COMMENT RESPONSE DOCUMENT

SUMMARY OF PUBLIC COMMENTS AND BLM RESPONSES ON THE DRAFT PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT AND POSSIBLE LAND USE PLAN AMENDMENTS FOR ALLOCATION OF OIL SHALE AND TAR SANDS RESOURCES ON LANDS ADMINISTERED BY THE BLM IN COLORADO, UTAH, AND WYOMING

This page intentionally left blank.

CONTENTS

NOTATION

A. Introduction 1

B. Public Comment Process 2
- B.1 Public Involvement 2
- B.2 Public Comment Submittal Metrics 2
- B.3 Campaign Submittals 3
- B.4 Summary of Issues Raised by the Commentors on the Draft OSTS PEIS and the Agencies' Responses 7
  - B.4.1 Issue Outline 8
  - B.4.2 Issue Summaries and Responses 32

C. Submission Report 173

TABLES

B-1 Commentor Distribution by State 2

B-2 Organizations Submitting Campaigns 3

B-3 OSTS CRD Commentor Index 13

This page intentionally left blank.

NOTATION

The following is a list of acronyms and abbreviations, chemical names, and units of measure used in this document.

GENERAL ACRONYMS AND ABBREVIATIONS

ACEC	Area of Critical Environmental Concern
AQRV	air quality–related value
BLM	Bureau of Land Management
BMP	best management practice
CEQ	Council on Environmental Quality
CFR	*Code of Federal Regulations*
CHAT	Critical Habitat Assessment Tool
CO_2	carbon dioxide
CPW	Colorado Parks and Wildlife (formerly Colorado Division of Wildlife)
CRD	Comment Response Document
EA	environmental assessment
E.O.	Executive Order
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act of 1973
FLPMA	Federal Land Policy and Management Act of 1976
FR	*Federal Register*
GAO	U.S. Government Accountability Office
GHG	greenhouse gas
HAP	hazardous air pollutant
KOP	key observation point
LWC	lands having wilderness characteristics
MMTA	Mechanically Mineable Trona Area
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act of 1969
NHPA	National Historic Preservation Act of 1966
NOA	Notice of Availability

NOSR	Naval Oil Shale Reserves
NSO	No Surface Occupancy
NTSA	National Trails System Act
NTT	National Technical Team
OSEC	Oil Shale Exploration Company
OSTS	oil shale and tar sands
PEIS	programmatic environmental impact statement
PFYC	Potential Fossil Yield Classification
$PM_{2.5}$	particulate matter with an aerodynamic diameter of 2.5 μm or less
PM_{10}	particulate matter with an aerodynamic diameter of 10 μm or less
PRLA	preference right lease area
PSD	Prevention of Significant Deterioration
RD&D	research, development, and demonstration
RFDS	reasonably foreseeable development scenario
RMP	Resource Management Plan
ROD	Record of Decision
ROI	region of influence
ROW	right-of-way
SHPO	State Historic Preservation Office(r)
TDS	total dissolved solids
UDWR	Utah Division of Wildlife Resources
UGS	Utah Geological Survey
USC	*United States Code*
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
VOC	volatile organic compound
VRI	visual resource inventory
VRM	Visual Resource Management
WEQC	Wyoming Environmental Quality Council
WGFD	Wyoming Game and Fish Department
WSA	Wilderness Study Area
WSR	Wild and Scenic River

UNITS OF MEASURE

bbl	barrel(s)
ft	foot (feet)
gal	gallon(s)
L	liter(s)
m	meter(s)
mg	milligram(s)
mi	mile(s)
MW	megawatt(s)

ENGLISH/METRIC AND METRIC/ENGLISH EQUIVALENTS[a]

The following table lists the appropriate equivalents for English and metric units.

Multiply	By	To Obtain
English/Metric Equivalents		
acres	0.4047	hectares (ha)
cubic feet (ft^3)	0.02832	cubic meters (m^3)
cubic yards (yd^3)	0.7646	cubic meters (m^3)
degrees Fahrenheit (ºF) –32	0.5555	degrees Celsius (ºC)
Feet (ft)	0.3048	meters (m)
gallons (gal)	3.785	liters (L)
gallons (gal)	0.003785	cubic meters (m^3)
inches (in.)	2.540	centimeters (cm)
miles (mi)	1.609	kilometers (km)
miles per hour (mph)	1.609	kilometers per hour (kph)
pounds (lb)	0.4536	kilograms (kg)
short tons (tons)	907.2	kilograms (kg)
short tons (tons)	0.9072	metric tons (t)
square feet (ft^2)	0.09290	square meters (m^2)
square yards (yd^2)	0.8361	square meters (m^2)
square miles (mi^2)	2.590	square kilometers (km^2)
yards (yd)	0.9144	meters (m)
Metric/English Equivalents		
centimeters (cm)	0.3937	inches (in.)
cubic meters (m^3)	35.31	cubic feet (ft^3)
cubic meters (m^3)	1.308	cubic yards (yd^3)
cubic meters (m^3)	264.2	gallons (gal)
degrees Celsius (ºC) +17.78	1.8	degrees Fahrenheit (ºF)
hectares (ha)	2.471	acres
kilograms (kg)	2.205	pounds (lb)
kilograms (kg)	0.001102	short tons (tons)
kilometers (km)	0.6214	miles (mi)
kilometers per hour (kph)	0.6214	miles per hour (mph)
liters (L)	0.2642	gallons (gal)
meters (m)	3.281	feet (ft)
meters (m)	1.094	yards (yd)
metric tons (t)	1.102	short tons (tons)
square kilometers (km^2)	0.3861	square miles (mi^2)
square meters (m^2)	10.76	square feet (ft^2)
square meters (m^2)	1.196	square yards (yd^2)

A. INTRODUCTION

This Comment Response Document (CRD) presents an analysis of public comments on the 2012 Draft Plan Amendments and Oil Shale and Tar Sands Programmatic Environmental Impact Statement (Draft OSTS PEIS); presents the Bureau of Land Management's (BLM's) responses to public comments; and identifies changes made in the Final OSTS PEIS in accordance with these responses.

Section B is the comment analysis and comment response portion of the CRD. Section B.1 is a review of the public meetings and comment period on the Draft PEIS, Section B.2 presents comment submittal statistics, and Section B.3 presents a summary of the concerns raised in campaign letters received.

Section B.4 presents the public comment analysis. A summary of issues raised in public comments and the BLM's responses to these issues is presented, including a description of changes made in the Final OSTS PEIS. Table B-3 is the Commentor Index. It lists the names and/or organizations of commentors, assigns an identification number to each commentor submittal, and lists all of the issue numbers assigned to each submittal. Section B.4.1 presents the Issue Outline, which is organized by topic and which presents the issue numbers. Section B.4.2 presents a summary of each numbered issue followed by the BLM's response to each issue. Responses describe the disposition of the issue, including any changes made in the Final OSTS PEIS in response to the issue or to individual comments contributing to an issue.

Section C is the Submission Report. It presents the identification of individual comments within all of the comment submittals. The comment submittals presented are facsimiles of the original comment letters or Web site submittals, with individual comments identified in brackets. The header of each submittal gives the submittal identification number, which is also presented in Table B-3. Delineated comments are numbered sequentially within each submittal.

All comment documents received during the public comment period were assigned a unique identifying number. Individuals who submitted comment documents via the Web site will have received a receipt containing their ID number (OSTS2012D5xxxx). Comment documents received by other means have an ID number starting with OSTS. Each ID number is followed by a dash and a 1-, 2, or 3-digit number (e.g., 50001-12). This is the comment number. The comment numbers associated with each numbered issue are listed after the issue number and title in Section B.4.2, where only the five-digit ID number is used (e.g., 50001). The Submission Report contains the text of each comment letter/submission. The bracketed numbers in red indicate the beginning and end of each comment. The issues associated with a given comment directly follow the opening red bracket.

B. PUBLIC COMMENT PROCESS

B.1 PUBLIC INVOLVEMENT

The BLM filed a Notice of Availability (NOA) for the Draft OSTS PEIS on February 3, 2012 (77 FR 5833–5835). The NOA announced the start of a 90-day comment period that closed on May 4, 2012.

The public was provided with three methods for submitting comments on the Draft OSTS PEIS:

- Via the OSTS public Web site,
- Postal mail, and
- Via written comment form or other written material submitted at the public meeting.

Public meetings on the Draft OSTS PEIS were held at four locations in March of 2012: Silt, Colorado (March 12), Vernal, Utah (March 13), Salt Lake City, Utah (March 14), and Rock Springs, Wyoming (March 15). The public meetings were attended by nearly 290 people (Salt Lake City─138; Vernal─44; Rock Springs─30, and Silt─72). Presentation materials from the meetings, including slide presentation, are available on the project Web site (http://ostseis.anl.gov)

All comment documents received during the public comment period were assigned a unique identifying number. Individuals who submitted comment documents via the Web site will have received a receipt containing their ID number (OSTS2012D5xxxx). In the following sections, only the five-digit ID number is used (e.g., 50001). Comment documents received by other means have an ID number starting with OSTS.

B.2 PUBLIC COMMENT SUBMITTAL METRICS

Comment documents were received from approximately 600 individuals; organizations (including environmental groups and other special interest groups); private businesses and industry; and local, state, and federal agencies. Submissions were received from 37 states plus the District of Columbia. About 70% of the submissions were from Colorado, Wyoming, and Utah. Table B-1 shows the percentages for the five states with the most comments. Each of the remaining states had fewer than nine submissions. About 370 submissions were via the OSTS public Web site; slightly more than 200 were received via postal mail, and about 30 were submitted at the public meetings.

TABLE B-1 Commentor Distribution by State

State	Percentage
Colorado	43
Utah	20
Wyoming	07
California	06
All others	24

B.3 CAMPAIGN SUBMITTALS

In addition to the individual submittals, several organizations prepared their own campaign letter that could be submitted as is or edited by members of the public. These campaign letters were sent to the OSTS project as paper copies by mail, and as Excel or Word files on CDs, or via the OSTS public Web site. Table B-2 provides information on the campaign letter source and the number of people submitting the letter. A summary of each campaign is provided below.

Approximately 160,000 individuals submitted campaign letters originating from various organizations. Table B-2 provides information on the organizations submitting campaigns and the number of individuals associated with each campaign. Files containing submittals from each organization have been included in Volume 5 of this Final PEIS.

Center for Biological Diversity: The Center for Biological Diversity submitted a campaign opposing any action by the BLM that would allow any new oil shale and tar sands development on public lands and stating that the Draft PEIS should have included an alternative that removed public lands from development. The organization and its members pointed out the importance of the tourism and recreation industries to the regions' economies and stated that oil shale and tar sands technology would adversely affect the environment, threatened and endangered species, and local water supplies, and would exacerbate global climate change. The letter urges the BLM to carefully evaluate and disclose all impacts on the environment from oil shale and tar sands development.

Several people altered the original campaign letter to express additional concerns about oil shale and tar sands development. Many commentors expressed a preference for energy conservation or alternative forms of energy over oil shale and tar sands development, including solar and wind power, algae biodiesel, conventional oil, and natural gas. Many commentors expressed concerns over oil shale and tar sands technologies; that they are too resource intensive and net energy is negative, that impacts are uncertain and may include increased seismic activity,

TABLE B-2 Organizations Submitting Campaigns

Organization	No. of Commentors
Center for Biological Diversity	33,300
Colorado Environmental Coalition	590
Defenders of Wildlife	39,400
Earthjustice	33,700
Institute for Energy Research	450
National Wildlife Federation	20,590
Sierra Club	29,790
The Wilderness Society	1,860
Unidentified campaign	380

that they are more likely to produce an oil spill, and that the fuel is dirtier than conventional fuels. One commentor suggested that the BLM should require developers to fully compensate and clean up local areas in case of a spill. Many commentors were also concerned with water use during the extraction process and its effects on the Colorado River and the water supply of Las Vegas. Some commentors also suggested that oil shale resources should be left in place as a source of fuel for future supply emergencies.

Colorado Environmental Coalition: The Colorado Environmental Coalition campaign letter stated that the Draft PEIS should have included an alternative that removed public lands from development. It pointed out the importance of the tourism and recreation industries to the regions' economies and stated that oil shale and tar sands technologies are unproven and not expected to generate revenue for the next 10 years. The letter urges the BLM to carefully evaluate all impacts on the environment from oil shale and tar sands development.

Many people altered the original campaign letter to express additional concerns about oil shale and tar sands development. Many commentors expressed a preference for energy conservation or alternative forms of energy over oil shale and tar sands development. Many commentors were also concerned with water use during the extraction process and its effects on local water quality and quantity. Commentors also suggested that the process is too energy intensive and would contribute to global climate change. One commentor expressed strong support for oil shale and tar sands development. Another commentor voiced support for the Preferred Alternative.

Defenders of Wildlife: The Defenders of Wildlife campaign letter expressed support for Alternative 3 and noted concerns about the impacts of oil shale and tar sands development on wildlife, including threatened and endangered species, and their habitat. The letter also expressed concern about the tourist and recreational activities on these public lands as well as concern about the economic viability of oil shale and tar sands and the amounts of resources needed to extract these fuels. The letter suggested that oil shale and tar sands activities should take place on private lands.

More than 1,700 letters were altered to express additional concerns about oil shale and tar sands development and its impacts on water, human heath, and seismic activity. Commentors voiced additional concerns about the oil shale and tar sands extraction technologies and their economic and energy viability. Many commentors expressed a preference for energy conservation or alternative forms of energy over oil shale and tar sands development, including solar and wind power, biomass, and nuclear, and for higher fuel efficiency standards. Some commentors also voiced specific concern for the black-footed ferret, its habitat, and the recovery of its population. Commentors also expressed a preference for public lands to be kept free of oil shale and tar sands development. One commentor expressed support for oil shale and tar sands development to proceed on public lands because it was a proven source of energy and could create jobs in the surrounding regions.

Earthjustice: The Earthjustice campaign letter detailed the organization's concerns about oil shale and tar sands development. While Earthjustice felt that the Preferred Alternative was a step in the right direction, it would prefer an alternative that does not allow any public lands to be open for oil shale and tar sands research and development. The signatories to the letter suggested that there is time to thoroughly assess the impacts of development because the oil shale and tar sands industry is not expected to produce significant revenues in the near term. They stated that the lands designated for oil shale and tar sands development are some of the best for wildlife habitat in the West and pointed out the economic importance of recreation, tourism, farming, and ranching to the region.

Many people altered the text of the original campaign letter to add additional concerns about oil shale and tar sands development. Many commentors expressed a preference for energy conservation or alternative forms of energy over oil shale and tar sands development, including solar and wind power, and nuclear, and for higher fuel efficiency standards. Some commentors expressed concerns about reclamation and requested that bonding and restoration programs be instituted. Others suggested that there might be an increased earthquake risk associated with oil shale and tar sands development. A number of commentors expressed concerns about oil shale and tar sands impacts on water resources and climate change. One commentor did not approve of the economic analysis used in the PEIS, while others questioned whether oil shale and tar sands could be economically viable. One commentor expressed concern that his comment would never be read or considered.

Institute for Energy Research: The Institute for Energy Research campaign letter asked the Department of the Interior (DOI) to adopt the "No Action" Alternative. It claimed that the DOI's Preferred Alternative was at odds with the President's energy policy. It also pointed out that most of the affected counties in Colorado favored oil shale development and supported commercial leasing with proper safeguards.

National Wildlife Federation: The National Wildlife Federation campaign letter urged the BLM to choose the Preferred Alternative. It supported the exclusion of vital habitats from oil shale and tar sands development as well as limiting leasing in order to investigate whether impacts on wildlife, air, and water resources can be avoided. The letter stated the importance of the West for big game migration, mule deer, and sage-grouse habitat.

Several people altered the original campaign letter to express additional concerns about oil shale and tar sands development. Many commentors expressed a preference for energy conservation or alternative forms of energy over oil shale and tar sands development, including solar and wind power, algae biodiesel, conventional oil, and natural gas. Commentors recommended increasing gas mileage standards, switching to electrically powered vehicles, and instituting population control regulations. Several commentors were concerned about the visual impacts of "scarred" landscapes, while many others suggested that there might be an increased earthquake risk associated with oil shale and tar sands development. One commentor was concerned about dust. One commentor stated that the BLM must manage its lands for multiple

use. Another commentor stated that a PEIS was not the right approach for oil shale and tar sands development and warned that the document will subject the BLM to legal challenges.

Sierra Club: The Sierra Club campaign letter expressed support for Alternative 3, with concerns about the environmental impacts of oil shale and tar sands development, including climate change and impacts on land, wildlife, air, and water resources. The letter expressed opposition to any oil shale or tar sands development on public lands.

More than 2,400 people altered the text of the original campaign letter to express additional concerns about oil shale and tar sands development. Many commentors expressed a preference for energy conservation or alternative forms of energy over oil shale and tar sands development, including solar and wind power, biomass, and nuclear, and for higher fuel efficiency standards. One commentor recommended instituting population control regulations. Others suggested that there might be an increased earthquake risk associated with oil shale and tar sands development. A number of commentors expressed concerns about oil shale and tar sands impacts on human health, water resources and climate change, while others were concerned about visual impacts, birds, or recreation and tourism. Several commentors suggested that a carbon tax be implemented, and one recommended that a law be passed requiring oil produced from oil shale and tar sands resources to stay in the United States. Profit-sharing mechanisms and risk premiums were also recommended. Some commentors stated that oil shale and tar sands resources require too much energy to extract.

The Wilderness Society: The Wilderness Society campaign letter expressed the organization's concerns about oil shale and tar sands development. It pointed out the importance of the recreation industry to Colorado's economy and stated that oil shale and tar sands technology is unproven, uses large amounts of water and electricity, and would contribute to air pollution and carbon dioxide (CO_2) emissions. The organization expressed its support for the Preferred Alternative, saying that it would close many valuable and important lands to oil shale and tar sands development, protect wilderness, wildlife, and clean air, and protect water supplies.

Many of the commentors who submitted the Wilderness Society campaign letter added to or edited the original letter's text. The majority of these commentors expressed their desire to see alternative forms of energy, such as solar and wind power, be pursued rather than oil shale and tar sands development. Other commentors were concerned about the climate change impacts that could result from oil shale and tar sands development. One commentor suggested that oil shale and tar sands development would increase earthquake risk.

Unidentified Campaign: This campaign letter expressed support for Alternative 1, saying that oil shale is an important resource for the nation's economy, national security, and energy independence. It stated that environmental conservation and economic development are not mutually exclusive. The commentors found it shocking that government resources were spent to re-do the 2008 PEIS, which they thought concluded with a preferable alternative. They

expressed concern that a negative precedent was set by allowing a lawsuit to prompt revision of the PEIS.

A few people presented ideas not discussed in the original letter. One person suggested that climate change is "scientific fraud." Another commentor recommended that oil shale and tar sands development take place first in areas that have the infrastructure to handle increased truck traffic and development activity. The third commentor to alter the letter stated that national security and economic security revolve around energy independence and should thus be primary considerations in the PEIS. The remaining two commentors voiced general support for oil shale and tar sands development on public lands.

B.4 SUMMARY OF ISSUES RAISED BY THE COMMENTORS ON THE DRAFT OSTS PEIS AND THE AGENCIES' RESPONSES

Commentors on the Draft OSTS PEIS identified a number of major topic areas of concern. These topics regarded concerns about the National Environmental Policy Act of 1969 (NEPA) process; the alternatives analyzed; the analysis of impacts of oil shale and tar sands resource development on the environment, wildlife, cultural and visual resources, human health, and regional economies; cumulative effects on resources; mitigation of effects; the state of development and the effects of representative oil shale and tar sands technologies; and land use conflicts. In addition, many commentors identified concerns regarding the BLM's policies, such as those concerning implementation of the 2005 Energy Policy Act; the identification of lands to be excluded from leasing; the role of future NEPA analyses; stakeholder participation; and the adequacy of the alternatives evaluated in the PEIS. Finally, commentors expressed concerns of a general nature that were out of the scope of the PEIS.

In response to these comments, several changes were incorporated into the Final PEIS, and some land allocations in the PEIS were modified based on additional information. For example, land allocations under Alternative 2 were found to conflict with Wyoming state-level policy regarding management of greater sage-grouse populations. Consequently, core or priority sage-grouse habitat in Wyoming is not closed under Alternative 2, the Proposed Plan, in the Final PEIS; the management of such areas is deferred to the state. Colorado and Utah do not have similar conflicts. However, maps used to delineate core or priority sage-grouse habitat in those states have been updated since the Draft PEIS was prepared. These changes have resulted in an overall increase in the acreage available for leasing under Alternative 2 in the Final PEIS.

Similarly, commentors requested that the BLM revisit its classification of lands with wilderness characteristics, which are likewise closed to leasing under Alternative 2, suggesting that the BLM had miscategorized some lands. Updated data received from BLM field offices in Wyoming since the issuance of the Draft PEIS, in fact, confirmed that lands with wilderness characteristics inventories in that state did not identify any such lands within oil shale areas. This update resulted in a further increase in acreage within Alternative 2.

Finally, under the Proposed Plan the split estate lands (federal minerals, tribal surface) within the Hill Creek Extension of the Uintah and Ouray Reservation will remain open for

potential oil shale and tar sands leasing and development. The Record of Decision for the 2008 Oil Shale and Tar Sands PEIS opened these lands for potential oil shale and tar sands leasing and development in accordance with the expressed desire of the Ute Indian Tribe.

The overall result of these changes was to increase the total amount of land available for leasing under the Proposed Plan from about 462,000 acres for oil shale and 91,000 acres for tar sands under the Preferred Alternative in the Draft PEIS to about 677,000 acres for oil shale and 130,000 acres for tar sands under the Proposed Plan.

In addition, specific requests for additional information were made by several commentors. These requests were reviewed and information was incorporated into the PEIS as appropriate. For instance, the U.S. Environmental Protection Agency requested that impaired surface waters be identified in the Final PEIS. This information was added to the relevant sections of the Final PEIS. In other submissions, commentors requested specific clarifications or suggested specific revisions to the PEIS. As appropriate, such revisions were made to the Final PEIS. However, many concerns, suggestions, and questions raised in other comments did not require any changes to be made to the PEIS. Explanations of changes made or not made to the Final PEIS in response to public comments on the Draft PEIS can be found in the following subsections.

The following sections present the disposition of issues raised in public comments on the Draft PEIS received during the public comment period. The BLM identified issues raised in one or more submittals of comments on the Draft PEIS and categorized them according to various topic areas as described above. The following begins with the Issue Outline followed by the Commentor Index, Table B-3, which links comment submittals to issue numbers. The Commentor Index is followed by a descriptive summary of each issue, including a list of all associated comments, and the BLM's response. Responses identify locations in the PEIS that present the relevant information supporting the response and identify any changes made to the Draft PEIS in response to issues raised in comments in preparing the Final PEIS. Following the comment summaries and responses is the Submission Report, which brackets the original comments within comment submittals, assigns a comment number, and lists all issue numbers associated with each comment. Commentors may track the BLM's response to their comment submittals through the issue numbers assigned to their submittal in Table B-3 and the comment numbers listed with each issue summary and response.

B.4.1 Issue Outline

1 NEPA Analysis
- 1.1 Public Involvement
  - 1.1.1 Extension of Comment Period
- 1.2 Government-to-Government Consultation
- 1.3 State and Local Government
- 1.4 Agency Consultation
- 1.5 Inadequate/Biased NEPA Analysis

2 Alternatives
- 2.1 Alternative 1, No Action
  - 2.1.1 Support of Alternative 1
- 2.2 Alternative 2, Conservation Focus
  - 2.2.1 Support of Alternative 2
- 2.3 Alternative 3, Oil Shale Research Lands Focus and Tar Sands Pending Commercial Lease Research
  - 2.3.1 Support of Alternative 3
- 2.4 Alternative 4, Moderate Development
  - 2.4.1 Support of Alternative 4
- 2.5 New Alternative Suggestions

3 Environmental Issues
- 3.1 Land Use
  - 3.1.1 Support of Additional Resource Protection
  - 3.1.2 Impacts on Recreational Lands
  - 3.1.3 Protections for Lands with Wilderness Characteristics and ACECs
  - 3.1.4 Support of Leasing
  - 3.1.5 Objections to Certain Land Use Protections
  - 3.1.6 Out of Scope
  - 3.1.7 Errata/Editorial Comments
  - 3.1.8 No Response Required
- 3.2 Soil and Geology
- 3.3 Paleontological Resources
  - 3.3.1 Fossil Locations
  - 3.3.2 Role of the State Historic Preservation Officer
- 3.4 Water Resources
  - 3.4.1 Water Quantity and Quality
  - 3.4.2 Project-Level Water Use
  - 3.4.3 Water Use by Oil Shale and Tar Sands Technologies
  - 3.4.4 Comments Requiring Individual Responses
  - 3.4.5 Editorial Comments
  - 3.4.6 No Response Required
- 3.5 Air Quality
  - 3.5.1 Climate Change
    - 3.5.1.1 Inadequate Discussion of Climate Change
    - 3.5.1.2 Editorial Comments
    - 3.5.1.3 Mitigation and Compliance
    - 3.5.1.4 Mitigation of GHG Emissions at the Project Level
    - 3.5.1.5 Reduction of GHG Emissions
    - 3.5.1.6 No Response Required
    - 3.5.1.7 Long-Term Adaptation
    - 3.5.1.8 Comments Requiring Individual Responses
  - 3.5.2 Wintertime Ozone
  - 3.5.3 Additional Power Needs for Oil Shale and Tar Sands
  - 3.5.4 Quantitative Analysis

3.5.5 Data
3.5.6 VOCs and Dust Mitigation
3.5.7 No Response Required
3.5.8 Comments Requiring Individual Responses
3.5.9 Impacts of Dust
3.6 Noise
3.7 Ecological Resources
3.7.1 Aquatic Resources
3.7.1.1 Recommended Habitat Protections
3.7.1.2 Aquatic Impact Analysis
3.7.2 Vegetation
3.7.3 Wildlife
3.7.3.1 Habitat Loss/Fragmentation
3.7.3.2 Exclusion of Horses and Burros
3.7.3.3 Discussion of Birds by Orders
3.7.3.4 Pond Impacts on Birds
3.7.3.5 Raptor Response to Fire
3.7.3.6 Cumulative Impacts on Wildlife Habitat/Connectivity
3.7.3.7 Change in Text/Tables
3.7.3.8 Alternative Comparison of Wildlife Impacts
3.7.3.9 Mitigation
3.7.3.10 Raptor Areas and Data
3.7.3.11 Wildlife Contamination
3.7.3.12 Comments Requiring Individual Responses
3.7.4 Threatened and Endangered Species
3.7.4.1 Impacts on Threatened and Endangered Species
3.7.4.2 Land Exclusions To Protect Threatened and Endangered Species
3.7.4.3 Requests for Updated Information
3.7.4.4 Mitigation and Conservation Measures
3.7.4.5 Editorial Comments on Tables and Figures
3.7.4.6 Cumulative Impacts on Threatened and Endangered Species
3.7.4.7 Effects of Climate Change on Threatened and Endangered Species
3.7.4.8 Impacts and Stipulations on Sage-Grouse Core/Priority Habitat
3.7.4.9 Updated Sage-Grouse Information
3.7.4.10 No Response Required
3.7.4.11 Comments Requiring Individual Responses
3.7.5 Sage-Grouse
3.7.5.1 Conservation, Data, and Analysis
3.7.5.2 Cumulative Effects
3.7.5.3 Specific Revisions
3.8 Visual Resources
3.8.1 General Concerns
3.8.2 Visual Resource Inventory/Visual Resource Management Concerns

3.8.3 Visual Resources Photos
3.8.4 Visual Resources Terminology
3.9 Cultural Resources
3.9.1 Historic Trails
3.9.2 Cultural/Tribal Public Outreach
3.9.3 Tribal Consultation
3.9.4 Protection of Historic Resources (Policy)
3.9.5 Heritage Tourism
3.9.6 Effects of Leasing
3.9.7 Commitment of Resources
3.10 Socioeconomics
3.10.1 Socioeconomic Data, Methods, and Assumptions
3.10.2 Impacts on Local Government
3.10.3 Local Economic Development Benefits
3.10.4 Recreation Impacts
3.10.5 Economic Viability
3.11 Recreation
3.12 Environmental Justice
3.12.1 Agricultural Water Use
3.12.2 Analytical Methods, Data, and Scope
3.12.3 Support of Economic Development as a Means of Addressing Environmental Justice Issues
3.13 Hazardous Materials/Waste
3.14 Health and Safety
3.15 Geographic Information System

4 Cumulative Impacts
4.1 Programmatic Cumulative Impacts and Subsequent NEPA Analysis
4.2 Cumulative Impacts on Resources
4.3 Impacting Factors and Other Assumptions

5 Mitigation and Reclamation

6 Resource and Technological Concerns
6.1 Resource Assessments
6.1.1 Geologically Prospective
6.1.2 2008 PEIS Was Reasonable
6.2 Power and Energy Needs
6.2.1 External Energy Source
6.2.2 Produces More Energy Than It Consumes
6.2.3 Uses a Large Amount of Energy
6.3 Technology
6.3.1 Technical Comments on Technologies and Processes
6.3.2 Water Use
6.3.2.1 Water Use Figures Are Overinflated
6.3.2.2 Too Much Water Needed

6.3.3 In Situ Technologies
6.3.3.1 Limits to In Situ Technologies
6.3.4 Feasibility
6.3.5 Commercial viability
6.3.6 Surface Mining
6.4 Spent Shale
6.5 Data
6.6 Oil Shale and Tar Sands Differences

7 Economics/Cost Benefit

8 Multiple Use Conflicts
8.1 Recreation
8.2 Grazing
8.3 Oil and Gas

9 Policy
9.1 Purpose and Need
9.2 Legal/Compliance Issues
9.2.1 Lands with Wilderness Characteristics, Secretarial Order 3310
9.2.2 Section 369 of the Energy Policy Act
9.2.3 Other Comments on the Energy Policy Act
9.2.4 Sage-Grouse Policy
9.2.5 Federal Data Quality Act
9.2.6 Requirements for Lessees
9.3 Future NEPA Analysis
9.4 Region-Wide Analysis
9.5 Consistency with Local Plans
9.6 Leases
9.6.1 Technology Double Standard
9.7 RD&D
9.8 Revision of 2008 PEIS

10 Out of Scope
10.1 Revision of 2008 PEIS
10.2 Defer for R&D Results
10.3 Oil Shale Regulations and National Policy
10.4 Bonding and Reclamation
10.5 Royalties, Subsidies, Incentives, and Taxes
10.6 National Energy Strategy
10.6.1 Use Fewer Fossil Fuels
10.6.2 Conventional Oil and Gas
10.6.3 Energy/National Security
10.7 Pavement
10.8 Better Here Than There

11 General Support
  11.1 Tar Sands
  11.2 Oil Shale

12 General Opposition
  12.1 Tar Sands
  12.2 Oil Shale
  12.3 Use of Public Lands

13 Editorial Comments

TABLE B-3 OSTS Commentor Index (Note: ID numbers in parentheses are duplicate submittals or informational attachments.)

Commentors (Name/Organization)	ID Number	Issue Number
Aaslan, Bill	OSTS_162	2.1.1
Adams, Greg	50217	12.0
Adams, Oliver	OSTS_031	2.5; 3.8.1; 6.3.2.2
Aegerter, Bob	50167	2.3.1; 3.4.1; 3.10.3; 3.10.4
Albury, Kathryn F.	50279	1.0; 3.4.1; 3.5.1.6; 3.13; 9.8;
Allen, John and Mickey	OSTS_198	12.0
Alliance for Historic Wyoming	50125	1.1; 1.2; 3.4.1; 3.9.1; 3.9.2; 3.9.3; 3.9.5; 3.9.7; 3.10.4; 4.1; 5.0
Alliance for the Wild Rockies	50175	12.3
Amador, Robert	50228	2.3.1; 3.1.1; 3.4.1
American Petroleum Institute	50310	1.1.1; 1.5; 2.0; 2.1; 2.1.1; 2.2; 2.3; 2.4; 3.1.7; 3.1.8; 3.4.4; 3.4.5; 3.4.6; 3.5.1.8; 3.7.4.5; 3.9.6; 3.10.1; 3.12.2; 4.2; 4.3; 6.2; 6.2.1; 6.3; 6.3.2.1; 6.3.5; 6.3.6; 8.3; 9.1; 9.2.2; 9.2.4; 9.3; 9.6; 9.7; 9.8; 10.3; 13.0
American Shale Oil, LLC	50090	1.3; 2.0; 2.2; 2.4; 3.4.1; 3.4.3; 3.5.1.2; 3.8.3; 3.10.1; 3.10.3; 3.12.2; 4.2; 5.0; 6.1; 6.1.1; 6.2.1; 6.3; 6.3.1; 6.3.2.1; 6.3.5; 6.4; 9.1; 9.2.3; 9.6; 9.8
Americans for Prosperity, Colorado	OSTS_092	2.1.1; 2.2; 3.10.3; 9.8
Anson, Mardi	OSTS_157	2.1.1; 11.2
Arguello, Fares J.	50222	2.3.1; 3.10.2
Aridas, RoseMarie	50173	12.0
Armstrong, Laurel	50291	2.3.1
Atiya, Gabe	50126	2.3.1
Avery, Sara	50215	2.3.1; 3.0; 3.1.1; 3.4.1
Backcountry Hunters and Anglers, Utah Chapter	50258	2.2; 2.3; 2.5; 9.2.6; 9.8; 10.4

TABLE B-3 (Cont.)

Commentors (Name/Organization)	ID Number	Issue Number
Bailey Sr, John R.	50020	11.0
Bailey, Gary	OSTS_190	2.1.1; 6.2.2; 6.3.2.1; 9.6; 10.5
Ballantyne, Corey	50048	12.3
Bambino, Mike	OSTS_186	2.1.1; 9.2.1
Barr, Cassie G.	50057	10.6.1
Baumgardner, Randy	OSTS_149	2.1.1; 9.2.1; 9.8
Baysinger, Jonathan	OSTS_173	2.1.1; 9.8
Behm, Gregory	50133	2.2; 3.0; 3.10.3; 12.3
Bell, Karen	OSTS_103	2.1.1; 9.0; 10.8
Bell, Richard	OSTS_106	3.10.3; 9.8; 11.0
Bell, Thomas A.	50124	3.4.1
Benson, Susan E.	50187	12.3
Berger, Bruce N.	50207	12.0
Betz, Kelsie	OSTS_178	2.1.1; 2.2
Biodiversity Conservation Alliance Californians for Western Wilderness Colorado Environmental Coalition Jackson Hole Conservation Alliance Rocky Mountain Wild	50329	2.3.1; 3.1.1; 3.7.3.1; 3.7.3.9; 3.7.3.12; 3.7.4.1; 3.7.5.1; 3.7.5.2; 3.8.2; 3.9.4; 5.0; 6.1.1
Bitter, Merrill	50214	2.3.1; 3.0; 3.1.1; 3.4.1
Blackburn, Casey M.	50050	11.0
Blackman, Janet	OSTS_193	2.1.1
Blair, Dan and Janet	50300	2.5; 3.4.1; 3.10.4; 3.10.5; 12.0
Blevins, Philip B.	50032	2.3.1
Boak, Jeremy	50271	2.1.1; 2.2; 2.4; 2.4.1; 3.1.4; 6.1; 6.3; 6.3.2.1; 9.2.6; 9.6; 9.7; 10.3
Borgenicht, Roger	OSTS_017	10.6.1
Borman, Kevin	OSTS_113	1.1.1; 2.1.1
Bowers, Krista	OSTS_005	3.5.1.7; 12.0
Bowman, Chris	50182	12.0
Brady, Kimber A.	50069	12.0
Brandon, Jarry	OSTS_099	1.1.1; 2.1.1; 10.6.3
Brandon, Jody	OSTS_104	1.5; 2.1.1; 2.2
Brauner, John	50316	10.6.1
Brown, Casey L.	50197	2.5
Burch, Jan	OSTS_220	3.0

TABLE B-3 (Cont.)

Commentors (Name/Organization)	ID Number	Issue Number
Bureau of Land Management, Utah State Office	50277	2.2; 3.1.3; 3.1.7; 3.4.5; 3.4.6; 3.5.1.6; 3.5.3; 3.5.8; 3.6; 3.7.1.2; 3.7.2; 3.7.3.7; 3.14; 3.15; 6.0; 6.1.1; 9.1; 9.6; 13.0
Burkett, William	OSTS_163	1.1.1; 2.1.1
Burns, Stephen A.	50266	2.3.1; 3.0; 3.1.1; 3.4.1
Burrows, Thomas	OSTS_183	1.1.1; 2.1.1
Burton, Priscilla	50334	2.3.1
Butcher, Chris E.	50252	12.0
C., R.	50140	12.0
Calder, Milo	OSTS_006	1.1
Campaign - unidentified	OSTS_233	2.1.1; 9.8
Cannon, Cynthia	50146	2.2; 3.0; 3.10.3; 12.3
Capozzelli, J.	OSTS_175	2.2.1
Capozzelli, J.	OSTS_216	2.5; 3.0; 3.10.3; 6.2.3; 12.3
Carbon County	50290 (50292)	1.1.1; 1.3; 2.1.1; 2.2; 3.1.3; 9.2.1; 9.8
Carbon County	OSTS_082	1.1.1; 1.3
Carlile, Fenwick	OSTS_229	3.5.1.6; 3.10.3; 6.3.2; 9.0; 9.6
Carlin, Mercedes	50372	9.0
Carter Technologies Co.	50063	6.0; 9.2.6; 11.0; 11.2
Cavanaugh, Terri	OSTS_116	2.1.1
Centennial Institute	OSTS_109	1.5; 2.1.1; 2.2; 2.3; 9.8
Center for Biological Diversity campaign	50341 (50344; 50345; 50347; 50348; 50350)	2.5; 3.0; 3.10.4; 12.3
Center for Regulatory Effectiveness	50308	1.1; 2.1.1; 2.2; 3.1.3; 3.1.5; 3.4.2; 6.1.2; 6.3.2.1; 9.2.1; 9.2.3; 9.2.4; 9.2.5; 9.3; 9.8; 10.6.3
Channel, Abbey	OSTS_165	2.1.1
Chapp, Lewis	50221	12.0
Chazen, Matin and Jeanne	OSTS_168	2.1; 2.1.1
Child, Kiristen	50117	3.10.3
Chowen, Carole	OSTS_224	3.0
Christensen, Neil J.	50248	3.1.1
Christiansen, Bonnie R.	50282	3.4.1; 3.5.1.1
City of Grand Junction	50154	2.0; 3.10.2; 9.0; 9.3; 10.5; 10.6; 11.0

TABLE B-3 (Cont.)

Commentors (Name/Organization)	ID Number	Issue Number
City of Rifle, Colorado - City Council	50110	2.0; 3.10.2; 10.5
Clark Mining Services, LLC	50160	1.0; 2.1.1; 9.2
Clark, Donald	50188	12.0
CLUB 20	50227	1.3; 2.1.1; 2.2; 3.10.3; 6.3.2.1; 9.2.2; 9.3; 9.5; 9.6; 9.7; 9.8; 10.5; 11.0
Coalition of Local Governments Lincoln County Lincoln Conservation District Little Snake River Conservation District Sublette County Sublette County Conservation District Sweetwater County Sweetwater County Conservation District Uinta County Uinta County Conservation District	50324 (50342)	1.1.1; 1.5; 2.0; 2.1.1; 2.3; 2.4; 2.5; 3.1.3; 3.1.7; 3.6; 3.7.2; 3.7.3.2; 3.9.1; 3.10.3; 6.1.1; 6.3.2; 6.3.5; 6.5; 8.0; 8.3; 9.0; 9.1; 9.2; 9.2.1; 9.2.2; 9.2.3; 9.2.4; 9.3; 9.5; 9.8; 10.7; 13.0
Cohn, Barbara M.	50085	10.6.1; 12.1
Coles, Tyler S.	50208	2.3.1; 3.0; 3.1.1; 3.4.1
Collins, Carol L.	50064	2.3.1
Colorado Department of Health and Environment - Air Pollution Control Division	50071	3.5.5
Colorado Department of Health and Environment - Air Pollution Control Division	50072	3.5.3; 3.5.5; 6.3; 9.3
Colorado Department of Public Health and Environment	50118	3.4.1; 3.4.5; 3.4.6; 10.2; 3.10.2; 4.2
Colorado Department of Public Health and Environment	50119	3.10.2
Colorado Department of Natural Resources and Colorado Department of Public Health and Environment	50314	2.2.1; 2.2; 3.4.1; 3.5.3; 3.5.7; 3.5.8; 3.7.3.1; 3.7.3.6; 3.7.4.1; 3.10.2; 3.10.3; 3.10.4; 3.14; 4.1; 6.1.2; 6.2.1; 9.7
Colorado Environmental Coalition campaign	OSTS_235	2.2; 3.0; 3.10.4; 12.3
Colorado Parks and Wildlife	50180	2.3.1; 3.7.3.1; 3.7.4.1; 3.7.4.3; 3.7.5.1; 3.7.3.8; 6.3.1
Conner, Luke	OSTS_095	2.1.1; 9.8
Conner, Nicole	OSTS_111	2.1
Coppin, Terry	50367	2.2.1; 3.4.1
Cordray, Cathryn	OSTS_011	1.1
Corey, Jean	OSTS_018	2.4.1
Corkle, Violet	50037	12.2
Craig Chamber of Commerce	OSTS_089	1.3; 11.0
Crank, Jeff	OSTS_065	11.0
Crawford, Carol	OSTS_223	3.0

TABLE B-3 (Cont.)

Commentors (Name/Organization)	ID Number	Issue Number
Crippen, Rick and Susan	OSTS_214	2.1.1; 2.2
Crowe, Richard D.	50293	11.0
CryoRain Inc.	50297 (50302)	6.3.1
Cupp, Brandon	OSTS_187	2.1.1; 11.0
Cupp, Jennifer	OSTS_192	2.1.1
Cuthbert, Barclay E.	50365	3.10.3; 6.1; 6.3.5; 9.3
Dandeneau, Mark	50369	12.1
Daub & Associates, Inc.	50087	1.3; 2.1.1; 2.2; 2.4; 3.4.3; 3.10.3; 6.1.1; 9.6; 9.6.1; 9.7; 9.8; 10.3
Davis, Angela	50139	2.2; 3.0; 3.10.3; 12.0; 12.3
Defenders of Wildlife campaign	50309	2.3.1; 3.7.3.1; 3.10.3; 3.10.4; 6.3
Delperto, Matt	OSTS_004	1.1; 12.1
DeNio, Douglas A.	50171	2.2.1; 3.10.2; 9.8
DePooter, Ted R.	50296	1.1; 3.10.3
Derr, Michael F.	50213	2.3.1; 3.0; 3.1.1; 3.4.1
Dinas, Dean	OSTS_008	3.10.2; 6.6; 10.7
Doebbeling, Denis	OSTS_025	10.6.1; 12.0
DOI, BLM, Rawlins Field Office	OSTS_230	3.1.7; 3.15
Dombek, Iori J.	50079	12.0
Dougherty, Eric	OSTS_145	2.1.1; 9.6.1; 9.8
Doyle, Dillon J.	50076	3.0
Duchesne County Utah	50181 (50183) (50185)	1.3; 1.5; 2.0; 2.1.1; 2.2; 2.4; 3.1.2; 3.1.5; 3.1.6; 3.1.7; 3.1.8; 3.2; 3.4.4; 3.4.5; 3.5.1.5; 3.5.1.8; 3.5.5; 3.6; 3.7.1.1; 3.7.2; 3.7.3.7; 3.7.4.4; 3.7.5.1; 3.7.5.3; 3.8.3; 3.8.4; 3.10.1; 3.10.2; 3.10.3; 3.10.4; 3.12.1; 3.12.2; 3.13; 3.15; 6.2.1; 6.3; 6.3.2; 6.3.2.1; 6.3.5; 6.5; 9.1; 9.2.1; 9.2.5; 9.5; 9.8; 13.0
Duchesne County Board of Commissioners, Utah	50184	1.3; 6.1; 9.0; 9.5; 11.0
Duchesne County Utah	50186	1.1.1; 1.3; 1.5; 2.1.1; 2.2; 3.1.3; 3.10.3; 6.1.2; 6.2.2; 6.3.2.1; 6.3.3.1; 6.3.4; 9.2.1; 9.2.2; 9.2.5; 9.5; 9.8
Dunn, Anna R.	50092	6.1; 6.3.5; 10.3; 10.6.3; 11.0
Dunn, Lois	OSTS_125	2.1.1; 3.10.3

TABLE B-3 (Cont.)

Commentors (Name/Organization)	ID Number	Issue Number
Earthjustice campaign	50355 (50356; 50357; 50358; 50360; 50361; 50362)	2.2; 3.0; 3.10.4; 12.3
ECCOS (Environmentally Conscious Consumers for Oil)	50091	1.1.1
ECCOS	50272	1.1.1; 2.1.1; 2.2; 3.10.1; 3.10.3; 6.2.1; 6.3.2.1; 9.2.1; 9.8
Eckerle, William	50267	2.2; 2.3; 2.5; 10.4
Ehlers, Ruth	OSTS_158	2.1.1
Eichinger, Dennis	OSTS_141	2.1.1
Elected Officials in Tri-state area	50321	2.2.1
Elms, Howard	50368	2.2.1; 3.4.1
Enefit American Oil Company	OSTS_026	2.1.1; 2.2; 3.1.3; 3.7.4.2; 3.7.4.8; 6.3.5; 9.2.1; 9.2.3; 9.2.4; 9.6; 9.6.1; 9.8
Enefit American Oil	50268	1.1.1; 1.5; 2.0; 2.1.1; 2.2; 3.1.3; 3.1.7; 3.15; 6.3; 6.3.5; 8.0; 9.1; 9.2.1; 9.2.3; 9.2.4; 9.3; 9.6; 9.8; 10.3
Esparza, Eva	50078	12.0
Estes, Charlete	50239	12.0
Excalibur Industries, Inc.	OSTS_020	2.0; 3.4.2; 6.3; 11.2
Excalibur Industries, Inc.	OSTS_068	1.5; 2.1.1; 6.3; 6.3.1; 9.1; 9.2.2; 9.3; 9.6
ExxonMobil Exploration Company	50287	1.5; 2.0; 2.1.1; 2.2; 2.4; 3.1.5; 3.4.1; 8.3; 9.0; 9.1; 9.2.2; 9.2.3; 9.2.4; 9.3; 9.6; 9.7; 10.6.3
Favret, Bruce	50086	6.3
Fiandaca, Anastasia	50155	2.2; 3.0; 3.10.3; 12.3
Firmage, Edwin	OSTS_001	3.4.1; 3.5.1.6; 3.5.3; 8.0; 9.2; 12.0
Fletcher, James	OSTS_208	2.1.1
Florence, Lauren O.	50169	2.3.1
Floyd, Lindsy	50010	12.1
Folland, Dave	OSTS_062	2.2; 3.0; 3.4.10; 12.3
Foothills Sustainability Institute	50301	12.0
Ford, Julie	50225	2.3.1
Ford, Leslie	50134	2.2; 3.0; 3.10.3; 12.3
Forsberg, Charles W.	50303	6.3.1; 11.2

TABLE B-3 (Cont.)

Commentors (Name/Organization)	ID Number	Issue Number
Freeborn, Craig	OSTS_124	2.2; 9.2.1; 9.6.1
Friends of NW Colorado	50320	1.5; 2.5; 3.4.1; 3.7.3.4; 3.7.3.6; 3.7.4.1; 3.7.5.1; 3.7.3.4; 3.7.3.6; 3.10.3; 4.2; 6.2.1; 8.0; 9.7
Front Range Water Council Aurora Water Board of Works of Pueblo Colorado Springs Utilities Denver Water Northern Colorado Conservancy District Southeastern Colorado Water Conservancy District Twin Lakes Reservoir and Canal Company	50337 (50294)	1.1.1; 1.5; 3.4.1; 3.4.5; 3.4.6; 3.7.4.1; 6.2.3; 6.3; 9.8
Fryer, Brent	OSTS_070	1.1; 1.5; 2.0; 2.2; 6.3; 6.3.5; 9.7; 10.3
Futrell, Sherrill	50051	2.3.1
Gabbott, Caylee A.	50274	10.6.1
Gabow, Bruce	50359	12.0
Garcelon, Gwen	50275	12.2
Garcia, Yolanda	50054	2.3.1
Garfield County Board of Commissioners	OSTS_078	1.1.1; 1.3; 1.5; 2.1.1; 2.2; 3.1.3; 3.10.3; 6.1.2; 6.2.2; 6.3.2.1; 6.3.3.1; 6.3.4; 9.2.1; 9.2.2; 9.5; 9.8
Gentry, Garry L.	50192	12.3
Gentry, Nola A.	50193	12.3
GeoX Consulting Inc.	50305	2.5; 12.3
Gillespie, Al	50040	2.2.1
Glen Canyon Institute	50352	2.3.1; 3.1.1; 3.4.1
Goad, Rebecca	OSTS_200	2.1.1; 9.8
Godlewski, Alison	50229	3.10.3
Goldsmith, Ken	50061	2.3.1
Goodloe, Sid	50116	2.3.1
Grand County, Utah	50017	1.1
Grand Junction Area Realtors Association	OSTS_114	1.1.1; 2.1.1; 9.8
Grand Junction Chamber of Commerce	OSTS_091	1.1.1; 2.1.1; 9.8
Grand Junction Economic Partnership	OSTS_176	2.1.1
Greene, Jack	50034	12.2
Greenwood, Rebekah	OSTS_129	2.1.1; 2.2; 11.2
Gregersen, Dylan	50327	12.0
Gregory, Joan	OSTS_010	3.5.1.7; 12.0
Gregory, Linda	OSTS_201	2.1.1; 9.8; 10.6.3

TABLE B-3 (Cont.)

Commentors (Name/Organization)	ID Number	Issue Number
Greig, Alexander J.	50023	12.2
Griffee, Ingrid K.	50041	10.6.1
Grote, Rolland P.	50289	10.6.1; 12.0
Grow Our Western Economy	OSTS_138	1.1.1; 2.1.1; 2.2
Gruen, Tatianna	OSTS_199	2.1.1; 2.2; 9.8
Guise, Karen D.	50082	12.0
Guldi, Christine	50263	6.1
Gutierrez, Laureen	OSTS_211	1.5; 2.1.1; 9.2.3
Gutt, Ruth	OSTS_234	3.0
Halbower, Kathy	50224	12.3
Hall, Rebecca	50011	12.1
Hanson, Jake	50198	10.6.1; 12.0
Hardebeck, Larry J.	50029	12.3
Harding, William	50340	2.2
Hardy, Jamie R.	50196	11.0
Harkins, Joanne E.	50202	2.3.1; 3.0; 3.1.1; 3.4.1
Harmon, Jay	OSTS_160	2.1.1; 2.2; 9.2.1; 9.8
Harmon, Kari	OSTS_144	2.1.1; 9.8
Haun, Marjorie	OSTS_215	1.1.1; 2.1.1; 9.8
Hawkes, Nathaniel	50190	10.6.1; 12.0
HawkWatch International	50295	2.3.1; 3.7.3.1; 3.7.3.5; 3.7.3.6; 3.7.3.9; 3.7.3.10; 3.7.4.1; 3.7.4.4; 3.7.3.9; 3.7.3.10
Hawley, Edward R.	50094	10.5; 10.6.3; 11.0
Healy, Debbie	OSTS_195	2.1.1; 2.2; 9.3
Hemmer, Michelle	OSTS_185	1.1.1; 2.1.1; 11.0
Hilberman, Mark	50047	1.0; 2.2.1; 2.3.1; 3.1.2; 3.4.1; 3.5.1.1; 3.5.1.6; 3.15; 6.2.3; 6.3.4; 9.0; 9.3; 9.7; 10.4; 10.6.1
Hills, Richard G.	50242	2.3.1; 3.0; 3.1.1; 3.4.1
History Colorado	50306	1.4; 3.9.7
Hollis, Jacqueline	OSTS_015	2.3.1
Holtzin, Rich K.	50209	1.5
Hudson, Denise	50257	2.3.1
Hull, Brian	OSTS_213	2.1.1
Hultgren, Sandra	50084	12.0
Hunsinger, Jerry	OSTS_172	2.1.1; 9.8
Hunsinger, Phyllis	OSTS_136	9.8

TABLE B-3 (Cont.)

Commentors (Name/Organization)	ID Number	Issue Number
Hurley, Michael A.	50033	11.0
Hyde, Mike	OSTS_027	2.1.1; 6.3.2.1; 9.8
Ickes, Elizabeth	50049	12.0
Ifill, Tim	50203	2.3.1; 3.0; 3.1.1; 3.4.1
iMatter Utah	50014	3.5.1.6; 12.0
Industrial Energy Consumers of America	OSTS_232	2.1.1; 2.2; 3.10.3; 9.8; 11.0
Industrial Systems, Inc.	50007 (50008)	11.2
Ingalls, William	50070	2.3.1; 3.1.1; 10.6.1; 12.3
Institute for Energy Research Campaign	OSTS_217	2.1.1
Irwin, Michele and Rob	50026	4.3; 5.0; 10.4
Jefferson, Eleanor J.	50128	3.0; 12.0
Jilka, Sarah	50307	12.0
Johnson, Bill J.	50280	1.5; 2.1.1; 9.8
Johnson, Curtis A.	50067	2.3.1
Johnson, Richard B.	50205	2.3.1
Johnston, Becky	50231	2.3.1; 3.0; 3.1.1; 3.4.1
Johnston, Ward	OSTS_139	12.0
Jones, Anne E.	50220	2.3.1
Jones, Don	OSTS_130	2.1.1; 9.8
Jones, Donna	OSTS_219	3.0
Jourgensen, Todd	OSTS_120	2.1.1; 2.2; 9.8
Jusek, Lauren	50168	3.10.2
Justman, John	OSTS_127	2.1.1
JWBA, Inc.	50349	2.1; 9.2.2; 9.7
Kaplowitz, Rena B.	50027	12.0
Keown, Herald D.	50170	3.5.1.6; 6.2.3; 12.0
Kerns, Craig	OSTS_030	6.3.3
Kiefer, Lois	OSTS_154	2.1.1; 2.2
King, Steve	OSTS_177	2.1.1; 9.8
King, Cindy	50261	2.3.1
Klafehn, Brad	50162	1.1; 1.5; 2.2; 2.3.1; 3.2; 3.3.2; 3.4.1; 3.4.6; 4.1; 5.0; 6.0; 6.3.2
Klain, Kyle	50246	3.4.1; 3.8.1
Kline, Stacy	50053	2.3.1
Kllanxhja, Piera	OSTS_221	3.0
Kohls, Cyn	OSTS_100	1.1.1; 2.1.1; 3.10.3

TABLE B-3 (Cont.)

Commentors (Name/Organization)	ID Number	Issue Number
Kohls, Jeff	OSTS_105	2.1.1; 3.10.3
Konola, Claudette	50089	2.3.1
Kovats, Attila B.	50254	10.6.1
Kresin, Bruce	OSTS_102	2.1.1; 2.2; 3.10.3; 9.6
Kresin, Teresa	OSTS_107	2.1.1.; 6.2.2; 6.3.2.1; 10.6.3; 10.8; 11.0
Kroese, Ciru	OSTS_203	2.1.1; 2.2; 6.3
Lamb, Elsie Wattson	OSTS_137	2.5; 3.0; 3.10.4; 3.10.5; 12.3
Lambert, Kate	OSTS_012	1.1; 12.0
Larime, Barbara E.	50370	2.1.1
Larsen, David	50143	3.0; 3.1.1; 3.3.1; 3.4.1; 3.5.1.1; 3.5.7; 3.9.7; 3.10.3; 9.3; 10.5
Latsch, Steve	50151	2.2; 3.0; 3.10.3; 12.3
Laybourn, Royal	50319	12.0
Leis, Ken	OSTS_212	1.1.1; 2.1.1; 9.2.1; 9.6.1; 9.8
Lenart, Joshua	OSTS_019	2.3.1
Lence, Bryan	50256	3.1.1; 12.0
Lewis, Steve G.	50230	12.3
Lincoln County Board of Commissioners	OSTS_077	1.1.1; 1.3; 1.5; 2.1.1; 2.2; 3.1.3; 3.10.3; 6.1.2; 6.2.2; 6.3.2.1; 6.3.3.1; 6.3.4; 9.2.1; 9.2.2; 9.5; 9.8
Lindermuth, John	50212	12.3
Lish, Christopher	50165	2.2; 2.3.1; 3.5.7; 3.7.3.12; 3.10.3; 3.10.5; 6.3.2.2; 9.8; 10.6.1; 12.3
Little, Frank R.	50004	11.2
Living Rivers/Colorado Riverkeeper Center for Biological Diversity Grand Canyon Trust	OSTS_083	1.5; 3.1.1; 3.4.1; 3.4.6; 3.5.1.1; 3.5.2; 3.5.4; 3.5.8; 3.7.1.2; 3.7.4.7; 3.7.4.10; 4.2; 6.3.2; 9.2; 9.2.2
Living Rivers	OSTS_022	3.4.1; 4.2
Livingston, Elaine D.	50311	12.0
London, Floyd	50001	3.4.1
Long, Randy	OSTS_013	2.2; 2.3.1; 12.0
Maclure, Carole A.	50299	12.3
MacTavish, Jodie	50083	12.1
Mahony, Eileen McGuire	OSTS_128	1.1.1; 2.1.1; 2.2; 9.8
Mansfield, Sandra	OSTS_126	2.1.1; 10.8; 11.2
Marsh, Douglas E.	50178	12.1
Marshall, David	OSTS_231	3.0; 3.10.3; 12.3

TABLE B-3 (Cont.)

Commentors (Name/Organization)	ID Number	Issue Number
Martin, Mary	OSTS_222	3.0
Martin, Melanie	OSTS_024	1.1; 3.4.1; 3.7.3.1; 3.7.4.1; 3.7.4.11; 3.13; 6.3
Martin, Melanie J.	50276	3.4.1; 3.4.2; 3.5.1.6; 3.7.3.1; 3.10.3; 3.13; 3.14; 10.6.1; 12.0
Martinet, Melissa	OSTS_016	1.1; 12.0
Masefield, Deborah	50211	2.3.1; 3.0; 3.1.1; 3.4.1
Masefield, Steve J.	50204	2.3.1
Mates, Ben J.	50038	12.0
Mathews, Frances	50080	10.6.1; 12.0
McAndrews, Douglas	50127	11.2
McArthur, Duncan	OSTS_209	1.1.1; 2.1.1; 9.6.1
McBride, Judith	50174	12.0
McCabe, Eileen M.	50313	2.5; 3.0; 10.6.1
McCarney, Kevin	OSTS_155	2.1.1; 6.2.2; 6.3.2.1; 6.3.5
McCoy, Hazel	50136	2.2; 3.0; 3.10.3; 12.3
McRoberts, Timothy E.	50237	12.0
Meinhart, Charity	OSTS_167	1.1.1; 2.1.1; 9.2.1
Mesa County Board of Commissioners	OSTS_079	1.1.1; 1.3; 1.5; 2.1.1; 2.2; 3.1.3; 3.10.3; 6.1.2; 6.2.2; 6.3.2.1; 6.3.3.1; 6.3.4; 9.2.1; 9.2.2; 9.5; 9.8
Mesa County Board of County Commissioners	OSTS_033	2.2; 2.1.1.; 3.10.2; 5.0; 9.3; 9.7
Messenger, Thomas J.	50326	2.3.1
Meyer, Jeff	50298	3.4.1
Michaelis, Margaret	50081	10.6.1; 12.0
Miller, Dorian L.	50045	12.0
Miller, Glen	OSTS_084	3.4.4; 3.15; 6.1; 6.3.2; 6.3.3; 6.3.6; 9.7
Miller, Glen	OSTS_085	3.1.8; 6.1; 6.3.6
Miller, Jack E.	50233	2.3.1
Miller, Neil and Jennifer	50247	10.6.1
Miller, Roger K.	50363	3.4.1; 3.13; 9.0
Moffat County Board of Commissioners	OSTS_081	1.1.1; 1.3; 1.5; 2.1.1; 2.2; 3.1.3; 3.10.3; 6.1.2; 6.2.2; 6.3.2.1; 6.3.3.1; 9.2.1; 9.2.2; 9.5; 9.8
Montrose County Board of County Commissioners	OSTS_032	1.5; 2.1.1; 3.10.3
Moore, Matt	OSTS_132	1.1.1; 2.1.1
Moore, Roger E.	50030	2.0; 2.2; 3.15; 6.3.6

TABLE B-3 (Cont.)

Commentors (Name/Organization)	ID Number	Issue Number
Moss, Timothy A.	50251	12.3
Moyer, Larry	OSTS_087	1.1; 2.0; 3.1.7; 3.4.6; 3.10.3; 3.15; 6.1.1
Mueller, Andy	50114	12.0
Mueller, Marilyn	50115	12.0
Mullins, Chad E.	50353	12.0
Musser, R.	OSTS_166	2.1.1
Name withheld on request	OSTS_009	1.1
Name withheld on request	OSTS_014	1.1; 12.0
Name withheld on request	OSTS_028	12.2
Name withheld on request	OSTS_034	3.4.1; 3.14
Nagel, Peggy A.	50095	2.2.1; 10.6.1
National Council of Churches Church of the Brethren Columbian Center for Advocacy and Outreach The Episcopal Church Maryknoll Office of Global Concerns National Council of Churches USA Presbyterian Church (USA) Office of Public Witness Union for Reform Judaism Unitarian Universalist Association of Congregations United Church of Christ - Justice and Witness Ministries United Methodist Church - General Board of Church and Society	50021	2.2.1
National Oil Shale Association	50074 (50075)	1.1.1; 2.1; 2.2; 2.3; 2.4; 3.1.4; 3.1.7; 3.4.3; 3.15; 6.3.2; 6.3.2.1; 9.6; 9.6.1; 9.8; 10.5
National Parks Conservation Association	50253	2.3.1; 3.1.1; 3.1.2; 3.4.1; 3.5.4; 3.6; 3.8.1; 3.10.4
National Wildlife Federation	50323	1.5; 2.2; 2.2.1; 3.1.1; 3.1.2; 3.1.8; 3.4.1; 3.4.2; 4.2; 3.7.1.1; 3.7.1.2; 3.7.3.1; 3.7.3.9; 3.7.3.12; 3.7.4; 3.7.4.1; 3.7.4.3; 3.7.4.9; 3.7.5.1; 3.10.2; 3.10.4; 4.1; 4.2; 5.0; 6.3.2; 9.2.1; 9.2.6; 9.4
National Wildlife Federation campaign	OSTS_228	2.2.1; 3.0
Natural Soda, Inc.	50330	1.3; 2.2; 2.1.1; 3.1.5; 3.10.3; 6.3.3
Neal, Marcia	OSTS_121	2.1.1; 2.2
No last name provided, Gordon	50317	12.3

TABLE B-3 (Cont.)

Commentors (Name/Organization)	ID Number	Issue Number
No last name provided, Mark	50002	2.1; 11
No last name provided, Peg	50044	12.0
No last name provided, Steve	50278	10.6.1; 11.2
No name provided	OSTS_023	3.0
No name provided	50018	2.2
No name provided	50022	12.2
No name provided	50042	12.0
No name provided	50065	2.3.1
No name provided	50066	2.3.1
No name provided	50073	1.1; 2.2
No name provided	50120	2.2; 3.0; 3.10.4; 12.3
No name provided	50121	2.2; 3.0; 3.10.4; 12.3
No name provided	50129	2.2; 3.0; 3.10.3; 12.3
No name provided	50130	2.2; 3.0; 3.10.3; 12.3
No name provided	50131	2.2; 3.0; 3.10.3; 12.3
No name provided	50137	2.2; 3.0; 3.10.3; 12.3
No name provided	50141	12.0
No name provided	50145	2.1.1
No name provided	50152	1.1.1; 2.1.1; 9.8
No name provided	50153	1.1
No name provided	50156	3.4.1
No name provided	50157	2.3.1; 3.7.4.10; 3.10.4; 3.10.5
No name provided	50159	2.2; 3.0; 3.4.1; 3.10.3; 12.3
No name provided	50166	2.2; 3.0; 3.10.3; 12.3
No name provided	50172	2.2; 3.0; 3.10.3; 12.3
No name provided	50177	12.0
No name provided	50194	12.3
No name provided	50218	3.1.1
No name provided	50226	2.3.1; 3.0; 3.1.1; 3.4.1
No name provided	50232	12.0
No name provided	50240	2.3.1; 12.0
No name provided	50288	12.0
No name provided	50364	10.6.1; 12.0
Oden, Marilyn	OSTS_191	2.1.1
Olson, Joyce	OSTS_225	3.0
Oswald, Lance M.	50262	2.3.1; 6.3.4; 10.4; 10.5

TABLE B-3 (Cont.)

Commentors (Name/Organization)	ID Number	Issue Number
Our Healthy Earth Foundation	OSTS_021	3.10.2; 6.6; 10.7; 12.2
Ouray County, Colorado	50269	2.2.1; 3.4.1; 3.10.2; 3.10.4; 5.0; 6.2
Outdoor Alliance Access Fund American Canoe Association American Hiking Association American Whitewater International Mountain Biking Association Winter Wildlands Alliance	50318	1.5; 2.3.1; 3.1.1; 3.4.1; 3.5.4; 3.5.6
Pace, Stephanie	50009	12.3
Park, Gerald M.	50315	11.0
Parsons, Barbara W.	50019	8.0
Pattison, Ben	50245	3.10.4; 6.3.2.2; 12.0
Pearce, Daniel D.	50015	12.0
Peeso, Sandy	OSTS_156	1.1.1; 2.1.1; 2.2
Peterson, Bonnie	OSTS_170	1.1.1
Peterson, Derek K.	50036	12.2
Pettygrove, Don	OSTS_119	1.1.1; 2.1.1; 2.2
Pitkin County	50147	2.3.1; 3.4.1; 3.5.3; 3.5.4; 3.5.9; 3.7.3.1; 3.7.3.6; 3.10.2; 3.10.4; 3.14; 4.2; 6.2; 10.6; 10.6.1
Pollard, John R.	50264	12.0
Porter, Josephine	50216	2.3.1
Pottorff, Verna R.	50003	2.2
Powell, Krystal d.	50259	12.0
Power, Nancy R.	50012	2.2.1; 10.6.1
Public, Jean	50005	12
Pugliese, John	OSTS_202	2.1.1
Pugliese, Rose	OSTS_134	1.1.1; 2.1.1
Rankin, Bob	OSTS_180	2.0; 2.1.1; 9.6.1
Rau, George	OSTS_171	2.1.1
Raymond, Wendy J.	50241	3.4.1
Redmond, Dan	OSTS_131	2.1.1
Redstone, Cori	50281	12.0
Reinhardt, Renee C.	50142	3.0; 3.10.3; 3.10.5
Richards, Christopher	50189	3.0
Richardson, Gail	50056	2.3.1
Richardson, Scott	50260	3.4.1; 3.10.4
Rio Blanco County Board of Commissioners	OSTS_080	1.1.1; 1.3; 1.5; 2.1.1; 2.2; 3.1.3;

TABLE B-3 (Cont.)

Commentors (Name/Organization)	ID Number	Issue Number
		3.10.3; 6.1.2; 6.2.2; 6.3.2.1; 6.3.3.1; 6.3.4; 9.2.1; 9.2.2; 9.5; 9.8
Rio Blanco County Board of County Commissioners	OSTS_151	1.1.1
Rio Blanco County Board of County Commissioners	50312	1.3; 1.5; 2.1.1; 2.2; 2.4.1; 3.1.3; 3.4.1; 3.7.5.1; 3.10.1; 3.10.2; 3.10.3; 3.13; 5.0; 6.2.1; 6.3; 6.3.2.1; 8.0; 9.1; 9.2.1; 9.2.2; 9.7; 9.8; 10.5; 13.0
Roaring Fork Sierra Club Group	50336	2.2; 2.3; 2.3.1; 3.1.2; 3.4.1; 3.5.1.1; 3.10.4; 12.0
Robar, Kenneth	OSTS_207	2.1.1; 2.2; 2.3; 2.4; 9.6
Rock Springs Grazing Association	OSTS_029	11.2
Rodgers, David E.	50322	2.3.1; 3.1.1; 3.4.1; 3.10.4; 10.6.1
Rogers, Shannon	OSTS_161	2.1.1
Rogers, Tyler	OSTS_108	2.1.1; 2.2; 9.8
Rogier, Francesca E.	50373	12.0
Romanski, Gene	50234	2.3.1; 3.0; 3.1.1; 3.4.1
Roscetti, Dennis	50062	2.3.1
Routt County	50144	2.0; 3.0; 3.1.2; 3.4.1; 3.10.2; 3.10.3; 6.2.1
Russell, Shannon	OSTS_142	2.1.1
Rutkowski, Robert E.	50201	2.3.1; 3.0; 3.1.1; 3.4.1
Sachs, Kathryn C.	50236	3.4.1; 12.0
Sachs, Mary A.	50265	12.0
Samson Resources Company	OSTS_086	1.5; 3.1.5; 3.1.7
Sanders, Ashley B.	50013	12.1
Schmitzer, Rob	OSTS_123	2.1.1
Schoenradt, Richard	OSTS_148	2.1.1; 6.2.2; 6.3.2.1; 6.3.5
Schweiss, Kraig	50371	10.6.1; 12.0
Schwenke, Diane	OSTS_117	2.1.1; 3.10.3
Scott, Ray	OSTS_143	2.1.1; 9.8
Seelinger, Claire	50028	10.6.1; 12.1
Severson, Dan	OSTS_133	2.1.1; 2.2; 3.1.3; 9.2.1; 9.8
Shablo, Carol A.	50043	11.0
Shaffer, Adam	50058	2.3.1
Sharp, Mike	50250	12.3
Shell Frontier Oil and Gas, Inc.	OSTS_066	1.1.1; 1.3; 2.1.1; 2.2; 6.2.1; 6.3.3; 9.2.1; 9.8; 10.5; 10.6; 10.6.3;
Shepherd, Janice	OSTS_226	3.0; 3.2

TABLE B-3 (Cont.)

Commentors (Name/Organization)	ID Number	Issue Number
Sierra Club campaign	OSTS_227	2.3.1; 3.0; 3.5.1.6; 12.3
Sierra Club, Glen Canyon Group - Utah Chapter	OSTS_090	2.3.1; 3.1.1; 3.4.1; 3.5.4; 3.7.4.10; 3.7.5.1; 3.10.2; 6.3.2.2; 8.0
Skowronski, Christopher	OSTS_210	2.1.1; 9.2.1; 9.6
Skubic, Carol	OSTS_135	1.1.1; 2.1.1
Sloan, Brenda	OSTS_153	2.1.1; 9.8
Smigh, Herschella	OSTS_093	2.1.1; 9.8
Smith, Jeff	OSTS_118	2.2; 9.8
Smythe, Steven	OSTS_164	11.0
Spach, D.T.	OSTS_096	2.1.1; 6.3.5; 9.8
Spach, Janet	OSTS_101	1.1.1; 2.1.1; 3.10.3
Spears, Connie	50052	2.3.1
Speirs, Walt	50112	2.3.1
Springer, Craig	OSTS_147	1.1.1; 2.1.1; 2.2; 3.10.3; 9.8
Stansfield, Katrina	50366	2.2.1; 3.4.1
Staples, D.	50150	2.2; 3.0; 3.10.3; 12.3
State of Utah	50333	1.1.1; 1.3; 1.5; 2.1.1; 2.2; 3.1.3; 3.4.2; 3.4.3; 3.4.4; 3.4.5; 3.5.2; 3.5.5; 3.5.6; 3.7.5.1; 3.10.3; 3.14; 4.3; 6.1.1; 6.2.1; 6.3; 6.3.2; 6.5; 8.3; 9.2; 9.2.1; 9.2.2; 9.2.3; 9.2.4; 9.5; 9.6; 9.6.1; 9.7; 9.8; 10.5; 10.6; 11.0; 13.0
State of Wyoming	50332	1.3; 3.1.3; 3.1.5; 9.2.1; 9.2.4; 9.7
Steig, Brad	OSTS_188	2.1.1; 9.8
Steinbach, Larry W.	50006	2.1.1
Stephens, Ed	OSTS_159	2.1.1; 6.2.2; 6.3.2.1; 6.3.5
Stern, Adam G.	50199	2.3.1
Stevenson, Jason R.	50179	2.3.1; 3.1.2
Stewart, Irwin I.	50148	6.3; 9.0; 9.8
Stoker, Philip	50068	2.3.1
Straub, Carolyn A.	50055	2.3.1
Sundeen, Joan	50096	3.4.1; 3.5.7; 3.7.4.1; 3.10.3; 3.14
Sunewin Energy	OSTS_152	6.3.1
Susuras, Sam	OSTS_140	2.1.1
Swanson, Fred	50195	2.3.1
Sweetwater County Board of County Commissioners	OSTS_150	2.0

TABLE B-3 (Cont.)

Commentors (Name/Organization)	ID Number	Issue Number
Sweetwater County, Wyoming	50255	1.1.1; 1.3; 1.5; 2.1; 2.1.1; 2.2; 2.5; 3.1.3; 3.10.3; 6.1.2; 6.2.2; 6.3.2.1; 6.3.3.1; 6.3.4; 9.2; 9.2.1; 9.2.2; 9.5; 9.8; 10.6.3
Syroid, Daniel	50025	12.2
Syroid, Noah	50024	10.6.1; 12.0
Tabin, Jean N.	50077	2.3.1; 10.6.1
Taylor Energy	50304	6.3
Terry, K.	50149	2.2; 3.0; 3.10.3; 12.3
The Wilderness Society campaign	OSTS_218	2.2.1; 3.0; 3.5.3; 3.10.4; 6.2.3; 6.3.2.2
Thompson, Doug	OSTS_204	2.1.1; 2.2; 9.8
Thompson, Jeffrey	OSTS_206	8.1; 11.0
Thompson, Thurston	50060	12.0
Tibbetts, Peggy	50031	12.0
Tice, Larry	OSTS_181	2.1.1; 11.2
Tobin, Robert L.	50099 (50097-50098) (50100-50109)	3.2; 3.4.1; 3.4.5; 3.4.6
Todd, Sam	50135	2.2; 3.0; 3.10.3; 12.3
Town of Carbondale	50270	1.1; 3.1.2; 3.4.1; 3.7.3.12; 3.10.2; 3.10.4; 6.2.1; 9.7; 9.8
Town of New Castle	50249	2.2.1; 2.3.1; 3.4.1; 3.10.2; 3.10.4
Trepanier, Lionel	50285	1.1; 1.5; 3.4.1; 3.14; 4.2; 6.3; 12.0
Tucker, Pat and Gerry	OSTS_169	2.1.1
Tuke, Carla	50206	2.3.1; 3.0; 3.1.1; 3.4.1
Turley, Steven	50210	2.3.1
U.S. DOE, Fish and Wildlife Service, Region 6	OSTS_071	1.4; 2.2.1; 3.4.1.3; 3.4.6; 3.7.1.2; 3.7.3.2; 3.7.3.3; 3.7.3.4; 3.7.3.5; 3.7.3.6; 3.7.3.11; 3.7.3.12; 3.7.4.1; 3.7.4.3; 3.7.4.4; 3.7.4.5; 3.7.4.6; 3.7.4.11; 3.7.5.1; 3.7.5.3; 4.2; 4.3; 5.0; 6.3; 6.3.2; 9.2; 9.3
U.S. DOI, National Park Service, Intermountain Region	OSTS_073	2.3.1; 3.1.1; 3.9.1
U.S. DOI, U.S. Geological Survey (USGS)	OSTS_074	3.7.3.12; 3.7.4.11
U.S. Environmental Protection Agency, Region 8	OSTS_072	1.4; 3.4.4; 3.4.5; 3.5.5; 3.5.8; 3.7.2; 6.2.1; 9.3; 9.6
Uintah County	50325	1.1.1; 1.3; 1.5; 2.1; 2.1.1; 2.2; 2.5; 3.1.3; 3.1.7; 3.10.3; 6.0; 6.1.1; 6.1.2; 6.2.2; 6.3.2.1; 6.3.3.1; 6.3.4; 6.3.5; 9.1; 9.2.1; 9.2.2; 9.5; 9.8

TABLE B-3 (Cont.)

Commentors (Name/Organization)	ID Number	Issue Number
Uno, Kevin	50284	10.6.1; 12.0
Urignen, Anthony	OSTS_184	2.1.1; 9.6.1; 9.8
Utah Science & Technology Research	OSTS_002	10.7
Varner, Clara L.	50122	2.2.1
Vaughn, Chaz	OSTS_174	2.1.1
Vaughn, Colton	OSTS_205	2.1.1; 9.8
Venezia, Sherri	50223	12.3
Vermillion Ranch Limited Partnership	50328	1.5; 2.1; 2.1.1; 2.2; 3.1.3; 3.1.7; 3.10.3; 6.3.2; 6.3.5; 6.5; 8.2; 9.1; 9.2.1; 9.2.2; 9.2.4; 9.5; 9.7
Vernal Area Chamber of Commerce	OSTS_112	2.1.1
Vilnius, Douglas	50046	10.6.1
Vohland, Michael	OSTS_110	2.1.1; 9.8
W (no other name provided)	50093	12.1
Wade, Lowell E.	50123	2.2.1; 3.4.1; 3.10.3; 3.10.5
Walker, Jerry	OSTS_094	2.1.1
Wallace, Jonathan	50176	12.0
Walters, Sonya	50138	2.2; 3.0; 3.10.3; 12.3
Warnick, Richard M.	50238	2.3.1; 3.0; 3.1.1; 3.4.1
Waterson, Sarah	50164	2.3.1; 3.1.1; 3.4.1
Wear, George H.	50354	2.2.1
Weaver, Andrew	OSTS_098	1.1.1
Weaver, Megan	OSTS_097	2.1.1
Webb, Dean B.	50059	2.3.1
Weber Sustainability Consulting	50351	3.4.1; 3.7.3.11; 5.0; 12.0
Weber, Jana	OSTS_067	12.3
Weiblen, Peter M.	50191	12.0
Welch, Jeffery	OSTS_146	2.1.1
Werschky, Dave E.	50244	3.4.1; 12.0
West Slope Colorado Oil & Gas Association	50343	1.3; 2.2; 2.4; 3.4.1; 3.8.3; 3.10.1; 3.10.3; 3.12.3; 5.0; 6.1; 6.1.1; 6.2.1; 6.3; 6.3.2; 6.3.2.1; 9.3; 9.6; 9.8; 13.0
Western Business Roundtable	50283	6.1.2; 10.6.3; 9.0; 11.0
Western Colorado Jobs Alliance (WCJA)	OSTS_122	2.1.1; 2.2; 9.8
Western Colorado Contractors Association	OSTS_196	1.1.1; 2.1.1; 3.10.3

TABLE B-3 (Cont.)

Commentors (Name/Organization)	ID Number	Issue Number
Western Resource Advocates Biodiversity Conservation Alliance Center for Biological Diversity Colorado Environmental Coalition Defenders of Wildlife EcoFlight National Parks Conservation Association Natural Resources Defense Council Sierra Club Southern Utah Wilderness Alliance The Wilderness Society Utah Physicians for a Healthy Environment Western Colorado Congress Wild Utah Project Wilderness Workshop Wyoming Outdoor Council	OSTS_069	1.4; 1.5; 2.2; 2.3.1; 3.1.1; 3.1.2; 3.1.7; 3.4.1; 3.4.5; 3.5.1.1; 3.5.1.3; 3.5.1.4; 3.5.1.6; 3.5.3; 3.5.4; 3.7.1.1; 3.7.1.2; 3.7.4.1; 3.7.4.2; 3.7.4.3; 3.7.4.6; 3.7.4.7; 3.7.4.8; 3.7.4.9; 3.7.4.10; 3.7.5.1; 3.7.5.2; 3.7.5.3; 3.8.1; 3.8.2; 3.10.2; 3.10.3; 3.10.4; 3.15; 4.1; 4.2; 5.0; 6.1.1; 6.2; 6.2.1; 6.3; 9.0; 9.2.1; 9.2.4; 9.2.6; 9.3; 9.7; 10.6.1
Western Slope Conservation Alliance	OSTS_189	2.1.1; 9.6.1; 9.8
Wetzel, Angela	50273	3.10.3; 10.6.3; 11.0
Wharram, April	50132	2.0; 3.0; 3.10.3; 12.3
White, Dennis	OSTS_197	2.1.1; 6.2.2; 6.3.2.1; 9.8; 11.2
White, Leslie	OSTS_179	2.1.1; 9.8
Williams, Mary	OSTS_007	2.3.1
Williamson, Brenda	50158	12.3
Williamson, Kirt E.	50039	12.0
Willis, Cheryl	50243	3.4.1; 3.13
Wolf, Wesley	50219	2.3.1; 3.1.1; 3.4.1
Wolfe, Mary E.	50113	2.3.1; 12.0
Worden, Bonnie J.	50161	2.2; 3.0; 3.4.1; 3.10.3; 12.3
Worthen, Garry	OSTS_194	2.1.1; 9.8
Worthy, Crista	50200	2.3.1; 3.1.1; 3.4.1
Wortmann, Craig	OSTS_115	2.1.1; 9.8
Wright, Jared	OSTS_182	2.1.1; 2.2
Wright, Tom	50235	2.3.1; 3.0
Wuerthner, George	50111	2.3.1; 3.1.1
Wyoming Department of Environmental Quality	50335	1.5; 2.2; 3.1.7; 3.4.2; 3.4.5; 3.5.4; 3.5.6; 3.5.7; 3.13; 5.0; 6.0; 6.3; 6.4; 9.1; 9.2; 9.3; 9.7

TABLE B-3 (Cont.)

Commentors (Name/Organization)	ID Number	Issue Number
Wyoming Game and Fish Department	50286	2.1; 2.2; 2.3; 2.4; 3.1.2; 3.7.3.1; 3.7.5.1; 3.7.3.8
Wyoming Office of State Lands & Investments	50163	9.2; 9.2.4
Wyoming Outdoor Council	OSTS_088	2.2; 2.3.1; 3.1.1; 3.4.1; 3.5.7
Yazzie, Jane	OSTS_003	2.2; 3.4.1; 10.6.1; 12.0
Zigmund, Sean	50088	2.5; 10.6.1

B.4.2 Issue Summaries and Responses

1.0 NEPA ANALYSIS

50047-16 50047-17 50160-2 50279-7

Issue Summary: Commentors noted that the general Programmatic Environmental Impact Statement (PEIS) document was adequate. Other commentors noted that appropriate baseline measurements should be taken prior to the program's implementation.

Response: The Bureau of Land Management (BLM) will do baseline monitoring and baseline environmental studies at the appropriate time and in a focused manner prior to an area being leased, as noted on p. J-19 of the Draft PEIS. This approach would result in a cost-effective program that would produce relevant data. Appropriate baseline measurements were made for each of the research, development, and demonstration (RD&D) lease areas as part of an environmental analysis and plan of operations for both the state and the BLM. This information will be used to support the conversion to commercial leases.

1.1 PUBLIC INVOLVEMENT

OSTS_004-1	OSTS_014-1	50017-1	50270-2
OSTS_004-3	OSTS_016-1	50073-1	50285-1
OSTS_006-1	OSTS_024-1	50125-1	50296-1
OSTS_009-1	OSTS_062-4	50125-3	50308-14
OSTS_011-1	OSTS_070-9	50153-1	
OSTS_012-1	OSTS_087-8	50162-4	

Issue Summary: Some members of the public were concerned about the format of the meetings and also were concerned about the size of the meeting room, the lack of an open speaking forum, and the way the meetings format was publicized (or not). In addition, concerns were expressed about the content of the opening remarks and the lack of a presentation on the content of the Draft PEIS, while others expressed appreciation for the BLM's response to their questions. Several commentors expressed concern that the public comments that the BLM received during the 90-day public comment period were not available for view by the public, on the oil shale and tar sands (OSTS) Web site, or on a public Web site such as regulations.gov.

Response: For a number of purposes, external scoping meetings are held to notify agencies, organizations, tribes, state and local governments and the public that the BLM is about to prepare a National Environmental Policy Act of 1969 (NEPA)/planning document and to provide opportunities for feedback on what needs to be analyzed in these documents. These meetings are also used to identify coordination needs, refine issues, and identify new issues and possible alternatives. The BLM generally does this through a public meeting with an open forum format whereby participants are each given an opportunity to express their views on the above issues. This information is incorporated and used in preparing the Draft PEIS/land use plan. The BLM holds public meetings on draft land use plans after it has circulated the document for comment. The intent of these meetings is to inform the public that the Draft is available and to respond to any questions the public may have regarding the Draft document. In general, the BLM will do this through a public open-house meeting. The format is an open-house format whereby posters and maps are arrayed around the meeting room and resource experts are available to answer specific resource questions. In addition, BLM staff are present to discuss policy and NEPA issues and concerns. Several members of the public expressed concerns about the size of the venue in Salt Lake City for the public meeting on the Draft PEIS. The size of the room was selected based on the number of attendees at the scoping meeting for the PEIS in Salt Lake City the previous year. Regarding presentations of the Draft PEIS, a continuous un-narrated slide presentation was run throughout the meeting, and several posters and maps were available, as were BLM and contractor resource specialists to explain the contents of the PEIS. In spite of this crowded condition, the BLM was able to hear a wide variety of concerns regarding the PEIS and respond to questions to groups or individuals during the meeting. Staff were available to answer questions through the full period of the meeting, and they engaged in several discussions with members of the public, especially toward that later part of the meeting, after members of the public had viewed the various visual presentations. The BLM publicized the format of the meeting through announcements in local newspapers in a manner that fairly and accurately described the format of the meetings.

Several commentors expressed concern that the public comments that the BLM received during the 90-day public comment period were not available for view by the public, on the OSTS Web site, or on a public Web site such as regulations.gov. Several federal agencies have elected to use regulations.gov to request and make available public comments for NEPA processes. The commentors assert that failing to make such public

comments available during the public comment period is not consistent with open government, in principle, and as advocated by the Obama Administration.

Under the BLM's planning regulations at Title 43, Part 1610.2(d) of the *Code of Federal Regulations* (43 CFR 1610.2(d)), any comments received from the public during public participation activities must be available for the record or in a summary and must remain open for 30 days, so that members of the public may correct or clarify their views. For the OSTS PEIS planning initiative, the BLM prepared a summary of public comments received during the scoping period that began on April 14, 2011, and posted that summary to the OSTS Web site in late summer 2011. The summary of comments received was also published with the Draft PEIS, on February 3, 2012.

As for the public comments received during the 90-day public comment period, although the comments were not made available as they were received, they were posted on the OSTS Web site on August 21, 2012, after the close of the comment period. In addition, public comments are included, in full, in electronic form on the CD portion of Volume 5 of this Final PEIS. Under the BLM planning regulations and in accordance with the Council on Environmental Quality's (CEQ's) regulations implementing NEPA, all the comments received during the comment period, as well as the Final PEIS, will be available for at least 30 days, upon publication, before any decision is made regarding the proposed action of amending land use plans.

1.1.1 Extension of Comment Period

OSTS_066-7	OSTS_100-3	OSTS_170-1	50255-27
OSTS_077-15	OSTS_101-4	OSTS_183-2	50268-22
OSTS_077-19	OSTS_113-2	OSTS_185-3	50268-33
OSTS_078-15	OSTS_114-3	OSTS_196-4	50272-8
OSTS_078-19	OSTS_119-2	OSTS_209-1	50290-8
OSTS_079-15	OSTS_128-4	OSTS_212-5	50310-1
OSTS_079-19	OSTS_132-1	OSTS_215-3	50324-1
OSTS_080-16	OSTS_134-2	50074-1	50325-24
OSTS_080-20	OSTS_135-2	50074-5	50325-30
OSTS_081-15	OSTS_138-3	50091-1	50325-9
OSTS_081-20	OSTS_147-3	50152-3	50333-1
OSTS_082-1	OSTS_151-1	50186-19	50333-33
OSTS_091-3	OSTS_156-3	50186-26	50337-12
OSTS_098-1	OSTS_163-1	50186-28	
OSTS_099-3	OSTS_167-2	50255-23	

Issue Summary: A number of parties requested that the comment period be extended by 30, 60, or 90 days to include the period in which the draft oil shale regulations would be published so that both documents could be reviewed simultaneously.

Response: The request for an extension of the public comment period for this PEIS was not granted. See the response to Issue 9.8, below, for an explanation of why an extension was not granted. In particular, it is noted there that the 2012 proposed land use plan amendment allocation and the proposed amendment to the rule are distinct proposed actions, which take place under distinct authorities according to distinct procedural requirements. The proposed rule amendment is not "closely related" to the proposed land use plan allocation amendment, so as to warrant discussion as a "connected action" under 40 CFR 1508.25. Nor are they so dependent upon one another as to necessitate coordination of the public comment period for either process.

1.2 GOVERNMENT-TO-GOVERNMENT CONSULTATION

50125-2

Issue Summary: One commentor asked the BLM to ensure that it conduct extensive outreach and consultation with tribes to identify cultural sites of importance.

Response: The BLM has conducted outreach. The BLM has consulted with all the affected tribes and continues to consult with them through the Section 106 process, including asking them to identify landscape-wide sites of cultural importance to them.

1.3 STATE AND LOCAL GOVERNMENT

OSTS_066-9	50087-4	50227-4	50325-45
OSTS_075-2	50090-9	50255-28	50325-8
OSTS_077-20	50181-99	50255-5	50330-2
OSTS_078-20	50184-3	50290-5	50333-6
OSTS_079-20	50184-4	50290-9	50333-7
OSTS_080-21	50184-8	50312-1	50343-7
OSTS_081-21	50186-27	50312-6	
OSTS_082-2	50227-14	50312-7	
OSTS_089-1	50227-15	50325-31	

Issue Summary: Certain county and city governments were concerned that the BLM did not solicit input and consideration from them. One commentor suggested that because the public hearings in Colorado were not held in the White River district, where the richest

oil shale resource lies and where most of RD&D leases exist, the BLM's focus had shifted away from the local connections with the resource.

Response: As part of the cooperating agency process, the BLM sent cooperating agency invitation letters to all county governments in the planning area. It is BLM policy to solicit cooperating agency status from county governments. If a city government had requested to participate as a cooperating agency, that request would have been granted. Counties that did not indicate a desire to be a cooperating agency were not included as a cooperating agency. Regarding including original scoping comments in Chapter 7 or elsewhere in the PEIS, the BLM does not generally include individual scoping comments in a planning document; rather, a scoping report summarizing these comments and BLM's determination of whether issues raised in such comments are within the scope of the document is provided. Such a summary report is provided as Appendix J in this PEIS. In accordance with 43 CFR 1610.3-1, when developing or revising Resource Management Plans (RMPs), BLM State Directors and Field Managers will invite eligible federal agencies, state and local governments, and federally recognized Indian tribes to participate as cooperating agencies. The same requirement applies when the BLM amends RMPs through an EIS. State Directors and Field Managers will consider any requests of other federal agencies, state and local governments, and federally recognized Indian tribes for cooperating agency status. Field Managers who deny such requests will inform the State Director of the denial. The State Director will determine whether the denial is appropriate.

Under the BLM's planning regulations at 43 CFR 1610.2(d), any comments received from the public during public participation activities must be available for the record, or in a summary, and must remain open for 30 days so that members of the public may correct or clarify their views. For the OSTS PEIS planning initiative, the BLM prepared a summary of public comment received during the scoping period that began on April 14, 2011, and posted that summary to the OSTS Web site in late summer 2011. The summary of comments received was also published with the Draft PEIS, on February 3, 2012.

In accordance with 43 CFR 1610.3-1, State Directors and Field Managers shall provide other federal agencies, state and local governments, and Indian tribes opportunity for review, advice, and suggestion on issues and topics that may affect or influence other agency or other government programs. The BLM will:

(1) Ensure plans are as consistent as possible with existing officially adopted and approved resource related plans, policies or programs of other federal agencies, state agencies, Indian tribes, and local governments that may be affected, as prescribed by §1610.3–2 of this title;

(2) Identify areas where the proposed guidance is inconsistent with such policies, plans, or programs and provide reasons why the inconsistencies exist and cannot be remedied; and

(3) Notify the other federal agencies, state agencies, Indian tribes, or local governments with whom consistency is not achieved and indicate any appropriate methods, procedures, actions, and/or programs which the State Director believes may lead to resolution of such inconsistencies.

In accordance with Section 202 (c)(9) of the Federal Land Policy and Management Act of 1976 (FLPMA), the BLM has given consideration to those state, local, and tribal plans that are germane in the development of land use plans for public lands. Land use plans of the Secretary under this section shall be consistent with state and local plans to the maximum extent he finds consistent with federal law and the purposes of this Act.

The BLM has published the written comments of cooperators who have unresolved disagreements over substantive elements of the PEIS in Appendix M of this PEIS.

Public meetings were held in a central location in the planning area in each state. The meeting in Colorado was held in the Colorado River Valley Field Office in Silt, one of the three Colorado BLM offices within the planning area. The other two offices were 49 mi (White River Field Office in Meeker) and 68 mi (Grand Junction Field Office) away, respectively. The meetings were held 8 mi from the location of the 2008 PEIS public meetings.

1.4 AGENCY CONSULTATION

OSTS_069-25	OSTS_071-8	OSTS_072-9	50306-1

Issue Summary: Commentors requested the BLM consult with relevant agencies in areas of their expertise.

Response: The BLM received comments on the Draft PEIS from various federal agencies and has incorporated these comments into the Final PEIS and will continue to consult with agencies as appropriate.

1.5 INADEQUATE/BIASED NEPA ANALYSIS

OSTS_032-2	OSTS_078-6	OSTS_081-9	50162-3
OSTS_068-1	OSTS_078-8	OSTS_083-1	50181-125
OSTS_068-10	OSTS_079-6	OSTS_086-1	50181-3
OSTS_069-42	OSTS_079-8	OSTS_104-1	50181-8
OSTS_070-1	OSTS_080-9	OSTS_109-3	50181-90
OSTS_077-6	OSTS_080-15	OSTS_211-1	50186-8
OSTS_077-8	OSTS_081-7	50162-16	50186-11

50209-1	50310-12	50324-10	50328-24
50255-4	50310-15	50324-16	50333-2
50255-14	50312-11	50324-7	50333-21
50255-16	50312-42	50324-9	50333-31
50268-20	50318-5	50325-16	50333-5
50280-1	50320-1	50325-18	50333-40
50285-7	50320-7	50328-17	50335-5
50287-22	50323-2	50328-18	50337-11

Issue Summary: Many comments expressed concern that the NEPA analysis was flawed, inadequate, or biased for or against oil shale and tar sands development. Comments from industry and local governments suggested that the document did not satisfy NEPA requirements to protect the environment, but that it serves to establish barriers to oil shale and tar sands development on public land and thus violates NEPA and the 2005 Energy Policy Act. Some environmental groups suggested that, by allowing any oil shale and tar sands development, the Draft PEIS did not adhere to NEPA requirements to protect the environment or that the NEPA analysis was biased in favor of development on public lands. Several commentors also stated that the Draft PEIS lacks detail, data, and a sufficient analysis of impacts.

The State of Utah commented that the PEIS inadequately analyzes oil shale technologies.

One member of the public commented that on page J-6, in the analysis of Scoping Comments, the PEIS states that the comment that "deferment of decisions [should be made] until RD&D results are available" is outside the scope of the PEIS and disagreed that this comment was out of scope.

One local government commentor noted that the PEIS fails to incorporate new data and listed pages where new data were needed.

Response: The BLM disagrees that the PEIS is not following an open and unbiased process. The Draft PEIS was prepared in accordance with both FLPMA and NEPA land use planning requirements. While the BLM has a multiple use mandate, this does not mean that the BLM will allow every use on every acre. In accordance with FLPMA, the Secretary has the discretion to manage public lands as he determines appropriate. Regarding the withdrawal of Naval Oil Shale Reserves (NOSR) lands, as stated in Section 2.3.3, pages 2-30 and 2-31 of the Draft PEIS, the oil shale withdrawal is still in effect on NOSR lands 1 and 3, and these lands are closed and not available for future opportunity for lease for the development of oil shale resources under all alternatives.

The BLM complied with the requirements of the Energy Policy Act in 2008, issuing both the PEIS and the regulation required by Section 369 of the Act. Nothing in the Energy

Policy Act of 2005 specified how the Secretary must establish a commercial oil shale leasing program, apart from requiring the Secretary to consider the most geologically prospective areas in Colorado, Utah, and Wyoming. The Energy Policy Act did not specify the acreage that must be available for such program, or how the requirements of such program should be balanced with other resource uses. Under FLPMA, the Secretary must manage the public lands in accordance with land use plans, and retains the discretion to establish, revise, and amend those land use plans, as appropriate, to address resource management issues. This means that no leasing or development of oil shale or tar sands resources may occur on the public lands unless such activity is consistent with the applicable land use plan. In view of the nascent character of the oil shale and tar sands industries, as well as in light of other resource management concerns, the Secretary, acting though the BLM, has decided to reconsider the appropriate federal lands to be available for leasing and development of these resources, as well as whether commercial leasing should be preceded by additional, vigorous RD&D. There may be different views as to whether the nascent character of the technologies argues for more land to be open, so that more lands may be available for RD&D, or whether fewer lands should be open, in order that such RD&D and eventual commercial development as does occur may be targeted in areas with few resource use conflicts, while leaving open some areas where the oil shale or tar sands resource has been identified as particularly rich. While the Energy Policy Act of 2005 encourages commercial development of oil shale and tar sands resources, these kinds of land management policy questions (how much land, where, with what restrictions, and so on) are left, under FLPMA, to the Secretary, acting through the BLM. The BLM believes the purpose and need statement to be appropriate to this proposed land use allocation planning action and consistent with the fostering of a robust RD&D oil shale program, and tar sands industry, leading to viable commercial development of both of these resources.

Additional data from RD&D projects were added to the Final PEIS. Regarding the issue identified on page J-6, the BLM does not agree that the issue of deferment of a decision until RD&D results are available is not out of scope. An allocation decision is required to fulfill the purpose and need for which this PEIS has been prepared, regardless of whether RD&D results are available or not. While the PEIS under Alternative 3 analyzes an alternative that includes only lands within existing or pending RD&D leases and associated preference right lease areas (PRLAs), the selection of this allocation alternative would not depend on the availability of RD&D results.

The BLM examined information on the cited pages of the Draft PEIS where the commentor noted information needed to be updated and updated information such as could be found in the Final PEIS.

2.0 ALTERNATIVES

OSTS_020-1	OSTS_070-6	OSTS_150-1	50030-1
OSTS_070-2	OSTS_087-3	OSTS_180-1	50090-2

50110-4	50181-9	50268-16	50324-9
50132-2	50181-16	50287-3	50324-49
50144-8	50181-28	50310-13	
50154-3	50181-30	50310-58	

Issue Summary: Several people commented that the range of alternatives was insufficient to foster oil shale and tar sands development as mandated by the 2005 Energy Policy Act and unnecessarily restricts lands that would be available for future commercial oil shale leasing based on arbitrary land use policy judgments and speculation about future resource impacts that are currently unknown and unknowable. Some commentors asserted that the BLM had not presented a thorough enough analysis of the consequences of not developing oil shale and had improperly failed to consider an alternative of having no commercial leasing program, but had focused too much on the negative environmental consequences of developing the resources. The commentors cited the increased likelihood of stunted economic growth as a result of the high balance of payment deficit (the financial relationship between the United States and other nations), the need for a large military force to ensure a safe source of petroleum, and periodic wars to enforce that security. The commentors also suggested that the BLM compare shale oil to biofuels in terms of cost and water use or to the effects of gasoline rationing.

Several commentors expressed their preference that the BLM adopt either the Preferred Alternative or any alternative that included the RD&D first procedural element. In addition, several commentors requested that the Secretary, the BLM, and members of Congress ensure, through federal regulatory or legislative processes, that local communities and the region where these resources are located are prepared for and have the necessary assistance in place prior to commercial development of oil shale. The City of Rifle (the City) is supportive of the efforts to expand oil shale and tar sands research and development activities, but is concerned about the impacts of such a program to the City's economy, infrastructure, government services, recreational opportunities, and water supply. The City supports any alternative in which a strong RD&D program precedes oil shale and tar sands production. The availability of such data will allow the City to properly plan for any impacts, including the dedication of financial resources to mitigate potentially adverse impacts. The City requests that the federal government ensure that local governments directly affected by oil shale and tar sands development receive funding to address local impacts prior to the approval of commercial production.

Several of the cooperating agencies responded to the BLM's request that members of the public consider the suggestion put forward by several of the cooperating agencies that the BLM develop an alternative that would allow for larger scale leasing and development in Utah and Wyoming, where the majority of the cooperators support a program that makes more federal oil shale and tar sands resources available for application for future leasing, while limiting development in Colorado where the majority of the cooperators favor a more cautious approach to leasing and development (Draft PEIS, Section 2.4.4). These

cooperators requested that the BLM develop such an alternative and present it for public comment.

One commentor noted that the Table 2.6-1 header excluded the Vernal RMP and perhaps other oil shale development areas.

Response: As required by NEPA and the regulations, the BLM considered a range of alternatives and explained its identification of Alternative 2(b) as the Preferred Alternative in the Draft PEIS. The conduct of rulemaking proceedings is outside the scope of this PEIS. The size and configuration of RD&D leases will be determined in the leasing process and are outside the scope of this PEIS. The Proposed Plan fosters a robust RD&D program as a first step toward a viable and environmentally acceptable oil shale industry.

Under any of the alternatives analyzed, a viable commercial program would be possible. Even the alternative with the least amount of land allocated would provide more than 30,000 acres of the richest oil shale resource being open for consideration for future leasing. Other extractive industries have mature and predictable technologies. Even the impacts of relatively new renewable energy technologies are generally predictable. Oil shale technologies are nascent and have not been proven commercially viable for production of liquid fuels. Federal law requires that the Secretary consider potential impacts on the environment in considering land use decisions. Under FLPMA, the Secretary has the authority and the discretion to engage in land use planning, including the establishment, revision, or amendment of land use plans. While oil shale is authorized under the 1920 Mineral Leasing Act, management of oil shale resources is also conducted pursuant to FLPMA. Under Section 302 of FLPMA, the Secretary can establish the conditions under which uses of the public land can take place. Because the technologies required to develop oil shale resources are in their infancy, the Secretary is proposing to require RD&D in order that the kinds of technologies and their impacts may be known before broad-scale commercial development takes place. In contrast, the technology required to develop oil and gas resources is well-established.

The BLM has complied with the Energy Policy Act of 2005. The Act does not prevent the Secretary from proposing an amendment or amending land use plans. Under any of the alternatives analyzed, a viable commercial program would be possible. Even the alternative with the least amount of land allocated would provide for more than 30,000 acres of the richest oil shale resource being open for consideration for future leasing.

The BLM decided not to include a thorough analysis of the consequences of not developing oil shale in the PEIS, because these issues are beyond the scope of the purpose and need and analysis of the proposed action, which is a reassessment of the appropriate allocation of public lands for development of oil shale and tar sands resources, and reflects the congressionally established policy of encouraging the development of these resources on public lands.

The BLM did not include in the PEIS an analysis to ensure that regions where these resources are located have the necessary assistance in place prior to the commercial development of oil shale. These issues are beyond the scope of the current land use planning allocation decisionmaking, and its purpose and need for reassessing the appropriate allocation of federal lands for leasing and development of these resources, and are not further addressed.

In response to the cooperators' request that the BLM develop an alternative that would allow for larger scale leasing and development in Utah and Wyoming, the BLM considered this suggestion, and this request, and decided not to develop such an alternative and present it for public comment—largely because such an alternative would consist of elements already analyzed and presented for public comment, and therefore this approach is not necessary. Further, the BLM did not receive public comments supporting this idea, beyond those of the cooperators who originally suggested this approach.

Several commentors objected to any leasing of oil shale or tar sands resources for development. Adopting such a management plan would be inconsistent with the policies of the United States as expressed in the Energy Policy Act of 2005.

The headings in Table 2.6-1 were corrected.

2.1 ALTERNATIVE 1, NO ACTION

OSTS_111-1	50074-2	50310-06	50328-8
OSTS_168-1	50255-2	50310-10	50349-1
50002-1	50286-1	50325-35	50349-5

Issue Summary: Some commentors voiced support for the 2008 PEIS and stated that there was little reason to reduce the acreage available to development because of legal action taken by opponents of oil shale and tar sands development. One commentor stated that the No Action Alternative (Alternative 1) is the only alternative justified under Section 369 of the Energy Policy Act of 2005, and subsequent Record of Decision (ROD) of the original PEIS in 2008.

One state-level wildlife agency commented that Alternative 1 would have adverse impacts on the environment and wildlife. Other commentors noted that Alternative 1 would best ensure that industry would realize a return on investment and best secure energy resources for the future.

Response: The impacts of Alternative 1 are described in Chapter 6 of the PEIS. Project- and site-specific NEPA analysis would further identify the specific impacts on the environment and wildlife of future commercial operations, as well as any potential mitigation measures. There is no basis for the commentor's claim that Alternative 1 is the

only justified alternative under the Energy Policy Act of 2005 or under the ROD for the 2008 PEIS. Both the 2008 PEIS and the current PEIS analyze several valid allocation alternatives. The BLM appreciates the commentor's concern for potentially impacted resources. Accordingly, the Proposed Plan would foster a robust RD&D program as a first step toward an economically viable and environmentally acceptable oil shale industry. Industry return on investment and federal energy policy are beyond the scope of this PEIS.

2.1.1 Support of Alternative 1

OSTS_026-7	OSTS_097-1	OSTS_123-1	OSTS_153-2
OSTS_027-3	OSTS_099-2	OSTS_125-1	OSTS_154-2
OSTS_032-3	OSTS_100-1	OSTS_125-3	OSTS_155-2
OSTS_033-2	OSTS_101-1	OSTS_126-3	OSTS_156-1
OSTS_033-7	OSTS_101-3	OSTS_127-1	OSTS_157-2
OSTS_066-2	OSTS_102-1	OSTS_128-3	OSTS_158-1
OSTS_066-6	OSTS_103-1	OSTS_129-3	OSTS_159-1
OSTS_068-11	OSTS_103-4	OSTS_130-1	OSTS_160-1
OSTS_077-16	OSTS_104-3	OSTS_131-1	OSTS_161-1
OSTS_077-18	OSTS_105-2	OSTS_132-2	OSTS_162-1
OSTS_078-16	OSTS_107-5	OSTS_133-4	OSTS_163-2
OSTS_078-18	OSTS_108-3	OSTS_134-1	OSTS_165-1
OSTS_079-16	OSTS_109-4	OSTS_135-1	OSTS_166-1
OSTS_079-18	OSTS_110-2	OSTS_138-2	OSTS_167-3
OSTS_080-17	OSTS_112-1	OSTS_140-1	OSTS_168-2
OSTS_080-19	OSTS_113-1	OSTS_141-1	OSTS_169-1
OSTS_081-16	OSTS_114-1	OSTS_142-1	OSTS_171-1
OSTS_081-18	OSTS_115-2	OSTS_143-2	OSTS_172-2
OSTS_091-1	OSTS_116-1	OSTS_144-2	OSTS_173-2
OSTS_091-2	OSTS_117-1	OSTS_145-3	OSTS_174-1
OSTS_092-4	OSTS_117-3	OSTS_146-1	OSTS_176-1
OSTS_093-2	OSTS_119-2	OSTS_147-5	OSTS_177-2
OSTS_094-1	OSTS_120-3	OSTS_148-2	OSTS_178-1
OSTS_095-1	OSTS_121-2	OSTS_149-1	OSTS_178-3
OSTS_096-2	OSTS_122-3	OSTS_149-4	OSTS_179-2

OSTS_180-3	OSTS_197-5	OSTS_232-1	50280-2
OSTS_181-2	OSTS_199-3	OSTS_232-3	50287-6
OSTS_182-1	OSTS_200-2	OSTS_233-1	50290-7
OSTS_182-3	OSTS_201-1	OSTS_233-3	50308-1
OSTS_183-1	OSTS_202-1	50006-1	50308-20
OSTS_184-3	OSTS_203-3	50087-7	50310-2
OSTS_185-2	OSTS_204-3	50145-1	50310-21
OSTS_186-2	OSTS_205-2	50152-1	50312-43
OSTS_187-2	OSTS_207-5	50160-1	50312-5
OSTS_188-2	OSTS_208-1	50181-104	50324-2
OSTS_189-3	OSTS_209-3	50181-5	50325-25
OSTS_190-5	OSTS_210-3	50186-25	50325-27
OSTS_191-1	OSTS_211-3	50227-2	50328-1
OSTS_192-1	OSTS_212-4	50255-24	50330-6
OSTS_193-1	OSTS_213-1	50255-26	50333-15
OSTS_194-2	OSTS_214-1	50268-26	50333-34
OSTS_195-3	OSTS_214-3	50271-9	
OSTS_196-1	OSTS_215-2	50272-1	
OSTS_196-3	OSTS_217-1	50272-9	

Issue Summary: Several commentors expressed support for the No Action Alternative (Alternative 1). Many commentors voiced their support for the 2008 PEIS and supported Alternative 1, because it would leave in place the conclusions from the 2008 PEIS. Commentors gave various reasons for their support of maximum acreage available for development, including (1) that oil shale and tar sands development relies on secure technologies, (2) that oil shale and tar sands energy extraction will be a profitable industry, (3) that it will provide jobs and local economic development, (4) that it will adhere to environmental regulations, (5) that it will ensure energy security for the country, and (6) that it best supports the goals of the 2005 Energy Policy Act. Other commentors wrote that Alternative 1 would provide the best structured and balanced process for commercialization and provide regulatory certainty for developers. Commentors also noted that Alternative 1 was the alternative preferred by the cooperating agencies, and some stated that Alternative 1 was the only alternative consistent with the goals of the 2005 Energy Policy Act.

Response: Thank you for your comment supporting the No Action Alternative. The BLM appreciates the values the commentors place on economic development.

Accordingly, the Proposed Plan would foster a robust RD&D program as a first step toward an economically viable and environmentally acceptable oil shale industry.

Several commentors appeared to interpret the terms of Alternatives 2(b), 3, and 4(b) as closing lands to all commercial oil shale leasing. That is incorrect. Under each of those alternatives, the lands would remain open to commercial leasing. Under Alternatives 2(b) and 4(b), lessees would be able to acquire a commercial lease only through conversion of an RD&D lease. Under Alternative 3, while the lands would be open to commercial leasing, the lands are currently under existing RD&D leases, which may be converted to commercial leases. Under Alternative 3, should any of the existing RD&D leases terminate, expire, or be relinquished, those lands would remain open to future oil shale leases, whether RD&D or commercial. If the BLM were to adopt an Alternative 3(b), any future leases would include the RD&D first requirement.

The BLM has complied with the requirements of the Energy Policy Act in 2008, issuing both the PEIS and the regulation required by Section 369 of the Act. Nothing in the Energy Policy Act of 2005 specified how the Secretary must establish a commercial oil shale leasing program, apart from requiring the Secretary to consider the most geologically prospective areas in Colorado, Utah, and Wyoming. The Energy Policy Act did not specify the acreage that must be available for such program or how the requirements of such program should be balanced with other resource uses. Under FLPMA, the Secretary must manage the public lands in accordance with land use plans, and retains the discretion to establish, revise, and amend those land use plans, as appropriate, to address resource management issues. This means that no leasing or development of oil shale or tar sands resources may occur on the public lands unless such activity is consistent with the applicable land use plan. In view of the nascent character of the oil shale and tar sands industries, as well as in light of other resource management concerns, the Secretary, acting though the BLM, has decided to reconsider the appropriate federal lands to be available for leasing and development of these resources, as well as whether commercial leasing should be preceded by additional, vigorous RD&D. There may be different views as to whether the nascent character of the technologies argues for more land to be open, so that more lands may be available for RD&D, or whether fewer lands should be open, in order that such RD&D and eventual commercial development as does occur may be targeted in areas with few resource use conflicts, while leaving open some areas where the oil shale or tar sands resource has been identified as particularly rich. Although the Energy Policy Act of 2005 encourages commercial development of oil shale and tar sands resources, these kinds of land management policy questions (how much land, where, with what restrictions, and so on) are left, under FLPMA, to the Secretary, acting through the BLM.

2.2 ALTERNATIVE 2, CONSERVATION FOCUS

OSTS_003-1	OSTS_026-4	OSTS_066-11	OSTS_070-7
OSTS_013-1	OSTS_033-1	OSTS_066-9	OSTS_077-7

OSTS_078-7	OSTS_204-2	50149-2	50287-17
OSTS_079-7	OSTS_207-1	50150-2	50290-2
OSTS_080-10	OSTS_214-2	50151-2	50308-3
OSTS_081-5	OSTS_232-4	50155-2	50308-19
OSTS_081-8	OSTS_235-2	50159-2	50310-3
OSTS_088-1	50003-1	50161-2	50310-15
OSTS_092-2	50018-1	50162-1	50310-16
OSTS_102-2	50030-3	50165-3	50312-44
OSTS_104-2	50073-1	50166-2	50314-13
OSTS_108-1	50074-7	50172-2	50323-1
OSTS_109-2	50087-5	50181-4	50325-14
OSTS_118-2	50087-10	50181-19	50325-17
OSTS_119-1	50087-11	50181-20	50325-36
OSTS_120-2	50090-18	50181-93	50328-17
OSTS_121-1	50090-19	50186-9	50328-20
OSTS_122-1	50090-21	50227-3	50330-1
OSTS_124-1	50090-3	50227-6	50333-26
OSTS_128-2	50120-2	50255-15	50333-38
OSTS_129-2	50121-2	50258-2	50335-4
OSTS_133-3	50129-2	50267-1	50336-1
OSTS_138-1	50130-2	50268-17	50340-1
OSTS_147-1	50131-2	50268-18	50343-1
OSTS_154-1	50133-2	50271-1	50343-14
OSTS_156-2	50134-2	50272-4	50343-15
OSTS_160-2	50135-2	50277-2	50343-17
OSTS_178-2	50136-2	50277-12	50343-6
OSTS_182-2	50137-2	50286-4	50355-2
OSTS_195-1	50138-2	50286-5	
OSTS_199-2	50139-3	50287-10	
OSTS_203-1	50146-2	50287-14	

Issue Summary: Some commentors opposed the Preferred Alternative, saying it would prohibit or undermine oil shale and tar sands development by drastically and

unnecessarily reducing the available acreage and by locating what was left in fragmented parcels, too small and isolated to adequately support commercial development. As such, the commentors said that the acreage allotted in the Preferred Alternative does not satisfy the purpose and need of the document. Other commentors noted that under the preferred alternative, some resource-rich lands were excluded. Others expressed concern that the Preferred Alternative did not have the support of the cooperating agencies. Several commentors noted that the Preferred Alternative, Alternative 2b, was not adequately analyzed in the Draft PEIS.

Conversely, some commentors wrote that Alternative 2 allocated too much land as available for oil shale and tar sands lease applications and that they would like to see further reductions in lands available for leasing. Other commentors expressed support of the provisions in the Preferred Alternative that protected wildlife areas and other unique lands.

With respect to the "RD&D First" provision of the Preferred Alternative, as presented in the Draft RMP Amendments/Draft PEIS, several reviewers noted that each oil shale RD&D lease in the study area would need to employ a different experimental technology. More specifically, under the Preferred Alternative, each potential lessee must first obtain an RD&D lease for a tract prior to converting that RD&D lease to a commercial lease. If an RD&D lessee establishes the viability of a particular technology on leasehold A, that lessee wishing to operate on leasehold B must first obtain an RD&D lease on leasehold B. However, because that technology would already have been proven in the study area (i.e., on leasehold A), it would no longer be the basis for obtaining an RD&D lease on leasehold B, because that technology would no longer be considered "experimental." Reviewers noted that the inability to exploit or to license the proven technology for use off of leasehold A would be likely to inhibit the development of a commercial oil shale industry and would reduce the incentive to participate in the RD&D program.

Similar to the previous issue, under the Preferred Alternative in the Draft PEIS, no provision is made for those instances where a potential lessee intends to employ a technology that has proved commercially viable either on nonfederal lands within the study area, or outside the study area.

Response: In 2008, the BLM made a land use allocation decision based on the available information, emphasizing the potential of oil shale to provide a domestic source of liquid fuels. Although that consideration remains important, the BLM revisited that allocation decision, more squarely in the context of other resource management considerations. Each of the alternatives keeps lands available for RD&D and commercial development of oil shale. None of the alternatives is inconsistent with the policies expressed in Section 369 of the Energy Policy Act of 2005.

The BLM has not been presented with a basis for estimating the optimal size of an oil shale operation. Several of the alternatives do result in small or irregular tracts being available for consideration for oil shale/tar sands leasing. Nothing in the Energy Policy

Act of 2005 precludes the BLM from offering leases of less than 5,760 acres for oil shale. In the last round of RD&D, the BLM offered 640 acres and received 3 nominations. Under the oil shale regulations, potential lessees may obtain exploration licenses to investigate potential lease tracts, in order to anticipate how such tracts might be developed most efficiently, prior to leasing them. Further, as the experience of at least one of the current RD&D lessees demonstrates, in many locations, there are opportunities for potential developers to plan operations across federal and nonfederal lands. In its allocation alternatives, the BLM did not want to preclude these opportunities by closing off smaller tracts.

As explained in the Draft PEIS, Alternative 2(b), the RD&D first alternative, adds only the procedural requirement that companies must first obtain an RD&D lease prior to obtaining a commercial lease. From the standpoint of environmental consequences, then, there is no difference between Alternative 2 and Alternative 2(b). The BLM denies that this Alternative (2) was ingredient to the 2011 settlement agreement, or that the United States was contractually obligated to pursue this alternative; rather, this approach was a late development that arose during the preparation of the Draft PEIS for publication. The BLM does not disagree that from a business management standpoint, there may be differences for potential lessees ingredient in this procedural distinction, and has addressed the several questions raised by commentors in the Final PEIS.

With respect to the "RD&D First" provision of the Preferred Alternative, as presented in the Draft PEIS, Alternative 2(b) has been revised in the Proposed Plan, Section 2.5 of the Final PEIS, as follows: "In the areas open for oil shale leasing and development under Alternative 2(b), the Secretary may issue a commercial lease to an entity that has succeeded in converting an RD&D lease to commercial lease (or who holds the license to a technology that has converted from RD&D to commercial lease) for a tract on other lands open under Alternative 2(b). In these circumstances, such commercial lessee would not have to begin with another RD&D lease on the new leasehold."

Similarly, for those instances where a potential lessee intends to employ a technology that has proved commercially viable either on nonfederal lands within the study area, or outside the study area, Alternative 2(b) has been revised in the Proposed Plan, Section 2.5 of the Final PEIS as follows: "The Secretary may issue a commercial oil shale lease on the lands open under the Proposed Plan, where the potential commercial lessee intends to employ technology which has proved commercially viable on non-federal lands in the study area[, or outside the study area,] and which the Secretary determines to be environmentally acceptable."

Finally, in response to comments received on the Draft PEIS, Alternative 2(b) has been revised in the Proposed Plan, Section 2.5 of the Final PEIS, to incorporate that element of Alternative 3 whereby the three potential RD&D leases currently undergoing NEPA analysis (two in Colorado and one in Utah) would be available for potential oil shale leasing. However, like the other areas that are available for potential oil shale leasing under this alternative, these areas are also open to RD&D first only.

2.2.1 Support of Alternative 2

OSTS_071-2	50040-1	50269-9	50366-3
OSTS_175-1	50047-4	50314-1	50367-1
OSTS_218-4	50095-1	50321-1	50367-3
OSTS_228-1	50122-1	50323-16	50368-1
50012-1	50123-1	50323-31	50368-3
50021-1	50171-2	50354-1	50370-1
50021-2	50249-4	50366-1	

Issue Summary: Several commentors expressed support for the Conservation Focus Alternative (Alternative 2). Many commentors voiced their support for the Preferred Alternative, because it would protect important tourism and recreation industries; protect historic, cultural, air, and water resources; and protect wildlife and vegetation from adverse impacts. Most commentors stated that oil shale and tar sands development would pollute air and waterways and voiced concerns about the technology being in a nascent state. Some commentors supported oil shale and tar sands development but were concerned about uncertainty surrounding its impacts and thus supported the Preferred Alternative for its "balanced" approach to development.

Response: Thank you for your comment supporting the Conservation Focus Alternative.

2.3 ALTERNATIVE 3, OIL SHALE RESEARCH LANDS FOCUS AND TAR SANDS PENDING COMMERCIAL LEASE RESEARCH

OSTS_109-2	50258-3	50310-4	50336-2
OSTS_207-3	50267-2	50310-55	
50074-8	50286-6	50324-55	

Issue Summary: Some commentors wrote that Alternative 3 was far too restrictive. Other commentors wrote that Alternative 3 takes a measured and cautious approach to oil shale and tar sands development and would promote understanding of technologies before a widespread OSTS development program was implemented.

Response: Several commentors objected to Alternative 3, the Research Lands Focus Alternative, on the grounds that this alternative restricts leasing to the current first- and second-round RD&D lessees. This is incorrect. Should any of the current RD&D leases terminate, expire, or be cancelled or relinquished, the lands currently occupied by these RD&D leaseholders, as well as the preference right lease acreage associated with each of the existing RD&D leases, would remain open for future application to lease. Like the other alternatives, Alternative 3 could also, if eventually adopted, include a RD&D first requirement.

2.3.1 Support of Alternative 3

OSTS_007-1	50066-1	50203-6	50235-1
OSTS_013-1	50067-1	50204-1	50235-3
OSTS_015-1	50068-1	50205-1	50238-2
OSTS_019-1	50070-3	50206-2	50238-6
OSTS_069-1	50077-1	50206-6	50240-2
OSTS_069-8	50089-1	50208-2	50242-2
OSTS_069-14	50111-1	50208-6	50242-6
OSTS_069-63	50112-1	50210-1	50249-4
OSTS_073-1	50113-1	50211-2	50253-1
OSTS_073-3	50116-1	50211-6	50253-9
OSTS_088-3	50126-1	50213-2	50257-1
OSTS_088-5	50147-1	50213-6	50261-1
OSTS_088-7	50147-10	50214-2	50262-1
OSTS_090-1	50157-1	50214-6	50266-2
OSTS_090-9	50162-2	50215-2	50266-6
OSTS_227-1	50164-1	50215-6	50291-1
50032-1	50165-1	50216-1	50295-1
50047-4	50167-1	50219-1	50309-1
50051-1	50169-1	50219-5	50318-1
50052-1	50179-2	50220-1	50318-2
50053-1	50180-6	50222-2	50318-3
50054-1	50195-1	50225-1	50322-1
50055-1	50199-1	50226-2	50322-5
50056-1	50200-1	50226-6	50326-1
50058-1	50200-5	50228-1	50329-1
50059-1	50201-2	50231-2	50329-16
50061-1	50201-6	50231-6	50334-1
50062-1	50202-2	50233-1	50336-6
50064-1	50202-6	50234-2	50352-1
50065-1	50203-2	50234-6	50352-5

Issue Summary: Several commentors expressed support for the Preferred Alternative (Alternative 2(b)), or for Alternative 3, and many expressed concern for resources other than oil shale or tar sands, including air, water, wildlife, climate, scenic and recreation values, and their concern for socioeconomic impacts.

Response: Thank you for your comment in support of Alternative 3. The BLM appreciates the values you place on scenic, water, air, climate, wildlife and recreation-related resources and has considered the economic and social history of oil shale development. The BLM has also considered the available information and analysis of impacts on water resources, energy requirements, and infrastructure. Accordingly, the Proposed Plan would foster a robust RD&D program as a first step toward an economically viable and environmentally acceptable oil shale industry. Information from each RD&D operation will be considered as pertinent in each subsequent decision concerning oil shale.

The BLM also appreciates concern for resources other than oil shale, and those resource values are reflected in the Proposed Plan. However, concerns about local government actions are outside the scope of this PEIS.

Several commentors appeared to interpret the terms of Alternatives 2(b), 3, and 4(b), as closing lands to all commercial oil shale leasing. That is incorrect. Under each of those alternatives, the lands would remain open to commercial leasing. Under Alternatives 2(b) and 4(b), lessees would be able to acquire a commercial lease only through conversion of an RD&D lease. Under Alternative 3, while the lands would be open to commercial leasing, the lands are currently under existing RD&D leases, which may be converted to commercial leases. Under Alternative 3, should any of the existing RD&D leases terminate, expire, or be relinquished, those lands would remain open to future oil shale leases, whether RD&D or commercial. If the BLM were to adopt an Alternative 3(b), any future leases would include the RD&D first requirement.

One commentor noted that leaving public lands open for speculative development could foul lands and air and water quality, and result in large quantities of greenhouse gases (GHGs). The commentor supports Alternative 3. The BLM agrees that "speculative development" should be discouraged. As explained in this PEIS, the Proposed Plan fosters a robust RD&D program as a first step toward a viable and environmentally acceptable commercial oil shale industry.

Several commentors emphasized the need for the BLM to obtain information from the RD&D leasing process pertaining not only to technical matters of extraction, but also to the environmental consequences of this use of the public lands, in order to inform future decisionmaking. The BLM agrees that the RD&D program and the information obtained from the current RD&D leases should provide insight into the environmental consequences of development of this resource, and acknowledges that any future decisionmaking regarding RD&D leases would need to be supported by appropriate environmental review, pursuant to federal statutes including, but not limited to, NEPA,

the Endangered Species Act (ESA), the National Historic Preservation Act (NHPA), and others.

2.4 ALTERNATIVE 4, MODERATE DEVELOPMENT

OSTS_207-4	50181-22	50286-7	50310-57
50074-9	50181-23	50286-10	50324-59
50087-14	50181-112	50287-8	50324-63
50090-20	50271-2	50310-5	50343-16

Issue Summary: Commentors remarked upon general similarities between Alternative 4 and Alternative 1. Some commentors questioned why Alternative 4 was included in the PEIS.

Response: The BLM considered a range of alternatives for land use allocations in this analysis.

2.4.1 Support of Alternative 4

OSTS_018-1	50271-9	50312-43	50312-5

Issue Summary: Several commentors expressed support for Alternative 4, either as a first choice or as a second choice after Alternative 1. One noted various concerns, including the need for greater access to energy resources. Another commentor was concerned that the Preferred Alternative was not sufficiently vetted by the cooperating agencies.

Response: The BLM is fully aware of the policies in favor of fostering a viable and environmentally acceptable oil shale industry. The views of the cooperating agencies have been carefully considered. The Proposed Plan allows for a robust RD&D program as a first step toward a sustainable oil shale industry.

2.5 NEW ALTERNATIVE SUGGESTIONS

OSTS_031-1	50197-1	50313-3	50325-34
OSTS_031-4	50255-1	50320-13	50325-39
OSTS_137-1	50258-4	50320-2	50341-3
OSTS_216-3	50267-3	50320-8	
50088-1	50300-1	50324-61	
50088-3	50305-1	50324-62	

Issue Summary: Several commentors suggested that the BLM consider leaving even fewer lands open to oil shale or tar sands leasing and development than are represented by Alternatives 2 and 3. Some of those commentors noted their concerns for wildlife habitat, watersheds, and recreational values.

Response: In Sections 2.5.7 and 2.5.13 of the Draft PEIS, the BLM considered leaving open even fewer lands than were considered under Alternatives 2 or 3, but did not carry these forward for further development, because such analysis would not be appreciably different than that presented under Alternatives 2 and 3, and excluding even more lands from potential oil shale and tar sands leasing and development would not be consistent with congressional policy encouraging development of these resources, or with the Secretary's and the Director's emphasis on developing and maintaining a robust RD&D process.

3.0 ENVIROMENTAL ISSUES

OSTS_023-1	50076-1	50133-3	50143-7
OSTS_137-3	50120-1	50133-5	50144-5
OSTS_216-1	50120-3	50134-1	50146-1
OSTS_216-6	50120-5	50134-3	50146-3
OSTS_218-1	50121-1	50134-5	50146-5
OSTS_219-1	50121-3	50135-1	50149-1
OSTS_220-1	50121-5	50135-3	50149-3
OSTS_221-1	50128-1	50135-5	50149-5
OSTS_222-1	50129-1	50136-1	50150-1
OSTS_223-1	50129-3	50136-3	50150-3
OSTS_224-1	50129-5	50136-5	50150-5
OSTS_225-1	50130-1	50137-1	50151-1
OSTS_226-1	50130-3	50137-3	50151-3
OSTS_227-4	50130-5	50137-5	50151-5
OSTS_228-2	50131-1	50138-1	50155-1
OSTS_231-1	50131-3	50138-3	50155-3
OSTS_231-4	50131-5	50138-5	50155-5
OSTS_234-1	50132-1	50139-2	50159-1
OSTS_235-1	50132-3	50139-4	50159-3
OSTS_235-3	50132-5	50139-6	50159-5
OSTS_235-5	50133-1	50142-1	50161-1

50161-3	50189-1	50214-1	50266-1
50161-5	50201-1	50215-1	50313-1
50166-1	50202-1	50226-1	50341-1
50166-3	50203-1	50231-1	50341-5
50166-5	50206-1	50234-1	50355-1
50172-1	50208-1	50235-2	50355-3
50172-3	50211-1	50238-1	50355-5
50172-5	50213-1	50242-1	

Issue Summary: Commentors expressed general concerns about the impacts of OSTS development on the region's water, wildlife, communities, and public lands. Commentors suggested that the BLM carefully consider the impacts on wildlife, water, air, visual and cultural resources, and communities as they take another look at oil shale development.

Response: The BLM appreciates commentors' concerns about these resources. A discussion of the affected environment for various resources can be found in Chapter 3 of the PEIS. Impacts on resources for oil shale technologies are discussed in Chapter 4 and for tar sands technologies in Chapter 5 of the PEIS. Chapter 6 presents a comparison of the PEIS alternatives and a discussion of cumulative impacts. The Preferred Alternative would foster a robust RD&D program as a first step toward an economically viable and environmentally acceptable oil shale industry.

3.1 LAND USE

3.1.1 Support of Additional Resource Protection

OSTS_069-24	OSTS_069-75	OSTS_069-87	OSTS_069-98
OSTS_069-63	OSTS_069-77	OSTS_069-88	OSTS_069-99
OSTS_069-64	OSTS_069-78	OSTS_069-89	OSTS_069-100
OSTS_069-65	OSTS_069-79	OSTS_069-90	OSTS_069-101
OSTS_069-66	OSTS_069-80	OSTS_069-91	OSTS_069-102
OSTS_069-69	OSTS_069-81	OSTS_069-92	OSTS_069-103
OSTS_069-70	OSTS_069-82	OSTS_069-93	OSTS_069-104
OSTS_069-71	OSTS_069-83	OSTS_069-94	OSTS_069-105
OSTS_069-72	OSTS_069-84	OSTS_069-95	OSTS_069-106
OSTS_069-73	OSTS_069-85	OSTS_069-96	OSTS_069-107
OSTS_069-74	OSTS_069-86	OSTS_069-97	OSTS_069-108

OSTS_069-109	50203-5	50234-5	50323-24
OSTS_073-2	50206-5	50238-5	50323-25
OSTS_083-8	50208-5	50242-5	50323-27
OSTS_088-2	50211-5	50248-1	50323-29
OSTS_090-8	50213-5	50253-2	50323-30
50070-1	50214-5	50256-1	50324-51
50111-1	50215-5	50266-5	50329-2
50143-4	50218-1	50318-4	50329-3
50164-2	50219-4	50318-7	50329-4
50200-4	50226-5	50322-4	50329-5
50201-5	50228-4	50323-22	50352-4
50202-5	50231-5	50323-23	

Issue Summary: Numerous commentors indicated they support providing protection from direct impacts from oil shale and tar sands development for a wide variety of BLM-administered lands by making them unavailable for oil shale or tar sands leasing. Other specific areas mentioned are currently identified as open to application for commercial development in one or more alternatives. Many specific recommendations for protection are included in the comments with supporting justification. Some examples include all lands with wilderness characteristics (LWC; as identified by the BLM), rivers (whether considered eligible or suitable as wild and scenic rivers [WSRs] or not, including their watersheds); all designated ACECs (including those not currently withdrawn from mineral entry); all potential Areas of Critical Environmental Concern (ACECs) considered in BLM RMPs but not designated; sage-grouse habitat; and larger viewsheds surrounding National Historic Trails.

There was a mistake in the Draft PEIS, in footnote 11 on page 2-35, that indicated that proposed ACECs in place when the 2008 PEIS was prepared were excluded from leasing in Alternative 2. This statement was not correct. The calculated acreage open to leasing in Alternative 2 actually did include the proposed ACECs just as was done in the 2008 document. Therefore, the acreage potentially available for leasing in Alternative 2 was correct. Several commentors supported the idea of excluding the potential ACECs.

Many comments also indicate a concern for potential indirect impacts (e.g., visual impacts, impacts on the tourism economy) on areas managed both by the BLM and other agencies that are otherwise excluded from development of either oil shale or tar sands resources. Some examples include Wilderness Study Areas (WSAs), ACECs withdrawn from mineral entry, units of the National Park System (including night sky impacts), and the viewshed of Flaming Gorge National Recreation Area (managed by the U.S. Forest Service).

Two commentors suggest that the 0.25-mi buffer used when considering historic trails is inadequate. Also a comment was provided recommending additional mitigation for impacts on National Historic Trails.

There are numerous examples of commentors calling for protection of areas that have already been identified as being excluded from application for commercial leasing.

Response: The range of alternatives considered in the PEIS would provide for all areas listed in the comments, with the exception of the proposed ACECs discussed in the 2008 PEIS, to not be designated as available for application for commercial oil shale or tar sands leasing in one or more of the alternatives. This PEIS is a BLM planning and land allocation document; the PEIS focuses on whether lands will be open or closed to application for oil shale or tar sands development. Lands that may be determined to not be suitable for application for oil shale or tar sands leasing will not be made available for commercial oil shale or tar sands leasing, but they will not receive any additional designations in this PEIS. Current land use decisions regarding management of these lands in the existing RMPs will remain in effect.

The commentors stated that in some cases, the 0.25-mi corridor extending from either side of the historic trail may not be adequate to provide these resources with meaningful protection. The PEIS, on page 2-32, states that the National Historic Trails in Wyoming will be excluded from oil shale leasing/development for a minimum distance of 0.25 mi on either side of the trail, regardless of the provisions of any existing applicable RMP. This buffer has been revised to reflect that prior to leasing, an "area of potential adverse impact" will be determined, where appropriate. The area of potential adverse impact will be based on information contained in the pertinent BLM RMP and the information obtained during the inventory for the area under consideration as well as consultation with stakeholders, through the Section 106 of the NHPA review. In the event that the BLM determines that the 0.25-mi corridor needs to be changed, the BLM will follow the appropriate planning process to lessen or increase this exclusion. Under the National Trails System Act, the BLM is also required to coordinate with the National Trail Administrator when the BLM receives an application for a proposed action where a National Trail Management Corridor has not yet been established but could exist. An additional commentor suggested mitigation for addressing impacts on historic trails (i.e., off-site mitigation). Mitigation strategies for impacts on historic properties such as National Historic Trails would be developed at the time of a lease application as part of the mandatory Section 106 of the NHPA review for a leasing action and in consultation with the trail administering agency and other stakeholders.

3.1.2 Impacts on Recreational Lands

OSTS_069-68	50179-1	50270-9	50323-18
50047-1	50181-75	50286-3	50323-28
50144-6	50253-5	50286-9	50336-5

Issue Summary: Comments on this issue related specifically to concerns for potential impacts on recreation activities; examples from all three states within the study area were provided. The majority of comments addressed the potential recreation impacts on areas and rivers/watersheds that are important to hunters and fishers. There was also a theme of the potential adverse impact on important recreation tourism economies that could be adversely affected by changes in conditions for fishing, hunting, and National Park tourism.

Response: The descriptions of recreation resources within the oil shale and tar sands study area are general but provide a high-level picture of available resources, resource uses, and economic values at the programmatic level. Because of the dispersed nature of much of the public land recreation use, good estimates of use by specific activities are generally lacking and this contributes to the difficulty of providing good use estimates at this scale. As pointed out in many places in the PEIS, site-specific analysis associated with specific lease applications for oil shale or tar sands projects will be required to determine more accurate impacts on affected recreation resources. A description of recreation resources by field offices with a focus on specially designated areas and LWC is included in Section 3.1.1 of the PEIS. Existing conditions of recreation, ecological, and visual resources, and the recreation economy, are discussed in Sections 3.1, 3.7, 3.8, and 3.11. Potential impacts on these uses/resources are described in Sections 4.2, 4.8, 4.9, 4.12, 5.2, 5.8, 5.9, and 5.12.1 and Chapter 6 of the PEIS.

3.1.3 Protections for Lands with Wilderness Characteristics and ACECs

OSTS_026-6	50186-1	50312-10	50328-13
OSTS_075-4	50255-9	50312-13	50328-14
OSTS_077-1	50268-08	50324-6	50333-08
OSTS_078-1	50268-12	50325-3	50333-10
OSTS_079-1	50268-29	50325-10	50333-18
OSTS_080-1	50277-1	50328-02	
OSTS_081-1	50290-4	50328-10	
OSTS_133-2	50308-12	50328-12	

Issue Summary: Most of these comments came from the States of Wyoming and Utah, county governments in the three states in the study area, a coalition of local governments, an oil shale company, and several individuals. The major point of these comments was that it is inappropriate to reduce the amount of land that was designated in 2008 as being available for application of oil shale or tar sands development. Commentors specifically object to considering removing LWC, potential ACECs, and the Adobe Town Very Rare and Uncommon Area from availability for leasing. Several of the commentors indicated that since decisions have been made in recent BLM RMPs regarding management of

LWC, WSRs, and ACECs, it is inappropriate to be reconsidering the status of these lands in this PEIS. Many of the county and state government commentors challenged BLM's actions as being inappropriate, because Congress expressly forbade implementation of Secretarial Order 3310 regarding LWC. The State of Utah raised the issue of the potential impact of BLM decisions on State Trust lands, because these lands are intermingled with BLM-administered public lands and reiterated language from the Energy Policy Act of 2005 directing the BLM to place a priority on using land exchanges to block areas for potential mineral development.

There was a mistake in the Draft PEIS, in footnote 11 on page 2-35, that indicated that proposed ACECs in place when the 2008 PEIS was prepared were excluded from leasing in Alternative 2. This statement was not correct. The calculated acreage open to leasing in Alternative 2 actually did include the proposed ACECs just as was done in the 2008 document. Therefore, the acreage potentially available for leasing in Alternative 2 was correct.

Response: The purpose of this PEIS is expressly to reconsider the land use allocations made in the 2008 OSTS PEIS. The alternatives considered in this PEIS provide a range of options for the lands that would be made available for application for commercial oil shale and tar sands leasing and fulfill the requirements of a settlement agreement that resulted from a lawsuit filed against BLM's ROD for the 2008 PEIS. The lands that are excluded from the land allocation alternatives for oil shale and tar sands are described in Sections 2.3 and 2.4, respectively and are shown in Tables 2.3.2-2 and 2.4.2-2.

This PEIS is a BLM planning and land allocation document, and it focuses on whether lands will be open or closed to application for oil shale or tar sands development. Lands that may be determined to not be suitable for application for oil shale or tar sands leasing will not be made available for commercial oil shale or tar sands leasing, but they will not receive any additional designations in this PEIS. Current land use decisions regarding management of these lands in the existing RMPs will remain in effect.

The State of Utah commented that it is concerned over potential impacts on State Trust lands and specifically raised the issue of the requirement of the Energy Policy Act of 2005 regarding placing a priority on land exchanges to facilitate recovery of oil shale and tar sands resources where federal, state, and private lands are intermingled. The BLM recognized this requirement in its ROD in 2008 and expressly noted in Section 1.1.1 of this Draft PEIS that this decision was being carried forward in this new planning process.

3.1.4 Support of Leasing

50074-17 50271-3

Issue Summary: These two comments made the argument that many of the lands currently identified as available for application for oil shale leasing do not contain

important recreation or wilderness quality lands and therefore that they should remain available for leasing.

Response: The BLM is aware that there are competing visions for the use of public lands and has developed alternatives to consider an array of use allocations, and the lands mentioned by the commentors would be open for application for leasing under two of the four alternatives. Although portions of these areas are developed, other parts of the areas are not developed and there are many competing uses for them.

3.1.5 Objections to Certain Land Use Protections

OSTS_075-5	OSTS_086-5	50287-12	50324-65
OSTS_075-6	50181-10	50308-13	50330-3

Issue Summary: These comments focused on the perceived lack of a rationale for considering providing protection for designated ACECs that are open to mineral development and for the Adobe Town Very Rare or Uncommon Area. In the case of ACECs not closed to mineral development, it was argued that because the areas were not closed to mineral entry in recent RMPs, it is not appropriate to protect them from oil shale or tar sands development. Likewise, it is argued that the Wyoming State designation identifying the Adobe Town Very Rare and Uncommon Area does not require that the area be made off-limits to oil shale leasing and that portions of the area are currently under development for oil and gas resources.

Response: As stated in the Executive Summary of the Draft PEIS, the BLM determined there was reason to take a fresh look at the allocation of lands made in the 2008 Final PEIS. One possibility was to increase the amount of land excluded from application for development in one or more alternatives being considered. ACECs that were not withdrawn from mineral development were a reasonable choice for exclusion from potential development as were lands with wilderness characteristics, and lands identified in RMPs as having surface disturbance restrictions or seasonal limitations to protect known sensitive resources. In the case of the Adobe Town Very Rare and Uncommon Area, although this is a state designation, the only lands affected by the PEIS are public lands managed by the BLM. The recognition by the state and overlapping proposals for BLM management of all or parts of the area as LWC, Special Management Area, or WSA, warranted consideration for additional protection. Although this PEIS is a BLM planning and land allocation document, the principal focus is whether lands will be open or closed to application for oil shale or tar sands development. Public lands determined to be not suitable for application for oil shale or tar sands leasing will not receive any additional designation in this PEIS; the land use decisions for these public lands in existing RMPs will remain in effect.

3.1.6 Out of Scope

50181-44

Issue Summary: The commentor questioned the authority of the Wyoming Environmental Council to designate an area as Very Rare or Uncommon.

Response: This comment is outside the purview of the PEIS.

3.1.7 Errata/Editorial Comments

OSTS_069-76	OSTS_230-5	50268-23	50310-25
OSTS_086-2	OSTS_230-6	50268-31	50324-29
OSTS_086-3	50074-18	50277-4	50324-33
OSTS_086-4	50181-25	50277-5	50324-39
OSTS_086-6	50181-42	50277-6	50324-50
OSTS_087-4	50181-43	50277-15	50324-57
OSTS_230-1	50181-91	50277-16	50325-37
OSTS_230-2	50181-92	50277-1	50328-5
OSTS_230-3	50181-96	50277-19	50335-12
OSTS_230-4	50181-115	50277-20	

Issue Summary: Commentors offered a wide range of editorial comments and opinions and pointed out factual errors in the document.

Response: After the suggested changes to the document had been checked, corrections or changes were made where appropriate.

3.1.8 No Response Required

OSTS_085-1	50181-45	50310-29	50323-26

Issue Summary: Commentors offered opinions on various issues.

Response: Thank you for your comments.

3.2 SOIL AND GEOLOGY

OSTS_226-2	50162-10	50181-46
50099-2	50162-11	

Issue Summary: These comments addressed concerns about the impacts of OSTS development on soils and geological resources. Comments dealt with geologic hazards, valley floor erosion observed in the Yellow C basin during large runoff events, concern that soils would be contaminated if pipelines were to break, and concern that toxic metals could leach into the soil. One commentor noted that erosion is more likely to occur by wind.

Response: Erosion is described generally in Section 3.2.1.3. Specific descriptions of occurrences along Yellow Creek or other waterways are not discussed. No change was made to the document in response to this comment.

Sections 4.3.1.1 and 4.5.1.3 were modified to address the potential for pipeline breakage and effects on soil or surface water resources. Leaching effects on water quality are discussed in Section 4.5.1.3. No change was made to the document in response to the comment.

Finally, Section 3.2.1.3 was modified in response to a comment on wind erosion.

3.3 PALEONTOLOGICAL RESOURCES

3.3.1 Fossil Locations

50143-9

Issue Summary: One commentor asked whether all the fossil localities within the proposed areas have been identified.

Response: A paleontological overview study of the areas within Colorado, Utah, and Wyoming where oil shale and tar sands resources are present was prepared in support of the PEIS; its findings are the basis for the fossil potential designations assigned to the geologic units described in Chapter 3 of the Draft PEIS (see the study cited as Murphey and Daitch 2007 in the PEIS). The study evaluated geologic units in the study areas by researching their known fossil content, paleontological significance, stratigraphic relations, and geographic distribution. A limited fossil locality record search was also conducted as part of the study. Field surveys to find new fossil localities will occur later, based on likely fossiliferous outcrop areas highlighted in Potential Fossil Yield Classification (PFYC) maps, for exact areas of proposed ground disturbance. Note that the PYFC system classifies geologic units on the basis of the relative abundance of

vertebrate or uncommon invertebrate or plant fossils and their sensitivity to adverse impacts. Although the classification may take into account known fossil localities, the presence of fossil localities does not necessarily indicate a higher PYFC class.

3.3.2 Role of the State Historic Preservation Officer

50162-13

Issue Summary: One commentor expressed concern that the paleontological resource sections omitted a discussion of the role of the State Historic Preservation Officers (SHPOs) in protecting paleontological resources.

Response: Paleontological resources, as defined in the Draft PEIS, are distinct from human remains and artifacts, which are considered archaeological or historical materials (see Section 3.3). Because the role of the SHPOs is to protect and preserve historic properties that have historical, cultural, and archeological significance (i.e., cultural resources), they are discussed in the mitigation measures section for cultural resources, Section 4.10.2.

Paleontological resources, in differing from archaeological/historical materials, are protected under FLPMA, the Paleontological Resources Preservation Act, and other authorities and policy. Thus, there is close networking with the SHPO, where appropriate, for mutual areas of paleontological resource database management. In general, paleontological resources are managed by the BLM through partnerships, agreements, and policy with various museum, university, and geological survey curation facilities with paleontological resources databases.

3.4 WATER RESOURCES

3.4.1 Water Quantity and Quality

OSTS_001-4	OSTS_069-18	OSTS_083-3	50096-2
OSTS_003-4	OSTS_069-26	OSTS_083-6	50099-4
OSTS_022-1	OSTS_069-28	OSTS_088-4	50118-1
OSTS_024-4	OSTS_069-29	OSTS_090-2	50123-3
OSTS_034-1	OSTS_069-32	50001-1	50124-1
OSTS_048-1	OSTS_069-33	50047-14	50125-4
OSTS_064-1	OSTS_071-21	50047-2	50143-3
OSTS_069-16	OSTS_083-2	50090-7	50144-2

50147-2	50214-3	50244-1	50314-6
50156-1	50214-4	50246-2	50318-6
50162-8	50215-3	50249-2	50320-9
50164-3	50215-4	50253-4	50322-2
50167-2	50219-2	50260-2	50322-3
50200-2	50219-3	50266-3	50323-8
50200-3	50226-3	50266-4	50336-3
50201-3	50226-4	50269-3	50337-4
50201-4	50228-2	50269-5	50337-5
50202-3	50228-3	50270-5	50337-7
50202-4	50231-3	50276-3	50337-8
50203-3	50231-4	50279-2	50343-4
50203-4	50234-3	50279-3	50351-2
50206-3	50234-4	50282-1	50351-3
50206-4	50236-1	50285-5	50352-2
50208-3	50238-3	50285-6	50352-3
50208-4	50238-4	50287-25	50363-2
50211-3	50241-1	50298-1	50366-2
50211-4	50242-3	50300-3	50367-2
50213-3	50242-4	50312-18	50368-2
50213-4	50243-1	50314-5	

Issue Summary: This group of comments dealt with surface water and/or groundwater use, availability, and quality, at scales ranging from local to regional. Some comments also included reference to the possible effects of global climate change on water availability.

Response: Water quantity and quality issues and impacts are discussed in Sections 4.5 and 5.5 of the PEIS, and cumulative water impacts are discussed in sections in Chapter 6. The potential effect of global climate change on water resources is discussed in Sections 4.5.1.2 and 5.5.1.2. These issues are important; however, the document deals with programmatic-level impacts, rather than site-specific impacts. At the programmatic level of this EIS, information is not available on the exact water supplies that would be used for development of specific oil shale leases. For example, water supplies could come from conversion of existing water rights, application for new water rights, construction of new surface water diversion and storage facilities, construction of well fields, imported water from other watersheds, or a combination of these approaches.

Given this uncertainty, this EIS is limited to acknowledging that water used for oil shale development will not be available for other purposes, but conclusions cannot be drawn as to which other water uses will have less supply available as oil shale development proceeds. An actual project would undergo two further levels of NEPA analysis (lease stage and project design phase). When subsequent tiers of NEPA analysis are performed on proposals for development of specific leases, information will become available about the proposed water supply for those leases, and an analysis of impacts on other water uses can be performed at that time. After development of multiple leases is analyzed, information will also become available concerning trends in water supply for oil shale development and aggregate water demand, allowing detailed analysis of cumulative impacts. Therefore, specific or quantified impacts on surface water or groundwater use or quality cannot be addressed in this document; these impacts would be addressed in project-specific NEPA documents. Also, decisions regarding water rights, which are included in some of the comments, cannot be regulated in this document. No changes were made to the PEIS in response to these comments.

New information on water availability for future development in the Colorado River system within the State of Colorado recently became available. This analysis includes climate change evaluations. Relevant findings from this report were incorporated into Section 4.5.1.2 of the PEIS.

3.4.2 Project-Level Water Use

OSTS_020-2	50323-09	50333-51
50276-4	50323-10	50333-52
50308-17	50333-36	50335-10

Issue Summary: These comments concerned various issues at the project level for oil shale and tar sands development.

Response: Little information is currently available concerning the impacts from pilot projects. The PEIS deals with programmatic-level impacts, rather than site-specific impacts. An actual project would undergo two further levels of NEPA analysis (lease stage and project design phase). Therefore, specific or quantified impacts on surface water or groundwater use or quality cannot be addressed in this document; these would be addressed in project-specific NEPA documents. Possible mitigation measures are described in Sections 4.5.3 and 5.5.3. No changes were made to the PEIS in response to these comments.

3.4.3 Water Usage by Oil Shale and Tar Sands Technologies

50074-14	50087-17	50333-24
50074-15	50090-33	

Issue Summary: This group of comments dealt with water usage by oil shale and tar sands technologies and alleged discrepancies between the water use estimates of the Draft PEIS and those of industry pilot studies such as Red Leaf and Enefit.

Response: The water use estimates of the Draft PEIS are based on RAND, AMEC Earth and Environmental, and U.S. Government Accountability Office (GAO) reviews (see Sections 4.1.2 and 4.1.3) and incorporate all estimated water requirements for scaled-up operations. These requirements are wide-ranging, as described in Section 4.5.1.2. Decisions regarding water rights, which are included in some of the comments, cannot be regulated in the PEIS. An actual project would undergo two further levels of NEPA analysis (lease stage and project design phase). The BLM may have the opportunity at such a future point in the NEPA process to review pilot-scale water use. At the current programmatic stage, the ratios of water usage stated in Sections 4.1.2 and 4.1.3 will be used in the PEIS analyses. No change was made to the PEIS in response to these comments.

3.4.4 Comments Requiring Individual Responses

OSTS_072-4	OSTS_084-4	50310-36
OSTS_072-5	50181-51	50333-23

Issue Summary: The U.S. Environmental Protection Agency (EPA) Region 8 recommended that the Final PEIS add additional information to more thoroughly characterize groundwater resources in Utah and Wyoming; specifically, the Final PEIS should include the delineated depth of underground source of drinking water in the study areas as well as the quality of each zone within these aquifers. Region 8 also recommends that all sources of drinking water in the study area be characterized in the Final PEIS. These sources include water in streams, rivers, lakes, springs, and aquifers that is used as a supply of drinking water.

One commentor noted that, in Section 3.4.2, pages 3-76–78, the message that the lower aquifer groundwater is of "unusable" quality is in error. U.S. Geological Survey (USGS) Open-File Report 78-734, prepared in cooperation with the BLM and EPA, notes that the average total dissolved solids (TDS) in the lower aquifer is 3,460 mg/L, and only one test hole encountered highly saline water.

The State of Utah suggested that the characterization of water resource use in the Draft PEIS study area lacks the clarity necessary to satisfy the requirements of NEPA.

One cooperating agency noted that the PEIS cites old data that should be replaced with newer data.

An industry group stated that, on page 4-39, lines 9–21, the data presented in this paragraph are from operations monitoring; however, the information lacks good context such as information on background or reference well data to demonstrate the impact of the RD&D activity.

Response: Aquifer systems and water quality in the basins are described generally in Sections 3.4.2.1, 3.4.3.1, and 3.4.4.1, and geologic information is provided in Sections 3.2.1.2, 3.4.3.1, and 3.4.4.1. Thicknesses, water quality, and depths of the aquifers vary on a site-specific basis. Because the PEIS provides an overview of the study areas, site-specific information is not included. An actual project would undergo two further levels of NEPA analysis (lease stage and project design phase), during which aquifer depths and other information would be assessed in detail. No change was made to the PEIS in response to this comment. The PEIS also provides an overview of the hydrology of the study areas. Site-specific information is not included in the PEIS. An actual project would undergo two further levels of NEPA analysis (lease stage and project design phase), during which groundwater and surface water protection zones would be assessed in detail. Sections 3.4.2.1, 3.4.3.1, and 3.4.4.1 were updated to refer to the source water protection programs in the three states.

The discussion in Section 3.4.2.1 about the range of TDS in the Upper and Lower Piceance Basin Aquifers is based on many data points summarized by Topper et al. (2003). This citation was added to the text. The information from Topper et al. is consistent with the commentor's USGS report (78-734).

The use of the phrase "highly developed" in the PEIS does not imply a fully developed condition (i.e., using all available water). As shown in Table 3.4.1-3, much but not all of the legally available water undergoes consumptive use. The PEIS does not describe Utah's water allocation as being completely used. Section 3.4.1.4 was modified in response to this comment to link the terms *demand* and *diversion* and the terms *consumption* and *depletion* to give clarification on the values provided in Tables 3.4.1-2 to 3.4.1-4.

Although the cited material is based on reports from the 1970s, the reports themselves were based on decades of data. They are expected to remain adequate references for the basin-wide hydrologic information. No change was made to the PEIS in response to this comment.

The cited paragraph in Section 4.5.1.3 describes the data as being limited and without spatial reference or other details. No conclusions can be drawn from the available data. No change was made to the PEIS in response to this comment.

3.4.5 Editorial Comments

OSTS_069-27	50118-4	50181-120	50337-03
OSTS_072-3	50118-5	50277-32	50335-27
50099-3	50181-48	50310-38	
50099-6	50181-50	50333-46	
50118-2	50181-71	50333-47	

Issue Summary: Commentors offered a wide range of editorial comments and opinions and pointed out factual errors in the document.

Response: After the suggested changes to the document had been checked, corrections or changes were made where appropriate.

3.4.6 No Response Required

OSTS_071-20	50099-1	50162-14	50277-27
OSTS_083-5	50099-5	50162-15	50310-37
OSTS_087-5	50118-3	50277-26	50337-9

Issue Summary: Commentors offered opinions or nonsubstantive statements on various issues.

Response: Thank you for your comments. No text change was required.

3.5 AIR QUALITY

3.5.1 Climate Change

3.5.1.1 Inadequate Discussion of Climate Change

OSTS_069-41	OSTS_069-46	50047-5	50282-2
OSTS_069-44	OSTS_083-11	50143-6	50336-4

Issue Summary: Several comments (1) claimed that the treatment of climate change in the Draft PEIS was nonquantitative or inadequate and one comment (2) noted the need to assess CO_2, methane, black carbon, nitrous oxide, and all greenhouse gas (GHG) emissions.

Response: (1) No text change was required. Decisions to be made on the basis of this Final PEIS are land allocation decisions, which do not result in emissions of any GHGs. In addition, the data needed for the detailed emissions estimates and level of analysis suggested in these comments are not available at this programmatic level; specific development sites have not been proposed, specific technologies have not been proposed, and detailed site development plans are unavailable. Even if data were available to make detailed GHG emission estimates, there are currently no tools for predicting the impact of individual sources on climate change. Because climate change is a global phenomenon, the overall climate impact of emissions from any source depends on the emissions from all other sources. The PEIS reflects this interdependence in Sections 4.6.1.1.3 and 5.6.1.1.3 by summarizing the possible changes in GHG emissions that may be associated with oil shale and tar sands development. If and when an application for a lease for a specific project is made, a project-specific NEPA analysis subject to public and agency review and comment would be required. The BLM cannot approve leases and plans of development that do not comply with all applicable air regulations. If requirements in effect at that time require mitigation of GHG emissions or detailed assessment of the climate change impacts of the GHG emissions from a project, the BLM and the agencies responsible for enforcing such requirements will ensure that the project complies with these requirements.

(2) As noted above, emissions of GHGs, which include CO_2, methane, and nitrous oxide, are already adequately covered for a programmatic-level EIS. Text has been added to Sections 4.6.1.1.2 and 5.6.1.1.2 to acknowledge the importance of black carbon emissions.

3.5.1.2 Editorial Comments

50090-30 50310-56

Issue Summary: One comment (1) suggested minor edits or changes in wording that would not affect the meaning of the text, and one comment (2) suggested adding a discussion of expected emissions when discussing cumulative impacts.

Response: (1) The edits and changes were made.

(2) No text change was required. Reasonable estimates of expected emissions cannot be made at this programmatic stage until specific lease applications proposing specific technologies have been made. In addition, emissions estimates for technologies still in the research and development phases are not available. However, text has been added to Section 6.1.3.5 to reference the emissions presented in Appendices A and B, which summarize potential emissions from existing oil shale and tar sands technologies.

3.5.1.3 Mitigation and Compliance

OSTS_069-21 OSTS_069-47

Issue Summary: Two comments suggested that the BLM include language that would make granting commercial leases contingent upon adequate and acceptable analysis of impacts and detailed mitigation plans, including documentation of GHG emissions and demonstration of compliance with all applicable regulations.

Response: No text change was required. As noted in Sections 4.6.1 and 5.6.1 of the PEIS, the BLM cannot authorize activities that would not comply with all applicable air laws, regulations, and standards so all leases will require lessees to comply with these requirements within the leased area. When a lease application is submitted to the BLM and specific information is known, a detailed assessment and project-specific NEPA review will be performed and could include a GHG emissions inventory and development of mitigation measures (Sections 4.6.1.1 and 5.6.1.1 of the PEIS). In addition, the developer will be required to obtain an air permit from the state. Requirements of NEPA and the state air permit would include preparation of a GHG emissions inventory, if required, and development of any required GHG mitigation measures.

3.5.1.4 Mitigation of GHG Emissions at the Project Level

OSTS_069-45

Issue Summary: The EPA has commented, in recent NEPA reviews, that an analysis of reasonable alternatives be performed that includes an assessment of potential means to mitigate project-related GHG emissions. Specifically, the EPA suggested assessing carbon capture and sequestration technologies as well as measures from BLM's Supplemental Information Report for the eight environmental assessments (EAs) in Montana, North Dakota, and South Dakota. These measures should be considered by the BLM in alternatives developed pursuant to NEPA prior to any further development of oil shale and tar sands resources. In addressing climate impacts, the BLM must craft long-term management prescriptions without permanent impairment and unnecessary or undue degradation to the resources in the face of climate change. Secretarial Order 3289 states that "[t]he realities of climate change require us to change how we manage the land, water, fish and wildlife, and cultural heritage and tribal lands and resources we oversee." Without this critical analysis, the BLM cannot meet its NEPA obligations or other legal and policy mandates discussed above.

Response: No text change was required. Decisions to be made on the basis of this Final PEIS are land allocation decisions, which do not result in emissions of any GHGs. This programmatic EIS does not treat specific projects, and detailed information on technology, capacity, emissions, and sites are unavailable. Without this detailed information, mitigation measures for GHGs cannot be developed. The PEIS discusses

general methods for reducing GHG emissions in Sections 4.6.1.1.2 and 5.6.1.1.2 but, for the reasons just noted, cannot quantify the potential reductions. If and when an application for a lease for a specific project is made, a project-specific NEPA analysis subject to public and agency review and comment would be required. The BLM cannot approve leases and plans of development that do not comply with all applicable air regulations. If requirements in effect at that time require mitigation of GHG emissions, the BLM and the agencies responsible for enforcing such requirements will ensure that the project complies with these requirements.

3.5.1.5 Reduction of GHG Emissions

50181-76 50181-77 50181-85

Issue Summary: Several comments suggested that specific companies, including Read Leaf Resources, be contacted to ascertain how its new technologies reduce GHG emissions.

Response: No text change was required. Appendices A and B discuss oil shale and tar sands technologies, including Red Leaf Resources. Emissions from production-scale units of these technologies could be quite different than those from pilot and demonstration units. The technologies discussed in these appendices provide a reasonable overview at this time. When and if a lease application is made, the developer will need to choose a specific technology based on a range of considerations and provide emission estimates, including GHGs, for that technology at the scale envisaged in the application.

3.5.1.6 No Response Required

OSTS_001-3	OSTS_229-1	50170-2	50279-4
OSTS_069-43	50014-2	50276-7	
OSTS_227-3	50047-18	50277-21	

Issue Summary: Some comments were informational, were nonsubstantive, expressed opinions, made no specific requests for changes, or identified no possible errors.

Response: Thank you for your comments. No text change was required.

3.5.1.7 Long-Term Adaptation

OSTS_005-2 OSTS_010-2

Issue Summary: Two comments suggested adoption of long-range climate adaption and mitigation plans consistent with the hypothesis that the atmospheric CO_2 ceiling that must not be exceeded be adjusted downward from its current level.

Response: No text change was required. The BLM has no authority to adopt climate adaption plans or mitigation measures not sanctioned by regulations. If laws and regulations are passed requiring actions to adapt the climate change or GHG mitigation measures, the BLM will require that producers comply with these requirements before a lease is granted, because the BLM cannot conduct or authorize activities that do not comply with all applicable laws, regulations, standards, and plans.

3.5.1.8 Comments Requiring Individual Responses

50181-52 50310-40

Issue Summary: One commentor stated that, on page 4-57, line 4, the BLM should consider providing an update on the status of the proposed rulemaking for the Final PEIS. The same commentor asked the following of page 6-129, lines 4–6: What does this sentence add to defining the GHG emission concerns for the project?

One commentor noted that on pages 3-103 through 3-105, the climate change predictions are filled with contradictions; for example, there are dire predictions of both drought and increased precipitation attributed to climate change.

Response: The status of the rulemaking was updated. To answer the question, no text change was required. The statement is true and indicates that oil shale and tar sands emissions of GHGs could contribute to climate change.

Several aspects of climate change as discussed in Section 3.5.1.2 should be noted. First, at the local level, changes can vary among localities. Second, climate change research indicates that extreme weather events will increase. There will be both more drought and more heavy rains. Text has been added to Section 3.5.1 to note that extreme events are expected to become more frequent.

3.5.2 Wintertime Ozone

OSTS_083-7 50333-35

Issue Summary: Two comments noted that the Draft PEIS did not discuss the phenomenon of wintertime ozone, which may result from emissions from oil and gas development. One comment suggested that the results of the *Uintah Basin 2012 Winter Ozone Study and the Three State Study* be considered in the PEIS.

Response: No text change was required. Section 3.5.3 of the PEIS already has a discussion of both summertime and wintertime ozone, including a discussion of the factors involved in wintertime ozone production and measured wintertime levels.

3.5.3 Additional Power Needs for Oil Shale and Tar Sands

OSTS_001-5	OSTS_218-3	50147-4	50314-7
OSTS_069-38	50072-5	50277-28	

Issue Summary: Several comments dealt with issues related to the need for additional electricity generation to support oil shale production. (1) Some expressed concern that generating power needed for oil shale and tar sands production would emit large quantities of GHGs, particulates, and mercury and requested that the potential impacts on air quality and human health need to be acknowledged in the PEIS and the impacts analyzed. Several comments noted that up to 14,000 MW of new electric generation would be needed in Colorado alone. (2) One comment suggested strengthening the language in Section 6.1, replacing the current language stating that, "If the development of oil shale requires expansion of capacity of existing electric power plants" with language stating that "It is believed that the development of shale *will* require additional power capacity." The potential impacts on air quality and human health need to be acknowledged. (3) One comment objected that presenting only coal use in Table 6.1.1-3 makes development of shale appear worse than it really is, because other non-coal power plants may supply some of the power.

Response: (1) Based on additional information, the BLM has reduced the assumed additional power need to 600 MW based on in situ oil shale production of 50,000 bbl/day. Even with this reduction, the BLM agrees that there would be impacts on air quality and human health caused by emissions from producing the required electric power. Text was added to Section 4.1.6 of the Final PEIS similar to the text in Section 6.1.1.5 of the Draft PEIS to note that the emissions from producing this electric power would affect air quality, human health, and air quality-related values (AQRVs). However, quantitative estimates cannot be made at this programmatic stage. If new power plants were required to meet this demand, they would be subject to whatever regulations and requirements were in effect at the time they were built. Because any new fossil plants would be major sources of air pollution, permitting requirements would include detailed modeling requirements for impacts on National Ambient Air Quality Standards (NAAQS), prevention of significant deterioration (PSD) increments, and visibility.

(2) No text change was required. No change in the language was required. When and if an in situ shale plant is built, the electric power could be supplied by non-fossil sources. The BLM has taken the approach of analyzing cases with larger air emissions. To the extent that power would be provided by non-fossil sources (e.g., wind or solar), air impacts would be reduced below the levels assumed in this Final PEIS.

(3) The BLM added a natural gas–fired plant to Table 6.1.1-3. In addition, text was added to Sections 6.1.1.5, 6.1.2.5, and 6.1.4.5 to the effect that to the extent that some power needed by in situ oil shale production is supplied by non-fossil generating capacity, the emissions would be less than those in the table.

3.5.4 Quantitative Analysis

OSTS_069-34	OSTS_069-39	50071-1	50318-8
OSTS_069-36	OSTS_083-7	50147-4	50318-9
OSTS_069-37	OSTS_090-4	50253-3	50335-30

Issue Summary: Several comments noted that air quality impacts of oil shale and tar sands development, including cumulative oil and gas development, on NAAQS, PSD increments, and AQRVs (including visibility) had not been addressed quantitatively through the use of models.

Response: No text change was required. The BLM has determined that deferment of analysis of environmental consequences to project-level NEPA evaluations is outside the scope of this PEIS (Section 1.2.1). In addition, the detailed level of analysis suggested in these comments is not available at this programmatic level; specific development sites have not been proposed, specific technologies have not been proposed, and detailed site development plans are unavailable. If and when an application for a lease for a specific project is made, a project-specific NEPA analysis subject to public and agency review and comment would be required. As part of this project-specific review, the BLM may, at its discretion, require detailed air quality modeling and analysis, including, as noted in Sections 4.6.1 and 5.6.1, near-field and far-field modeling and photochemical grid modeling. Furthermore, the BLM is required to notify Federal Land Managers in potentially affected areas of the potential impacts on AQRVs, including visibility. In addition, the prospective lessee would be required to apply for preconstruction air permits from air regulatory agencies. These applications generally require establishment of air quality protocols, extensive modeling and analysis of the types noted above for air impacts, including, if applicable, impacts on NAAQS, PSD increments, and AQRVs including visibility, and may require preconstruction monitoring to establish baseline air quality. The BLM cannot approve leases and plans of development that do not comply with all applicable air regulations.

Regarding contributions to cumulative impacts from industrial development in the region, including fugitive emissions of methane, volatile organic compounds (VOCs), and hazardous air pollutants (HAPs) from oil and gas infrastructure and in addition to those from future oil shale and tar sands developments, such an analysis would require many assumptions that are premature at this programmatic stage in the review process for the reasons discussed above. If any lease applications are made, detailed analysis of such effects would be appropriately evaluated in project-specific NEPA analyses conducted prior to issuing the leases and approving plans of development.

3.5.5 Data

OSTS_072-7	50072-2	50181-53	50333-35

Issue Summary: Several comments noted that some air data for nonattainment area emissions were outdated and that data for some areas were missing.

Response: Air data, including those noted in comment, were updated in Sections 3.5.2 (emissions) and 3.5.3 (air quality). The discussion of nonattainment areas in Section 3.5.3 was updated. Data for Duchesne County, Utah, were added to Table 3.5.2-1.

3.5.6 VOCs and Dust Mitigation

50333-35	50335-30

Issue Summary: Several comments either presented additional mitigating measures for dust and VOCs or noted that additional mitigating measures might be required based on modeling results or whether problems developed during the life of a project.

Response: No text change was required. The PEIS gives examples of the mitigating measures that may be needed and is not intended to be exhaustive. For a specific project, a different set of mitigation measures may be more appropriate. Sections 4.6.2 and 5.6.2 of this Final PEIS note individual leases and use authorizations could include specific mitigation measures that "could include, but are not limited to" those listed. As noted in Sections 4.6.1 and 5.6.1, the specific mitigation measures that will be required will be determined during the modeling and analysis conducted during lease application and air permit application reviews for specific projects.

Mitigations, including emission controls, operating practices, and equipment specifications required by state and federal regulations such as the National Emission Standards for Hazardous Air Pollutants (NESHAP) and National Security and Public Safety (NSPS), will be required either through the BLM lease, state air permits, or both.

The BLM will require ongoing monitoring during the life of the project to ensure that problems are identified and additional mitigations initiated as required.

3.5.7 No Response Required

OSTS_088-6	50143-5	50314-7
50096-3	50165-6	50335-29

Issue Summary: Some comments were informational, were nonsubstantive, expressed opinions, made no specific requests for changes, or identified no possible errors.

Response: Thank you for your comments. No text change was required.

3.5.8 Comments Requiring Individual Responses

OSTS_072-7 OSTS_083-7 50277-28 50314-7

Issue Summary: One comment noted the need to conduct a General Conformity analysis in nonattainment and maintenance areas.

One comment noted that the PEIS must acknowledge the impacts of fugitive VOC emissions.

One comment claimed that the Draft PEIS failed to supply information on surface retorting.

One comment noted that the PEIS should include information about potential emissions of mercury, ozone precursors, and HAPS from oil shale development.

Response: Text summarizing the General Conformity program was added to Section 3.5.3. Text was added at the ends of Sections 4.6.1 and 5.6.1 stating that a conformity applicability analysis needs to be conducted as part of the project-specific reviews and that a conformity determination may be required.

Text was added to Sections 4.6.1.2.2 and 5.6.1.2.2 noting that VOCs are emitted from fugitive sources.

No text change was required. Section B.6 in Appendix B presents information on surface retorting.

No text change was required. Little information on emissions from oil shale and tar sands processing is available. Appendices A and B summarize the information available for preparing this Final PEIS. Data on mercury emissions were unavailable. Several processing technologies are currently under development. When a specific project is proposed for leasing and permitting, the proponent will be required to submit emissions information. Emissions information should also become available as part of the RD&D projects.

3.5.9 Impacts of Dust

50147-4

Issue Summary: One comment requested that the impacts of dust on (1) health, (2) snow, and (3) climate change be evaluated.

Response: (1) No text change was required. The primary NAAQS for particulate matter with a mean aerodynamic diameter of 2.5 µm or less and 10 µm or less ($PM_{2.5}$ and PM_{10}) have been set to protect public health with an adequate margin of safety. The modeling and analysis required for a specific project during the BLM lease application and state air permit application processes should ensure that the NAAQS are not violated and thus that there are no health impacts.

(2) Information on snowmelt associated with dust was added to Section 3.5.3 and noted as a possible impact from oil shale and tar sands development in Sections 4.6.1 and 5.6.1.

(3) Impacts of dust on climate change were added to Section 3.5.3 and noted as a possible impact from oil shale and tar sands development in Sections 4.6.1 and 5.6.1.

3.6 NOISE

50181-116	50253-6	50324-31
50181-054	50277-29	

Issue Summary: Some comments were informational, were nonsubstantive, expressed opinions, made no specific requests for changes, or identified no possible errors. Other comments requested specific changes, corrections, or identified errors.

Comment OSTS2012D50181-116: On page D-14, Table D-9, the correct reference to the Duchesne County Code for noise regulations is the Nuisance Ordinance, which is in Title 3, Chapter 1, Section 4(G) of the County Code.

Response: Table D-9 was corrected using the citation provided in the comment.

Comment OSTS2012D50181-54: On page 3-120, line 1, Duchesne County actually limits construction and mining activities to 7 a.m. to 9:30 p.m. on weekdays, 8 a.m. to 9:30 p.m. on Saturdays, and 9 a.m. to 9:30 p.m. on Sundays and holidays.

Response: The limits provided in the comment were included in Section 3.6 of the Final PEIS.

Comment OSTS2012D50277-29: On page 6-12, line 8, the phrase, "Construction-related noise levels could exceed EPA guidelines and/or Colorado regulations (there are currently no state guidelines/regulations for Utah or Wyoming)," has no basis. There should be justification to use a statement like this. Noise needs to have receptors (such as people) to determine the applicability of noise standards. Most of the areas involved have few inhabitants.

Response: No text change was required. Section 4.7.1.1 provides ample justification for the statement that construction-related noise could exceed EPA guidelines and/or Colorado regulatory levels. In the PEIS, these levels are used as indicators of the potential for problems. Although these areas currently have few inhabitants, populations do change over time. The applicability of the guidelines/regulations and whether measures must be taken to mitigate noise will be determined during project-specific NEPA analyses and the permit application procedures when a specific project is proposed. In addition, as discussed in Section 4.8, noise affects various ecological resources.

Comment OSTS2012D50324-31: One comment (1) suggested changes in the discussion of applicable laws and regulations and (2) questioned the use of the EPA guideline in areas with sparse population.

Response: (1) The suggestion deletion was not made. The statement in the Draft PEIS concerning the EPA guideline is true. The suggested addition was made in Section 2.2.1.

(2) No text change was required. Section 4.7.1.1 provides ample justification for the statement that construction-related noise could exceed EPA guidelines. In the PEIS, this guideline is used as an indicator of the potential for problems. Although these areas currently have few inhabitants, populations do change over time. The applicability of the guideline and whether measures must be taken to mitigate noise will be determined during project-specific NEPA analyses and the permit application procedures when a specific project is proposed. In addition, as discussed in Section 4.8, noise impacts various ecological resources.

3.7 ECOLOGICAL RESOURCES

3.7.1 Aquatic Resources

3.7.1.1 Recommended Habitat Protections

OSTS_069-109	50323-17	50323-27
50181-55	50323-26	

Issue Summary: The commentors requested that the BLM declare NOSRs and a number of watersheds ineligible for oil shale and tar sands development. In Colorado, these include all eligible WSRs, Parachute Creek Watershed Management Area, and all of the Trapper and Northwater Creek watershed. These watersheds contain valuable fish habitat and some support the Colorado River cutthroat trout. In Utah, eligible WSRs include the White River/White River ACEC, Bitter Creek, Nine Mile Creek, Range Cree, and Rock Creek. These waters support endangered species of fish. The commentors stated that numerous tributaries to the Green River contain cutthroat trout populations that should be

protected. This includes the Greater Little Mountain Area between Flaming Gorge and Wyoming Highway 191, in which Trout Creek, Gooseberry Creek, Sage Creek, and Currant Creek are important waters for cutthroat trout populations.

Response: In Section 1.2, the text states that the NOSRs will be identified as being unavailable for application for commercial oil shale leasing. For portions of Trapper and Northwater Creeks that are not included in the Trapper/Northwater Creek ACEC and the White River in the Vernal RMP, additional project-specific NEPA analyses would be conducted prior to any future leasing decisions to evaluate potential impacts in greater detail. The presence of cutthroat trout between Flaming Gorge and Wyoming Highway 191 was noted in Section 3.7.1.1.1. As stated in Section F.2.2 of Appendix F, oil shale and tar sands activities will be consistent with the June 2006 *Conservation Agreement for Colorado River Cutthroat Trout* (*Oncorhynchus clarkia pleuriticus*) *in the States of Colorado, Utah, and Wyoming*.

3.7.1.2 Aquatic Impact Analysis

OSTS_069-16	OSTS_071-20	OSTS_071-23	50277-34
OSTS_069-30	OSTS_071-21	OSTS_083-2	50323-20
OSTS_069-32	OSTS_071-22	50277-33	

Issue Summary: The commentor recommended that the BLM mandate that lessees provide an analysis of the impact of oil shale projects on U.S. Fish and Wildlife Service (USFWS) efforts to protect four endangered species: the Colorado pikeminnow, the humpback chub, the bonytail, and the razorback sucker, including on the 15 Mile Reach in Colorado and the Green River below its confluence with the White River. Multiple commentors stated that the BLM should ensure that oil shale and tar sands development does not undermine protections provided under the Upper Colorado River Endangered Fishes Recovery Implementation Program. The commentors stated several potential impacts that could result from oil shale and tar sands development, and of particular concern were the impacts on aquatic biota from water depletions, water storage, and degradation of water quality from sediment and contaminant leaching, spills, and runoff. The commentors also requested more specific analysis of impacts of oil shale and tar sands developments on Colorado River cutthroat trout and threatened and endangered species and critical habitat in the Colorado River Basin.

One commentor also stated that there was no scientific basis for the 2-mi buffer used to demarcate the area of indirect effects and that the use of a 2-mi buffer should be justified.

One commentor stated that the in situ projects in Colorado are substantially different from the project in Utah and that there should be a distinction between in situ retorting and surface retorting. The commentor stated that impacts of surface retorting are known, but with in situ retorting, the environmental impacts are largely unknown.

Response: The impacts of oil shale and tar sands development on native fish and endangered species were described in Sections 4.8.1.1 and 4.8.1.4, Threatened, Endangered, and Sensitive Species. Section 6.1.1.7.1 states that the 2-mi impact zone was used to assess direct impacts based on the assumption that as project development activities become more distant from waterways, the potential for negative effects on aquatic resources are reduced. The impacts of surface and in situ retorting are discussed separately in the Section 4.1 and in the individual resource sections. Section 6.1.3.4 discusses water withdrawal requirements in Colorado versus those in Utah. Project-specific NEPA analyses would be conducted prior to any future leasing decisions to evaluate potential impacts in greater detail.

3.7.2 Vegetation

OSTS_071-21	50181-117	50277-35
OSTS_072-6	50277-30	50324-32

Issue Summary: Comments included requests for updates in the vegetation sections of the PEIS. One commentor pointed out that the county code reference for Duchesne County was incorrect in Appendix D. A couple of commentors suggested that support for statements in Chapter 6 regarding reclamation should be added. Another commentor requested that avoidance of impacts on all wetlands, including nonjurisdictional, in addition to minimization and mitigation, should be emphasized in the PEIS. Finally, a commentor stated that federal law does not regulate noxious weeds or invasive species; they are regulated pursuant to state law.

Response: The county code reference for Duchesne County was corrected in Appendix D. Section 4.8.1.2 provides supporting information for evaluations of impacts of alternatives. Additional text was provided in that section as appropriate. The text in Section 4.8.1.2 was revised to emphasize the need for avoidance of wetland impacts and to include nonjurisdictional wetlands. The text in Section 2.2.1 was revised as requested to reflect state regulation of noxious weeds and invasive species.

3.7.3 Wildlife

3.7.3.1 Habitat Loss/Fragmentation

OSTS_024-2	50276-6	50314-3	50323-21
50147-3	50286-1	50323-11	50329-10
50180-1	50295-3	50323-13	50329-11
50180-2	50309-2	50323-14	

Issue Summary: These comments mentioned that habitat loss and fragmentation pose major concerns for wildlife, including big game and raptors. In addition to a general loss and fragmentation of habitats, specific mention was made regarding impacts on big game seasonal habitats. One comment suggested that loss of vegetation would have a large, rather than moderate, impact on raptors, while another stated that disturbance would affect raptors. One comment stressed the need to maintain migration corridors.

Response: Sections 4.8.1.3.1 and 5.8.1.3.1 discuss wildlife impacts from habitat loss and fragmentation from oil shale and tar sands developments, respectively. The PEIS acknowledges that loss of important seasonal habitats could be a significant impact on big game and other wildlife species. It was not possible to conduct a more detailed site-specific analysis for each species given the large areas involved and uncertainty in exact project locations. Impacts on raptors were concluded to be moderate rather than large because of nest avoidance and other protective actions that would be implemented to avoid, minimize, or mitigate impacts on raptors. Therefore, no population-level impacts on raptor species are expected. Additional lease-specific NEPA evaluations will be conducted for all lease applications tiering from this PEIS. If any important wildlife habitats (e.g., crucial winter habitats or parturition areas) occur in the vicinity of the proposed lease areas, additional lease-specific minimization or mitigation measures will be identified at that stage (including potential denial of the lease application). Greater specification in mitigation requirements, impact significance determinations, and measurable standards of protection will be deferred to specific project assessments that would be developed in consultation with state and federal natural resource management agencies.

Mitigation measures and conservation measures, as well as those determined during lease-specific NEPA evaluations, will be implemented for each commercial development under the proposed program. Greater specification in mitigation requirements, impact significance determinations, and measurable standards of protection is also deferred to specific project assessments that would be developed in consultation with state and federal natural resource management agencies. It is expected that this consultation process will identify species and habitats of concern in the project area, the need for additional survey, quantitative significance criteria, and specific mitigation requirements.

3.7.3.2 Exclusion of Horses and Burros

OSTS_071-11	OSTS_071-33	50324-35	50324-36

Issue Summary: These comments mentioned that wild horses and burros should not be included with wildlife, because the BLM manages them under separate legislation and programs from their wildlife management program.

Response: The discussion and analysis of wild horses and burros was moved to the land use sections in Chapters 3 through 6 of the PEIS.

3.7.3.3 Discussion of Birds by Orders

OSTS_071-15 OSTS_071-16

Issue Summary: These comments noted that the headers used to describe birds in Section 3.7.3.2 of the PEIS do not address many of the bird species present in the study area. In particular, the use of neotropical migrants as a header is inaccurate, because it refers to many orders of birds, whereas the discussion under the header refers primarily to passerines.

Response: In Section 3.7.3.2 of the PEIS, the "Neotropical migrant" header was changed to "Passerines and Other Landbirds." Also, examples of bird orders discussed under each header are provided.

3.7.3.4 Pond Impacts on Birds

OSTS_071-21 OSTS_071-25 OSTS_071-28 50320-12

Issue Summary: Several comments requested that the potential use of wastewater impoundments or evaporation ponds by birds and mitigation measures to minimize bird mortality in those water bodies be discussed in more detail. Another comment expressed concern that big game loss could occur from drinking polluted waters.

Response: Potential use and impacts of wastewater impoundments and evaporation ponds by birds and other wildlife were added to Sections 4.8.1.3.5 and 5.8.1.3.5 of the PEIS, while appropriate mitigation measures were added to Sections 4.8.2.3 and 5.8.2.3 of the PEIS.

3.7.3.5 Raptor Response to Fire

OSTS_071-29 50295-3

Issue Summary: Comments disagreed with the statements made in Section 5.8.1.3.9 of the PEIS regarding raptor response to fire. One comment mentioned that over time, repeated fire in cheatgrass areas converts the areas to annual grasslands with negative consequences to raptor populations, while another comment mentioned that fire likely has a moderate to large impact on raptors rather than a small impact (e.g., golden eagle nesting success, nest starts, and productivity declines in intense fire years and loss of critical shrub cover declines for prey species).

Response: Sections 4.8.1.3.9 and 5.8.1.3.9 of the PEIS were modified to include additional discussion of fire effects on raptors. Tables 4.8.1-3 and 5.8.1-3 were modified to indicate that fire could have a potential moderate impact on raptors.

3.7.3.6 Cumulative Impacts on Wildlife Habitat/Connectivity

OSTS_071-21	50295-2	50320-12
50147-3	50314-3	

Issue Summary: Some comments wanted the cumulative impacts of roads, pipelines, compressors, tanks, drill rigs, camps, and other infrastructure on wildlife and their habitats to be evaluated, while other comments wanted conventional oil and gas developments to be considered in addition to oil shale and tar sands developments. Another comment wanted coal extraction and power plants needed to supply power to oil shale and tar sands development to be assessed.

Response: The cumulative effects analyses in the PEIS (Sections 6.1.6 and 6.2.6) consider the effects of nearby federal and nonfederal activities. Given the uncertainties in oil shale and tar sands development technology, the scale (size) of future projects, and their locations (including factors such as the amount of land disturbance and water requirements), an accurate assessment of the cumulative impacts of oil shale and tar sands development on wildlife species cannot be made. Any additional analyses required to more accurately determine cumulative impacts on wildlife species will be determined at the lease-specific level.

3.7.3.7 Changes in Text/Tables

50181-31	50181-40	50277-30

Issue Summary: Some comments questioned the acreage of raptor nests listed in Tables 2.6-1 and 2.6-2 of the PEIS (Tables 2.7-1 and 2.7-2 of the Final PEIS). Another comment questioned the statement made that impacts such as habitat loss could continue beyond the termination of oil shale production.

Response: “Raptor nests” was changed to “Raptor nesting areas” in the Chapter 6 tables that provide the acreage of wildlife habitat protected by stipulations in BLM RMPs. The raptor nesting areas refer to areas that are managed for raptor nest protection rather than referring to actual acres of raptor nests.

3.7.3.8 Alternative Comparison of Wildlife Impacts

50180-4	50286-4	50286-6

Issue Summary: These comments discussed potential differences in impacts on wildlife and wildlife habitats for the various alternatives. One comment believed that there are

many unknowns and variability in estimates to appropriately analyze impacts on wildlife and wildlife habitats from the various alternatives.

Response: Given the uncertainties in technology, scale (size), and location, including factors such as the amount of land disturbance and water requirements, it is currently not possible to quantify the impacts of future oil shale and tar sands development on wildlife for the various alternatives. However, the potential for impact on ecological resources is assumed to be directly related to the amount of land disturbance that might be associated with potential future development. Therefore, the comparison of potential for impacts under each alternative was based upon the relative amount of surface area identified for land use plan amendments (Chapter 6).

3.7.3.9 Mitigation

50295-2	50295-8	50323-14	50329-10
50295-4	50323-11	50329-9	50329-11

Issue Summary: One comment suggested that a limit be set on surface disturbance that, when reached, would require reclamation before further development could occur. Comments also suggested that appropriate buffers be applied to protect raptor nests and habitats important for raptor nesting. Another comment stated that none of the mitigation measures in the PEIS would reduce the large, protracted loss of habitat associated with oil shale and tar sands development. Similarly, another comment stated that mitigation measures involving timing limitations during construction are not effective, because long-term habitat loss would still occur; rather, no surface occupancy (NSO) is preferred for big game habitats, such as crucial winter ranges, parturition areas, and migration corridors. Another comment stated that foraging areas for golden eagles, such as prairie dog colonies, need to be protected from development.

Response: Mitigation measures are identified in Sections 4.8.2 and 5.8.2 of the PEIS. These programmatic mitigation measures and conservation measures, as well as those determined during lease-specific NEPA evaluations, will be implemented for each commercial development under the proposed program. Greater specification in mitigation requirements, impact significance determinations, and measurable standards of protection is also deferred to specific project assessments that would be developed in consultation with state and federal natural resource management agencies. It is expected that this consultation process will identify species and habitats of concern in the project area, the need for additional survey, quantitative significance criteria, and specific mitigation requirements. As discussed in the wildlife sections of Chapter 6 in the PEIS, the BLM RMPs contain various stipulations that provide protection to various wildlife species. These stipulations include lands designated as NSO, controlled surface use, and timing limitations.

3.7.3.10 Raptor Areas and Data

50295-6 50295-7

Issue Summary: One comment suggested that substantial raptor data available from BLM field offices be utilized. Another comment suggested that key raptor areas identified within the region be given special consideration when oil shale and tar sands developments are being sited.

Response: The wildlife sections in Chapter 6 of the PEIS discuss raptor habitat areas that are protected by stipulations in BLM RMPs. These key raptor areas would be given special consideration when locating oil shale and tar sands developments. In addition, some of the mitigation measures listed in Sections 4.8.2 and 5.8.2 of the PEIS would work toward avoiding, minimizing, or mitigating impacts on raptors and their habitats. Greater specification in mitigation requirements and measurable standards of protection is deferred to specific project assessments. These requirements and standards would be developed in consultation with state and federal natural resource management agencies. It is expected that this consultation process will identify species and habitats of concern in the project area and specific mitigation requirements.

3.7.3.11 Wildlife Contamination

OSTS_071-21 50351-5

Issue Summary: The comments stated that wildlife would be affected from exposure to contaminants associated with oil shale and tar sands development.

Response: Sections 4.8.1.3.5 and 5.8.1.3.5 of the PEIS discuss wildlife exposure to contaminants associated with oil shale and tar sands development. NEPA analysis done at the project level would address impacts on wildlife from contaminant exposure in greater detail.

3.3.7.12 Comments Requiring Individual Responses

OSTS_071-12	OSTS_071-24	50165-8	50329-9
OSTS_071-13	OSTS_071-26	50270-8	
OSTS_071-14	OSTS_074-1	50323-15	

Issue Summary: These comments addressed a variety of issues. One comment mentioned that the details used in defining impact categories for wildlife were not provided. Another comment believed that BLM's wildlife management goals and objectives in Section 3.7.3 of the PEIS need to be explained more accurately. One

commentor stated that the description of USFWS's role in wildlife management on BLM-administered lands in Section 3.7.3 of the PEIS needs to be revised.

Another comment requested that the description of important bird groups in Section 3.7.3.2 of the PEIS be modified to stress that all migratory birds receive equal importance regardless of their commercial or recreational importance to humans. Another commentor wanted data and information from the USGS Breeding Bird Survey included in Section 3.7.3.2 of the PEIS.

One commentor requested that the Western Wildlife Critical Habitat Assessment Tool (CHAT) be used to identify wildlife corridors and crucial habitats. Another stated that the Draft PEIS does not include baseline information on population size and trends for big game species, and how populations would change under the various alternatives.

Response: A footnote in the wildlife impact tables (e.g., Table 4.8.1-3) defines the "small," "moderate," and "large" impact categories. BLM's wildlife management goals and objectives are more clearly defined in Section 3.7.3 of the PEIS. USFWS's role in wildlife management on BLM administered lands was revised in Section 3.7.3 of the PEIS.

The description of important bird groups in Section 3.7.3.2 of the Final PEIS was modified.

Sections 4.8.1.3.4 and 5.8.1.3.4 of the PEIS were revised to state that the potential does exist for raptors to be electrocuted. Because of the uncertainties in location of oil shale and tar sands developments at the programmatic level, data from the USGS Breeding Bird Survey would not alter the analyses contained in the PEIS. More detailed information regarding the local abundance and distribution of wildlife species will be determined at the lease level in coordination with the appropriate state and federal agencies. At the lease level, USGS Breeding Bird Survey data would be appropriate to use, in conjunction with other data sources and pre-disturbance surveys, in order to identify species at risk. Project developers and interested stakeholders could use that information to work toward avoiding, minimizing, or mitigating impacts on birds and other ecological resources.

Because of the uncertainties in location of oil shale and tar sands developments at the programmatic level, use of the Western Wildlife CHAT would not alter the analyses contained in the PEIS. However, at the project development stage, BLM Instruction Memorandum (IM) 2012-039 ("Identification and Uniform Mapping of Wildlife Corridors and Crucial Habitat Pursuant to a Memorandum of Understanding with the Western Governors' Association") would be appropriate and applicable. The regional-level data and maps developed through CHAT would be useful to oil shale and tar sands developers, federal and state agencies, and other interested stakeholders in the siting of oil shale and tar sands projects and associated infrastructure. In addition, given the uncertainties in technology, scale (size), and location, including factors such as the amount of land disturbance and water requirements, it is not possible to quantify the

impacts of future oil shale and tar sands development on big game species. Impacts on big game species were qualitatively determined by using best available information, which included spatial data pertaining to species occurrences and their habitat. Species were evaluated based on their known or potential occurrence to areas that may be affected by future oil shale and tar sands development activities. However, the potential for impact on big game species is assumed to be directly related to the amount of land disturbance that might be associated with potential future development. Therefore, the potential for impact can be compared for each alternative based upon the relative amount of surface area identified for land use plan amendments (Chapter 6). More accurate impact significance determinations and measurable standards of protection are deferred to specific project assessments that would be developed in consultation with state and federal natural resource management agencies. It is expected that this consultation process will identify species and habitats of concern in the project area, the need for additional surveys, quantitative significance criteria, and specific mitigation requirements.

Sections 4.8.1 and 5.8.1 of the PEIS discuss potential impacts on ecological resources from oil shale and tar sands developments, respectively; and Sections 4.8.1.3 and 5.8.1.3 specifically discuss potential impacts on wildlife.

3.7.4 Threatened and Endangered Species

3.7.4.1 Impacts on Threatened and Endangered Species

OSTS_024-3	50180-1	50323-11	50329-11
OSTS_069-110	50295-7	50323-17	50329-8
OSTS_071-8	50314-3	50323-20	50337-2
50096-1	50320-10	50323-26	50337-6

Issue Summary: These comments mentioned the impact assessment performed for threatened and endangered species and requested modifications to the approach or overall impact determination made for various ecological resources.

Response: Given the uncertainties in technology, scale (size), and location, including factors such as the amount of land disturbance and water requirements, it is currently not possible to quantify the impacts of future oil shale and tar sands development on individual threatened, endangered, and sensitive species. Impacts on threatened, endangered, and sensitive species were qualitatively determined by using best available information, which included spatial data pertaining to species occurrences and their habitat, as well as updated species distribution information. Species were evaluated based on their known or potential occurrence to areas that may be affected by future oil shale and tar sands development activities. It was not possible to conduct a more detailed site-

specific analysis for each species given the large areas involved and uncertainty in exact project locations. There are simply too many uncertainties to allow for a more quantitative analysis at the programmatic level (such as those pertaining to surface water and groundwater quantity and quality). However, the potential for impact on sensitive species (and ecological resources in general) is assumed to be directly related to the amount of land disturbance that might be associated with potential future development. Therefore, the potential for impact can be compared for each alternative based upon the relative amount of surface area identified for land use plan amendments (Chapter 6). Mitigation measures are identified in Section 4.8.2, which include many stipulations to protect sensitive species. Conservation measures for federally protected species are also provided in Appendix F. These programmatic mitigation measures and conservation measures, as well as those determined during lease-specific NEPA evaluations, will be implemented for each commercial development under the proposed program. Greater specification in mitigation requirements, impact significance determinations, and measurable standards of protection is also deferred to specific project assessments that would be developed in consultation with state and federal natural resource management agencies (including any necessary ESA Section 7 consultation). It is expected that this consultation process will identify species and habitats of concern in the project area, the need for additional survey, quantitative significance criteria, and specific mitigation requirements.

3.7.4.2 Land Exclusions To Protect Threatened and Endangered Species

OSTS_026-6 OSTS_069-104 OSTS_069-105 OSTS_069-106

Issue Summary: These comments identified certain areas (such as ACECs) that should be excluded from oil shale and tar sands activities under one or more of the alternatives.

Response: This PEIS does not exclude all areas (including ACECs or other specially designated areas) that may provide potentially suitable habitat for sensitive species at a gross, programmatic level. Prior to any authorization of a lease, pre-disturbance field surveys would be required to determine the presence of sensitive species or their habitats in the vicinity of a proposed oil shale or tar sands project. Programmatic mitigation measures have been developed to avoid, minimize, or mitigate impacts on sensitive species. Additional lease-specific NEPA evaluations will be conducted, and any additional lease-specific minimization or mitigation measures identified at that stage will be implemented for each commercial development under the proposed program. Greater specification in mitigation requirements, impact significance determinations, and measurable standards of protection is also deferred to specific project assessments that would be developed in consultation with state and federal natural resource management agencies (including any necessary ESA Section 7 consultation). It is expected that this consultation process will identify species and habitats of concern in the project area, the need for additional survey, quantitative significance criteria, and specific mitigation requirements.

3.7.4.3 Requests for Updated Information

OSTS_069-52	OSTS_069-112	OSTS_071-7	OSTS_071-42
OSTS_069-53	OSTS_069-113	OSTS_071-18	50180-2
OSTS_069-110	OSTS_069-114	OSTS_071-30	50323-19
OSTS_069-111	OSTS_069-115	OSTS_071-31	

Issue Summary: These comments requested updates to the list of threatened, endangered, and sensitive species, their status, or the state and federal policies that regulate those species.

Response: Revisions or updates to the number and status of special status species were provided in the Final PEIS and updated in Appendix E. The PEIS acknowledges the uncertainty in determining species potential occurrences in the vicinity of areas that may be considered for oil shale and tar sands lease authorizations. The PEIS mentions that these species are either known to occur or may have suitable habitat that may occur in areas potentially available for lease application, and if available, more detailed information regarding the species' distribution in the study area is provided. More detailed information regarding the local abundance and distribution of special status species will be determined at the lease level in coordination with the appropriate state and federal agencies.

3.7.4.4 Mitigation and Conservation Measures

OSTS_071-37	OSTS_071-42	50295-4
OSTS_071-38	OSTS-071-43	50295-5
OSTS_071-40	50181-121	50295-8

Issue Summary: These comments requested updates or modification to the mitigation measures identified in the PEIS, including those conservation measures described in Appendix F.

Response: Conservation measures for regulated species are provided in Appendix F of the PEIS. The introduction to Appendix F was revised to include BLM sensitive species, state-listed species, and those protected under the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act. Greater specification in mitigation requirements, impact significance determinations, and measurable standards of protection is deferred to specific project assessments that would be developed in consultation with state and federal natural resource management agencies. It is expected that this consultation process will identify species and habitats of concern in the project area, the need for additional survey, quantitative significance criteria, and specific mitigation requirements. New or revised conservation measures may be determined during these lease-specific

NEPA evaluations and consultations with the USFWS and other state and federal resource agencies. These changes could include but are not limited to changes to the list of species, buffer or setback distances around known locations for protected species, and measures to avoid or minimize impacts on particular habitats (e.g., wetlands).

3.7.4.5 Editorial Comments on Tables and Figures

OSTS_071-10	OSTS_071-34	50310-49
OSTS_071-17	OSTS_071-39	

Issue Summary: These comments requested changes to the format and/or location of tables and figures in sections discussing threatened, endangered, and sensitive species.

Response: Tables and figures were edited for the Final PEIS.

3.7.4.6 Cumulative Impacts on Threatened and Endangered Species

OSTS_069-59	OSTS_069-60	OSTS_071-22

Issue Summary: These comments requested modification to or additional analysis of the cumulative effects on threatened, endangered, and sensitive species.

Response: The cumulative effects analysis in the PEIS considers the effects of nearby federal and nonfederal activities. Given the uncertainties in oil shale and tar sands development technology, the scale (size) of future projects, and their locations (including factors such as the amount of land disturbance and water requirements), an accurate assessment of the cumulative impacts of oil shale and tar sands development on sensitive species cannot be made. Any additional analyses required to more accurately determine cumulative impacts on sensitive species will be determined at the lease-specific level.

3.7.4.7 Effects of Climate Change on Threatened and Endangered Species

OSTS_069-116	OSTS_083-10

Issue Summary: This comment requested additional discussion or analysis in the PEIS regarding effects of climate change on threatened, endangered, and sensitive species.

Response: The ecological impacts of climate change are important; however, this document deals with programmatic-level impacts, rather than site-specific impacts. A discussion of the full range of possible impacts on sensitive species from climate change is not possible in this programmatic document. An actual project would undergo two

further levels of NEPA analysis (lease stage and project design phase). More detailed analysis of impacts (including those pertaining to climate change, if necessary) would be addressed in project-specific NEPA documents.

3.7.4.8 Impacts and Stipulations on Sage-Grouse Core/Priority Habitat

OSTS_026-6	OSTS_069-25	OSTS_069-56	OSTS_069-58
OSTS_069-22	OSTS_069-54	OSTS_069-57	

Issue Summary: These comments asked for further evaluation of impacts on sage-grouse core/priority areas or additional restrictions placed around these areas (e.g., additional setback distances). Some of these comments also questioned the exclusion of these core/priority areas from oil shale and tar sands development. Included in this category are some comments that also stress the importance of excluding other important sage-grouse habitats (such as brooding and wintering areas) that may not occur within the boundaries of the core/priority areas.

Response: As presented in the PEIS, the BLM has issued nationwide and state-specific guidance recommending the consideration of certain management practices to address the appropriate management of sage-grouse habitat in the context of land use actions. Although the greater sage-grouse is not federally listed as a threatened or endangered species under the ESA, the USFWS determined that listing of the species was warranted but precluded by higher priority listing actions (75 FR 13910). Considering the likelihood of future listing under the ESA, the BLM has adopted a conservation alternative (Alternative 2) to exclude all currently defined sage-grouse core and priority habitats from consideration for oil shale and tar sands lease applications in Colorado and Utah and to make oil shale and tar sands development activities consistent with the Wyoming *Greater Sage-Grouse Core Area Protection Strategy* in Wyoming (Wyoming Executive Order [E.O.] 2011-5).

Sage-grouse core and priority habitats were determined by state wildlife agencies (Colorado Parks and Wildlife [CPW], Utah Department of Wildlife Resources [UDWR], Wyoming Game and Fish Department [WGFD]) with involvement from federal, state, and local governments. Revised sage-grouse core and priority habitat boundaries were released following the publication of the Draft PEIS. Updated boundaries were incorporated in the evaluation for the Final PEIS.

Section 2.3.3.1 of the Final PEIS has been revised to note that unlike the states of Colorado and Wyoming, the state of Utah has not yet completed the process of identifying core or priority sage-grouse habitat. The information available from Utah is the map of occupied habitat, and this map was used in the development of the alternatives in the Draft PEIS, specifically the Preferred Alternative, Alternative 2(b), under which all such lands are excluded from oil shale/tar sands leasing and development. This map was

updated by the State of Utah in September 2011, but still shows occupied habitat. For Utah, the state's occupied habitat map represents the best source of information regarding sage-grouse habitat. Therefore, although the occupied habitat map almost certainly represents a larger area than will eventually be designated by the State of Utah as core or priority habitat, the Final PEIS will continue to rely on the 2011 map as a proxy for core or priority sage-grouse habitat.

Other areas outside of these core and priority habitats may offer important habitat for the greater sage-grouse. These areas may include known brooding and wintering areas that do not coincide with the current core and priority habitat boundaries. Additional lease-specific NEPA evaluations will be conducted for all lease applications tiering from this PEIS. If any important sage-grouse habitats (e.g., brooding or wintering areas) occur in the vicinity of the proposed lease areas, additional lease-specific minimization or mitigation measures will be identified at that stage (including potential denial of the lease application). Greater specification in mitigation requirements, impact significance determinations, and measurable standards of protection will be deferred to specific project assessments that would be developed in consultation with state and federal natural resource management agencies.

3.7.4.9 Updated Sage-Grouse Information

OSTS_069-52 OSTS_069-53 50323-21

Issue Summary: These comments addressed sage-grouse policy, including updates to BLM policy and recent memoranda.

Response: As presented in the PEIS, the BLM has issued nationwide and state-specific guidance recommending the consideration of certain management practices to address the appropriate management of sage-grouse habitat in the context of land use actions. Considering the likelihood of future listing under the ESA, the BLM has adopted a conservation alternative (Alternative 2) to exclude all currently defined sage-grouse core and priority habitats from consideration for oil shale and tar sands lease applications in Colorado and Utah and to make oil shale and tar sands development activities consistent with the Wyoming *Greater Sage-Grouse Core Area Protection Strategy* in Wyoming (E.O. 2011-5). Sage-grouse core and priority habitats were determined by state wildlife agencies (CPW, UDWR, WGFD) with involvement from federal, state, and local governments. Revised sage-grouse core and priority habitat boundaries were released following the publication of the Draft PEIS. Updated policy and BLM Instructional Memoranda (IM), as well as updated core and priority area boundaries, were incorporated in the Final PEIS.

3.7.4.10 No Response Required

OSTS_069-55 OSTS_083-4 OSTS_090-3 50157-2

Issue Summary: These comments did not substantively comment on any portion of the PEIS or did not request any modifications.

Response: Thank you for your comments.

3.7.4.11 Comments Requiring Individual Responses

OSTS_024-6 OSTS_071-9 OSTS_074-2 OSTS_074-3

Issue Summary:
024-6: Also, I'm trying to make sense of the following statement, which seems contradictory to me: "The construction and operation of commercial oil shale projects could affect threatened, endangered, and sensitive species and their habitats where individual projects are located within the 461,965 acres identified for oil shale leasing. There were no habitats for threatened, endangered, or sensitive species identified for spatial or temporal protection in BLM RMPs that would be present in the lease application areas." How is it that no habitats have been identified for protection if the BLM acknowledges that such habitats are present?

071-9: In Table 2.6.1, page 2-98, for Alternative 2 the PEIS states "no critical habitat will be affected under this alternative." We do not agree with this statement because water depletions from the upper Colorado River Basin, as well as adverse changes to stream water quality, would have an adverse impact on critical habitat for the four endangered Colorado River Basin fish species. We recommend this statement of impacts be changed to indicate possible downstream impacts on critical habitat for listed fish.

074-3: In Table 6.2.1-9, the degree to which populations may be affected depends on the status of the species; however, the table does not provide information about the status of the listed species. We suggest the Final PEIS provide a general summary of the status of the listed species. For example; the trends and status of the avian species listed can be found at http://www.mbr-pwrc.usgs.gov/bbs/bbs.html and in Sauer, J. R., J. E. Hines, J. E. Fallon, K. L. Pardieck, D. J. Ziolkowski, Jr., and W. A. Link, 2011, *The North American Breeding Bird Survey, Results and Analysis 1966 – 2009*, Version 3.23.2011 USGS Patuxent Wildlife Research Center, Laurel, MD.

074-2: On page 3-185, we suggest that the Final EIS include the data and information on the home range characteristics of adult Mexican Spotted Owls (*Strix occidentalis lucida)* in southern Utah available in: Willey, D. W.;van, Riper, III, C., 2007, "Home range characteristics of Mexican Spotted Owls in the canyonlands of Utah," *Journal of Raptor Research* 41:10–15.

Response:
024-6: Several of the BLM RMPs include various stipulations to provide protection for different species. These stipulations include lands designated as (1) NSO (where the BLM does not allow long-term ground-disturbing activities [i.e., with an impact that would last longer than 2 years]), (2) controlled surface use (CSU; where the BLM places special restrictions, including shifting a ground-disturbing activity by more than 200 m from the proposed location to another location to protect a specific resource such as a raptor nest), and timing limitation (TL; where the BLM may allow specified activities but not during certain sensitive seasons such as when raptors are nesting or when big game are on their winter ranges).

RMP decisions are made and approved under the authority of FLPMA, as well as other pertinent regulations (e.g., NEPA). The BLM uses RMPs to identify and protect areas of importance to plants and wildlife. The absence of spatially defined protected areas in the RMPs does not imply that such habitat does not exist.

071-9: Table 2.6-1 (Table 2.7-1 in the Final OSTS PEIS) presents a comparison of the impacts of each oil shale alternative. The table is correct in stating that critical habitat for the Colorado River endangered fish does not occur within lands identified for application for leasing under Alternative 2. Indirect impacts, such as those pertaining to water depletion, could occur under any of the four; these impacts are discussed under each alternative in Chapter 6.

074-2: Home range information for the Mexican spotted owl, based on research provided in the comment, was added to the Final PEIS.

074-3: The table already includes the listing status of each species.

3.7.5 Sage-Grouse

3.7.5.1 Conservation, Data, and Analysis

OSTS_069-52	OSTS_069-61	OSTS_090-7	50286-8
OSTS_069-53	OSTS_069-62	50180-03	50312-13
OSTS_069-55	OSTS_071-6	50181-56	50320-11
OSTS_069-56	OSTS_071-27	50181-57	50323-12
OSTS_069-57	OSTS_071-32	50286-2	50329-7
OSTS_069-58	OSTS_071-41	50286-7	50333-16

Issue Summary: These comments provided specific scientific information that the commentors believe should be incorporated into the analysis. These requests included

updates to the species' biology, natural history, distribution, and threats. The comments also suggested data published subsequent to the publication of the Draft PEIS be added to the analysis (e.g., National Technical Team (NTT) report, priority habitat mapping), to ensure adequate protection of large expanses of sagebrush habitat. Some comments also discussed the use of current greater sage-grouse state and federal policies (e.g., Wyoming IM 2012-043, IM 2012-44, IM 2012-19, and E.O. 2011-5).

Response: Given the uncertainties in oil shale technology, scale (size), and location, including factors such as the amount of land disturbance and water requirements, it is currently not possible to quantify the impacts of future oil shale and tar sands development on individual threatened, endangered, and sensitive species. Impacts on threatened, endangered, and sensitive species were qualitatively determined by using best available information, which included spatial data pertaining to species occurrences and their habitat. It was not possible to conduct a more detailed site-specific analysis for each species given the large areas involved and uncertainty in exact project locations. There are too many uncertainties to allow for a more quantitative analysis at the programmatic level (such as those pertaining to surface water and groundwater quantity and quality). Instead, the programmatic analysis discusses potential impacts on sensitive species (and ecological resources in general) in relation to the amount of land disturbance associated with potential future development. Therefore, the potential for impact can be compared for each alternative based upon the relative amount of surface area identified for land use plan amendments (Chapter 6).

The BLM is currently evaluating Greater Sage-Grouse Planning Amendments/Updates to ensure conservation of this species across its range. In accordance with the BLM Greater Sage-Grouse NTT Report in December 2011, the Preferred Alternative avoids priority sage-grouse habitats recently mapped or identified in Colorado and Utah when identifying lands open for oil shale leasing. In accordance with Wyoming IM 2012-043, "Greater Sage-Grouse Interim Management Policies and Procedures," potential oil shale development in Wyoming will adhere to E.O. 2011-5, Greater Sage-Grouse Core Area Protection. It is understood that any proposed oil shale leasing in Wyoming core areas would need to demonstrate development criteria consist with E.O. 2011-5 through leasing or project-specific NEPA. Any future oil shale and tar sands leasing and development activities would be required to comply with all ongoing BLM planning and management efforts to conserve greater sage-grouse and its habitat (e.g., IM 2012-43 and IM 2012-44). Relevant conservation guidelines, policies, and IMs pertinent to greater sage-grouse conservation were provided in Appendix K of the Final PEIS.

Mitigation measures are identified in Section 4.8.2, which include many stipulations to protect sensitive species, including measures for management of greater sage-grouse general habitat. Conservation measures for federally protected species are also provided in Appendix F. These programmatic mitigation measures and conservation measures, as well as those determined during lease-specific NEPA evaluations, will be implemented for each commercial development under the proposed program. Greater specification in mitigation requirements, impact significance determinations, and measurable standards of protection is also deferred to site-specific project assessments that would be developed in

consultation with state and federal natural resource management agencies (including any necessary ESA Section 7 consultation). It is expected that this consultation process will identify the potential occurrence of greater sage-grouse and its habitat in the project area, the need for additional surveys, quantitative significance criteria, and specific mitigation requirements.

3.7.5.2 Cumulative Effects

OSTS_069-52	OSTS_069-59	OSTS_069-60	50329-7

Issue Summary: These comments requested modification or additional analysis on the cumulative effects on the greater sage-grouse, as it relates to other ongoing projects (e.g., transmission lines), total loss of habitat (e.g., sagebrush treatments, previous industrial projects), or interconnected actions (threat of predation).

Response: The cumulative effects analysis in the PEIS considers the effects of nearby federal and nonfederal activities. Given the uncertainties in oil shale and tar sands development technology, the scale (size) of future projects, and their locations (including factors such as the amount of land disturbance and water requirements), an accurate assessment of the cumulative impacts of oil shale and tar sands development on sensitive species cannot be made. The role of this programmatic document is to analyze allocation decisions. Programmatic environmental impact statements are used to evaluate broad policies, plans, and programs and provide an effective analytical foundation for subsequent project-specific NEPA documents. Any additional analyses required to more accurately determine cumulative impacts on sage-grouse (such as connected demographic impacts based on habitat loss) will be determined at the lease-specific level.

3.7.5.3 Specific Revisions

OSTS_069-52	OSTS_071-41	50181-57
OSTS_069-53	50181-56	

Issue Summary: These comments identified specific locations of the PEIS requesting updates to the status, biology, distribution, or ecology of the greater sage-grouse.

Response: Revisions or updates to the status, ecology, or distribution of the greater sage-grouse, including updated tables, figures, and priority greater sage-grouse habitat mapping, were provided in the Final PEIS. The PEIS acknowledges the uncertainty in determining species potential occurrences in the vicinity of areas that may be considered for oil shale and tar sands lease authorizations. More detailed site-specific analysis, including information regarding the local abundance and distribution of special status species, will be determined at the lease level in coordination with the appropriate state and federal agencies.

3.8 VISUAL RESOURCES

3.8.1 General Concerns

OSTS_031-3	50246-1	50253-7
OSTS_069-69	50253-5	

Issue Summary: An environmental organization and several individuals raised general concerns about the potential visual impacts of oil shale and tar sands development on scenic landscapes in the PEIS region, particularly on lands administered by the National Park Service. One comment noted night sky impacts as a particular concern.

Response: Regardless of the technologies employed for production, oil shale and tar sands facilities involve substantial amounts of land disturbance. The presence and operation of large-scale facilities and equipment would introduce major visual changes into non-industrialized landscapes and could create strong visual contrasts in line, form, color, and texture, especially where viewed from nearby locations.

Some degree of visual contrast and impact from oil shale and tar sands development on BLM-administered lands is unavoidable; potential impacts on visual resources are one factor among many that must be considered by the BLM in the complex process of identifying lands suitable for energy development. However, the identification of leasing areas under the various alternatives considered in the PEIS incorporated concerns for visual resources that resulted in avoidance or reduction of major impacts on many sensitive visual resource areas. Furthermore, when individual projects are proposed, additional consideration of potential visual impacts will be incorporated into the required site- and project-specific impact assessment that will occur, including further opportunities for public comment on potential visual impacts. Furthermore, there are numerous visual design features included in the PEIS that developers will be required to implement that will result in avoidance and/or reduction of potential visual impacts associated with energy facility construction, operation, and decommissioning.

3.8.2 Visual Resource Inventory/Visual Resource Management Concerns

OSTS_069-67	50329-13	50329-6

Issue Summary: Three comments from environmental organizations suggested the BLM prohibit lands from oil shale development based on either Scenic Quality Ratings (under BLM's visual resource inventory [VRI] process) or a Visual Resource Management (VRM) Class rating of 1, 2, or 3 (under BLM's VRM class designation process).

Response: The BLM's VRM System utilizes the Visual Contrast Rating System as described in *BLM Manual Handbook 8431-1* to determine whether a proposed project conforms to the specified VRM class for the proposed project location. According to the manual, the assessment of visual contrast that determines VRM class consistency must be made from key observation points (KOPs). In other words, VRM class consistency is always judged from one or more specific locations where people would be expected to view the project area, and is not a blanket assessment of contrast that is independent of viewer location and that would apply regardless of the distance from the proposed project, the presence of screening topography, vegetation, or structures. Hence, it is possible that an oil shale or tar sands facility could conform with VRM Class III requirements if the relevant KOPs were sufficiently far away or had only partial views of the facility.

The PEIS states that regardless of the technologies employed for production, oil shale and tar sands facilities involve substantial amounts of land disturbance. The presence and operation of large-scale facilities and equipment would introduce major visual changes into non-industrialized landscapes and could create strong visual contrasts in line, form, color, and texture, especially where viewed from nearby locations. In many if not most situations, oil shale and tar sands facilities would not be expected to conform with VRM Class III management objectives for nearby KOPs with unobstructed views of the facilities, but that determination would be made on a project-specific basis as part of the visual impact analysis when a project-specific environmental assessment would be conducted.

3.8.3 Visual Resources Photos

50090-31	50181-78	50181-87	50343-24

Issue Summary: Several commentors questioned the use of photographs of oil shale and tar sands development from facilities in other countries.

Response: The photos in the PEIS do include photos from facilities in the United States (e.g., the Crown Asphalt Ridge Oil Sands Facility shown in Figure 5.9.1-5 of the PEIS); however, current U.S. facilities are pilot-plant or very small-scale experimental facilities and are not representative of the large commercial-scale facilities for which potential impacts are analyzed in the PEIS. Although each facility built in future would have some unique visual characteristics, the facilities and mining operations in Canada and Australia are closer in size and general visual characteristics to the commercial-scale facilities for which potential impacts are analyzed in the PEIS than are the very small-scale facilities currently in operation in the United States, and are therefore more representative of the likely visual impacts associated with the facilities discussed in the PEIS analysis.

3.8.4 Visual Resources Terminology

50181-79

Issue Summary: One comment requested a clarification of the term "fall-line cut."

Response: A fall-line cut is the removal of vegetation (generally trees and shrubs) along the right-of-way (ROW) using straight-line boundaries between the cleared area and the natural vegetation outside the ROW. The "hard edge" between the cleared area and the surrounding vegetation is non-natural in its appearance and appears as a line contrast that may be visible for very long distances, especially for views along or parallel to the ROW. Fall-line cuts are so named because the cut mimics the "fall line" of the transmission towers, that is, an imaginary line running on either side of the transmission line at a distance corresponding to the height of the transmission tower, inside which vegetation must be cleared for safety reasons.

3.9 CULTURAL RESOURCES

3.9.1 Historic Trails

OSTS_073-2 50125-6 50324-51 50324-41

Issue Summary: Two commentors suggested that the 0.25-mi buffer used in the consideration of historic trails is inadequate. One commentor recommended additional mitigation for impacts on National Historic Trails. Another commentor suggested adding text to the Draft PEIS about National Trails System Act of 1978 (NTSA) segments that intersect with prospective oil shale resources in Wyoming.

Response: The commentors stated that in some cases, the 0.25-mi corridor extending from either side of the historic trail may not be adequate to provide these resources with meaningful protection. The PEIS, on page 2-32, states that the National Historic Trails in Wyoming will be excluded from oil shale leasing/development for a minimum distance of 0.25 mi on either side of the trail, regardless of the provisions of any existing applicable RMP. This has been revised to reflect that prior to leasing, an "area of potential adverse impact" will be determined, where appropriate. The area of potential adverse impact will be based on information contained in the pertinent BLM RMP and the information obtained during the inventory for the area under consideration as well as consultation with stakeholders, through the Section 106 of NHPA review. In the event that the BLM determines that the 0.25-mi corridor needs to be changed, the BLM will follow appropriate planning processes to lessen or increase this exclusion. Under the National Trails System Act, the BLM is also required to coordinate with the National Trail Administrator when the BLM receives an application for a proposed action where a National Trail Management Corridor has not yet been established, but could exist. An

additional commentor suggested mitigation for addressing impacts on historic trails (i.e., off-site mitigation). Mitigation strategies for impacts on historic properties such as National Historic Trails would be developed at the time of a lease application as part of the mandatory Section 106 of the NHPA review for a leasing action and in consultation with the trail administering agency and other stakeholders. Text was added to Section 2.2.3 of the PEIS regarding NTSA segments that intersect oil shale areas in Wyoming.

3.9.2 Cultural/Tribal Public Outreach

50125-1

Issue Summary: A commentor indicated that additional outreach should be undertaken. One group mentioned that it would like to be considered an interested party for the Section 106 review and that additional outreach should be conducted with groups interested in historic preservation.

Response: The commentor will be added to the list of interested parties for the Section 106 NHPA review. Public outreach efforts undertaken for the PEIS are discussed in Sections 1.1 and 1.2.1 of the PEIS. In addition, the efforts undertaken for complying with Section 106 of the NHPA are discussed in Section 3.9.1. Future opportunities for public involvement will occur when lease applications are submitted.

3.9.3 Tribal Consultation

50125-2

Issue Summary: A commentor indicated that Native American tribes should be consulted concerning traditional cultural properties.

Response: As discussed in Sections 4.11.2 and 7.2, the BLM is committed to timely and meaningful consultation with federally recognized tribal entities that could be directly and substantially affected by oil shale and tar sands development on the lands the BLM administers. Table 7.2-1 lists the results of contacts made with 25 tribes and Navajo chapters. Consultation is ongoing and has included field inspection of potentially affected areas by Native American tribal cultural authorities (thus far, one visit by the Ute Tribe). Government-to-government consultation with the tribes would continue through all phases of leasing and development, including leasing and project proposals. Stipulations in lease sales would require that the leaseholders to take resources important to Native Americans into account during project development and operation and may require additional survey prior to a lease sale.

3.9.4 Protection of Historic Resources (Policy)

50329-12

Issue Summary: A commentor suggested that larger areas be excluded from leasing consideration near significant historic properties.

Response: The PEIS acknowledges in Section 3.10 that Native American tribes view traditional cultural properties and the landscapes in which they are situated as an integrated whole that is difficult or impossible to divide into segments. However, as discussed in Sections 4.11.2 and 5.11.2, through early and meaningful government-to-government consultation with directly and significantly affected tribes through all stages of development, mutually acceptable accommodations can be reached that take landscape values into account and would reduce or mitigate adverse impacts on these resources.

3.9.5 Heritage Tourism

50125-8

Issue Summary: One commentor was concerned that the leasing could affect heritage tourism.

Response: Response provided in recreation comments. Response is provided in the file Issue 1 and 3 9_ST_KP_5-17-12.

While the Draft PEIS analyzes the potential impacts of oil shale development on historic and cultural resources in the study area at a qualitative level, a more thorough analysis of such impacts would be done at the leasing and development stage in particular locations. Additional language was added to the recreational use sections under the land use planning heading in both Chapters 4 and 5 of the Final PEIS to acknowledge that recreational opportunities include heritage tourism and qualitatively the potential impacts of commercial development on these resources.

3.9.6 Effects of Leasing

50310-54

Issue Summary: A commentor suggested that the effect of leasing is mischaracterized in the text.

Response: Text changed in response to comment.

3.9.7 Commitment of Resources

50125-5	50143-8	50306-1

Issue Summary: Several commentors stated that unknown resources are likely present and that these resources should not be committed without additional surveys and consideration.

Response: It is acknowledged in Section 1.1.1 of the PEIS that additional studies would be necessary prior to approval of a lease and plan of development. A Section 106 NHPA review would be conducted prior to the issuance of a lease and development. Chapter 3, Sections 3.9.1.2 and 3.9.1.3, identify the compliance efforts for leasing and development. Section 3.9 identifies the current level of cultural resource survey for each basin. In the PEIS, it is acknowledged that additional unknown cultural resources exist in these areas open for leasing applications. Currently unknown resources would be identified and considered during future environmental reviews that would occur before leasing. Thank you for your comments.

3.10 SOCIOECONOMICS

3.10.1 Socioeconomic Data, Methods, and Assumptions

50090-25	50181-66	50310-53	50312-35
50181-58	50181-67	50312-19	50312-37
50181-59	50181-68	50312-20	50312-38
50181-60	50181-122	50312-22	50312-39
50181-63	50181-123	50312-23	50343-19
50181-64	50272-5	50312-25	

Issue Summary: Some commentors were concerned about the use of IMPLAN, and the need to include the latest economic data in analysis. Many commentors were concerned with the assumptions used in the analysis.

Response: In order to capture a large proportion of impacts that would occur, a region of influence (ROI) was established, including the counties which included urban areas in which oil shale and tar sands construction and operations workers were most likely to live and spend their wages and salaries, and in which in-migrating workers were most likely to temporarily, in the case of construction workers, or permanently, in the case of operations workers, reside. Table 3.11.2-1 in the PEIS lists the counties and communities most likely to be affected by development of oil shale and tar sands resources.

The cities of Blanding, Duchesne, and Naples were added to Table 3.11.2-1 in the PEIS. The cities of Del Norte, Monte Vista, and South Fork were deleted from Table 3.112.-7 in the PEIS.

Data for 2004 in Table 3.11.2-4 were updated to include 2009 data.

The economic baseline for each ROI used data current in August 2011. Many of the data sources are updated annually and sometimes monthly. However, it is not the case that the impacts of oil shale and tar sands land allocations will change significantly with more recent baseline data, only the magnitude of the impacts compared to the forecasted baseline for the relevant peak construction year and first year of operations. Economic, fiscal, and demographic projections included in the report prepared by BBC Consulting were reviewed in the PEIS, and data included where appropriate.

Although information collected in the interviews with stakeholders and community leaders included recent data, the purpose of the interviews was to provide the viewpoints of numerous local individuals of various aspects of oil shale and tar sands S development in the context of energy resource developments that have occurred in the past. It is clear from the material provided in these interviews that many of the issues associated with recent oil and gas development and oil shale developments since the 1970s are relevant to the future development of these resources, and oil shale and tar sands in particular. Because of the historical experience with the development of the resource, many individuals perceived development of oil shale resources to be associated with "boom and bust" development, and difficulties facing local communities in attempting to plan for rapid energy developments involving the large and rapid influx of population from other parts of the United States. Planning issues, in particular the provision of local public services, housing and transportation, associated with the rapid development perceived to be associated with oil shale leasing, are likely to differ from those in the past only in terms of scale, as individual projects are permitted and come into operation. It is unlikely, therefore, that conducting additional, more recent, interviews would provide any additional information that would be fundamentally different from that provided in the PEIS.

As stated in Section 4.12 of the PEIS, with the size of the potential demand for housing by the in-migrating oil shale facility, power plant, and coal mine workers and families compared with the number of housing units projected to be available in each ROI, it was assumed that temporary housing would be required. Based on population density, the relative remoteness of rural communities, and likely driving distances to oil shale facilities, it was assumed that a relatively large percentage of oil shale and power plant workers and families would be housed in employer-provided housing, with the remainder accommodated in temporary housing of similar quality built in local communities in each ROI. In order to assess the impacts of in-migrants on local public service infrastructure, a gravity model was used to assign oil shale workers and their families not accommodated in temporary employer-provided housing to specific ROI communities (see Section 3.10). Gravity models mathematically estimate the interaction between pairs of points (the number of construction and operations workers and family members associated with each

technology, nominally located at the oil shale resource centered in a state, and the population of each community in a state ROI) weighted by the linear distance between each pair of points. Linear, rather than roadway distance, was used in the analysis, because the location of oil shale and tar sands facilities and supporting roadway infrastructure and potential congestion data were not known.

Worker and family population data associated with each technology were used to calculate the number of housing units required and the impact on vacant housing, as well as, in association with existing levels of service, the number of local government employees (police and fire personnel, general government workers, and teachers) and the relative impact on local government finances. A qualitative assessment of the potential impact of a large number of in-migrants on social disruption in small rural communities was made on the basis of evidence from extensive literature in sociology on potential social problems associated with boomtown energy development.

As stated in Section 4.12 of the PEIS, many of the industries that would likely provide the appropriate materials, equipment, and other supplies in sufficient quantity for construction and operation of oil shale facilities and the associated power plants and coal mines are currently located outside the ROI in each state; thus, it was assumed that the majority of these resources would be purchased outside each ROI and shipped to the relevant oil shale, power plant, and coal mine facility locations. The values chosen for the extent of local purchases during construction and operation, and for employer-provided housing, were based on the presence and capacity of industries likely to provide materials and equipment to oil shale and tar sands facilities. While it may be the case that the ability of these industries to provide supplies to the oil shale and tar sands facilities may vary with developments in the economy of the ROI, these values were chosen as appropriate average values, given that many of the oil shale and tar sands and auxiliary facilities would not be constructed for some time. Similarly, the values chosen for the number of in-migrating direct employees were average values, rather than values based on specific projects constructed in particular years, to allow assessment of the impacts of oil shale and tar sands S facilities sometime in the future. Temporary housing would be subject to health and safety regulations provided in each of the three states.

IMPLAN data used in the analysis were for 2010. More information on the IMPLAN model is presented in Appendix G of the PEIS. Appendix G also discusses the drawbacks of the IMPLAN model, in particular, that it cannot measure inflation and supply shortages if local sectors and labor resources cannot provide sufficient output and labor hours to support a particular project. Another drawback of the IMPLAN model is the absence of any allowance for technical change and its impact on future changes in the economic structure of the ROI around each oil shale or tar sands project. The PEIS assumes that because the majority of the ROI economies are growing fairly slowly, some have almost static growth rates, and many rely on a small number of traditional industries, such as agriculture, mining, and services, where it is reasonable to assume that any technical change likely to occur will not fundamentally affect output and employment, and with little movement of industries and firms in and out of the ROI, the

economic structure of each ROI during construction and operation of oil shale or tar sands projects would be similar that in the IMPLAN model for each ROI.

Direct employment data for in situ and surface mining processes taken from a number of sources, listed in Appendix G, were used as the basis for estimating economic impacts in each ROI. Data on direct employment and the associated temporary worker housing provided in earlier BLM NEPA reviews of oil shale and tar sands projects were used in preference to data that might have been available from more recent oil and gas projects, given differences in the scale and technology utilized in the two forms of development.

In addition to the analyses of economic, public service, housing, and social impacts included in the PEIS, additional analyses of impacts would be included as part of the site-specific NEPA review process conducted for individual oil shale and tar sands projects. These analyses would include facility-specific data on local purchasing of material, equipment, temporary housing, and in-migrating workers.

3.10.2 Impacts on Local Government

OSTS_008-2	OSTS_090-5	50171-3	50312-21
OSTS_008-5	50110-1	50181-88	50312-24
OSTS_021-3	50118-1	50181-94	50312-26
OSTS_021-5	50119-1	50222-1	50312-27
OSTS_033-3	50144-3	50249-1	50312-28
OSTS_033-4	50144-7	50269-1	50312-29
OSTS_069-20	50147-6	50269-4	50312-3
OSTS_069-49	50154-1	50269-8	50312-40
OSTS_069-50	50154-5	50270-6	50314-10
OSTS_069-51	50168-1	50270-10	50323-8

Issue Summary: Commentors were concerned about mitigation agreements, planning, revenue sharing, and housing and public service, infrastructure, and water use impacts.

Response: The PEIS estimates the impacts of proposed oil shale and tar sands developments on local governments within the ROI through the estimation of impacts on local government and educational employment. The number of additional employees in both categories is calculated by using estimates of the number of in-migrants arriving in each ROI at the in the peak year of construction and in the first year of operations, based on existing levels of service provision (number of employees per 1,000 population) for jurisdictions within each ROI. Although the per-capita estimates of local jurisdictional expenditures in each ROI were based on older data, levels of service for local public

services based on these data are intended to provide an indication of average expenditure levels in each ROI. Because no leases under the OSTS program would occur until 2022, attempts to project levels of expenditure per capita more than 10 years into the future is problematic, given fluctuations in ROI, regional and national economies, and other factors that might affect expenditure levels.

As the PEIS describes in Section 3.11.1, the development of large energy-related projects can, as has happened in the past, lead to rapid expansion, followed by equally rapid contraction, in economic activity, leading to "boom-bust" socioeconomic impacts. Given the rural nature of many of the proposed leasing locations, which limits the number of locally available workers and the number in range of occupations required, it is likely that a large proportion of construction workers would temporarily locate in the ROI at each oil shale and tar sands project. The timing and magnitude of in-migration may mean that local jurisdictions would be unable to adequately plan and fund infrastructure, public services, and educational services to immediately cope with increases in service demand. There may also be housing market impacts if insufficient public infrastructure is in place to support sufficient private housing development. Local expansion in infrastructure and service provision might then be quickly followed by potential overprovision of infrastructure and services, leaving the remaining population burdened with a higher tax bill to maintain the new level of provision.

In addition to the analyses of fiscal impacts included in the PEIS, additional analyses of impacts would be included as part of the site-specific NEPA review process that would be conducted for individual proposed projects. These analyses may provide information on the magnitude and timing of impacts on local government service provision and employment and on impacts on housing, roads, telecommunications infrastructure, and services, such as regional water providers and any loss of property tax revenues. Such a review may also include a variety of additional socioeconomic mitigation measures and revenue sources available to the BLM and local jurisdictions, such as payments in lieu of taxes (PILT), leasing versus ROW designation, and revenue sharing, making it possible for individual jurisdictions to develop more detailed expenditure plans to cope with population increases. Because the nature of specific mitigation measures developed at the project-specific level was beyond the scope of the PEIS, none were included in this part of the NEPA review. Additional NEPA analyses would also address the issue of the impacts of infrastructure upgrades and water rights allocations. Discussion of water quantity and quality impacts can be found in Section 3.4 of the PEIS.

Although vacancy rates in each ROI were based on older data, housing availability using these data are intended to provide an indication of average availability levels in each ROI. Because no leases under the OSTS program would occur until 2022, attempts to project the level of housing availability so far into the future is problematic, with fluctuations in ROI, regional and national economies, and other factors that might affect housing availability. Economic, fiscal, and demographic projections included in the report prepared by BBC Consulting were reviewed in the PEIS, and data included where appropriate.

As described in Section 3.1.2.2.7, the influx of large numbers of in-migrants could lead to ongoing social impacts associated with the transition from small community societies with traditional rural values, to larger communities with urban values, often requiring a higher level of social and educational service provision, and a larger supporting tax base. The extent to which social disruption impacts occur would be partly a result of the number of in-migrants and partly a result of the extent of differences between the social and cultural values of in-migrants and those of the local population. Because the nature and magnitude of these impacts are difficult to estimate, no mitigation measures are offered. Additional analyses of potential social impacts would be included as part of the site-specific NEPA review process conducted for individual proposed projects.

To the extent that there is a relationship between the scale and pace of proposed development and anticipated adverse socioeconomic impacts, controlling the pace of development "to minimize rapid, disruptive social change" is recognized as an appropriate mitigation measure in the BLM *National Environmental Policy Act Handbook*, H-1790-1, Section 6.8.4, page 62: "Socioeconomic impacts are usually indirect and largely fall on communities and local government institutions, by definition located outside BLM-managed lands. While some mitigation strategies are within the BLM's control, (such as regulating the pace of mineral exploration and development to minimize rapid, disruptive social change), most mitigation strategies require action by other government entities . . ."

Individual lease applications would be subject to additional analyses, including the timing and sources of funding for local jurisdictions to support the additional growth in expenditure and employment likely with oil shale or tar sands developments, and the impact of changes in personal and property taxes.

Although it is unlikely that the BLM would be able to require individual oil shale or tar sands developers to enter into mitigation agreements with local jurisdictions affected by development, there are likely to be significant tax revenue benefits through rental and capacity payments that would be made to the BLM by developers. Much of the revenue collected by the BLM from these sources would be distributed to local jurisdictions affected by development, and may be used to provide additional services and infrastructure for local community increases in population.

3.10.3 Local Economic Development Benefits

OSTS_032-1	OSTS_081-13	OSTS_102-4	OSTS_196-2
OSTS_069-48	OSTS_087-6	OSTS_105-1	OSTS_216-4
OSTS_077-13	OSTS_087-7	OSTS_106-1	OSTS_229-4
OSTS_078-13	OSTS_092-3	OSTS_117-2	OSTS_231-3
OSTS_079-13	OSTS_100-2	OSTS_125-2	OSTS_232-2
OSTS_080-14	OSTS_101-2	OSTS_147-4	50087-9

50090-4	50135-4	50165-8	50296-2
50090-5	50136-4	50166-4	50309-5
50090-23	50137-4	50167-4	50312-41
50090-24	50138-4	50172-4	50314-2
50090-25	50139-5	50181-34	50320-5
50090-34	50142-2	50181-124	50324-12
50096-4	50143-10	50186-17	50325-22
50117-1	50144-1	50227-8	50328-21
50123-2	50146-4	50229-1	50330-5
50129-4	50149-4	50255-6	50333-17
50130-4	50150-4	50255-7	50343-18
50131-4	50151-4	50255-21	50343-19
50132-4	50155-4	50272-5	50365-2
50133-4	50159-4	50273-2	
50134-4	50161-4	50276-8	

Issue Summary: Some commentors expressed support for long-term, well-paid jobs in local communities, while others were concerned over impacts on property values and agriculture. Some commentors preferred a phased approach to avoid "boom-bust" economic development. Many commentors were generally opposed to or supported oil shale and tar sands based on economic development issues in each state ROI.

Response: The purpose of the socioeconomic assessment in the PEIS is to estimate the impacts of the leasing land to accommodate specific production levels for each oil shale and tar sands recovery method on the ROI surrounding it. It may be the case, however, that smaller scale projects may result from the development of portions of proposed oil shale and tar sands acreage, with lower production levels, especially at larger lease tracts, meaning that the impacts of oil shale and tar sands development are a conservative estimate of impacts in one or each ROI. In addition to the analyses of economic impacts included in the PEIS, additional analyses of impacts would be included as part of the site-specific NEPA review process conducted for individual oil shale and tar sands projects. Part of the process of performing additional environmental and socioeconomic analyses could be an assessment of the impacts of smaller scale projects and a phased approach to development. However, because the scale of development in each ROI is likely to be driven primarily by market factors, in particular the financial viability of projects of specific capacities, the involvement of the BLM in this aspect of oil shale and tar sands development, and the extent to which subsequent NEPA analysis might consider a range of proposed capacity level and development timelines, is likely to be limited.

As discussed in Section 4.1 of the PEIS, oil shale and tar sands developments are likely to create significant direct construction employment benefits for residents in communities in each ROI. Construction jobs are likely to produce annual incomes significantly larger than the current average. As the higher-than-average wages and salaries of direct employees are spent in each ROI, indirect jobs will be created throughout the economies of each ROI. Additional employment and incomes will also be generated through the procurement of goods, materials, equipment, and services within each ROI during the construction phase of each project. In addition to the economic impacts of oil shale and tar sands facilities, there are likely to be significant tax revenue benefits from the construction and operation of oil shale and tar sands projects not only through sales and income taxes but also through annual payments that would be made to the BLM by oil shale and tar sands developers. Much of the revenues collected by the BLM from these sources would be distributed to local jurisdictions affected by such development. Potential impacts on agriculture are covered in Section 4.12.1.4 of the PEIS.

Section 4.12.1.6 of the PEIS covers potential impact on property values, while Section 4.12.1.7 of the PEIS discusses the relationship between changes in amenity value and economic development in the western states. Economic, fiscal, and demographic projections included in the report prepared by BBC Consulting were reviewed in the PEIS, and data included where appropriate. Discussion of water impacts can be found in Section 4.5 of the PEIS.

As the PEIS describes, socioeconomic mitigation measures could include training programs to ensure that the employment of a local labor force in the construction and operation of oil shale and tar sands projects is as large as possible, because there may few potential employees in the required construction occupations, given the economic profile of the ROIs, where agriculture, mining and services may be largest current employing sectors. To the extent that local labor resources and vendors can be utilized on oil shale and tar sands projects during both construction and operation, oil shale and tar sands developments could contribute to reducing unemployment that may have resulted from national recession or from declining demand for the products of ROI sectors traditionally providing significant local employment opportunities. Requiring project developers to undertake preferential hiring of residents, and to use vendors within the county or state where an oil shale and tar sands project is proposed, are in certain respects attractive as a means of addressing the project's socioeconomic impacts. It is likely, however, that these requirements would be held to violate the interstate commerce clause.

Analysis undertaken for the PEIS indicates direct and indirect employment growth associated with development of oil shale and tar sands facilities could lead to development on a scale likely to precipitate a "boom-bust" economic development trajectory at the majority of ROIs. The PEIS acknowledges that the influx of large numbers of in-migrants can lead to ongoing social impacts associated with the transition from small community societies with traditional rural values, to larger communities with urban values, which may fundamentally affect quality of life in small rural communities. Section 3.11.2.2.7 of the PEIS provides an analysis of the literature discussing the nature of these impacts.

3.10.4 Recreation Impacts

OSTS_069-20	50125-7	50253-8	50323-7
OSTS_069-31	50147-6	50260-1	50323-28
OSTS_069-50	50157-4	50269-7	50336-5
OSTS_137-2	50167-3	50270-4	50341-4
OSTS_218-1	50181-65	50300-2	50355-4
OSTS_235-4	50181-81	50309-4	
50120-4	50245-1	50314-4	
50121-4	50249-3	50322-6	

Issue Summary: Many commentors were concerned about impacts on tourism and recreation from oil shale and tar sands development and the importance of tourism and recreation to local economies.

Response: As discussed in Section 3.11, the economic baseline established for recreation activities in each ROI identifies a number of sectors in which recreational expenditures would occur, including sporting goods retailers, automotive rental, hotels, recreational vehicle parks, campsites, and restaurants. Recreational activities in the vicinity of oil shale and tar sands projects could be affected by visual, air quality, or water quality impairments or reductions in populations of animals that provide hunting opportunities.

A significant problem in the assessment of impacts of oil shale and tar sands developments on recreation lies in the measurement of recreational visitation, especially visitation related to specific recreational activities, and the extent to which individual activities are affected by aspects of oil shale and tar sands development, changes in the visual environment and related infrastructure, increases in traffic, and changes in the overall level of local economic development, property values, and quality of life. Moreover, visitation rates associated with various recreational activities, such as hunting, off-road vehicle use, bird-watching, hiking, and so on is often not measured, especially if there is no specific market transaction, such payment of camping fees, even though there may be significant associated expenditure on accommodation, gasoline, vehicle, and equipment rentals. While there have been several studies of specific recreational activities, such as off-road vehicle use, and in specific locations, such as public lands in Utah, there is no systematically collected data for all three ROIs to allow an assessment of the economic impacts of visitation related to all recreational activities.

Various locations within the ROIs host healthy, tourism-based economies. During NEPA review at the project-specific level, agreements may be reached between local governments and oil shale and tar sands developers to allow energy development and also mitigate impacts on important employment and revenue-generating tourist and

recreational sites, such as national parks and historic areas, including potential impacts on water, air, and ecosystem viability.

3.10.5 Economic Viability

OSTS_137-2	50142-2	50165-8
50123-2	50157-3	50300-2

Issue Summary: A number of commentors were concerned about the viability of oil shale and tar sands technologies and their revenue-generating potential.

Response: Due diligence by the BLM in assessing project viability prior to issuing a lease is required for applications. In addition, under the Preferred Alternative, leases will be granted for RD&D projects. Developers will be required to prove that they have a viable technology.

3.11 RECREATION

Comments associated with recreation are addressed under Issue 8.1.

3.12 ENVIRONMENTAL JUSTICE

3.12.1 Agricultural Water Use

50181-36	50181-88

Issue Summary: Commentors were concerned about impacts on drinking and irrigation water.

Response: Text was added to the PEIS to describe the potential for environmental justice impacts from changes in water supplies and water costs for drinking and irrigation water resulting from oil shale and tar sands developments.

3.12.2 Analytical Methods, Data, and Scope

50090-35	50181-35	50310-31

Issue Summary: Commentors were concerned that analysis did not present an accurate description of minority and low-income populations.

Response: Low-income and minority data and maps in the PEIS were updated and are now based on data provided in the 2010 Census.

An important part of the analysis of the potential impacts of oil shale and tar sands developments on low-income and minority communities is to establish the proximity of these communities to such developments. Once proximity has been established, the extent to which impacts that are high and adversely affect individuals in low-income and minority communities can be established by considering how environmental pathways or social, cultural, and economic interactions at the state level or within a 50-mi area around each leasing area could be affected by specific types of environmental or socioeconomic impacts of oil shale and tar sands projects. The PEIS establishes a basis for the examination of these impacts and provides design features that may be implemented to mitigate some or all of these impacts. Subsequent, project-specific NEPA assessments of individual oil shale and tar sands projects would consider in more detail the precise nature and magnitude of these impacts and establish a set of mitigation procedures.

Under Presidential E.O. 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," federal agencies have the responsibility to "identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations." The spirit of this policy—not a mechanical threshold—should guide any analysis of disproportional impact. Given that stipulation, using a quantitative threshold to determine impact is a useful and accepted tool for preparing environmental justice analyses. In its guidance accompanying E.O. 12898, CEQ proposes that:

Minority populations should be identified where either: (a) the minority population of the affected area exceeds 50 percent or (b) the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographic analysis.

No specific definition of "meaningfully greater" is offered; instead, it is meant to vary depending on the scale of the analysis and the level of expected impacts. Where adverse impacts appear to be negligible, it may be reasonable to set the threshold higher to avoid running through an environmental justice analysis that contributes nothing substantive to the understanding of impacts. Conversely, where there is a reasonable chance of adverse effects, the threshold should be set lower to ensure that such effects on minority or other environmental justice groups are well documented. The PEIS finds that "impacts resulting from the construction and operation of oil shale and tar sands facilities with the potential to affect low-income and minority populations are likely to be small," justifying an increased threshold for determining whether environmental justice communities exist in the affected area. Despite this finding, the PEIS acknowledges that demographics could change and proceeds to list potential impacts on environmental justice communities. This (and other) sections also include applicable mitigation measures to address these impacts.

Finally, "the OSTS PEIS will not eliminate the need for site-specific environmental review for future individual OSTS development proposals. … The determination of the necessary level of additional NEPA analysis, however, would be made on a case-by-case basis at the time an OSTS energy project application was received."

3.12.3 Support of Economic Development as a Means of Addressing Environmental Justice Issues

50343-27

Issue Summary: One commentor advocated oil shale and tar sands development as a means of addressing poverty in each state ROI and providing economic opportunities for minority populations.

Response: As discussed in Section 4.1 of the PEIS, oil shale and tar sands developments are likely to create significant direct construction employment benefits for residents in communities in each ROI, including low-income and minority individuals. Construction jobs are likely to produce annual incomes significantly larger than the current average. As the higher-than-average wages and salaries of direct employees are spent in each ROI, indirect jobs will be created throughout the economies of each ROI. Additional employment and incomes will also be generated through the procurement of goods, materials, equipment, and services within each ROI during the construction phase of each project, including establishments employing low-income and minority individuals. In addition to the economic impacts of oil shale and tar sands facilities, there are likely to be significant tax revenue benefits from the construction and operation of oil shale and tar sands projects not only through sales and income taxes but also through annual payments that would be made to the BLM by oil shale and tar sands developers. Much of the revenues collected by the BLM from these sources would be distributed to local jurisdictions affected by oil shale and tar sands development, including low-income and minority individuals.

As the PEIS describes, socioeconomic mitigation measures could include training programs to ensure that the employment of a local labor force in the construction and operation of oil shale and tar sands projects is as large as possible, including low-income and minority individuals, as there may few potential employees in the required construction occupations, given the economic profile of the ROIs, where agriculture, mining, and services may be largest current employing sectors. To the extent that local labor resources and vendors can be utilized on oil shale and tar sands projects during both construction and operation, oil shale and tar sands developments could contribute to reducing unemployment that may have resulted from national recession or from declining demand for the products of ROI sectors traditionally providing significant local employment opportunities. Mitigation programs would also benefit low-income and minority individuals.

3.13 HAZARDOUS MATERIALS/WASTE

OSTS_024-5	50243-1	50335-15	50335-22
50181-82	50276-5	50335-16	50335-23
50181-86	50279-5	50335-17	50335-24
50181-89	50279-6	50335-18	50335-25
50181-98	50312-32	50335-19	50335-26
50181-114	50312-33	50335-20	50363-1
50181-118	50335-14	50335-21	

Issue Summary: Commentors raised a number of technical and procedural issues related to the management of hazardous materials and wastes used in or produced by oil shale and tar sands operations. Duchesne County, Utah, provided citations for hazardous wastes and for solid wastes in its County Code to be added to Appendix D of the PEIS. This commentor also noted that spent tar sands do have commercial value and are not necessarily treated as a solid waste. Rio Blanco County, Colorado, noted that the assumption in Section 4.14.1 of the PEIS that produced waste waters would be collected in lined ponds and treated on-site was inconsistent with BLM's history of not allowing such activities on public land. The Wyoming Department of Environmental Quality (WDEQ) made a number of comments on Section 4.14.1 regarding the procedural requirements and implementation of state and federal waste management regulations, as well as for reporting and cleaning up releases to the environment. Other commentors expressed general concerns regarding the use of hazardous materials by a future oil shale and tar sands industry and the effects of releases to the environment.

Response: Appendix D was revised in accordance with information from Duchesne County on solid and hazardous waste regulations. In addition, Section 5.14.1.1 of the PEIS was revised to indicate that spent tar sands in Utah do have potential commercial value. Conversely, no change was made to the PEIS in response to suggested inconsistencies of assumptions regarding on-site storage and treatment of process waters and previous BLM policy on similar actions. With respect to comments from the WDEQ, Section 4.14.1 was revised in several places to address points made in these comments. Regarding general concerns about releases of hazardous materials or wastes used or produced in commercial operations, Oil Shale Section 4.14.2 and Tar Sands Section 5.14.2 list mitigation measures, including regulatory requirements, that would limit the release of hazardous wastes and minimize and mitigate the effects of any accidental releases. Management of spent shale is discussed in Section 4.14.1.

3.14 HEALTH AND SAFETY

OSTS_034-2	50276-2	50277-24	50333-49
50096-5	50277-22	50285-4	
50147-5	50277-23	50314-8	

Issue Summary: Commentors expressed concerns regarding potential exposure to chemical additives used in shale fracturing in the oil and gas industry and the use of "citrus solvent" in tar sands extraction. A commentor from the BLM state office in Utah recommended clarifications to the discussion of mine safety issues related to methane, hydrogen sulfide, and explosive dusts, and noted that Mine Safety Health Administration standards, if followed, would prevent unacceptable exposures to miners. A Utah State commentor pointed out that health effects estimates in Table 4.15.2 are based on 1 million bbl/day oil shale production, while Chapter 4 analysis assumptions address a significantly smaller initial industry.

Response: Regarding chemical additives used in oil and gas hydraulic fracturing, Section 4.14.1.4 of the PEIS discusses this issue, but notes that it is not clear that in situ oil shale processes would use processes or additives similar those for recovering oil and gas. Regarding all hazardous materials, mitigation measures and regulations discussed in Section 4.14.2 would limit exposures to worker and the public. Regarding mine safety, affected sections of the PEIS were revised in accordance with these comments. Regarding the health effects estimates in Table 4.15.2, these estimates may be scaled to any assumed oil shale industry size. No change was made in response to this comment.

3.15 GEOGRAPHIC INFORMATION SYSTEM

OSTS_069-53	50030-1	50181-25	50277-12
OSTS_084-6	50047-12	50268-15	50277-13
OSTS_087-1	50074-10	50277-8	50277-14
OSTS_230-5	50181-12	50277-11	50277-31

Issue Summary: Commentors identified errors in maps and figures. Commentors also suggested improvements for maps and figures or requested design changes, additions, or omissions from the maps and figures.

Response: After reviewing comments, the BLM adjusted maps, figures, text, or tables to correct commentors' issues as appropriate.

The information displayed on the maps and figures is correct to the best of the BLM's knowledge and reflective of the data available. The maps and figures contain an appropriate level of detail so as to relay the relevant information without overwhelming the reader.

4.0 CUMULATIVE IMPACTS

4.1 PROGRAMMATIC CUMULATIVE IMPACTS AND SUBSEQUENT NEPA ANALYSIS

OSTS_069-11 50162-5 50323-3
50125-6 50314-11

Issue Summary: Several commentors expressed views on the scope and nature of the cumulative impacts analysis in the PEIS. One commentor stated that cumulative impacts must be analyzed at the programmatic level in a manner sufficient to place an upper limit on development. Another commentor stated that carrying capacity thresholds should be used in the cumulative impacts analysis, including for mule deer and elk and for air and water resources. In addition, this commentor stated that the socioeconomic effects of oil shale and tar sands development should be analyzed on top of rapidly growing oil and gas, tourism, and recreation industries in a programmatic sense. A third commentor acknowledged language in the Draft PEIS to the effect that currently available information allowed only a qualitative analysis of cumulative effects, which, while sufficient to support the narrow allocation decision at hand, is not sufficient to support specific leasing decisions, and stated that, thus, the Final PEIS must (1) define the define the scope of subsequent NEPA analysis, including the scope of cumulative impacts analysis, and (2) define mitigation actions. Likewise, another commentor noted that the Draft PEIS does not quantitatively analyze effects on fish and wildlife, and thus subsequent NEPA analysis must construct a reasonably foreseeable development scenario (RFDS) and conduct a quantitative analysis of the effects on soil and vegetation, habitat structure, habitat fragmentation, water availability, and fish and wildlife habitat on specific lands. In addition, the Final PEIS must state that this analysis must be completed before a lease will be issued or a facility permitted. Finally, one commentor suggested that a mechanism should be set up through the NEPA process to provide off-site compensatory mitigation for cumulative effects on National Historic Trails to overcome inherent shortcomings of the Section 106 process.

Response: In the PEIS, cumulative impacts analysis at a programmatic level has been conducted to the extent possible, as appropriate to the proposed land use allocation decision under consideration. The analysis summarizes the extensive current and planned other activities (e.g., oil and gas development, coal mining, minerals development) for the study area and offers a preliminary qualitative assessment of the impacts of those activities, combined with possible future oil shale and tar sands development, including but not limited to air, water, wildlife, and communities in the study area. Because of the limited character of the decision to be made on the basis of this PEIS (planning/allocation of lands where nominations to lease can be considered), because the locations and magnitude of future oil shale and tar sands development are highly speculative, and because there will be additional NEPA analysis prior to leasing, in this PEIS it is neither required nor possible to present a cumulative effects analysis

showing the impacts of future leasing and development. Prior to leasing (when site-specific and technology-specific data will be available) or approval of a plan of development (when accurate information on water use, air emissions, employment, and the like will be available), additional environmental analysis will be performed, including a cumulative analysis, as appropriate.

The PEIS is a programmatic-level document, analyzing allocation decisions. Programmatic environmental impact statements are used to evaluate broad policies, plans, and programs and provide an effective analytical foundation for subsequent project-specific NEPA documents. At this time, it is not possible to provide a quantitative landscape-level analysis of impacts. There are many uncertainties regarding the amount of development that is reasonably foreseeable, the types of technologies that might be deployed, and the locations of potential projects.

The BLM is taking a measured approach to oil shale development in which each step builds upon a prior step. This approach ensures that any commercial oil shale program meets the intent of Congress, is consistent with the requirements of NEPA and FLPMA, takes advantage of the best available information and practices to minimize impacts, and offers opportunities for states, tribes, local communities, and the public to be involved at each decision point. At future stages of environmental evaluation (i.e., leasing and/or plan of development), a landscape-level analysis will be performed, if appropriate. The scope of the analysis in subsequent NEPA documents would be dependent upon the number of applications received and the type and size of operations proposed by the applicant. This could result in a statewide, regional, basin-wide, or site-specific analysis. Issues such as the presence of wildlife, wildlife habitat, and wildlife habitat fragmentation will be considered, as appropriate.

Regarding the view the PEIS must (1) define the scope of subsequent NEPA analysis, including the scope of cumulative impacts analysis, and (2) define mitigation actions, the text box on page 1-2 as well as the discussion in Section 1.1.1 on page 1-5 of the Draft PEIS highlights that the subsequent NEPA analysis will need to occur prior to oil shale and tar sands leasing and development and points out that the BLM may issue leases with stipulations and requirements for best management practices (BMPs) and may condition site-specific development documents with specific requirements to avoid minimize or mitigate adverse impacts on various resources. In addition, as required by CEQ regulations (40 CFR 1508.7 and 1508.8), this document and any subsequent NEPA documents prepared with respect to oil shale and tar sands development will analyze the direct, indirect, and cumulative effects of the proposed action, as appropriate. The cumulative analysis will include past, present, and reasonably foreseeable future actions on the full range of affected resources including but not limited to air quality, water quality, wildlife resources, habitat fragmentation, and socioeconomic impacts. In particular, the cumulative analysis will consider the present effects of past actions, to the extent that they are relevant, and present and reasonably foreseeable effects of federal and nonfederal actions within an area appropriate to the proposed action at issue. The reasonably foreseeable actions to be considered at that point can include information from the RFDS and pertinent federal or nonfederal actions or effects thereof. That

analysis will present the incremental impact of oil shale and tar sands exploration and development when added to all reasonably foreseeable actions. That analysis will also help to form the basis for the development of mitigation measures, such as BMPs to mitigate short-term and long-term adverse impacts that might be associated with development of these resources.

Finally, regarding off-site compensatory mitigation for cumulative effects on National Historic Trails, while the BLM has excluded from leasing National Historic Trails and a corridor extending at least 0.25 mi on either side, as noted on page 2-32 of the Draft PEIS, it is beyond the scope of this PEIS to establish a mechanism for an off-site compensatory mitigation of cumulative effects on National Historic Trails. Mitigations to further protect these resources, including off-site compensatory mitigation, would be considered at the leasing and project stage of oil shale development.

4.2 CUMULATIVE IMPACTS ON RESOURCES

OSTS_022-1	OSTS_083-6	50118-1	50310-56
OSTS_069-59	OSTS_083-7	50147-3	50320-14
OSTS_071-36	50090-8	50285-4	50323-10

Issue Summary: Commentors expressed a number of concerns regarding cumulative effects and the analysis thereof on particular resources, including water, air, wildlife, as well as from hazardous and toxic materials that might be associated with future oil shale and tar sands development projects. With regard to cumulative effects on water resources from oil shale and tar sands development, concerns included contributions to water shortages, loss of watershed productivity, dust on snow effects, increased aridity, increased salinity, effects of proposed oil and gas projects, and loss of aquatic habitat. In addition, a commentor expressed the view that the Final PEIS must analyze the cumulative effects of potential reduced water supplies resulting from global warming. Finally, a commentor stated that the PEIS does not adequately account for contributions to stresses on public water and wastewater systems in communities affected by population growth from oil shale development.

Regarding cumulative effects on air quality, including contributions to ozone production, one commentor stated that the PEIS must assess impacts on ozone formation and human health from fugitive emissions of methane, VOCs, and HAPs from existing and future oil and gas infrastructure and pipelines.

With respect to wildlife and habitat, commentors expressed concerns that surface mining and in situ extraction would affect sage-grouse populations; that such activities must avoid sage-grouse leks and core and priority habitat; and that the PEIS must evaluate the cumulative effects of oil shale and tar sands infrastructure and development on habitat loss, fragmentation, and loss of continuity.

Regarding the cumulative effects associated with hazardous and toxic wastes, a commentor noted that phosphate and other mineral mining in tar sands areas can contribute, along with tar sands development, to leaching of arsenic and selenium in the region and affect aquatic resources, fish, and migratory birds. Another commentor stated that the cumulative effects of toxic wastes released from oil shale and tar sands development has not been disclosed in the Draft PEIS.

Response: It is important to note that the cumulative impacts discussion presented in the PEIS is a preliminary, programmatic one, appropriate to the land use allocation decision under consideration in this initiative. As purely a land use allocation decision, the proposed action can be understood to have effects, including cumulative effects, only in a limited way. Therefore, the analysis presented focuses on the effects from future oil shale and tar sands projects, in a preliminary and programmatic way, in order to provide decision makers with a sense of the kinds of impacts that could occur, in the future. The kinds of very specific analyses that most of the commentors appear to be calling for are, at this early stage, neither possible nor appropriate. In order to direct the reader to the specific discussions in the PEIS addressing the resources of interest to the commentors, the following information is provided.

Regarding cumulative effects on water resources, Sections 4.5.1 and 5.5.1 of the PEIS describe common impacts expected from oil shale and tar sands operations, respectively. These discussions are of a qualitative or semi-quantitative nature, in the absence of specific knowledge of locations or types of future developments and the needs of the allocation decision at hand. Analysis of effects on both water availability and water quality are discussed in these sections and include effects of concern to commentors, including the potential contributing effects on water availability of climate change. Cumulative effects on various resources are discussed in Section 6.1.6.3 of the PEIS and include the effects on water supply and water quality and effects on terrestrial and aquatic habitats. Regarding future oil and gas development, Section 6.1.6.2 of the PEIS discusses projected levels of oil and gas development in the study area. With respect to the effects of climate change, Section 4.5.1.2, pages 4-36 and 4-37, of the Draft PEIS analyzes qualitatively the effects of future climate change on water availability in the study area. Sections 4.6.1.1.3 and 5.6.1.1.3 of the Draft PEIS discuss GHG emission sources associated with oil shale and tar sands development, respectively. As noted on page 4-59 of the Draft PEIS, quantification of climate change effects from such sources is beyond the scope of the PEIS. Regarding additional loads on public water systems, while the PEIS analyzes the overall impact on surface water supplies from projected commercial oil shale development over the next couple of decades, this analysis is done in the context of regional Colorado River system, and not at any particular location. Thus, while additional loads will be placed on water supply and wastewater treatment systems from oil shale development and associated population growth, it is not possible to identify which systems will be affected or the degree to which they will be affected. Such analysis would be performed in future NEPA reviews at the lease and project development stages.

Regarding contributions to cumulative impacts from industrial development in the region including fugitive emissions of methane (natural gas), VOCs, and HAPs from oil and gas infrastructure in addition to those from future oil shale and tar sands developments, such an analysis would require many assumptions that are premature at this programmatic stage in the review process. If any lease applications are made, detailed analysis of such effects would be appropriately evaluated in site-specific NEPA analyses conducted prior to issuing leases and approving plans of development.

Regarding analysis of contributions to cumulative effects on sage-grouse and other wildlife from future oil shale developments, effects of habitat loss and fragmentation on wildlife and sensitive species are analyzed qualitatively in Section 6.1.6.3.7, and similar effects from tar sands developments are analyzed in Section 6.2.6.3.7 of the PEIS. Further, more quantitative, analysis of these effects would be done in future NEPA analyses at the leasing and project development stages.

With respect to contributions to cumulative effects from leaching of arsenic and selenium from tar sands development in addition to those from other types of mining, Section 6.2.6.2.4 was revised accordingly to note such possible cumulative effects on aquatic systems, fish, and migratory birds.

Finally, regarding toxic wastes, the cumulative effects of toxic wastes potentially released from oil shale and tar sands development in combination with similar wastes associated with oil and gas operations, coal and mineral mining, electric power generation, and other activities are described in Sections 6.1.6.3.13 and 6.2.6.3.13 of the PEIS for oil shale and tar sands development, respectively.

4.3 IMPACTING FACTORS AND OTHER ASSUMPTIONS

OSTS_071-35	50310-59	50310-61	50310-63
50026-1	50310-60	50310-62	50333-50

Issue Summary: Commentors expressed a number of concerns regarding technical aspects of the cumulative impacts analysis in the PEIS, including values used and currency of impacting factors used in the analysis, other assumptions used, and the acknowledgment of certain trends in the region. Commentors stated that the assumptions and values for impact-producing factors presented in the cumulative impacts analysis should be updated, particularly accounting for the use of well pads that support multiple wells, thus reducing surface disturbance overall; that information on coal mining in Table 6.1.6-2 should be reviewed using information from the three state agencies regulating mining, not from central/eastern states; and that Table 6.1.6-3 should be updated for coal-fired power plants and expanded to include gas-fired plants; that Section 6.1.6.3.11 on cumulative effects on socioeconomics should be updated in light of the ongoing RD&D projects and looking forward; that the discussion of hydraulic

fracturing in Section 6.1.6.3.13 should be updated with more recent information; that gas-fired power plants should be included in the discussion of power plant wastes in Section 6.1.6.3.13; that the Table 6.1.6-5 listing of projected levels of tar sands development on private lands should be consistent with discussions of such development in Appendix B; and finally, that the PEIS must address downward trends from impacts from past and ongoing energy development.

Response: Regarding impacting factors for ground disturbance from oil and gas drilling, in Table 6.1.6-1, on page 6-244, and Table 6.2.6-1, on page 6-481, in the Final PEIS, a footnote was added to summary Table 6.1.6-9 and Table 6.2.6-6 for oil shale and tar sands, respectively, noting that projected ground disturbance from future oil and gas wells could be reduced by up to an order of magnitude though the use of multiple-well pads. Regarding assumptions used for coal mining, Table 6.1.6-2 on page 6-246 of the PEIS does show data for the western United States for surface mining. To the extent that underground mining is conducted in the West, the data in the table for the eastern United States are sufficiently representative and encompassing of such mining operations for the PEIS, whose purpose is to indicate the types and order of magnitude of impacts associated with coal mining.

Regarding Table 6.1.6-3, the data presented in this table in the Draft PEIS are sufficiently representative and encompassing of coal-fired power plant operations for the PEIS and thus were not updated for coal-fired plants. However, impacting factors for gas-fired plants were added to Tables 6.1.6-3 and 4.1.6-1 in the Final PEIS, so that impacts of this potential power source for future oil shale and tar sands development may be understood and compared with those from coal-fired plants.

Regarding updating the cumulative effects analysis for socioeconomics in Section 6.1.6.3.11 of the PEIS with information from the ongoing RD&D projects, those projects have not yielded socioeconomic data that would override those used in Section 4.12 for analysis of impacts for oil shale development and thus result in updates to the cumulative effects analysis in Section 6.1.6.3.11. Regarding the discussion of hydraulic fracturing in Section 6.1.6.3.13 of the Draft PEIS, this section in the Final PEIS was updated with more recent information regarding this rapidly developing process.

Regarding consistency of information on the projected levels of tar sands development on private lands in Utah, the current Table 6.1.6-5 entry of “Potential unknown” under “Level of Activity” is not inconsistent with information in Appendix B. Finally, regarding trends in cumulative effects in the region, effects from other energy development in oil shale and tar sands areas has been considered in the cumulative impacts analysis sections of the PEIS. Further analysis of such cumulative impacts will be performed as part of the required NEPA review conducted for future commercial oil shale lease applications and again at the project proposal stage.

5.0 MITIGATION AND RECLAMATION

OSTS_033-4	50125-6	50323-4	50343-5
OSTS_069-13	50162-12	50323-14	50343-25
OSTS_071-28	50269-2	50329-10	50351-4
OSTS_071-39	50312-29	50329-14	
50090-32	50312-31	50335-11	

Issue Summary: Commentors made a number of proposals related to impact mitigation and site reclamation that related to the implementation of mitigation measures. Commentors stated that government and industry should make advance investments and contributions to communities that will be affected by oil shale and tar sands development; that mitigations listed in Section 4.12.2 of the Draft PEIS should be made mandatory in the Final PEIS; that off-site compensatory mitigation for cumulative effects on National Historic Trails should be part of the NEPA process; and that an expressed call for regional mitigation planning and coordination be included in the Final PEIS. Other commentors, citing CEQ guidance, noted that mitigation measures are ongoing commitments that should include specific measureable performance standards and adequate mechanisms for implementation, monitoring, and reporting. Such mitigations would be appropriately specified in future NEPA reviews of proposals with specific technologies at the leasing and plan of development stages. In addition, commentors suggested that further consideration be given to protection of migratory birds, including from contaminated pits, and to bird collisions with power lines; that specific buffers sizes should be specified in mitigations for active raptor nests and ferruginous hawks; that additional review of migration corridor studies for big game be conducted; that mitigation measures should be specified to protect groundwater near in situ operations after production ceases; that experience from the 1980s shows that reclamation of oil shale areas can be successful and should inform BMPs for surface disturbance; that a detailed socioeconomic study be conducted for the ROI at the time of leasing; that timing or seasonal restrictions are not effective mitigations for big game or sage-grouse, but only avoidance is effective; and that mitigations for impacts on soil and geologic resources in Section 4.3.2 should list existing requirements for reclamation performance bonds.

Response: Regarding considerations of making advance contributions to communities to mitigate the effects of oil shale and tar sands development; of making mitigations listed in Section 4.12.2 of the Draft PEIS mandatory; of including off-site compensatory mitigation for cumulative effects on National Historic Trails part of the NEPA process, and of making a specific call for regional mitigation planning in the PEIS, these topics are outside the scope of the PEIS, which is narrowly focused on a land allocation decision. With respect to making mandatory the socioeconomic mitigations listed in Section 4.12.2 of the PEIS, such a mandate would be premature at this time. Mitigations will be considered in greater detail at the leasing and plan of development stages, as was noted to be appropriate by other commentors. Similarly, additional mitigations to protect

migratory birds, raptors, and big game may be added in future NEPA reviews, as may mitigations for protecting groundwater near in situ extraction operations. More detailed socioeconomic studies of specific ROIs would also be conducted at such time. Regarding avoidance of habitat for big game and sage-grouse, such an objective is addressed on a large scale by the formulation of various alternatives and may be addressed on a smaller scale on a case-by-case basis at the project implementation stage. Finally, regarding reclamation performance bonds, the existing requirement for such bonds was not added to the list of soil and geologic mitigation measures in Section 4.3.2, because this and similar sections focus on the technical aspects of mitigations rather than on the administrative aspects.

6.0 RESOURCE AND TECHNICAL CONCERNS

50063-2	50162-9	50325-44
50162-7	50277-7	50335-8

Issue Summary: Commentors expressed a number of concerns related to oil shale and tar sands resources and the technologies available to extract and process them. Commentors identified a need for specificity in oil shale and tar sands regulations, so that developers and the private sector could respond with technological developments to meet specified needs. Another inquired as to the properties of commercial synthetic crude oils in the context of pipeline corrosion. One commentor requested more detailed analysis of the cumulative effects from pipelines from an eventual commercial industry, while another questioned the statement in Section 1.2.2 of the Draft PEIS to the effect that information regarding the nature and extent of future development of oil shale and tar sands resources was speculative at the current time. Finally, one commentor urged that a review be conducted of the Rock Springs oil shale retort site in Wyoming that was operated between 1965 and 1979.

Response: The commentor's view on the need for specificity in regulations is noted. However, oil shale regulations are not within the scope of the PEIS. Regarding the properties of synthetic crude oils eventually produced on a commercial scale and their corrosion properties in pipelines, such properties are not yet known, because no commercial-scale oil shale operations are ongoing in the study area. Similarly, quantifying the cumulative effects of pipelines supporting a commercial industry is not possible at this time in the absence of a reasonable understanding of the eventual nature and size of such an industry. Regarding a review of the Rock Springs retort site operated between 1965 and 1979, because this time period is covered in Appendix A in reviews of other projects in the study areas and because more recent information from RD&D projects is now available, while the technology review was not intended to be exhaustive, information on the Rock Springs retort site is not needed for the PEIS and was not added in the Final PEIS in the interest of time.

6.1 RESOURCE ASSESSMENTS

OSTS_084-6	50092-1	50271-7
OSTS_085-1	50184-1	50343-10
50090-13	50263-1	50365-3

Issue Summary: Commentors expressed a number of concerns related to oil shale and tar sands resource assessments. One commentor took issue with the map of the White River Field Office RMP decisions shown in Figure 3.1.1-3 on page 3-11, as well as areas identified as LWC in Figure 2.3.3-1 on page 2-37, of the Draft PEIS. Another commentor pointed out technical disagreements on terms used to the describe oil shale conversion temperature on page 2-15 of the Draft PEIS, while another requested that the definition of crude oil presented in the PEIS glossary be clarified and expanded. Another commentor pointed out the existence of the Uintah Basin Energy Zone in Duchesne County, which includes oil shale and which has as a highest priority management and development of existing energy and mineral resources to provide long-term domestic energy and supplies for Utah and the United States. In Colorado, a commentor noted that oil shale resources in the Piceance Basin are the richest in the study area and likely to be developed first, while the area available of leasing would be greatly reduced under the Preferred Alternative. Finally, a commentor stated that tar sands resources in Utah are a fraction of those in Alberta, Canada, and would be produced at levels of no more than 25,000 to 50,000 bbl/day.

Response: Regarding Figure 3.1.1-3 on page 3-11 of the Draft PEIS, the text on the previous page points out that a number of decisions in the 1985 RMP from which the map in the figure was taken and which gave rise to the comments were superseded by decisions in the 2008 ROD, shown in Figure 2.3.2-1 of this PEIS. Regarding the areas identified in the latter figure as LWC, the lands were identified by the affected BLM Field Offices in field surveys that were updated as recently as 2011 following program guidelines for identifying such lands. Regarding the discussion of oil shale on page 2-15 of the Draft PEIS and the definition of crude oil in the glossary, each of these sections was revised in accordance with the comments. In addition, the BLM notes the existence of the Uintah Basin Energy Zone in Duchesne County as well as the fact that the Piceance Basin contains rich oil shale resources that would likely be among the first developed in the study area. Regarding projected production levels of tar sands in Utah, Sections 5.1.1 and 5.1.2 of the PEIS assume production levels of 20,000 bbl/day for surface retort and in situ retort processes, respectively, in line with the levels suggested in the comment.

6.1.1 Geologically Prospective

OSTS_069-117	50090-11	50324-44	50333-32
OSTS_087-2	50277-18	50325-42	50343-9
50087-8	50324-22	50329-15	

Issue Summary: Several commentors asked that the BLM clearly define what "geologically prospective" means in each state. They expressed concerns over why the BLM would make available lands that fall below the 25 gal/ton and 25-ft-thick threshold in Wyoming. Many commentors would prefer that all states meet the 25/25 standard. Other commentors suggested that industry is in a better position to decide which resources are economically recoverable. Commentors also stated that having different standards across state lines would constitute a decision that was arbitrary and capricious if such a decision was not logically reasoned.

Response: In Section 369 of the Energy Policy Act of 2005, Congress required the Secretary of the Interior to establish a commercial oil shale leasing program that focused on the most geologically prospective regions. This mandate included requiring the Secretary to determine the meaning of "most geologically prospective" for the purpose of identifying the oil shale resources on the public lands in Colorado, Utah, and Wyoming. The Secretary, through the BLM, determined the meaning of this phrase in 2008, and has carried it forward into this 2012 planning initiative, for the reasons explained in Section 1.2. The standards developed by the USGS Conservation Division, and subsequently adopted by the BLM, use 15 gal/ton and 15 ft thick as the prospectively valuable classification standard for oil shale resources. The USGS further defined oil shale leasing area criteria on a regional basis as 25 gal/ton and 25 ft thick. For this PEIS, the most geologically prospective resources in Colorado and Utah are defined as those deposits that yield 25 gal/ton or more and are 25 ft thick or greater. In Wyoming, where the oil shale resource is not of as high a quality as it is in Colorado and Utah, the most geologically prospective resources are defined as those deposits that yield 15 gal/ton or more and are 15 ft thick or greater The intent of using these definitions in the PEIS is to establish an area inside of which applications for leases can be accepted. Industry can make its own determinations on what target it may want to pursue within that area. An alternative that would apply the Wyoming criteria to Colorado and Utah was considered but eliminated from detailed analysis in the PEIS, as discussed in Section 2.5.2. In that discussion it is reasoned that it would not make economic sense to open larger areas in Colorado and Utah to potential oil shale leasing where the resource is of low grade and unlikely to be developed at this time, because interest in future leasing would be directed at higher grade deposits. It is further noted that, in the future, additional planning and NEPA analysis could be conducted to open areas with lower grade deposits if economically warranted.

6.1.2 2008 PEIS Was Reasonable

OSTS_077-3	OSTS_080-3	50255-11	50308-2
OSTS_078-3	OSTS_081-3	50283-2	50314-12
OSTS_079-3	50186-3	50308-10	50325-12

Issue Summary: Several commentors suggested that the Preferred Alternative in the 2008 OSTS PEIS was a reasonable response to the large amount of oil shale and tar sands

resources available in Colorado, Utah, and Wyoming. Commentors further suggested that the Preferred Alternative in the 2012 PEIS, because of reduced acreage open for application for leasing, would impede commercial development and thus requires strong justification. Another commentor supported evaluating the results of research and development projects prior to commercial leasing of public lands.

Response: The Preferred Alternative identified in this PEIS would make more than 600,000 acres of public land open for application for commercial oil shale leasing. Given the nascent stage of development of oil shale technologies and the recent and current rate of advancement of the industry, the amount of land available under the Preferred Alternative would present no significant barrier to development of the industry in the foreseeable future, while requiring RD&D first is a prudent management step in a reasoned, organized, and responsible path toward commercialization.

6.2 POWER AND ENERGY NEEDS

OSTS_069-17	50269-6	50310-35
50147-7	50310-34	

Issue Summary: A number of commentors expressed concerns that all impacts associated with oil shale and tar sands production be fully considered prior to issuing commercial leases, in particular, impacts from associated electrical power generation required to support production. Among these concerns was that energy return in the form of oil shale and tar sands products be compared to energy invested in such production in analysis of impacts. Others were concerned about the geographic range of impacts from commercial development, particularly on towns and communities, including from power production. Yet others noted that operations that are self-supplied with power would reduce impacts from electrical transmission.

Response: The requirements and effects of power generation and transmission were considered in the preparation of this PEIS and are analyzed in Section 4.1 for oil shale production and Section 5.1 for tar sands production, along with several other factors potentially contributing to impacts that may extend beyond production locations. These discussions are of a general nature as appropriate for a programmatic level of analysis. Additional, more detailed analysis of such factors will be performed in future NEPA reviews at the leasing and project design level of commercial development. Some projects may be self-supplied with power as a by-product of operations, reducing effects from power transmission. Likewise, projects that generate production heat from combustion of product gases may have a lower water demand overall than those that use electricity for heating to the extent that electricity generation requires water. Air emissions, on the other hand, would occur at the operations site instead of at an external power plant, for aboveground retorting operations. Air emissions would be reduced overall for in situ operations that used self-supplied gas for combustion underground rather than electricity generated above ground.

6.2.1 External Energy Source

OSTS_066-14	50181-73	50310-45	50333-48
OSTS_069-38	50270-7	50310-47	50343-20
OSTS_072-8	50272-6	50312-36	
50090-27	50310-33	50314-9	
50144-4	50310-44	50320-6	

Issue Summary: Several commentors questioned BLM's assumption that coal would provide the supplemental energy required for oil shale or tar sands extraction. They requested that the BLM include scenarios in which the energy supply comes from gas-fired power or from other energy sources. One commentor questioned the definition of 60% efficiency assumed for coal-fired plants. Others pointed out that some operations may be self-supplied with energy from co-produced gases or natural gas and to such an extent would reduce the need for new power plants. Similarly, in situ operations that used combustion for heating rather than electricity should be considered in the PEIS analysis. Finally, a commentor noted that Section 4.9.1.3.2 assumes that, with respect to visual impacts, new coal-fired power plants built to support oil shale development would be 1,500-MW units, whereas the PEIS assumes that only 600 MW would be needed to supply an initial industry, while the discussion of power plant construction activities should be moved from visual impacts Section 4.9.1.4.2 to Section 4.1.6, which covers expansion of generating capacity.

Response: The BLM acknowledges that future energy required to support a commercial oil shale and tar sands industry would likely be provided by some source other than coal and, in the near term, would likely be provided by natural gas, which has lower CO_2 emissions than coal-fired plants. The Final PEIS was revised in the appropriate places in accordance with this response, including in Section 4.1.6. Impact-producing factors for gas-fired generating plants were added to Tables 4.1.6-1, 6.1.6-3, and 6.2.6-3. The first footnote in Tables 6.1.6-3 and 6.2.6-3 was revised to read, "Power plants are assumed to operate at 60% *capacity factor*," revised from "60% *efficiency*." In addition, the text was revised to note that natural gas–fired energy production might be self-supplied at some oil shale operations, reducing loads on the grid. Otherwise, however, it is noted that self-supplied natural gas–fired electric power would have roughly similar impacting factors as that produced by off-site generators supplying the grid using combined-cycle gas-fired plants. However, if self-supplied gas is used directly for heating, it is noted that water use could be reduced overall, compared to using electricity for heating, to the extent that electricity generation requires water, and that while air emissions would still occur for aboveground operations; they would not occur for below ground combustion for in situ operations, based on the assumption that combustion products are sequestered. The potential contribution to energy supplied by renewables, particularly wind energy, is now noted qualitatively in Section 4.1.6. No impact-producing factors are provided for renewables, but it is noted that several such factors, including air emissions and water use associated with wind energy, would be greatly reduced or eliminated compared to coal-

or gas-supplied energy. Regarding the comment that the visual impacts discussion assumes that a new coal-fired plant would be 1,500 MW when only 600 MW is needed to support development, no changes were made in the Final PEIS. The assumption is reasonable because this is a typical size for a coal-fired plant. Not all of the output of a new plant would necessarily go to oil shale development. Likewise, the discussion of power plant construction activities was not moved as suggested, because the activities are discussed in the context of their visual impacts.

6.2.2 Produces More Energy Than It Consumes

OSTS_077-12	OSTS_081-12	OSTS_159-1	50255-20
OSTS_078-12	OSTS_107-3	OSTS_190-4	50325-21
OSTS_079-12	OSTS_148-1	OSTS_197-3	
OSTS_080-13	OSTS_155-1	50186-16	

Issue Summary: Several commentors stated that the energy available in oil shale and tar sands products exceeds the energy consumed in their extraction processes; that commercial technology is already available in other countries, while the RD&D projects in Colorado and Utah show some promising early results; and that water requirements of a commercial industry could be met with available supplies.

Response: The BLM does not take issue with the characterizations of the performance of current oil shale technologies made in these comments as summarized above.

6.2.3 Uses a Large Amount of Energy

OSTS_216-5	50047-15	50337-10
OSTS_218-3	50170-1	

Issue Summary: Several commentors stated that oil shale extraction requires a large amount of electricity that would necessitate the construction of new power plants. They expressed concerns over the additional GHGs produced from the extraction of oil shale relative to petroleum or natural gas.

Response: A number of comments refer to an oil shale industry producing at a level of 1 million bbl of oil per day. Section 4.1 in the PEIS assumes production levels of 25,000 to 30,000 bbl/day for aboveground processing technologies and 30,000 to 50,000 bbl/day for in situ processing technologies for the purposes of analysis based on the current trajectory of the industry. Analysis of significantly higher levels of development would be speculative at this time. Section 4.6.1 of the PEIS assumes that an additional 600 MW of electrical power would be required to support a 50,000-bbl/day oil shale industry

employing in situ extraction technologies, representing the upper end of the projected power need. Regarding quantitative comparisons of GHG emissions from oil shale and tar sands development to those from conventional oil and gas, such comparisons would similarly be speculative at this time. As noted in Section 4.6.1.1, it is not possible at this time to make adequate assumptions of GHG emissions from future commercial oil shale operations to estimate emission inventories, and thus to compare them to those from conventional fossil fuels. Such emission estimates might be possible when specific oil shale or tar sands projects are proposed.

6.3 TECHNOLOGY

OSTS_020-3	50072-3	50268-32	50333-7
OSTS_024-7	50086-1	50271-4	50335-3
OSTS_068-6	50090-10	50285-3	50335-28
OSTS_068-7	50090-37	50304-1	50337-4
OSTS_069-5	50148-1	50309-3	50337-8
OSTS_070-4	50181-6	50310-19	50343-13
OSTS_071-3	50181-17	50310-28	50343-23
OSTS_071-4	50181-70	50310-48	
OSTS_203-2	50268-24	50312-16	

Issue Summary: Commentors made a number of comments of a general nature regarding oil shale technologies and comparisons or suggested comparisons of oil shale resources and technologies within and outside the United States, including ongoing commercial oil shale production in Brazil, and suggested comparison to effects of oil sands production in Canada and to the effects of oil and gas development. They suggested that product upgrading could be done on already affected lands; that more details on the commercial technologies and equipment that would be used are needed for analysis of impacts; that the assumption in Section 4.1.3 that all combustible gases produced by commercial in situ oil shale processes would be consumed on-site as supplement fuel might not hold; that footnotes on page 1-17 of the Draft PEIS referring to RD&D ownership need to be revised; that Section A.5.3.2 describing AMSO's RD&D project is outdated; that the Draft PEIS failed to mention TomCo Energy's interests in oil shale development on nonfederal lands in the area; that Red Leaf Resource's process requires less upgrading than analyzed in general in the PEIS; that Enefit's RD&D process description in Appendix A should be revised; that some potential developers that require rich resources for testing may not be able to obtain RD&D leases in Colorado under the Preferred Alternative; that it is not possible to evaluate impacts of an industry for which technologies are under development; that the viability of oil shale technologies and land allocation decisions are separate issues; that use of produced water from the oil and gas industry for oil shale production be considered; that information on impacts of operations

that would compose oil shale and tar sands development is already well known, readily available from experience in the oil and gas and mining industries in the affected states, and can be used to evaluate similar oil shale processes, and thus there is no need to delay commercial leasing until completion of further research on the impacts of oil shale technologies; that impacts for natural gas pipelines supplying retorting operations be analyzed; that non-water dust suppressants be considered; and that the PEIS does not adequately analyze the range of impacts on water resources from various oil shale technologies, from increased demand due to population growth associated with the industry, or from potential effects of depleting groundwater resources on affected surface habitats and surface water.

Response: The BLM acknowledges that commercial oil shale and tar sands operations are ongoing in other countries; however, the economics and environmental impacts are not necessarily directly relatable to future commercial oil shale and tar sands operations in the study area. Regarding product upgrading at separate locations, including on already affected lands, the PEIS assumes on-site upgrading for completeness of analysis. With respect to analyzing technologies and processes at a greater level of detail, the analyses in the PEIS are at a level of detail sufficient for the land allocation decision at hand; further detailed analysis would be performed at the project level in future NEPA analysis when a specific technology is proposed. Regarding the assumption in question in Section 4.1.3, the text in the Final PEIS was revised to note that some flaring of combustible gases may occur, and footnotes on page 1-17 were revised to clarify RD&D ownership. Section A.5.3.2 was revised in light of updated plans of operation available from AMSO; Section A.5.3.4 was revised to update the description of Enefit's RD&D project; and Section A.5.3.7 was revised to mention TomCo Energy's lease holdings on private land and its licensing agreement to use Red Leaf Resource's oil shale technology. The fact that much of the land available for leasing in Colorado under the Preferred Alternative is already committed to existing RD&D projects is acknowledged; however, abundant land is available for application in Utah and Wyoming, including areas with rich resources. Regarding analyzing the effects of an industry for which technologies are in early development, the PEIS performs conservative analyses by using data available from similar industries and from research projects and principles of operations of promising technologies to estimate impacts from a possible future industry. The BLM believes that these analyses allow a level of understanding of impacts sufficient to support the land allocation decision at hand, but is proceeding cautiously. Conversely, the BLM disagrees that the state of the required technologies has no bearing on the allocation decision. The state of technology and its relationship to the potential success and environmental impacts of a commercial oil shale and tar sands industry bears directly on decisions balancing multiple demands on public lands. Regarding possible use of produced water from oil and gas operations in oil shale production, text was added to Section 4.5.1.2 of the PEIS to note this possibility. Regarding the use of existing information from industries performing similar processes, the PEIS does in fact rely on information from the oil and gas and mining industries, as indicated in the first paragraphs of both Chapter 4 and Chapter 5 of this PEIS. However, while useful in identifying the nature of impacts and estimating some impacting factors for a future oil shale and tar sands industry, this information does not allow a sufficiently detailed evaluation of the extent of

environmental impacts to allow leasing directly, limiting this PEIS to an allocation decision. Regarding analyzing an additional ROW for a gas pipeline to support retorting, while this may be needed for some future projects, many of the current developers have indicated that such gas would be self-supplied with co-produced gas or natural gas, and thus would not require an external pipeline. Regarding dust suppressants, the use of non-water suppressants is noted in Section 4.6.2 of this PEIS. Finally, regarding the full range of impacts of water use from an industry employing various technologies, the analysis in this PEIS is sufficiently detailed to permit an assessment of the availability of water to support a prospective industry using existing and emerging technologies as well as analysis of the potential effects on water resources. While attendant population growth supporting a new industry is acknowledged, additional water needs are within the uncertainty of the analysis. Estimating potential effects on surface habitats and surface water would be similarly uncertain and would be speculative at this point. Such analysis would be appropriately performed in future NEPA analysis at the leasing and project design stages.

6.3.1 Technical Comments on Technologies and Processes

OSTS_068-4	OSTS_152-1	50180-5	50302-1
OSTS_068-5	50090-31	50297-1	50303-1

Issue Summary: A number of commentors provided specific technical comments on technologies and processes, including that Section A.5.3.4 describing the Oil Shale Exploration Company (OSEC) RD&D rotary kiln technology is outdated; that text on page 1-13 of the Draft PEIS implies that clean technologies are excluded from analysis; that Figures 4.9.1-1 and 4.9.1-2 of the Draft PEIS show photos of an industrial technology not currently being considered in the United States; and that certain technologies favored or offered by commentors should be used or considered.

Response: Regarding the OSEC technology described in Section A.5.3.4, this section was revised in the Final PEIS to describe the technology proposed by Enefit, the company that acquired the RD&D lease from OSEC. The text referred on page 1-13 of the Draft PEIS implies, not that clean technologies are excluded from the OSTS program, but that alternatives to an oil shale program that rely on such technologies are out of the scope of the PEIS. Figures 4.9.1-1 and 4.9.1-2 are used to show the nature of the visual contrasts with landscapes of industrial-scale oil shale operations and associated linear facilities, regardless of the current prospects for the particular technology shown. Finally, for the several technologies favored by commentors, endorsement of any particular technology is outside the scope and purpose of this PEIS.

6.3.2 Water Use

OSTS_071-19	50074-14	50323-8	50333-47
OSTS_083-5	50162-6	50324-11	50343-21
OSTS_084-3	50181-113	50328-19	50343-26
OSTS_229-2	50181-119	50333-24	

Issue Summary: Several commentors expressed concerns about the effects of a commercial oil shale and tar sands industry employing various technologies on water supplies and water quality. They were concerned that estimates of wastewater quantities and means of treatment should be discussed in the PEIS; that water use by an oil shale and tar sands industry would contribute to future water shortages in the region; that in situ retorts would leach contaminants to groundwater after oil shale is extracted and that subsidence effects are unknown; that dust suppression and spent shale wetting are consumptive uses of water, not non-consumptive uses as implied in Section 4.1 of the Draft PEIS; that climate change effects would further stress future water supplies; that the effects of reservoir storage for a future oil shale industry on fish species and river systems were not adequately analyzed in the Draft PEIS; that the assumptions used in the PEIS are outdated and result in overestimates of water and power needs and land disturbance from oil shale development and that such erroneous assumptions contribute to the BLM's conclusion that oil shale and tar sands technologies have not yet been proven to be commercially viable and that varying estimates of water use amount to a scientific controversy; that newer technologies, specifically that used by Red Leaf Resources, use less water than the PEIS assumption; that the BLM has failed to discuss vital issues with developers, including Enefit; that water from the Green River would also be available to tar sands developments in the Asphalt Ridge Special Tar Sand Area (STSA); that the term *large* with regard to water use or effects should be defined on pages 4-33 and 4-39 of the Draft PEIS; and that the potential use of reverse osmosis to treat deep brackish groundwater to supply oil shale operations should be mentioned in Section 4.5.1.2 of the PEIS.

Response: Regarding concerns about effects of oil shale and tar sands development on water supplies and water quality, the PEIS analyzes such effects for in situ and surface technologies in Sections 4.5 and 5.5 for oil shale and tar sands, respectively. Regarding wastewater production estimates and treatment, the quantify of wastewater can be estimated by using, for example, the value of 2 to 10 gal per ton of oil shale processed listed in Section 4.1.2 for surface retorts multiplied by the number of tons of oil shale processed per year. For example, an aboveground retort producing 30,000 bbl of oil produced per year, with 42 gal/bbl, and assuming 25 gal of oil per ton of shale would process about 50,000 tons of shale per year. Accordingly, roughly 100,000 to 500,000 gal of wastewater would be produced per year. The management of such wastewater is discussed in some detail in Sections 4.5.1.3 and 4.14.1 for oil shale operations and Sections 5.5.1.3 and 5.14.1 for tar sands technologies. Regarding contributions to future water shortages from oil shale and tar sands development, the estimated water

requirements for an initial tar sands industry as a fraction of available surface water sources are presented in Section 4.5.2 for oil shale development and Section 5.5.2 for tar sands development. Although these estimates indicate that water supplies are currently available for the industry, at levels of a few percent of available supplies, they would represent a significant source of water consumption. The possibility that climate change could further reduce future water supplies is noted in Sections 4.5.1.2 and 5.5.1.2 of the PEIS. Regarding leaching of contaminants from underground oil shale retort zones, this concern is discussed in Section 4.5.1.3, while the possibility of subsidence is discussed in Section 4.5.1.4. The word *non-consumptive* has been removed from text in two places in Section 4.1 in accordance with the relevant comment. Regarding the potential effects on fish and aquatic habitats of future reservoir storage of surface water to support oil shale and tar sands developments, such possible effects are presented in Section 4.5.1.2 of the PEIS. Further discussion of such effects on aquatic resources was added to Section 4.8.1.1 of the Final PEIS. Regarding the currency of assumptions of water use rates for oil shale production presented in the PEIS, the rates used in the 2008 PEIS were reviewed and affirmed in light of more recent reports, including the AMEC 2011 and GAO 2011 reports, as noted in Section 4.1.1 of this PEIS. Red Leaf Resource's technology is reviewed in Section A.3.5.7 of Appendix A of the PEIS, where it is noted that the retort process requires no water. In this regard, it is similar to in situ technologies reviewed in the PEIS. Because estimates of rates of water requirements fall within a fairly narrow range as derived from numerous sources, the range of estimates presented by no means implies a scientific controversy. Uncertainties in future water needs for the industry are dominated by the size of the industry and the technologies used, not by rates of water use for various technologies. Despite the noted uncertainties in the estimates of future water needs for an oil shale and tar sands industry, the BLM believes that water needs and availability are sufficiently well understood to support the land allocation decisions being addressed by this PEIS. Regarding discussions with involved industries, the BLM has ongoing discussions with RD&D program participants and has met with Enefit in the preparation of the Final PEIS. Regarding availability of surface water to support tar sands operations in the Asphalt Ridge STSA, text was added to Section 5.5.2.2.1 of the Final PEIS to note this fact. Text containing the terms *large* or *relatively large* was revised in Sections 4.5.1.2, 4.5.1.3, and 4.12.1.4 in accordance with the relevant comments. Finally, the potential use of reverse osmosis to treat brackish groundwater is noted, but no change to the PEIS was made in response to this comment.

6.3.2.1 Water Use Figures Are Overinflated

OSTS_027-2	OSTS_107-3	50074-16	50181-84
OSTS_077-11	OSTS_148-1	50090-28	50181-109
OSTS_078-11	OSTS_155-1	50090-29	50186-15
OSTS_079-11	OSTS_159-1	50181-11	50227-7
OSTS_080-12	OSTS_190-3	50181-49	50255-19
OSTS_081-11	OSTS_197-2	50181-69	50271-6

50272-10	50310-18	50312-17	50343-22
50308-17	50312-15	50325-47	

Issue Summary: Several commentors noted that some reported technologies use less water than the rates used for analysis in the PEIS and that technologies with low water use are not represented in the PEIS. Conversely, one commentor noted that the current best estimates of water use of less than 3 barrels per barrel of produced oil have been agreed to by most of industry. Commentors further noted that the estimated water requirements and concerns about availability of water are not cited as a motivation for preparing this PEIS; that an oil shale operation in Bio Blanco County, Colorado, producing 550,000 bbl of oil per day in 2050 would require 37,900 to 42,000 acre-ft per year of water (1.5 to 1.6 bbl of water per barrel of oil produced); and that estimates of water use for power generation should reference natural gas–fired plants. In addition, commentors noted that oil shale and tar sands products contain substantially more energy than that needed to produce them and that other forms of energy, such as biofuels, and require relatively more water to produce and that sufficient water is available to support an oil shale and tar sands industry.

Response: The BLM acknowledges that some technologies in the RD&D phases are purported to use somewhat less water than that assumed for commercial-scale operations in the PEIS. For example, Section A.5.3.7 reports that Red Leaf Resource's technology requires no process water. The BLM stands by the water use rates presented, however, which cover a variety of technologies that could be used commercially. The rates projected in the relevant comment for Rio Blanco County in 2050 fall within the range of values for in situ processes assumed in the PEIS. Water use rates and other impacting factors for gas-fired power plants were added to Tables 4.1.6-1 and Table 6.1.6-3, alongside corresponding values for coal-fired plants. Regarding energy return in oil shale and tar sands products, the PEIS assumes that 600 MW of power would be required to produce 50,000 bbl of oil per day from oil shale using in situ technologies, which represents a net energy return of about 5.6 to 1.

6.3.2.2 Too Much Water Needed

OSTS_031-2	OSTS_218-2	50245-2
OSTS_090-2	50165-7	

Issue Summary: Commentors expressed concerns about regulations and limits on the amount of water used in commercial oil shale and tar sands operations; that water use rates for oil shale and tar sands production are somewhat higher than those assumed in the PEIS; and that population growth, agriculture, and climate change will reduce available water in the future.

Response: Regarding regulations on water use by commercial oil shale operations, this issue is outside the scope of this PEIS. Regarding water use estimates for commercial oil shale and tar sands operations that are higher than those assumed in the PEIS, the BLM acknowledges that higher estimates exist, but stands by the values used in the PEIS, which fall between the lowest and highest water use estimates available. Future stresses on water availability from population growth, agriculture, and climate change are addressed in Sections 4.5.1.2, 5.5.1.2, 6.1.6.3.4, and 6.2.6.3.4 the PEIS.

6.3.3 In Situ Technologies

OSTS_030-1	OSTS_066-4	OSTS_084-2	50330-4

Issue Summary: Several commentors pointed out positive attributes of in situ technologies. Conversely, one commentor noted that in situ technologies can exhibit low resource recovery compared to mining and aboveground retorting.

Response: In situ technologies represent a major category of technologies that were evaluated in the PEIS. Resource recovery rates of such technologies were factored in to the PEIS analyses as they affect land requirements, production rates, and energy requirements. However, resource recovery as it relates to waste of resources as contemplated in the Mineral Leasing Act is beyond the scope of the PEIS.

6.3.3.1 Limits to In Situ Technologies

OSTS_077-14	OSTS_079-14	OSTS_081-14	50255-22
OSTS_078-14	OSTS_080-8	50186-18	50325-23

Issue Summary: Several commentors stated that the 2012 OSTS PEIS improperly limits technology testing to strictly in situ efforts and does not allow for development of other technologies.

Response: The PEIS does not limit technology testing to in situ efforts, nor could it. The selection of technologies for testing is outside the scope of the PEIS, while the PEIS analyzes the environmental effects of both in situ and aboveground retorting technologies.

6.3.4 Feasibility

OSTS_077-10	OSTS_080-11	50255-18
OSTS_078-10	50047-6	50262-3
OSTS_079-10	50186-14	50325-20

Issue Summary: Several commentors stated that oil shale development is technologically and economically feasible, while others questioned such feasibility.

Response: The technical and economic feasibility of oil shale and tar sands technologies is not evaluated in the PEIS, because such an evaluation is outside the scope of the PEIS. However, that these technologies are reasonably understood to be feasible or likely to be feasible bears on the need for preparing this PEIS.

6.3.5 Commercial Viability

OSTS_026-1	OSTS_159-1	50268-1	50324-46
OSTS_070-8	50090-22	50268-2	50325-33
OSTS_096-3	50092-3	50310-20	50325-41
OSTS_148-1	50181-15	50324-11	50328-20
OSTS_155-1	50181-111	50324-45	50365-4

Issue Summary: Several commentors stated that the technology to develop oil shale is available and commercially viable and that statements in the PEIS to the contrary are wrong and misleading. Companies have been operating in Estonia, China, and Brazil for many years, while Shell has demonstrated the viability of its process in Colorado. One commentor noted that commercial viability depends on the prevailing price of oil. Others referred to commercial oil sands operations in Canada. One commentor stated that most technologies under consideration are in fact not new and their viability has been discredited in previous efforts.

Response: Statements in the PEIS to the effect that oil shale and tar sands technologies are nascent or not proven to be commercially viable describe the historic experience in the study area. As commentors pointed out, commercial viability depends on context, including the price of oil, and not simply on the technical ability to extract oil from shale oil or tar sands. The viability of commercial operations in other countries depends on the particular conditions and circumstances present at those locations, including the specific nature of the resources being tapped as well as the political and economic regime within which development takes place. With respect to Canadian oil sands, as the introduction to Appendix B and Section 2 of Attachment B1 of the PEIS clearly point out, are fundamentally different in character from tar sands resources in the study area. There are currently no commercial operations producing oil or other energy products from tar sands or oil shale in the study area.

6.3.6 Surface Mining

OSTS_084-5	OSTS_085-2	50030-2	50310-32

Issue Summary: One commentor stated that an area of surface minable oil shale with less than 500 ft of overburden of roughly 65 mi^2 lies along the northwest edge of the Piceance Basin and should be included within the most geographically prospective area for surface mining in Colorado. Commentors wondered whether surface mining is being discouraged in this basin and requested an explanation in Section 4.1.1 of its exclusion in Colorado from the scope of the PEIS. Commentors pointed out several advantages of surface mining, including cost, resource recovery, and absence of subsurface retorts.

Response: Regarding the absence of identified areas available for surface mining in Colorado, as noted in footnote 4 on page 2-20 of the Draft PEIS, the BLM relied on data from Donnell's 1987 paper for identifying such areas in Colorado. The absence of such prospective areas as identified from these data is the only basis for not including surface mining in Colorado within the scope of PEIS, its reported advantages notwithstanding.

6.4 SPENT SHALE

50090-26	50335-1	50335-2

Issue Summary: Commentors questioned a statement of a 30% increase in volume of spent shale compared to mined shale on page 4-6 of the Draft PEIS. Another commentor stated that a mining technique that allows a greater percentage of spent shale to be disposed of inside the mine should be encouraged.

Response: Text referring to a 30% increase in volume of spent shale was revised in Section 4.1.1 of the Final PEIS in accordance with the relevant comments. That mining techniques should consider spent shale disposal is noted.

6.5 DATA

50181-12	50181-101	50181-107	50333-20
50181-72	50181-102	50181-108	50333-42
50181-74	50181-103	50181-110	50333-43
50181-83	50181-105	50324-10	50333-44
50181-100	50181-106	50328-19	50333-45

Issue Summary: Several commentors identified data in the Draft PEIS as outdated and directed the BLM to new data available on oil shale and tar sands resources and technologies. Specifically, commentors identified data in Appendix A that should be updated with respect to in-place oil shale reserves, current domestic and Canadian crude oil sources supplying U.S. refineries, and oil shale RD&D technologies, particularly those employed by Enefit and Red Leaf Resources. Regarding Appendix B, commentors

noted that Temple Mountain Energy has been operating in the Asphalt Ridge STSA since 2006 and that Section B.3 should be updated with respect to current tar sands activity. Other maps and data cited by commentors as needing updating include Figure 1.2-1 and 2.3-1 showing the identified most prospective oil shale resources and workforce and housing estimates in Section 4.1.5; self-supplied energy prospects in Section 4.1.6; and project timelines in Section 4.1.8. Other comments suggested that data should be clarified in Tables 4.1.1-1, 4.1.2-1, and 4.1.3-1, which present assumptions for impacting factors used for operations involving surface mining, underground mining, and in situ recovery, respectively. With respect to ongoing RD&D projects, commentors stated that the Draft PEIS omits progress reports from these efforts and, moreover, should revise downward power, water, and surface disturbance factors on the basis of such progress reports and other recent data. In addition, commentors stated that new information in the PEIS on sage-grouse habitat, LWC, and ACECs is vague, prevents meaningful review, and lacks a discussion of the resource values of such areas or of Wyoming's sage-grouse strategy. Regarding resource assessments and identification of the most geologically prospective area for oil shale development, commentors stated that the PEIS did not use the 2010 and 2011 USGS assessment reports or 2008 data from the Utah Geological Survey (UGS) to update the most geologically prospective area.

Response: Regarding data on in-place oil reserves in Table A-1, the table was not updated using 2010 data from the USGS assessment, because the data from that assessment does not report oil shale resources on the basis of minimum interval thickness; Table A-1 reports on the basis of a minimum 15-ft thickness. However, Sections 6 and 7 of Attachment A of Appendix A summarizing domestic and Canadian crude sources were updated in the Final PEIS. The description of Enefit's technology was updated in Section A.5.3.4 of the Final PEIS. The description of Red Leaf Resource's technology was carried over from that in Section A.5.3.7 of the Draft PEIS. Section B.3 in the Final PEIS describing ongoing tar sands mining activity was updated and now includes Temple Mountain Energy's project. Figures 1.2-1 and 2.3-1 did not need to be updated because the most geologically prospective area has not changed since the 2008 PEIS. Likewise, workforce and housing estimates in Section 4.1.5 were not revised; the current estimates are not inconsistent with estimates, for example, from Enefit. Section 4.1.6 was revised in the Final PEIS to note the possibility of self-supplied energy projects, but the estimate of power needs for an initial industry were not changed. Generic project timelines in Section 4.1.8 were not revised in light of recent projections from Enefit, which benefit from Enefit's particular experience in Estonia with an identical technology. Regarding clarifying entries in Tables 4.1.1-1, 4.1.2-1, and 4.1.3-1 for assumed development footprint acres, total surface disturbance, and wastewater volume in gallons of water per ton of shale, and total employment, the meaning of each term is clearly and meaningfully defined in the associated footnotes and in the references cited therein. Total annual wastewater volume can be easily calculated for the stated annual production rates by assuming oil shale richness in gallon per ton. The methodology for calculating employment numbers is given in the cited Appendix G. Regarding progress reports from the ongoing RD&D projects, the principal available and relevant reports that synthesize results in a form useful for this PEIS are papers and presentations made by RD&D project representatives at the Oil Shale Symposium

conducted annually in October. Relevant results from the presentations made at the October 2011 symposium were incorporated as appropriate into the Final PEIS. Although some of the RD&D project proponents expect somewhat lower water use than assumed in the PEIS, results are still too preliminary to affect these assumptions. Likewise, although some proponents expect that the eventual commercial-scale version of their technology will be self-supplied with power or will use co-generated gas or natural gas to heat their process, these projections likewise are too preliminary to change the PEIS assumptions of external power needs for a commercial industry, which are needed to evaluate potential demand on the grid and potential need for new power plants. Regarding the land categories that form the basis of lands closed to lease application in various alternatives, information was added to clarify some of the land definitions in the Final PEIS. Specifically, a text box was added in Section 3.7.4.3.1 describing how core or priority sage-grouse habitat is defined in each state and what data set was used to prepare maps of such areas. Additional discussion of sage-grouse habitat was added to the associated text, as was a description of Wyoming's sage-grouse strategy. The process used in identifying LWC in the study area is described in Section 2.2.3 of the PEIS. Finally, regarding potential changes to the most geologically prospective oil shale area, which defines the study area, as well as lands considered for leasing, both the USGS 2010/2011 and the UGS 2008 reports cited in comments were reviewed in the preparation of the PEIS. Regarding the USGS 2010/2011 reports, as noted in Section 2.5.1, the BLM considered these data but concluded that it did not indicate that the most geologically prospective area should not be changed for the reasons cited there.

The UGS 2008 report was likewise reviewed in the preparation of the PEIS, particularly oil shale isopach maps in Plate 3. From this review, it was concluded that the USG assessment was in good agreement with the most geologically prospective area as previously defined and thus that no change was needed to the most geologically prospective area in light of this assessment. A citation of this report has been added to Section 1.2 of the Final PEIS.

6.6 OIL SHALE AND TAR SANDS DIFFERENCES

OSTS_008-4 OSTS_021-2

Issue Summary: Two commentors noted that oil shale processes and impacts are different from the processes and impacts of tar sands. They also suggested including findings from the University of Utah study "A Technical, Economic, and Legal Assessment of North American Heavy Oil, Oil Sands, and Oil Shale Resources" in the PEIS.

Response: The 2007 report discussed in the comments from the University of Utah is now cited in Appendix B of the Final PEIS.

7.0 ECONOMICS/COST BENEFIT

There were no comments associated with this issue.

8.0 MULTIPLE USE CONFLICTS

OSTS_001-2	OSTS_090-6	50268-19	50320-3
OSTS_001-4	50019-1	50312-9	50324-37

Issue Summary: Commentors stated that oil shale and tar sands development is inconsistent with the principle of multiple use on public lands, because it is resource and land intensive. Some commentors from industry groups suggested that Alternative 2 impermissibly restricts the BLM's discretion to manage lands according to FLPMA's multiple (including oil shale and tar sands development) use mandate.

Response: Although FLPMA requires the Secretary, through the BLM, to manage the public lands for multiple use, and sustained yield, in accordance with land use plans, developed on the basis of an inventory of the public lands and their resources, FLPMA does not require all uses to take place on all lands and does not specify particular acreages that must be allocated to particular uses. Nor does the Energy Policy Act of 2005 speak to allocations of public lands for commercial oil shale or tar sands leasing, nor provide any standard by which the reasonableness of any particular acreage figure might be determined. The Secretary has wide latitude to allocate the public lands to particular uses, and to employ the mechanism of land use allocation to protect for certain resource values, or, conversely, develop some resource values to the detriment of others, short of unnecessary and undue degradation. None of the alternatives presented in the Draft PEIS, or the Proposed Plan presented in the Final PEIS, precludes the Secretary's or the BLM's exercise of discretion in managing the public lands for multiple use, or the appropriate use of an adaptive management approach. In the Proposed Plan, the Secretary, acting through the BLM, has made a policy decision that in view of the nascent character of the oil shale and tar sands industries, less land than allocated in 2008 should remain open for development of these resources, at this time.

8.1 RECREATION

OSTS_206-2

Issue Summary: One commentor suggested that outdoor recreation and tourism are economic drivers in the region and that oil shale and tar sands development has the potential to contribute to the region's economic growth without threatening recreational activities.

Response: Thank you for your comment.

8.2 GRAZING

50328-3

Issue Summary: One commentor stated that the LWC classification would impair other multiple uses on the land, such as livestock grazing.

Response: For the purposes of the PEIS, the classification of LWC in inventories conducted within the three study area states is used solely for the purpose of constructing alternatives for allocating lands as open or closed for application of leases for oil shale or tar sands development.

8.3 OIL AND GAS

50287-26 50310-52 50324-42 50333-32

Issue Summary: Several commentors noted that oil shale and tar sands development can be compatible with development of other mineral resources and urged the BLM not only to develop leasing programs that accommodate multimineral leasing but also to identify areas where conflicts may arise. The State of Utah suggested that, in the PEIS, the BLM overestimated the amount of land truly available for leasing given that much of the land proposed has already been leased for oil and gas projects. In addition, the State of Utah provided updated data related to average annual drilling rates and estimates of number of wells in Duchesne and Uintah Counties over a 20-year planning horizon, as well as new oil production numbers. The State of Utah also requested that the discussion of Petroleum Administration for Defense District (PADD) be updated to reflect the new pipeline connecting Salt Lake City to the Las Vegas market.

Response: Section 4.2.1.1 of the PEIS addresses other mineral development in oil shale areas and discusses BLM policies related to accommodations of oil and gas leasing in oil shale areas. Section 2.3.3 notes that the Mechanically Minable Trona Area in the Green River Basin in Wyoming would be closed to oil shale leasing under all allocation alternatives, while in Colorado, lands within the Multimineral Zone identified in the White River RMP would be open for application for oil shale leasing only for technologies that would not prevent the recovery of or otherwise destroy other minerals, such as nahcolite and dawsonite. Regarding current and future oil and gas leases affecting the amount of lands practically available for oil shale development, Section 4.2.1.1 does state in the first paragraph that, “a significant portion of the land within the most geologically prospective oil shale areas is already undergoing mineral development, particularly for the development of oil and gas resources.” The section goes on to explain that it is BLM’s policy to optimize the recovery of both oil and gas and oil shale

resources. Chapter 6, page 6-3, lines 40-44, was rewritten to acknowledge that use agreements and various drilling technologies are available to resolve conflicts among willing parties. Mineral development conflicts would occur where resource recovery would use the same extraction method (i.e., surface or underground mining) on the same land; however, precedent leasing would typically result in design and subsequent lease agreements compatible with development.

The new information provided by the State of Utah was incorporated into the document in Tables 6.1.6-5 and 6.2.6-4.

9.0 POLICY

OSTS_069-4	50047-10	50283-4	50363-3
OSTS_069-23	50047-13	50287-4	50372-1
OSTS_069-24	50148-3	50287-9	
OSTS_103-3	50154-8	50324-18	
OSTS_229-3	50184-6	50324-65	

Issue Summary: Comments included general policy suggestions and requests such as one commentor who suggested that the BLM include language in the document providing that the BLM can, in appropriate circumstances, rely on the broad discretion it has under FLPMA to deny commercial oil shale lease and tar sands nominations without completing the NEPA process. Many other comments suggested changes that were outside the scope of the purpose and need for the proposed action or included opinions regarding oil shale and tar sands development on public lands.

One commentor inquired about monitoring the fracking process during the RD&D phase. Another commentor remarked that if the DOI adopts the Preferred Alternative, FLPMA requires that the DOI issue a formal withdrawal.

Response: These comments did not require a text change in the PEIS document. These comments address issues outside the scope of the purpose and need for the proposed action. To the degree to which some comments address merits of the Proposed Allocation Plan, expressions of opinion are not substantive comments requiring a response.

The specifics of the BLM's decisionmaking authority are outside the scope of the purpose and need for the proposed action.

As noted in footnote 2 to Section 1.1 of the Draft PEIS, "See the description of oil shale in Section 2.3 of [the Draft PEIS]. This PEIS does not address opening or closing lands to development of other resources or the hydraulic fracturing of other types of shale for the production of oil and gas." With some exceptions not relevant here, the system of

classification of public lands for certain uses has been superseded by land use planning pursuant to FLPMA

9.1 PURPOSE AND NEED

OSTS_068-2	50268-7	50312-12	50325-43
50090-6	50268-25	50324-20	50328-15
50181-2	50277-3	50324-26	50335-6
50268-4	50287-13	50325-29	
50268-5	50287-18	50325-32	
50268-6	50310-11	50325-38	

Issue Summary: These comments addressed the purpose and need of the 2012 PEIS. Many commentors wrote that the purpose and need was insufficiently explained in the PEIS. Many people commented that the purpose and need was inconsistent with the 2005 Energy Policy Act. Several commentors suggested that the purpose and need of the document was inconsistent with the need for domestic development of unconventional fuels. One commentor from industry suggested that the BLM return to the Purpose and Need statement in the 2008 PEIS.

Response: The DOI complied with the requirements of the Energy Policy Act in 2008, issuing both the PEIS and the regulation required by Section 369 of the Act. Nothing in the Energy Policy Act of 2005 specified how the Secretary must establish a commercial oil shale leasing program, apart from requiring the Secretary to consider the most geologically prospective areas in Colorado, Utah, and Wyoming. The Energy Policy Act did not specify the acreage that must be available for such programs, or how the requirements of such programs should be balanced with other resource uses. Under FLPMA, the Secretary must manage the public lands in accordance with land use plans and retains the discretion to establish, revise, and amend those land use plans, as appropriate, to address resource management issues. This means that no leasing or development of oil shale and tar sands resources may occur on the public lands unless such activity is consistent with the applicable land use plan. In view of the nascent character of the oil shale and tar sands industries, as well as in light of other resource management concerns, the Secretary, acting though the BLM, decided to reconsider the appropriate federal lands to be available for leasing and development of these resources, as well as whether commercial leasing should be preceded by additional, vigorous RD&D. There may be different views of whether the nascent character of the technologies argues for more land to be open, so that more lands may be available for RD&D, or whether fewer lands should be open, in order that such RD&D and eventual commercial development as does occur may be targeted in areas with few resource use conflicts, while leaving open some areas where the oil shale and tar sands resource has been identified as particularly rich. While the Energy Policy Act of 2005 encourages

commercial development of oil shale and tar sands resources, these kinds of land management policy questions (how much land, where, with what restrictions, and the like) are left, under FLPMA, to the Secretary, acting through the BLM. The BLM believes the purpose and need statement to be appropriate to this proposed land use allocation planning action and consistent with the fostering of a robust RD&D oil shale program, and tar sands industry, leading to viable commercial development of both of these resources.

Congress spoke to the importance for the national interest of developing the nation's oil shale and tar sands resources in the Energy Policy Act of 2005. The Secretary's planning initiative is not in conflict with the goals nor the mandate of the Energy Policy Act of 2005, nor with E.O. 13212; rather, the current planning initiative focuses attention on the appropriate land use allocation and emphasis on RD&D in order to facilitate these interests being realized. Section 369 of the Energy Policy Act of 2005 does not specify that any particular land use planning decision be made, nor provide any standard by which the reasonableness of the acreage available for such a commercial leasing program as called for in the Act might be determined. Section 369 expresses Congressional policy that the development of these resources should be conducted in an environmentally sound manner, using practices that minimize impacts. One practice available to the BLM under FLPMA for minimizing impacts is making land use allocations that reduce conflicts among resource uses in the first place. Another practice available to the BLM under FLPMA is to require that potential commercial developers pursue RD&D first, in order that more is known about the technologies for development, and their impacts, before broader scale development is undertaken. Each of the alternatives presented provides for lands to be available for development of these important resources. Under the purpose and need—reassessing the appropriate mix of allowable uses, in light of the still nascent character of the oil shale and tar sands industries—any of the four alternatives (or combination of elements thereof) presented for analysis could be selected for implementation. Although the BLM agreed in settlement to consider certain alternatives in the NEPA and planning processes, the Proposed Plan presented with this Final PEIS was not "predetermined." Nor did the settlement agreement impermissibly "flip[…] NEPA's requirements on its head, and preordain[…] the outcome" as claimed by one commentor. In fact, the measures agreed to by the United States in settlement are not inconsistent with its NEPA obligations under BLM's planning regulations.

In addition, the settlement of pending litigation challenging the 2008 OSTS ROD is an element of the background information for the purpose and need, not an element of the purpose and need itself. The Secretary has long expressed an interest in reassessment of the allocation decisions made in 2008 and a focus on a robust RD&D program; the terms of the settlement agreement are consistent with this policy direction.

9.2 LEGAL/COMPLIANCE ISSUES

OSTS_001-1	OSTS_083-2	50324-27	50335-13
OSTS_071-7	50160-3	50324-28	
OSTS_071-37	50163-1	50324-34	
OSTS_071-7	50255-3	50333-26	

Issue Summary: These comments address various laws, such as the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act, and commentors were concerned that the BLM had not adequately addressed these in the PEIS. Other comments noted that there were a variety of environmental regulations that developers would need to comply with, and the PEIS should do a better job of outlining these regulations. Other commentors requested a change to the text of the PEIS to demonstrate what specific laws and regulations would apply to developers.

Another commentor noted that, by creating a program to expand oil shale and tar sands development, the BLM is not complying with its mission to sustain the health and diversity of the environment.

Response: Where appropriate, the PEIS had added information about applicable laws and regulations facing developers. For example, one commentor noted that there was a missing reference to the requirement for a mine permit in Wyoming. The requirement for a mine permit in Wyoming was added to Table D-15 in Appendix D.

The BLM has noted in the PEIS that developers will need to comply with all applicable laws and regulations as a condition of leasing. The BLM believes it has fulfilled its mandate under the 2005 Energy Policy Act, to develop a leasing program for unconventional fuels, while accomplishing its mission to sustain the health, diversity, and productivity of America's public lands for the use and enjoyment of present and future generations.

9.2.1 Lands with Wilderness Characteristics, Secretarial Order 3310

OSTS_026-6	OSTS_078-1	OSTS_081-17	OSTS_210-2
OSTS_066-8	OSTS_078-17	OSTS_124-3	OSTS_212-3
OSTS_069-64	OSTS_079-1	OSTS_133-2	50181-2
OSTS_069-77	OSTS_079-17	OSTS_149-3	50186-1
OSTS_075-4	OSTS_080-1	OSTS_160-2	50186-22
OSTS_077-1	OSTS_080-18	OSTS_167-1	50255-9
OSTS_077-17	OSTS_081-1	OSTS_186-1	50255-25

50268-8	50312-10	50324-57	50328-13
50268-29	50323-23	50324-64	50328-16
50272-7	50324-6	50325-3	50328-25
50290-3	50324-14	50325-10	50333-8
50290-6	50324-38	50325-26	50333-10
50308-12	50324-40	50328-12	50333-14

Issue Summary: These comments address BLM's policies concerning LWC and Secretarial Order 3310. Commentors suggested that the PEIS's Preferred Alternative, by eliminating from consideration lands that the BLM has identified as having "wilderness characteristics," violates a spending moratorium put in place by Congress last year banning funds from being used to implement Secretarial Order 3310 and that only Congress can designate a wilderness area.

Response: Several commentors claim that the current OSTS planning initiative and the continued development of BLM's OSTS PEIS violates the April 21, 2011 Continuing Resolution and other Congressional prohibitions on "implementing, administering, or enforcing Secretarial Order 3310" (the "Wild Lands" order).

Lands that the BLM identifies as having wilderness characteristics will be considered during this planning initiative as part of the planning process consistent with FLPMA and BLM Manuals 6301 (*Wilderness Characteristics Inventory*) and 6302 (*Consideration of Lands with Wilderness Characteristics in the Land Use Planning Process*). In accordance with congressional direction, this planning initiative will not consider designating Wild Lands. This current planning initiative does not rely upon the Secretarial Order as legal authority and does not implement, administer, or enforce it. Nothing in any of the congressional actions addressing Secretarial Order 3310, however, prohibits the Secretary from considering the wilderness value of lands in establishing, revising, or amending land use plans, pursuant to FLPMA. The Secretary has the authority and obligation, under Section 201 of FLPMA to "prepare and maintain on a continuing basis an inventory of all public lands and their resources and other values (including, but not limited to, outdoor recreation and scenic values), giving priority to areas of critical environmental concern" (Title 43, Section 1711[a] of the *United States Code* [43 USC 1711[a]]). As required under Section 202 of FLPMA, the BLM relies on its inventory information, such as the inventory of LWC assembled for this OSTS planning initiative, in developing land use plans. There is ample authority in FLPMA for the BLM to identify wilderness characteristics and, if it chooses, to manage lands to protect such characteristics, when found. In this instance, the BLM is merely considering whether to protect lands it identifies as having wilderness characteristics from the possible impacts of a technology still in its infancy.

9.2.2 Section 369 of the Energy Policy Act

OSTS_068-3	OSTS_083-9	50312-8	50328-9
OSTS_077-5	50186-5	50324-3	50328-22
OSTS_078-5	50227-21	50324-13	50333-4
OSTS_079-5	50255-13	50324-8	50333-25
OSTS_080-7	50287-10	50325-2	50333-41
OSTS_081-6	50310-9	50325-15	50349-3

Issue Summary: Industry group commentors suggested the 2012 OSTS Draft PEIS Preferred Alternative threatens to undermine the process and the work of the 2008 OSTS PEIS, and dismantle a reasonable and rational OSTS program in violation of Section 369 of the 2005 Energy Policy Act. On the other hand, some commentors from environmental groups suggested that the program outlined in the PEIS would not meet the requirements of Section 369 of the Energy Policy Act, because the PEIS could not prove that oil shale and tar sands development could be carried out in an environmentally sound manner.

In addition, the State of Utah noted that, unlike in 2008, the BLM had not consulted with the Governors of the states of Colorado, Utah, and Wyoming, regarding the level of support and interest in the states in the development of oil shale and tar sands resources, and that this failure to consult was inconsistent with the requirements of Section 369 of the Energy Policy Act of 2005. The State of Utah also commented that the PEIS should be reworded to discuss how the BLM will follow Congress's mandatory directive in Section 369(n) of the Act that it will give priority to land exchanges.

Response: Congress spoke to the importance for the national interest of developing the nation's oil shale and tar sands resources in the Energy Policy Act of 2005. The Secretary's planning initiative is not in conflict with the goals nor the mandate of the Energy Policy Act of 2005, nor with E.O. 13212; rather, the current planning initiative focuses attention on the appropriate land use allocation, and emphasis on RD&D in order to facilitate these interests being realized. Section 369 of the Energy Policy Act of 2005 does not specify that any particular land use planning decision be made, nor provide any standard by which the reasonableness of the acreage available for such a commercial leasing program as called for in the Act might be determined. Section 369 expresses congressional policy that the development of these resources should be conducted in an environmentally sound manner, using practices that minimize impacts. One practice available to the BLM under FLPMA for minimizing impacts is making land use allocations that reduce conflicts among resource uses in the first place. Another practice available to the BLM under FLPMA is to require that potential commercial developers pursue RD&D first, in order that more is known about the technologies for development, and their impacts, before broader scale development is undertaken. Each of the alternatives presented provides for lands to be available for development of these important resources. Under the purpose and need—reassessing the appropriate mix of

allowable uses, in light of the still nascent character of the oil shale and tar sands industries—any of the four alternatives (or combination of elements thereof) presented for analysis could be selected for implementation. Although the BLM agreed in settlement to consider certain alternatives in the NEPA and planning processes, the Proposed Plan presented with this Final PEIS was not "predetermined." In fact, the measures agreed to by the United States in settlement are not inconsistent with its NEPA obligations under the BLM's planning regulations.

Section 369 of the Energy Policy Act of 2005 requires the Secretary, no later than 180 days after the publication of the oil shale regulations whose development is required under this section, to consult with the governors of states with significant oil shale and tar sands resources on public lands, as well as with representatives of local governments, interested Indian tribes, and other interested persons, to determine the level of support and interest in the states in the development of oil shale and tar sands resources. The Secretary conducted this consultation in 2008, when the commercial oil shale and tar sands easing programs were established. It is anticipated that further consultation would occur in the future, in preparation for any Secretarial decision to conduct a lease sale in one or more of these states. At this time, however, no commercial lease sale is under consideration or anticipated. Rather, the BLM is engaged in a land use planning action pursuant to its authority under FLPMA. As part of the land use planning action, which involves a targeted plan amendment addressing land use allocation for future oil shale and tar sands leasing and development, as well as the associated NEPA analysis, the BLM has invited the state and local governments, as well as interested tribes, to participate in the NEPA process as cooperating agencies, and will provide a governors' consistency review regarding the Proposed Plan, in accordance with the BLM's planning regulations at 43 CFR 1610.3-2.

As noted on page 1-12 of the Draft PEIS, analysis of the potential impacts of land exchanges is beyond the scope of the purpose and need for the proposed action. To the extent that the 2008 OSTS ROD adopted decisions regarding land exchanges, these decisions were carried forward, unchanged, in the current planning initiative. While Section 369 of the Energy Policy Act of 2005 requires the Secretary to consider land exchanges, where appropriate and feasible, land exchange decisions are particular decisions not germane to this programmatic land use allocation planning process.

9.2.3 Other Comments on the Energy Policy Act

OSTS_026-5	50268-17	50324-43	50333-33
OSTS_211-2	50287-16	50333-30	
50090-17	50308-8	50333-31	

Issue Summary: These comments addressed miscellaneous issues regarding oil shale and tar sands development and the 2005 Energy Policy Act, with most commentors

suggesting that the 2012 PEIS is in violation of the Act's policy directive to develop unconventional fuels on federal lands.

Response: Congress spoke to the importance for the national interest of developing the nation's oil shale and tar sands resources in the Energy Policy Act of 2005. The Secretary's planning initiative is not in conflict with the goals nor the mandate of the Energy Policy Act of 2005, nor with E.O. 13212; rather, the current planning initiative focuses attention on the appropriate land use allocation and emphasis on RD&D in order to facilitate these interests being realized. Section 369 of the Energy Policy Act of 2005 does not specify that any particular land use planning decision be made, nor provide any standard by which the reasonableness of the acreage available for such a commercial leasing program as called for in the Act might be determined. Section 369 expresses congressional policy that the development of these resources should be conducted in an environmentally sound manner, using practices that minimize impacts. One practice available to the BLM under FLPMA for minimizing impacts is making land use allocations that reduce conflicts among resource uses in the first place. Another practice available to the BLM under FLPMA is to require that potential commercial developers pursue RD&D first, in order that more is known about the technologies for development and their impacts before broader scale development takes place. Each of the alternatives presented provides for lands to be available for development of these important resources. Under the purpose and need—reassessing the appropriate mix of allowable uses, in light of the still nascent character of the oil shale and tar sands industries—any of the four alternatives (or combination of elements thereof) presented for analysis could be selected for implementation. Although the BLM agreed in settlement to consider certain alternatives in the NEPA and planning processes, the Proposed Plan presented with this Final PEIS was not "predetermined." In fact, the measures agreed to by the United States in settlement are not inconsistent with its NEPA obligations under BLM's planning regulations.

9.2.4 Sage-Grouse Policy

OSTS_026-6	50268-10	50287-23	50324-60
OSTS_069-22	50268-11	50287-24	50328-6
OSTS_069-25	50287-7	50308-11	50328-11
OSTS_069-52	50287-11	50310-16	50333-3
OSTS_069-54	50287-19	50324-5	50333-16
OSTS_075-3	50287-20	50324-48	
50163-2	50287-21	50324-54	

Issue Summary: Several comments from industry groups expressed concern regarding exclusions of sage-grouse habitat from lands available for lease applications. Some commentors stated that there is no new information about the sage-grouse that warrants

dramatic changes in the RMPs at this time. Other commentors noted that the BLM's current RMPs have already addressed sage-grouse. One environmental group's comments suggested that the BLM should coordinate with the USFWS to evaluate the impacts of development on sage-grouse areas of concern and that, under NEPA, the BLM is required to address sage-grouse conservation and analyze all reasonably foreseeable impacts on the species and its habitat.

The State of Wyoming commented that the decision to analyze and consider excluding oil shale development in the greater sage-grouse core area is not consistent with Wyoming's Greater Sage-Grouse Core Area Protection strategy.

One cooperating agency objected to the exclusion of core priority sage-grouse habitat from development, saying that the BLM does not have jurisdiction to regulate wildlife.

Response: Other information new since 2008, as noted in the Notice of Intent (NOI), was the USFWS determination regarding the status of the sage-grouse. The USFWS determination, that listing the species was warranted but precluded, nevertheless demonstrates that there is a vital need and an important opportunity for managing the habitat of the species on public lands to prevent the listing of the species as threatened or endangered. If the species were to be listed, there could be significant adverse impacts on several types of land uses, including oil shale and tar sands S development. The BLM has considered this information, and while the BLM agrees with the commentor that there are several methods, including but not limited to land use allocation decisions, to address reducing impacts on this species' habitat, the BLM elected to consider the use of this method in order to address the anticipated resource conflicts.

The BLM acknowledges that there may have been some confusion regarding how the sage-grouse habitat information has been developed and used in this planning process. In this planning effort, it was never the BLM's intent to make allocation decisions on the basis of information to be acquired in the future. That is, as described in the Draft PEIS, the BLM received from the States of Colorado, Wyoming, and Utah, information about the location of sage-grouse habitat and adopted this information for use in considering allocation alternatives. In the cases of Wyoming and Colorado, the states had already identified core or priority sage-grouse habitat, and the BLM adopted that information as such. In the case of Utah, at the time the Draft PEIS was being developed, the only maps available were those showing occupied habitat. The BLM anticipated that the State of Utah would provide updated information showing core or priority habitat in time for inclusion in the Final PEIS. The BLM anticipated that this core or priority habitat would consist of a subset of the occupied habitat. Unfortunately, the State of Utah's process for designation of core or priority sage-grouse habitat has not been completed as of the date this Final PEIS is going to press. Therefore, the BLM is relying upon the existing maps showing the location of occupied habitat to represent core or priority sage-grouse habitat in Utah in order to make its allocation decisions.

As in many similar public land use and development decisions, even where lands remain open for leasing and development, the BLM may impose mitigation measures in lease

stipulations or in conditions of approval in plans of development that would be consistent with law, regulation, and policy, and indicated by environmental review conducted at the time of the decision.

In accordance with regulations promulgated by the CEQ, the BLM has relied in this PEIS on high-quality information, including the best available information concerning the habitat of sage-grouse in Utah. At the time the Draft PEIS was developed, the State of Utah had provided the BLM with maps showing "occupied" sage-grouse habitat. In the absence of more specific information from the State of Utah, the BLM relied upon this map to show where the core or priority habitat would be located and, therefore, what lands might be unavailable for oil shale and tar sands leasing under certain alternatives. While the State of Utah has informed the BLM that it anticipates finalizing its more specific maps in the near future, the BLM is not required to delay its land use planning decisions or this PEIS in the hope of new information from the State of Utah becoming available. Furthermore, the commentors did not present information indicating that the Proposed Plan amendment would conflict with any subsequent plan by the State of Utah for managing the habitat of sage-grouse. Under FLPMA's multiple use mandate, the BLM must take into account wildlife, as well as other resource values. Although no law prevents the BLM from adopting land use plans that are more protective of a resource than the laws or policies of state or local governments, any future amendments of the applicable land use plans would take into account updated information from the State of Utah. The BLM acknowledges that there are many methods for protecting identified resources, of which land use plan allocations are only one; however, the BLM is considering the use of this method during this planning effort. Nonetheless, while the sage-grouse is not a listed species under the ESA, the BLM has the opportunity to accommodate valid existing rights of lessees. The lease terms include provisions for compliance with the ESA.

The comment addressed issues relating to the specific information requirements for analysis of future project proposals and is beyond the scope of the purpose and need for the proposed action. The BLM has conducted sufficient analysis pursuant to the NEPA to support this land use allocation decisionmaking. The BLM will similarly determine the appropriate NEPA analysis required to support decisionmaking regarding any future proposed actions, including, but not limited to, additional planning, leasing, or development.

Under BLM's Preferred Alternative, as presented in the Draft PEIS, Alternative 2(b), oil shale leasing and development would have been excluded from greater sage-grouse core and priority habitat. That is not consistent with Wyoming's Greater Sage-Grouse Core Area Protection strategy. Wyoming's E.O. 2011-5 has been recognized by the USFWS as an adequate regulatory mechanism for the conservation of greater sage-grouse and has been adopted by the BLM Wyoming State Office. The Wyoming E.O. 2011-5 does not generally preclude mineral development; rather, it establishes conditions designed to maintain and enhance greater sage-grouse habitat (e.g., mitigation measures). In recognition of this coordinated approach to the conservation of the greater sage-grouse, the BLM has modified Alternative 2(b) in the Proposed Plan to maintain consistency with

Wyoming's Greater Sage-Grouse Core Area Protection strategy. Therefore, areas identified by the BLM as core or priority sage-grouse habitat in Wyoming would not be closed to future leasing of oil shale, but would be available for application, and managed consistent with how the BLM is managing sage-grouse habitat for other resource uses in Wyoming. Such modification does not require a supplement to the Draft PEIS, because these areas were analyzed as open for oil shale leasing and development under Alternative 1, the No Action Alternative.

The BLM is not purporting to regulate wildlife in derogation of the authority of the states; rather, the BLM is making allocation decisions that take into account the value of protecting wildlife habitat, consistent with FLPMA's recognition of wildlife resource values as appropriate for BLM management. As discussed in Section 3.7.4.3.1, the BLM is working closely with state governments responsible for the management of wildlife, including sage-grouse, in order to develop appropriate management strategies. That said, no law prevents the BLM from taking a more protective approach to wildlife habitat that the BLM manages than that supported by the state.

9.2.5 Federal Data Quality Act

50181-6	50186-21	50308-14	50308-15

Issue Summary: Commentors stated that the 2012 Draft PEIS relied on the same data as the 2008 PEIS and failed to incorporate new data, particularly the new information on oil shale and tar sands operations currently being employed on nonfederal lands. This failure to utilize the best available data constitutes a violation of the Federal Data Quality Act.

Response: The BLM asked for information from those companies operating on public lands, as well as on nonfederal lands, in the study area and incorporated the information that was provided to the degree to which it constituted "high quality information" as required by CEQ regulations implementing NEPA, and BLM policy implementing the Federal Data Quality Act.

9.2.6 Requirements for Lessees

OSTS_069-16	OSTS_069-19	OSTS_069-22	OSTS_069-47
OSTS_069-17	OSTS_069-20	OSTS_069-33	OSTS_069-51
OSTS_069-18	OSTS_069-21	OSTS_069-40	50063-2

Issue Summary: Comments suggested incorporating into the PEIS requirements in the leases that developers must meet, such as identifying water and energy demands.

Response: These comments addressed issues relating to the specific information requirements for analysis of future project proposals and are beyond the scope of the purpose and need for the proposed action.

9.3 FUTURE NEPA ANALYSIS

OSTS_033-6	OSTS_071-8	50154-4	50310-26
OSTS_068-9	OSTS_072-1	50227-5	50324-47
OSTS_069-2	OSTS_195-2	50268-30	50335-7
OSTS_069-3	50047-9	50287-19	50343-4
OSTS_069-10	50047-11	50308-6	50365-1
OSTS_069-12	50072-1	50308-16	50365-5
OSTS_69-35	50072-4	50310-12	
OSTS_071-1	50072-6	50310-13	
OSTS_071-5	50143-1	50310-14	

Issue Summary: Commentors suggested that this NEPA analysis is deficient and that the Final PEIS document must identify the timing and scope of subsequent NEPA analyses.

Several commentors, representatives of state and local government wildlife, air quality, and other environmental review agencies, noted that, given the limited information provided in the PEIS, the technical expertise of their agencies could best be utilized at the site- and project-specific levels of oil shale and tar sands development. The USFWS expressed concern that the document did not contain enough information about the technologies to be employed in oil shale and tar sands development and that the policy of conducting supplemental EAs associated with future lease sales and projects could lead to a fragmented approach. They also suggested that, given the impacts of these technologies, the BLM include provisions requiring Section 7 consultation in future NEPA analyses.

One cooperating agency commented that the BLM has sufficient information from the RMPs to identify general conditions of development and likely lease stipulations and will not need to further amend plans based on future NEPA analyses.

A coalition of environmental groups noted that the BLM's analysis in this PEIS and in future NEPA analyses must analyze together air impacts from oil shale and tar sands development with oil and gas development and other uses that degrade air quality.

Response: The BLM will similarly determine the appropriate NEPA analysis required to support decisionmaking regarding any future proposed actions, including, but not limited

to, additional planning, leasing, or development. The scope of any future environmental analysis would depend upon the specifics of the technology proposed for use, as well as the resources specific to the area proposed for leasing and/or development. Reference should be made to the applicable regulations governing oil shale and tar sands development for more specifics on the information that would or may be required from applicants to inform this analysis.

The BLM appreciates the participation of its sister federal agencies, as well as interested state and local government agencies, with resource expertise and anticipates working closely with these agencies in the future, as appropriate. The BLM has conducted sufficient analysis pursuant to NEPA to support this land use allocation decisionmaking. The BLM will similarly determine the appropriate NEPA analysis required to support decisionmaking regarding any future proposed actions, including, but not limited to, additional planning, leasing, or development. The BLM has also fulfilled its obligation under Section 7 of the ESA to support this land use allocation decisionmaking. The BLM will similarly determine the appropriate NEPA analysis, as well as appropriate ESA Section 7 compliance, required to support decisionmaking regarding any future proposed actions, including, but not limited to, additional planning, leasing, or development. The BLM appreciates the assistance of the USFWS to date and anticipates continuing to work closely with the USFWS in considering these issues.

Chapters 4 and 5 describe, in general terms, the type of technologies and impacts that might be expected, based upon the information the BLM has available at this time. Similarly, these chapters describe, in general terms, the types of mitigation or other protective measures that the BLM might impose, if warranted by the analysis conducted at the time of future decisionmaking. In this respect, the PEIS fulfills the important function of letting the public, and future decision-makers, know what they can reasonably expect in terms of requirements that might be placed on applicants for leases or development authorizations. As the technology to develop oil shale and tar sands into commercially viable energy sources is still in its nascent stages, it is premature to determine, with any further specificity, the likely lease stipulations that might be imposed on future development. The BLM has conducted sufficient analysis pursuant to the NEPA to support this land use allocation decisionmaking. The BLM will similarly determine the appropriate NEPA analysis required to support decisionmaking regarding any future proposed actions, including, but not limited to, additional planning, leasing, or development. The scope of any future environmental analysis would depend upon the specific technology proposed for use, as well as the resources specific to the area proposed for leasing and/or development. Reference should be made to the applicable regulations governing oil shale and tar sands development for more specifics on the information that would or may be required from applicants to inform this analysis.

Regarding air quality, a discussion of cumulative impacts on air quality is presented in Section 6.1.6.3.5, and a description of future air quality modeling in Section 4.6.1.The type of modeling requested by the commentor is not possible to perform at this point because of the uncertainly of the nature and size of the eventual oil shale and tar sands

industry. The necessary NEPA analysis will be performed at the leasing and development stages as described in Section 4.6.1.

9.4 REGION-WIDE ANALYSIS

50323-6

Issue Summary: One comment on this topic was received from an environmental organization, which stated that no commercial leasing of oil shale and tar sands resources is appropriate at this time, because the RMPs amended by the PEIS did not outline much of the required information.

Response: In general, the BLM planning process is guided by the requirements of FLPMA, the BLM planning regulations implementing FLPMA (at 43 CFR Part 1600), as well as official BLM guidance such as the BLM *Land Use Planning Handbook H-1601-1*. However, only the statutory and regulatory requirements are binding as a matter of law. The BLM *Land Use Planning Handbook* is a guidance document, intended to cover most land use planning situations. The provisions in the Handbook, while fairly detailed with respect to individual BLM programs like conventional oil and gas development or recreational use, are still relatively general and do not address, for instance, situations like oil shale and tar sands development, where little is in fact known about the technology that will be needed to commercially develop these resources or about the impacts that can be expected from the use of this technology. In a situation like this one, it is not possible to develop the kind of RFDS that would assist the BLM in developing appropriate resource protection measures, like stipulations with any kind of reasonable basis. In this situation, only a basic allocation decision can be made on whether or not the lands will be open or closed, in general, to application for commercial (including RD&D) leasing. Any more specific management goals, or protective measures, will need to await further information before they can be developed. For this reason, also, the BLM is committed to engaging in further NEPA and other environmental review prior to issuing any oil shale or tar sands leases.

9.5 CONSISTENCY WITH LOCAL PLANS

OSTS_077-9	50181-14	50227-16	50324-56
OSTS_078-9	50181-95	50255-17	50324-58
OSTS_079-9	50181-126	50324-4	50325-5
OSTS_080-5	50184-5	50324-15	50325-19
OSTS_081-10	50184-7	50324-23	50325-28
OSTS_081-19	50186-20	50324-24	50325-46
50181-7	50186-29	50324-53	50328-4

50328-10	50333-9	50333-13
50328-23	50333-12	50333-19

Issue Summary: Commentors expressed concerns that BLM plans were inconsistent with local plans.

One cooperating agency organization stated that, while much of the Wyoming high-potential area is located in the Rock Springs Field Office, which initiated its plan revision in the spring of 2011, the OSTS Draft PEIS appears to use proposed LWC and ACECs that have not yet been fully addressed within the cooperating agency process.

Response: Section 202 of FLPMA and BLM's planning regulations require the BLM land use plans, including amendments, to be consistent with the planning of other federal departments and agencies, and of the states and local governments, to the extent consistent with the laws governing the administration of the public lands, including their purposes, policies, and programs. The BLM acknowledges that several of the cooperating agencies have identified the proposed plan amendments to be inconsistent with local plans, and has provided a more detailed discussion of these points in Section M.1 of Appendix M, as called out in Section 7.4 of the main document.

Section 3.1.1.11 was adjusted to clarify that no decisions regarding designation of ACECs is being made during this planning initiative. Decisions regarding designation of ACECs in the Rock Springs Field Office will be made during the Rock Springs plan revision process. Any decisions regarding management of oil shale resources in areas designated as ACECs will be made, if appropriate, during, or subsequent to, that planning process as well.

9.6 LEASES

OSTS_026-3	50074-3	50268-13	50277-17
OSTS_068-8	50074-4	50268-14	50287-15
OSTS_072-2	50087-15	50268-21	50310-27
OSTS_102-3	50090-12	50268-27	50333-29
OSTS_190-1	50090-14	50268-28	50343-9
OSTS_207-2	50090-15	50271-10	50343-11
OSTS_210-1	50090-16	50271-11	50343-12
OSTS_229-5	50090-36	50277-9	50343-28
50074-11	50227-19	50277-10	

Issue Summary: Many commentors had suggestions or requests for provisions to be included in the leases. One commentor requested that information be included in the

Final PEIS outlining criteria the BLM may be considering for converting research leases to commercial-scale leases. Other commentors were concerned that, by issuing only RD&D leases, the Preferred Alternative would violate the Energy Policy Act. Some commentors from industry wrote that by restricting leasing to RD&D leases, the BLM would be deciding on technical strategies and selecting winners and losers in the industry. Others suggested that by restricting leasing to RD&D, decisions on commercial leasing would be deferred for years and essentially close the door to commercial leasing.

Some commentors requested that the BLM clarify the legal rights of existing RD&D lease holders. One industry group had a series of questions about what happens when an RD&D lease holder relinquishes its lease. The same group suggested that the BLM should open the Mechanically Mineable Trona Area (MMTA) to oil shale leasing and development.

Another industry group stated that the BLM had failed to explain how Alternative 2(b) would affect a company that has already demonstrated the ability to commercially develop oil shale, saying that the BLM fails to explain how the RD&D first alternative would be applied to a company that has already demonstrated the ability to proceed to commercial oil shale development.

One commentor asked about the statement on page 2-26, which the commentor characterized as, "that if an RD&D lease holder relinquishes its lease, the area may be leased to another operator with the decisions in the RMP at the time of application."

Response: Particulars regarding the specific terms and conditions of the current RD&D leases are beyond the scope of the purpose and need for this proposed action.

The BLM has conducted sufficient analysis pursuant to NEPA to support this land use allocation decisionmaking. The BLM will similarly determine the appropriate NEPA analysis required to support decisionmaking regarding any future proposed actions, including, but not limited to, additional planning, leasing, or development. The scope of any future environmental analysis would depend upon the specific technology proposed for use, as well as the resources specific to the area proposed for leasing and/or development. Reference should be made to the applicable regulations governing oil shale and tar sands development for more specifics on the information that would or may be required from applicants to inform this analysis.

The practice available to the BLM under FLPMA for minimizing impacts is making land use allocations that reduce conflicts among resource uses in the first place. Another practice available to the BLM under FLPMA is to require that potential commercial developers pursue RD&D first, in order that more become known about the technologies for development and their impacts before broader scale development takes place. Each of the alternatives presented provides for lands to be available for development of these important resources. Under the purpose and need—reassessing the appropriate mix of allowable uses, in light of the still nascent character of the oil shale and tar sands

industries—any of the four alternatives (or combination of elements thereof) presented for analysis could be selected for implementation.

The BLM is not assuming industry's role; it is continuing its statutory function under FLPMA. The BLM makes allocation decisions for multiple uses as part of its planning process. The BLM is not attempting to pick winners and losers, but needs to ensure that the technological and environmental impacts are well understood prior to commercial development. Any entity that believes it has a commercially viable technology could seek an RD&D lease at the next call for nominations. It would be irresponsible for the BLM to encourage speculative commercial leasing. The BLM is not proposing to eliminate commercial leasing but to require that the commercial viability of a technology is proven and the environmental impacts are evaluated prior to issuing such leases.

Although the contractual terms of RD&D leases are beyond the scope of this PEIS, the rights and obligations of existing RD&D lessees are delineated in their respective leases and in the applicable regulations. If an RD&D lease holder relinquishes its lease, the area may be leased to another operator with the decisions in the RMP at the time of application. The application would be the new nomination of an area in response to a call for RD&D applications. Assignment of a lease means that the existing lease is transferred to a new lessee. The new lessee may carry out the approved plan of operations or may apply to the BLM for approval of a new plan of operations. Whether the new or modified process requires further analysis under NEPA would be a fact-specific determination. If Alternative 2(b) is adopted, as presented in the Proposed Plan in this Final PEIS, some of the acreage, as specified in the description of that alternative, would be removed from oil shale or tar sands leasing. Only the existing RD&D lessees or their successors-in-interest would retain whatever rights to those lands are afforded them under the terms of the existing leases.

Several commentors suggested that the BLM should open the MMTA to oil shale leasing and development. As discussed in the 2008 PEIS and ROD and carried forward into this planning initiative (see Section 2.3.3 of the Final PEIS), the MMTA was established to protect the safety of underground trona miners. The BLM has determined that the MMTA would be excluded from oil shale leasing and development until technology is demonstrated that would allow the BLM to decide that oil shale operations would be compatible with the safe and effective mining of trona.

The BLM has modified the Preferred Alternative, Alternative 2(b), to address questions raised by several commentors, regarding how the "RD&D First" aspect of Alternative 2(b) would work. The intent of the RD&D First plan element is to focus on development of a robust RD&D program in order to answer questions about the requirements and impacts, both technological and environmental, of developing oil shale resources on public lands. This effort would be best informed by RD&D activities that take place on those public lands or, at least, within the Green River Formation Basins. In light of these considerations, as explained in Section 2.5, Proposed Plan, of the Final PEIS, the BLM has determined the following: (1) Areas identified in Alternative 2(b) as closed to oil shale and tar sands leasing would remain closed to any future application for leases, even

if they are currently encumbered by an RD&D lease. That is, if Alternative 2(b) is adopted, as presented in the Proposed Plan in the Final PEIS, some of the acreage, as specified in the description of that alternative, would be removed from oil shale and tar sands leasing. Only the existing RD&D lessees or their successors-in-interest would retain whatever rights to those lands is afforded them under the terms of the existing leases. If the existing RD&D leases are relinquished, are terminated, or expire, the lands identified in Alternative 2(b) as closed to oil shale and tar sands development would not be available for potential future leasing of these resources. (2) As several commentors pointed out, as developed in the Preferred Alternative, each RD&D lease in the study area must employ a different experimental technology. More specifically, under the Preferred Alternative in the Draft PEIS, each potential lessee must first obtain an RD&D lease for a tract prior to converting that RD&D lease to a commercial lease. If an RD&D lessee proves up a particular technology on leasehold A, that lessee wishing to operate on leasehold B must first obtain an RD&D lease on leasehold B. However, because that technology would already have been proven in the study area (i.e., on leasehold A), it could no longer be the basis for obtaining an RD&D lease on leasehold B—that technology would no longer be considered "experimental." The inability to exploit or to license the proven technology for use off of leasehold A is likely to inhibit the development of a commercial oil shale industry, and would reduce the incentive to participate in the RD&D program. In light of this circumstance and to encourage RD&D leasing, the BLM is including language in the Proposed Plan in the Final PEIS to the effect that, "In the areas open under Alternative 2(b), the Secretary may issue a commercial lease to an entity that has succeeded in converting an RD&D lease to commercial lease (or who holds the license to a technology which has converted from RD&D to commercial lease) for a tract on other lands open under Alternative 2(b). In these circumstances, such commercial lessee would not have to begin with another RD&D lease on the new leasehold." Similarly, under the Preferred Alternative in the Draft PEIS, no provision is made for those instances in which a potential lessee intends to employ a technology that has proved commercially viable on nonfederal lands either within the study area or outside the study area. To address this issue, the BLM is including in the Proposed Plan in the Final PEIS the following modification to the Preferred Alternative: "The Secretary may issue a commercial lease on the lands open under the Proposed Plan, where the potential commercial lessee intends to employ technology which has proved commercially viable on nonfederal lands in the study area (i.e., in the Green River Formation Basins in Colorado, Utah, and Wyoming), and which the Secretary determines to be environmentally acceptable."

The commentor is referring to the description on page 2-26 of the Draft PEIS of what could happen under the No Action Alternative. Under the No Action Alternative, under which all the areas currently under RD&D lease are designated in the applicable RMP as available for oil shale and tar sands S leasing, if a holder of a current RD&D lease were to relinquish the lease, the area could be nominated in response to a call for RD&D applications. The application would be the new nomination of an area in response to a call for RD&D applications. Assignment of a lease, by contrast, means that the existing lease is transferred to a new lessee. The new lessee may carry out the approved plan of operations or may apply to the BLM for approval of a new plan of operations. Whether

the new or modified process requires further analysis under NEPA would be a fact-specific determination. If Alternative 2(b) is adopted, as presented in the Proposed Plan in the Final PEIS, some of the acreage, as specified in the description of that alternative, would be removed from oil shale and tar sands leasing. Only the existing RD&D lessees or their successors-in-interest would retain whatever rights to those lands is afforded them under the terms of the existing leases.

9.6.1 Technology Double Standard

OSTS_026-5	OSTS_180-2	OSTS_209-2	50087-13
OSTS_124-2	OSTS_184-2	OSTS_212-2	50333-27
OSTS_145-2	OSTS_189-2	50074-6	

Issue Summary: Commentors expressed concern that oil shale and tar sands industries looking to develop on public lands would be subject to requirements not faced by other extractive industries. These additional requirements discourage oil shale and tar sands development and thus conflict with the intent of the Energy Policy Act of 2005. Specifically, the requirement to first demonstrate a viable production technology to the government before being able to convert up to a commercial lease is a requirement not imposed on any other industry.

Response: The BLM has complied with the Energy Policy Act of 2005. The Act does not prevent the Secretary from proposing an amendment or amending land use plans. Under any of the alternatives analyzed, a viable commercial program would be possible. Even the alternative with the least amount of land allocated would provide more than 30,000 acres of the richest oil shale resource open for consideration for future leasing. Other extractive industries have mature and predictable technologies. Even the impacts of relatively new renewable energy technologies are generally predictable. Oil shale technologies are nascent and have not been proven commercially viable for production of liquid fuels. Federal law requires that the Secretary consider potential impacts on the environment in considering land use decisions. Under FLPMA, the Secretary has the authority and the discretion to engage in land use planning including the establishment, revision, or amendment of land use plans.

9.7 RD&D

OSTS_033-5	OSTS_084-1	50287-2	50333-28
OSTS_069-7	50047-7	50310-17	50335-9
OSTS_069-9	50087-6	50312-14	50349-4
OSTS_069-15	50227-20	50314-12	
OSTS_070- 3	50270-3	50320-4	
OSTS_075-1	50271-4	50328-7	

Issue Summary: Many commentors wrote to support BLM's RD&D approach to oil shale and tar sands development in the PEIS. The WDEQ noted that more details on the RD&D projects are in the EAs, but the application of existing data from RD&D projects to support the qualitative statements in the PEIS would improve the quantitative reliability of the PEIS for the decision makers.

One industry commentor wrote that the RD&D approach was inconsistent with the Energy Policy Act of 2005.

The State of Utah commented that the justification for seeking more RD&D data is not valid in the case of oil shale companies that might seek federal leases in Utah, because many companies already develop oil shale and tar sands resources on state and private lands.

Response: Thank you for your comment. The BLM has conducted sufficient analysis pursuant to NEPA to support this land use allocation decisionmaking. The BLM will similarly determine the appropriate NEPA analysis required to support decisionmaking regarding any future proposed actions, including, but not limited to, additional planning, leasing, or development. The BLM has made every effort to integrate the information about the current RD&D projects and their impacts that has been provided by the current lessees. However, it is important to note that the EAs prepared to support decisionmaking regarding issuing the existing RD&D leases described possible environmental consequences, foreseeable at the time these decisions were made, and that the RD&D projects are still in their early stages and little is yet known about actual environmental consequences of operations on these leases.

The BLM complied with the requirements of the Energy Policy Act in 2008, issuing both the PEIS and the regulation required by Section 369 of the Act. Nothing in the Energy Policy Act of 2005 specified how the Secretary must establish a commercial oil shale leasing program, apart from requiring the Secretary to consider the most geologically prospective areas in Colorado, Utah, and Wyoming. The Energy Policy Act did not specify the acreage that must be available for such program or how the requirements of such program should be balanced with other resource uses. Under FLPMA, the Secretary must manage the public lands in accordance with land use plans and retains the discretion to establish, revise, and amend those land use plans, as appropriate, to address resource management issues. This means that no leasing or development of oil shale and tar sands resources may occur on the public lands unless such activity is consistent with the applicable land use plan. In view of the nascent character of the oil shale and tar sands industries, as well as in light of other resource management concerns, the Secretary, acting though the BLM, has decided to reconsider the appropriate federal lands to be available for leasing and development of these resources, as well as whether commercial leasing should be preceded by additional, vigorous RD&D.

The BLM has considered the information referred to by the State of Utah. Although the State of Utah refers to information about water quality and quantity from currently permitted oil shale and tar sands operations, none of these operations has been

demonstrated to be a commercially viable source of energy, such that the information would be germane to BLM's analysis of the impacts of such an industry. The BLM disagrees with the State of Utah's assertion that an analysis of the commercial production of oil shale and tar sands can be surmised from consideration of the discrete elements of mining and retort processes. No particular combination of these processes has yet proved commercially viable; therefore, no concrete, substantiated information relevant to this question is available.

Under the Preferred Alternative and the Proposed Plan, the restriction is not to RD&D only, but to RD&D *first*. That is, applicants would need to first secure an RD&D lease and then, assuming their technology proved commercially viable, could apply to convert the RD&D lease to a commercial lease.

9.8 REVISION OF 2008 PEIS

OSTS_026-2	OSTS_106-2	OSTS_173-1	50087-3
OSTS_027-1	OSTS_108-2	OSTS_177-1	50087-18
OSTS_066-1	OSTS_109-1	OSTS_179-1	50090-1
OSTS_066-3	OSTS_110-1	OSTS_184-1	50148-2
OSTS_077-2	OSTS_114-2	OSTS_188-1	50152-2
OSTS_077-4	OSTS_115-1	OSTS_189-1	50165-2
OSTS_078-2	OSTS_118-1	OSTS_194-1	50171-1
OSTS_078-4	OSTS_120-1	OSTS_197-1	50181-1
OSTS_079-2	OSTS_122-2	OSTS_199-1	50186-2
OSTS_079-4	OSTS_128-1	OSTS_200-1	50186-4
OSTS_080-2	OSTS_130-2	OSTS_201-3	50227-1
OSTS_080-4	OSTS_133-1	OSTS_204-1	50255-10
OSTS_080-6	OSTS_136-1	OSTS_205-1	50255-12
OSTS_081-2	OSTS_143-1	OSTS_212-1	50258-1
OSTS_081-4	OSTS_144-1	OSTS_215-1	50268-3
OSTS_091-2	OSTS_145-1	OSTS_232-5	50268-9
OSTS_092-1	OSTS_147-2	OSTS_233-2	50270-1
OSTS_093-1	OSTS_149-2	50074-19	50272-2
OSTS_095-1	OSTS_153-1	50074-20	50279-1
OSTS_096-1	OSTS_160-3	50087-1	50280-2
OSTS_096-4	OSTS_172-1	50087-2	50290-1

50308-4	50312-2	50325-6	50333-11
50308-5	50312-4	50325-7	50337-1
50308-7	50324-7	50325-11	50343-2
50308-9	50324-52	50325-13	50343-3
50310-7	50325-1	50325-40	50343-29
50310-8	50325-4	50333-3	

Issue Summary: Many commentors wrote in opposition to the 2012 PEIS, saying the 2008 PEIS was sufficient and there has been no new information to justify a repeat effort.

Several commentors objected to the fact that the Draft PEIS did not address the BLM's proposed amendment to the 2008 oil shale rule, on that grounds that the two proposed actions—the land use plan allocation decisionmaking, and the proposed amendment to the rule—should be considered "connected actions" under CEQ's regulations implementing NEPA (at 40 CFR 1508.25) and therefore discussed in the Draft PEIS. Several commentors also requested extensions of the comment period on the Draft PEIS on the grounds that they needed to see the proposed amendments to the rule in order to comment meaningfully on the proposed land use plan amendments.

Response: Under FLPMA, the Secretary has the authority to establish, revise, and amend land use plans, and Congress has not abrogated that authority. The Secretary may engage in land use planning on the basis of changed circumstances, new policy considerations, or any combination of the two, as long as the correct procedures are followed. In this instance, a combination of factors—the still nascent character of the oil shale and tar sands industries, the new USGS information regarding the resource potential, the USFWS determination that listing of the sage-grouse as threatened or endangered under the ESA was warranted but precluded by the need to focus on other species, the fact that the BLM itself had identified additional LWC in the study area, as well as other policy considerations—contributed to the Secretary's decision to propose this land use planning initiative. The interest in engaging this land use planning initiative also served to assist the United States in resolving pending litigation.

Although these considerations, including the new information, prompted the initiation of this planning effort, in fact, as described in Section 1.1.1 of the Draft PEIS, upon consideration of the USGS studies, which focused on the potential resource, and after analysis of the issue, the BLM determined that the USGS studies did not provide a basis for revising the boundaries of the study area or the definition of the most geologically prospective area for oil shale. Still, through the planning process itself, including the analysis of alternative allocations under NEPA, and consideration of other resource issues, the BLM developed the Proposed Plan presented with this Final PEIS.

As a result of this planning initiative, the BLM has been able to refine its inventories of resources it manages in the study area. Some lands previously identified as having

wilderness characteristics were and are no longer considered to have these characteristics. In other instances, areas were reviewed and identified as having wilderness characteristics.

Similarly, other information new since 2008, as noted in the NOI, was the USFWS determination regarding the status of the sage-grouse. The USFWS determination that listing the species was warranted but precluded, nevertheless demonstrates that there is a vital need and an important opportunity to manage the habitat of the species on public lands to prevent the listing of the species as threatened or endangered. If the species were to be listed, there could be significant adverse impacts on several types of land uses, including oil shale and tar sands development. The BLM has considered this information, and although the BLM agrees with the commentor that there are several methods, including but not limited to land use allocation decisions, to address reducing impacts on this species' habitat, the BLM elected to consider the use of this method in order to address the anticipated resource conflicts.

As in many similar public land use and development decisions, even where lands remain open for leasing and development, the BLM may impose mitigation measures in lease stipulations or in conditions of approval in plans of development that would be consistent with law, regulation, and BLM policy, and that would be indicated by environmental review conducted at the time of the decision.

In addition, nothing in the Energy Policy Act of 2005 specified how the Secretary must establish a commercial oil shale leasing program, apart from requiring the Secretary to consider the most geologically prospective areas in Colorado, Utah, and Wyoming. The Energy Policy Act did not specify the acreage that must be available for such programs or how the requirements of such program should be balanced with other resource uses. Under FLPMA, the Secretary must manage the public lands in accordance with land use plans and retains the discretion to establish, revise, and amend those land use plans, as appropriate, to address resource management issues. This means that no leasing or development of oil shale and tar sands resources may occur on the public lands unless such activity is consistent with the applicable land use plan. In view of the nascent character of the oil shale and tar sands industries, as well as in light of other resource management concerns, the Secretary, acting though the BLM, has decided to reconsider the appropriate federal lands to be available for leasing and development of these resources, as well as whether commercial leasing should be preceded by additional, vigorous RD&D. There may be different views on whether the nascent character of the technologies argues for more land to be open, so that more lands may be available for RD&D, or whether fewer lands should be open, in order that such RD&D and eventual commercial development as does occur may be targeted in areas with few resource use conflicts, while leaving open some areas where the oil shale and tar sands S resource has been identified as particularly rich. While the Energy Policy Act of 2005 encourages commercial development of oil shale and tar sands resources, these kinds of land management policy questions (how much land, where, with what restrictions, and so on) are left, under FLPMA, to the Secretary, acting through the BLM.

The 2012 proposed land use plan amendment allocation and the proposed amendment to the rule are distinct proposed actions, which take place under distinct authorities according to distinct procedural requirements. The proposed rule amendment is not "closely related" to the proposed land use plan allocation amendment, so as to warrant discussion as a "connected action" under 40 CFR 1508.25. Nor are they so dependent upon one another as to necessitate coordination of the public comment period for either process. Neither the Proposed Plan amendment nor the proposed rule amendment is interdependent upon the other; neither automatically triggers the other; neither needs the other to proceed; neither depends on a larger action for justification. Any proposal to lease oil shale or tar sands, with or without a rule, must be consistent with the applicable land use plan. The PEIS reassesses the appropriate mix of allowable uses with respect to opening lands for future oil shale and tar sands leasing and potential development. Therefore, the proposed amendment to the oil shale rule is not discussed as a "connected action" in the Final PEIS, nor did the BLM extend the 90-day public comment period for the Draft PEIS.

10.0 OUT OF SCOPE

10.1 REVISION OF 2008 PEIS

There were no comments associated with this issue.

10.2 DEFER FOR RD&D RESULTS

There were no comments associated with this issue

10.3 OIL SHALE REGULATIONS AND NATIONAL POLICY

OSTS_070-5	50087-16	50268-22	50310-20
50087-12	50092-2	50271-8	

Issue Summary: Commentors suggested that national oil shale regulations, including the program outlined in the PEIS, were too restrictive. Other commentors proposed that the United States model federal oil shale regulations on those already in practice in other countries with oil shale and tar sands industries.

Response: The regulations surrounding oil shale development are beyond the scope of this PEIS. The purpose of this document is to outline a program to amend 10 land use plans in Colorado, Utah, and Wyoming to describe those areas that will be open to application for commercial leasing, exploration, and development of oil shale and tar sands resources.

10.4 BONDING AND RECLAMATION

50026-2	50258-5	50258-8	50267-4
50047-8	50258-6	50262-2	

Issue Summary: Commentors cited the potentially adverse environmental impacts of oil shale development and suggested the developers should be financially responsible for disturbed landscapes and required to post bonds to facilitate the reclamation of the affected environment after development ceases.

Response: Specific mitigation measures, such as bonding for reclamation, will be addressed at the project-specific NEPA level and are beyond the scope of this PEIS.

10.5 ROYALTIES, SUBSIDIES, INCENTIVES, AND TAXES

OSTS_066-12	50074-13	50154-6	50262-4
OSTS_066-13	50094-2	50227-9	50312-30
OSTS_190-2	50110-3	50227-17	50333-31
50074-12	50143-2	50227-18	

Issue Summary: Commentors remarked upon the industry's royalty rate, the tax revenues provided to local governments as a result of development, and financial incentives for oil shale and tar sands S development. Depending on their point of view, commentors supported using these financial mechanisms to encourage development or discourage extensive development and ensure developers were financially responsible for socioeconomic and environmental impacts.

Response: The financial details of leases such as royalty payments, state severance tax revenues, and credits for mitigation will be addressed at the project-specific NEPA level and are beyond the scope of this PEIS.

10.6 NATIONAL ENERGY STRATEGY

OSTS_066-5	50147-8	50154-7	50333-39

Issue Summary: Commentors expressed support for the BLM to build a national energy policy that recognizes the importance of developing domestic energy resources such as oil shale and tar sands. One commentor suggested that energy resources developed domestically should be sold on the domestic market, rather than abroad. An industry commentor stated that the federal government should create a regulatory environment that encourages the investment in oil shale to meet the nation's energy challenges.

Response: Issues of national energy strategy and regulatory environment are beyond the scope of this PEIS. The purpose of this document is to outline a program to amend 10 land use plans in Colorado, Utah, and Wyoming to describe those areas that will be open to application for commercial leasing, exploration, and development of oil shale and tar sands resources.

10.6.1 Use Fewer Fossil Fuels

OSTS_003-3	50041-1	50088-2	50276-9
OSTS_017-1	50046-2	50095-2	50278-2
OSTS_025-1	50047-3	50147-9	50284-2
OSTS_042-2	50057-1	50165-5	50289-2
OSTS_062-2	50070-4	50190-1	50313-2
OSTS_069-6	50077-2	50198-2	50316-1
50012-2	50080-1	50247-1	50322-7
50024-2	50081-1	50254-1	50364-1
50028-2	50085-1	50274-1	50371-1

Issue Summary: These commentors voiced opposition to the program, stating that dependence on fossil fuel resources should be reduced and that development of alternative energy sources of energy such as wind, geothermal, and solar should be expanded.

Response: The analyses in the PEIS were developed to evaluate the effects of the proposed action (i.e., amending 10 land use plans in Colorado, Utah, and Wyoming to describe those areas that will be open and those that will be closed to application for commercial leasing, exploration, and development of oil shale and tar sands resources) and its alternatives. National energy policy and the development of other types of energy resources, such as renewables, are beyond the scope of this PEIS.

10.6.2 Conventional Oil and Gas

There were no comments associated with this issue.

10.6.3 Energy/National Policy

OSTS_066-10	OSTS_107-2	50092-4	50094-3
OSTS_099-1	OSTS_201-2	50094-1	50255-8

50273-1	50287-1	50308-18
50283-3	50287-5	

Issue Summary: Commentors suggested that, by expanding development of domestic sources of energy, the surrounding regions and entire country will enjoy the accompanying economic development benefits that result from a secure source of energy. Commentors also encouraged the BLM to make land available for leasing to reduce dependence on foreign oil supplies, which will promote national security.

Response: The BLM appreciates commentors' interest in the long-term sustainability of the domestic energy supply; however, issues of energy security and national security are beyond the scope of this PEIS.

10.7 PAVEMENT

OSTS_002-1	OSTS_008-3	50324-19
OSTS_008-1	OSTS_021-4	

Issue Summary: Commentors noted that oil shale and tar sands resources have been developed for use in pavement materials and suggest that the PEIS should incorporate information from this industry in its analysis.

Response: The purpose and need for the proposed action has been revised to acknowledge that while tar sands are used for pavement, the focus of this PEIS is on commercial development of tar sands as a fuel source.

10.8 BETTER HERE THAN THERE

OSTS_103-2	OSTS_107-4	OSTS_126-2

Issue Summary: These comments express preference for oil shale and tar sands development in the United States over other countries that may have less stringent environmental controls and regulations.

Response: Thank you for your comments.

11.0 GENERAL SUPPORT

OSTS_065-1	OSTS_206-1	50050-1	50227-12
OSTS_089-2	OSTS_206-3	50063-1	50227-13
OSTS_106-3	OSTS_232-2	50092-4	50273-3
OSTS_107-1	50002-1	50094-3	50283-1
OSTS_164-1	50020-1	50154-2	50293-1
OSTS_185-1	50033-1	50184-2	50315-1
OSTS_187-1	50043-1	50196-1	50333-22

Issue Summary: A number of commentors expressed their support for oil shale and tar sands development. Commentors cited a variety of different reasons for their support, including the need for energy independence and national security, economic development, fuel supply and price stability, employment opportunities, retail sector growth, and low energy costs.

Commentors also stated that the oil shale and tar sands industry has years of experience and will have as little environmental impact as possible, and that the tourism and recreation industries are not enough to support the economy. Many stated that the Preferred Alternative of the PEIS contains too many land restrictions and makes unreasonable demands on industry to prove its technology.

Response: Thank you for your comments in support of oil shale and tar sands development.

11.1 TAR SANDS

There were no comments associated with this issue.

11.2 OIL SHALE

OSTS_020-4	OSTS_157-1	50007-1	50303-1
OSTS_029-1	OSTS_181-1	50063-3	
OSTS_126-1	OSTS_197-4	50127-1	
OSTS_129-1	50004-1	50278-1	

Issue Summary: These commentors expressed support for development, specifically for oil shale.

Response: Thank you for your comments in support of oil shale development.

12.0 GENERAL OPPOSITION

OSTS_001-6	50044-1	50176-1	50265-1
OSTS_003-2	50045-1	50177-1	50276-1
OSTS_005-1	50049-1	50182-1	50281-1
OSTS_010-1	50060-1	50188-1	50284-1
OSTS_012-1	50069-1	50190-1	50285-2
OSTS_013-1	50078-1	50191-1	50288-1
OSTS_014-2	50079-1	50198-1	50289-1
OSTS_016-2	50080-1	50207-1	50300-4
OSTS_025-1	50081-1	50217-1	50301-1
OSTS_062-1	50082-1	50221-1	50307-1
OSTS_139-1	50084-1	50232-1	50311-1
OSTS_198-1	50113-1	50236-2	50319-1
50005-1	50114-1	50237-1	50327-1
50014-1	50115-1	50239-1	50336-4
50015-1	50128-2	50240-1	50351-1
50024-1	50139-1	50244-2	50353-1
50027-1	50140-1	50245-3	50359-1
50031-1	50141-1	50252-1	50364-2
50038-1	50170-3	50256-2	50371-1
50039-1	50173-1	50259-1	50373-1
50042-1	50174-1	50264-1	

Issue Summary: A number of commentors expressed their opposition to oil shale and tar sands development. Commentors cited a variety of different reasons for opposing the program, including uncertain and/or negative environmental─particularly, water─impacts, adverse impacts on other sectors of the economy such as tourism, distrust of development corporations, concerns about the safety of oil shale and tar sands development technologies, and the unsustainability of oil shale and tar sands resources. Many commentors stated concerns regarding increasing global warming in their opposition to further fossil fuel development.

Response: Thank you for your comments.

12.1 TAR SANDS

OSTS_004-2	50013-1	50085-2	50369-1
50010-1	50028-1	50093-1	
50011-1	50083-1	50178-1	

Issue Summary: Commentors expressed opposition to the oil shale and tar sands development program, noting that they are especially against tar sands development. Many of these commentors suggested that the BLM consider the negative effects of tar sands development in the Canadian Province of Alberta. Commentors said that water had been polluted and forests had been cleared, and they were opposed to the same situation happening in their region.

Response: Thank you for your comments.

12.2 OIL SHALE

OSTS_021-1	50023-1	50036-1
OSTS_028-1	50025-1	50037-1
50022-1	50034-1	50275-1

Issue Summary: Commentors expressed opposition to the oil shale and tar sands development program, noting that they are especially against oil shale development. Commentors cite reasons such as those cited by commentors opposed to all oil shale and tar sands development (see 12.0 above).

Response: Thank you for your comments.

12.3 USE OF PUBLIC LANDS

OSTS_035-2	OSTS_041-2	OSTS_047-2	OSTS_053-2
OSTS_036-1	OSTS_042-3	OSTS_048-3	OSTS_054-2
OSTS_037-2	OSTS_043-2	OSTS_049-2	OSTS_055-2
OSTS_038-2	OSTS_044-2	OSTS_050-2	OSTS_056-2
OSTS_039-2	OSTS_045-2	OSTS_051-2	OSTS_057-2
OSTS_040-2	OSTS_046-2	OSTS_052-2	OSTS_058-2

OSTS_059-2	50070-2	50146-2	50192-1
OSTS_060-2	50120-2	50149-2	50193-1
OSTS_061-2	50121-2	50150-2	50194-1
OSTS_063-2	50129-2	50151-2	50212-1
OSTS_064-3	50130-2	50155-2	50223-1
OSTS_067-1	50131-2	50158-1	50224-1
OSTS_137-1	50132-2	50159-2	50230-1
OSTS_216-2	50133-2	50161-2	50250-1
OSTS_227-2	50134-2	50165-4	50251-1
OSTS_227-5	50135-2	50165-9	50299-1
OSTS_231-2	50136-2	50166-2	50305-1
50009-1	50137-2	50172-2	50317-1
50029-1	50138-2	50175-1	50341-2
50048-1	50139-3	50187-1	50355-2

Issue Summary: These commentors were opposed to oil shale and tar sands development on public lands. These commentors noted that public lands should be open for the benefit of all citizens and should be kept in pristine condition for future generations. Some commentors also mentioned that there were sufficient private lands available for development.

Response: Under the 2005 Energy Policy Act, the BLM was mandated to create a program that would facilitate development of oil shale and tar sands resources on federal public lands.

13.0 EDITORIAL COMMENTS

50181-13	50181-33	50181-97	50310-42
50181-18	50181-37	50277-4	50310-43
50181-21	50181-38	50277-25	50310-46
50181-22	50181-39	50310-22	50310-50
50181-24	50181-41	50310-23	50310-51
50181-26	50181-47	50310-24	50312-34
50181-27	50181-61	50310-30	50324-17
50181-29	50181-62	50310-39	50324-21
50181-32	50181-80	50310-41	50324-25

50324-30 50333-37 50343-8

Issue Summary: These commentors noted general editorial issues in the PEIS, such as misspellings and grammatical errors.

Response: Comments were reviewed and changes were made to the Final PEIS as appropriate.

C. SUBMISSION REPORT

This page intentionally left blank.

CommentWorks® Submission Report

Initiative: OSTS
Client Name: Agency
Author: Georgia Anast
Created Date: Tuesday, July 31, 2012
Sort Order: No Sort Applied
Selected Options:
Include Commenter
Include Organization
Include Additional Commenters
Include Additional Commenter Organizations
Include Commenter Type
Include Classification
Include Category
Include Submitted As
Include Form Letter Category
Include Form Letter Master
Include Task
Include Attachment Data
Include Bracketing
Include Received Date
Include Flags
Preview as HTML
Single File

Number of Submissions: 606

DELETED_by_Request_OSTS2012D50016
Organization: Grand County Council Member, Audrey Graham
Received: 2/10/2012 1:06:03 AM
Commenter1**:** Audrey Graham - Maob, Utah 84532 (United States)
Organization1**:**Grand County Council Member
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** klett
Attachments: OSTS2012D50016.htm (DELETED_by_Request_OSTS2012D50016-58135.htm Size = 1 KB)
Submission Text

Dear BLM, As a local elected official in Grand County Utah, where some of the proposed activities will take place, I request that a public hearing take place in our community in a timely and well-advertised manner. Thank you, Audrey

DELETED_OSTS2012D50035

Organization: X, Md. Dulal
Received: 3/14/2012 2:58:40 AM
Commenter1: Md. Dulal - Dhaka, California 12345 (United States)
Organization1:X
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** klett 4/25/2012 12:00:00 AM
Attachments: OSTS2012D50035.htm (DELETED_OSTS2012D50035-58239.htm Size = 1 KB)
Submission Text
Please Help Me..... I am Md.Dulal and Leave In Bangladesh.I am a Poor Boy.Do You Know?When my Age 6 Years,I am Hard Working For My Life and Till Now! But I am Field.So I Need Your Help For My Life.Would You Help Me.....? My Information:- ========== 1:Full Name: Md.Dulal 2:Home Address: 173,East Rampura,Dhaka-1219. 3:Country:Bangladesh. BANK INFORMATION:- Account Name : Md.Dulal Bank Account No : 178 - 101 - 181474. Bank Name : Dutch- Bangla Bank Ltd. Bank Branch : Any Branch In Bangladesh. Country Name : Bangladesh*

DUP_of_50007_OSTS50008

Organization: Industrial Systems, Inc., Glenn Lewis
Received: 2/6/2012 6:11:54 PM
Commenter1: Glenn Lewis - Delta, Colorado 81416 (United States)
Organization1: Industrial Systems, Inc.
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** klett
Attachments: OSTS2012D50008.htm (DUP_of_50007_OSTS50008-58149.htm Size = 1 KB)
Submission Text
Industrial Systems Inc.,(ISI) was founded in 1991. ISI is: A Service Disabled Veteran Owned Small Business employing about 35 employees full time. ISI has employed as many as 200 employees depending on larger projects. ISI is currently completing a Pilot Shale Oil project in Piceance Creek area of western CO. This project has generated full time work for over 100 full time employees for the most part of the last two years. The above mentioned employees are not into account for the various companies who manufactured pipe, pumps, other pieces of

equipment too numerous to list other firms, such as freight company, equipment dealers such as Catapillar, Ford, Chevy trucks, etc. co on and on. Many millions of dollars have went through ISI's payroll and accounting systems. Failure to list these shale oil lands for lease would have of course, not allowed this important project to proceed. The shale oil leases must continue to insure America has a chance to not be dependent on foreign countries for our energy. This work is being done without adverse environmental stress or damage to the BLM lands. I strongly urge BLM support of continued leasing of BLM land to private companies to push forward with pilot programs ti insure America's independence of other countries who may not have our best interests at heart regarding our energy future. Thank you Thank you

DUP_of_50097_OSTS50100
Organization: Robert Tobin
Received: 4/23/2012 12:52:05 PM
Commenter1: Robert Tobin - Meeker, Colorado 81641 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web/E-mail/Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** klett
Attachments: OSTS2012D50100.htm (DUP_of_50097_OSTS50100-58506.htm Size = 1 KB)
B.TobinPEIS2_OSTS2012D50100.pdf (DUP_of_50097_OSTS50100-58505.pdf Size = 11 KB)
Submission Text
this page 2 of my attachment See Attachment.

DUP_of_50098_OSTS50109
Organization: Robert Tobin
Received: 4/23/2012 1:01:14 PM
Commenter1: Robert Tobin - Meeker, Colorado 81641 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: 50099 Attachment
Submitted As: Web/E-mail/Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** klett
Attachments: OSTS2012D50109.htm (DUP_of_50098_OSTS50109-58533.htm Size = 1 KB)
B.TobinPEIS10_Attach_1_OSTS2012D50109.pdf (DUP_of_50098_OSTS50109-58532.pdf Size = 26 KB)
Submission Text
PAGE 10 OF 10 OF MY PEIS See Attachment.

reference list

DUP_of_50101_OSTS50102
Organization: Robert Tobin
Received: 4/23/2012 12:54:13 PM
Commenter1: Robert Tobin - Meeker, Colorado 81641 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: 50099 Attachment
Submitted As: Web/E-mail/Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** klett
Attachments: OSTS2012D50102.htm (DUP_of_50101_OSTS50102-58512.htm Size = 1 KB)
B.TobinPEIS3_OSTS2012D50102.pdf (DUP_of_50101_OSTS50102-58511.pdf Size = 19 KB)
Submission Text
This page 3 of my PEIS See Attachment.

DUP_of_50181_OSTS50183
Organization: Duchesne County, Utah, Duchesne County Commissioners
Received: 4/30/2012 4:13:20 PM
Commenter1: Duchesne County Commissioners - Duchesne, Utah 84021 (United States)
Organization1: Duchesne County, Utah
Commenter Type: Coop Agency - Local Govt
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form and Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** klett
Attachments: OSTS2012D50183.htm (DUP_of_50181_OSTS50183-58793.htm Size = 1 KB)
img-430123411_OSTS2012D50183.pdf (DUP_of_50181_OSTS50183-58792.pdf Size = 409 KB)
Submission Text
See attachment See Attachment.

DUP_of_50241_OSTS50344
Organization: Center for Biological Diversity, Campaign
Received: 5/4/2012 6:03:46 PM
Commenter1: - , (United States)
Organization1: Center for Biological Diversity, Campaign
Commenter Type: Environmental Organization
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** klett

Attachments: OSTS2012D50344.htm (DUP_of_50241_OSTS50344-59080.htm Size = 1 KB) Batch_2_Comments_CBD_OSTS2012D50344.pdf (DUP_of_50241_OSTS50344-59079.pdf Size = 15153 KB)
Submission Text
The following is the second batch of comments submitted on behalf of supporters of the Center for Biological Diversity. See Attachment.

DUP_of_50286_OSTS_076
Organization: Wyoming Game and Fish Department, John Emmerich
Received: 5/4/2012 12:00:00 AM
Commenter1: John Emmerich - Cheyenne, Wyoming 82006 (United States)
Organization1: Wyoming Game and Fish Department
Commenter Type: State Government
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** klett
Attachments: OSTS2012D00077.htm (DUP_of_50286_OSTS_076-59131.htm Size = 1 KB) OSTS_076_WY_Game_and_Fish_Mail_OSTS2012D00077.pdf (DUP_of_50286_OSTS_076-59130.pdf Size = 475 KB)
Submission Text
See Attachment.

DUP_of_50290_OSTS50292
Organization: Carbon County Commission
Received: 5/4/2012 12:30:38 PM
Commenter1: Carbon County Commission - Price, Utah 84501 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** klett
Attachments: OSTS2012D50292.htm (DUP_of_50290_OSTS50292-58930.htm Size = 1 KB) BLM_Oil_Shale_Tar_Sands_PEIS_Comments_050112_OSTS2012D50292.pdf (DUP_of_50290_OSTS50292-58929.pdf Size = 9068 KB)
Submission Text
See Attachment.

DUP_of_50337_OSTS50294
Organization: Denver Water, Vicki Parks
Received: 5/4/2012 12:49:05 PM
Commenter1: Vicki Parks - Denver, Colorado 80204 (United States)

Organization1: Denver Water
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** klett
Attachments: OSTS2012D50294.htm (DUP_of_50337_OSTS50294-58935.htm Size = 1 KB)
Submission Text
The attachment is being sent for Dave Little on behalf of the Front Range Water Users Council on May 4, 2012.

DUP_of_50341_OSTS50345
Organization: Center for Biological Diversity, Campaign
Received: 5/4/2012 6:07:40 PM
Commenter1: - , (United States)
Organization1: Center for Biological Diversity, Campaign
Commenter Type: Environmental Organization
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** klett
Attachments: OSTS2012D50345.htm (DUP_of_50341_OSTS50345-59083.htm Size = 1 KB)
Group_7_OSTS2012D50345.pdf (DUP_of_50341_OSTS50345-59082.pdf Size = 3646 KB)
Submission Text
The following is the fourth batch of comments submitted on behalf of supporters of the Center for Biological Diversity. See Attachment.

DUP_Of_50341_OSTS50347
Organization: Center for Biological Diversity, Campaign
Received: 5/4/2012 6:13:17 PM
Commenter1: - , (United States)
Organization1: Center for Biological Diversity, Campaign
Commenter Type: Environmental Organization
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** klett
Attachments: OSTS2012D50347.htm (DUP_Of_50341_OSTS50347-59086.htm Size = 1 KB)
Group_5_OSTS2012D50347.pdf (DUP_Of_50341_OSTS50347-59085.pdf Size = 8381 KB)
Submission Text

The following is the third of FIVE batches of comments submitted on behalf of the supporters of the Center for Biological Diversity. See Attachment.

DUP_of_50341_OSTS50348
Organization: Center for Biological Diversity, Campaign
Received: 5/4/2012 6:13:43 PM
Commenter1: - , (United States)
Organization1: Center for Biological Diversity, Campaign
Commenter Type: Environmental Organization
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** klett
Attachments: OSTS2012D50348.htm (DUP_of_50341_OSTS50348-59089.htm Size = 1 KB) Group_6_OSTS2012D50348.pdf (DUP_of_50341_OSTS50348-59088.pdf Size = 7620 KB)
Submission Text
The following is the fifth of FIVE batches of comments submitted on behalf of the supporters of the Center for Biological Diversity. See Attachment.

DUP_of_50341_OSTS50350
Organization: Center for Biological Diversity, Campaign
Received: 5/4/2012 6:20:17 PM
Commenter1: - , (United States)
Organization1: Center for Biological Diversity, Campaign
Commenter Type: Environmental Organization
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** klett
Attachments: OSTS2012D50350.htm (DUP_of_50341_OSTS50350-59095.htm Size = 1 KB) Batch_5_Comments_CBD_OSTS2012D50350.pdf (DUP_of_50341_OSTS50350-59094.pdf Size = 723 KB)
Submission Text
The following is the final batch of comments submitted on behalf of the supporters of the Center for Biological Diversity. See Attachment.

DUP_of_50355_OSTS50356
Organization: Earthjustice, Campaign, Alexander Rony
Received: 5/4/2012 7:18:48 PM
Commenter1: Alexander Rony - San Francisco, California 94111 (United States)
Organization1: Earthjustice, Campaign
Commenter Type: Environmental Organization
Classification:

Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** klett
Attachments: OSTS2012D50356.htm (DUP_of_50355_OSTS50356-59103.htm Size = 2 KB) Comments_Earthjustice2_OSTS2012D50356.pdf (DUP_of_50355_OSTS50356-59102.pdf Size = 14005 KB)
Submission Text
Earthjustice collected 33,698 comments regarding the Oil Shale and Tar Sands Programmatic EIS. Attached are comments 5,001-10,000. Here is the sample comment that people could edit: I am deeply concerned about the potential effects to our water, wildlife, communities and public lands if the BLM initiates a commercial oil shale leasing program. The two million acres in UT, WY and CO previously allocated for commercial leasing is a massive amount of public, taxpayer land that would be sacrificed for a singular use of the landscape. While the preferred alternative (Alternative 2) is a step in the right direction, BLM should consider an alternative that does not endorse giveaways of public lands to this unproven industry. Oil shale is currently producing no jobs and no revenue. The Congressional Budget Office confirmed that it is not expected to produce significant revenues through 2022. This means we have time to thoroughly assess the impacts of development to our water, wildlife and communities, and should not rush now to give away public lands. The land overlying oil shale resources in Utah, Colorado and Wyoming is some of the best wildlife habitat in the West. Outdoor recreation and tourism are huge economic drivers that depend on this habitat. The farming and ranching sectors require reliable access to water resources, which may be depleted by extensive commercial oil shale development. We must protect these jobs by making smart decisions about how we allow oil companies to move forward with oil shale speculation. I recommend that you carefully consider the serious impacts of oil shale production to our wildlife, water, air, and communities as you take another look at oil shale development. See Attachment.

DUP_of_50355_OSTS50357
Organization: Earthjustice, Campaign, Alexander Rony
Received: 5/4/2012 7:20:43 PM
Commenter1: Alexander Rony - San Francisco, California 94111 (United States)
Organization1: Earthjustice, Campaign
Commenter Type: Environmental Organization
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** klett
Attachments: OSTS2012D50357.htm (DUP_of_50355_OSTS50357-59106.htm Size = 2 KB) Comments_Earthjustice3_OSTS2012D50357.pdf (DUP_of_50355_OSTS50357-59105.pdf Size = 14007 KB)
Submission Text
Earthjustice collected 33,698 comments regarding the Oil Shale and Tar Sands Programmatic EIS. Attached are comments 10,001-15,000. Here is the sample comment that people could edit:

I am deeply concerned about the potential effects to our water, wildlife, communities and public lands if the BLM initiates a commercial oil shale leasing program. The two million acres in UT, WY and CO previously allocated for commercial leasing is a massive amount of public, taxpayer land that would be sacrificed for a singular use of the landscape. While the preferred alternative (Alternative 2) is a step in the right direction, BLM should consider an alternative that does not endorse giveaways of public lands to this unproven industry. Oil shale is currently producing no jobs and no revenue. The Congressional Budget Office confirmed that it is not expected to produce significant revenues through 2022. This means we have time to thoroughly assess the impacts of development to our water, wildlife and communities, and should not rush now to give away public lands. The land overlying oil shale resources in Utah, Colorado and Wyoming is some of the best wildlife habitat in the West. Outdoor recreation and tourism are huge economic drivers that depend on this habitat. The farming and ranching sectors require reliable access to water resources, which may be depleted by extensive commercial oil shale development. We must protect these jobs by making smart decisions about how we allow oil companies to move forward with oil shale speculation. I recommend that you carefully consider the serious impacts of oil shale production to our wildlife, water, air, and communities as you take another look at oil shale development. See Attachment.

DUP_of_50355_OSTS50358

Organization: Earthjustice, Campaign, Alexander Rony
Received: 5/4/2012 7:23:29 PM
Commenter1: Alexander Rony - San Francisco, California 94111 (United States)
Organization1: Earthjustice, Campaign
Commenter Type: Environmental Organization
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** klett
Attachments: OSTS2012D50358.htm (DUP_of_50355_OSTS50358-59109.htm Size = 2 KB) Comments_Earthjustice4_OSTS2012D50358.pdf (DUP_of_50355_OSTS50358-59108.pdf Size = 14014 KB)

Submission Text

Earthjustice collected 33,698 comments regarding the Oil Shale and Tar Sands Programmatic EIS. Attached are comments 15,001-20,000. Here is the sample comment that people could edit: I am deeply concerned about the potential effects to our water, wildlife, communities and public lands if the BLM initiates a commercial oil shale leasing program. The two million acres in UT, WY and CO previously allocated for commercial leasing is a massive amount of public, taxpayer land that would be sacrificed for a singular use of the landscape. While the preferred alternative (Alternative 2) is a step in the right direction, BLM should consider an alternative that does not endorse giveaways of public lands to this unproven industry. Oil shale is currently producing no jobs and no revenue. The Congressional Budget Office confirmed that it is not expected to produce significant revenues through 2022. This means we have time to thoroughly assess the impacts of development to our water, wildlife and communities, and should not rush now to give away public lands. The land overlying oil shale resources in Utah, Colorado and Wyoming is some of the best wildlife habitat in the West. Outdoor recreation and tourism are huge economic

drivers that depend on this habitat. The farming and ranching sectors require reliable access to water resources, which may be depleted by extensive commercial oil shale development. We must protect these jobs by making smart decisions about how we allow oil companies to move forward with oil shale speculation. I recommend that you carefully consider the serious impacts of oil shale production to our wildlife, water, air, and communities as you take another look at oil shale development. See Attachment.

DUP_of_50355_OSTS50360

Organization: Earthjustice, Campaign, Alexander Rony
Received: 5/4/2012 7:25:02 PM
Commenter1: Alexander Rony - San Francisco, California 94111 (United States)
Organization1: Earthjustice, Campaign
Commenter Type: Environmental Organization
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** klett
Attachments: OSTS2012D50360.htm (DUP_of_50355_OSTS50360-59112.htm Size = 2 KB) Comments_Earthjustice5_OSTS2012D50360.pdf (DUP_of_50355_OSTS50360-59111.pdf Size = 13992 KB)

Submission Text

Earthjustice collected 33,698 comments regarding the Oil Shale and Tar Sands Programmatic EIS. Attached are comments 20,001-25,000. Here is the sample comment that people could edit: I am deeply concerned about the potential effects to our water, wildlife, communities and public lands if the BLM initiates a commercial oil shale leasing program. The two million acres in UT, WY and CO previously allocated for commercial leasing is a massive amount of public, taxpayer land that would be sacrificed for a singular use of the landscape. While the preferred alternative (Alternative 2) is a step in the right direction, BLM should consider an alternative that does not endorse giveaways of public lands to this unproven industry. Oil shale is currently producing no jobs and no revenue. The Congressional Budget Office confirmed that it is not expected to produce significant revenues through 2022. This means we have time to thoroughly assess the impacts of development to our water, wildlife and communities, and should not rush now to give away public lands. The land overlying oil shale resources in Utah, Colorado and Wyoming is some of the best wildlife habitat in the West. Outdoor recreation and tourism are huge economic drivers that depend on this habitat. The farming and ranching sectors require reliable access to water resources, which may be depleted by extensive commercial oil shale development. We must protect these jobs by making smart decisions about how we allow oil companies to move forward with oil shale speculation. I recommend that you carefully consider the serious impacts of oil shale production to our wildlife, water, air, and communities as you take another look at oil shale development. See Attachment.

DUP_of_50355_OSTS50361

Organization: Earthjustice, Campaign, Alexander Rony
Received: 5/4/2012 7:26:33 PM
Commenter1: Alexander Rony - San Francisco, California 94111 (United States)

Organization1: Earthjustice, Campaign
Commenter Type: Environmental Organization
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** klett
Attachments: OSTS2012D50361.htm (DUP_of_50355_OSTS50361-59115.htm Size = 2 KB) Comments_Earthjustice6_OSTS2012D50361.pdf (DUP_of_50355_OSTS50361-59114.pdf Size = 13993 KB)
Submission Text
Earthjustice collected 33,698 comments regarding the Oil Shale and Tar Sands Programmatic EIS. Attached are comments 25,001-30,000. Here is the sample comment that people could edit: I am deeply concerned about the potential effects to our water, wildlife, communities and public lands if the BLM initiates a commercial oil shale leasing program. The two million acres in UT, WY and CO previously allocated for commercial leasing is a massive amount of public, taxpayer land that would be sacrificed for a singular use of the landscape. While the preferred alternative (Alternative 2) is a step in the right direction, BLM should consider an alternative that does not endorse giveaways of public lands to this unproven industry. Oil shale is currently producing no jobs and no revenue. The Congressional Budget Office confirmed that it is not expected to produce significant revenues through 2022. This means we have time to thoroughly assess the impacts of development to our water, wildlife and communities, and should not rush now to give away public lands. The land overlying oil shale resources in Utah, Colorado and Wyoming is some of the best wildlife habitat in the West. Outdoor recreation and tourism are huge economic drivers that depend on this habitat. The farming and ranching sectors require reliable access to water resources, which may be depleted by extensive commercial oil shale development. We must protect these jobs by making smart decisions about how we allow oil companies to move forward with oil shale speculation. I recommend that you carefully consider the serious impacts of oil shale production to our wildlife, water, air, and communities as you take another look at oil shale development. See Attachment.

DUP_of_50355_OSTS50362
Organization: Earthjustice, Campaign, Alexander Rony
Received: 5/4/2012 7:28:08 PM
Commenter1: Alexander Rony - San Francisco, California 94111 (United States)
Organization1: Earthjustice, Campaign
Commenter Type: Environmental Organization
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** klett
Attachments: OSTS2012D50362.htm (DUP_of_50355_OSTS50362-59118.htm Size = 2 KB) Comments_Earthjustice7_OSTS2012D50362.pdf (DUP_of_50355_OSTS50362-59117.pdf Size = 10392 KB)

Submission Text
Earthjustice collected 33,698 comments regarding the Oil Shale and Tar Sands Programmatic EIS. Attached are comments 30,001-33,698. Here is the sample comment that people could edit: I am deeply concerned about the potential effects to our water, wildlife, communities and public lands if the BLM initiates a commercial oil shale leasing program. The two million acres in UT, WY and CO previously allocated for commercial leasing is a massive amount of public, taxpayer land that would be sacrificed for a singular use of the landscape. While the preferred alternative (Alternative 2) is a step in the right direction, BLM should consider an alternative that does not endorse giveaways of public lands to this unproven industry. Oil shale is currently producing no jobs and no revenue. The Congressional Budget Office confirmed that it is not expected to produce significant revenues through 2022. This means we have time to thoroughly assess the impacts of development to our water, wildlife and communities, and should not rush now to give away public lands. The land overlying oil shale resources in Utah, Colorado and Wyoming is some of the best wildlife habitat in the West. Outdoor recreation and tourism are huge economic drivers that depend on this habitat. The farming and ranching sectors require reliable access to water resources, which may be depleted by extensive commercial oil shale development. We must protect these jobs by making smart decisions about how we allow oil companies to move forward with oil shale speculation. I recommend that you carefully consider the serious impacts of oil shale production to our wildlife, water, air, and communities as you take another look at oil shale development. See Attachment.

DUP_of_70074_OSTS50075
Organization: National Oil Shale Association, Roy Vawter
Received: 4/5/2012 11:39:06 AM
Commenter1: Roy Vawter - GLENWOOD SPRINGS, Colorado 81602 (United States)
Organization1: National Oil Shale Association
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/16/2012 12:00:00 AM
Attachments: OSTS2012D50075.htm (DUP_of_70074_OSTS50075-58320.htm Size = 10 KB)
Submission Text
This is a copy of the attachment I submitted on the previous submission, in case you did not receive it or could not open it. BLM has decided to redo the Oil Shale and Tar Sand Programmatic Environmental Impact Statement…. (PEIS) and Commercial Oil Shale Leasing Regulations (Regulations) completed in 2008. BLM's actions resulted from a settlement by the Department of Interior of law suits brought against the 2008 PEIS and Regulations. There is little, if any, new information to be considered, and the 2012 draft PEIS contains largely the same information as the 2008 final PEIS. However, the BLM has chosen a different preferred alternative 2(b) that significantly reduces the acreage available for oil shale leasing, eliminates the issuance of commercial leases, and restricts leasing to Research, Development and Demonstration (R,DandD) leases only.
• Alternative 1, Oil Shale No Action Alternative, in the new PEIS, preserves the actions taken in the 2008 PEIS, and is the alternative favored by NOSA.

• The 2008 PEIS was very professionally done, received thousands of comments, involved the public and resulted in a preferred alternative that provided a reasonable amount of acreage for potential commercial leasing, while still designating environmentally sensitive and other areas deemed unsuitable for leasing.
• BLM's preferred alternative (2b) in the new PEIS restricts leasing to R,DandD leases only and defers decisions on commercial leasing for years. This is a disincentive for companies that have access to technologies that are commercially viable. Going through the R,DandD process will delay bringing oil shale into production. Also, unknown lease terms for future R,DandD leases is yet another disincentive for companies interested in producing shale oil (e.g. 2nd round R,DandD leases offered insufficient Preference Right acreage to support a commercial project in the opinion of many companies), and other terms of the leases are more restrictive than those in the 1st round R,DandD leases. Only three companies sought 2nd round R,DandD leases, whereas about 20 companies sought 1st round R,DandD leases).
• Eliminating commercial leasing closes the door to some companies that could responsibly develop the resource, provide jobs, and produce tax revenues to local communities. Leasing oil shale is only the first step towards a commercial project. The BLM, Federal, State and local government agencies require a developer to go through additional environmental reviews and permitting activities that include public oversight before a project can go into production. It is estimated that two or three Environmental Impact Statements would be required, in addition to this PEIS, before a developer could break ground on a commercial venture. This PEIS and the 2008 final PEIS, only designate where oil shale leasing may occur and directs BLM field offices to change their planning documents accordingly.
• The draft 2012 oil shale leasing regulations have not yet been issued. It is difficult to comment intelligently upon the PEIS since the two are integrally linked. The BLM should consider extending the deadline for the comment period beyond May 4, 2012 to allow time for BLM to issue the regulations.
• Under Federal mineral leasing laws industry is allowed to lease oil and gas and minerals from BLM without a prior demonstration of the technology to be used to recover the resource. BLM for some reason has a different standard for oil shale. Developers decide whether to risk the cost of leasing a resource. They pay bonus payments to the Federal Government (shared with local communities) to acquire the lease. And lease rental payments are made to keep the lease during the time the developer is deciding whether to pursue a commercial venture. During that period, jobs are created and local communities receive sales, and other tax revenues.
• PEIS Alternative 2 reduces the acreage available for leasing to a level that most tracts in Colorado are too small and too dispersed to support a commercial project. The situation in Utah is somewhat better. Wyoming is similar to Colorado.
• Alternative 3 restricts leasing to the current 1st and 2nd round R,DandD lessees.
• Alternative 4(a) is very similar in acreage to Alternative 1, the No Action Alternative, but Alternative 4 (b) restricts leasing to R,DandD first leases only.
• Maps are in error in all three states 1. The oil shale cut-off grade was not consistently applied across the three states (e.g. 15 gpt in Wyoming and 25 gpt in Utah and Colorado). Assumptions about mining are over generalized (e.g. 500 ft. maximum overburden for surface mining in Utah and Wyoming , no surface mining in Colorado, and no consideration of underground mining in Colorado); thus the Most Geologically Prospective Oil Shale Resource areas should be corrected in each state map. 2. Preference Right acreage for the 1st Round R,DandD leases is smaller than already agreed upon between BLM and lessees (Figures 2.3.3-4 and 2.3.3-5 show portions of

Preference Right areas are not available for leasing). If maps are the legal description of the actions BLM plans to take, then the maps should be changed.

• The fact that 2,000,000 acres were made available for leasing in the 2008 PEIS does not mean that amount of land would be leased or developed. Generally, industry chooses the acreage that it believes can be profitably developed. In the new PEIS, BLM has assumed industry's role by choosing the lands it believes should be leased. Whereas the mineral leasing laws provide for leases of 5, 120 acres BLM is limiting the acreage to be leased, and deciding upon technological strategies to be employed by restricting leasing to an R,DandD first approach. So it seems BLM is choosing winners and losers, a role usually left up to industry. BLM has the authority to control development after leases are issued through environmental analyses and approval of development plans.

• The current royalty rate for oil shale in the 2008 regulations is not a give-away. Oil shale is not oil and gas. Oil shale is more expensive to produce than conventional oil and gas. Thus the rates should be much lower initially during the pioneering phase of the industry.

• In Canada the royalty rates for oil sands were set low initially in recognition of the pioneering nature of the industry. The Canadian government recently raised the royalty rates because the industry matured and could afford to pay higher rates. Canadians benefited from that strategy, and, as it works out, so did we in the United States, because today over a million barrels per day of oil from Canadian oil sands comes to U.S. refineries.

• Water used in oil shale processing is reasonable compared with many other energy sources (e.g. much lower than water consumed producing bio fuels from irrigated corn). There is a wealth of information on water usage and quality. A recent GAO report indicates there is enough water for a 500,000 b/d shale oil industry. The water consumption estimates used by GAO are conservative. They assumed the use of electric power generated from coal fired – water cooled power plants would be used to liberate shale oil via insitu heating. This approach does not reflect a consensus of industry thinking at this time. Low water usage has been recently publicized by developers of new and improved technologies (e.g. AMSO, Red Leaf and Enefit). Many companies have water rights to meet their long term needs.

A recent independent study sponsored by the Colorado River Conservation District showed that 120,000 acre feet per year of water would be required for a 1.55 million barrel per day shale oil industry. This is about 2-3 % of the water that flows from the Colorado River into Lake Powell annually. This study also used some liberal water usage assumptions. Much more water flows from Western Colorado to Front Range cities to meet their growing water needs.

Oil shale production produces more energy than it consumes. The range is 3:1 to 6:1. A huge drop in oil prices and political reasons caused oil shale development to stop in the 1980's. It had nothing to do with its energy content or energy recovery efficiency. A similar resource, the oil sands of Canada, proceeded after the drop in oil prices, because of industry-government cooperation. That industry is producing 1.6 million barrels per day of crude oil and sending over 1-million barrels per day of it to the U.S. The energy content of Canadian oil sands is less that the average Western U.S. oil shale.

• The Piceance and Uinta Basins – where most of the oil shale resource is concentrated - are not pristine primitive areas. The cultural, wildlife, environmental, and recreational assets can be managed along with oil shale development as has been demonstrated by existing oil and gas operations in the region. The BLM appropriately designated certain sensitive areas inappropriate for leasing in the 2008 EIS. For some reason the preferred alternative in the 2012 PEIS designates substantially more acreage unavailable for leasing while relying on the same data. It

also leaves a great deal of discretion to the BLM field offices to designate more sensitive areas in the future.
• The concentrated nature of the oil shale resource (e.g. 1 to 1-1/2 million barrels per acre in the middle of the Piceance Basin of Colorado) reduces the land use effects over similar energy recovery operations.
• Re-visiting the PEIS and leasing regulations is delaying the time oil shale can provide more jobs and economic development in the three-state region and nationwide.
• Western U.S. oil shale resources – now estimated by U.S.G.S. at 4-trillion barrels - are an important domestic energy asset that should be developed for the benefit of the American people. Re-visiting the PEIS and regulations completed in 2008 is delaying the development of the oil shale resource. The time required to develop an oil shale project is long, and the work should not be further delayed. National Oil Shale Association, P.O. Box 3080, Glenwood Springs, CO 81602

DUP_of_OSTS_075_OSTS50332
Organization: Matthew Mead
Received: 5/4/2012 5:20:24 PM
Commenter1: Matthew Mead - Cheyenne, Wyoming 82002 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** klett
Attachments: OSTS2012D50332.htm (DUP_of_OSTS_075_OSTS50332-59058.htm Size = 1 KB)
20120504_Comments_on_BLM_2012_OSTS_DPEIS_OSTS2012D50332.pdf (DUP_of_OSTS_075_OSTS50332-59057.pdf Size = 56 KB)
Submission Text
See Attachment.

Dup_of_OSTS_235_OSTS_035
Organization: Catherine Deuter
Received: 3/29/2012 12:00:00 AM
Commenter1: Catherine Deuter - Cedarede, Colorado 81413 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: 035_Campaign
Submitted As: E-Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/20/2012 12:00:00 AM
Attachments: OSTS2012D00035.htm (Dup_of_OSTS_235_OSTS_035-58436.htm Size = 1 KB)

OSTS_035_Deuter_Email_OSTS2012D00035.pdf (Dup_of_OSTS_235_OSTS_035-58435.pdf Size = 80 KB)
Submission Text
See Attachment.

<([#1 [*3*] I am deeply concerned about the potential effects to our water, wildlife, communities and public lands if the BLM
initiates a commercial leasing program. The two million acres in UT, WY and CO previously allocated for commercial
leasing is a massive amount of public, taxpayer land that would be sacrificed for a singular use of the landscape.
#1])>
<([#2 [*2.2*] [*12.3*] While the preferred alternative (Alternative 2) is a step in the right direction, I would like to have seen a draft document
that does not give away hundreds of thousands of taxpayer lands to a failed industry to tinker with. I would have liked to
have seen an alternative that does not endorse giveaways of even more public lands to this unproven industry. **#2])>**

<([#3 [*3*] Oil shale is currently producing no jobs and no revenue the Congressional Budget Office confirmed that it is not
expected to produce significant revenues through 2022. So we have the time to assess the impacts of development to
our water, wildlife, and communities.
#3])>
<([#4 [*3.10.4*] The land overlying oil shale resources in Utah, Colorado and Wyoming is some of the best wildlife habitat in the West,
outdoor recreation and tourism are huge economic drivers in the West. We must protect these jobs by making smart
about how we allow oil companies to move forward with oil shale speculation. **#4])>**

<([#5 [*3*] Finally, I recommend that you carefully consider the serious impacts of new energy required for oil shale production and
the potential devastating impacts to our wildlife, water, air, and communities as you take another look at oil shale
development. **#5])>**

Dup_of_OSTS_235_OSTS_036
Organization: Gary Roberts
Received: 3/1/2012 12:00:00 AM
Commenter1: Gary Roberts - Grand Junction, Colorado 81507 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: 035_Campaign_Subset
Submitted As: E-Mail
Form Letter Category:

Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/20/2012 12:00:00 AM
Attachments: OSTS2012D00036.htm (Dup_of_OSTS_235_OSTS_036-58438.htm Size = 1 KB)
OSTS_036_Roberts_Email_OSTS2012D00036.pdf (Dup_of_OSTS_235_OSTS_036-58437.pdf Size = 79 KB)
Submission Text
See Attachment.

I have lived in western Colorado since the 1960's and have studied the oil shale question for over 30 years. I was a BLM
geologist in the Glenwood Springs Resource Area and worked on the Resource Area Management Plan in the 1980's. I
also toured the old Anvil Point retort and reviewed the burning slag pile in the gulch to the east of the retort. Even in
the 1980's the method of waste disposal was to dump it in the gulch.

<([#1 [*12.3*] It is factually true that there is a lot of energy locked up in the rock formation. However, it is also factually true that
there has not been a commercially viable technology to recover this energy historically or currently.

I can not understand the thought processes involved that says industry has a right to more public land for oil shale
study/extraction when there is no technology for extraction. It appears that there is sufficient land already provided to
industry for the study of technology; however, the giving away of more public land for outright speculation by industry
must not be allowed.

The BLM should maintain its fundamental duty of multiple use of our public lands for the benefit of the public -- not
strictly industry.
#1])>

Dup_of_OSTS_235_OSTS_037
Organization: Chandler Roth
Received: 2/29/2012 12:00:00 AM
Commenter1: Chandler Roth - New Castle, Colorado 81647 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: 035_Campaign
Submitted As: E-Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/20/2012 12:00:00 AM

Attachments: OSTS2012D00037.htm (Dup_of_OSTS_235_OSTS_037-58440.htm Size = 1 KB)
OSTS_037_Roth_Email_OSTS2012D00037.pdf (Dup_of_OSTS_235_OSTS_037-58439.pdf Size = 80 KB)
Submission Text
See Attachment.

<([#1 [*3*] I am deeply concerned about the potential effects to our water, wildlife, communities and public lands if the BLM
initiates a commercial leasing program. The two million acres in UT, WY and CO previously allocated for commercial
leasing is a massive amount of public, taxpayer land that would be sacrificed for a singular use of the landscape. **#1])>**

<([#2 [*2.2*] [*12.3*] While the preferred alternative (Alternative 2) is a step in the right direction, I would like to have seen a draft document
that does not give away hundreds of thousands of taxpayer lands to a failed industry to tinker with. I would have liked to
have seen an alternative that does not endorse giveaways of even more public lands to this unproven industry. **#2])>**

<([#3 [*3*] Oil shale is currently producing no jobs and no revenue the Congressional Budget Office confirmed that it is not
expected to produce significant revenues through 2022. So we have the time to assess the impacts of development to
our water, wildlife, and communities. **#3])>**

<([#4 [*3.10.4*] The land overlying oil shale resources in Utah, Colorado and Wyoming is some of the best wildlife habitat in the West,
outdoor recreation and tourism are huge economic drivers in the West. We must protect these jobs by making smart
about how we allow oil companies to move forward with oil shale speculation. **#4])>**

<([#5 [*3*] Finally, I recommend that you carefully consider the serious impacts of new energy required for oil shale production and
the potential devastating impacts to our wildlife, water, air, and communities as you take another look at oil shale
development. **#5])>**

Dup_of_OSTS_235_OSTS_038
Organization: Cecelia Severance
Received: 2/29/2012 12:00:00 AM
Commenter1: Cecelia Severance - Walsenburg, Colorado 81089 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: 035_Campaign

Submitted As: E-Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/20/2012 12:00:00 AM
Attachments: OSTS2012D00038.htm (Dup_of_OSTS_235_OSTS_038-58442.htm Size = 1 KB)
OSTS_038_Severance_Email_OSTS2012D00038.pdf (Dup_of_OSTS_235_OSTS_038-58441.pdf Size = 79 KB)
Submission Text
See Attachment.

<([#1 [*3*] I am deeply concerned about the potential effects to our water, wildlife, communities and public lands if the BLMinitiates a commercial leasing program. The two million acres in UT, WY and CO previously allocated for commercial
leasing is a massive amount of public, taxpayer land that would be sacrificed for a singular use of the landscape. **#1])>**

<([#2 [*2.2*] [*12.3*] While the preferred alternative (Alternative 2) is a step in the right direction, I would like to have seen a draft document
that does not give away hundreds of thousands of taxpayer lands to a failed industry to tinker with. I would have liked to
have seen an alternative that does not endorse giveaways of even more public lands to this unproven industry. **#2])>**

<([#3 [*3*] Oil shale is currently producing no jobs and no revenue the Congressional Budget Office confirmed that it is not
expected to produce significant revenues through 2022. So we have the time to assess the impacts of development to
our water, wildlife, and communities.
#3])>
<([#4 [*3.10.4*] The land overlying oil shale resources in Utah, Colorado and Wyoming is some of the best wildlife habitat in the West,
outdoor recreation and tourism are huge economic drivers in the West. We must protect these jobs by making smart
about how we allow oil companies to move forward with oil shale speculation. **#4])>**

<([#5 [*3*] Finally, I recommend that you carefully consider the serious impacts of new energy required for oil shale production and
the potential devastating impacts to our wildlife, water, air, and communities as you take another look at oil shale
development. **#5])>**

Dup_of_OSTS_235_OSTS_039
Organization: Bob Arrington
Received: 3/2/2012 12:00:00 AM
Commenter1: Bob Arrington - Battlement Mesa, Colorado 81635 (United States)
Organization1:

Commenter Type: Member of the Public
Classification: none
Submission Category: 035_Campaign
Submitted As: E-Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/20/2012 12:00:00 AM
Attachments: OSTS2012D00039.htm (Dup_of_OSTS_235_OSTS_039-58444.htm Size = 1 KB)
OSTS_039_Arrington_Email_OSTS2012D00039.pdf (Dup_of_OSTS_235_OSTS_039-58443.pdf Size = 79 KB)
Submission Text
See Attachment.

<([#1 [*3*] I am deeply concerned about the potential effects to our water, wildlife, communities and public lands if the BLM
initiates a commercial leasing program. The two million acres in UT, WY and CO previously allocated for commercial
leasing is a massive amount of public, taxpayer land that would be sacrificed for a singular use of the landscape. **#1])>**

<([#2 [*2.2*] [*12.3*] While the preferred alternative (Alternative 2) is a step in the right direction, I would like to have seen a draft document
that does not give away hundreds of thousands of taxpayer lands to a failed industry to tinker with. I would have liked to
have seen an alternative that does not endorse giveaways of even more public lands to this unproven industry. **#2])>**

<([#3 [*3*] Oil shale is currently producing no jobs and no revenue the Congressional Budget Office confirmed that it is not
expected to produce significant revenues through 2022. So we have the time to assess the impacts of development to
our water, wildlife, and communities. **#3])>**

<([#4 [*3.10.4*] The land overlying oil shale resources in Utah, Colorado and Wyoming is some of the best wildlife habitat in the West,
outdoor recreation and tourism are huge economic drivers in the West. We must protect these jobs by making smart
about how we allow oil companies to move forward with oil shale speculation. **#4])>**

<([#5 [*3*] Finally, I recommend that you carefully consider the serious impacts of new energy required for oil shale production and
the potential devastating impacts to our wildlife, water, air, and communities as you take another look at oil shale
development. **#5])>**

Dup_of_OSTS_235_OSTS_040

Organization: Lee Gelatt
Received: 3/2/2012 12:00:00 AM
Commenter1: Lee Gelatt - Grand Junction, Colorado (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: 035_Campaign
Submitted As: E-Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/20/2012 12:00:00 AM
Attachments: OSTS2012D00040.htm (Dup_of_OSTS_235_OSTS_040-58446.htm Size = 1 KB)
OSTS_040_Gelatt_Email_OSTS2012D00040.pdf (Dup_of_OSTS_235_OSTS_040-58445.pdf Size = 80 KB)
Submission Text
See Attachment.

<([#1 [*3*] I am deeply concerned about the potential effects to our water, wildlife, communities and public lands if the BLM
initiates a commercial leasing program. The two million acres in UT, WY and CO previously allocated for commercial
leasing is a massive amount of public, taxpayer land that would be sacrificed for a singular use of the landscape.
#1])>
<([#2 [*2.2*] [*12.3*] While the preferred alternative (Alternative 2) is a step in the right direction, I would like to have seen a draft document
that does not give away hundreds of thousands of taxpayer lands to a failed industry to tinker with. I would have liked to
have seen an alternative that does not endorse giveaways of even more public lands to this unproven industry. **#2])>**

<([#3 [*3*] Oil shale is currently producing no jobs and no revenue the Congressional Budget Office confirmed that it is not
expected to produce significant revenues through 2022. So we have the time to assess the impacts of development to
our water, wildlife, and communities.
#3])>
<([#4 [*3.10.4*] The land overlying oil shale resources in Utah, Colorado and Wyoming is some of the best wildlife habitat in the West,
outdoor recreation and tourism are huge economic drivers in the West. We must protect these jobs by making smart
about how we allow oil companies to move forward with oil shale speculation. **#4])>**

<([#5 [*3*] Finally, I recommend that you carefully consider the serious impacts of new energy required for oil shale production and

the potential devastating impacts to our wildlife, water, air, and communities as you take another look at oil shale
development. **#5])>**

Dup_of_OSTS_235_OSTS_041
Organization: Bill Dvorak
Received: 3/3/2012 12:00:00 AM
Commenter1: Bill Dvorak - Nathrop, Colorado 81236 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: 035_Campaign
Submitted As: E-Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/20/2012 12:00:00 AM
Attachments: OSTS2012D00041.htm (Dup_of_OSTS_235_OSTS_041-58448.htm Size = 1 KB)
OSTS_041_Dvorak_Email_OSTS2012D00041.pdf (Dup_of_OSTS_235_OSTS_041-58447.pdf Size = 80 KB)
Submission Text
See Attachment.

<([#1 [*3*] I am deeply concerned about the potential effects to our water, wildlife, communities and public lands if the BLM
initiates a commercial leasing program. The two million acres in UT, WY and CO previously allocated for commercial
leasing is a massive amount of public, taxpayer land that would be sacrificed for a singular use of the landscape. **#1])>**

<([#2 [*2.2*] [*12.3*] While the preferred alternative (Alternative 2) is a step in the right direction, I would like to have seen a draft document
that does not give away hundreds of thousands of taxpayer lands to a failed industry to tinker with. I would have liked to
have seen an alternative that does not endorse giveaways of even more public lands to this unproven industry. **#2])>**

<([#3 [*3*] Oil shale is currently producing no jobs and no revenue the Congressional Budget Office confirmed that it is not
expected to produce significant revenues through 2022. So we have the time to assess the impacts of development to
our water, wildlife, and communities. **#3])>**

<([#4 [*3.10.4*] The land overlying oil shale resources in Utah, Colorado and Wyoming is some of the best wildlife habitat in the West,
outdoor recreation and tourism are huge economic drivers in the West. We must protect these jobs by making smart

about how we allow oil companies to move forward with oil shale speculation. **#4])>**

<([#5 [*3*] Finally, I recommend that you carefully consider the serious impacts of new energy required for oil shale production and
the potential devastating impacts to our wildlife, water, air, and communities as you take another look at oil shale
development. **#5])>**

Dup_of_OSTS_235_OSTS_042
Organization: Jennifer Gray
Received: 3/2/2012 12:00:00 AM
Commenter1: Jennifer Gray - Loveland, Colorado 80538 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: 035_Campaign
Submitted As: E-Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/20/2012 12:00:00 AM
Attachments: OSTS2012D00042.htm (Dup_of_OSTS_235_OSTS_042-58450.htm Size = 1 KB)
OSTS_042_Gray_Email_OSTS2012D00042.pdf (Dup_of_OSTS_235_OSTS_042-58449.pdf Size = 82 KB)
Submission Text
See Attachment.

<([#1 [*3*] I am deeply concerned about the potential effects to our water, wildlife, communities and public lands if the BLM
initiates a commercial leasing program. Not to mention the affects it could have long term for the people that depend
on the land for some part of their lives. The two million acres in UT, WY and CO previously allocated for commercial
leasing is a massive amount of public, taxpayer land that would be sacrificed for a singular use of the landscape. **#1])> <([#2** [*10.6.1*] We
need to stop with the oil companies solution to energy and use new more renewable solutions.
#2])>
<([#3 [*2.2*] [*12.3*] While the preferred alternative (Alternative 2) is a step in the right direction, I would like to have seen a draft document
that does not give away hundreds of thousands of taxpayer lands to a failed industry to tinker with. I would have liked to
have seen an alternative that does not endorse giveaways of even more public lands to this unproven industry.
#3])>
<([#4 [*3*] Oil shale is currently producing no jobs and no revenue the Congressional Budget Office confirmed that it is not
expected to produce significant revenues through 2022. So we have the time to assess the

impacts of development to
our water, wildlife, and communities. **#4])>**

<([#5 [*3.10.4*] The land overlying oil shale resources in Utah, Colorado and Wyoming is some of the best wildlife habitat in the West,
outdoor recreation and tourism are huge economic drivers in the West. We must protect these jobs by making smart
about how we allow oil companies to move forward with oil shale speculation. **#5])>**

<([#6 [*3*] Finally, I recommend that you carefully consider the serious impacts of new energy required for oil shale production and
the potential devastating impacts to our wildlife, water, air, and communities as you take another look at oil shale
development.
#6])>

Dup_of_OSTS_235_OSTS_043
Organization: Thomas Holzfaster
Received: 3/4/2012 12:00:00 AM
Commenter1: Thomas Holzfaster - Lakewooc, Colorado 80226 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: 035_Campaign
Submitted As: E-Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/20/2012 12:00:00 AM
Attachments: OSTS2012D00043.htm (Dup_of_OSTS_235_OSTS_043-58452.htm Size = 1 KB)
OSTS_043_Holzfaster_Email_OSTS2012D00043.pdf (Dup_of_OSTS_235_OSTS_043-58451.pdf Size = 80 KB)
Submission Text
See Attachment.

<([#1 [*3*] I am deeply concerned about the potential effects to our water, wildlife, communities and public lands if the BLM
initiates a commercial leasing program. The two million acres in UT, WY and CO previously allocated for commercial
leasing is a massive amount of public, taxpayer land that would be sacrificed for a singular use of the landscape. **#1])>**

<([#2 [*2.2*] [*12.3*] While the preferred alternative (Alternative 2) is a step in the right direction, I would like to have seen a draft document
that does not give away hundreds of thousands of taxpayer lands to a failed industry to tinker with. I would have liked to
have seen an alternative that does not endorse giveaways of even more public lands to this

unproven industry. **#2])>**

<([#3 [*3*] Oil shale is currently producing no jobs and no revenue the Congressional Budget Office confirmed that it is not
expected to produce significant revenues through 2022. So we have the time to assess the impacts of development to
our water, wildlife, and communities. **#3])>**

<([#4 [*3.10.4*] The land overlying oil shale resources in Utah, Colorado and Wyoming is some of the best wildlife habitat in the West,
outdoor recreation and tourism are huge economic drivers in the West. We must protect these jobs by making smart
about how we allow oil companies to move forward with oil shale speculation. **#4])>**

<([#5 [*3*] Finally, I recommend that you carefully consider the serious impacts of new energy required for oil shale production and
the potential devastating impacts to our wildlife, water, air, and communities as you take another look at oil shale
development.
#5])>

Dup_of_OSTS_235_OSTS_044
Organization: Marilyn Kenny
Received: 3/2/2012 12:00:00 AM
Commenter1: Marilyn Kenny - Cheyenne, Wyoming 82009 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: 035_Campaign
Submitted As: E-Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/20/2012 12:00:00 AM
Attachments: OSTS2012D00044.htm (Dup_of_OSTS_235_OSTS_044-58454.htm Size = 1 KB)
OSTS_044_Kenny_Email_OSTS2012D00044.pdf (Dup_of_OSTS_235_OSTS_044-58453.pdf Size = 80 KB)
Submission Text
See Attachment.

<([#1 [*3*] I am deeply concerned about the potential effects to our water, wildlife, communities and public lands if the BLM
initiates a commercial leasing program. The two million acres in UT, WY and CO previously allocated for commercial
leasing is a massive amount of public, taxpayer land that would be sacrificed for a singular use of the landscape. **#1])>**

<([#2 [*12.3*] [*2.2*] While the preferred alternative (Alternative 2) is a step in the right direction, I would like to have seen a draft document
that does not give away hundreds of thousands of taxpayer lands to a failed industry to tinker with. I would have liked to
have seen an alternative that does not endorse giveaways of even more public lands to this unproven industry. **#2])>**

<([#3 [*3*] Oil shale is currently producing no jobs and no revenue the Congressional Budget Office confirmed that it is not
expected to produce significant revenues through 2022. So we have the time to assess the impacts of development to
our water, wildlife, and communities. **#3])>**

<([#4 [*3.10.4*] The land overlying oil shale resources in Utah, Colorado and Wyoming is some of the best wildlife habitat in the West,
outdoor recreation and tourism are huge economic drivers in the West. We must protect these jobs by making smart
about how we allow oil companies to move forward with oil shale speculation. **#4])>**

<([#5 [*3*] Finally, I recommend that you carefully consider the serious impacts of new energy required for oil shale production and
the potential devastating impacts to our wildlife, water, air, and communities as you take another look at oil shale
development. **#5])>**

Dup_of_OSTS_235_OSTS_045
Organization: Rich Ranieri
Received: 3/3/2012 12:00:00 AM
Commenter1: Rich Ranieri - Wolcott, Colorado 81655 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: 035_Campaign
Submitted As: E-Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/20/2012 12:00:00 AM
Attachments: OSTS2012D00045.htm (Dup_of_OSTS_235_OSTS_045-58456.htm Size = 1 KB)
OSTS_045_Ranieri_Email_OSTS2012D00045.pdf (Dup_of_OSTS_235_OSTS_045-58455.pdf Size = 80 KB)
Submission Text
See Attachment.

<([#1 [*3*] I am deeply concerned about the potential effects to our water, wildlife, communities and public lands if the BLM
initiates a commercial leasing program. The two million acres in UT, WY and CO previously

allocated for commercial
leasing is a massive amount of public, taxpayer land that would be sacrificed for a singular use of the landscape. **#1])>**

<([#2 [*2.2*] [*12.3*] While the preferred alternative (Alternative 2) is a step in the right direction, I would like to have seen a draft document
that does not give away hundreds of thousands of taxpayer lands to a failed industry to tinker with. I would have liked to
have seen an alternative that does not endorse giveaways of even more public lands to this unproven industry. **#2])>**

<([#3 [*3*] Oil shale is currently producing no jobs and no revenue the Congressional Budget Office confirmed that it is not
expected to produce significant revenues through 2022. So we have the time to assess the impacts of development to
our water, wildlife, and communities. **#3])>**

<([#4 [*3.10.4*] The land overlying oil shale resources in Utah, Colorado and Wyoming is some of the best wildlife habitat in the West,
outdoor recreation and tourism are huge economic drivers in the West. We must protect these jobs by making smart
about how we allow oil companies to move forward with oil shale speculation. **#4])>**

<([#5 [*3*] Finally, I recommend that you carefully consider the serious impacts of new energy required for oil shale production and
the potential devastating impacts to our wildlife, water, air, and communities as you take another look at oil shale
development. **#5])>**

Dup_of_OSTS_235_OSTS_046
Organization: Georgeanne Spates
Received: 3/4/2012 12:00:00 AM
Commenter1: Georgeanne Spates - Southold, New York 11971 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: 035_Campaign_Subset
Submitted As: Web Form
Form Letter Category: Form Letter minus Text
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/20/2012 12:00:00 AM
Attachments: OSTS2012D00046.htm (Dup_of_OSTS_235_OSTS_046-58458.htm Size = 1 KB)
OSTS_046_Spates_Email_OSTS2012D00046.pdf (Dup_of_OSTS_235_OSTS_046-58457.pdf Size = 78 KB)
Submission Text
See Attachment.

<([#1 [*3*] I am deeply concerned about the effects of more attempts to develop oil from oil shale. So far it is a very dirty business. **#1])>**
<([#2 [*12.3*] [*3*] More importantly, I am enraged that a massive amount of public land would be leased for oil shale development with all
the consequent problems for our lands, waters, wildlife, and communities. **#2])>**

<([#3 [*3.10.4*] The land overlying oil shale resources in Utah, Colorado and Wyoming is some of the best plant and wildlife habitat in
the West. People who use this land for outdoor recreation and tourism are very significant to the economies there. **#3])>**

<([#4 [*3*] Please, very carefully consider the serious impacts of added energy use required for oil shale production and its
potential devastating impacts as you take another look at oil shale development. **#4])>**

Thanks for your consideration of my comments.

Dup_of_OSTS_235_OSTS_047
Organization: Paul Taylor
Received: 3/5/2012 12:00:00 AM
Commenter1: Paul Taylor - Laramie, Wyoming 82073 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: 035_Campaign
Submitted As: E-Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/24/2012 12:00:00 AM
Attachments: OSTS2012D00047.htm (Dup_of_OSTS_235_OSTS_047-58460.htm Size = 1 KB)
OSTS_047_Taylor_Email_OSTS2012D00047.pdf (Dup_of_OSTS_235_OSTS_047-58459.pdf Size = 80 KB)
Submission Text
See Attachment.

<([#1 [*3*] I am deeply concerned about the potential effects to our water, wildlife, communities and public lands if the BLM
initiates a commercial leasing program. The two million acres in UT, WY and CO previously allocated for commercial
leasing is a massive amount of public, taxpayer land that would be sacrificed for a singular use of the landscape. **#1])>**

<([#2 [*12.3*] [*2.2*] While the preferred alternative (Alternative 2) is a step in the right direction, I

would like to have seen a draft document
that does not give away hundreds of thousands of taxpayer lands to a failed industry to tinker with. I would have liked to
have seen an alternative that does not endorse giveaways of even more public lands to this unproven industry. **#2])>**

<([#3 [*3*] Oil shale is currently producing no jobs and no revenue the Congressional Budget Office confirmed that it is not
expected to produce significant revenues through 2022. So we have the time to assess the impacts of development to
our water, wildlife, and communities. **#3])>**

<([#4 [*3.10.4*] The land overlying oil shale resources in Utah, Colorado and Wyoming is some of the best wildlife habitat in the West,
outdoor recreation and tourism are huge economic drivers in the West. We must protect these jobs by making smart
about how we allow oil companies to move forward with oil shale speculation. **#4])>**

<([#5 [*3*] Finally, I recommend that you carefully consider the serious impacts of new energy required for oil shale production and
the potential devastating impacts to our wildlife, water, air, and communities as you take another look at oil shale
development.
#5])>

Dup_of_OSTS_235_OSTS_048
Organization: Andy Blair
Received: 3/7/2012 12:00:00 AM
Commenter1: Andy Blair - Lander, Wyoming 82520 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: 035_Campaign_plus
Submitted As: E-Mail
Form Letter Category: Form Letter plus Text
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/24/2012 12:00:00 AM
Attachments: OSTS2012D00048.htm (Dup_of_OSTS_235_OSTS_048-58462.htm Size = 1 KB)
OSTS_048_Blair_Email_OSTS2012D00048.pdf (Dup_of_OSTS_235_OSTS_048-58461.pdf Size = 81 KB)
Submission Text
See Attachment.

<([#1 [*3.4.1*] The school I work for runs trips on the Green River right through the heart of the Uintah Basin. Summer trips during
drought years already contend with low water situations that make the trips a challenge. I am

concerned that water
used for oil shale will further deplete this scarce resource and directly impact our operations. **#1])>**

<([#2 [*3*] I remain deeply concerned about the potential effects to our water, wildlife, communities and public lands if the BLM
initiates a commercial leasing program. The two million acres in UT, WY and CO previously allocated for commercial
leasing is a massive amount of public, taxpayer land that would be sacrificed for a singular use of the landscape. **#2])>**

<([#3 [*2.2*] [*12.3*] While the preferred alternative (Alternative 2) is a step in the right direction, I would like to have seen a draft document
that does not give away hundreds of thousands of taxpayer lands to a failed industry to tinker with. I would have liked to
have seen an alternative that does not endorse giveaways of even more public lands to this unproven industry. **#3])>**

<([#4 [*3*] Oil shale is currently producing no jobs and no revenue the Congressional Budget Office confirmed that it is not
expected to produce significant revenues through 2022. So we have the time to assess the impacts of development to
our water, wildlife, and communities. **#4])>**

<([#5 [*3.10.4*] The land overlying oil shale resources in Utah, Colorado and Wyoming is some of the best wildlife habitat in the West,
outdoor recreation and tourism are huge economic drivers in the West. We must protect these jobs by making smart
about how we allow oil companies to move forward with oil shale speculation. **#5])>**

<([#6 [*3*] Finally, I recommend that you carefully consider the serious impacts of new energy required for oil shale production and
the potential devastating impacts to our wildlife, water, air, and communities as you take another look at oil shale
development. **#6])>**

Dup_of_OSTS_235_OSTS_049
Organization: Cassandra S.
Received: 3/5/2012 12:00:00 AM
Commenter1: Cassandra S. - Lafayette, Colorado 80026 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: 035_Campaign
Submitted As: E-Mail
Form Letter Category:
Form Letter Master:

Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/24/2012 12:00:00 AM
Attachments: OSTS2012D00049.htm (Dup_of_OSTS_235_OSTS_049-58464.htm Size = 1 KB)
OSTS_049_Cassandra_S_Email_OSTS2012D00049.pdf (Dup_of_OSTS_235_OSTS_049-58463.pdf Size = 80 KB)
Submission Text
See Attachment.

<([#1 [*3*] I am deeply concerned about the potential effects to our water, wildlife, communities and public lands if the BLM
initiates a commercial leasing program. The two million acres in UT, WY and CO previously allocated for commercial
leasing is a massive amount of public, taxpayer land that would be sacrificed for a singular use of the landscape. **#1])>**

<([#2 [*2.2*] [*12.3*] While the preferred alternative (Alternative 2) is a step in the right direction, I would like to have seen a draft document
that does not give away hundreds of thousands of taxpayer lands to a failed industry to tinker with. I would have liked to
have seen an alternative that does not endorse giveaways of even more public lands to this unproven industry. **#2])>**
<([#3 [*3*] Oil shale is currently producing no jobs and no revenue the Congressional Budget Office confirmed that it is not
expected to produce significant revenues through 2022. So we have the time to assess the impacts of development to
our water, wildlife, and communities. **#3])>**
<([#4 [*3.10.4*] The land overlying oil shale resources in Utah, Colorado and Wyoming is some of the best wildlife habitat in the West,
outdoor recreation and tourism are huge economic drivers in the West. We must protect these jobs by making smart
about how we allow oil companies to move forward with oil shale speculation. **#4])>**
<([#5 [*3*] Finally, I recommend that you carefully consider the serious impacts of new energy required for oil shale production and
the potential devastating impacts to our wildlife, water, air, and communities as you take another look at oil shale
development.
#5])>

Dup_of_OSTS_235_OSTS_050
Organization: Richard Engelmann
Received: 3/23/2012 12:00:00 AM
Commenter1: Richard Engelmann - Boulder, Colorado 80301 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: 035_Campaign
Submitted As: E-Mail

Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/25/2012 12:00:00 AM
Attachments: OSTS2012D00050.htm (Dup_of_OSTS_235_OSTS_050-58466.htm Size = 1 KB)
OSTS_050_Engelmann_Email_OSTS2012D00050.pdf (Dup_of_OSTS_235_OSTS_050-58465.pdf Size = 80 KB)
Submission Text
See Attachment.

<([#1 [*3*] I am deeply concerned about the potential effects to our water, wildlife, communities and public lands if the BLM
initiates a commercial leasing program. The two million acres in UT, WY and CO previously allocated for commercial
leasing is a massive amount of public, taxpayer land that would be sacrificed for a singular use of the landscape. **#1])>**

<([#2 [*12.3*] [*2.2*] While the preferred alternative (Alternative 2) is a step in the right direction, I would like to have seen a draft document
that does not give away hundreds of thousands of taxpayer lands to a failed industry to tinker with. I would have liked to
have seen an alternative that does not endorse giveaways of even more public lands to this unproven industry. **#2])>**

<([#3 [*3*] Oil shale is currently producing no jobs and no revenue the Congressional Budget Office confirmed that it is not
expected to produce significant revenues through 2022. So we have the time to assess the impacts of development to
our water, wildlife, and communities. **#3])>**

<([#4 [*3.10.4*] The land overlying oil shale resources in Utah, Colorado and Wyoming is some of the best wildlife habitat in the West,
outdoor recreation and tourism are huge economic drivers in the West. We must protect these jobs by making smart
about how we allow oil companies to move forward with oil shale speculation. **#4])>**

<([#5 [*3*] Finally, I recommend that you carefully consider the serious impacts of new energy required for oil shale production and
the potential devastating impacts to our wildlife, water, air, and communities as you take another look at oil shale
development. **#5])>**

Dup_of_OSTS_235_OSTS_051
Organization: Tiffanie Rudow
Received: 3/28/2012 12:00:00 AM
Commenter1: Tiffanie Rudow - Glenwood Springs, Colorado 81601 (United States)
Organization1:

Commenter Type: Member of the Public
Classification: none
Submission Category: 035_Campaign
Submitted As: E-Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/25/2012 12:00:00 AM
Attachments: OSTS2012D00051.htm (Dup_of_OSTS_235_OSTS_051-58468.htm Size = 1 KB)
OSTS_051_Rudow_Email_OSTS2012D00051.pdf (Dup_of_OSTS_235_OSTS_051-58467.pdf Size = 80 KB)
Submission Text
See Attachment.

<([#1 [*3*] I am deeply concerned about the potential effects to our water, wildlife, communities and public lands if the BLM
initiates a commercial leasing program. The two million acres in UT, WY and CO previously allocated for commercial
leasing is a massive amount of public, taxpayer land that would be sacrificed for a singular use of the landscape. **#1])>**

<([#2 [*2.2*] [*12.3*] While the preferred alternative (Alternative 2) is a step in the right direction, I would like to have seen a draft document
that does not give away hundreds of thousands of taxpayer lands to a failed industry to tinker with. I would have liked to
have seen an alternative that does not endorse giveaways of even more public lands to this unproven industry. **#2])>**

<([#3 [*3*] Oil shale is currently producing no jobs and no revenue the Congressional Budget Office confirmed that it is not
expected to produce significant revenues through 2022. So we have the time to assess the impacts of development to
our water, wildlife, and communities. **#3])>**

<([#4 [*3.10.4*] The land overlying oil shale resources in Utah, Colorado and Wyoming is some of the best wildlife habitat in the West,
outdoor recreation and tourism are huge economic drivers in the West. We must protect these jobs by making smart
about how we allow oil companies to move forward with oil shale speculation. **#4])>**

<([#5 [*3*] Finally, I recommend that you carefully consider the serious impacts of new energy required for oil shale production and
the potential devastating impacts to our wildlife, water, air, and communities as you take another look at oil shale
development. **#5])>**

Dup_of_OSTS_235_OSTS_052

Organization: Robert Spencer
Received: 3/5/2012 12:00:00 AM
Commenter1: Robert Spencer - Rock Springs, Wyoming 82901 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: 035_Campaign
Submitted As: E-Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/25/2012 12:00:00 AM
Attachments: OSTS2012D00052.htm (Dup_of_OSTS_235_OSTS_052-58470.htm Size = 1 KB)
OSTS_052_Spencer_Email_OSTS2012D00052.pdf (Dup_of_OSTS_235_OSTS_052-58469.pdf Size = 80 KB)
Submission Text
See Attachment.

<([#1 [*3*] I am deeply concerned about the potential effects to our water, wildlife, communities and public lands if the BLM
initiates a commercial leasing program. The two million acres in UT, WY and CO previously allocated for commercial
leasing is a massive amount of public, taxpayer land that would be sacrificed for a singular use of the landscape. **#1])>**

<([#2 [*12.3*] [*2.2*] While the preferred alternative (Alternative 2) is a step in the right direction, I would like to have seen a draft document
that does not give away hundreds of thousands of taxpayer lands to a failed industry to tinker with. I would have liked to
have seen an alternative that does not endorse giveaways of even more public lands to this unproven industry. **#2])>**

<([#3 [*3*] Oil shale is currently producing no jobs and no revenue the Congressional Budget Office confirmed that it is not
expected to produce significant revenues through 2022. So we have the time to assess the impacts of development to
our water, wildlife, and communities. **#3])>**

<([#4 [*3.10.4*] The land overlying oil shale resources in Utah, Colorado and Wyoming is some of the best wildlife habitat in the West,
outdoor recreation and tourism are huge economic drivers in the West. We must protect these jobs by making smart
about how we allow oil companies to move forward with oil shale speculation. **#4])>**

<([#5 [*3*] Finally, I recommend that you carefully consider the serious impacts of new energy required for oil shale production and

the potential devastating impacts to our wildlife, water, air, and communities as you take another look at oil shale
development. **#5])>**

Dup_of_OSTS_235_OSTS_053
Organization: Connie Wilcox-Timar
Received: 3/5/2012 12:00:00 AM
Commenter1: Connie Wilcox-Timar - Rock Springs, Wyoming 82902 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: 035_Campaign
Submitted As: E-Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/25/2012 12:00:00 AM
Attachments: OSTS2012D00053.htm (Dup_of_OSTS_235_OSTS_053-58472.htm Size = 1 KB)
OSTS_053_Wilcox-Timar_Email_OSTS2012D00053.pdf (Dup_of_OSTS_235_OSTS_053-58471.pdf Size = 80 KB)
Submission Text
See Attachment.
<([#1 [*3*] I am deeply concerned about the potential effects to our water, wildlife, communities and public lands if the BLM
initiates a commercial leasing program. The two million acres in UT, WY and CO previously allocated for commercial
leasing is a massive amount of public, taxpayer land that would be sacrificed for a singular use of the landscape. **#1])>**

<([#2 [*2.2*] [*12.3*] While the preferred alternative (Alternative 2) is a step in the right direction, I would like to have seen a draft document
that does not give away hundreds of thousands of taxpayer lands to a failed industry to tinker with. I would have liked to
have seen an alternative that does not endorse giveaways of even more public lands to this unproven industry. **#2])>**

<([#3 [*3*] Oil shale is currently producing no jobs and no revenue the Congressional Budget Office confirmed that it is not
expected to produce significant revenues through 2022. So we have the time to assess the impacts of development to
our water, wildlife, and communities. **#3])>**

<([#4 [*3.10.4*] The land overlying oil shale resources in Utah, Colorado and Wyoming is some of the best wildlife habitat in the West,
outdoor recreation and tourism are huge economic drivers in the West. We must protect these jobs by making smart
about how we allow oil companies to move forward with oil shale speculation. **#4])>**

<([#5 [*3*] Finally, I recommend that you carefully consider the serious impacts of new energy required for oil shale production and
the potential devastating impacts to our wildlife, water, air, and communities as you take another look at oil shale
development. #5])>

Dup_of_OSTS_235_OSTS_054
Organization: Rita Thompson
Received: 3/5/2012 12:00:00 AM
Commenter1: Rita Thompson - Green River, Wyoming 82935 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: 035_Campaign
Submitted As: E-Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/25/2012 12:00:00 AM
Attachments: OSTS2012D00054.htm (Dup_of_OSTS_235_OSTS_054-58474.htm Size = 1 KB)
OSTS_054_Thompson_Rita_Email_OSTS2012D00054.pdf (Dup_of_OSTS_235_OSTS_054-58473.pdf Size = 80 KB)
Submission Text
See Attachment.

<([#1 [*3*] I am deeply concerned about the potential effects to our water, wildlife, communities and public lands if the BLM
initiates a commercial leasing program. The two million acres in UT, WY and CO previously allocated for commercial
leasing is a massive amount of public, taxpayer land that would be sacrificed for a singular use of the landscape. #1])>

<([#2 [*2.2*] [*12.3*] While the preferred alternative (Alternative 2) is a step in the right direction, I would like to have seen a draft document
that does not give away hundreds of thousands of taxpayer lands to a failed industry to tinker with. I would have liked to
have seen an alternative that does not endorse giveaways of even more public lands to this unproven industry. #2])>

<([#3 [*3*] Oil shale is currently producing no jobs and no revenue the Congressional Budget Office confirmed that it is not
expected to produce significant revenues through 2022. So we have the time to assess the impacts of development to
our water, wildlife, and communities. #3])>

<([#4 [*3.10.4*] The land overlying oil shale resources in Utah, Colorado and Wyoming is some of

the best wildlife habitat in the West,
outdoor recreation and tourism are huge economic drivers in the West. We must protect these jobs by making smart
about how we allow oil companies to move forward with oil shale speculation. **#4])>**

<([#5 [*3*] Finally, I recommend that you carefully consider the serious impacts of new energy required for oil shale production and
the potential devastating impacts to our wildlife, water, air, and communities as you take another look at oil shale
development.
#5])>

Dup_of_OSTS_235_OSTS_055
Organization: Bill Thompson
Received: 3/5/2012 12:00:00 AM
Commenter1: Bill Thompson - Green River, Wyoming 82935 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: 035_Campaign
Submitted As: E-Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/25/2012 12:00:00 AM
Attachments: OSTS2012D00055.htm (Dup_of_OSTS_235_OSTS_055-58476.htm Size = 1 KB)
OSTS_054_Thompson_Rita_Email_OSTS2012D00055.pdf (Dup_of_OSTS_235_OSTS_055-58475.pdf Size = 80 KB)
OSTS_055_Thompson_Bill_Email.pdf (Dup_of_OSTS_235_OSTS_055-58477.pdf Size = 81 KB)
Submission Text
See Attachment.
<([#1 [*3*] I am deeply concerned about the potential effects to our water, wildlife, communities and public lands if the BLM
initiates a commercial leasing program. The two million acres in UT, WY and CO previously allocated for commercial
leasing is a massive amount of public, taxpayer land that would be sacrificed for a singular use of the landscape. **#1])>**

<([#2 [*2.2*] [*12.3*] While the preferred alternative (Alternative 2) is a step in the right direction, I would like to have seen a draft document
that does not give away hundreds of thousands of taxpayer lands to a failed industry to tinker with. I would have liked to
have seen an alternative that does not endorse giveaways of even more public lands to this unproven industry. **#2])>**

<([#3 [*3*] Oil shale is currently producing no jobs and no revenue the Congressional Budget

Office confirmed that it is not
expected to produce significant revenues through 2022. So we have the time to assess the impacts of development to
our water, wildlife, and communities. **#3])>**

<([#4 [*3.10.4*] The land overlying oil shale resources in Utah, Colorado and Wyoming is some of the best wildlife habitat in the West,
outdoor recreation and tourism are huge economic drivers in the West. We must protect these jobs by making smart
about how we allow oil companies to move forward with oil shale speculation. **#4])>**

<([#5 [*3*] Finally, I recommend that you carefully consider the serious impacts of new energy required for oil shale production and
the potential devastating impacts to our wildlife, water, air, and communities as you take another look at oil shale
development. **#5])>**

Dup_of_OSTS_235_OSTS_056
Organization: Kent Temur
Received: 3/5/2012 12:00:00 AM
Commenter1: Kent Temur - Rock Springs, Wyoming 82902 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: 035_Campaign
Submitted As: E-Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/25/2012 12:00:00 AM
Attachments: OSTS2012D00056.htm (Dup_of_OSTS_235_OSTS_056-58479.htm Size = 1 KB)
OSTS_056_Temur_Email_OSTS2012D00056.pdf (Dup_of_OSTS_235_OSTS_056-58478.pdf Size = 80 KB)
Submission Text
See Attachment.

<([#1 [*3*] I am deeply concerned about the potential effects to our water, wildlife, communities and public lands if the BLM
initiates a commercial leasing program. The two million acres in UT, WY and CO previously allocated for commercial
leasing is a massive amount of public, taxpayer land that would be sacrificed for a singular use of the landscape. **#1])>**

<([#2 [*12.3*] [*2.2*] While the preferred alternative (Alternative 2) is a step in the right direction, I would like to have seen a draft document
that does not give away hundreds of thousands of taxpayer lands to a failed industry to tinker with. I would have liked to

have seen an alternative that does not endorse giveaways of even more public lands to this unproven industry. **#2])>**

<([#3 [*3*] Oil shale is currently producing no jobs and no revenue the Congressional Budget Office confirmed that it is not
expected to produce significant revenues through 2022. So we have the time to assess the impacts of development to
our water, wildlife, and communities. **#3])>**

<([#4 [*3.10.4*] The land overlying oil shale resources in Utah, Colorado and Wyoming is some of the best wildlife habitat in the West,
outdoor recreation and tourism are huge economic drivers in the West. We must protect these jobs by making smart
about how we allow oil companies to move forward with oil shale speculation. **#4])>**

<([#5 [*3*] Finally, I recommend that you carefully consider the serious impacts of new energy required for oil shale production and
the potential devastating impacts to our wildlife, water, air, and communities as you take another look at oil shale
development. **#5])>**

Dup_of_OSTS_235_OSTS_057
Organization: Patrick Massaro
Received: 4/3/2012 12:00:00 AM
Commenter1: Patrick Massaro - Denver, Colorado 80203 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: 035_Campaign
Submitted As: E-Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/25/2012 12:00:00 AM
Attachments: OSTS2012D00057.htm (Dup_of_OSTS_235_OSTS_057-58481.htm Size = 1 KB)
OSTS_057_Massaro_Email_OSTS2012D00057.pdf (Dup_of_OSTS_235_OSTS_057-58480.pdf Size = 81 KB)
Submission Text
See Attachment.

<([#1 [*3*] I am deeply concerned about the potential effects to our water, wildlife, communities and public lands if the BLM
initiates a commercial leasing program. The two million acres in UT, WY and CO previously allocated for commercial
leasing is a massive amount of public, taxpayer land that would be sacrificed for a singular use of the landscape. **#1])>**

<([#2 [*2.2*] [*12.3*] While the preferred alternative (Alternative 2) is a step in the right direction, I would like to have seen a draft document
that does not give away hundreds of thousands of taxpayer lands to a failed industry to tinker with. I would have liked to
have seen an alternative that does not endorse giveaways of even more public lands to this unproven industry. **#2])>**

<([#3 [*3*] Oil shale is currently producing no jobs and no revenue the Congressional Budget Office confirmed that it is not
expected to produce significant revenues through 2022. So we have the time to assess the impacts of development to
our water, wildlife, and communities. **#3])>**

<([#4 [*3.10.4*] The land overlying oil shale resources in Utah, Colorado and Wyoming is some of the best wildlife habitat in the West,
outdoor recreation and tourism are huge economic drivers in the West. We must protect these jobs by making smart
about how we allow oil companies to move forward with oil shale speculation. **#4])>**

<([#5 [*3*] Finally, I recommend that you carefully consider the serious impacts of new energy required for oil shale production and
the potential devastating impacts to our wildlife, water, air, and communities as you take another look at oil shale
development. **#5])>**

Dup_of_OSTS_235_OSTS_058
Organization: Luke Schafer
Received: 4/4/2012 12:00:00 AM
Commenter1: Luke Schafer - Craig, Colorado 81625 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: 035_Campaign
Submitted As: E-Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/25/2012 12:00:00 AM
Attachments: OSTS2012D00058.htm (Dup_of_OSTS_235_OSTS_058-58483.htm Size = 1 KB)
OSTS_058_Schafer_Email_OSTS2012D00058.pdf (Dup_of_OSTS_235_OSTS_058-58482.pdf Size = 81 KB)
Submission Text
See Attachment.

<([#1 [*3*] I am deeply concerned about the potential effects to our water, wildlife, communities and public lands if the BLM
initiates a commercial leasing program. The two million acres in UT, WY and CO previously

allocated for commercial
leasing is a massive amount of public, taxpayer land that would be sacrificed for a singular use of the landscape. **#1])>**

<([#2 [*2.2*] [*12.3*] While the preferred alternative (Alternative 2) is a step in the right direction, I would like to have seen a draft document
that does not give away hundreds of thousands of taxpayer lands to a failed industry to tinker with. I would have liked to
have seen an alternative that does not endorse giveaways of even more public lands to this unproven industry. **#2])>**

<([#3 [*3*] Oil shale is currently producing no jobs and no revenue the Congressional Budget Office confirmed that it is not
expected to produce significant revenues through 2022. So we have the time to assess the impacts of development to
our water, wildlife, and communities. **#3])>**

<([#4 [*3.10.4*] The land overlying oil shale resources in Utah, Colorado and Wyoming is some of the best wildlife habitat in the West,
outdoor recreation and tourism are huge economic drivers in the West. We must protect these jobs by making smart
about how we allow oil companies to move forward with oil shale speculation. **#4])>**

<([#5 [*3*] Finally, I recommend that you carefully consider the serious impacts of new energy required for oil shale production and
the potential devastating impacts to our wildlife, water, air, and communities as you take another look at oil shale
development. **#5])>**

Dup_of_OSTS_235_OSTS_059
Organization: John Cornely
Received: 4/19/2012 12:00:00 AM
Commenter1: John Cornely - Littleton, Colorado 80127 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: 035_Campaign
Submitted As: E-Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/25/2012 12:00:00 AM
Attachments: OSTS2012D00059.htm (Dup_of_OSTS_235_OSTS_059-58485.htm Size = 1 KB)
OSTS_059_Cornely_Email_OSTS2012D00059.pdf (Dup_of_OSTS_235_OSTS_059-58484.pdf Size = 82 KB)
Submission Text
See Attachment.

<([#1 [*3*] I am deeply concerned about the potential effects to our water, wildlife, communities and public lands if the BLM
initiates a commercial leasing program. The two million acres in UT, WY and CO previously allocated for commercial
leasing is a massive amount of public, taxpayer land that would be sacrificed for a singular use of the landscape. **#1])>**

<([#2 [*2.2*] [*12.3*] While the preferred alternative (Alternative 2) is a step in the right direction, I would like to have seen a draft document
that does not give away hundreds of thousands of taxpayer lands to a failed industry to tinker with. I would have liked to
have seen an alternative that does not endorse giveaways of even more public lands to this unproven industry. **#2])>**

<([#3 [*3*] Oil shale is currently producing no jobs and no revenue the Congressional Budget Office confirmed that it is not
expected to produce significant revenues through 2022. So we have the time to assess the impacts of development to
our water, wildlife, and communities. **#3])>**

<([#4 [*3.10.4*] The land overlying oil shale resources in Utah, Colorado and Wyoming is some of the best wildlife habitat in the West,
outdoor recreation and tourism are huge economic drivers in the West. We must protect these jobs by making smart
about how we allow oil companies to move forward with oil shale speculation. **#4])>**

<([#5 [*3*] Finally, I recommend that you carefully consider the serious impacts of new energy required for oil shale production and
the potential devastating impacts to our wildlife, water, air, and communities as you take another look at oil shale
development.
#5])>

Dup_of_OSTS_235_OSTS_060
Organization: John Anderson
Received: 4/19/2012 12:00:00 AM
Commenter1: John Anderson - Laporte, Colorado 80535 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: 035_Campaign
Submitted As: E-Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/25/2012 12:00:00 AM
Attachments: OSTS2012D00060.htm (Dup_of_OSTS_235_OSTS_060-58487.htm Size = 1

KB)
OSTS_060_Anderson_Email_OSTS2012D00060.pdf (Dup_of_OSTS_235_OSTS_060-58486.pdf Size = 81 KB)
Submission Text
See Attachment.

<([#1 [*3*] I am deeply concerned about the potential effects to our water, wildlife, communities and public lands if the BLM
initiates a commercial leasing program. The two million acres in UT, WY and CO previously allocated for commercial
leasing is a massive amount of public, taxpayer land that would be sacrificed for a singular use of the landscape. **#1])>**

<([#2 [*2.2*] [*12.3*] While the preferred alternative (Alternative 2) is a step in the right direction, I would like to have seen a draft document
that does not give away hundreds of thousands of taxpayer lands to a failed industry to tinker with. I would have liked to
have seen an alternative that does not endorse giveaways of even more public lands to this unproven industry. **#2])>**

<([#3 [*3*] Oil shale is currently producing no jobs and no revenue the Congressional Budget Office confirmed that it is not
expected to produce significant revenues through 2022. So we have the time to assess the impacts of development to
our water, wildlife, and communities. **#3])>**

<([#4 [*3.10.4*] The land overlying oil shale resources in Utah, Colorado and Wyoming is some of the best wildlife habitat in the West,
outdoor recreation and tourism are huge economic drivers in the West. We must protect these jobs by making smart
about how we allow oil companies to move forward with oil shale speculation. **#4])>**

<([#5 [*3*] Finally, I recommend that you carefully consider the serious impacts of new energy required for oil shale production and
the potential devastating impacts to our wildlife, water, air, and communities as you take another look at oil shale
development. **#5])>**

Dup_of_OSTS_235_OSTS_061
Organization: Robert LeClair
Received: 4/20/2012 12:00:00 AM
Commenter1: Robert LeClair - Westminster, Colorado 80234 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: 035_Campaign
Submitted As: E-Mail

Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/25/2012 12:00:00 AM
Attachments: OSTS2012D00061.htm (Dup_of_OSTS_235_OSTS_061-58489.htm Size = 1 KB)
OSTS_061_LeClair_Email_OSTS2012D00061.pdf (Dup_of_OSTS_235_OSTS_061-58488.pdf Size = 82 KB)
Submission Text
See Attachment.

<([#1 [*3*] I am deeply concerned about the potential effects to our water, wildlife, communities and public lands if the BLM
initiates a commercial leasing program. The two million acres in UT, WY and CO previously allocated for commercial
leasing is a massive amount of public, taxpayer land that would be sacrificed for a singular use of the landscape. **#1])>**

<([#2 [*2.2*] [*12.3*] While the preferred alternative (Alternative 2) is a step in the right direction, I would like to have seen a draft document
that does not give away hundreds of thousands of taxpayer lands to a failed industry to tinker with. I would have liked to
have seen an alternative that does not endorse giveaways of even more public lands to this unproven industry.
#2])>
<([#3 [*3*] Oil shale is currently producing no jobs and no revenue the Congressional Budget Office confirmed that it is not
expected to produce significant revenues through 2022. So we have the time to assess the impacts of development to
our water, wildlife, and communities. **#3])>**

<([#4 [*3.10.4*] The land overlying oil shale resources in Utah, Colorado and Wyoming is some of the best wildlife habitat in the West,
outdoor recreation and tourism are huge economic drivers in the West. We must protect these jobs by making smart
about how we allow oil companies to move forward with oil shale speculation. **#4])>**

<([#5 [*3*] Finally, I recommend that you carefully consider the serious impacts of new energy required for oil shale production and
the potential devastating impacts to our wildlife, water, air, and communities as you take another look at oil shale
development. **#5])>**

Dup_of_OSTS_235_OSTS_063
Organization: Kerri Stroupe
Received: 4/21/2012 12:00:00 AM
Commenter1: Kerri Stroupe - Denver, Colorado 80211 (United States)

Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: 035_Campaign
Submitted As: E-Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/25/2012 12:00:00 AM
Attachments: OSTS2012D00063.htm (Dup_of_OSTS_235_OSTS_063-58596.htm Size = 1 KB)
OSTS_063_Stroupe_Email_OSTS2012D00063.pdf (Dup_of_OSTS_235_OSTS_063-58595.pdf Size = 81 KB)
Submission Text
See Attachment.

<([#1 [*3*] I am deeply concerned about the potential effects to our water, wildlife, communities and public lands if the BLM initiates a commercial leasing program. The two million acres in UT, WY and CO previously allocated for commercial leasing is a massive amount of public, taxpayer land that would be sacrificed for a singular use of the landscape. **#1])>**

<([#2 [*12.3*] [*2.2*] While the preferred alternative (Alternative 2) is a step in the right direction, I would like to have seen a draft document that does not give away hundreds of thousands of taxpayer lands to a failed industry to tinker with. I would have liked to have seen an alternative that does not endorse giveaways of even more public lands to this unproven industry. **#2])>**

<([#3 [*3*] Oil shale is currently producing no jobs and no revenue the Congressional Budget Office confirmed that it is not expected to produce significant revenues through 2022. So we have the time to assess the impacts of development to our water, wildlife, and communities. **#3])>**

<([#4 [*3.10.4*] The land overlying oil shale resources in Utah, Colorado and Wyoming is some of the best wildlife habitat in the West, outdoor recreation and tourism are huge economic drivers in the West. We must protect these jobs by making smart about how we allow oil companies to move forward with oil shale speculation.
#4])>
<([#5 [*3*] Finally, I recommend that you carefully consider the serious impacts of new energy required for oil shale production and the potential devastating impacts to our wildlife, water, air, and communities as you take another look at oil shale development. **#5])>**

Dup_of_OSTS_235_OSTS_064
Organization: Don Thompson
Received: 4/22/2012 12:00:00 AM
Commenter1: Don Thompson - Alamosa, Colorado 81101 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: 035_Campaign_plus

Submitted As: E-Mail
Form Letter Category: Form Letter plus Text
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/25/2012 12:00:00 AM
Attachments: OSTS2012D00064.htm (Dup_of_OSTS_235_OSTS_064-58598.htm Size = 1 KB)
OSTS_064_Thompson_Don_Email_OSTS2012D00064.pdf (Dup_of_OSTS_235_OSTS_064-58597.pdf Size = 82 KB)
Submission Text
See Attachment.

<([#1 [*3.4.1*] Water is more important than potential oil. I can live without oil, but not without water. **#1])>**

<([#2 [*3*] I am deeply concerned about the potential effects to our water, wildlife, communities and public lands if the BLM initiates a commercial leasing program. The two million acres in UT, WY and CO previously allocated for commercial leasing is a massive amount of public, taxpayer land that would be sacrificed for a singular use of the landscape. **#2])>**

<([#3 [*2.2*] [*12.3*] While the preferred alternative (Alternative 2) is a step in the right direction, I would like to have seen a draft document that does not give away hundreds of thousands of taxpayer lands to a failed industry to tinker with. I would have liked to have seen an alternative that does not endorse giveaways of even more public lands to this unproven industry. **#3])>**

<([#4 [*3*] Oil shale is currently producing no jobs and no revenue the Congressional Budget Office confirmed that it is not expected to produce significant revenues through 2022. So we have the time to assess the impacts of development to our water, wildlife, and communities. **#4])>**

<([#5 [*3.10.4*] The land overlying oil shale resources in Utah, Colorado and Wyoming is some of the best wildlife habitat in the West, outdoor recreation and tourism are huge economic drivers in the West. We must protect these jobs by making smart about how we allow oil companies to move forward with oil shale speculation. **#5])>**

<([#6 [*3*] Finally, I recommend that you carefully consider the serious impacts of new energy required for oil shale production and the potential devastating impacts to our wildlife, water, air, and communities as you take another look at oil shale development.
#6])>

DUP-of_50324_OSTS50342
Organization: SW WY CLG, John Woodward
Received: 5/4/2012 6:02:57 PM
Commenter1: John Woodward - Kemmerer, Wyoming 83101 (United States)
Organization1:SW WY CLG
Commenter Type: Cooperating Agency
Classification:
Submission Category: Standard Web Form

Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** klett
Attachments: OSTS2012D50342.htm (DUP-of_50324_OSTS50342-59074.htm Size = 1 KB)
clg_os_ts_eis_OSTS2012D50342.pdf (DUP-of_50324_OSTS50342-59073.pdf Size = 3904 KB)
Submission Text
See Attachment.

OSTS_001
Organization: Edwin Firmage
Received: 3/14/2012 12:00:00 AM
Commenter1: Edwin Firmage - Salt Lake City, Utah 84124 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Comment Form
Submitted As: SLC Meeting
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/20/2012 12:00:00 AM
Attachments: OSTS2012D00001.htm (OSTS_001-58357.htm Size = 1 KB)
OSTS_001_Firmage_Form_and__Written_Comments_SLC_OSTS2012D00001.pdf (OSTS_001-58356.pdf Size = 314 KB)
Submission Text
See Attachment.

<([#1 [*9.2*] "I see all that we have ruined in order to have, all that was owned for a lifetime to be destroyed forever." - Wendell Berry

According to its mission statement, the purpose of the Bureau of Land Management is to *"sustain the health, diversity, and productivity of the public lands for the* use *and enjoyment of present and future generations."* But if history is anything to go by, the BLM's mission to sustain health and diversity is a stewardship more in the breach than the observance. The question before us today is whether this will continue to be the case, whether Wendell Berry's words I just quoted will continue to characterize BLM decision making or whether we will at last begin to manage our public lands as we do our homes. It is my argument today that oil shale development in any form is inconsistent with the BLM's role as the steward of the land for all generations.
#1])>
Let me summarize my objections to oil shale development in four bullet points.

<([#2 [*8*] First, oil shale development is inconsistent with the principal of multiple use, because all lands so developed are destroyed forever. Unlike subsurface forms of mining that have thrived in the West, oil shale mining involves the permanent removal of all soil, and therefore all other uses, and it does so on an enormous scale. It must be enormous in order *to* meaningfully offset our oil consumption, which is enormous. We have all witnessed the effects of such large-

scale earth removal on both natural and human communities in Appalachia. That is a disaster that we do not *have* to repeat. **#2])>**

<([#3 [*3.5.1.6*] Second, oil shale development is inconsistent with the imperative that we face to reduce greenhouse gas emissions. Summarizing the studies of over 450 primary researchers, 800 contributing authors, and 2,500 peer reviewers around the world, the 2007 report of the Intergovernmental Panel on Climate Change concluded that in order to avoid climate catastrophe, the world must effectively eliminate its use of fossil fuels by midcentury. The IPCC's conclusion was delivered in the form of a range of probabilities for averting disaster. Based on data prior to 2007, the IPCC projected that eliminating 50% of world greenhouse gas emissions by 2050 would yield just a 15% probability of averting catastrophic climate change. An 85% reduction would yield an 85% probability of averting disaster. This, for many, is therefore the minimum world target. It's an intimidating number.

For the U.S., however, the numbers are even more stark, because of our disproportionate role in the production of global greenhouse gasses, of which we generate 20% despite having just 6% of global population. For the world to reach a 50% reductions target by 2050, the U.S. must cut its emissions by 88%, and for the world to hit its 85% target, the U.S. must cut its greenhouse gas emissions by 96%.[1] Effectively, by mid-century we must eliminate the use of fossil fuels in this country.

But this is not the direction in which we are presently headed. On the contrary, as is evidenced by the fact that we are debating the development of an entirely NEW fossil fuel, it's clear that we have yet to come to terms with the implications of climate change for U.S. energy and land management policy. The IPCC's 2007 recommendations have scarcely begun to be implemented, and climate change continues to accelerate beyond worst-case projections. As we contemplate our failure in years to come, we may look back on a 96% reduction by 2050 as a comparatively easy challenge.

The effect of our refusal to recognize climate reality will be felt everywhere but perhaps especially here in the West, where average annual temperatures have risen not by the global average of 1.3°F but by 2.5°F or more. Such increases, and their associated changes in precipitation, snowpack, and the timing of snow melt, will forever alter natural and therefore human landscapes in the West. Our failure to respond appropriately to climate change will lead to the desertification and destruction of much of the West as we know it.

In the 1930s, Walter Cottam, professor of botany at the University of Utah, surveyed the catastrophic destruction of Utah's forests and valley grasslands due to massive overgrazing throughout the state. Cottam predicted the desertification of the state if swift and decisive action was not taken. Fortunately for us, government did respond, and our mountains and valleys are now healthier than they were then despite large increases in overall population. Government today, by contrast, is notably failing to deal with the climate crisis, and our children, not just our grandchildren, will reap the whirlwind for this failure.
#3])>
<([#4 [*3.4.1*] [*8*] Third, oil shale development is inconsistent with multiple use because it will rob us of other resources on which all such use depends, and I speak here not only of the effect

on public lands but also of the derivative effect on land in private hands. The key resource in this case is water. A recent study commissioned by the Colorado Department of Natural Resources and the Colorado Water Conservation Board found that to develop oil shale on a large scale in western Colorado would require in excess of 400,000 acre feet of water every year,[2] this in a river basin that is already oversubscribed and climate-threatened.[3] To put this number in perspective, that's over 80% of the water that the entire Salt Lake valley uses in a year, and also more than Utah's unallocated entitlements in the Colorado River.

What emerges from this is the realization that the West faces a choice of absolute proportions: we can launch a new fossil fuel energy or we can develop our cities and our farms. We can preserve our public lands for many different uses, including some forms of mining, or we can develop oil shale. There is not water sufficient to do all of these. The likely casualty will be farming in the West. It's loss represents a blow to diversity, not just on public lands but everywhere. And it represents a blow to sustainable living everywhere. One of the effects of climate change that is not presently much discussed in the U.S., though it is other countries that will be similarly affected, is the loss of agricultural productivity. With losses around the world projected to be on the order of 30-50%, today's breadbaskets such as the Midwest, California's Central Valley, and southern California desert farms, fed - incidentally exclusively by the Coloradowill all be hard-hit. We will be scrounging for farm land to make up the difference. But if we pursue large-scale energy development such as oil shale, there will be no such farm land and no water to bring it alive. Even as climate change and increases in fuel costs require us to be more regionally food-self-sufficient, we will be without the means to grow the food we need. **#4])>**

<([#5 [*3.5.3*] Fourth, oil shale is inconsistent with multiple use because it will entail a massive increase in air pollution and consequent effects for human health. Already today we see in sparsely populated areas such as Pinedale, WY, and Utah's Uintah Basin air pollution levels that are higher than those of our dirtiest cities. This pollution is due entirely to oil and and natural gas development. Adding oil shale to the mix will make affected rural areas even unhealthier, and not only because of the obvious effects of the strip mining itself, bad as these will be. In the Colorado study I just mentioned, it is estimated that exploiting oil shale just in western Colorado will require the construction of 14,000 MW of new electrical power. This means the construction of new coal or natural gas plants, which themselves then become major new point sources of air and water pollution. To put that 14,000 MW in perspective, consider that Colorado's largest coal plant today generates 1 ,000. We're talking, then, about 14 new coal-fired plants as big as anything in Colorado today, each spewing out massive quantities of greenhouse gasses, particulates, and mercury, to extract oil that will also then be burned to generate greenhouse gases, particulates, and other pollutants. **#5])>**

<([#6 [*12*] What emerges from all of this is the conclusion that our government and its regulatory agencies such as the BLM have simply gone insane, criminally insane. In their mad pursuit of still more fossil fuels, instead of clean alternatives, the government and its agencies betrays their criminal disregard for their mission to protect not only the land for the people but the people themselves. Once again we see the truth of C. S. Lewis's observation that, "What we call our power over Nature turns out to be a power exercised by some men over other men with Nature as its instrument."

The way we treat the land is the bell wether of the way we treat each other. Oil shale development anywhere in our country today, but especially in the arid West, is tantamount to a crime against humanity, and those who perpetrate it deserve to be treated as the war criminals that they are, for make no mistake, oil shale development is a war against the land and its people. **#6])>**

Firmage, BLM Testimony, 4/26/11 6 treated as the war criminals that they are, for make no mistake, oil shale development is a war against the land and its people.

[1] See the excellent discussion in Arjun Makhijani, *Carbon-Free and Nuclear-Free: A Roadmap for U.S. Energy Policy.* Takoma Park, MD: lEER, 2007, 203ft.

2 *Energy Development Water Needs* Assessment *(Phase 1 Report).* Prepared by URS Corporation for the Colorado, Yampa, and White River Basin Roundtables Energy Subcommittee. September 2008.

3 On the threat that climate change poses to the Colorado Basin, see inter alia James Powell, *Dead Pool.* Berkeley: University of California, 2008. See also my own study of Utah water data provided on the accompanying CD.

OSTS_002

Organization: Utah Science and Technology Research, Alan Walker
Received: 3/14/2012 12:00:00 AM
Commenter1: Alan Walker - Salt Lake City, Utah 84108 (United States)
Organization1: Utah Science and Technology Research
Commenter Type: Misc. Organization
Classification: none
Submission Category: Comment Form and Attachment
Submitted As: SLC Meeting
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/20/2012 12:00:00 AM
Attachments: OSTS2012D00002.htm (OSTS_002-58359.htm Size = 1 KB)
OSTS_002_Walker_Form_and_Report_SLC_Mtg_OSTS2012D00002.pdf (OSTS_002-58358.pdf Size = 2755 KB)

Submission Text

See Attachment.

Comment: **<([#1** [*10.7*] I have attached two studies by Utah business schools indicating the economic viability of oil sand development for use as pavement. The study by the University of Utah demonstrates that agencies can save $45,000 per road mile. The study by Westminster College shows the oil sand pavement is competitive up to 530 miles from the mine. [See Attachments]
#1])>

OSTS_003

Organization: Jane Yazzie
Received: 3/14/2012 12:00:00 AM
Commenter1: Jane Yazzie - Craig, Utah 81626 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: addr
Submission Category: Comment Form
Submitted As: SLC Meeting
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/20/2012 12:00:00 AM
Attachments: OSTS2012D00003.htm (OSTS_003-58361.htm Size = 1 KB)
OSTS_003_Yazzie_Form_SLC_Mtg_OSTS2012D00003.pdf (OSTS_003-58360.pdf Size = 553 KB)
Submission Text
See Attachment.

<([#1 [*2.2*] The 2(b) BLM preferred alternative is wisest of 6 choices, but we sense it's designed to combine gathering more knowledge with some degree of 'stalling,' hoping for clarification of a shale oil future or avoidance of either ecosystem degradation or lawsuits resulting from degradation (from SO or Tar Sands activity). **#1])> <([#2** [*12*] Oil/gas corporations (American based) appear calm, ready for best practices requirements in APDs, even accepting the preferred alternative (Altern. 2(b)) RD&D phase, but those corporations are

a) Driven by a world market and by futures buying to store up profit and capital,

b) Driven to get most possible income/profit from remaining fossils,

c) Driven to beat (in lease or APD terms) the arrival of greater regulations,

d) Interested in being the capitalizers/profiteers of alternate fuel development and marketing in the future to control such fuels in some fashion now control fossils

e) Realizing, if their costs, investments, buyouts, have them over-leveraged, worrying at regulations requiring more capitalizing of debt or their banks being pressured to increase capitalizing, that they must receive their habit of overleveraging debt and that they may lose out on their convienient accounting habit of listing certain O/G leases as assets.

f) Driven by own economic habits to get BLM to open up leasable acreage always relatively cheap to lease, and then 'play' w such additional leases, as assets, among world banks and competitors,

g) Thus, leading the BLM – a guardian of public lands, the nation's only public lands – to accept more O/G leasing (shale oil & tar sands) to contribute in getting the United States "freer from imports of fossil fuels" when the reality of turning over public lands to shale oil/tar sands development would be exposing them, even more than now, to the global market (unaccountable,

often indistinguishable, and greatly unregulated) as a new DRIVER of how our public lands are used.

Finally, even more important than sagebrush habitat studies in typical Colorado BLM lands are studies barely begun of BLM lands' water and air resources. Sensing how long the revving up, scientifically, of such studies would take and how much reflection such studies, esp. of water above or underground, would offer against hydrofracking, plus the unpreparedness of geology to predict, track, or control subsurface natural waters, fracked waters, or geo exchanges, it's no wonder the fossil energy companies, reliant on fracking to produce product, are in a rush to lease it to lenient-as-possible terms of development. It's also no wonder such companies have wages, even financial, public attacks on such bills as Colorado's Clean Air/Clean Jobs Act.
#2])>
<([#3 [*10.6.1*] As the agency (BLM) must know that natural gas (though tis burning releases ½ the CO_2 of burning an equivalent energy unit of coal) actually uses more water, more coal-fired energy and releases more methane during production than other fossil fuel productions, the BLM must consider moving away from new leases for SO/TS, rather than toward such leases.
#3])>
<([#4 [*3.4.1*] The BLM's resource responsibilities in these 3 Western states (UT,WY, CO) may center most on water. Yet "water" as a resource, gets short shift in RUDs, often 1-1.5 pages, which largely say water resources, drainages, riparians, etc. will be given minimal protection and some repair, "when possible," "where feasible." Let's be reminded that the Alberta tar sands effort, ready, according to the DOE's own Energy Information Administration, has worked through much of its most available and bitumen-rich deposits and thus, heading into more costly and destructive extraction, desperately wants the Keystone XL pipeline to push out product, get it to US poored market, and get best price before both production costs and risks and public-demanded regulations limit profit.

In other words, lands above the Ogallala Aquifer and our public lands in WY, UT, & CO are pawns in a big card game. We must understand this game and never assume it would stop. The land's resources cannot be so used. Your PEIS effort is about far more than mere leasing. **#4])>**
Thank you.

OSTS_004
Organization: Matt Delperto
Received: 3/14/2012 12:00:00 AM
Commenter1: Matt Delperto - Salt Lake City, Utah 84115 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Comment Form
Submitted As: SLC Meeting
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/20/2012 12:00:00 AM
Attachments: OSTS2012D00004.htm (OSTS_004-58363.htm Size = 1 KB)
OSTS_004_Delperto_Form_SLC_OSTS2012D00004.pdf (OSTS_004-58362.pdf Size = 177 KB)

Submission Text
See Attachment.

<([#1 [*1.1*] There are huge risks involved in this process. It seems that none of the experts could give an answer for why (with so little information) this process is even going through… other than to defer responsibility to other people, and other bodies like Congress. And that there is money to be made (this was not said publically). The format of the meetings seemed poorly suited as well. The request to diffuse and have separate conversations, with different "experts" (who seemed to have a hard time fielding many of the questions, which again brings into question the preparedness to push a project like this through in any kind of a safe manner [and furthermore, there is an assumption that this project IS a worthwhile endeavor. I believe that it is questionable that tar sands can ever be a safe or sustainable product for extraction])…

The separation into groups fragmented the conversation, and made it impossible for conversations to be heard for all. I believe there should be another meeting (ASAP!) about these issues with the BLM (and ALL other involved parties) where there will be space for public comment and conversation to be had by all (bring a microphone! please!). While I feel that conversations like the ones I had with officials today can be great, if they are not combined with public presentation or conversations that all can be heard by all present (with opportunity for comment), then these types of meetings are hollow shows that are ineffective and undemocratic. **#1])>**
<([#2 [*12.1*] I believe that the BLM and individuals need to step up to the task of putting a cap on these tar sands development projects and to invest their energy in a truly sustainable future. **#2])>**

<([#3 [*1.1*] Incorporate room for public comment, public conversation, and direct address of questions please.

Also, please invest time in making sure your 'experts' are well informed if you decide to have a similar format for future meetings. **#3])>**

OSTS_005
Organization: Krista Bowers
Received: 3/14/2012 12:00:00 AM
Commenter1: Krista Bowers - Salt Lake City, Utah 84103 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: addr
Submission Category: Comment Form
Submitted As: SLC Meeting
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/20/2012 12:00:00 AM
Attachments: OSTS2012D00005.htm (OSTS_005-58365.htm Size = 1 KB)
OSTS_005_Bowers_Form_SLC_OSTS2012D00005.pdf (OSTS_005-58364.pdf Size = 88 KB)
Submission Text
See Attachment.

<([#1 [*12*] Zero tar sands and oil shale extraction. **#1])> <([#2** [*3.5.1.7*] Adopt long-range climate adaptation and mitigation plan for Utah consistent with the science of 350ppm. **#2])>**

OSTS_006
Organization: Milo Calder
Received: 3/14/2012 12:00:00 AM
Commenter1: Milo Calder - Salt Lake City, Utah (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Comment Form
Submitted As: SLC Meeting
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/20/2012 12:00:00 AM
Attachments: OSTS2012D00006.htm (OSTS_006-58367.htm Size = 1 KB)
OSTS_006_Calder_Form_SLC_OSTS2012D00006.pdf (OSTS_006-58366.pdf Size = 153 KB)
Submission Text
See Attachment.

<([#1 [*1.1*] The opening of the meeting was poorly planned. The speaker should have given a summary of the past developments (re- Black Sunday – 5/2/1982) as per money spent and research methods and feasibility. Then spend two or three minutes new technology and what government subsidizing as what is proposed.

As a lay person I didn't know what PEIS meant. It was used extensively at the beginning. Finally I found a book that listed general acronyms and abbreviations.

Also – you should have allowed a place on your forum for comments (2 min or so per person). **#1])>**

OSTS_007
Organization: Mary Williams
Received: 3/14/2012 12:00:00 AM
Commenter1: Mary Williams - Salt Lake City, Utah 84115 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Comment Form
Submitted As: SLC Meeting
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/20/2012 12:00:00 AM
Attachments: OSTS2012D00007.htm (OSTS_007-58369.htm Size = 1 KB)
OSTS_007_Williams_Form_SLC_OSTS2012D00007.pdf (OSTS_007-58368.pdf Size = 84 KB)
Submission Text

See Attachment.

<([#1 [*2.3.1*] I want us off oil! The only choice is Amendment 3. Too much destruction of air, use of water, & destruction of our parks (the real income for UT). **#1])>**

OSTS_008
Organization: United Mergers and Aquisitions Consultants, Dean Dinas
Received: 3/14/2012 12:00:00 AM
Commenter1: Dean Dinas - Midvale, Utah 84047 (United States)
Organization1: United Mergers and Aquisitions Consultants
Commenter Type: Affiliation Only
Classification: addr
Submission Category: Comment Form
Submitted As: SLC Meeting
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/20/2012 12:00:00 AM
Attachments: OSTS2012D00008.htm (OSTS_008-58371.htm Size = 1 KB) OSTS_008_Dinas_Form_and_Written_Comments_SLC_OSTS2012D00008.pdf (OSTS_008-58370.pdf Size = 324 KB)
Submission Text
See Attachment. *[Two comment forms were submitted]*

<([#1 [*10.7*] Industrial distinctions between oil shale/sands show that oil sands can be a source of road materials, saving ~$45,000/mile and averting air emissions/water pollutants that oil shale would generate. Oil sands have been proven to provide a viable alternative to concrete and other materials. Self-sufficiency in asphalt can be achieved via responsible extraction of natural asphalt from oil sands in Uinta Basin.

http://democrats.naturalresources.house.gov/content/files/2011-08-24_HRE_EMR_Testimony_Spinti.pdf

http://repository.icse.utah.edu/dspace/handle/123456789/10823 **#1])>**

See attached comments for consideration:
-Industry application
-Economic environment

Thank you.

Suggestions for Consideration in Context of BLM Oil Shale & Tar Sands PEIS March 2012

<([#4 [*6.6*] Industrial Distinctions

1. Oil shale extractive processes and products have distinct characteristics from Tar Sands

a. Environmental impacts and energy inputs differ dramatically between OS/TS

b. E&P processes vary in accordance with terrain and mineral content

c. End-products can be combustible for energy production, or resource-conserving

d. In 2007 responding to the Energy Policy Act of 2005 (Section 369-p), the University of Utah prepared "A Technical, Economic, and Legal Assessment of North American Heavy Oil, Oil Sands, and Oil Shale Resources," for the US Dept of Energy, in which it drew from science and available technologies to illustrate clear distinctions between the E&P processes and products and their economic and environmental impacts. There are clear advantages/disadvantages that need to be included in BLM considerations, since this is a landmark study.
#4])>
<([#5 [*3.10.2*] 2. Oil Shale fuel removal and Tar Sands applications have different costs, and local impacts

a. Proximity to established roads makes haulage expensive, contributes emissions

b. Local sourcing/local applications make Tar Sands more "user-friendly" **#5])>**

<([#3 [*10.7*] c. Asphalt content of Tar Sands offers immediate benefits, with proven lower costs

d. Current testing and applications of native asphalt (derived closely from Tar Sands) on local roads is expected to lead to wider development of this process/product, with the concurrent completion of the Utah Department of Transportation's recent performance test results (coordinated by USTAR). This is a more sustainable and non-combustible application vs. Oil Shale.
#3])>
<([#2 [*3.10.2*] Economic Impacts

-The Uinta Basin has a long track record of experience in energy source E&P, generating small business and high-wage job growth, State & Federal revenues

-To sustain small business and job creation, and retain multinational business manufacturing in the region, choices need to be made with respect to access

-High capital investment/costs of capital in the energy E&P industry require guarantees of longevity, and consideration of interstate competitive issues

-In 2008, at request of the Uintah County Planning Commission, Strategic Leadership Partners conducted an exhaustive study analyzing the current and projected impact of [energy-source] extraction industry activities on economic, social, and environmental conditions in the County. This is a unique analysis, and should be included in the BLM's considerations

-Previous challenges from the availability of asphalt/asphalt oils in the region have shown that self-sufficiency is vital to meet the imperatives of infrastructure maintenance and expansion to

avoid supply disruption/price volatility
#2])>

OSTS_009
Organization: Lee Anne Walker
Received: 3/14/2012 12:00:00 AM
Commenter1: Lee Anne Walker - Salt Lake City, Utah 84121 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: nameaddr
Submission Category: Comment Form
Submitted As: SLC Meeting
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/20/2012 12:00:00 AM
Attachments: OSTS2012D00009.htm (OSTS_009-58373.htm Size = 1 KB)
OSTS_009_Walker_Form_SLC_OSTS2012D00009.pdf (OSTS_009-58372.pdf Size = 123 KB)
Submission Text
See Attachment.

<([#1 [*1.1*] This was awful. I am a candidate for the Utah legislature and wanted to educate myself. There was no chance to get an overview, listen to other's questions.

I assumed 'No Action' meant no development. Others thought so too. Persisted asking, found out it meant 'Don't stop the drive to development.' Research. **#1])>**

OSTS_010
Organization: Joan Gregory
Received: 3/14/2012 12:00:00 AM
Commenter1: Joan Gregory - Salt Lake City, Utah 84108 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: addr
Submission Category: Comment Form
Submitted As: SLC Meeting
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/20/2012 12:00:00 AM
Attachments: OSTS2012D00010.htm (OSTS_010-58375.htm Size = 1 KB)
OSTS_010_Gregory_Form_SLC_OSTS2012D00010.pdf (OSTS_010-58374.pdf Size = 94 KB)
Submission Text
See Attachment.

<([#1 [*12*] Zero, 0, none. No tar sands and no oil shale extraction. **#1])> <([#2** [*3.5.1.7*] Instead, adopt long range climate adaptation and mitigation plans for Utah, Wyoming, and Colorado consistent with the science of 350 ppm. **#2])>**

OSTS_011
Organization: Cathryn Cordray
Received: 3/14/2010 12:00:00 AM
Commenter1: Cathryn Cordray - Salt Lake City, Utah 84102 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: addr
Submission Category: Comment Form
Submitted As: SLC Meeting
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/20/2012 12:00:00 AM
Attachments: OSTS2012D00011.htm (OSTS_011-58377.htm Size = 1 KB)
OSTS_011_Cordray_Form_SLC_OSTS2012D00011.pdf (OSTS_011-58376.pdf Size = 106 KB)
Submission Text
See Attachment.

<([#1 [*1.1*] This public meeting is a very poor method of meeting. This room is too small and the staff was inadequately prepared to deal with the amount of people and concerns. There should be a question and answer period for everyone to hear the questions and answers. You need a much larger room so that the people can hear the different experts without shouting. **#1])>**

OSTS_012
Organization: Kate Lambert
Received: 3/14/2010 12:00:00 AM
Commenter1: Kate Lambert - Salt Lake city, Utah 84103 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Comment Form
Submitted As: SLC Meeting
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/20/2012 12:00:00 AM
Attachments: OSTS2012D00012.htm (OSTS_012-58379.htm Size = 1 KB)
OSTS_012_Lambert_Form_SLC_OSTS2012D00012.pdf (OSTS_012-58378.pdf Size = 101 KB)
Submission Text
See Attachment.

<([#1 [*1.1*] [*12*] I came with a negative view of oil shale and tar sands development and thus have only been reinforced by the format of this meeting. It seems designed to defuse input and prevent true learning and challenges. It is unnecessary to pursue a risky and environmentally degrading process when alternatives are available. **#1])>**

OSTS_013

Organization: Randy Long
Received: 3/14/2012 12:00:00 AM
Commenter1: Randy Long - Salt Lake City, Utah 84121 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: addr
Submission Category: Comment Form
Submitted As: SLC Meeting
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/20/2012 12:00:00 AM
Attachments: OSTS2012D00013.htm (OSTS_013-58381.htm Size = 1 KB)
OSTS_013_Long_Form_SLC_OSTS2012D00013.pdf (OSTS_013-58380.pdf Size = 97 KB)
Submission Text
See Attachment.

<([#1 [*2.3.1*] [*2.2*] [*12*] Wilderness must prevail. Alternative 3 would be best, although Alternative 2 would be alright. Oil shale and tar sands development must be stopped once and for ALL. When? NOW!!! **#1])>**

OSTS_014
Organization: Anthony Magnetti
Received: 3/14/2012 12:00:00 AM
Commenter1: Anthony Magnetti - Salt Lake City, Utah 84103 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: nameaddr
Submission Category: Comment Form
Submitted As: SLC Meeting
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/20/2012 12:00:00 AM
Attachments: OSTS2012D00014.htm (OSTS_014-58383.htm Size = 1 KB)
OSTS_014_Magneth_Form_SLC_OSTS2012D00014.pdf (OSTS_014-58382.pdf Size = 110 KB)
Submission Text
See Attachment.

<([#1 [*1.1*] I felt the hearing was conducted very inefficiently. If they had a panel of people up front to answer peoples questions it could have been more help. **#1])>**

<([#2 [*12*] I'm against any tar sands/shale mining. Based on what I gathered here tonight these mining proposals are out of the question! **#2])>**

OSTS_015
Organization: Jacqueline Hollis
Received: 3/14/2012 12:00:00 AM

Commenter1: Jacqueline Hollis - Ogden, Utah 84403 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Comment Form
Submitted As: SLC Meeting
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/20/2012 12:00:00 AM
Attachments: OSTS2012D00015.htm (OSTS_015-58385.htm Size = 1 KB)
OSTS_015_Hollis_Form_SLC_OSTS2012D00015.pdf (OSTS_015-58384.pdf Size = 92 KB)
Submission Text
See Attachment.

<([#1 [*2.3.1*] I support #3 option. If research on 32,000 acres is enough why would 500,000 acres be needed? **#1])>**

OSTS_016
Organization: Melissa Martinet
Received: 3/14/2012 12:00:00 AM
Commenter1: Melissa Martinet - Salt Lake City, Utah 84105 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Comment Form
Submitted As: SLC Meeting
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/20/2012 12:00:00 AM
Attachments: OSTS2012D00016.htm (OSTS_016-58387.htm Size = 1 KB)
OSTS_016_Martinet_Form_SLC_OSTS2012D00016.pdf (OSTS_016-58386.pdf Size = 95 KB)
Submission Text
See Attachment.

<([#1 [*1.1*] The room was not large enough and the experts in different corners of the room was inefficient. People also should have been able to give spoken comments. **#1])>**

<([#2 [*12*] I'm totally opposed to any more oil shale and/or tar sands development in Utah. Where is the option for no more development? **#2])>**

OSTS_017
Organization: Roger Borgenicht
Received: 3/14/2012 12:00:00 AM
Commenter1: Roger Borgenicht - Salt Lake City, Utah 84103 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none

Submission Category: Comment Form
Submitted As: SLC Meeting
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/20/2012 12:00:00 AM
Attachments: OSTS2012D00017.htm (OSTS_017-58389.htm Size = 1 KB)
OSTS_017_Borgenicht_Form_SLC_OSTS2012D00017.pdf (OSTS_017-58388.pdf Size = 90 KB)
Submission Text
See Attachment.

<([#1 [*10.6.1*] Environmental degradation for a damaging energy source will damage the future for our children and on. Change to conservation and development of clean energy sources must be our long-term strategy for Utah and the planet. Don't chase a dying, destructive solution. **#1])>**

OSTS_018
Organization: Jean Corey
Received: 3/14/2012 12:00:00 AM
Commenter1: Jean Corey - Sandy, Utah 84092 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Comment Form
Submitted As: SLC Meeting
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/20/2012 12:00:00 AM
Attachments: OSTS2012D00018.htm (OSTS_018-58391.htm Size = 1 KB)
OSTS_018_Corey_Form_SLC_OSTS2012D00018.pdf (OSTS_018-58390.pdf Size = 114 KB)
Submission Text
See Attachment.

<([#1 [*2.4.1*] Please go forward with Alternative 4a immediately. Stop holding up development of this valuable resource. Make us more energy and materials (plastics, etc) self sufficient. There are possible endangered species and historic sites everywhere. We can't live in the stone age because of fears about this. Companies are now very accomplished at low impact energy development. Don't listen to the luddites. **#1])>**

OSTS_019
Organization: Joshua Lenart
Received: 3/14/2012 12:00:00 AM
Commenter1: Joshua Lenart - Salt Lake City, Utah 84105 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: addr
Submission Category: Comment Form

Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/20/2012 12:00:00 AM
Attachments: OSTS2012D00019.htm (OSTS_019-58393.htm Size = 1 KB)
OSTS_019_Lenart_Form_Mail_OSTS2012D00019.pdf (OSTS_019-58392.pdf Size = 154 KB)
Submission Text
See Attachment.

<([#1 [*2.3.1*] I am a Doctoral candidate in English with a focus on environmental humanities and rhetoric. I teach technical writing in the Department of Chemical Engineering. I attended the BLM's 2012 Oil Shale and Tar Sands Draft PEIS in Salt Lake City on March 14, 2012. I STRONGLY support Alternative 3. I also support recommendations made by the Theodore Roosevelt Conservation Partnership (TRCP) and Sportsman for Responsible Energy Development. **#1])>**

OSTS_020
Organization: Excalibur Industries, Raymond Ridge
Received: 3/14/2012 12:00:00 AM
Commenter1: Raymond Ridge - Salt Lake City, Utah 84117 (United States)
Organization1: Excalibur Industries
Commenter Type: OSTS Tech Company
Classification: addr
Submission Category: Comment Form and Attachment
Submitted As: SLC Meeting
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/20/2012 12:00:00 AM
Attachments: OSTS2012D00020.htm (OSTS_020-58395.htm Size = 1 KB)
OSTS_020_Ridge_Form_and_Written_Comments_SLC_OSTS2012D00020.pdf (OSTS_020-58394.pdf Size = 248 KB)
Submission Text
See Attachment.

BLM Draft Programmatic Environmental Impact Statement
Wednesday, March 14, 2012, 7:00p.m.
Comments of Raymond L. Ridge

Questions

1. By show of hands, how many of you here would have come tonight to protest the construction of a ski lift in a wilderness area erected by helicopter on cement pylons?

2. By show of hands, how many of you here would have come tonight to protest the construction of an underground pipeline that denudes the surface the entire width of the right-of-way?

3. By show of hands, how many of you here would have come tonight to protest the construction of an above-ground pipeline similar to the Alaska pipeline?

4. By show of hands, how many of you here would have come tonight to protest the construction of a high-powered electric transmission line over the lands in question?

5. By show of hands, how many of you here would have come tonight to protest the construction of an elevated, camouflaged conveyor belt that does no harm to wild lands or wildlife, similar to the Kennecott conveyor belt between the crushing plant and the smelter, but erected by helicopter on cement pylons?

<([#1 [*2*] The problem with the draft Pro grammatic Environmental Impact Statement ("PEIS") subject
ofthis hearing is that it proposes to treat oil shale development as more hostile to the environment than the current shale gas drilling activities being conducted throughout the country, including on the Roan Plateau as depicted National Wildlife magazine dated June/July 2010. (Hold-up pictures)
And, it leaves no room for anyprocess which is environmentally responsible and economic. In fact,
the expressed preference for Alternative 2(b) would merely serve to prevent environmentally responsible methods from ever being employed, and effectively continue the reservation of oil shale
for Big Oil against the day that traditional sources of crude are expended. No provision is made to
reconsider Alternative 2(b) if presented an alternative for environmentally responsible methods. In
fact, the prospect of future clean technologies has purposely been excluded from consideration; and
the assumption has been made that all processing will be done "on-site", on BLM oil shale lands, rather than possibly on "environmentally expendable" lands.
#1])>
<([#2 [*3.4.2*] With respect to shale gas wells that are fraced, that process permanently eliminates enough
water to support almost 100 persons, i.e. 6 Million gallons/143,000 Bbls/18.4 acre/ft. That would be enough to support at least 500,000 people if all 5,175 wells just approved in the Uinta Basin are
to be fraced.

Unlike the processing of tar sands in Canada, the water used in oil shale processing does not come into contact with the hydrocarbons, and the small amounts of water that leach from tailings prior to processing into 14 ancillary products can be rendered environmentally inert using plasma gasification subject of the Todd Foret patent for Plasma Whirl. The only substance which cannot be
rendered "environmentally inert" using plasma gasification is radioactive material.
#2])>

<([#3 [*6.3*] As for economic viability, Petro bras has continuously produced oil from oil shale since 1972
using Paraho/Petrosix vertical retorts from 7% grade material rather than the 13%-18% grades in Colorado. Kennecott mines material worth a mere $20.00/ton while oil shale has a value in excess
of $75.00/ton for the oil, without attributing any value to ancillary products; and four tons of Canadian tar sands produce but a single barrel of oil, while four tons of oil shale at 12% grade produces 3 bbls. of oil.
#3])>
<([#4 [*11.2*] Shale Gas drilling activities are currently denuding much larger tracts than would be denuded
by underground mining of oil shale (which is currently mandated by the State of Colorado) and its
transpm1 by elevated, camouflaged conveyor belts descending through ravines & rail in already existing transpm1ation corridors to an environmentally expendable site for central site processing
and refining. A site with no Sage Grouse!

The question which m11st be asked is why is Secretary Salazar intent on withdrawing oil shale lands from development regardless of how environmentally responsible the method of extraction and
processing might be, especially after I had informed him by letter December 14, 2010 of my Patent
to produce oil shale without environmental impacts?

And, why did he instigate this action within 60 days of receipt of my letter, i.e. learning that oil shale could be produced without hann to the environment?

What is his true motivation to withdraw oil shale lands rather than merely define the level of cleanliness and mitigation of surface disturbance needed to protect the wildlands and wildlife?

Why does the BLM propose to continue the exploitation of energy extraction using methods which are more harmful than those I propose for Oil Shale?

Why does Secretary Salazar hide behind the Sage Grouse, when the methods I propose would not hann the Sage Grouse habitat?

Why is Oil Shale the only resource absent from the President's Energy Plan?

Secretary Salazar knows that the industry cannot attract the capital needed without the prospect of access to the entire lands currently available under Option 1. He is intent on killing this
nascent industry, and is hiding behind a veil of moderation and the Sage Grouse in doing so!

The actions proposed by the BLM in this Draft PEIS as Options 2-4 are flawed and will be subjected to judicial review if adopted. That is likely the reason a separate PEIS relating to Sage

Grouse alone was inititated in December 2011. The BLM is seeking to have two bites of the proverbial "Apple" to kill this nascent industry!
#4])>
And, for those of you who think you are being informed by the Press, you should be aware that I've attempted to give this information to both Nancy Conway, Editor of The Salt Lake Tribune
and Brandon Loomis, a "reporter" covering oil issues and publishing diatribe articles. They have refused to respond! The Salt Lake Tribune continues to propagate antiquated, misleading information to the public!

OSTS_021
Organization: Our Healthy Earth Foundation, Mary Russell
Received: 3/14/2012 12:00:00 AM
Commenter1: Mary Russell - Glenwood Springs, Utah 81602 (United States)
Organization1: Our Healthy Earth Foundation
Commenter Type: Misc. Organization
Classification: none
Submission Category: Comment Form and Attachment
Submitted As: SLC Meeting
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/20/2012 12:00:00 AM
Attachments: OSTS2012D00021.htm (OSTS_021-58397.htm Size = 1 KB)
OSTS_021_Russell_Form_and_Written_Comments_SLC_OSTS2012D00021.pdf (OSTS_021-58396.pdf Size = 355 KB)
Submission Text
See Attachment.

<([#1 [*12.2*] Powering machines and vehicles and heating our buildings takes 84% of the petroleum used every year (American Chemical Society, "Chemistry in the Community, p. 176). Sixteen (16%) percent of it goes into making plastics, pharmaceuticals, fertilizers, as well as crayons, gum, ink, dishwashing liquid, deodorant, tires, and ammonia. Drilling, processing, and burning oil is dirty and damaging to the health of people everywhere, not to mention the health of the planet. Oil is running out. There needs to be an end to all future extraction of this non-renewable resource. As Dr. Fatih Birol, Chief economist at the IEA (International Energy Agency) says, "we have to leave oil before oil leaves us, and we have to prepare a ourselves for that day." The BLM is charged with the duty to manage all lands under this jurisdiction that protects all living organisms to survive and thrive. Continuing to work is within the paradigm of managing the public lands its held accountable for, with a high (illegible) for their economic benefit, is against the natural law of limits to growth. The lands in Colorado, Wyoming, and Utah are being taxed beyond their capacity to ever be redeemed or recovered.

In 1989 the wall erected between East and West Germany was torn down. This collapse was a result of the collapse of the Soviet Union. It resulted in the collapse of the system put into place 40 years earlier that caused Cuba to be dependent on oil from the Soviet Union. Cuba suffered, as the rest of us must, at the immediate loss of fertilizers to grow industrialized food systems.

Within two years, Cuba developed into what is now considered a more resilient, self-sustaining nation, free from oil dependency, this timing through a new paradigm of less consumption "after decades plagued with poverty, public health crises, and environmental devastation, while Shell extracted millions of dollars worth of oil from under their homes, the Ogoni (of Nigeria's Ogoniland) began to organize themselves to fight for their rights and their land." We will fight for our land as well. **#1])>**

Attachment:

SLC Mtg 3-14-12

Suggestions for Consideration in Context of BLM Oil Shale & Tar Sands PEIS March 2012

<([#2 [*6.6*] Industrial Distinctions

1. Oil shale extractive processes and products have distinct characteristics from Tar Sands

a. Environmental impacts and energy inputs differ dramatically between OS/TS

b. E&P processes vary in accordance with terrain and mineral content

c. End-products can be combustible for energy production, or resource-conserving

d. In 2007 responding to the Energy Policy Act of 2005 (Section 369-p), the University of Utah prepared "A Technical, Economic, and Legal Assessment of North American Heavy Oil, Oil Sands, and Oil Shale Resources," for the US Dept of Energy, in which it drew from science and available technologies to illustrate clear distinctions between the E&P processes and products and their economic and environmental impacts. There are clear advantages/disadvantages that need to be included in BLM considerations, since this is a landmark study.

#2])> <([#3 [*3.10.2*] 2. Oil Shale fuel removal and Tar Sands applications have different costs, and local impacts

a. Proximity to established roads makes haulage expensive, contributes emissions

b. Local sourcing/local applications make Tar Sands more "user-friendly"
#3])>
<([#4 [*10.7*] c. Asphalt content of Tar Sands offers immediate benefits, with proven lower costs

d. Current testing and applications of native asphalt (derived closely from Tar Sands) on local roads is expected to lead to wider development of this process/product, with the concurrent completion of the Utah Department of Transportation's recent performance test results (coordinated by USTAR). This is a more sustainable and non-combustible application vs. Oil Shale.
#4])>
<([#5 [*3.10.2*] Economic Impacts

-The Uinta Basin has a long track record of experience in energy source E&P, generating small business and high-wage job growth, State & Federal revenues

-To sustain small business and job creation, and retain multinational business manufacturing in the region, choices need to be made with respect to access

-High capital investment/costs of capital in the energy E&P industry require guarantees of longevity, and consideration of interstate competitive issues

-In 2008, at request of the Uintah County Planning Commission, Strategic Leadership Partners conducted an exhaustive study analyzing the current and projected impact of [energy-source] extraction industry activities on economic, social, and environmental conditions in the County. This is a unique analysis, and should be included in the BLM's considerations

-Previous challenges from the availability of asphalt/asphalt oils in the region have shown that self-sufficiency is vital to meet the imperatives of infrastructure maintenance and expansion to avoid supply disruption/price volatility

Also see: http://democrats.naturalresources.house.gov/content/files/2011-08-24_HRG_EMR_Testimony_Spinti.pdf

And http://repository.icse.utah.edu/dspace/handle/123456789/10823
#5])>

OSTS_022
Organization: Living Rivers, John Weisheit
Received: 3/14/2010 12:00:00 AM
Commenter1: John Weisheit - Muab, Utah 84532 (United States)
Organization1: Living Rivers
Commenter Type: Environmental Organization
Classification: none
Submission Category: Comment Form
Submitted As: SLC Meeting
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/20/2012 12:00:00 AM
Attachments: OSTS2012D00022.htm (OSTS_022-58399.htm Size = 1 KB)
OSTS_022_Weisheit_Form_SCL_OSTS2012D00022.pdf (OSTS_022-58398.pdf Size = 110 KB)
Submission Text
See Attachment.

<([#1 [*3.4.1*] [*4.2*] Our main concern is cumulative impacts to water resources and the hydrologic cycle. The impacts include: over-allocation; imbalance of demand over supply; destruction of primary watershed productivity, dust on snow; increases loading of greenhouse

gases; increased aridity & evaporation; increasing salinity; destruction of aquatic critical habitat. We will provide more thorough comments by the due date of May 4, 2012. **#1])>**

OSTS_023
Organization: unknown unknown
Received: 3/14/2012 12:00:00 AM
Commenter1: unknown unknown - , Utah (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: SLC Meeting
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/18/2012 12:00:00 AM
Attachments: OSTS2012D00023.htm (OSTS_023-58401.htm Size = 1 KB)
OSTS_023_unknown_SLC_illustration_OSTS2012D00023.pdf (OSTS_023-58400.pdf Size = 71 KB)
Submission Text
See Attachment.

<([#1 [*3*] Illustration commenting on alternatives 1, 2, 3, and 4 [See attachment] **#1])>**

OSTS_024
Organization: Melanie Martin
Received: 4/2/2012 12:00:00 AM
Commenter1: Melanie Martin - , (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: E-Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/20/2012 12:00:00 AM
Attachments: OSTS2012D00024.htm (OSTS_024-58403.htm Size = 1 KB)
OSTS_024_Martin_SLC_Email_OSTS2012D00024.pdf (OSTS_024-58402.pdf Size = 62 KB)
Submission Text
See Attachment.

<([#1 [*1.1*] I spoke with you at the BLM's public meeting about prospective leasing of lands for oil shale and tar sands development a couple of weeks ago, and appreciated your thoughtful answers to my questions. **#1])>** I'm working with two local organizations that are concerned about proposed tar sands and oil shale developments in Utah: Peaceful Uprising and the Utah Tar Sands Resistance. I'm hoping you can answer a few questions of mine regarding these issues, and would greatly appreciate your input.

<([#2 [*3.7.3.1*] The EIS states, in the section on oil shale development:

"A total of 112,851 acres of wild horse HMAs, 172,339 acres of mule deer winter habitat, 11,470 acres of mule deer summer habitat, 159,205 acres of elk winter habitat, and 11,465 acres of elk summer habitat overlap lands that would be available for oil shale leasing."

How do you believe tar sands and oil shale development would affect these species, and in doing so, how would this affect the greater ecosystem?
#2])>
<([#3 [*3.7.4.1*] *Furthermore, regarding oil shale development, the EIS continues,* ***"151 federal candidate, BLM designated sensitive, and state listed species, and 14 federally listed threatened or endangered species could occur in areas that are available for application for leasing under Alternative 2."***

How might oil shale development affect these 14 federally listed species, and what species would be most at risk? What is the likelihood that they occur in the areas in question?
#3])>
<([#4 [*3.4.1*] The EIS also states: "For Alternative 2, within the lease areas (including a 2-mi buffer), **there are 37 perennial streams totaling 386 mi. The construction and operation of commercial oil shale projects within the lease areas could adversely affect aquatic resources in these streams."**

How would the streams be affected—would they be diverted, for example, and what effects would this have on local communities and agriculture? What effects might this have on wildlife and ecosystems?
#4])>
<([#5 [*3.13*] *Additionally, do you believe that hazardous chemicals from tar sands and oil shale extraction and processing will likely contaminate ecosystems?*
#5])>
<([#6 [*3.7.4.11*] Also, I'm trying to make sense of the following statement, which seems contradictory to me: "The construction and operation of commercial oil shale projects **could impact threatened, endangered, and sensitive species and their habitats** where individual projects are located within the 461,965 acres identified for oil shale leasing. **There were no habitats for threatened, endangered, or sensitive species identified for spatial or temporal protection** in BLM RMPs that would be present in the lease application areas."

How is it that no habitats have been identified for protection if the BLM acknowledges that such habitats are present?
#6])>
<([#7 [*6.3*] **Finally, I understand that the extraction process for Utah's tar sands would be different than the process for Canadian tar sands. Would impacts on ecosystems and communities be potentially greater, or lower—or do we not have enough evidence to make such a determination?**
#7])>
Thank you very much for your time. I look forward to hearing your thoughts on these important issues.

Best regards,

Melanie Martin

OSTS_025
Organization: Denis Doebbeling
Received: 4/7/2012 12:00:00 AM
Commenter1: Denis Doebbeling - Salt Lake City, Utah 84105 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Comment Form
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/20/2012 12:00:00 AM
Attachments: OSTS2012D00025.htm (OSTS_025-58405.htm Size = 1 KB) OSTS_025_Doebbeling_form_mail_OSTS2012D00025.pdf (OSTS_025-58404.pdf Size = 241 KB)
Submission Text
See Attachment.

<([#1 [*10.6.1*] [*12*] Earth, our planet, has experienced a previous global warming event which occurred 56 million years ago. It is not known what caused this massive release of carbon into the atmosphere. It is called the Paleocene-Eocene Thermal Maximum or PETM. It is estimated that if we burn through all of our planet's reserve of coal, oil, oil shale tar sands, and natural gas, a similar situation will be created. The human caused PETM will take more than 150,000 years for oceans and forests to absorb the excess carbon and cool off our planet. In the meantime, all animal life will become extinct. New animal life will develop from a species of foram, a sand grain size creature that lives in the sands of oceans.

This is the scenario that many scientists predict will occur unless we stop using fossil fuels. My suggestion is that we forget about developing tar sands and oil shale. We need to put our resources into developing clean energy. It will take time to turn this ship around but we must attack it as if we were at war. Stop the development of tar sands and oil shale. Develop clean energy to stop global warming.

"With fossil fuels today, we are taking what took millions of years to accumulate and we are releasing them in a geologic instant." (James Zachos, U of CA, Santa Cruz).

The science I referred to I found in National Geographic Magazine, October 2011, Earth before Ice, p. 90. **#1])>**

OSTS_026
Organization: Enefit American Oil Company, Gary Aho
Received: 3/3/2012 12:00:00 AM

Commenter1: Gary Aho - Vernal, Utah 84078 (United States)
Organization1: Enefit American Oil Company
Commenter Type: OSTS Tech Company
Classification: none
Submission Category: Comment Form and Attachment
Submitted As: Vernal Meeting
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/25/2012 12:00:00 AM
Attachments: OSTS2012D00026.htm (OSTS_026-58407.htm Size = 1 KB)
OSTS_026_Enefit_Aho_form_Vernal_OSTS2012D00026.pdf (OSTS_026-58406.pdf Size = 269 KB)
Submission Text
See Attachment.

Enefit American Oil Company (Enefit), a subsidiary of Eesti Energia, hereby submits the following public comments on the Draft Programmatic Environmental Impact Statement (PEIS) and Possible Land Use Plan Amendments for Allocation of Oil Shale and Tar Sands Resources on Lands Administered by the Bureau of Land Management in Colorado, Utah, and Wyoming.

Enefit presented detailed comments in response to the Notice of Intent to Prepare a Programmatic Environmental Impact Statement (EIS) and Possible Land Use Plan Amendments for Allocation of Oil Shale and Tar Sands Resources and will submit additional formal comments in response to the Draft PEIS.

<([#1 [*6.3.5*] The Administration continues to ignore the advancement of the oil shale industry worldwide. In
February, testifying before the Senate Energy Committee, Secretary Salazar stated once again that the technology has not been developed and the "technology is not there" to develop our oil shale resources. This statement could not be further from reality. Estonian companies have been commercially producing oil from oil shale for decades and they meet all European Union environmental standards. This production is not subsidized and is a profitable business. Moreover, commercial production is occurring in Brazil and China as well. The key reason development is not occurring in the United States is because the Federal Government owns the vast majority of oil shale resources in this nation and has only made a small fraction available for limited development under uncertain conditions which do not justify the significant investments needed for permitting, engineering and full scale commercial development. Enefit was founded in 1939 and is the world's largest oil shale processing company.

In Estonia we mine up to 17 million tons of oil shale per year. We operate the world's largest oil shale fired power plants with a total output of 2,380 MW. Enefit also owns the most advanced proprietary shale oil production technology. In total we have mined 1 billion tons of oil shale, produced 550 TWh of power and produced 200 million barrels of oil. We also employ approximately 7,000 people. Moreover, our Enefit 280 plant will go into production this year and will more than double our current oil production capacity. Enefit desires to bring this same, next generation technology to the Uinta Basin in Utah. Enefit will make very large capital

investments, without government support and will bring approximately 2000 direct jobs to the State of Utah as well as produce hundreds of millions of barrels of oil over the life of the project.

This massive investment in a project that will span decades is only possible because of our private Utah land holdings. Availability of Federal resources would attract similar investments from other companies. **#1])>**

<([#2 [*9.8*] Enefit opposes the Draft PEIS and encourages the Administration to revisit the need for this
effort given that a comprehensive effort was completed in 2008, there is little justification or new information to support a repeat of this effort, and the oil shale industry in the United States is in its infancy. **#2])> <([#3** [*9.6*] Enefit holds one of the five Federal RD&D leases ever granted which is located at
the White River Mine in Eastern Utah. The Draft PEIS gives little assurance to Enefit and other RD&D lease holders that the property rights they have paid for, own, and spent their own money investing in will not be impacted. The Draft PEIS calls into question the lease holders' ability to convert the RD&D leases into commercial leases and should clearly confirm that the potential and process for this conversion will not change. In some instances, great investment into these leases has occurred and the PEIS must provide a strong and clear statement that the terms and conditions of these existing rights will not change in any fashion.
#3])>
<([#4 [*2.2*] The Draft PEIS is designed to prohibit development of America's largest petroleum resource.
Furthermore, at a time when the United States is facing an energy crisis in combination with a struggling economy, this is perhaps the worst possible timing to be removing over 75% of the world's largest oil shale deposits from leasing and potential production. In conservative terms, the proposed PEIS would place off limits billions of barrels of recoverable oil to Americans at a time when oil prices exceed $100 per barrel and gas prices are approaching $5 per gallon in some markets.
#4])>
<([#5 [*9.2.3*] [*9.6.1*] The Draft PEIS is also in direct opposition to the 2005 Energy Policy Act which required
commercial leasing of Federal oil shale resources. Removing 75% of the resource from access and requiring proof of technology prior to commercial leasing violates the 2005 Act. The notion that a company willing to commit its own investment capital must demonstrate technology, demonstrate viable markets, and demonstrate commercial viability before even being allowed to enter into a mineral lease is in contravention with Federal leasing practices. No other extractive industry is faced with these requirements. Oil, gas, coal, potash, and other resources are put up for competitive lease and companies are free to bid on these resources and develop them pursuant to the applicable land, water, and air protections in existing law. All applicable environmental regulations will apply to oil shale as they do other heavy industries; yet, the Draft PEIS seeks to add additional requirements which prejudice and discourage the development of this critical resource in direct conflict with the intent of the 2005 Act. BLM fails to present a credible factual, legal or legitimate policy basis for proposing to amend the ten Resource Management Plans (RMP) currently in place. The Administration failed to vigorously defend the 2008 PEIS in litigation and instead settled litigation to achieve a political policy decision as

opposed to following the open public planning process required under FLPMA. The 2008 PEIS should be allowed to operate and then if issues arise from the current regulatory framework, those identified problems could be addressed in precise amendments to the current plans. **#5])>**
<([#6 [*9.2.4*] [*9.2.1*] [*3.7.4.2*] [*3.7.4.8*] [*3.1.3*] The preferred alternative in the Draft PEIS would exclude from commercial leasing lands that
may have wilderness characteristics or are in "core or priority sage-grouse habitat". Neither of these categories enjoy any regulatory protections but rather are assumed conditions by the BLM. Potential wilderness is not protected under the Wilderness Act unless designated as a Wilderness Study Area under the Act or through the FLPMA planning process. In terms of Sage Grouse, this species is not currently protected under the Endangered Species Act. Foreclosing lands due to the potential of these categories presupposes future designations or potential mitigation actions that could be taken and is premature. **#6])>**

<([#7 [*2.1.1*] Enefit believes that in the near future, production of oil from oil shale rock will occur in a
responsible manner, meeting all environmental regulations, without government subsidies, and will be a profitable industry. The Federal Government should provide access to the world's greatest deposits of oil shale in Utah, Colorado, and Wyoming. Oil shale development should be treated on an equal basis with other energy and mineral leasing activities. Enefit urges the BLM to withdraw the current Draft PEIS or select the no action alternative. **#7])>**

Enefit American Oil Co.

OSTS_027
Organization: Duchesne County, Mike Hyde
Received: 3/13/2012 12:00:00 AM
Commenter1: Mike Hyde - Duchesne, Utah 84021 (United States)
Organization1: Duchesne County
Commenter Type: Affiliation Only
Classification: none
Submission Category: Comment Form
Submitted As: Vernal Meeting
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/20/2012 12:00:00 AM
Attachments: OSTS2012D00027.htm (OSTS_027-58409.htm Size = 1 KB)
OSTS_027_Hyde_form_Vernal_OSTS2012D00027.pdf (OSTS_027-58408.pdf Size = 613 KB)
Submission Text
See Attachment.

<([#1 [*9.8*] This so-called "fresh look" is a waste of the taxpayer's money. A perfectly fine PEIS was approved in 2008. Because the Obama administration is pandering to the environmental groups, the new proposed EIS reduces the land area for commercial leasing dramatically. Obama's failure to encourage development of domestic sources of energy will guarantee he is a one term president. If this is a "fresh look," why was there such a feeble attempt made to update the data in the PEIS? There is still a lot of data in it that is obsolete. If this were truly a "fresh

look," the data would be updated to the most current available. Too bad that the document is being rushed toward an approval that will appease the environmentalists rather than being a true "fresh look." **#1])> <([#2** [*6.3.2.1*] If this were truly a "fresh look," the BLM would have made contact with Enefit and Red Leaf Resources to learn more about their technologies. Red Leaf can produce a barrel of oil with only 8 gallons of water. This is not recognized in the report, instead the report uses talking points from the environmental community in making water consumption to be a bigger issue than it truly is. **#2])> <([#3** [*2.1.1*] The oil shale industry will move forward not because of the BLM making lands available but in spite of the BLM's failure to make lands available. Technology will instead be proven on state and private lands. Only with a Republican Administration will BLM begin placing the interests of the energy-consuming public ahead of the interests of plants and animals. Duchesne County will be submitting detailed comments in writing before the May 4th deadline. Our hope is that the BLM will recognize these comments and select the No Action Alternative in spite of their settlement agreement with environmental groups. We need the energy and jobs for our growing population.
#3])>

OSTS_028
Organization: David Freeman
Received: 3/15/2012 12:00:00 AM
Commenter1: David Freeman - Rock Springs, Wyoming 82902 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: nameaddr
Submission Category: Comment Form
Submitted As: Rock Springs Meeting
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/20/2012 12:00:00 AM
Attachments: OSTS2012D00028.htm (OSTS_028-58411.htm Size = 1 KB)
OSTS_028_Freeman_form_RockSprings_OSTS2012D00028.pdf (OSTS_028-58410.pdf Size = 78 KB)
Submission Text
See Attachment.

<([#1 [*12.2*] I am not really in favor of oil shale development until we can answer many more questions. At this point it's like riding a blind horse. **#1])>**

OSTS_029
Organization: Rock Springs Grazing Association, Don Schramm
Received: 3/15/2012 12:00:00 AM
Commenter1: Don Schramm - Rock Springs, Wyoming 86902 (United States)
Organization1: Rock Springs Grazing Association
Commenter Type: Grazing Assoc
Classification: none
Submission Category: Comment Form
Submitted As: Rock Springs Meeting
Form Letter Category:

Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/20/2012 12:00:00 AM
Attachments: OSTS2012D00029.htm (OSTS_029-58413.htm Size = 1 KB)
OSTS_029_Schramm_form_RockSprings_OSTS2012D00029.pdf (OSTS_029-58412.pdf Size = 86 KB)
Submission Text
See Attachment.

Comment: **<([#1** [*11.2*] RSGA [Rock Springs Grazing Association] supports all oil shale leasing for development. RSGA has one active lease with Anadarko for the oil. Along with WY DEQ. **#1])>**

OSTS_030
Organization: Craig Kerns
Received: 3/15/2012 12:00:00 AM
Commenter1: Craig Kerns - Green River, Wyoming 82935 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Comment Form
Submitted As: Rock Springs Meeting
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/20/2012 12:00:00 AM
Attachments: OSTS2012D00030.htm (OSTS_030-58415.htm Size = 1 KB)
OSTS_030_Kerns_form_RockSprings_OSTS2012D00030.pdf (OSTS_030-58414.pdf Size = 95 KB)
Submission Text
See Attachment.

<([#1 [*6.3.3*] The in-situ process, when practical, appears to be the most advantageous, from an initial cash investment to confinement of the processing area (underground) containment of any solvents should be easily controlled due to laminate structure of the shale – looks like a great prospect for fuel, wealth & technology. **#1])>**

OSTS_031
Organization: Oliver Adams
Received: 3/22/2012 12:00:00 AM
Commenter1: Oliver Adams - Boulder, Colorado 80302 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/18/2012 12:00:00 AM

Attachments: OSTS2012D00031.htm (OSTS_031-58417.htm Size = 1 KB)
OSTS_031_Adams_letter_mail_OSTS2012D00031.pdf (OSTS_031-58416.pdf Size = 107 KB)
Submission Text
See Attachment.

<([#1 [*2.5*] The proposed plan for research and development of oil shale in the four corners region has to
be adjusted drastically. The proposed area of land allocated for this project is 461,965 acres, covering areas in Colorado, Utah and Wyoming (BLM Draft Programmatic). In the proposal, it is clearly stated that there is currently not a sustainable or viable procedure for oil shale or tar sand extraction. Considering the case, the main point of this project should be researching a way to extract oil shale and tar sand in an economically viable way. So why does one need 461,965 acres to plan and research the extraction of these resources. It seems that regardless of the lack of technology, there will still be massive mining operations occurring at these sites. It seems a lot more rational to establish a mining site in a resource rich area covering 100 acres tops. It would be best to establish these mining and research stations in several locations but there should be designated areas with limits to development. Having 4 or 5 stations covering 100 acres each would be a lot less detrimental to the environment than having 461 ,965 acres open for development. **#1])>**

<([#2 [*6.3.2.2*] The other major issue is the required massive amounts of water needed to extract these
resources in an area where water is very scarce. There should be regulations and limits to the amount of water consumed by these mining companies, as long as these projects aren't large scale extraction sites this shouldn't be a problem. **#2])>**

<([#3 [*3.8.1*] After traveling and conducting field work in this area for two months it is inevitable for me
to bring up the aesthetic values. These canyons are some of the last pieces of land on earth that have not been developed, they are truly unique. Giving such a large amount of land for mining poses a serious threat for the conservation of these places. **#3])> <([#4** [*2.5*] I agree that research
and 'development' are necessary for the progression of our countries energy consumption, but these number are exaggerated. There can be sustainable research methods without the use of massive amounts of land. Help me in conserving this area and thank you for considering reducing the amount of land to a sustainable acreage. **#4])>**

OSTS_032
Organization: Montrose County Board of County Commissioners, David White
Received: 2/16/2012 12:00:00 AM
Commenter1: David White - Montrose, Colorado 81401 (United States)
Organization1: Montrose County Board of County Commissioners
Commenter2: Gary Ellis - Montrose, Colorado 81401 (United States)
Organization2: Montrose County Board of County Commissioners
Commenter3: Ron Henderson - Montrose, Colorado 81401 (United States)
Organization3: Montrose County Board of County Commissioners
Commenter Type: Local Government

Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/18/2012 12:00:00 AM
Attachments: OSTS2012D00032.htm (OSTS_032-58419.htm Size = 1 KB)
OSTS_032_Montrose_County_mail_OSTS2012D00032.pdf (OSTS_032-58418.pdf Size = 174 KB)
Submission Text
See Attachment.

As the elected County Commissioners for Montrose County, Colorado we are hereby submittingcomments as an interested party in response to the Draft Programmatic Environmental Impact
Statement (Draft PEIS) for Allocation of Oil Shale and Tar Sands Resources which was published in the Federal Register on February 6, 2012.

<([#1 [*3.10.3*] In general, we are concerned that this proposed action will adversely impact oil shale
development within the State of Colorado. The economic benefits derived from development of domestically located natural resources are well known and deserve adequate consideration in actions such as this Draft PEIS. With the exception of the required "No Action" alternative, all of the proposed alternatives will significantly reduce the acreage available to oil shale development in Colorado. In fact, preferred alternative 2(b) would reduce the Colorado acreage available for oil shale leasing from 346,609 acres to 35,308 acres (Draft PEIS, Table 2.3.2-2). Given that proposed alternatives 2, 3 and 4 span the range from moderate to severe restriction of available lease lands, we believe that adequate consideration has not been given to the future economic impact of this action on oil shale development. **#1])>**

More specifically, we have concerns that the regulatory requirements ofNEPA have not been satisfied. NEPA regulations state:

<([#2 [*1.5*] If the information relevant to reasonably foreseeable significant adverse impacts cannot
be obtained because the overall costs of obtaining it are exorbitant or the means to obtain
it are not known, the agency shall include within the environmental impact statement:

a summary of existing credible scientific evidence which is relevant to evaluating
the reasonably foreseeable significant adverse impacts on the human environment
(CEQ- Regulations for Implementing NEPA, 43 CFR Part 1502.22.b(3))

In this Draft PEIS, the agency repeatedly mentions the "unknown" aspects of oil shale extraction. As an example, the section discussing potential development technologies states, "Because commercial oil shale development technologies are still largely in an R&D phase, many details regarding the specific technologies that may be used in the future to produce oil from oil shale

are unknown" (Draft PEIS, § 2.3 .1, p.2-16 at 44-46). While it is true that extraction technology is
continually evolving, we feel that the agency has relied upon a perceived uncertainty of oil shale extraction in the course of advancing overly restrictive alternatives.

Furthermore, it does not appear that "a summary of existing credible scientific evidence" has been included to fulfill NEP A requirements or to support the concerns about the unknowns of the
extraction process. It seems that the agency is relying on a general premise that all extraction activities are environmentally harmful and therefore any potential technology used to develop oil shale will also be significantly harmful. Evidence of this premise can be found in various places within the Draft PEIS. For example, "Processing of the mineral ore involves a variety of chemical and physical manipulations that produce a wide variety of wastes, many of them capable of producing significant adverse environmental impacts if not managed properly" (Draft PEIS, § 6.1.6.3 .13, p.6-31 0 at 15-17).

In closing, it is our opinion that making a determination that oil shale extraction/technology will be significantly harmful while failing to provide the required basis for that determination is a decision which does not satisfy NEPA or represent the needs of the public. **#2])> <([#3** [*2.1.1*] We hereby, provide
our unanimous support for the "No Action" alternative as stated in the Draft PEIS and request that further consideration be given to the agency's position on oil shale extraction in this and any future actions.
#3])>

OSTS_033
Organization: Mesa County Board of County Commissioners, Craig Meis
Received: 4/10/2012 12:00:00 AM
Commenter1: Craig Meis - Grand Junction, Colorado 81502 (United States)
Organization1: Mesa County Board of County Commissioners
Commenter2: Janet Rowland - Grand Junction, Colorado 81502 (United States)
Organization2: Mesa County Board of County Commissioners
Commenter3: Steve Acquafresca - Grand Junction, Colorado 81502 (United States)
Organization3: Mesa County Board of County Commissioners
Commenter Type: Local Government
Classification: none
Submission Category: Letter
Submitted As: Email & Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/11/2012 12:00:00 AM
Attachments: OSTS2012D00033.htm (OSTS_033-58421.htm Size = 1 KB)
OSTS_033_Mesa_County_mail_OSTS2012D00033.pdf (OSTS_033-58420.pdf Size = 522 KB)
Submission Text
See Attachment.

Mesa County appreciates the opportunity to submit comments on the Draft

Programmatic Environmental Impact Statement (DPEIS) and Possible Land Use Amendments for Allocation of Oil Shale and Tar Sands Resources on Lands Administered by the BLM in Colorado, Utah and Wyoming. Mesa County has a long history of cooperation with the Forest Service and BLM through a variety of methods, including agreements for joint planning, and information sharing. We *very* much appreciate the efforts and cooperation of the Forest Service and BLM in this regard. We participated in the 2008 PEIS process as a Cooperating Agency, but did not feel it was necessary to act in that capacity with this latest PEIS effort. The ink was hardly dry on the previous decision when the BLM was required via the legal settlement to duplicate efforts to analyze potential alternatives for the allocation of lands for Oil Shale and Tar Sands resources. Accordingly, the following comments mirror our comments on the 2008 PEIS (see enclosed 2008 comments).

<([#1 [*2.2*] Mesa County does not support the DPEIS's preferred alternative - Alternative 2 (b). **#1])>**
<([#2 [*2.1.1*] We strongly support Alternative 1 - "No Action," approved as the preferred alternative
in the 2008 PEIS. Mesa County is the economic regional center for western Colorado and Eastern Utah and although the resources analyzed in the DPEIS are not primarily located within Mesa County, multiple use of public lands throughout the region directly and indirectly impact the Mesa County economy, including energy development, tourism, agriculture, forestry, etc. **#2])>**

<([#3 [*3.10.2*] Our experience with the 1970s and 1980s development of the Colony Project confirms
that the impacts of oil shale development will fall heavily on Mesa County and its municipalities. The positive and negative impacts of the "boom" and "bust" cycles remain ever clear to us including our experience with the energy industry over the past decade. Demands on local government services and Infrastructure during development occur significantly in advance of the tax revenues and other revenues that assist in mitigating local impacts. Our economy in Mesa County and in this general region is significantly different than it was in the late 1970's and early 1980's. However, although the energy industry has attempted to assist in many ways, impacts from recent exploration and development of natural gas stretch local resources. **#3])>**

<([#4 [*3.10.2*] [*5*] We strongly believe that government and industry need to make significant, early,
up-front investments in and contributions to the infrastructures of local entities which will be impacted by oil shale development. These investments and contributions can be later credited against severance and/or other taxes and impact fees if appropriate as they come due. We believe that these investments and contributions should be considered in and required by the DPEIS process. Specifically, proactive socio-economic mitigation measures suggested in section 4.12.2 of the DPEIS (page 4-181) should be mandatory in the Final EIS rather than simply suggestions for the future. We respectfully refer the BLM to the April 2008 *Northwest Colorado Socioeconomic Analysis prepared by BBC Research & consulting for Associated* Governments of Northwest

Colorado. The purpose of the report ". . .was to analyze existing cumulative socioeconomic conditions in northwest Colorado (Garfield, Mesa, Moffat and Rio Blanco counties) and forecast how these conditions may change with future natural resource development."
#4])>
<([#5 [*9.7*] We support the Research Development, and Demonstration (RD&D) approach and program currently in place for oil shale. To the extent it can be expanded with the issuance of additional leases and the evaluation of additional technologies, we would support such expansion. Information and techniques presently being developed on the RD&D leases will be valuable in the site-specific process. We also appreciate knowing the United States Geological Survey is studying baseline water resources conditions to better understand potential commercial-scale oil shale development impacts on ground and surface waters. **#5])>**

<([#6 [*9.3*] We understand that completion of the PEIS under the Preferred Alternative will modify
applicable Resource Management Plans (RMPs). Rather than amending these RMPs, we suggest nominations for additional RD&D leases and subsequent commercial development leases be allowed per the No Action Alternative. Site specific NEPA analyses will then be conducted on issued leases based on company-specific development technology and plans, which will reflect current technologies and impacts. Conditions are placed on a lease as an outcome of the site specific NEPA analysis. **#6])>**

<([#7 [*2.1.1*] In summary, we believe Alternative A, the No Action Alternative, is in the best interest
of the United States, the State of Colorado, the region and Mesa County. The thoughtful and carefully regulated exploration and development of oil shale reserves is a vital component of energy development for our country and our local area. We note that the lands available for leasing in the other Alternatives are smaller and more scattered and we question whether those Alternatives would result in a situation in which development of the oil shale reserves becomes economically impossible. With this in mind, and with the basic assumption that the NEPA process will result in leases and projects which minimize and mitigate their negative impacts, we reiterate that Alternative A should be the Preferred Alternative. **#7])>**

We appreciate the opportunity to participate in the PEIS process and we look forward to cooperating with the BLM and participating in the site specific NEPA project analyses as oil shale development proceeds.

[See PDF for 2008 comments.]

OSTS_034
Organization: Sandra Hays
Received: 4/17/2012 12:00:00 AM
Commenter1: Sandra Hays - Sandy, Utah 84092 (United States)
Organization1:
Commenter Type: Member of the Public

Classification: nameaddr
Submission Category: Comment Form
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/20/2012 12:00:00 AM
Attachments: OSTS2012D00034.htm (OSTS_034-58423.htm Size = 1 KB)
OSTS_034_Hays_Mail_OSTS2012D00034.pdf (OSTS_034-58422.pdf Size = 222 KB)
Submission Text
See Attachment.

<([#1 [*3.4.1*] Comment: Initial drilling operations itself may consume 6,000-600,000 gallons of fracking fluids: Over its lifetime an average well will require up to an additional 5 million gallons of water for the initial hydraulic operation & possible restimulation frac jobs. (High-volume hydraulic fracturing can use as much as 2-3 million gallons of fluid per well). **#1])>**
<([#2 [*3.14*] Over life of a typical well, chemical additives (used in fracturing fluids) may amount to 100,000 gallons of chemical additives. Some chemicals are carcinogens (causes cancer), neurotoxins (causes cancer), benzene (c. cancer and bone marrow failure), lead (damages the nervous system & causes brain disorders), ethylene glycol (antifreeze -> causes death), 2-butoxyethanol (causes hemolysis) Gamma-emitting isotopes (radioactive; can cause cancer) etc -> to many more to be named. This leaks into and found to be in peoples drinking water and milk. The 2011 US House of Rep. found 750 compounds in fracturing products. These manufacturers also withhold information and are injecting fluids containing unknown chemicals that they put down in our earth, water and air.

Some European countries have banned fracking.

I guess they value human life.
#2])>

OSTS_062
Organization: Dave Folland
Received: 4/4/2012 12:00:00 AM
Commenter1: Dave Folland - , (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Message
Submitted As: E-Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/25/2012 12:00:00 AM
Attachments: OSTS2012D00062.htm (OSTS_062-58594.htm Size = 1 KB)
OSTS_062_Folland_Email_OSTS2012D00062.pdf (OSTS_062-58593.pdf Size = 57 KB)
Submission Text
See Attachment.

Kurt, Dave called me back today and let me know he did submit some written comments on the website, but he also wanted to discuss with me what those were. I've summarized them below; please
add to our comments:
<([#1 [*12*] - All Utahans do not think like the Utah State Government. **#1])>**
<([#2 [*10.6.1*] - Mr. Folland believes this country needs to focus on renewable energy.
#2])> <([#3 [*2.2*] - Mr. Folland is in favor of the direction BLM has gone with the new PEIS.
#3])>
<([#4 [*1.1*] We also discussed the format of the meeting; I explained why we had the open house format versus an
open microphone format. He said he understood, but that the BLM should do a better job of publicizing
what format the meeting will be in. I agreed. **#4])>**

OSTS_065
Organization: Jeff Crank
Received: 4/26/2012 12:00:00 AM
Commenter1: Jeff Crank - Colorado Springs, Colorado (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Message
Submitted As: E-Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/1/2012 12:00:00 AM
Attachments: OSTS2012D00065.htm (OSTS_065-58670.htm Size = 1 KB)
OSTS_065_Crank_Email_OSTS2012D00065.pdf (OSTS_065-58669.pdf Size = 74 KB)
Submission Text
See Attachment.

<([#1 [*11*] Open all oil shale areas. We need jobs and energy now. Stop allowing the radical environmentalists to run the show.
#1])>

OSTS_066
Organization: Shell Frontier Oil and Gas, Inc., Dan Whitney
Received: 4/26/2012 12:00:00 AM
Commenter1: Dan Whitney - Denver, Colorado 80237 (United States)
Organization1: Shell Frontier Oil and Gas, Inc.
Commenter Type: Gas / Oil Company
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:

Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/2/2012 12:00:00 AM
Attachments: OSTS2012D00066.htm (OSTS_066-58672.htm Size = 1 KB)
OSTS_066_Shell_Frontier_OSTS2012D00066.pdf (OSTS_066-58671.pdf Size = 507 KB)
Submission Text
See Attachment.

® Shell Frontier Oil and Gas, Inc.
April 25, 2012
Draft OSTS PEIS
Argonne National Laboratory
9700 S. Cass Ave.
EVS,240
Argonne, IL 60439
Shell Frontier Oil & Gas, Inc.
4582 S. Ulster Pkwy, Suite 1400
Denver, CO 80237, U.S.A.
SUBJECT: Comments on BLM's February 3, 2012 Draft Programmatic Environmental Impact Statement and Possible Land Use Plan Amendments for Allocation of Oil Shale and Tar Sands Resources on Lands Administered by the Bureau of Land Management in Colorado, Utah and Wyoming
Dear Sir or Madam:
<([#1 [*9.8*] Shell Frontier Oil and Gas, Inc. appreciates this opportunity to comment on the subject Draft
PEIS. As Shell previously stated in comments submitted on May 4, 2011 for the PEIS NOI, Shell views this second PEIS as an inefficient and unnecessary use of taxpayer money and as a significant deterrent to capital investment by Shell and others in the energy industry. **#1])>**
<([#2 [*2.1.1*] Given that the reopening of the PEIS has occurred, Shell supports "Alternative 1, No Action
Alternative, No Change to 2008 Decision, Oil Shale", so that approximately 2,000,000 acres of public land remain available for potential development of oil shale and 430,000 acres of public land remain available for potential development of tar sands. The basis for this recommendation is that the first PEIS has already adequately and thoroughly addressed this issue. **#2])>**
<([#3 [*9.8*] The Energy Policy Act of 2005 (EPA'05) declared oil shale and heavy oil "strategically
important resources that should be developed to reduce the growing dependence of the United States on politically and economically unstable sources of foreign imports". Events since 2005 have only served to reinforce the need for domestic oil shale development as part of an "all of the above" solution.
In September 2008, the BLM issued what was thought to be the Final PEIS; a comprehensive work consisting of 1,828 pages in three volumes. This document was published after a 120-day comment period in which more than 100,000 comment letters were submitted. The comments and the BLM responses are contained in a fourth volume containing over 7,000 pages. Shell provided 226 comments covering nearly 80 pages.
BLM has stated that the bases for reopening the PEIS are: (1) because there are presently "no economically viable ways yet known to extract and process" oil shale and tar sands, (2)

because new information has come out (including revisions to the resource assessment and to the list of threatened/ endangered species) and (3) "to reassess the appropriate mix of allowable uses with respect to oil shale and tar sands leasing and potential development" that were apparently not sufficiently covered in the original PEIS.

Regarding the first reason, the work that went into the PEIS was based on the assumption that a commercial development of oil shale would successfully emerge from the RD&D work. That is the objective of the RD&D program. If the RD&D work does not lead to a commercial development, there will be no demand for leases (and thus no need to withdraw lands from leasing consideration).

The second reason for reopening the original PEIS is not valid given that new information and studies are being produced all the time. The existing, fully vetted, comprehensive, 1,800 page PEIS is less than three years old and in the intervening time no substantive new information has emerged that merits revisiting the PEIS in such a short time. Additionally, the entire issue fails to recognize the comprehensive framework of regulatory checks and balances already in place in the form of environmental (and other) laws, including site specific NEPA review that will apply to every oil shale project under federal jurisdiction in the future. These laws and regulations are further elaborated on in Section 2.2.1 (Existing Relevant Statutory Requirements).

The third reason for reopening the PEIS is also without warrant. Remarkably, all five areas proposed for removal from development as identified in the Notice (i.e. those with wilderness characteristics, "very rare or uncommon" designation, sage grouse habitat, "areas of critical environmental concern") may be precluded under the existing leasing authority assigned to BLM land managers.

Given the fact that there are already adequate checks and balances provided in existing regulatory programs to accomplish the stated bases for this PEIS, Shell views the new Draft PEIS as an inefficient and unnecessary use of taxpayer money and a significant deterrent to capital investment by Shell and others in the energy industry. The ramification of such a downsizing of the areas of potential development coupled with the increase in regulatory uncertainty could be (1) lower capital investment, (2) lower domestic oil production, (3) higher oil imports, (4) higher unemployment, (5) lower tax revenues from royalties, federal and state corporate and individual incomes taxes, severance tax, and property and sales taxes, and (6) lower overall economic growth.

#3])> Shell's Long Standing Commitment to Oil Shale Research

2

<([#4 [*6.3.3*] Shell has been investing in the technical and commercial development of the In situ Conversion Process (ICP) for oil shale since the early 1980s as a means to economically develop oil shale- in an environmentally responsible and socially sustainable manner. This effort has required considerable dedicated scientific effort and significant investment. To date, through persistence and much effort, a logical progression of work has been completed from desk top studies, to laboratory scale testing, to prototype scale testing, and finally to field pilot testing in Colorado.

Shell's seven previous Colorado pilot projects have tested broad technology themes, including (1) demonstrating that the technology works, (2) measuring energy balance and recovery efficiency necessary to estimate commercial project economics, (3) producing and measuring the properties of ICP oil and gas, (4) proving that the groundwater can be protected, and (5) testing the effectiveness of a variety of heat delivery methods. In the

process, Shell has carried out extensive pre-operational environmental assessments. Shell has given careful attention to archaeologically sensitive areas by completely assessing and avoiding such areas, and has cooperated fully with agencies such as the State Historical Preservation Office and BLM to identify and avoid areas of critical environmental concern, including establishing conservation easements to provide permanent protection of certain areas. Shell has also funded research into environmental restoration, and has shown that disturbed lands can be returned to beneficial uses that are equivalent to the pre-disturbance conditions. And last, Shell has always stated our commitment to supporting a transparent and regulated NEPA process for a potential commercial project.

#4])> <([#5 [*10.6*] The Pressing Need for Energy Solutions in the United States

While questions and challenges remain regarding the future implementation of oil shale technology, Shell believes it is now time for increased commitment by the Federal Government to create a regulatory environment that encourages the investment in oil shale RD&D, including ICP technology. While perfect regulatory certainty can never be attained, the lack of policy consistency from one administration to another makes investment risky and potentially untenable.

Shell firmly believes that if the ICP technology (or technologies being tested by other energy companies) can be proven through RD&D testing, a meaningful domestic source of energy can be successfully unlocked. The energy chc1llenges facing this nation and this planet are real and require working together to maximize the chance of finding cost effective, environmentally acceptable, and timely solutions.

Shell intends to develop oil shale in a manner that is economically viable, environmentally responsible and socially sustainable. An environmentally based "no development" policy is unsustainable when considering socioeconomics, national energy needs, and the facts and realities of future U.S. energy requirements. As NEPA requires, the environmental and social impacts and benefits of any proposed action need to be considered. Our country needs energy in every form. There is clearly a path forward where our energy needs can be supplemented with oil shale, while also managing and mitigating the impacts of development.

#5])> <([#6 [*2.1.1*] As previously stated, Shell supports "Alternative 1, No Action Alternative, No Change to2008 Decision, Oil Shale", so that approximately 2,000,000 acres of public land remain

available for potential development of oil shale and 430,000 acres of public land remain available for potential development of tar sands.

#6])> Additional, and more specific comments can found in the following attachment to this letter.

last, **<([#7** [*1.1.1*] Shell reserves the right to submit additional comments to this PEIS in the event that the public comment is extended, as was requested by our letter of April 10, 2012. Because BLM

intends to issue the Notice of Proposed Rulemaking (NPR) for the commercial leasing regulations on or around May l51h, which is after the planned May 4th end of this initial comment period, there will be additional context in the NPR that will reflect directly on this PEIS.

#7])> Thank you for the opportunity to comment on this important matter.

Dan Whitney

Heavy Oil Development

<([#8 [*9.2.1*] PEIS Citation: Vol 1, Pg 2-76, Sec 2.4.4, line 12 Preferred Alternative
Topic: Compliance with Section 369(e) of the Energy Policy Act of 2005 requiring COMMENCEMENT OF COMMERCIAL LEASING OF OIL SHALE AND TAR SANDS
Comment: The DOI and BLM are attempting to alter federal law through a federal policy decision.
Section 369(c) of the Energy Policy Act of 2005 requires establishment of a LEASING PROGRAM FOR RESEARCH AND DEVELOPMENT OF OIL SHALE AND TAR SANDS. Then, Section 369(d) requires development of a separate commercial leasing program for oil shale and tar sands by requiring a PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT for that program in Section 369(d) and COMMENCEMENT OF COMMERCIAL LEASING OF OIL SHALE AND TAR SANDS in Section 369(e).
By recommending Alternative 2(b) as BLM's chosen Preferred Alternative, BLM and DOI are essentially vacating the federal law by policy decision by making the RD&D program the only possible future avenue to commercial oil shale development. **#8])>**

<([#9 [*1.3*] [*2.2*] PEIS Citation: Vol 1, Pg 2-76, Sec 2.4.4, line 12 Preferred Alternative
Topic: Compliance with 40CFR1501.6(a)(2)
Comment: For multiple reasons, BLM should re-evaluate its decision to select Alternative 2(b) as the Preferred Alternative. In doing so, BLM and the DOI have demonstrated that the most stringent reductions of
"operating space" for the oil shale industry are a matter of policy from the administration rather than taking into consideration the needs and desires of entities within the region of potential oil shale development. Not a single entity among the 14 Cooperating Agencies prefers Alternative 2(b) as the Preferred Alternative, and more than half of them {8) preferred Alternative 1, the No Action Alternative. Choosing a Preferred Alternative that is inconsistent with the consensus of all l4 of the Cooperating Agencies, and diametrically opposed to the preference of the majority (8 of 14) of the Cooperating Agencies appears to be in conflict with the requirements of 40 CFR 150 1.6(a)(2) which states that the lead agency (BLM) shall "Use the environmental analysis and proposals of cooperating agencies with jurisdiction by law or special expertise, to the maximum extent possible consistent with its responsibility as lead agency". Putting forth a Recommended Alternative that has zero support among the Cooperating Agencies does not constitute using the proposals of the Cooperating Agencies to the maximum extent possible. **#9])>**

<([#10 [*10.6.3*] PEIS Citation: Vol l, Pg 2-76, Sec 2.4.4, line 12 Preferred Alternative
Topic: National Energy Security
Comment: Another reason BLM should re-evaluate its decision to select Alternative 2(b) as the Preferred Alternative has to do with National Energy Security. BLM is charged to be the steward of much of our nation's Federal property, and those properties are to be managed for multiple uses. Yet, in the case of oil shale-containing lands, developing the mineral and energy resources of the single most concentrated hydrocarbon resource on the planet is taking the lowest priority among an idealistic Focus on environmental protection at a time when the economy is struggling, and our nation depends on external sources to supply more than half of our oil demand. In the mean time, we export

approximately a half a trillion tax payer dollars a year to purchase oil that could be otherwise invested here in the United States. There is an extensive array of existing environmental regulatory programs in the US that are more than adequate to effectively manage, mitigate and restore the impacts of oil shale production activities. The selection of Alternative 2(b) does not appear to reflect the DECLARATION OF POLICY stated in the Energy Policy Act of 2005 that states that the "United States oil shale, tar sands, and other unconventional Fuels are strategically important domestic resources that should be developed to reduce the growing dependence of the United States on politically and economically unstable sources of foreign imports".
#10])>

<([#11 [*2.2*] PEIS Citation: Vol l, Pg 2-76, Sec 2.4.4, line 12 Preferred Alternative
Topic: Regulatory Uncertainty
Comment: Another reason BLM should re-evaluate its decision to select Alternative 2(b) as the Preferred Alternative has to do with regulatory uncertainty. Alternative 2(b) has reduced the acreage potentially available for oil shale and tar sands development by nearly 77%, and in Colorado, where the richest and most abundant oil shale exists, the acreage potentially available for oil shale development has been reduced by nearly 90%. Additionally, the acreage in Colorado now deemed suitable for oil shale development is so significantly dispersed and discontiguous, especially outside the area of the existing RD&D leases, that the opportunity for a company to put together a viable operation is nearly non-existent. To have such wide variability in national oil shale policy is a significant disincentive to companies that have invested many millions of
dollars into oil shale research and development, as well as other companies that are considering such investment. **#11])>**

<([#12 [*10.5*] PEIS Citation: Vol 1, Pg 2-82, Sec 2.5.12, line 7
Topic: Establishment of Trust Funds
Comment: In saying that socioeconomic impact mitigation through establishment of a trust fund should be left to site specific NEPA analyses of specific projects, BLM is failing to recognize and address the most significant socioeconomic impact associated with oil shale development. The issue is not site- or project-specific because it is so tied to the cumulative impacts of the developing industry. The issue is the disparity between when socioeconomic impacts will occur (primarily during project construction and start-up phases) versus when the revenue stream of royalty payments begins many years later. A legal/legislative mechanism needs to be devised to facilitate a flow of money on the front end to mitigate the impacts when they occur, tied to a credit against future royalty payments for the amount paid early on for impact mitigation. **#12])>**

<([#13 [*10.5*] PEIS Citation: Vol2, Pg 4-165, Sec 4.12, Line 10
Topic: Socioeconomics
Comment: In general, the PEIS fails to provide an assessment of both the potential negative and positive potential socioeconomic impacts of oil shale development. It should be better recognized that the opportunity for revenue distribution grows proportionally with the scale of the industry. For example, a 12.5% royalty on production of 1,000,000 barrels

per day of oil at $100 per barrel would nominally generate $12,500,000 dollars in royalties {subject to standard deductions) each and every day, or $4.56 billion per year. In addition to that would be state severance taxes, property tax, federal and state income tax, and sales tax and other fees that would all go toward making an enormous amount of revenue distribution that contribute to the positive impacts that such a level of development would provide. Other positive impacts and benefits resulting from oil shale development include economic expansion and diversification, long-term, well-paying employment opportunities, educational/ academic growth and skill development opportunities, and the positive effects that revenue distribution will have on public sector infrastructure enhancement. **#13])>**

<([#14 [*6.2.1*] PEIS Citation: Vol 2, Pg 4-165, Sec 4. 12, Footnote 13
Topic: Presumption of supplemental energy sources
Comment: A scenario where the primacy: energy supply comes from new gas-fired power, and not coal-fired power, should be built into the PEIS as a likely option. Footnote 13 on page 4-165, and elsewhere, presumes that coal-fired power plants will be used to provide electrical power to oil shale developers. The PEIS fails to consider the likelihood that 1) natural gas fired power will almost certainly be preferential to coal because of the abundance of natural gas in the region, 2) C02 emissions of gas fired power are nearly half that of coal, and 3) that gas-fired power plants are faster and less expensive to build. There is also the high likelihood that the natural gas produced by some oil shale operators will be directly used to generate electricity and thus reduce demand off the grid. The PEIS also fails to consider that local power supplies might also be supplemented by wind power that is abundantly available in the region north of the Piceance Basin.
#14])> -- -

OSTS_067
Organization: Jana Weber
Received: 4/20/2012 12:00:00 AM
Commenter1: Jana Weber - Rock Springs, Wyoming 82901 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Comment Form
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/1/2012 12:00:00 AM
Attachments: OSTS2012D00067.htm (OSTS_067-58674.htm Size = 1 KB)
OSTS_067_Weber_Form_Mail_OSTS2012D00067.pdf (OSTS_067-58673.pdf Size = 151 KB)
Submission Text
See Attachment.

<([#1 [*12.3*] I have read about oil shale extraction and processing on the internet, the newspaper, and have attended meetings where the process was described. At this point in time (and possibly for decades to come) this extraction and processing would be an environmental disaster. It is

critical that NO public lands be involved until technology exists which will truly protect the environment. **#1])>**

OSTS_068
Organization: Excalibur Industries, Inc., Raymond Ridge
Received: 4/18/2012 12:00:00 AM
Commenter1: Raymond Ridge - Salt Lake city, Utah 84117 (United States)
Organization1: Excalibur Industries, Inc.
Commenter Type: OSTS Tech Company
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/7/2012 12:00:00 AM
Attachments: OSTS2012D00069.htm (OSTS_068-58676.htm Size = 1 KB)
OSTS_068_Excalibur_Ridge_Mail_OCR_OSTS2012D00069.pdf (OSTS_068-58675.pdf Size = 2992 KB)
OSTS_068_Excalibur_Ridge_Mail.pdf (OSTS_068-58677.pdf Size = 19715 KB)
Submission Text
See Attachment.

The comments set forth below are intended to supplement, augment and correct the oral comments
which Raymond L. Ridge provided during the Scoping Meeting of April26, 2011 (1 '1 session) at the Little
America Hotel in Salt Lake City, UT and our comments dated May 12,2011, a copy of which, together with
Exhibit Volumes I-V, is attached hereto and incorporated herein by this reference as though newly submitted
herewith. The undersigned demands that such materials be addressed as fully as any other comments now
being submitted in response to the Draft Programmatic EIS bearing a date of January 2012 ("Draft PEIS").

Introduction

<([#1 [*1.5*] Bureau of Land Management ("BLM") Land Use Policy has historically permitted multiple uses,
provided those uses were not mutually incompatible. This policy is enshrined in the Federal Land Policy
and Management Act of 1976 ("FLPMA").

The Draft PEIS is fundamentally flawed as it seeks not to protect the environment, but rather to kill
the nascent oil shale industry by withdrawing lands requisite to attracting the capital needed to develop the

industry. It was "born" from a contrived settlement agreement between Secretary Salazar and plaintiff
environmental organizations, including The Wilderness Society, dated February 15, 2011, Civil Action No.
09-cv-0009-JLK. It was contrived, because both Secretary Salazar and The Wilderness Society were aware
of the technology subject of U.S. Patent 7,807,049, issued to the undersigned, dated October 5, 2010,
described as "Method and Apparatus For Recovering Oil From Oil Shale *Without Environmental Impacts."*
Secretary Salazar was informed by letter dated December 14, 2010 from the undersigned. It is a fraud on
the Federal Court dependent on tbjs contrived Draft PEIS for its full implementation! This fraudulent
intent is corroborated by the decision of Secretary Salazar to persist in extending the withdrawal of the Naval
Oil Shale Reserves Nos. 1 & 3 (56,238 acres) as detailed in the Draft PEIS on Page 2-31, lines 29-32.
Secretary Salazar's position contravenes the clear intent of Congress when it authorized the transfer of those
Naval Reserves from the Department of Energy's Office ofNaval Petroleum and Oil Shale Reserves to the
Department of the Interior! If acting in "good faith" Secretary Salazar should have sought clarification from
Congress to the extent any question regarding "Congressional intent" really exists.

It would appear that the environmentalist plaintiffs felt their chances for a favorable resolution lay
with Secretary Ken Salazar and his sympathies towards environmentalists who had funded his election
campaigns as a Senator, and the perception that he is "beholden" to them for delivering the "Colorado Vote"
for President Obama in 2008, rather than risk a Federal court likely to honor the most recent evidence of
Congressional Intent set forth in Section 369 of the Energy Policy Act of2005, also known as the "Oil Shale,
Tar Sands, and Other Strategic Unconventional Fuels Act of2005" (the "Act"). It would be more difficult
for a Court to set aside a voluminous rework of a Programmatic Environmental Impact Statement than that
embodied in the 2008 PEIS. The Draft PEIS of 2012 is a continuing perpetration of that fraud, and
involves the complicity of every employee of the BLM advancing the withdrawal of oil shale lands on
the pretext of environmental protection.

The Settlement and the Draft PEIS are an affront to Procedural Due Process protected by the U.S.
Constitution, as it is intended to achieve by the appearance of propriety that which would not have been
sanctioned by the Federal Court. As such it smacks of denying the nascent industry a full hearing on the
merits, especially as it abuses the Power of Definition. It ignores traditional principles of "fair play and
substantial justice", and seeks to control the outcome of court decisions under the guise of an open and
fair review of the 2008 PEIS. And, it borders on being "treasonous", as it intends to deprive our Nation
of a 1.5 Trillion barrel resource of hydrocarbons in oil shale capable of providing energy independence and
strategic national security. America does not have just 2% of the world's oil reserves, as the 1.5 Trillion
barrels represents a reserve equal to or in excess of all the oil the world has produced to date. Indeed, the
link between our food chain and fossil fuels that provide transportation fuels would break without the
transportation fuels needed to maintain high farm productivity. Peak Oil is a reality, and famine could result
from diminished access to transportation fuels.
#1])>
Abuse of the "Power of Definition"

<([#2 [*9.1*] The Draft PEIS abuses the "power of definition" in the following particulars:

1. "Need" for a New PEIS. The only attempt to define the "need" for a new PEIS is contained in the last sentence of the second paragraph of the introductory letter signed by Michael D. Nedd which states, *"The purpose and need for the proposed planning action is to reassess the appropriate mix of allowable uses with respect to oil shale ... leasing and potential development.* " The "need" is neither explained nor defined; nor does it reference the Settlement Agreement! As such, it abuses the power of definition by failing to explain the attempt to reexamine land use policy without any intervening expression of Congressional Intent, environmental studies, nor technological improvements or degradations that would otherwise prompt a reexamination.
#2])>
<([#3 [*9.2.2*] 2. Assumption that Oil Shale Technology is "Experimental". *"In the present experimental
stage of the oil shale . . . industr[y] ... , the BLM believes that the stages of NEPA compliance will be different from those used in oil and gas."* [Page ES-5, second full paragraph]. This statement is made in derogation of the express intention of Congress quoted on page 1-3 of the Introduction citing paragraphs (d) and (e) of the Act to the effect that the Secretary shall:

" *... Complete a programmatic environmental impact statement for a commercial leasing program for oil shale ... on public lands ...* "

" *... Not later than 6 months after completion of the programmatic environmental impact statement . .. the Secretary shall publish a final regulation establishing such [commercial/easing] program."*

Secretary Salazar is illegally conducting this review of the 2008 PEIS in violation Congressional intent that commercial leasing should have commenced six months after the completion of the 2008 PEIS!

The only thing industry has been exploring as "experimental" are approaches to solve the environmental conundrum, e.g. "in-situ", i.e. "Out-of-Sight/Out-of-Mind". Oil shale processing has been proven to be "commercial"in Brazil, Estonia and China. In Brazil, for example, Petrobras has been producing continuously since 1972 using a Paraho retort from 7% grade vs. the 13% grade generally available in Colorado and Utah. The only thing which has prevented those processes from being implemented i **#3])>** n the U.S. has been the challenges they present to do no harm to the environment.

<([#4 [*6.3.1*] 3. Improper Assumptions About Technologies. *"Underground mines with surface retorts*
are assumed to be commercial implementations of the OSEC RD&D technology (see Appendix A, Section A.5.3.4) ". Section A.5.3.4 of the Draft PEIS is outdated using information from 2007!! Since 2007, OSEC abandoned the ATP Taciukrotary kiln (which is that cited in the Draft PEIS) in favor ofPetrobras' Petrosix vertical kiln; and then even later sold out the RD&D Lease to Enefit American Oil, a subsidiary of Enefit, an Estonian company, that has processed oil shale for decades using vertical retorts designed by Russian engineers. Enefit has not identified the method it proposes to use in the U.S., but has stated only that it is experimenting with U.S. oil shale.

The thing which makes this approach so egregious is that the ATP Taciuk rotary kiln was never proven in Australia (as asserted by the BLM); in fact it was so damaging to the environment in Australia that it threatened the very existence of the Great Barrier Reef and was shut down at the insistence of GreenPeace. Subsequently, in 2008, Australia imposed a 20-year moratorium on oil shale development precisely because of the perceived environmental problems caused by the ATP Taciuk rotary kiln technology.

In brief, the BLM has assumed the use of a technology already proven to be an environmental nightmare. In doing so, it has intentionally selected the most environmentally challenged method of oil shale production as the "model" for use in the Draft PEIS. Further, no rotary kiln technology will ever work in oil shale production and still be environmentally clean. The undersigned has been advised by Reaction Engineering International, experts in rotary kilns, that rotary kilns are at least 45% less efficient in transferring heat from "gas-to-particle" than a vertical kiln. Thus, every rotary kiln configuration using recycling gases must produce 45% more heat and carbon dioxide to heat the same amount of oil shale feed stock as a vertical retort. No rotary kiln can ever

be environmentally preferred!
#4])>
<([#5 [*6.3.1*] 4. Exclusion from the Draft PEIS of Consideration of Clean Technologies. How can one
assess the need to withdraw BLM lands from leasing if one excludes by definition technologies proven to be commercial, and which have been improved to not impact BLM lands adversely? [See the last paragraph on page 1-13 of the Draft PEIS which definitionally excludes consideration of *"renewable energy resources, clean technologies and conventional oil and gas activities.]* And, more importantly perhaps, **there is no provision for opening or re-opening BLM lands to environmentally clean technologies!** The BLM has excluded my environmentally clean technology from consideration even though it would not impact BLM lands adversely! Moreover, absent Congressional action, Secretary Salazar is imposing a predicate requirement to Commercial Leases in the form of RD&D Leases, which violates the Congressional Intent to proceed to commercial leasing as soon as possible.

The only impact on BLM lands using my technology and concepts would be the use of underground mining and transport of resource material via elevated conveyor belts (across BLM lands) and rail (in already existing transportation corridors) to an environmentally expendable site for processing, i.e. a site where nothing grows and no Sage Grouse live.

Underground mining would employ continuous mining machines, which have been developed in conjunction with the Colorado School of Mines for oil shale mining, and are readily available from Joy Mining Machinery and Caterpillar. Such machines have been available since at least 2004, as they were demonstrated at the Mining Convention in Las Vegas. See Appendix I attached hereto and incorporated herein by this reference. Such machines are capable of extracting 10,000 tons/day in two eight hour shifts, with the third shift allocated to maintenance and repair. Thus, BLM assertions that underground mining must be conducted using blasting and mucking procedures is ill informed and erroneous.

Above-ground conveyors are used extensively in the mining industry, as depicted on Appendix II attached hereto and incorporated herein by this reference. Such conveyors are no more intrusive on wilderness lands and wildlife than ski lifts, electrical transmission lines, and pipelines (both underground and above ground), all of which are currently accessing BLM lands overlying oil shale deposits to support other kinds of energy production, e.g. shale gas and shale oil drilling.
#5])>
<([#6 [*6.3*] 5. **Exclusion from Draft PEIS of Impacts from Other Energy Activities.** The BLM is
allowing access to the same lands it seeks to exclude from oil shale activity for the purpose of shale gas and shale oil drilling. Those activities are far more destructive of the surface than would be underground mining and conveyor belt transport. See Appendix III attached hereto and incorporated herein by this reference, which portrays the surface destruction of shale gas drilling at Anvil Points, CO, the same site where the Bureau of Mines first demonstrated oil shale processing and extraction in 1948. If the Draft PEIS subject of this current inquiry were merely a re-evaluation of the 2008 PEIS, it would be appropriate to

compare contemplated oil shale activity and its potential impacts against the damage already being imposed on the same lands by shale gas drilling and related activities.
#6])>
<([#7 [*6.3*] 6. **Assumption that Processing Must Occur on BLM Lands.** There is an underlying
assumption that all oil shale processing will be performed on BLM lands, rather than on distant environmentally expendable lands. This imposes unnecessary requirements on remediating spent shale and water. Spent shale can be processed into ancillary products, and water can be purified using Plasma Whirl plasma gasification. See Appendix IV attached. **#7])>**

<([#8 [*9.6*] 7. **Ignoring Congressional Mandate for "Commercial Leasing".** The BLM has effectively
asserted in the Draft PEIS that the Congressional mandate to permit "commercial leases" **must** be frustrated by first requiring an applicant to obtain an "RD&D Lease", i.e. Preferred Alternative 2. It makes no sense for an applicant seeking to use a proven technology employed in Brazil, for example, to waste funds on an RD&D Lease and pilot plant; especially when it proposes processing the oil shale and spent shale on environmentally expendable lands using technology which solves the environmental conundrum. **#8])>**

<([#9 [*9.3*] 8. Alternative 2 (the Preferred Alternative): Changing the Fundamental Purpose and Use of the 2008 PEIS. Alternative 2 of the Draft PEIS deviates from Congressional intent in that it interposes and imposes on industry a requirement that a lease applicant spend monies to demonstrate its technology on an RD& D Lease, and reduces the acreage available as determined in the 2008 PEIS.

The 2008 PEIS was intended to provide a "benchmark" for industry against which cleanliness would be measured and compared in the future, so that industry would not have to be burdened with extensive, costly and time-consuming environmental studies on each project. The BLM asserts in this Draft PEIS of 2012 that the NEPA process will be mandated for each future project, thus starting anew, for each project, an EPA assessment under the National Environmental Policy Act of 1969. This violates Congress' intent as expressed in the Act. **#9])>**

<([#10 [*1.5*] The BLM fails to explain in ES.7 on page ES-9 the reason and authority for its deviation from Congress' intent! **#10])>**

Conclusion

<([#11 [*2.1.1*] The BLM should not deprive the Nation of this $150 Trillion asset and the jobs and revenues it can
generate for the Nation and the U.S. Treasury, especially when it can be achieved without damage to the
environment!

The BLM can avoid further litigation by adopting Alternative 1, as the environmentalist plaintiffs have no continuing right to pursue litigation, having agreed to terminate the Case in

return
for the BLM conducting a review of the 2008 PEIS.

If the final PEIS adopts any alternative other than Alternative 1, these issues will yet be finally adjudicated in a Federal Court, and will include individual defendants, both in government and from
the environmental community; especially if no provision is made for environmentally clean technologies to access those lands.

The lands themselves need not be withdrawn to protect the environment! The lands can still be protected using stringent environmental standards!
#11])>

OSTS_069
Organization: Western Resource Advocates, et al, Gary Graham
Received: 4/27/2012 12:00:00 AM
Commenter1: Gary Graham - Boulder, Delaware 80302 (United States)
Organization1: Western Resource Advocates, et al
Commenter Type: Environmental Organization
Classification: none
Submission Category: Letter
Submitted As: Email & Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/4/2012 12:00:00 AM
Attachments: OSTS2012D00070.htm (OSTS_069-58705.htm Size = 1 KB)
OSTS_069_WRA_etal_Mail_OSTS2012D00070.pdf (OSTS_069-58704.pdf Size = 6220 KB)
Submission Text
See Attachment.

Biodiversity Conservation Alliance - Center for Biological Diversity
Colorado Environmental Coalition - Defenders of Wildlife - EcoFlight
National Parks Conservation Association- Natural Resources Defense Council
Sierra Club - Southern Utah Wilderness Alliance
Utah Physicians for a Healthy Environment- Western Colorado Congress
Western Resource Advocates- The Wilderness Society
Wilderness Workshop- Wild Utah Project- Wyoming Outdoor Council
April27, 2012
Draft OSTS PEIS
Argonne National Laboratory
9700 S. Cass Ave.
EVS/240
Argonne, IL 60439
Re: Comments on Draft Oil Shale and Tar Sands Resources Programmatic EIS
Dear Reviewers:
Thank you for the opportunity to review and provide comment on the Draft Programmatic Environmental Impact Statement and Possible Land Use Plan Amendments for Allocation of Oil

Shale and Tar Sands Resources on Lands Administered by the Bureau of Land Management in Colorado, Utah, and Wyoming (DPEIS). This analysis and clear statements about the limitations of existing technologies mark an important and fundamental shift from the oil shale and tar sands PEIS that the Bureau of Land Management (BLM) adopted in 2008.

<([#1 [*2.3.1*] Our interest in this DPEIS stems from the fact that we represent individuals who live in close

proximity to the areas identified for oil shale and tar sands leasing, many who recreate on these lands, and many others who are concerned about the fate of their public lands. Based on the BLM's analysis in the DPEIS, commercial development of oil shale or tar sands would irreparably harm local lives and livelihoods. Development would also compromise a wide range of environmental values, including clean air, clean water, climate, recreation, water supply, and wildlife habitat.

Our organizations continue to strongly oppose opening any federal lands for oil shale and tar sands development. As we have stated numerous times over the past four years, research must precede any consideration of commercial leasing, and any commercial leasing, should technologies be developed, must protect our land, air, water, wildlife, communities and economies.

We are encouraged that the BLM, through this review, is taking clear and measured steps to restore order to the federal oil shale and tar sands policy. While Alternative 2(b) is a step in the right direction, we continue to believe that no lands should be allocated for commercial development until completion of research, including but not limited to federal research, design and demonstration (RD&D) leases, and an analysis of the impacts. F or that reason, we urge the BLM to adopt Alternative 3 in the Final PEIS. If, following completion of research activities the BLM concludes that lands should be open to application for commercial development, the BLM can then amend resource management plans and make land available.

By placing off-limits areas containing important environmental and ecological values, and by requiring companies to first prove their technologies and evaluate the impacts to communities, human health and the environment, Altemative 3 helps ensure that any commercial development is initiated following a full understanding and evaluation of the impacts. The 2008 PEIS not only excluded such guarantees, but it facilitated research and commercial development as concurrent paths.

#1])> <([#2 [*9.3*] Additionally, as a matter of law, we concur with the BLM's many statements that the agency

does not have enough information to conduct a thorough National Environmental Policy Act (NEPA) 1 analysis, including a cumulative impacts analysis. As stated in the document "The current experimental state ofthe oil shale and tar sands industries does not allow this PEIS to include sufficient specific information or cumulative impact analyses to support future leasing decision within these allocated lands."2 A cumulative impacts analysis is a cornerstone of NEPA analyses. 3 By identifying the limitations in this DPEIS and stating that additional NEPA analyses must address this deficiency, including the identification and enforcement of mitigation measures, the BLM is helping to en ure that future analyses take the broad look mandated by NEPA.

1 40 C.F.R. § 1500.l(b), §§ 1508.25, 1508.7, 1508.8.

2 Draft Programmatic Environmental Impact Statement and Possible Land Use Plan Amendments for Allocation of

Oil Shale and Tar Sands Resources on Lands Administered by the Bureau of Land Management in Colorado, Utah,
and Wyoming, (hereafter DPEIS), at 1-2.
3 40 C.F.R. § 1500.1 (b), §§ 1508.25, 1508.7, 1508.8.
#2])> <([#3 [*9.3*] Finally, as the preferred altemative, Altemative 2(b) rests on the proposition that the BLM, in the
Final PEIS, can define the protocols and param~:ters the agency will use in determining whether technologies are appropriate for commercial development. Should the BLM adopt Alternative 2(b) in the Final PEIS, those protections would then take on greater importance in ensuring any development protects these lands, airsheds, water systems, wildlife, economies, and a host of other interests.
In our comments below, we outline those parameters and tie the information needs to protection strategies. As we note in our recommendations, we are seeking to align federal policy across different energy sources. First, consistent with the terms specified in the second round oil shale RD&D lease terms, the final oil shale and tar sands PEIS and subsequent NEPA analyses must include, in addition to standard environmental analyses, a quantifiable analysis of the water and energy demands, water quality impacts, air impacts, greenhouse gas emissions, and greater sagegrouse
protections. **#3])> <([#4** [*9*] In addition, we believe the requirements described in the Supplement to the
draft Solar PEIS for variance applications provides a template for moving forward those applications with the least direct impacts, and a similar process should be considered for other energy sources.
#4])> <([#5 [*6.3*] As the BLM reviews these and other comments and make final decisions, it is imperative to
remember that we have time. As Jeremy Boak, director of the industry-funded Center for Oil Shale Technology and Research at the Colorado School ofMines, stated in November 2011 , "It isn't obvious to me yet that we need to be putting a bunch of commercial leases out there because
no one has a commercial process yet. .. I don't see anybody eager to go out and lease land now when they're still running experiments."4

4 E&E News, November 18,2011.
#5])> <([#6 [*10.6.1*] We also have time to ensure that any oil shale and tar sands leasing does not undermine or
otherwise detract from the Secretary's commitment to use public lands to support renewable energy projects. Building a new energy economy is central to the long-term economic, social and environmental health of our nation. We need to focus our resources on supporting energy efficiency and renewable energy sources that are known to protect the environment against the impact from climate change, and are economically sound. Those twin goals must remain our priority, and any consideration of oil shale and tar sands must be secondary to those goals.
#6])> Respectfully submitted,
ErikMolvar
Executive Director
Biodiversity Conservation Alliance
Taylor McKinnon

Public Lands Campaigns Director
Center for Biological Diversity
Elise Jones
Executive Director
Colorado Environmental Coalition
Peter Nelson
Director, Federal Lands Program
Defenders of Wildlife
Bruce Gordon
Founder and President
EcoFiight
David Nirnkin
Senior Director, Southwest Region
National Parks Conservation Association
Comments: 2012 Draft Oil Shale and Tar Sands PEIS
Western Resource Advocates, et al.
Page3
Bobby McEnaney
Deputy Director, Western Energy & Renewables Program
Natural Resources Defense Council
Devorah Ancel
Associate Attorney, Environmental Law Program
Sierra Club
Stephen Bloch
Energy Policy Director & Attorney
Southern Utah Wilderness Alliance
Dr. Brian Moench
President
Utah Physicians for a Healthy Environment
Gretchen Nicholoff
President
Western Colorado Congress
Gary Graham
Director, Lands Program
Western Resource Advocates
Nada Culver
Senior Director, Agency Policy and Planning
The Wilderness Society
Peter Hart
Conservation Analyst/Staff Attorney
Wilderness Workshop
Alison Jones
Conservation Biologist
Wild Utah Project
Steve Jones
Watershed Protection Program Attorney

Wyoming Outdoor Council
Comments: 2012 Draft Oil Shale and Tar Sands PEIS
Western Resource Advocates, et al.
Page4
Detailed Comments on Oil Shale and Tar Sands DPEIS
I. Overview - Restoring order to a failed oil shale policy
II. The Legal Framework for the PEIS
A. The National Environmental Policy Act- Cumulative Impacts Analysis
B. Define the scope of subsequent NEP A
C. Define mitigation actions
III. Defining Stipulations and Reporting Requirements in Alternative 2(b)
IV. Water Availability
A. Opportunities to improve the PEIS
B. Alternative 2(b) Data Needs-- Impacts on other uses
V. Air Quality
A. The BLM must conduct a comprehensive air quality analysis and consider the impact of development on existing air quality concerns in the study areas
i. Ozone concentrations are high and final particulates are also a concern
ii. Visibility in several Class I and Class II areas is already impacted
B. The BLM must address the impacts associated with electricity requirements to power production activities
C. Alternative 2(b)- Data Needs
VI. Climate Change
A. Legal and policy basis for the BLM evaluating climate change
B. Alternative 2(b) -Data Needs
VII. Socio-Economic Impacts
A. Challenges facing western communities
B. Assets at stake
C. Alternative 2(b)- Data Needs
VIII. Greater Sage-Grouse
A. Problem with Figure 6.1.2-5
B. Alternative 2(b)- Data Needs
C. Additional details about the greater sage-grouse
IX. Wilderness Areas, Lands with Wilderness Characteristics, and ACECs
A. Wilderness areas and lands with wilderness characteristics
B. Areas of Critical Environmental Concern (ACEC)
C. Wyoming: Adobe Town, ACECs, and Other Lands to Be Protected
i. Adobe Town
a. Adobe Town: Historical, prehistorical, and archaeological values
b. Adobe Town: Geological values
c. Adobe Town: Wildlife values
d. Adobe Town: Scenic values
ii. ACECs and other areas in Wyoming
a. Little Mountain area, including Greater Red Creek ACEC, Red Creek WSA, and Sugarloaf Basin SMA
b. Adobe Town State Very Rare or Uncommon Area

c. Adobe Town Dispersed Recreation Use Area (DRUA)
d. Kinney Rim North and Kinney Rim South citizens' proposed
wilderness areas
Comments: 2012 Draft Oil Shale and Tar Sands PEIS
Western Resource Advocates, eta/.
Page5
e. The Flaming Gorge National Recreation Area
f. Jack Morrow Hills planning area
m. Areas proposed for wilderness protections
D. Utah: ACECs, lands with wilderness characteristics, and other lands
i. Utah proposed wilderness areas that should be protected from oil shale and
tar sands development
a. Dirty Devil and Fiddler Butte
b. White Canyon/Fort Knocker Canyon
c. Bitter Creek
d. Dragon Canyon
e. Lower Bitter Creek
f. Sunday School Canyon
g. Seep Canyon
h. Turtle Canyon, Desbrough, and Desolation Canyon
i. Sids Mountain
ii. Potential ACECs in Utah that should be declared off-limits from oil shale
and tar sands development
a. Bitter Creek and Bitter Creek/PR Springs
b. Nine Mile Canyon
c. Range Creek
d. San Rafael Canyon (lower)
e. Main Canyon
f. Dirty Devil!N orth Wash
g. White River
h. Coyote Basin-Kennedy Wash, Coyote Basin-Coyote Basin, Coyote
Basin-Myton Bench, and Coyote Basin-Snake John
i. Four Mile Wash
j. Sids Mountain Potential ACEC
E. Colorado: ACECs, lands with wilderness characteristics, and other lands
i. Colorado proposed wilderness and wilderness-quality lands should be
protected from oil shale development
ii. Colorado ACECs that should be protected from oil shale development
a. East Fork Parachute Creek
b. Trapper/Northwater Creek ACEC
c. The Duck Creek, Ryan Gulch, Dudley Bluffs ACECs
iii. Potential ACEC's in Colorado that should be declared off-limits from oil
shale development
a. Snake John Subcomplex of the Coyote Basin Complex
b. Dudley Bluffs bladderpod and twinpod habitat outside of existing
ACECs

c. Graham's Penstemon habitat outside the Raven Ridge ACEC
d. Narrow-stem gilia habitat outside the existing Lower Greasewood
ACEC
e. Narrowleaf evening primrose habitat outside existing ACECs
X. Wild and Scenic Rivers, and Watershed Protection
XI. Other Species Protections
Comments: 2012 Draft Oil Shale and Tar Sands PEIS
Western Resource Advocates, eta!.
Page6
A. Sclerocactus
B. Additional deficiencies
C. Climate impacts on species
XII. Lands with deposits 15 gallons/ton or more and 15 feet thick or less
<([#7 [*9.7*] I. Overview - Restoring order to a failed oil shale policy
The current federal oil shale policy is deeply flawed. While the issuance of federal research leases is part of the federal policy, the policy does not require that any research be completed prior to companies securing access to more than 2 million acres of public land. Nevertheless, as the 2008 PEIS and commercial leasing regulations acknowledge, the picture is not so rosy and there remain important questions about the ability of industry to create oil from oil shale and to do so in an environmentally-protective manner. Tar sands development raises similar questions and concerns.
This DPEIS takes those concerns one step further by linking them with a more reasoned policy, one that ensures research be completed prior to any consideration of commercial leasing. **#7])>**
<([#8 [*2.3.1*] The
cleanest means to accomplish that goal is by adopting Alternative 3. Under that alternative, the first and second rounds of research, design and demonstration (RD&D) leases would be completed, and then if it made sense to open lands to oil shale leasing, the BLM could then make available lands for commercial leasing on a Resource Management Plan basis.
This alternative, we believe, addresses the concerns Secretary Salazar stated in February 2011 in announcing that the BLM would take a fresh look at the 2008 PEIS,
For more than a century, and through many busts, we in the West have been trying to unlock oil shale resources to help power our country .... lfwe are to succeed this time, we must continue to encourage RD&D, determine whether the technologies would be viable on a commercial scale, and find a way to develop the resources in a way that protects water supplies in the arid West. With commercial oil shale technologies still years away, now is the time to ensure that our rules and plans reflect the latest information and will deliver a fair return to the American taxpayer.
Towards this end, we are encouraged by the following statements in the DPEIS:
The current experimental state of the oil shale and tar sands industries does not allow this PEIS to include sufficient specific information or cumulative impact analyses to support future leasing decisions within these allocated lands. 5
In contrast, the present experimental state of the oil shale and tar sands industries does not allow this PEIS for land use plan amendments to include sufficient site-specific information or cumulative impact analysis to support issuance of a lease. 6

The BLM's approach is designed to ensure that oil shale technologies can operate at

economic and environmentally acceptable levels before the agency authorizes full-scale commercial leasing on public lands. 7
These and other similar statements in the DPEIS are important as they establish, as both a matter of law and policy, that due to the nascent state of the technology, the BLM will not at this time make available lands for commercial leasing. The 2008 PEIS likewise recognized the BLM's limitations in analyzing the technologies and related impacts, but nevertheless opened lands to application for both oil shale and tar sands development. This change in policy is warranted and, we believe, is required under both the National Environmental Policy Act and Federal Land Policy Management Act.

5 DPEIS, at 1-2.
6 DPEIS, at 1-6.
7 DPEIS, at 2-1. **#8])>**
<([#9 [*9.7*] II. The Legal Framework for the PEIS
In 2008 the BLM understood that due to the nascent state ofboth oil shale and tar sands technologies, the agency lacked the necessary information to meet Congress' directive in the Energy Policy Act of 2005 to develop a PEIS that could support commercial leasing. As the agency acknowledged,
The BLM originally intended the PEIS to support the amendment of land use plans to allocate areas open to commercial leasing and development of oil shale and tar sands, as well as to upport the i suance of such leases. However, in consultation with the cooperating agencies, it was determined that the analysis to support immediate leasing decisions would require making speculative assumptions regarding potential, unproven technologies, and, consequently, the decision to offer specific parcels for lease was dropped from consideration in the PEIS.
Nevertheless, the BLM amended 12 land use plans and made available for leasing more than 2 million acres of oil shale and tar sands lands.
In 2012, the BLM faces the same challenge. The technologies are no more advanced than they were in 2008. Land use decisions and supporting NEP A analyses made without the benefit of research will continue to suffer from the same fundamental flaws the BLM encountered when it issued the FPEIS. This time, though, the BLM is taking a far different tack in the proposed alternative - requiring companies to complete their research and evaluate its impacts prior to securing a commercial lease. In doing so, the BLM will, at least theoretically, secure good, current, independently-verifiable data to support land use decisions before large tracts of public land are committed to development.
8 FPEIS, at ES-3 (emphasis added).
#9])>
<([#10 [*9.3*] Nevertheless, due to these challenges, this NEPA analysis is deficient. For that reason, it
remains imperative that the Final PEIS maintain the many provisions that provide the BLM cannot meet its NEPA responsibilities, and identify the timing and scope of subsequent analyses. As discussed below, due to the nascent state of the technology and the corresponding limitations of this DPEIS, subsequent NEPA analyses should include either another PEIS or require lessees to conduct environmental impact statements. Environmental assessments at the leasing stage would not sufficiently addresses the legal and other deficiencies contained in this DPEIS.
#10])> <([#11 [*4.1*] A. The National Environmental Policy Act- Cumulative Impacts Analysis

One critical change from the 2008 PEIS is the agency's admission that it does not have sufficient information to conduct a cumulative impacts analysis, one of the cornerstones of the National Environmental Policy Act9 (NEPA). We applaud the frankness regarding the way the DPEIS addresses this requirement.

As stated early in the DPEIS, "The current experimental state of the oil shale and tar sands industries does not allow this PEIS to include sufficient specific information or cumulative impact analyses to support future leasing decisions within these allocated lands."10 Additionally, as expressed in Chapter 6,

analysis of the cumulative effects in this PEIS will be qualitative to reflect the limited and highly speculative character of the information available, and the limited nature of the decision to be made on the basis of this PEIS. At the leasing decision and at the decision to approve a plan of development, more specific cumulative effects analyses would be appropriate, and such analysis would be able to be completed, because specific technical and environmental information for those analyses should be available. 11

Finally,

This section describes, in a preliminary way, the possible cumulative impacts of potential commercial oil shale development that could occur over the next 20 years. More specific information regarding impacts, including cumulative impacts, would be provided by the analysis conducted at any future leasing stage and at the review of any project-specific plan of development. 12

As the BLM is aware, NEP A requires federal agencies to prepare a detailed statement on the environmental impacts of a proposed "major federal action" and all of the reasonable alternatives thereto before authorizing any such action. 13 An agency proposal for major federal action exists for NEP A purposes "at that the stage ... when an agency subject to [NEP A] has a goal and is actively preparing to make a decision on one or more alternative means of accomplishing that goal and the effects can be meaningfully evaluated." 14 NEPA's purpose is to promote efforts "which will prevent or eliminate damage to the environment", 15 to inform the public of environmental consequence 16 and to "help public officials ... take actions that protect, restore, and enhance the environment." 17

Under NEPA, the PEIS must analyze "connected", "cumulative", and "similar" actions and three types of impacts. 18 Cumulative and connected impacts assessments help assure that FLPMA's requirements regarding no degradation to the environment are met. Courts have held that there are situations where an agency must consider several related actions in a single NEP A document.

The U.S. Court of Appeals for the Fifth Circuit held that in a cumulative impact analysis, an agency should consider "(1) past and present actions without regard to whether they themselves triggered NEPA responsibilities and (2) future actions that are 'reasonably foreseeable,' even if they are not yet proposals and may never trigger NEPA-review requirements."19 The court noted that the applicable law "does not limit the inquiry to the cumulative impacts that can be expected from proposed projects; rather, the inquiry also extends to the effects that can be anticipated from "reasonably foreseeable future actions."20

Similarly, the U.S. Court of Appeals for the Ninth Circuit has specifically required analysis of activities on both public and private land, since both may impact federal resources; the court also found cumulative impacts analysis insufficient where it did not include foreseeable projects in the same geographical region. 21 Identifying these impacts is vital to the decision-making proce s

as the "primary purpose" of the PEIS is to "insure that the policies and goals defined in [NEP A] are infused into the ongoing programs and actions of the Federal Government. "22
Given that the BLM must delay until the leasing stage a full and complete cumulative impacts analysis, the Final PEIS must include two important provisions, both of which are discussed below:
1. Define the scope of the subsequent NEP A analysis, including the scope of the cumulative impacts analysis.
2. Define mitigation actions.

9 42 u.s.c. §§ 4321-4370[.
10 DPEIS, at l-2.
11 DPEIS, at 6-242. (emphasis added)
12 DPEIS, at 6-243.
13 42 u.s.c. § 4332(2)(C).
14 40 C.F.R. § 1508.23.
15 42 u.s.c. § 4321.
16 40 C.F.R. § 1500.l(b).
17 ld at§ 1500.1(c).
18 Id at§§ 1508.25,1508.7, 1508.8.
19 See, Fritiofson v. Alexander, 772 F.2d 1225, 1245 (5th Cir. 1985).
20 ld at 1243
21 See, Natural Resources Defense Council v. U.S. Forest Service, 421 F.3d 797, 815-16 (9th Cir. 2005);
Muckleshoot Indian Tribe v. U.S. Forest Service, 177 F.3d 800 (9th Cir. 1999).
22 40 C.F.R. § 1502.1
#11])> <([#12 [*9.3*] B. Define the scope of subsequent NEPA
A landscape level analysis of proposed commercial oil shale and tar sands development must evaluate the distribution of resources and supporting facilities across the affected states. This analysis is a critical component of any NEP A analysis, and the BLM must use the Final PEIS to define the scope of subsequent analyses.
Comments: 2012 Draft Oil Shale and Tar Sands PEIS
Western Resource Advocates, eta/.
Some items that the agency should require lessees to evaluate include in subsequent NEP A include:
1. Energy infrastructure and refining projects that would be developed. The increased infrastructure and the clustering of projects to access and service the oil shale and tar sands leasing areas is likely to have a cumulatively significant effect on the resources in the area. Support facilities such as coal-fired electric power plants or other electricity sources must be analyzed for their impacts upon the lands, communities, and resources.
2. Mainline and branch power lines that would be needed to run oil shale facilities.
3. Emissions of greenhouse gases from these power plants or their contributions to global warming.
4. Oil shale and tar sands development would require substantial new construction of regional and feeder pipelines and expansion of existing refineries to transport and process the kerogen and bitumen. These connected systems and their impacts must be analyzed.
Other impacts and actions that should be addressed in a cumulative fashion include, but are not

limited to:
1. Road construction,
2. Activities leading to soil and vegetation disturbance,
3. Activities leading to changed habitat structure,
4. Activities leading to habitat fragmentation, and
5. Activities causing air or water pollution.
Similarly, given that cumulative actions are actions that, incrementally, have significant impacts, even if the individual impacts are minor, the Final PEIS should state that subsequent cumulative impacts must include projects already approved under each resource management plan. First among many are oil and gas development.
#12])> <([#13 [*5*] C. Define mitigation actions
At the most fundamental level, NEP A is intended to help public officials make decisions that are based on an understanding of environmental consequences, and to take actions that protect, restore, and enhance the environment. 23 Federal agencies are required, to the fullest extent possible, to use all practicable means consistent with the requirements of NEP A to 'restore and enhance the quality of the human environment and avoid or minimize any possible adverse effects of their actions upon the quality of the human environment."24 A key element in meeting this mandate is developing and implementing mitigation measures.
As the BLM acknowledges in the DPEIS, "NEPA analysis and other appropriate review would also be required before approval of a lease and subsequent plan of development on a lease, which would include analysis of particular activities at the specific location where development would occur. Appropriate stipulations and mitigation measures would be identified as part of both of these subsequent NEPA analyses."25

Council on Environmental Quality (CEQ) regulations define mitigation as:
1. A voiding the impact altogether by not taking a certain action or parts of an action.
2. Minimizing impacts by limiting the degree or magnitude of the action and its implementation.
3. Rectifying the impact by repairing, rehabilitating, or restoring the affected environment.
4. Reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action.
5. Compensating for the impact by replacing or providing substitute resources or environments. 26
[n addition to these long-standing regulations, in January 2011, CEQ issued new mitigation guidance. 27 The guidance stresses the importance of mitigation in the alternatives analysis, in project design, and in other contexts. This guidance clearly provides that mitigation measures be "explicitly described as ongoing commitments and should specify measurable performance standards and adequate mechanisms for implementation, monitoring, and reporting."28A key element of determining mitigation effectiveness is establishing baseline resource conditions.
In general, the guidance directs agencies to:
1. commit to mitigation in decision documents when they have based environmental analysis upon such mitigation;
2. monitor the implementation and effectiveness of mitigation commitments;
3. make information on mitigation monitoring available to the public; and
4. remedy ineffective mitigation when the Federal action is not yet complete.
The DPEIS attempts to define mitigation measures. However, due to nascent state of the

technology, subsequent NEP A must define mitigation measures a lessee would take. Those measures must be tied to the technology developed, and other contemporary land use activities.

23 See 40 C.F.R. § 1500.l(b).
24 /d. at 1500.2(t).
25 DPEIS, at 1-1.
26 40 C.F.R. § 1508.20.
27 76 Fed. Reg. 3843 (January 21, 2011).
28 Id. **#13])>**
<([#14 [*2.3.1*] III. Defining Stipulations and Reporting Requirements in Alternative 2(b)
As discussed throughout these comments, we strongly encourage the BLM to adopt Alternative 3 in the Final PEIS. We continue to believe that no lands should be allocated for commercial development until completion of research, including but not limited to federal research, design and demonstration (RD&D) leases, and an analysis of the impacts. For that reason, we urge the BLM to adopt Alternative 3 in the Final PEIS. If, following completion of research activities the BLM concludes that lands should be open to application for commercial development, the BLM can then amend resource management plans and make land available.
By placing off-limits areas containing important environmental and ecological values, and by requiring companies to first prove their technologies and evaluate the impacts to communities, human health and the environment, Alternative 3 helps ensure that any commercial development is initiated following a full understanding and evaluation of the impacts. The 2008 PEIS not only excluded such guarantees, but it facilitated research and commercial development as concurrent paths.
#14])> <([#15 [*9.7*] We do not support the fact that Alternative 2 would open more than 462,000 acres to research
and development. Nonetheless, should the lands be open for this purpose, we agree with the premise of 2(b) to limit activities to research pending proof of viable technologies and a clear understanding of the impacts is both logical and necessary. A the BLM makes clear, this approach would require companies to secure answers to key questions prior to any consideration of commercial leasing, while avoiding what the BLM terms a few companies tying "up large areas with speculative commercialleases."29
As provided in the DPEIS "as the Draft PEIS was being developed, the idea for this alternative emerged. It is presented here in brief. This alternative is not noted elsewhere in the document but will be developed further in preparation of the Final PEIS."30 The following helps define those terms and conditions that give rise to Alternative 2(b) or any Alternative that the BLM adopt that first requires companies to complete research before accessing any land for commercial development.
The issues and ideas offered below recognize that in the nearly four years since the BLM issued the 2008 PEIS and Record of Decision (ROD), technology development has produced little new data. Companies have not yet developed any commercially-viable technologies, have not reported on their air and water emissions, have not provided data regarding their water demands, plus a host of other issues and concerns. They not even shown what products they will produce or where any manufacturing, including upgrading, might occur.
Yet since the PEIS was issued in 2008, there is now good data regarding water challenges Colorado and Utah will face over the next 40 years, and important (and troubling) data regarding air quality impacts resulting from fo sil fuel development. (These issues are discussed below.)

In that period the BLM has also taken steps to increase renewable energy and oil/gas development on some of the same areas proposed for oil shale and tar sands development. Taken together, it is imperative that the Final PEIS state in clear and unambiguous terms what companies will need to provide and what protections they will need to ensure before any consideration of commercial leasing. As noted in the cover letter, a good model the BLM should look to in defining Alternative 2(b) , or any chosen Alternative that allows applicants to move forward with commercial-scale leases, is the October 2011 Supplement to the Draft Programmatic Environmental Impact Statement for Solar Development in Six Southwestern States (Solar SDPEIS), and how the BLM addresses variance applications.

Consistent with the terms specified in the second round oil shale RD&D lease terms, the oil shale and tar sands Final PEIS and subsequent NEP A analyses should require that in addition to standard environmental analyses, there be a quantifiable analysis of the water and energy demands, water quality impacts, air impacts, greenhouse emissions, and greater sage-grouse protections. Additionally, by requiring companies to report on this data, not only will the BLM secure the necessary data, but it will place federal oil shale RD&D lessees and non-RD&D lessees on equal footing.
One of the inconsistencies in federal oil shale policy is that RD&D lessees have a greater burden of proof than companies not holding an RD&D lease ("non-lessees") that their technology is viable on a commercial scale. RD&D lessees must prove they can produce commercial quantities, but non-lessees do not. The Final PEIS should also require all potential lessees to provide quantifiable data showing they are technically and financially capable of producing commercial quantities, as well as data regarding the full suite of environmental impacts. Only then would all potential lessees be able to provide with any accuracy and detail the impacts identified below.

29 DPEIS, at 2-35.
30 /d.
#15])> <([#16 [*9.2.6*] [*3.4.1*] [*3.7.1.2*] More specifically, in defining Alternative 2(b), or any chosen Alternative, the BLM should
include in the Final PEIS language that addresses the following. Under these terms, approval of any commercial leases would only be granted upon an adequate and acceptable analysis of those impacts, and clear and detailed plans for mitigating such impacts.
Water demands - impacts to other water interests: Mandate that following completion of research activities lessees provide:
a. An analysis of the impacts of utilizing water for oil shale on efforts to meet municipal & industrial, agricultural, and other water demands.
b. An analysis of the economic and socio-cultural impacts of utilizing water for oil shale on communities, agricultural, recreation, and other water demands.
c. An accounting of water demands and water rights, including:
i. Specifying how much water all facets of an operation would require
ii. Identifying the sources of all water
iii. Identifying the impacts of surface diversions on existing users, including junior users
d. An analysis of the impact on USFWS' efforts to protect four endangered species - the Colorado pikeminnow, the humpback chub, the bonytail, and the razorback sucker including

on the 15 Mile Reach in Colorado and the Green River below its confluence with the White River.

#16])> <([#17 [*9.2.6*] [*6.2*] More specifically, in defining Alternative 2(b), or any chosen Alternative, the BLM should
include in the Final PEIS language that addresses the following. Under these terms, approval of any commercial leases would only be granted upon an adequate and acceptable analysis of those impacts, and clear and detailed plans for mitigating such impacts.

Energy demands: Mandate that, following completion of research activities, lessees provide the following information as a condition of further development:

a. Identify all sources of energy needed to support and power development.

b. Evaluate the impact of such energy development and use on water availability, water quality, air quality, endangered species, wildlife, and other resources.

#17])> <([#18 [*9.2.6*] [*3.4.1*] More specifically, in defining Alternative 2(b), or any chosen Alternative, the BLM should
include in the Final PEIS language that addresses the following. Under these terms, approval of any commercial leases would only be granted upon an adequate and acceptable analysis of those impacts, and clear and detailed plans for mitigating such impacts.

Water quality: Mandate that, following completion of research activities, lessees provide the following information as a condition of further development:

a. Document impacts to water quality.

b. Document how any proposed project would avoid degrading water quality.

c. Establish baseline surface water and groundwater conditions so that the BLM, EPA and state agencies can evaluate whether development activities would degrade water quality.

#18])> <([#19 [*9.2.6*] More specifically, in defining Alternative 2(b), or any chosen Alternative, the BLM should
include in the Final PEIS language that addresses the following. Under these terms, approval of any commercial leases would only be granted upon an adequate and acceptable analysis of those impacts, and clear and detailed plans for mitigating such impacts.

Air quality: Mandate that, following completion of research activities, lessees provide the following information as a condition of further development:

a. Document that the proposed project will not result in further exceedances of NAAQS.

b. Provide a full analysis of the direct, indirect, and cumulative impacts of energy development on ambient PM2.5, PM10, NOx, S02, ozone, and HAP concentrations, including necessary mitigation measures.

c. Provide a full analysis of the impacts to air quality from the cumulative impacts of oil shale and tar sands development with oil and gas development.

#19])> <([#20 [*9.2.6*] [*3.10.2*] [*3.10.4*] More specifically, in defining Alternative 2(b), or any chosen Alternative, the BLM should
include in the Final PEIS language that addresses the following. Under these terms, approval of any commercial leases would only be granted upon an adequate and acceptable analysis of those impacts, and clear and detailed plans for mitigating such impacts.

Socio-economic impacts: Mandate that, following completion of research activities lessees provide the following information as a condition of further development:

a. Estimate the true costs associated with oil shale and tar sands development to private landowners, recreation, agriculture, and other viable industries at the time of the lease sale.

b. Identify the increased public service and infrastructure costs associated with oil shale and tar sands development, and specify in detail how negative impacts would be mitigated.
#20])> <([#21 [*3.5.1.3*] [*9.2.6*] More specifically, in defining Alternative 2(b), or any chosen Alternative, the BLM should
include in the Final PEIS language that addresses the following. Under these terms, approval of any commercial leases would only be granted upon an adequate and acceptable analysis of those impacts, and clear and detailed plans for mitigating such impacts.
Greenhouse gas emissions: Mandate that, following completion of research activities, lessees provide the following information as a condition of further development:
a. Document the greenhouse gas emissions from all phases of the project, including energy demands, construction of lease sites, production of fuel, and combustion of fuel ultimately produced. This analysis must include incremental contributions from individual projects.
b. Show compliance with applicable federal and state policies and standards.
More specifically, in defining Alternative 2(b), or any chosen Alternative, the BLM should include in the Final PEIS language that addresses the following. Under these terms, approval of any commercial leases would only be granted upon an adequate and acceptable analysis of those impacts, and clear and detailed plans for mitigating such impacts.
#21])> <([#22 [*9.2.4*] [*9.2.6*] [*3.7.4.8*] Greater Sage Grouse: Mandate that, following completion of research activities, lessees
provide the following information as a condition of further development:
a. Document that development would protect core and priority sage-grouse areas, as defined at the point of a lease sale.
b. Document there would be no net decline in habitat or species viability, while furthering DOl's goal of maintaining or enhancing the health of sage-grouse populations.
c. Establish that proposed activities would comply with all applicable federal agency sage grouse policies, as well as state policies or standards.
d. Analyze the cumulative impacts to grouse conservation of the proposed project, and other current and reasonably foreseeable projects or activities that could adversely affect populations.
#22])> <([#23 [*9*] In addition to the requirements stated above, in defining Alternative 2(b), or the Alternative
selected, the Final PEIS must:
1. Include language providing that the BLM can, in appropriate circumstances, rely on the broad discretion it has under FLPMA to deny commercial oil shale lease and tar sands nominations without completing the NEPA process.
#23])> <([#24 [*9*] [*3.1.1*] In addition to the requirements stated above, in defining Alternative 2(b), or the Alternative
selected, the Final PEIS must: 2. Include language requiring the BLM to coordinate with the National Park Service to
ensure that development will not negatively impact the resources and values of units of the National Park System and other special status areas under NPS and/or BLM administration. This analysis would include potential air quality degradation of class 1 air sheds. See Attachment 11 for impacts to Park Service units from commercial development.
#24])> <([#25 [*9.2.4*] [*1.4*] [*3.7.4.8*] In addition to the requirements stated above, in defining

Alternative 2(b), or the Alternative
selected, the Final PEIS must: 3. Include a provision requiring the BLM to coordinate with the USFWS to evaluate the
impacts of development on sage grouse areas of concern. **#25])>**
<([#26 [*3.4.1*] IV. Water Availability
Water resources in the West are scarce and are under increasing pressure from development. In Colorado and Utah, water will be largely, if not completely, spoken for by 2050, the time line the BLM projects industry could develop large-scale oil shale or tar sands operations. Any discussion and evaluation of water availability and water consumption projections for oil shale and tar sands- no matter how great or little- must be viewed in the context of states' water availability projections, including both current and future demand.
The State of Utah and Government Accountability Office (GAO) have spoken to the challenge. Utah, the nation's second driest state, concluded in its 2011 10-year energy study:
Limited quantities of water may be available for new energy development. Most areas of the state are closed to new surface- and ground-water appropriations (especially new consumptive appropriations) and those that are still open are primarily for ground water in relatively small quantities. What little may be currently available will undoubtedly decline over the next decade. Water currently used at other facilities or by other water users may be purchased for use in energy development in the future . ... Given Utah's population growth and projected economic growth over the next decade, the possibility of increased drought, and with limited new water resources available, water consumption of energy resources should be given careful consideration .... As an arid state, an energy portfolio that encourages low water-use technologies should be considered. 31
Like the State ofUtah, the GAO has also raised concern. The GAO's October 2010 report on oil shale and water, "Energy-Water Nexus: A Better and Coordinated Understanding of Water Resources Could Help Mitigate the Impacts of Potential Oil Shale Development," 32 concluded

that oil shale would likely require 4-to-5 barrels of water for every barrel of oil produced from shale, higher than the BLM's projections in the DPEIS.33
Moreover the GAO offered this important cautionary note:
Water is likely to be available for the initial development of an oil shale industry, but the size of an industry in Colorado or Utah may eventually be limited by water availability. Water limitations may arise from increases in water demand from municipal and industrial users, the potential of reduced water supplies from a warming climate, fulfilling obligations under interstate water compacts, and the need to provide additional water to protect threatened and endangered fishes. 34
The GAO also offered the following:
The unproven nature of oil shale technologies and choices in how to generate the power necessary to develop this resource cast a shadow of uncertainty over how much water is needed to sustain a commercially viable oil shale industry .... These nascent efforts do not adequately define current baseline conditions for water resources in the Piceance and Uintah Basins, nor have they begun to model the important interaction of groundwater and surface water in the region. 35
Utah and Colorado understand the challenge industry would face and the impacts development would bring. The State of Utah projects that due to an increasing population statewide municipal and industrial (M&I) water demand would increase from 904,000 AF/yr in 1995, to 1,951,000

AF/yr in 2050, a 115% increase. 36 With conservation, the state hopes to reduce the 2050 demand, but none of these plans account for potential oil shale or tar sands development. 37
In Colorado, the December 2010 Statewide Water Supply Initiative (SWSI) study projected that by 2050, after taking into account conservation, statewide M&I demand will increase by somewhere between 538,000 AF/yr and 812,000 AF/yr (55-83%) over 2008 baseline demand. 38
M&I does not include water for oil shale or thermoelectric power production, o any water for oil shale, including water for electricity/energy production, will come in addition to statewide M&I demands. To meet these growing M&I demands- demands that are principally driven by an increasing population - large quantities of water currently used for agriculture would likely be diverted to M&I uses.

As the State of Utah and the State of Colorado's projections make clear, even without water for oil shale or tar sands, by 2050 the states will face enormous challenges in meeting demand for this increasingly scarce resource. Any water for oil shale or tar sands must therefore be analyzed in the context of competing water needs, as oil shale and tar sands development would have broad impacts on water availability.
Climate change increases the challenges states will face. As the DPEIS makes clear, by 2050, water in the Colorado River Basin could be reduced by 6-20%. 39 Such reductions would further stress existing resources, compounding the problems posed by large development projects such as oil shale and tar sands.
The DPEIS recognizes the importance of water, and makes clear that water requirements for commercial development could be substantial. It also projects how much water might be available for oil shale or tar sands development, and the impacts of using large quantities of water on existing demand and future uses. Based on those projections, the DPEIS cautions in Tables 3.4.1-2 and 3.4.1-3 and the corresponding text that demand in the Upper Basin could exceed what is legally available to the states. This conclusion is striking. It is reason alone why research must be completed and the impacts analyzed prior to any consideration of commercial leasing.
Knowing that water could be a limiting factor, companies are working hard to reduce their water demand. Since the release of the PEIS in 2008, companies pursuing oil shale and tar sands development have claimed that they are reducing the amount of water that would be needed to produce oil. None of these claims appear to be supported by independently-verifiable data, and claims made to the media, on websites, and in power point presentations have consistently been devoid of facts or data.

31 "Energy Initiatives and Imperatives: Utah's 10-Year Strategic Energy Plan," March 2011, at 25.
http: //www.energy.utab.gov/index.htm
32 GAO, "Energy-Water Nexus: A Better and Coordinated Understanding of Water Resources Could Help Mitigate
the Impacts of Potential Oil Shale Development". October 2010.
33 Id The GAO concluded the range of water-to-oil is 1:1 to 20:1. The report further stated 4-5 barrels of water to oil
was a good working figure.
34 Id
35 Id at 44-45.

36 Utah Division of Water Resources, Utah's M&J Water Conservation Plan: Investing in the Future, July 14, 2003,
http://www.water.utah.gov/M&I/Plan7-14-03.pdf, page 4.
37 Id
38 Statewide Water Supply Initiative (SWSI), Final2010 M&I Water Use Projections, Table 3-3, "M&I Forecast by
River Basin." At 3-11 . hllp://cwcbweblink. tate.co.us/webtink/0/doc/
144800/Electronic.aspx?searchid=c 1469548-
e589-49df-a54f-6b03612a38e3 (last accessed April 13, 20 12).
39 DPEIS, at 4-36 through 4-37.
#26])> <([#27 [*3.4.5*] A. Opportunities to improve the PEIS
In Utah, water availability in the DPETS is projected through 2050. The data needs to be cross referenced against the state's data included in "Utah's M&I Conservation Plan."40 That report, which was published in July 2003, provides more recent information than the BLM used it the DPEIS.
#27])> <([#28 [*3.4.1*] Similarly, the Colorado data (section 3.4.1.4, "Water Use'" relies on old data, the 2004 SWSI
study. That report was replaced by the 2010 SWSI study. 1 One of the primary differences between the two reports is that the 2004 report includes projections through 2035, while the 2010 report includes projections through 2050. Importantly, the 2010 report also uses updated population projections and per capita water use rates, both vital data points when projecting water availability.

40 Utah Division of Water Resources, Utah's M&I Water Conservation Plan: Investing in the Future, July 14, 2003,
http ://www. water.utab.gov/M&I/Plan7-1 4-03.pdf
41 State of Colorado 2050 Municipal & Industrial Water Use Projections, July 2010, report prepared by Camp
Dresser & Mckee, Inc. and Harvey Economics for Colorado Water Conservation Board,
b.tto:/ /cwcbweb I ink. state. co. us/web I ink/0/doc/ 144800/E lectronic.aspx ?searchid=c 1469
548-e589-49df-a54 f-
6b03612a38e3
#28])> <([#29 [*3.4.1*] Another area where the PEIS can be improved is expanding the analysis of the impacts of using
water for oil shale and tar sands on allocations and obligations under the Colorado River Compact. One of the great uncertainties and thus risks water managers face concerns water availability under the Colorado River Compact. The great unknown is how much water remains available for development, and the risk states face that large scale oil shale and tar sands development would result in a call under the Compact.
To help answer these and other related questions, the Bureau of Reclamation initiated an evaluation to "define current and future imbalances in water supply and demand in the Colorado River Basin and the adjacent areas of the Basin States that receive Colorado River water for approximately the next 50 years, and will develop and analyze adaptation and mitigation strategies to resolve those imbalances. 42 That study will likely show that even without largescale oil shale and tar sands production, demands outstrip supply by millions of acre-feet. The Colorado Water Conservation Board is also in the early stages of a study focused on

identifying how much water the state of Colorado may have left to develop under the Colorado River Compact- their "compact compliance study." Information from these analyses and any subsequent analyses must be examined in all subsequent NEP A reviews that the BLM requires or undertakes as part of the oil shale and tar sands research and leasing program.
42 http://www.usbr.gov/lc/region/programs/crbstudy.html **#29])>**
<([#30 [*3.7.1.2*] Further compounding the challenge companies would face in developing oil shale and tar sands
is ensuring development does not undermine protections provided under the Upper Colorado River Endangered Fishes Recovery Implementation Program. However, as the DPEIS makes clear, those protections could be weakened:
The Upper Colorado River Endangered Fishes Recovery Implementation Program considers any water depletions from the upper Colorado River Basin, which includes the watersheds of the Green River and the White River, an adverse effect on endangered Colorado River fishes that requires consultation and mitigation. Water depletions for individual projects could be quite large and represent a significant adverse impact on these riverine fish. 43

43 DPEIS, at 4-122.
#30])> <([#31 [*3.10.4*] Additionally, in Colorado alone, water-related activities inject into the economy between $7
billion and $8 billion, and employ 85,000 people.44 Non-consumptive uses are fundamental to these industries. It is thus imperative that subsequent NEP A analyses evaluate the impact diverting water for oil shale and tar sands development would have on these industries.
#31])> <([#32 [*3.4.1*] [*3.7.1.2*] Finally, one other issue that should be included in any subsequent NEP A analysis is the impact
of storing water for oil shale and tar sands development. Much if not most of the water required by development would need to be stored in reservoirs. Big :flows only happen in the Spring, yet industry would need water all year round. The impacts of storage projects, required to sustain oil shale and tar sands operations on endangered fish species, healthy river flows, plus a host of other concerns must be evaluates as part of any proposed project.

44 htto://cwcb.state.co.uslenvironment/oon-consumptive-needs/Pages/main.aspx
#32])> <([#33 [*3.4.1*] [*9.2.6*] B. Alternative 2(b) Data Needs -- Impacts on other uses
The Final PEIS must require potential lessees to provide quantifiable data on the impact development would have on water demands and uses. This data is vital in ensuring oil shale and tar sands' impacts are understood and fully analyzed prior to the issuance of any commercial leases. As noted in Section III of these comments, in defining Alternative 2(b), or any Alternative selected for the Final PEIS, the BLM has an opportunity to require all potential lessees to detail the amount of water a given development project would require and the impacts on other users.
There are a number of unanswered questions that must be addressed before considering commercial development. For these reasons, it is imperative that the Alternative selected in the Final PEIS mandate that following completion of research activities lessees provide the following information:
A. An analysis of the impacts of utilizing water for oil shale on efforts to meet municipal & industrial, agricultural, and other water demands.

B. An analysis of the economic and socio-cultural impacts of utilizing water for oil shale on communities, agricultural, recreation, and other water demands.
C. An accounting of water demands and water rights, including:
i. Specifying how much water all facets of an operation would require
ii. Identifying the sources of all water
iii. Identifying the impacts of surface diversions on existing users, including junior users
D. An analysis of the impact on USFWS' efforts to protect four endangered species- the Colorado pikeminnow, the humpback chub, the bonytail, and the razorback sucker including on the 15 Mile Reach in Colorado and the Green River below its confluence with the White River.
#33])> <([#34 [*3.5.4*] V. Air Quality
The PEIS does not fully analyze air quality impacts, but the analysis contained therein raises serious concern. The quality of air resources in western Colorado, eastern Utah and outhwestern Wyoming is quickly degrading due to ongoing oil and gas development. Oil shale and tar sands development would further impact regional air quality. With that, human health and environmental health would be further compromised. Economies that depend on clear air would also suffer. Protecting air quality alone is cause for the BLM to adopt Alternative 3 as the preferred alternative.
Accordingly, before considering any development of these deposits, the BLM must be up front with the public and fully disclose the potential impacts to human health and the environment from this significant source of S02, NOx, PM, CO and C02 emissions. Prior to any further leasing activity, the BLM must complete an assessment of the impact of the emissions from the power generation for development and determine adequate mitigation measures that demonstrate compliance with all ofthe NAAQS (including S02, PM, N02 and ozone) and the PSD increments and that prevent visibility degradation and acidification of lakes in affected areas.
#34])> <([#35 [*9.3*] The following comments rely on those submitted by Megan Williams and incorporated herein
(see Attachment 1).
A. The BLM must conduct a comprehensive air quality analysis and consider the impact of development on existing air quality concerns in the study areas
The DPEIS does not contain an air quality impact analysis, but instead, as discussed above, defers the analysis to address emerging technologies and site-specific conditions. Deferring this analysis undermines NEPA requirements. As Williams notes in Attachment 1,
Under NEPA, the BLM has obligations to assess and report the near-field, far-field and cumulative impacts of expected emissions in the various development areas on the National Ambient Air Quality Standards (NAAQS), prevention of significant deterioration (PSD) increments, and air quality related values (AQRVs) and to identify alternatives or other mitigation measures sufficient to prevent expected violations of NAAQS, PSD increments and adverse impacts on AQRVs (e.g., visibility impairment). (40 C.F.R. §§ 1502.14(a), (f), 40 C.F.R. § 1502.16(h) and 40 C.F.R. § 1508.27(b)(l0)).
As Williams also discusses, "The Federal Land Policy and Management Act (FLPMA) mandates that, "[i]n the development and revision of land use plans, the Secretary shall ... (8) provide for compliance with applicable pollution control laws, including State and Federal air, water, noise, or other pollution standards or implementation plans ... " (43 U.S.C. § 1712(c)(8))."
Compliance with these requirements is central to preventing unnecessary or undue degradation

of public lands and the environment. That analysis cannot be done in a vacuum. Given existing air quality concerns on oil shale and tar sands lands, the BLM's analysis in this PEIS and in future NEP A analyses must bring together air impacts from oil shale and tar sands development with oil and gas development and other uses that degrade air quality. An analysis that fails to do so is a violation ofNEPA.
#35])> <([#36 [*3.5.4*] 1. Ozone concentrations are high and final particulates are also a concern
Wintertime ozone pollution resulting from oil and gas development is an increasing problem, and would overlap with oil shale and tar sands areas. Essentially, there is no room for growth in emissions that contribute to these harmful levels of ozone pollution in the region-namely, NOx and VOC. Yet, the BLM is proposing with both research and commercial development to allow increased NOx emissions and VOC emissions.
Oil shale and tar sands development produce both NOx and VOC emissions (e.g., from coal-fired
power plants that supply electricity for in-situ processes, from drilling engines, compressor engines, diesel generators, heaters, boilers, mining equipment and from solvent extraction plants as well as from flares, storage tanks and retort processes, etc.). Without completing a dispersion modeling analysis, it is difficult to gauge the resultant impacts research and development would bring on regional air quality. As Williams makes clear any increase in emissions of ozone precursors will exacerbate the negative health effects of ozone in the region and is almost certain to cause significant health-based impacts." To protect human health and comply with ozone standards, the BLM must ensure that ozone concentrations in the region do not increase further. A NEPA analysis must rigorously analyze increased pollution and its impacts on regional air quality and the health of nearby residents.
Moreover, as Williams notes,
In addition to ozone, ambient concentrations of particulate matter-both fine particles (PM2.5) and coarse particles (PM10)-in the potential lease areas in Colorado, Utah and Wyoming indicate high concentrations and cannot be characterized as having relatively low concentrations compared with the NAAQS, as suggested. In these areas, background concentrations ofPM2.5, PM10 and ozone are already at or exceed the NAAQS and leave virtually no room for additional growth in emissions.
The areas that would be opened for research and then development under Alternative 2(b) already experience ambient concentrations that exceed, or are close to exceeding, the level of the short-term PM25 NAAQS. The BLM cannot therefore promote development without demonstrating quantitatively that development would not cause or contribute to violations of the NAAQS. As Williams notes, major sources of fine particles from oil shale and tar sands development would include but are not limited to:
../ products of combustion (e.g., coal-fired power plants used to generate electricity for insitu oil shale development, on-site drilling engines, boilers, diesel generators, heaters and compressors used during oil shale extraction and retort)
../ fugitive dust from travel on unpaved roads and from construction activities
../ fugitive dust emissions from in-situ oil shale development.
../ spent tar sands from solvent extraction plants, and
../ fugitive dust frommining operations (e.g., the mine pit, storage piles, crushing operations, etc.). **#36])>**
<([#37 [*3.5.4*] 2. Visibility in several Class I and Class II areas is already impacted
As Williams makes clear, "Several recent modeling analyses performed by the BLM for

projectspecific
EISs, Environmental Assessments (EA) and RMPs in the study areas indicate that visibility in several Class I areas and sensitive Class II areas is threatened by ongoing development." Further, as the 2007 RD&D EAs make clear, the combined effect of the five RD&D sites in Colorado with Exxon Mobil's Piceance Development Project will result in significant adverse effects on visibility at the Flat Tops Wilderness Area Class I area. 45 Thus, the potential air quality impacts of the oil shale RD&D sites are already quite significant.

Additional development would further impact air quality. In Colorado, Utah and Wyoming, the BLM has concluded that oil and gas development would further impact Class I air-sheds.46
The near-field modeling performed for the draft EGL (now AMSO) oil shale RD&D EA showed that the project alone would directly cause violations of the 24-hour average Class II PMw and S02 increments.47 For the final EA, the BLM revised the emissions inventory and modeling such that there are no Longer predicted violations of these PSD increments. However, the modeling done for the final RD&D BAs still shows that the EGL project consumes nearly all of the 24-hour Class II PM10 and S02 increment and that the Chevron RD&D site also consumes nearly all of the available Class II 24-hour PM10 increment. 48
Similarly, the recent Gasco DEIS did not include a comprehensive increment consumption analysis, however, even without such an analysis the BLM s modeling shows that Gasco project sources alone consume almost 287% of the available Class II 24-hour PM10 increment. 49 The Class II 24-hour PM10 increment will, therefore, also likely be exceeded when considering all other increment affecting sources in the area that impact the same area impacted by the Gasco development area.
As Williams explains, in Wyoming, the maximum modeled in-field pollutant concentrations for the Supplemental EIS for the Pinedale Anticline Oil and Gas Exploration and Development Project indicate that Pinedale Anticline project sources will result in pollutant impacts greater than the PSD Class TI increment for N02 of 25 ~g/m3 (annual average), greater than the PSD Class II increment for PM10 of30 ~g/m3 (24-hour) and greater than (be PSD Class II increments for PM2.5 of 9 ~g/m3 (24-hour) and 4 f,.lg/m3 (annual). 50 Similarly, the Jonah Infill Development
Project EIS showed that project sources will result in pollutant impacts greater than the PSD Class II increment for PM10 (24-hour) and greater than the PSD Class 11 increments for PM2.s (24-hour and annual). 51

45 See, e.g., BLM White River Field Office, Shell Frontier Oil and Gas Final EA (CO-Il 0-2006-117 -EA), p. 151.
http://www.blr:n.gov/pgdata/etc/medialib/blm/co/ field offices/white river field/oil shale/ he ll frontier oii. Par.555
36.File.dat/Fina!VersionShellEA1101 06.pdf.
46 See Williams comment letter, pages 20-24.
47 EGL Resources Inc. Oil Shale research, Development and Demonstration Tracts Draft Environmental Assessment
~C0-11 0-2006-118-EA), July 2006 at 21.
8 Modeled 24-hour PM10 direct concentrations from operation are 28.6 f1g/m3 compared with the Class U 24-hour
PMIO increment of30 f1g/m3

. See final EA (C0-110-2006-118-EA, November 2006) at 23. Modeled 24-hour PM10 direct concentrations from operations are 25.86 ~glm3 • See final EA (C0-110-2006-120-EA November 2006) at 28.
49 BLM Vernal Planning Area Uinta Basin Natural Gas Development Project Gasco DEIS, October 2010, at 4-l 3.
http://www.blm.gov/ut/stlen/fo/vemal/planning/nepa /gasco energy eis.htrnl
50 BLM, Pinedale Field Office, Final Supplemental Environmental Impact Statement for the Pinedale Anticline Oil
and Gas Exploration and Development Project, June 2008, Appendix 16, Table 16.8.
http://www.blm.gov/wy/stlen/info/NEP Aldocuments/pfo/anticline/seis.html. Direct Modeled Impacts: annual N02 =
31.6 f1.g/m3 (annual Class II P D increment is 25 f1.g/m3); 24-hour PM 10 = 76.3 f1g/m3 (24-hour Class fl PSD
increment is 30 11g/m3); 24-hour PM2.s = 15 11g/m3 (24-hour Class II PSD increment is 9 J.lg/m3); annual PM1.5 = 5.4
f1.g/m3 (annual Class IJ PSD increment is 4 f1g/m3).
51 BLM Final Air Quality Technical Support Document for the Jonah lnfill DriLLing Project EfS, January 2006,
Appendix E: Early Project Development Stage Modeling Results, Table G-E.5.1 .
http://www.blm.gov/wy/st/enlinfo/NEPA/documentslpfo/jonah.html. Direct Modeled Impacts: 24-hour PM1o = 82.6
f1g/m3 (24-hour Class II PSD increment is 30 ~g!m3); 24-hour PM2.5 = 36.2 f1g/m3 (24-hour Class II PSD increment
is 9 11glm3)· annual PM2.s = 6.2 11glm3 (annual Class II PSD increment is 4 f1g/m3).
#37])> <([#38 [*3.5.3*] [*6.2.1*] B. The BLM must address the impacts associated with electricity requirements to
power production activities
As the BLM concluded in 2008, this DPEIS assumes that the electricity for in-situ oil shale development would come from coal-fired power plants. As the BLM noted in the DPEIS, ‘Other types of electrical generation might be used, including natural gas, synthetic natural gas, nuclear, and renewable energy, but for the purposes of this PEIS, coal is assumed to be the fuel to avoid underestimating the impacts.” 52
As provided in the DPEIS, based on conversations with industry representatives and others, the BLM reduced the in-situ oil shale production level estimates from 200,000 barrels/day (as provided in the 2008 PEIS) to 50,000 barrels/day. 53 The electricity requirements were also reduced by a factor of four to 600 MW of additional electrical generating capacity. The electricity needs to support this level of development are equivalent to 15% of the generation from the e1ectric power industry (from coal) in 2010 in Colorado and Utah and 12% in 2010 in Wyoming. 54
In Table 6.1.6-3, the BLM presents assumed emission rates for coal-fired power plants and states that “power plants are assumed to operate at a 60% efficiency.” As Williams explains,
The BLM does not indicate what type of efficiency this represents (i.e., gross thermal efficiency, net thermal efficiency or something else entirely) but it cannot possibly represent either gross or net them1al efficiency of the assumed plant- modem IGCC (Integrated Gasification Combined Cycle) and supercritical pulverized coal units can only achieve net thermal efficiencies in the high 30s to low 40 percent range. 55

Even assuming the 600 MW of additional power will come from plants with not-yet-seen-today efficiencies of 60% the emissions from these plants, based on the BLM's assumed emission rates in Table 6.1.6-3, will be significant.
The BLM must acknowledge the full suite of emissions that would result from the increased need for electrical power generation to support in-situ oil shale production, even at the RD&D level. It is quite possible that the region simply cannot withstand, without adverse effects, the significant increases in emissions that would result from increased power needs.
52 DPEIS, at 4-13 .
53 DPEIS, at 4-2.
54 EIA, Net Generation by State by Type of Producer by Energy Source (EIA-906, EIA-920, and EIA-923).
CO: 34,559,290 MWh from Total Electric Power Industry (coal)* (lyrl8760hr) = 3,945 MW and 600MW I 3,945MW = 15%
UT: 34,057,265 MWh from Total Electric Power Industry (coal)* (1yrl8760hr) = 3,888 MW and 600MW I 3,888MW = 15%
WY: 42,986,523 MWh from Total Electric Power Industry (coal)* (1yrl8760hr) = 4,907 MW and
600MW I 4,907W = 12%
55 EPA-430/R-061006, July2006 Final Report on Environmental Footprints and Costs of Coal-Based Integrated
Gasification Combined Cycle and Pulverized Coal Technologies.
#38])> <([#39 [*3.5.4*] C. Alternative 2(b)- Data Needs
As discussed above and throughout these comments, the BLM's analysis falls short of meeting its NEPA and FLPMA requirements. The agency, for instance, has not analyzed whether the proposed oil shale and tar sands RD&D activity allowed under the RMP revisions will comply with the NAAQS and will prevent significant deterioration (PSD) of air quality, as required by the Clean Air Act (CAA). The BLM must complete an analysis to determine compliance with the NAAQS and also to determine how much of the incremental amount of air pollution allowed in clean air areas (i.e. , PSD increment) has already been consumed in the affected areas and how much additional increment consumption will occur due to the proposed RD&D program. Without this analysis, the BLM cannot ensure that the air quality in the study areas will not deteriorate more than allowed under the CAA. Finally, the BLM should complete an analysis of impacts to air quality related values, including visibility, in impacted Class I and sensitive Class II areas.
#39])> <([#40 [*9.2.6*] The Final PEIS must address these deficiencies. As noted above, the BLM should require
potential lessees to provide quantifiable data on the impact development would have on air quality. As noted in Section. III of these comments, in defining Alternative 2(b) or any Alternative selected for the Final PEIS, the BLM has an opportunity to require all potential lessees to detail the air quality emissions and associated impacts. This data is vital to ensuring oil shale and tar sands' impacts are understood and fully analyzed prior to the issuance of any commercial leases.
There are a number of unanswered questions that must be addressed before considering commercial development. For these reasons, it is imperative that Alternative 2(b) or the Alternative selected in the Final PEIS mandate that following completion of research activities lessees provide the following information:

A. Documentation that the proposed project will not result in further exceedances of NAAQS.
B. Full assessment if the direct, indirect, and cumulative impacts of energy development on ambient PM2.s, PM10, NOx, S02, ozone, and HAP concentrations, including necessary mitigation measures.
C. Quantification of the impacts to air quality from the cumulative impacts of oil shale and tar sands development with oil and gas development.
#40])> <([#41 [*3.5.1.1*] VI. Climate Change
We are encouraged by the BLM's inclusion of climate change as a serious issue that needs to be thoroughly evaluated prior to an initiation of commercial leasing. BLM's discussion in section 3.5.1.2 is a significant improvement on the agency's analysis in the 2008 PEIS where the BLM was reticent to link climatic change to human activity.
As the BLM discusses in the DPEIS, climate change has been intensely studied by the world's scientists, and broad consensus exists around its causes, magnitude, and effects. In February 2007, the IPCC declared, "[w]arming of the climate system is unequivocal," and it is "very likely ' that most of the warming since the middle of the 20th century is the result of human pollutants. Climate change is a global phenomenon with well-documented and serious local impacts. Those impacts affect both the ecosystems and the welfare of citizens not only around the world but in the United States and the nation's Western states in particular.
However, we strongly question the BLM's assertion that the impact from development might not be that great. Specifically, the DPEIS states:
GHG emissions and changes to carbon sinks would be small relative to state, regional, and global GHG emission inventories. Consequently, global or regional scale modeling may be unlikely to yield meaningful predictions of climate change impacts in relation to GHG emissions attributable to oil shale and tar sands activities alone. 6
Independent analyses have concluded that barrel-to-barrel, oil shale would produce more GHG than conventional oil. According to a report by Dr. Adam Brandt, Dr. Jeremy Boak, and Dr. Alan Burnham, 57 "without mitigation or technology improvements, full-fuel-cycle carbon dioxide (C02) emissions from oil shale derived liquid fuels are likely to be 25-75% higher than those from conventional liquid fuels." Dr. Brandt is a professor at Stanford University. Dr. Boak runs the Center for Oil Shale Technology and Research, an industry funded research center at the Colorado School of Mines. Dr. Burnham is the Chief Technology Officer with AMSO, one of the RD&D lessees.
As these three scientists note, emissions of C02 from oil shale derived fuels come from three stages: retorting of hale, upgrading and refining of raw shale oil, and combustion of the finished transportation fuels. 58 As they make clear, "emissions from these stages represent approximately
25-40%, 5-15%, and 50-65% of total fuel-cycle emissions, respectively, the most uncertain source of emissions is the retorting stage, due to variation in emissions with shale quality and retorting technology used.' Brandt, Boak, and Burnham conclude that "the primary opportunity for reducing C02 emissions from oil shale retorting lies in the substitution of low- or zero-carbon energy sources for high carbon sources." That means, "given the potential scale of emissions, it is clear that mitigation of C02 emissions from oil shale development will be needed to comply with any future C02 regulation." Thus oil shale upgrading and refining will unquestionably lead to significant increases in GHG emissions that BLM must account for in the Final PEIS.

56 DPEIS, at 4-59 (oil shale) and 5-50 (tar sands).
57 Adam Brandt, Jeremy Boak, Alan Burnham, "Carbon Dioxide Emissions from Oil Shale Derived Liquid Fuels",
Attachment 8.
58 Id.
#41])>
<([#42 [*1.5*] A. Legal and policy basis for the BLM evaluating climate change
As the BLM makes clear in the DPEIS the agency is required to evaluate the impacts of its land use decisions on climate change and to take action is clear. In 2007, the Supreme Court's decision in Massachusetts v EPA 59 recognized the severity of the climate change crisis, and the EPA's obligation to confront the problem. The Supreme Court noted "the enormity of the potential consequences associated with man-made climate change,"60 and the contribution of carbon dioxide emissions to global warming. 61 The Supreme Court concluded, "[t]he harms associated with climate change are serious and well recognized,' 62 and that the federal government has a responsibility to take action to reduce it, even if such action may not completely reverse global warming or if the emission are small in comparison to global emissions. 63
In connecting climate change with an agency's NEPA responsibilities, the U.S. Court of Appeals for the Ninth Circuit has stated that, a with any relevant information, an agency must take a "hard look" at the effects of climate change in its EIS. 64 This requirement flows in part out of the cumulative effects analysis requirements of NEPA 65 Accordingly, the analysis is one of considering "the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions,' including the impacts of climate change. 66 BLM is not exempt from this responsibility.
Indeed, Interior Secretary Salazar understands the great importance of Interior agencies analyzing the impacts of agency decisions on our climate. As noted in the DPEIS, Secretarial Order (S.O.) No. 3289 unequivocally mandates that all Department of the Interior agencies "analyze potential climate change impacts when undertaking long-range planning exercises, setting priorities for scientific research and investigations, developing multi-year management plans and making major decisions regarding potential use of resources under the Department's purvi ew.''67 The DPEIS falls squarely under this guidance and BLM must assess impacts from the proposed actions that may directly, indirectly, or cumulatively result in exacerbating climate change within this document.
Further, NEPA regulations require that NEPA documents address not only the direct effects of federal proposals, but also "reasonably foreseeable" indirect effects. These are defined as:
Indirect effects, which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems."68
BLM is required to take a hard look at direct, indirect, and cumulative impacts to and from climate change in the planning area in the RMP.

59 Massachusetts v. EPA, 127 S. Ct. 1438, 1455 (2007).
60 Id at 1458.
61 Id. at 1457-58.

62 Id at 1455.
63 Id. at 1458.
64 Ctr.for Biological Diversity v. Nat'! Hwy. Traffic Safety Admin., 538 F.3d 1172, 1214-15 (9th Cir. 2008).
65 Id. at 1215 (citing Klamath-Siskiyou Wildlands Ctr. v. Bureau of Land Mgmt., 387 F.3d 989, 994 (9th Cir. 2004)).
66 Id. (quoting 40 C.F.R. § 1508.7).
67 S.O. 3289, incorporating S.O. 3226.
68 40 C.F.R. § 1508.8(b) (emphasis added).
#42])>
<([#43 [*3.5.1.6*] FLPMA likewise provides relevant guidance [on climate change]. In enacting FLPMA, Congress enacted a policy that "the public lands be managed in a manner that will protect the quality of scientific, scenic,
historical, ecological, environmental, air and atmospheric, water resource, and archeological values .... " 69 Further, FLPMA directs BLM to manage the lands under its jurisdiction in such a manner that will "best meet the present and future needs of the American people;" "provide sufficient latitude for periodic adjustments in use to conform to changing needs and conditions;" and "take[] into account the long-term needs of future generations for renewable and nonrenewable resources, including, but not limited to, recreation, range, timber, minerals, watershed, wildlife and fish .... "70 In addition, the statute requires BLM to "minimize adverse impacts on the natural, environmental, scientific, cultural, and other resources and values (including fish and wildlife habitat) of the public lands involved."71

69 43 U.S.C. at§ 170l(a)(8).
70 ld § 1702(c).
71 ld § 1732(d)(2)(a).
#43])>
<([#44 [*3.5.1.1*] The Council on Environmental Quality's (CEQ) 2010 draft guidance on how NEPA should
consider and evaluate greenhouse gas emissions and climate change in instructive. Under this draft guidance, the agency should quantify and disclose its estimate of the expected, annual direct and indirect greenhouse gas emissions. Specifically, where a proposed action is anticipated to cause direct, annual emissions of 25,000 metric tons or more ofC02-equivalent greenhouse gas emissions, a quantitative and qualitative assessment is required together with the consideration of mitigation measures and reasonable alternatives to reduce greenhouse gas emissions.
#44])> <([#45 [*3.5.1.4*] EPA has commented, in recent NEP A reviews, that an analysis of reasonable alternatives be
performed that includes an assessment of potential means to mitigate project-related greenhouse gas emissions. 72 Specifically, EPA suggested assessing carbon capture and sequestration technologies as well as measures from BLM's Supplemental Information Report for the eight EAs in Montana, North Dakota and South Dakota. 73 These measures should be considered by BLM in alternatives developed pursuant to NEP A prior to any further development of oil shale and tar sands resources.
In addressing climate impacts, BLM must craft long-term management prescriptions without permanent impairment and unnecessary or undue degradation to the resources in the face of

climate change. S.O. 3289 states that "[t]he realities of climate change require us to change how we manage the land, water, fish and wildlife, and cultural heritage and tribal lands and resources we oversee." Without this critical analysis BLM cannot meet its NEP A obligations or other legal and policy mandates discussed above.

72 January 7, 2011, EPA, Comments on the Gasco Uinta Basin Natural Gas Development Project Draft EIS, CEQ#
20100386.
73 BLM's Supplemental Informational Report for the eight EAs in Montana, North Dakota and South Dakotahttp://
www.blm.gov/mt/st/enlprog/energy/oil and gas!leasing/leasingEA .html
#45])>

<([#46 [*3.5.1.1*] B. Defining Alternative 2(b)
As the DPEIS makes clear, the numerous uncertainties regarding development affect the BLM's ability to catalogue and quantify with any reasonable certainty. Some of those uncertainties include, but are not limited to:
./ Nature of the technologies
./ Sources and amount of electricity to power production
./ Transportation needs, including types of vehicles
./ Carbon sequestration
./ Emission capturing technology
./ Rate of development
Despite these uncertainties, the DPEIS provides, "The maximum potential increase in cumulative GHG emissions from all potential oil shale and tar sands activities cannot be predicted with accuracy."74 Given these significant uncertainties, BLM cannot simply state that cumulative GHG emissions cannot be predicted and proceed with permitting development activity. BLM does not have the analytical basis to claim that future oil shale and tar sands development is unlikely to cause significant impacts to climate. Until enough information is known to be able to reasonably quantify the potential environmental impacts from further oil shale and tar sands resource development, BLM must not open up any lands for development activity. If at any point in the future, technology development progresses to the point that commercial development is viable, the BLM must conduct a comprehensive analysis of impacts prior to the issuance of any lease.
Towards this end, BLM must commit to inventory GHG emissions from future oil shale and tar sands development and to seriously investigate the alternatives available to avoid or minimize these impacts as required by 40 C.F.R. § 1502.1, 40 C.F.R. § 1502.14 and 40 C.F.R. § 1502.16. That inventory should include impacts from other phases of extraction and production-energy demands, vehicles/transportation, construction site development, refineries, and combustion of fuel-and incremental impacts from individual projects.

74 DPEIS, at 4-59.
#46])> <([#47 [*3.5.1.3*] [*9.2.6*] Additionally, in defining Alternative 2(b), or the selected Alternative, the Final PEIS must
mandate that following completion of research activities lessees:
A. Document the greenhouse gas emissions from all phases of the project, including

energy demands, construction of lease sites, production of fuel, and combustion of fuel ultimately produced. This analysis must include incremental contributions from individual projects.
B. Show compliance with applicable federal and state policies and standards **#47])>** .

<([#48 [*3.10.3*] VII. Socio-Economic Impacts
Over the past 30 years, western economies have shifted from largely extractive industries to more diversified economies based on recreation, tourism, knowledge-based industries, and the professional and service sector. A 2004 study examining the impact of public lands on economic well-being in eleven western states found that only 3% of western counties could be classified as resource-extraction dependent. 75 There is a vast and growing body of research that indicates that
the environmental amenities provided by public lands are an important economic driver in the rural West. Given the changing nature of these economies, prioritizing oil shale and tar sands development at the expense of non-extractive economic drivers may harm the economy of the region in the long run by depleting the natural amenities currently responsible for the economic growth of western communities.
It is especially important to consider these demographic and economic shifts given the region where oil shale and tar sands development is being proposed. Since the 1982 oil shale bust, northwest Colorado has successfully transitioned from an economy dependent on extraction of natural resources to one that relies more heavily on the protection of the natural amenities. This area has developed a thriving retirement community, and has begun to market itself as a destination for outdoor recreation. In fact, many rural communities in the Rocky Mountain region are benefiting from the increase in demand for outdoor recreation, especially activities on federal public lands. The President's America Great Outdoors Initiative recognizes the social, economic and spiritual values of our pub tic lands for recreation, 76 so in analyzing the socioeconomic
impacts of oil shale and tar sands development, the Final PEIS and subsequent NEPA must account for these benefits.
Oil shale and tar sands development threaten these economic drivers. It is imperative that the relationship between protected public lands in the area and the local economy be given a more thorough comprehensive examination across the tri-state region. A rural communities diversify their economies, the framework for making public land management decisions must also evolve. Management plans for public land need to account for all aspects of the economic and social systems of these communities, including investment and retirement income, recreation, tourism, and entrepreneurial businesses attracted to scenic locations, when evaluating alternatives. Management plans must also consider the increasing importance of industries and economic sectors that rely on these public lands, but not necessarily on the extraction of natural resources. As the population of the entire country grows, the presence of undeveloped lands becomes increasingly important because these lands strengthen western rural economies by meeting growing needs for clean air and water, wildlife habitat, and recreation opportunities.
75 R. Rasker, B. Alexander, J. van den Noort and R. Carter.2004. The Sonoran Institute, Public Lands Conservation
and Economic Well-Being. Tucson AZ: The Sonoran Institute.
http ://sonoran.o(g/index.pbp?option=com docman&task=cat view&gid=152&Ttemid=74.
76 http://a.mericasgreatoutdoors.gov/ **#48])>**

<([#49 [*3.10.2*] A. Challenges facing western communities
A 2008 report by BBC Consulting evaluating the economic impacts of oil shale development in western Colorado highlights the challenge and needs communities could face. 77 The report, which was prepared for the Associated Governments of Northwest Colorado, offers a number of startling conclusions. Two in particular bear attention.
First, concurrent oil/gas and large-scale oil shale development would cause existing towns to reach capacity. New towns would have to be built. The report also notes baseline population projections already strain most municipalities. Second, even with payments made to the cities and counties, growth-related capital costs are projected to exceed energy revenues by $1.4 billion. The report suggests some of the revenue loss could be made up from state grants, but given the state's budget challenges and budget projections, that assumption is highly questionable. Communities in eastern Utah and southwestern Wyoming would face similar challenges.
BBC detailed the most significant challenges currently facing this region:
1. Providing roads, increased wear and tear, and congestion
2. Providing workforce housing
3. The demand for industry workers creates inflation for labor and supplies
4. Timing mismatch between upfront costs associated with developmental impacts and when local government revenues arrive
5. Geographical mismatch between costs created and the revenues generated
6. Lack of strategic partnership with the industry to address upfront industry impacts
The dichotomy of when the costs are created and the revenues are generated cannot be overstated. In their comments on the on the 2008 draft PEIS, Club 20, a group representing the 22 counties in western Colorado, noted that based on these economic considerations, "the federal government must encourage industry to make appropriate up-front investments in the infrastructure of locally-impacted communities." 8 Club 20 further noted, "We are concerned about the socio-economic impacts to the local communities. As the PEIS anticipates, rapid increases in population and immigration in parts of each region of influence could impact quality of life, in particular requiring a transition from traditional rural, to more urban lifestyles, and potentially cause large social disruption impacts."
Specifically, as Club 20 noted, "With the increasing natural gas development activity in northwestern Colorado, we are already experiencing:
1. housing shortages,
2. dramatic increases in retail and housing prices,
3. overwhelming demands on the community's social and physical infrastructure (schools, police and fire services, social services, water and sewer), and
4. a lack of available workforce to sustain each community's traditional Main Street economy."
BBC ascribes these challenges to the fact that the "four counties included in the study are located in rural Colorado and have minimal infrastructure, topographic barriers, lack housing, major road networks, and service capacity, and over 68 percent of the land in the region is public lands."
Like these four counties in western Colorado, infrastructure presents an enormous challenge for local municipalities in Utah and Wyoming. While the energy industry is creating new jobs, as BBC notes, "due to tight labor markets, they are competing with traditional industries like tourism/recreation, agriculture, and the public sector for workers and materials."

It is especially important to consider demographic and economic shifts given the location where this large-scale oil shale development is being proposed. As rural communities diversify their economies, the framework for making public land management decisions must also evolve. Management plans for public lands need to account for all aspects of the economic and social systems of these communities, including investment and retirement income, recreation, tourism, and entrepreneurial businesses attracted to scenic locations, when evaluating alternatives. Management plans must also consider the increasing importance of industries and economic sectors that rely on these public lands, but not necessarily on the extraction of natural resources. As the population of the entire country grows, the presence of undeveloped lands becomes increasingly important because these lands strengthen western rural economies by meeting growing needs for clean air and water, wildlife habitat, and recreation opportunities.

77 Northwest Colorado Socioeconomic Analysis and Forecasts, April2008. http ://agnc.org/reports/08-
ocioecomic/agnc fmal mail report' 4-07-08.pdf (last accessed Aprill3, 2012).
78 Club 20, Comments on 2008 Oil Shale and Tar Sands DPEIS, March 2008, at 4. (on file with the BLM)
#49])> <([#50 [*3.10.4*] [*3.10.2*] B. Assets at stake
While oil shale and tar sands proponents extoll the potential economic value resulting from large-scale development, they often downplay or ignore the economic value development, were it feasible, would undermine.
Environmental quality, including the quality of the social and natural environments, is a critical economic asset in this region. Oil shale and tar sands development would overlap with increasing tourism, agriculture, and recreational opportunities. Older workers and retirees are drawn to the West and bring with them investment, retirement, and other non-employment income. Younger people are likewise drawn to the area because of the quality of life they find here. The recovery of Colorado's West Slope from the oil shale and energy collapse of the early 1980s, for example, rests strongly on outdoor recreation opportunities, scenic beauty, open space, small towns, and an influx of retirees.
Consider the following:
./ Substantial conversion of water rights currently used for agriculture "could have large impacts on the economy of each ROI."
./ A September 2008 report prepared for the Colorado Division of Wildlife concluded that the 2007 direct annual expenditures in Colorado from hunting and fishing alone were approximately $1.1 billion. 79 Secondary impacts of the dollars re-spent within the economy in 2007 are estimated to be $767 million, for a total economic impact of more than $1.8 billion. The same study found wildlife-watching yields an additional total economic impact of $1.2 billion annually. Wildlife plays a similarly important role in Utah and Wyoming .
./ The DPEIS identified "172,339 acres of mule deer winter habitat, 11,470 acres of mule deer summer habitat, 159,205 acres of elk winter habitat, and 11,465 acres of elk summer habitat overlap lands that would be available for oil shale leasing." 80
./ In Utah, for tar sands alone, "57, 708 acres of mule deer winter habitat, 17, 110 acres of mule deer summer habitat, 52,361 acres of elk winter habitat, and 17,170 acres of elk summer habitat overlap lands that would be available for tar sands leasing."81
./ Oil shale tar sands and ancillary facility development "may fragment or destroy wildlife

habitat and affect the behavior of migratory big game species such as elk and mule deer, which fonn an important basis for recreational activities in many parts of each ROI."82
./ As the DPEIS provides, recreation would decline. Specifically,
o In Colorado, oil shale would result in a loss of up to 2,830 jobs and $36.5 million in income annually in the ROI. Additional economic impacts would be felt elsewhere.
o In Utah, 1,552 jobs and $12.6 million in income would be lost from oil shale and tar sands in the ROI. Additional economic impacts would be felt elsewhere.
o In Wyoming 2,719 jobs and $14.4 million in income would be lost. Additional economic impacts would be felt elsewhere.
Impacts from the development scenarios considered in Alternatives 1 and 4 would be significantly greater.

79 BBC Research & Consulting, The Economic Impacts of Hunting, Fishing and Wildlife Watching in Colorado,
Final Report, revised September 18, 2008, report prepared for Colorado Division of Wildlife, page 1. Main report
web page: http ://wildlife.state.co.us/About/Reports/Economklmpactsl; report-specific web page: http:/ /wild I i fe. state.co. us/SiteCollectionDocuments/DO WI AboutDow/Rev ised2004DO WEcooomiclmpactReport. pd
f.
80 DPEIS, Table 2.6-1 at 2-96.
81 DPEIS, Table 2.6-2 at 2-121.
82 DPEIS, at 4-176.
#50])> <([#51 [*3.10.2*] [*9.2.6*] C. Alternative 2(b)- Data Needs
The economic impacts on communities, jobs, and existing business remain highly unclear. Following completion of research activities, potential lessees should be required to:
A. Estimate the true costs associated with oil shale and tar sands development to private landowners, recreation, agriculture, and other viable industries at the time of the lease sale.
B. Identify the increased public service and infrastructure costs associated with oil shale and tar sands development, and specify in detail how negative impacts would be mitigated.
#51])>
<([#52 [*3.7.5.1*] [*9.2.4*] [*3.7.4.3*] [*3.7.4.9*] [*3.7.5.2*] [*3.7.5.3*] VIII. Greater Sage-Grouse
As the BLM is acutely aware, listing the greater sage-grouse under the Endangered Species Act (ESA) is not hypothetical. The disappearance of greater sage-grouse habitat and the decline of populations indicate the need to implement effective conservation immediately. While federal land management agencies and state wildlife agencies are taking steps to conserve greater sagegrouse
populations and habitat, the species is still in decline, demonstrating that past efforts have been inadequate.
Since the 2008 PEIS was issued, the United States Fish and Wildlife Service (USFWS) determined that listing the sage-grouse as threatened or endangered rangewide is "warranted but precluded by higher priority listing actions." As the agency cautions, "Evidence suggests that habitat fragmentation and destruction across much of the species' range has contributed to significant population declines over the past century. If current trends persist, many local

populations may disappear in the next several decades, with the remaining fragmented population vulnerable to extinction."83 The USFWS determined that southwestern and central Wyoming and northwestern Colorado are strongholds for sage-grouse, with some of the highest estimated densities of males anywhere in the remaining range of the species. The USFWS also identified this "high-density sagebrush area as one of the highest priorities for conservation consideration as it comprises one of two remaining areas of contiguous range essential for the long-term persistence of the species."84

The BLM recognizes the challenge it faces in meeting energy demand and protecting the greater sage-grouse. That's one of the reasons why the agency issued Instruction Memorandum 2012-043 "Greater Sage-Grouse Interim Management Policies and Procedures."85 Oil shale and tar sands development would further exacerbate the challenge, as development could occupy as much as 100% of the leasehold surface, thereby eliminating all grouse habitat on the lease, and effectively rendering adjacent habitat unsuitable and causing abandonment by sage-grouse populations due to industrial activity on the lease. Mention of this memorandum is missing from the DPEIS. This oversight should be corrected in the Final PEIS.

In addition, an excellent compilation of greater sage-grouse conservation is contained in "A Report on National Greater Sage-Grouse Conservation Measures.' This December 2011 report by the BLM's sage-grouse National Technical Team (NTT) establishes the BLM's objective is "to develop new or revised regulatory mechanisms, through Resource Management Plans (RMPs), to conserve and restore the greater sage-grouse and its habitat on BLM administered lands on a range-wide basis over the long term."86 With the NTT and the sage-grouse plan amendments, the BLM is taking steps to achieve its goal to "maintain and/or increase sagegrouse abundance and distribution by conserving, enhancing or restoring the sagebrush ecosystem upon which populations depend in cooperation with other conservation partners. " 87

The NTT further provides "Until such time as more specific conservation objectives relative to sage-grouse distribution or abundance by sage-grouse management zone, state, or population are developed, BLM will strive to maintain or increase current distribution and abundance of sagegrouse on BLM administered lands in support of the range-wide goals."88

The NTT provides fairly detailed suggestions on how the BLM should identify priority sagegrouse habitats, and recommended to achieve conservation goals, including limiting disturbance to 3% surface per square mile of the land where activities such as oil shale and tar sands would take place. Overall, effective conservation will require that the BLM designate large, contiguous tracts of prime sage-grouse habitat that are set-aside from development or protected via stringent management protections. Otherwise, the agency cannot meet its goal of maintaining and enhancing populations and habitats.

As BLM finalizes a new policy based on the NTT's recommendations to achieve the long-term viability of the species, and the USFWS moves toward reconsideration of its warranted but precluded finding, all priority sage-grouse habitat should be placed off limits to oil shale and tar sand research and development, including adequate buffers to protect priority and core habitat on adjoining lands. (See Molvar Comment, Attachment 3.) Additionally, the BLM needs to address the extent to which adjacent lands may warrant protection because they are likely to provide important habitat in the future, as climate change results in shifting habitat types and ecosystem conditions. Adaptation is recognized as a key strategy for addressing the impacts of climate change.

Under NEP A, the BLM is required to:
1. take a hard look at sage-grouse conservation, including new information and science regarding the current biological status of the species, and
2. thoroughly analyze all direct, indirect, cumulative, and reasonably foreseeably impacts to sage-grouse habitat and populations that could also be impacted by future oil shale or tar sands development.
Additionally, consistent with the court ruling in Western Watersheds Project v. Salazar, 89 oil shale or tar sands proposals must fully consider cumulative impacts to sage-grouse populations and habitat, in addition to proposed leasing and development for oil shale and tar sands. Existing and reasonably foreseeable oil and gas leases, wind generation projects, and associated roads, transmission and other infrastructure from both fossil fuel and renewable energy development must be considered in a rigorous cumulative impacts analysis analyzing the total impact on sagegrouse
from projects on both public and private lands in the bird's range.

83 http://www.fws.gov/rnountain-prairie/specie /birds/sagegrouse/ (last accessed March 29, 2012)
84 75 Fed. Reg. 13910, 13950 (March 23, 2010)(citing Wisdom eta!. (in press, p. 23)).
85http: //www.blm.gov/wo/stlen/info/regulations/lnstruclion Memos and Bulletins/national instruction/20 12/IM 20
12-043.html (last accessed April23, 2012)
86 BLM, "A Report on National Greater Sage-Grouse Conservation Measures," December 2011, page 4.
87 Id. at 6.
88 Id.
89 Case No. 4:08-CV-516-BLW (D. Idaho 2011).
#52])> <([#53 [*3.7.5.1*] [*3.15*] [*3.7.4.3*] [*3.7.4.9*] [*3.7.5.3*] A. Problem with Figure 6.1.2-5
We believe there is a problem with the overlay used to develop Figure 6.1.2-5. As provided in the DPEIS,
Areas including greater sage-grouse habitat and lek sites are shown in Figure 6.1.2-5. Although greater sage-grouse core and priority habitats are excluded from oil shale development under this alternative, core and priority habitats may occur in close proximity (<1 mi [1.6 km]) to proposed lease areas. In addition, three current and historic sage-grouse leks have been identified in Wyoming in areas overlapped by the Alternative 2 lease areas in that state (Figure 6.1.2-5). Those areas for which lease stipulations have been established in existing RMPs to protect federally listed and candidate species, BLM-designated sensitive species, and other special status species would not be available for lease application under Alternative 2. 90
While it is hard to discern the specific cause of the problem, based on what the Utah organizations signing these comment have been told by the Utah State BLM Office, it appears that in the DPEIS the BLM is using the wrong layer for what they are calling priority habitat in Utah. Sage grouse priority habitat, as it is currently defined by the state of Utah, include 100% of Doherty's breeding density (occupied leks buffered out to 4 miles), plus associated winter habitat and associated breeding habitat with those leks, as delineated by the Utah Division of Wildlife Resources and recently updated (last month) on their website.
The newly-convened Utah Sage Grouse Working Group are starting the process of developing a

new age grouse plan for Utah. The maps they are using track Doherty's. Additionally, according to the state office of the BLM, going forward all land use planning and NEP A analysis
on Utah BLM lands will use this layer until the RMP amendments are completed, or until they receive the final preliminary priority habitat maps from the state.
With that layer, it appears that 10% of the areas that would be opened for oil shale under Alternative 2 overlap with sage-grouse habitat. There is about the same amount of overlap for tar sands in the Uinta Basin. (See Attachment 2.)
#53])> <([#54 [*9.2.4*] [*3.7.4.8*] B. Alternative 2(b)- Data Needs
In order for the BLM to meet its aforementioned goals, it is imperative that the agency closely scrutinize all research data and development proposals. Among other provisions, the Final PEIS should include language mandating that following completion of research activities lessees:
A. Document that development would protect core and priority sage-grouse areas, as defined at the point of a lease sale.
B. Document there would be no net decline in habitat or species viability, while furthering DO I' s goal of maintaining or enhancing the health of sage-grouse populations.
90 DPEIS, at 6-82.
C. Establish that proposed activities would comply with all applicable federal agency sage grouse policies, as well as state policies or standards.
D. Analyze the cumulative impacts to grouse conservation of the proposed project, and other current and reasonably foreseeable projects or activities that could adversely affect populations.
#54])> <([#55 [*3.7.5.1*] [*3.7.4.10*] C. Additional details about the sage-grouse
As an umbrella species, the health of greater sage-grouse populations is a good indicator of overall ecosystem health for the sagebrush ecosystem. Landscape scale conservation strategies targeting the sage-grouse also benefit dozens of additional sagebrush obligate wildlife species, from pronghorns and pygmy rabbits to BLM Sensitive songbirds. 91 The maintenance of highquality
sagebrush steppe habitats, particularly nesting and wintering habitats, is necessary to maintain viable sage-grouse populations. That's why large sage-grouse core areas like South Pass and the Kinney Rim/Vermillion have been proposed for protection from future oil and gas leasing under the BLM's Wyoming sage-grouse plan amendment.
91 Mezquiza et al.
#55])> <([#56 [*3.7.5.1*] [*3.7.4.8*] Northwest Colorado has smaller greater sage-grouse numbers than Wyoming and may not retain
as many large contiguous blocks of relatively intact and unfragmented habitat as Wyoming. Accordingly, sage-grouse conservation in Colorado needs to be appropriately scaled to maximize the chances that these populations recover to healthy levels, leaving little room for error and no room for loss of important habitat in northwest Colorado.
#56])> <([#57 [*3.7.5.1*] [*3.7.4.8*] Additionally, Colorado, Utah and Wyoming sage-grouse populations are genetically connected.
Impacts from development to the populations in one state are likely to negatively influence populations in other states. As populations in Colorado and Utah are generally more compromised and at-risk than Wyoming, special care must be taken to appropriately scale conservation efforts to tates with smaller populations. Corridors and genetic connections between different populations and across state lines must inform decision-making. Additional

habitat fragmentation and infrastructure impacts that further isolate populations must be avoided. **#57])>**
<([#58 [*3.7.5.1*] [*3.7.4.8*] To ensure viable sage-grouse populations, it is important to consider nesting, brood-rearing, and
winter habitats. Holloran and Anderson found that 64% of sage-grouse females nested within 5 km of a lek. 92 Connelly proposed comprehensive guidelines regarding the management of sagegrouse,
focused around the conservation of breeding/nesting habitat, late summer brood-rearing habitat, and wintering habitat. 93
In western Wyoming, Lyon found that sage-grouse moved an average of 1.1 km from the nest site for early brood-rearing, and late brood-rearing habitats averaged 4.8 km distant from the early brood-rearing areas. 94 In Bates Hole Holloran found that early brood rearing habitats are typified by decreased sagebrush cover and height and increased forb abundance, and movement to riparian sites occurred as uplands became desiccated. 95 In addition, as Erik Molvar, a Wyoming-ba ed wildlife biologist and a signor to these comments explains in Attachment 3, "the availability of forage with a high nutritional content is an important factor determining brood success. Broods require forbs, insects and cover for growth, concealment and shade (Autenreith 1985)." Additionally, Molvar explains, "Mesic meadows and surface waters are focal points of sage-grouse activity during certain times of year. Mesic sites associated with springs, seeps, and streams are critical for sage-grouse on a year-long basis, and assume even greater importance as brood rearing habitat."
As for winter habitats, non-migratory sage-grouse winter on their nesting and brood-rearing habitats, while migratory populations may travel some distance to winter on traditional wintering areas. A western Wyoming study determined sage-grouse traveled at least 35 lcm to separate wintering grounds. 96 In Colorado's North Park, Beck found that grouse migrated 5-20 km away from breeding areas during winter. 97
Additionally, researchers appear to be unanimous in their recommendations that sage-grouse winter habitat be protected from disturbance. According to Beck and Braun, '"Areas of winter concentrations of sage-grouse need to be documented and afforded maximum protection."98
Lyon recommended that sage-grouse wintering habitats be placed off-limits to oil and gas development. 99 Thus, in the oil shale and tar sands planning areas, the BLM needs to rapidly identify sage-grouse winter concentration areas and place the areas off-limits to surface disturbance. Since development would remove all shrubs, development clearly falls into the category of activities that should be prohibited by the BLM.

92 Holloran, M.J., and S.H. Anderson. 2005. Spatial distribution of greater sage-grouse nests in relatively contiguous
sagebrush habitats. Condor 107:742-752.
93 Connelly, J.W. M.A. Schroeder, A.R. Sands, and C.E. Braun. 2000. Guidelines to manage sage-grouse
populations and their habitats. Wildl. Soc. Bull. 28:967-985.
94 Lyon, A.G. 2000. The potential effects ofnatw-al gas development on sage-grouse (Centrocercus urophasianus)
near Pinedale, Wyoming. M.S. Tbesi Univ. ofWyoming, 121 pp.
95 HolLoran, M.J. 1999. Sage-grouse (Centrocercus urophasianus) seasonal habitat use near Casper, Wyoming. M.S.

Thesis, Univ. of Wyoming, 130 pp.
96 Berry, J.D., and R.L. Eng. 1985. Interseasonal movements and fidelity to seasonal use areas by female sage~
rouse. J. Wild!. Manage. 49:237-240.
7 Beck, T.D.I. 1977. Sage-grouse flock characteristics and habitat selection in winter. J. Wildl. Manag. 41:18-26.
98 Beck, T.D.I., and C.E. Braun. 1980. The strutting grow1d count: Variation, traditionalism, and management needs.
Proc. Ann. Conf. West. Assn. Fish and Wildl. Agencies 60:558-566, at 564.
99 Lyon, A.G. 2000. The potential effects of natural gas development on sage-grouse (Centrocercus urophasianus)
near Pinedale, Wyoming. M.S. Thesis, Univ. ofWyoming, 121 pp.

#58])> <([#59 [*3.7.5.2*] [*4.2*] [*3.7.4.6*] In the PEIS the BLM must also evaluate the aggregated or cumulative effects of all industrial
activities on sage-grouse populations. Strip mining for coal has been shown to impact sagegrouse populations through major local decreases in recruitment. 100 Because oil shale
development either involves strip mining directly, or in the case of in situ methods a level of habitat destruction roughly equivalent to strip mining, areas near sage-grouse leks and other core and priority habitat 101 must be avoided with adequate buffers to avoid adverse impacts. Road development can also lead to lek abandonment. 102

100 Braun, C.E. 1986. Changes in sage-grouse lek counts with advent of surface coal mining. Proc. Issues and
Technology in the Management of Impacted Western Wildlife, Thorne Ecol. Inst. 2:227-231.
#59])> <([#60 [*3.7.4.6*] [*3.7.5.2*] When evaluating these and other impacts, oil and gas development provide a good starting point
for the BLM's analysis. As Molvar explains, over the past 10 years, oil and gas development has posed perhaps the greatest threat to sage-grouse viability. Over 8% of the total range of sagegrouse
has already been impacted by oil and gas development· in addition the Wyoming Basin
and Colorado Plateau ecoregions are among those areas that have the greatest proportion of land under lease (and therefore at risk for future industrialization). In a study near Pinedale, Wyoming, sage-grouse from disturbed leks where gas development occurred within 3 k:m of the lek site showed lower nesting rates (and hence lower reproduction), traveled farther tone t, and selected greater shrub cover than grouse from undisturbed lek . 103 Oil shale development, while having a much greater intensity of development- up to 100% landscape destruction rather than the 3-5% of a typical oil and gas field- also involves heavy vehicle traffic, human activity at the site of production, and networks of roads and potentially pipelines to support it.

101 The BLM defines "priority habitat" in Instruction Memorandum No. 2010-071.
102 Id.
#60])> <([#61 [*3.7.5.1*] The best available science establishes that current BLM nest buffers for oil and gas of~ mile for
NSO and 2 miles for seasonal stipulations have proven grossly inadequate to maintain sagegrouse

viability. The lek buffer must be based not only on maintaining the lek but also the nesting habitat that surrounds the lek. In addition, seasonal prohibitions that prohibit only construction activities near leks are pointless: If roads or wells are built near leks during the offseason,
the resulting regular vehicle traffic will have major negative impacts when the sagegrouse are present, effectively circumventing any mitigation value of delaying construction activities. We therefore recommend that the Final PEIS and RMP amendments include a 3-mile NSO and no surface disturbance/vegetation treatment buffer at minimum (5 miles would be preferable) for sage-grouse leks, winter habitat, and other vital sage-grouse habitats.
#61])> <([#62 [*3.7.5.1*] In summary, the BLM's sage-grouse analysis and decisions must be informed by the goal of
maintaining or increasing sage-grouse abundance and distribution by conserving, enhancing or restoring the sagebrush ecosystem upon which populations depend. A broad group of stakeholders works for effective sage-grouse conservation policies that will foster the recovery of populations and habitat to avoid the need for a listing, the BLM must ensure that the oil shale and tar sands PEIS does not undermine that shared goal.
In addition to these comments, Erik Molvar's comments in Attachment 3 are included as part of these general comments and are incorporated herein. Those comments detail scientific justifications for our policy recommendations, and provide bases for additional use restrictions necessary to protect the sage-grouse.

103 Lyon, A.G. 2000. The potential effects of natural gas development on sage-grouse (Centrocercus urophasianus)
near Pinedale, Wyoming. M.S. Thesis, Univ. of Wyoming, 121 pp.
#62])>
<([#63 [*3.1.1*] [*2.3.1*] IX. Lands with Wilderness Characteristics, ACECs, and Other Areas to be Protected
While we strongly endorse Alterative 3, we are encouraged that Alternative 2(b) would place off-limits to development both wilderness lands, including lands with wilderness characteristics, and ACECs. We also believe the preferred alternative can be strengthened.
In addition to the many areas discussed below, the BLM should protect core areas and corridors within Heart of the West Wildland Network Design from oil shale and tar sands development. 104
The Heart of the West conservation plan is a science- and GIS-based blueprint for sustainable development in the Wyoming Basins Ecoregion spanning southeast Idaho, southwest Wyoming, northwest Colorado and northeast Utah.

104 htt p://www.voiceforthewi ld.org/Heart of the West/HeartoftheWcstPian.pdf (last accessed March 30, 2012)
#63])> <([#64 [*9.2.1*] [*3.1.1*] A. Wilderness areas and lands with wilderness characteristics
As we noted in our May 2011 scoping comments on this DPEIS, the congressional funding limitation for fiscal year 2011 limiting implementation of S.O. 3310 does not relieve the BLM from either considering wilderness as part of this PEIS, or relieve the BLM from fulfilling its statutory obligations to inventory and manage federal lands for wilderness characteristics. FLPMA requires the BLM to "maintain on a continuing basis an inventory of all public lands and their resource and other values (including, but not limited to, outdoor recreation and scenic

values), giving priority to areas of critical environmental concern. This inventory shall be kept current so as to reflect changes in conditions and to identify new and emerging resource and other values.'"05 This requirement, we noted in 2011, stands despite the 2003 Norton-Leavitt settlement that rescinded the Wilderness Inventory Handbook, and the funding limitation Congress imposed prohibiting the BLM from implementing S.O. 3310 for fiscal year 2011. As the U.S. Court of Appeals for the Ninth Circuit recently held, wilderness characteristics are one of the resources of the public lands that the BLM must inventory under FLPMA, as confirmed by federal courts. As the Court stated,

wilderness characteristics are among the "resource and other values" of the public lands to be inventoried under§ 1711. BLM's land use plans, which provide for the management of these resources and values, are, again, to "rely, to the extent it is available, on the inventory of the public lands, their resources, and other values." 43 U.S.C. § 1712(c)(4). 106

In addition, the Ninth Circuit stated that it did not need to consider the legality of the 2003 Norton-Leavitt settlement, acknowledging that: "Wilderness values are among the resources which the BLM can manage under 43 U.S.C. §§ 1712 and 1732.'' 107 In other words, BLM has ongoing obligations to fulfill FLPMA's mandate to inventory and manage the resources of the public lands.

In addition to the agency's legal obligations to inventory lands with wilderness characteristics, the BLM must make decisions regarding how to balance the management of resources on public lands, including wilderness-quality lands. Once the BLM identifies lands with wilderness characteristics, the agency should apply management to preserve those qualities under FLPMA and the Land Use Planning Handbook, notwithstanding the status of S.O. 3310.

For these and other reasons, we are encouraged that the DPEIS includes protections for lands with wilderness characteristics and urge BLM not to retract on these protections in the Final PEIS.

105 43 U.S.C. § 1711(a)

106 Or. Natural Desert Ass 'n v. BLM, 531 F.3d 1114, 1119 (9th Cir. 2008).

107 Id. at 1132

#64])> <([#65 [*3.1.1*] B. Areas of Critical Environmental Concern (ACEC)108

FLPMA defines ACECs as "areas within public lands where special management attention is required to protect and prevent irreparable damage to important historic, cultural, or scenic values, fish and wildlife resources, or other natural systems or processes, or to protect life or safety from natural hazards." 109 Under FLPMA, BLM is obligated to "rive priority to the designation and protection of areas of critical environmental concern." 10 As the DPEIS makes clear, BLM would not be able to prevent undue degradation to important values for which ACECs were designated should oil shale or tar sands development proceed:

Existing ACECs that are not closed to mineral development may be available for application for commercial oil shale leasing. Oil shale and transmission or pipeline development on any ACEC would result in a loss of all or a part of the resources or values for which the area was originally designated. Oil shale development within the viewshed of these areas may also result in adverse impacts on scenic values of these areas. 111

The DPEIS further provides:

ACECs that are not closed to mineral leasing include approximately 44,000 acres and are

shown in Table 6.1.1-1. Should oil shale development occur in these areas, the R&I values within these designated ACECs would be lost. 112

In the 2008 PEIS, BLM opened all ACECs to application for commercial leasing, except for lands where mineral development is not currently allowed. This commitment to protect only a portion of ACECs was insufficient. While all ACECs are designated to protect different and unique values, commercial-scale oil shale and tar sands development would undermine the values for which these ACECs were designated.

Moreover, the DPEIS, through the preferred alternative, improves upon the 2008 decision by excluding from commercial development all ACECs, including those areas under consideration for designation as ACECs under current planning processes. 11 We support those additional protections and urge their inclusion in the Final PEIS.

The BLM should go one step further by prohibiting potential development from all ACECs, even those already open for mineral development. Given the relatively small number of acres of designated ACECs that overlap prospective oil shale and tar sands development areas, all ACECs should be closed to oil shale and tar sands development. These areas where mineral development occurs, and thus oil shale and tar sands development would be allowed, contain critical values. Protecting those values, when combined with the significant impacts development would bring, are a strong reason to close all ACECs to oil shale and tar sands development in a Final PEIS.

108 In support of this discussion, please see Attachment 9, NRDC maps.
109 43 U.S.C. § 1702(a).
110 43 U.S.C. § 1712(c)(3).
111 DPEIS, at 4-21.
112 DPEIS, at 6-5
113 DPEIS, at E-S 6 and 2-28.

#65])>

<([#66 [*3.1.1*] C. Wyoming: Adobe Town, ACECs, and Other Lands to be Protected

i. Adobe Town

The State of Wyoming's 2008 designation of the Adobe Town area as Very Rare or Uncommon under the state Environmental Quality Act is critical to protecting this area. We are thus encouraged that the BLM is proposing to protect Adobe Town from development in both Alternative 2(b) and Alternative 3. We strongly support this decision and urge the BLM to include such protections in the Final PEIS.

In the 2008 PEIS, only lands designated as WSA within Adobe Town were protected from commercial development. With Very Rare or Uncommon designation being finalized in 2008 following the issuance of the FPEIS, the BLM now has a strong basis for protecting this area's environmental and cultural resources. (Note: in Figure 2.3.3-3, Adobe Town is listed as "Rare and Irreplaceable Land". That should be changed to "Very Rare or Uncommon.)

Adobe Town has been called the crown jewel of the Red Desert, encompassing irreplaceable ecological, geological, historical and recreation values. At 180,910 acres, Adobe Town is Wyoming's largest and most spectacular desert wilderness. Stretching 26 miles north to south and 19 miles east to west, this area is one of the last places in Wyoming where visitors can take in views of pristine landscape that stretch from horizon to horizon. The landscape ranges from banded badlands to mazes of arches, pinnacles, and spires, offering spectacular scenic vistas and important wildlife habitat.

Adobe Town was designated "Very Rare or Uncommon" due to its geological, fossil, scenic, wildlife, and cultural/historical values. Non-coal surface mining (which would include oil shale) is expressly prohibited in Very Rare or Uncommon areas, except in cases where surface mining would not detract from such qualities. Because scenic qualities are part of the designation, there is no possibility that an exemption for oil shale mining could be issued.

In its formal designation of this area, Wyoming's Environmental Quality Council stated, "The designation protects the area from non-surface coal mining only. The designation would prevent surface mining for oil shale and uranium, as well as gravel pit mining." 114 While part of the Very Rare or Uncommon area is a WSA, the remainder is outside the WSA. All of Adobe Town as a state of Wyoming Very Rare and Uncommon area, not just the WSA, and should be protected from oil shale development. Further, Adobe Town geological formations, abundant fossil resources, historical and prehistoric sites and features, rare and sensitive (including crucial) wildlife habitats, and scenic values are comparable to existing national park w1its, and thus are of
national value. Left unprotected, these treasures are at risk of elimination.
The Adobe Town area should be managed on a landscape level, through a variety of management designations. By managing this area a a whole, the BLM can better protect its important and varied values. This concept i supported by the America's Great Outdoors report, which recommends the agency incorporate landscape-scale conservation and restoration as a priority in BLM resource management plans and programs. 115
a. Adobe Town: Historical, prehistorical, and archaeological values
Adobe Town has a number of historical, prehistorical and archaeological values that meet the criteria for Very Rare or Uncommon designation. It is mentioned prominently in the journals of the Geological Exploration of the 401
h Parallel (circa 1869), and was used as a hideout for fresh
horses by Butch Cassidy and his gang during the Tipton train robbery of 1900. The area has a high density of archaeological sites dating back 12,000 years, and is still used as an important religious site by Native Americans today.
Adobe Town is mentioned prominently in the Report of the Geological Exploration of the 40th Parallel, authored by eminent geologist Clarence King in 1869. This area was identified by King as the most superlative geological landscape found along the survey route. King described the general landscapes as follows:
From twelve to fourteen miles southwest of the head of Bitter Creek are seen
exposures of the soft green clays, marls, and whitish-gray ands of which the upper
beds of the Bridger group are made. Passing eastward of Pine Bluffs [known
today as Pine Butte], the country is covered with more or less drifting sand, which
forms noticeable trains of dunes. The sand suddenly gives way to the soft Bridger
beds which are intricately eroded into branching ravines [Adobe Town and Skull
Rims]. This bad-land country extends southeastward to the mouth of a dry valley
[Sand Creek] north of Cherokee Ridge [Powder Rim/Cherokee Rim], and from
that point a chain of bluff escarpments extends northeasterly for twelve or
fourteen miles. 116
Government Printing Office.
Comments: 2012 Draft Oil Shale and Tar Sands PEIS
Western Resource Advocates, eta/.

Page43
In addition to the historical noteworthiness of the Geological Exploration, Adobe Town is also unusually rich in archaeological sites. According to BLM,
Significant archaeological resources are found throughout the (Adobe Town] WSA, representing continuous occupation from Paleo Indian through late Prehistoric periods, that is, for the past 12,000 years. The cultural site density of the WSA is estimated to be 30 surface sites per square mile, which is unusually high. 117
b. Adobe Town: Geological values
Adobe Town is a geological masterpiece, dominated by outcroppings of the Washakie formation, a deep bed of volcanic ash deposited 50 million years ago during the Yellowstone eruptions as airborne ash and fluvial deposits of ash interbedded with reddish sandstone that forms rimrock. In 1981, BLM described the geology of the rims as follows:
They are composed of green, gray, and red tuffaceous and arkosic sandstone and minor beds of green shale, light-gray and green tuff, gray siltstone and conglomerate. The exposed beds have created the colorful landscape the Adobe Town Area is known for. 118
These are the epitome of fragile lands, with highly erodible soils (both the tuffaceous sandstone and the stabilized sand dunes mantled with a fragile veneer of vegetation) and the towers, arches, and balanced rocks which would easily be toppled by mechanical disturbance.
Above the rims, unique geological features include desert pavement and stabilized sand dunes. The rims have been whittled by erosion into spires and pinnacles, solifluction caves (known locally as 'mud caves') large enough to walk through, natural arches, lone towers, groups of castellated pillars, window rocks, grottoes, buttes, caprocks, mushrooms hat rocks, and eroded badlands banded with pink, red, and purple tones. According to BLM, "Skull Creek Rim, in the core of the area recommended for wilderness, contains some of the most unique and extensive badlands formations in Wyoming." 119 BLM described the effect ofthis surreal landscape as follows:
Many of the spires take on strange life-like forms- stone sentinals (sic) frozen in time standing guard over their silent desert domain. Walking amidst groups of these strange spires gives one the eerie feeling of being watched- by beings who have witnessed the evolution of Adobe Town for millennia. 120

In addition, the paleontological resources of Adobe Town are among the finest deposits of Eocene mammals and reptiles in the world. According to BLM, "The Adobe Town area is known as one of the three most valuable sites in North America for certain types of mammalian fossils." 121 BLM further noted,
The WSA is nationally known for the educational and scientific study of paleontological resources. Fossil remains of mammals are numerous and widely distributed throughout the area. Two notable mammalian fossils found in the area are the Uintathere and Titanothere. The Uintathere was a large mammal about the size and configuration of an African rhinoceros. The species of Titanothere found in the WSA was a tapir-like mammal, about 40 inches in height. This area has been identified as one of the premiere sites in North America for paleontological resources. 122
c. Adobe Town: Wildlife values

Adobe Town also has a host of sensitive wildlife habitats that are crucial or vital to meeting the very rare or uncommon designation criteria. These habitats include nest sites, sage-grouse lek sites, prairie dog colonies, and big game crucial winter ranges. The cbffs and pillar found throughout Adobe Town provide ideal nesting habitat for raptors, offering numerous nesting platfonns out of the reach of ground-based nest predators. Raptor nest sites, sage-grouse lek sites, and big game crucial winter ranges are exceptionally sensitive to, among other things, development as temporary disturbances can lead to nest failure or displacement of big game onto marginal ranges where they may not be able to survive.

The white-tailed prairie dog, a BLM Sensitive Species, is also recognized as a Sensitive Species by the Wyoming Game and Fish Department. There is a small white-tailed prairie dog colony observed at T 14N R97W sec. 12, SE V4, which has been active at least between 2001 and 2006· white-tailed prairie dogs were also observed in Section 13 NW Y4 of the arne township in 2006. Active white-tailed prairie dog colonies also occur in Horseshoe Bend south of the Haystacks.123

There are a number of known golden eagle nest sites, including two nest sites along the western end of The Haystacks (T16N R97W Sec. 10 NE ~and Tl6N R97W Sec. 15 SW l/4), one along Haystack Wash as it leaves the rimrock area (T16N R96W Sec. 30 NW ~) , and one on the lower rim (T15N R96W Sec. 18 NW ~). In the Rawlins Field Office, two golden eagle nests occur in the southern end of the WSA, with additional nests known from the Willow Creek Rim in the eastern proposed expansion unit and on outcrop to the west of Sand Creek in the southeastern part of the area.

The greater sage-grouse, another BLM Sensitive Species, is also listed as a Sensitive Species by the Wyoming Game and Fish Department. (Sage-grouse are discussed in further detail above.) There are three known sage-grouse leks- one in the southeastern proposed expansion, another north of the WSA and south of The Haystacks, and a third in the northeastern lobe of the WSA. Sage-grouse leks are the hub of nesting activity, and typically most of the hens bred at a lek nest within 3 miles of the lek site. Thus, the area around each lek also constitutes important nesting habitat.

There is a desert elk herd, known to the Wyoming Game and Fish Department as the Petition Herd, which is one of the few true desert elk herds in North America, spending the entire year in the Red Desert. This elk herd is therefore very rare. Its activities are centered on the Powder Rim.

Known prairie falcon nest sites within the proposed Very Rare or Uncommon area include one at Tl6N R95W Sec. 19 NW lf.l; two near Manuel Gap (T16N R97W Sec. 27 SW 1;4 and T16N R97W Sec. 28 SW lf.l); and Tl5N R96W Sec. 19 NE 1;4. 124 Prairie falcons with fledgling young

were observed roosting on a pinnacle just off the Skull Creek Rim at Tl3N R97W during the early summer of both 2005 and 2006. Prairie falcons with fledgling young were also sighted at T15N R97W Section 19 SW 1;4 on July 9, 2006. A known prairie falcon nest also was recorded by BLM on the bluffs above Willow Creek in the eastern proposed expansion.

Several other raptors are on the BLM and Wyoming Game and Fish Department Sensitive Species List . The burrowing owl, which is a prairie dog obligate species that nests in burrows of prairie dog towns, has one known nest location in the southwestern comer of the WSA. The ferruginous hawk, the largest hawk in Wyoming, has nest sites confirmed by BLM two miles south of Manuel Gap and in the southeastern proposed expansion.

Due to the rugged and inaccessible nature of much of Adobe Town, no thorough and systematic

inventory of nesting raptors has ever been performed. For instance, there are several known nest sites of ferruginous hawks active in recent years which are not in the BLM's database, even in accessible areas. An occupied and active ferruginous hawk nest was observed by Erik Molvar and Joel Sartore on the eroded walls far below East Fork Point at T14N R96W Section 8 SWSE on May 4, 2004. In addition, an active and occupied ferruginous hawk nest was documented in the Haystacks at T17N R96W Section 33 SWSE by Liz Howell, and separately by Erik Molvar, during summer of 2005. The same nest was found to be active again in 2006 by Erik Molvar.
The mountain plover is recognized as a BLM Sensitive Species and as a Sensitive Species by the Wyoming Game and Fish Department. Until recently, it was listed as Threatened under the Endangered Species Act (ESA). The Horseshoe Bend area south of the Haystacks contains vital mountain plover nesting habitat with a number of confirmed plover sightings. 125 Mountain plovers have also been sighted atop the Adobe Town Rim at T15N R98W Section 25 NE lf.l, and at the southern edge of the Adobe Town Rim.

The Great Basin gopher snake is listed as a BLM Sensitive Species. This species has been photographed along the Adobe Town Rim at T15N R97W Section 19, NW 1,4.
The Haystacks is identified by the Wyoming Game and Fish Department as crucial mule deer winter habitat. There is also a substantial amount of pronghorn crucial winter range south of Horseshoe Bend along the branches of Haystack Creek. In addition, portions of the area on the north slope of the Powder Rim are mule deer crucial winter range. 12
d. Adobe Town: Scenic values
The scenic values of Adobe Town are the most impressive of any desert landscape in Wyoming. It has long attracted the attention of writers and authors. In the 2006-2007 edition of Wilderness magazine, writer Allen Best characterizes Adobe Town as "a giant museum of geological curiosities." In 2004, Kerry Brophy wrote of Adobe Town in Wyoming Wildlife magazine as "about as lonesome and lovely a place as you're likely to find". Adobe Town is also featured in the guidebook Wild Wyoming, which characterized the area as "a landscape worthy of National Park status." World-renowned author Annie Proulx described Adobe Town as "The maze of badland formations, mesas, and buttes combine with brilliantly colored rock strata to create spectacular canyonland scenery."
More recently, Adobe Town has become a mecca for photographers, and photographs have been included in calendars, coffee table books such as Wind River Wilderness and Red Desert: History
of a Place. A scenic photograph of Adobe Town appeared in the July 2005 issue of National Geographic. Internationally known nature photographer Tom Mangelson noted, 'Adobe Town is truly one of the crown jewels of the West, one of the signature Red Desert landscapes that cannot be allowed to fall under the blade of the bulldozer."127 Photographer Ron Marquart described Adobe Town as follows: "Its landscape is comparable to Bryce Canyon, Canyonlands and Badlands National Parks, and represents the most intricate, outstanding badlands topography in the U.S." Adobe Town was also featured in the new book of photography published by Laguna Wilderness Press, Wyoming's Red Desert: A Photographic Journey.
These scenic values are also important economic values. Both must be protected.

114 Final Order at 18. Available online at
http://deg .state.wy.uslegc/orders/Rare%20or!l/o20Uncommon%20Closed%20Cases/07-ll01 %20Adobe%20Town/Adobe%20Final.pdf (last accessed April13, 2012).

115 http ://americasgreatoutdoors.gov/report/
116 King, Clarence. 1870. Report of the Geological Exploration ofthe Fortieth Parallel. Washington, DC:
117 BLM 1991. Wyoming statewide wilderness study report: Wilderness Study Area specific recommendations.
Cheyenne: BLM Wyoming State Office.
118 BLM 1981 . Overland Planning Unit, URA Step III (Present Situation), .48 Wilderness Resources. Rawlins:
BLM.
119 BLM 1991, at 184.
120 BLM 1981, at 4.
121 BLM 1991, at 187.
122 BLM 1991, at 188.
123BLM 2003. Draft Environmental Impact Statement, Desolation Flats Natural Gas Field Development Project.
Rawlins Field Office, Figure 3-1, at I-7.
124 BLM 2001. Decision Record/FONSI/Environmental Assessment, Veritas Haystacks Geophysical Project. Rock
Springs Field Office.
125 BLM 2003. Draft Environmental Impact Statement, Desolation Flats Natural Gas Field Development Project.
Rawlins Field Office. Figure 3-2, p. I-10
126 BLM 2005. Environmental Assessment for the Cherokee West 3D Seismic Project. Rawlins Field Office.
127 Protect Adobe Town, today, Rawlins Daily Times, January 19, 2006, p. 7
#66])>
<([#67 [*3.8.2*] ii. ACECs and other areas in Wyoming
As the BLM recognizes, "Commercial oil shale development is incompatible with recreational use (e.g., hiking, biking, fishing, hunting, bird watching, OHV use, and camping). Recreational use would be excluded from areas leased for oil shale production once development activities begin." 128 We strongly agree with this conclusion. For that reason, we are encouraged that the BLM in the preferred alternative is proposing to protect the following areas from development. We strongly support including these protections in the Final PEIS.

Further, because oil shale development includes 100 percent scarification to the land, and represents one of the most major types of visual intrusions possible on BLM lands, leasing should not allow any surface disturbance on lands of Visual Resource Management Class I, II, or III lands. The objectives for Class I and II lands are to ' preserve" and "retain" the "existing character of the land, while Class III lands are managed to "partially retain the existing character ofthe land."129
Oil shale development cannot possibly meet these objectives. Based on the definitions for these lands, only the objectives for VRM Class IV, which "provide for management activities which require major modification of the existing character of the landscape" and permit a level of change that is "high," are compatible with oil shale development. The BLM has recently completed a Visual Resource Inventory for portions of the Rawlins and Rock Springs Field Offices, and we recommend that this VRI be incorporated into the PEIS process for oil shale as

part of its Affected Environment analysis. Notably the Visual Resource analysis in the DPEIS for the Washakie Basin notes that this is "an area of active energy development" and that associated visual disturbances are found in the basin. This section fails to acknowledge that most of the Washakie Basin is in an undeveloped state, however, and contains some ofthe most outstanding scenic resources in either the Rawlins or Rock Springs Field Offices, including the Adobe Town Very Rare or Uncommon Area, the Kinney Rim citizens' proposed wilderness areas, the Powder Rim, and the Adobe Town Dispersed Recreation Use Area. In order to maintain conformity with local RMPs pursuant to FLPMA, under the preferred alternative, the BLM should limit potential oil shale development to VRM Class IV lands.

128 DPEIS, at 4-20.
129 BLM Manual 8431 -Visual Resource Contrast Rating, Appendix 2.
#67])> <([#68 [*3.1.2*] a. Little Mountain area, including Greater Red Creek ACEC, Red Creek WSA, and Sugarloaf Basin SMA
These areas were established under the Green River RMP and constitute an outstanding big game hunting resource. According to the Wyoming Game and Fish Department, the elk hunt in this area is the single most sought-after tag in the entire state. Oil shale activities would drive away elk and destroy the recreational quality of this area.
#68])> <([#69 [*3.1.1*] [*3.8.1*] b. Adobe Town State Very Rare or Uncommon Area
As discussed above, the scenic and wilderness qualities in this area and its viewshed need to be protected from oil shale leasing in order to maintain the scenic and wilderness qualities in this area. Oil shale leasing should be precluded from this area in order to maintain FLPMA-required consistency with the state designation preventing non-coal surface mining. Portions of this area also now fall within the Adobe Town Dispersed Recreation Use Area designated under the Rawlins RMP.
#69])> <([#70 [*3.1.1*] c. Adobe Town Dispersed Recreation Use Area (DRUA)
The Adobe Town DRUA was established under the Rawlins RMP, and includes not only the Very Rare or Uncommon area, but also portions of the Kinney Rim North and South citizens' proposed wilderness areas, the western Powder Rim, and the Prehistoric Rim area to the east of Adobe Town. 130 The DRUA is of high value for dispersed and primitive recreation, including hiking, wildlife viewing, hunting, and camping. It should be excluded from oil shale leasing.

130 Record of Decision and Approved Resource Management Plan for Public Lands Administered by the Bureau of
Land Management Rawlins Field Office, BLM, 2008, at Appendix 37, and see Maps 2-17 and 2-58.
#70])> <([#71 [*3.1.1*] d. Kinney Rim North and Kinney Rim South citizens' proposed wilderness areas
These lands provide a roadless, primitive/semi-primitive recreation experience, and represent an increasingly rare large tract of public land in the Red Desert that is free of industrial development. Parts of these now fall within the Adobe Town Dispersed Recreation Use Area designated under the Rawlins RMP.
#71])> <([#72 [*3.1.1*] e. The Flaming Gorge National Recreation Area
This area lays entirely within th~; area proposed for oil shale leasing in Wyoming. In the DPEIS, National Recreation Areas are not specifically listed as units of the National Landscape Conservation System that will he excluded f1·om oil shale leasing. However, all of this NRA as

well as its viewshed should be excluded from oil shale leasing consideration in order to preserve the scenic and recreational qualities found here.
#72])> <([#73 [*3.1.1*] f. Jack Morrow Hills planning area
This is an area highly important for both dispersed recreation and elk hunting. It contains the Boars Tusk and White Mountains Petroglyph Site, both of which are culturally important to Native American tribes. In addition, an archaeological site in the northwest comer of this area is an ACEC and its setting needs to be protected as well. The "most prospective" oil shale area in Wyoming includes portions of the Jack Morrow Hills planning area, a subset of the Rock Springs Field Office set aside from the Green River RMP in the 1990s for special planning due to its outstanding wildlife resources and strong public interest.
#73])> <([#74 [*3.1.1*] iii.. Areas proposed for wilderness protections
The following areas are proposed for wilderness protection in Wyoming. These areas should be protected from oil shale development: Adobe Town, Kinney Rim North, Kinney Rim South, Devils Playground, 131 Red Creek Badlands, 132 Buffalo Hump, and Sand Dunes, including citizens' proposed additions to existing WSAs. These lands are identified on GIS datasets included as Attachment 4.
The Adobe Town citizens' proposed wilderness, which is discussed at great length above under the Adobe Town Very Rare or Uncommon Area, encompasses the entire citizens' proposed wilderness. It is important to note that lands recognized as possessing wilderness characteristics (the "Adobe Town Fringe") are not shown on Figure 3.1.1-13 and Figure 3.1.1-14; this oversight merits correction. We recommend that the entire Adobe Town citizens' proposed wilderness outside the Wilderness Study Area be shown as "Lands to be Managed to Protect Wilderness Characteristics."

Additionally, the Kinney Rim is a lofty ridge rising like a wave from a sea of sagebrush. The Kinney Rim North and South citizens' proposed wilderness areas are listed as "Lands to be Managed to Protect Wilderness Characteristics" on Figure 3.1.1-13 and Figure 3 .1.1-14, a designation with which we concur. These lands appear to be withdrawn from oil shale leasing under Alternative 2, a decision we strongly support.

131 See Attachment 5 for complete inventory.
132 See Attachment 6 for complete inventory. **#74])>**
<([#75 [*3.1.1*] The Devils Playground/Twin Buttes citizens' proposed wilderness is a land of arid, windswept
badlands immediately to the west of Flaming Gorge National Recreation Area, offering outstanding hiking opportunities for visitors to the Recreation Area, in addition to habitat for the rare midget faded rattlesnake. The Devils Playground/Twin Buttes WSA is listed for the Rock Springs Field Office, but the corresponding citizens proposed wilderness (or WCA) has apparently been overlooked. 133 In light of the absence of industrial activity within the lands encompassed by the citizens' proposed wilderness, this area should be protected. BLM should evaluate the WCA surrounding the existing WSA and protect all the lands contained therein from oil shale development. Neither the currently designated WSA nor the citizens' proposed wilderness appear to be mapped as "Lands with Wilderness Characteristics" on Figure 2.3.3-3, and portions of this area appear to be made available for oil shale leasing under Alternative 2 in Figure 2.3 .3-6. This oversight should be corrected, and these lands should be withdrawn from oil

shale leasing in the Final PEIS.

133 DPEIS, at Figure 3.1.1-14. **#75])>**
<([#76 [*3.1.7*] The Red Creek Badlands citizens' proposed wilderness encompasses a maze of shallow canyons
through redbeds studded with junipers and pinyon pines. The "Lands with Wilderness Characteristics" mapped for the Red Creek unit do not appear to correspond with either the WSA or the citizens' proposed wilderness. See Figure 2.3.3-3. However, these lands being outside the "Most Geologically Prospective Area" do not appear to be offered for lease under any alternative, rendering this oversight of limited substantive importance.
#76])> <([#77 [*3.1.1*] [*9.2.1*] D. Utah: ACECs, lands with wilderness characteristics, and other lands
As the DPEIS and other BLM planning documents make clear, Utah is home to important landscapes. ACECs, proposed wilderness areas, and lands with wilderness characteristics, to varying degrees, overlap with oil shale deposits, and should be declared off-limits to research and development.
i. Utah proposed wilderness areas that should be protected from oil shale
and tar sands development
As noted throughout these comments, we strongly support Alternative 3 which would exclude BLM identified wilderness character areas from oil shale and tar sands leasing while still leaving over 32,000 acres in the three state analysis area available for commercial oil shale leasing and 2,100 acres of tar sands leasing in Utah. BLM confirmed these areas' wilderness characteristics in a series of inventories leading up to the 2008 Vernal, Price, Richfield, and Monticello resource management plans and record of decision. 134
To the extent that BLM previously determined proposed wilderness areas to lack wilderness characteristics, but is now proposing to make them available for oil shale and/or tar sands leasing, those decisions should be revisited. Secretarial Order 3310 (December 23, 2010) acknowledges that BLM decisions made prior to the release of the Order regarding the management of non-WSA lands with wilderness characteristics must be revisited. 135 BLM recently released Manual 6310 which contains its "policy and guidance for conducting wilderness characteristics inventories under Section 201 of[FLPMA] and supersedes all previous guidance on this topic."136 BLM's determinations in the Vernal and Price planning process that proposed Desolation Canyon wilderness areas lack such values was made before the March 2012 release of BLM Manual6310. BLM should revisit these finding and incorporate any necessary changes before issuing its final decision. 137

134 See PEIS at 2-34 and 2-36,2-43,2-66 to -67, and 2-70 (explaining that under either Alternative 2 or 3lands with
wilderness characteristics will not be available for oil shale or tar sands leasing).
135 SO§§ 5, 5(e){3). See also id. §§ 1, 4 (The Order establishes that management of wilderness characteristics is a
"high priority" for BLM and directs the agency' to protect wilderness characteristics through land use planning and
project-level decisions unless the BLM determines, in accordance with this Order, that impairment of wilderness
characteristics is appropriate and consistent with other applicable requirements of law and other

resource
management considerations.”) (emphases added).
136 BLM Manual6310.01 (March 15, 2012).
137 See BLM Manual6310.06(4).

#77])>
<([#78 [*3.1.1*] The following discussion concerns areas proposed for wilderness protection in Utah but that are
not currently identified as lands with wilderness characteristics. The BLM should reinventory these areas, and once it determines that they contain wilderness characteristics, exclude them from potential oil shale and/or tar sands leasing and development. 138
a. Dirty Devil and Fiddler Butte
The Dirty Devil and Fiddler Butte Citizen Proposed Wilderness (CPW) contain an abundance of archeological resources. Studies by the NPS and the BLM in this area have suggested that this region contains an average density of twenty-four archeological sites per square mile. This means that in the Dirty Devil region alone there are likely hundreds and hundreds of rock shelters, campsites, lithic scatters, stone tool quarries, and petroglyph sites.
The Dirty Devil CPW wilderness is home to antelope, bighorn sheep, and at least nine species of plants and animals identified as “sensitive” by the BLM. It is a landscape of narrow redrock canyons surrounded by vast slickrock bowls and cliffs. Plateaus above the canyons provide important habitat for plants and animals. This area was also frequented by outlaws; Butch Cassidy and the Wild Bunch were the most famous of the lawbreakers to hang out here. The Dirty Devil has served as the setting for many Western novels, including one by Zane Grey.

The Fiddler Butte area possesses some of the most spectacular scenery in the United States. This area, along with the Dirty Devil River CPW, would be totally inappropriate for tar sands development.
The BLM agrees that the majority of the relevant Dirty Devil and Fiddler Butte CPWs contain wilderness characteristics. The relevant resource management plan even manages portions of this area to preserve those wilderness characteristics.

138 See PEIS at 2-34 and 2- (describing that under either alternative 2 or 3 “[a]ll areas that the BLM has identified or
may identify as a result of inventories 26 conducted during this planning process, as [lands with wilderness
characteristics] will not be available for leasing).
#78])> <([#79 [*3.1.1*] The following discussion concerns areas proposed for wilderness protection in Utah but that are
not currently identified as lands with wilderness characteristics. The BLM should reinventory these areas, and once it determines that they contain wilderness characteristics, exclude them from potential oil shale and/or tar sands leasing and development.
b. White Canyon/Fort Knocker Canyon 139
Each year nearly 100,000 visitors explore Natural Bridges National Monument, searching for the solitude, beauty, and silence that are unique to the Colorado Plateau. Few of these visitors realize that the 7 ,600-acre national monument is surrounded by thousands of acres of BLM wild lands including the drainages of White Canyon.

White Canyon has carved a maze of canyons deep into the Cedar Mesa Sandstone layer. These canyons are among the world's foremost displays of erosion sculpting, and the upper part of White Canyon was included within Natural Bridges National Monument in recognition of this distinction. The sinuous canyons on the BLM l:ands alternately narrow down into cool, dark, arm
span-width slots and then widen again into coves littered with 40-ton house-sized rocks and pocket forests of cottonwood, ponderosa, and fir.
The canyon walls are honeycombed with alcoves, arches, windows, hanging gardens, and grottoes; the canyon floors are riddled with potholes. In places, natural spring water forms deep pools, and occasional rainstorms bring torrents of floodwater raging through the boulder gardens and thundering over pour-offs in spectacular waterfalls. Well over 100 miles of narrow, winding canyons in the White Canyon proposed wilderness complex (including White Canyon, Fort Knocker Canyon and Tuwa Canyon) form a network so labyrinthine that outstanding solitude is assured. Fort Knocker Canyon winds through sandstone bench lands surrounded by thousandfoot high mesas and buttes, and feeds into the lower reaches of White Canyon before it flows into the Colorado River arm of Lake Powell. This remote area is becoming internationally recognized for its dark night skies, offering some of the best stargazing in the world.
White Canyon's intermittently flowing water is an attraction for wildlife, and surely attracted the Ancestral Puebloans to the area, as remnants of their culture, ranging from scattered stoneworking
sites to impressive cliff dwellings, are located throughout the proposed wilderness.
The Glen Canyon/San Juan River area contains significant cultural resources.
The cultural resources found within the jurisdiction of the [Monticello Field Office] constitute some of the most aesthetically appealing and scientifically significant resources anywhere on the Colorado Plateau. The more than 26,000 documented archaeological sites in the area, the majority on ELM-administered lands, constitute the most significant concentration of cultural resources in the state ofUtah. The extraordinary number and density of sites (cf. DEIS 1-4) makes the region among the most significant concentrations of archaeological sites anywhere in the western United States. 140
A more recent report prepared by the Colorado Plateau Archaeological Alliance entitled "Farming and Foraging on the Southwestern Frontier," further details the significant cultural resources found within the proposed master leasing plan for this area. 141

139 See Utah Wilderness Inventory, at 94 (1999) (describing Fort Knocker Canyon). http://www.access.gpo.gov/blm/utah/pdf/se94.pdf. (last accessed April 23, 2012)
140 Colorado Plateau Archaeological Alliance Comments re: Monticello DEIS/DRMP at 3 (submitted Jan. 31, 2008).
141 A copy of"Farming and Foraging on the Southwestern Frontier" is available online at https://re earch. w ulibs. w u.edu: 443/dspace/handle/2376/2643.
#79])>
<([#80 [*3.1.1*] c. Bitter Creek142
The Bitter Creek proposed wilderness unit straddles the Colorado/Utah state lines high in the remote Eastern Book Cliffs. The area contains spectacular scenic vistas and offers sublime opportunities for solitude. Deep canyons cut through the pale Mesa Verde sandstone, and crenellated ridges buttress the sky. Within the unit, elevations range from 6,000 to 8,000 feet,

and canyon slopes rise 600 to 800 feet. Bitter Creek and Rat Hole Canyon two major drainages, wind through the area, each extending a number of side canyons like fingers into the surrounding mesas.
Vital riparian zone support box-elders and aspens, willows, sedges, and various reptile and amphibian species along the waterways in the canyon bottoms. Many wet meadow areas punctuate the folded landscape and support communities of grasses and wildflowers, insects and bird . At lower elevations, bench- and ridge-top vegetation consists of sagebrush, rabbitbrush, greasewood, and a variety of grasses. Above 7,400 feet, the drainages are dominated by pinyonjuniper
woodlands on south facing slopes, and by Douglas-firs and quaking aspens on the northern aspects. Peregrine falcons and golden eagles nest in the cliffs and hunt in the river drainages, deer and elk forage along the mesa tops and in the canyons, and black bears roam the broken terrain.
With its convoluted topography, screening vegetation and wide variety of plant and animal species, the Bitter Creek Addition provides outstanding opportunities not only :for solitude, but also for primitive and unconfined recreation. Hunting, fishing, camping, hiking, photography, and wildlife viewing are all popular in the area. Backpacking and horseback riding opportunities abound in the area' many and extensive scenic side canyons.
In addition to the inspiring scenery and vital habitat, a number of pictograph and petroglyph sites, as well as historic homesteads, grace the area, lending it archaeological and historical significance. Queen Chip eta, wife of Ute Chief Ouray, was intelligent, talented, and hardworking,
a model of constancy and courage during a desperate time. She acted as a messenger of goodwill between Indians and Whites, meeting with President McKinley and performing many acts of kindness and sacrifice, and thus earning her place among tribal leaders. Her eponymous canyon traverses the heart of the Bitter Creek Wilderness in Utah and provides access to many side canyons. Her legend informs the rich cultural heritage of the area.

142 In its 1999 Utah Wilderness Inventory, BLM determined that the so-called "Cripple Cowboy" wilderness
inventory area had wilderness characteristics, http://www.access.gpo.gov/blrnlutah/pdf/ne 142.pdf, a determination
BLM confirmed in the Vernal RMP- along with acknowledging for the first time that the citizen's "Bitter Creek"
unit have wilderness characteristics. Vernal PRMP/FEIS at 3-45 to -47. See generally http://www.blm.gov/ut/st/en/fo/vemal/planning/ upplemental nnplbackground documents.html. The citizen's
proposed "Bitter Creek" unit includes both the Cripple Cowboy and Bitter Creek units.
#80])> <([#81 [*3.1.1*] d. Dragon Canyon
The Dragon Canyon proposed wilderness unit consists of several large canyons that run south to north to Evacuation Creek. These include Davis, Side, Atchee, and Dragon Canyons in Utah, and Little Whiskey Creek in Colorado.
In this area, vital riparian zones support box elders and aspens, willows, sedges, and various reptile and amphibian species along the waterways in the canyon bottoms. Many wet meadow areas punctuate the folded landscape and support communities of grasses and wildflowers, insects and birds. At lower elevations, bench- and ridge-top vegetation consists of sagebrush,

rabbitbrush, greasewood, and a variety of grasses. Above 7,400 feet, the drainages are dominated by pinyon-juniper woodlands on south facing slopes, and by Douglas-frrs and quaking aspens on the northern aspects. Peregrine falcons and golden eagles nest in the cliffs and hunt in the river drainages; deer and elk forage along the mesa tops and in the canyons; and black bears roam the broken terrain. Other wildlife species include Townsend's big-eared bat, dwarf shrew, ringtail cat, Lewis' woodpecker, and ferruginous hawk and black bear fall concentration area. Expanding upon the important watershed values in Utah, the area provides protection for Whiskey Creek, Little Whiskey Creek, Tent Creek, Davis Creek, and West Evacuation Creek.

Significant cultural resources are found within the broader area. According to the Colorado Office of Archaeology and Historic Preservation there are forty-three registered sites with the Colorado portion of the Dragon Canyon unit alone. The type and significance of these sights is not available to the public. It is likely that the Utah portion of the Dragon Canyon unit also contains a similarly-high density of archaeological sites.

Superior visual resources exist in the area. These values are also significant, relevant and important given the threats these and similar values face in the broader landscape. The Utah BLM found the Utah portions of the Dragon/ Atchee/Davis Canyon area to have relevant "Scenic,
cultural resources and natural systems." 143 Within the broader context of the Piceance Basin and
the threats to the area these values are of substantial significance and must be protected.

143 Vernal RMP DEIS, at G-7.

#81])> <([#82 [*3.1.1*] e. Lower Bitter Creek

The Lower Bitter Creek proposed wilderness unit is dominated by Lower Bitter Creek itself, with its rich riparian corridor and intermittent stream that runs northwest to southeast through the center of the unit. Several deep washes enter Bitter Creek as it passes through this unit. In addition, some portions of the unit are desert landscape with sparse vegetation, while other locations support thick pinyon and juniper forests intermixed with sagebrush parks. The unit also has several prominent unnamed rock buttes that present striking features in the landscape.

Bitter Creek and its drainage provide excellent wildlife habitat for many State sensitive species including ferruginous hawk, burrowing owl, sage grouse, bald eagle, dwarf shrew, ringtail cat, black-footed ferret, as well as big game species such as mule deer and elk. Occasionally, a cougar or a bobcat can be seen. This unit may also be home to the Graham Beardtongue (penstemon Grahamii), a state sensitive plant species. A short day hike to several of the buttes provides unsurpassed views of this unique geologic region.

In 2007, the Vernal Field Office determined that 11,417 acres of the proposed Lower Bitter Creek wilderness unit contain wilderness characteristics.

#82])> <([#83 [*3.1.1*] f. Sunday School Canyon

The Sunday School Canyon proposed wilderness unit is adjacent to the northern boundary of the Winter Ridge WSA and is bounded topographically by Wood Canyon on the south, Buck Canyon to the north, the Willow Creek drainage on the west, and Seep Ridge to the east. Beyond adopting the name of its most prominent feature the unit encompasses the entire Sunday School Canyon drainage. Upper portions of this canyon system are broad, shallow, and park-like. The canyon becomes increasingly entrenched as one proceeds down through its multiple layers of exposed geology. During wetter periods, the area i drained by an intermittent stream that runs through this canyon.

Pinyon and juniper forests that dominate the higher elevations within the unit become less prominent in lower areas. Other vegetation, including sagebrush cactus, yucca, rabbitbrush, and native grasses are interspersed throughout the unit. The transition from lower desert to higher forested areas is important to wildlife and primitive recreation opportunities.

Wildlife viewing opportunities abound, as the unit is critical deer and elk winter habitat. In addition, on a hike up a canyon or along a ridge, a visitor may observe wild horses galloping through the landscape, or raptors circling for prey or soaring on thermals. The unit also contains either substantial, high-value, or substantial habitat for certain species of special concern, including: the state threatened ferruginous hawk, bald eagle, the burrowing owl, big free-tailed bat, sage grouse, Lewis' Woodpecker, ringtail cat, dwarf shrew, short-eared owl, Townsend's big-eared bat, and Utah Milk Snake. Special status plant species within the unit include the federally threatened Uinta Basin Hookless cactus, the Graham's beardtongue (an ESA candidate), and the Bameby's columbine, the Caespitose Cats-eye, the Grass Goldenweed, and Garrett's beardtongue.

The varied topography, wildlife, scenic vistas, and vegetation combine to create an overwhelmingly natural landscape with outstanding opportunities for solitude and a primitive, unconfined type of recreation. The unit offers incredible sight-seeing, with dramatic views of several prominent geological features including Big Pack Mountain, the Uinta Mountains, the Willow Creek drainage, the southern portions of Seep Ridge, and Bates Knolls. In addition, the potential for cultural sites exists along Willow Creek and its side drainages, as well as along Seep Ridge. **#83])>**

<([#84 [*3.1.1*] g. Seep Canyon

The Seep Canyon proposed wilderness un.it is comprised of sandstone rimrocks, towering cliffs, broken slopes, broad valleys, and endless ridge lines. Besides Seep Canyon and Seep Ridge, other predominant canyons and ridges include Park Canyon, Park Ridge, Crooked Canyon and many other side canyons and nameless draws and ridge lines. The several canyon systems drain north toward Sweet Water Canyon. The scenery created by this topographic feature is both stunning and intricate, and more distant views of the prominent buttes within the Lower Bitter Creek proposed wilderness unit, and McCook Ridge are spectacular.

Dense pinyon and juniper forests that dominate the landscape are interspersed with sagebrush, grasses, oakbrush, cacti, yucca, and other species. Isolated stands of aspen and Douglas fir are also present within the unit.

The Seep Canyon wilderness unit is important habitat for elk, deer, and several other wildlife species; cougar and golden eagles are also present. In addition, the area overlaps lands subject to a long-term black bear study by Brigham Young University and sponsored by the Utah Division of Wildlife Resources. The area contains habitat for the federal and state threatened Mexican spotted owl, the federal and state endangered willow flycatcher, and the state threatened Ferruginous Hawk. The area also provides critical habitat for the northern goshawk, and ringtail cat. It is also high value habitat for the bald eagle, burrowing owl, Lewis' woodpecker, Williamson's sapsucker, Townsend' big-eared bat, and the Utah milk snake.

#84])> <([#85 [*3.1.1*] h. Turtle Canyon, Desbrough, and Desolation Canyon

All three of these units are found in the western Book Cliffs and West Tavaputs Plateau. They are remarkable areas, rich with wildlife habitat, soaring escarpments, and delicate ecology. The BLM agrees that these areas contain wilderness characteristics. Oil shale or tar sands development in any of these areas would destroy the primitive character of this area. These three

units help form possibly the largest unprotected roadless areas in the contiguous United States.
#85])> <([#86 [*3.1.1*] i. Sids Mountain
The Sids Mountain citizen wilderness proposal area encompasses a large portion of the remarkable San Rafael Swell. This large geologic uplift is a maze of canyons, cliffs, shrubland, and arroyos. It is home to the largest population of desert bighorn sheep in Utah.
#86])> <([#87 [*3.1.1*] ii. Potential ACECs in Utah that should be declared off-limits from oil shale
and tar sands development
As noted throughout these comments, we strongly support Alternative 3 which would exclude the following BLM identified potential areas of critical environmental concern from oil shale and tar sands leasing while still leaving over 32,000 acres in the three state analysis area available for commercial oil shale leasing and 2,100 acres of tar sands leasing in Utah. BLM confirmed these areas' relevance and important values in a series of inventories leading up to the 2008 Vernal, Price, Richfield, and Monticello resource management plans and record of decision. 144
The PEIS, however, mistakenly identifies in Figure 2.3.3-5 and Figure 2.4.3-2 portions of several BLM identified potential ACECs as in fact available for leasing under Alternative 2. 145 These errors should be corrected in the revised FPEIS. 146

144 See PEIS at 2-34 and 2-36, 2-43, 2-66 to -67, and 2-70 (explaining that under either Alternative 2 or 3 potential
ACECs will not be available for oil shale or tar sands leasing).
145 See id. at 2-41 (Figure 2.3 .3-5) and 2-69 (Figure 2.4.3-2).
146 The PEIS, Alternatives and 2 and 3, mistakenly identifies portions of the following BLM identified potential
ACECs as being available for leasing: Vernal RMP (Nine Mile, Four Mile Wash, Coyote Basin-Myton Bench,
White River, Bitter Creek, Bitter Cree/P.R. Springs, and Coyote Basin-Snake John); Price RMP (Nine Mile, Range
Creek, Sids Mountain, San Rafael Canyon Lower); Richfield (Dirty Devil/North Wash). See Attachment 12.
#87])>
<([#88 [*3.1.1*] The following potential ACECs in Utah that should be protected from oil shale and tar sands
development:
a. Bitter Creek and Bitter Creek/PR Springs
This 14 7 ,425-acre potential ACEC is located high in the remote Book Cliffs of eastern Utah. The
Vernal RMP considered this ACEC in order to protect "old-growth pinyon pine, cultural resources, historical features, and watersheds." 47 Utah BLM found the Bitter Creek and Bitter Creek-P.R. Springs area to meet relevance and importance criteria for designation as an area of critical environmental concern (ACEC) based on these same values, stating:
Relevance Criteria: The area has relevance due to the existence of an old growth forest, significant cultural and historic resources, important watershed, and critical ecosystem for wildlife and migratory birds.
Importance Criteria: The relevant values described above have substantial significance due to qualities that make it fragile, sensitive, rare, irreplaceable, exemplary, and unique.

The ancient pinyon forest is over 1,200 years old, and includes the Utah champion pinyon, which is irreplaceable. Within the unit is the ancestral home of the Northern Ute Tribe when they were relocated from Colorado in the late 1800s. Many features, including graves, are within the potential ACEC, but specific locations are not known. Also in the potential ACEC is the most extensive wetland in the multi-state Book Cliffs. It exists because of a uniquely perched water table. This wetland and surrounding watershed is unique as a critical ecosystem for migratory birds and a wide variety of wildlife. 148
All of these relevant values would be severely impacted by oil shale or tar sands development.

147 Vernal Proposed RMP and Final EIS at 4-428.
148 Vernal RMP Draft RMP at G-4 to -5. **#88])>**

<([#89 [*3.1.1*] The following potential ACECs in Utah that should be protected from oil shale and tar sands
development:
b. Nine Mile Canyon
Nine Mile Canyon is often referred to as the world's longest art gallery for good reason. This stunning area is replete with cultural resources. Few areas have a higher concentration of known cultural resources in such a limited place.
This potential ACEC is split between the Price and Vernal field offices. The Price RMP considered an ACEC up to 49,000 acres in size. 149 The Vernal RMP considered an ACEC that would have included 81,168 acres. 150 The BLM identified this area because of its world-class archeological treasures. It includes "Fremont, Ute, and Archaic rock art and structures." 151 Although both the Price and Vernal RMPs designated an ACEC that would protect some of the resources of this area the designated ACEC is smaller than potential ACECs for this area that were considered in both plans.

149 Price Proposed RMP and Final EIS at 2-116.
150 Vernal Proposed RMP and Final EIS at 4-434.
151 Id.
#89])> <([#90 [*3.1.1*] The following potential ACECs in Utah that should be protected from oil shale and tar sands
development: c. Range Creek
The Range Creek potential ACEC contains "nationally significant, outstanding cultural resources. It holds hundreds, if not thousands, of Fremont archaeological sites. This is the most complete collection of existing, pristine Fremont sites."152

152 Price Proposed RMP and Final EIS at 2-116.
#90])> <([#91 [*3.1.1*] The following potential ACECs in Utah that should be protected from oil shale and tar sands
development: d. San Rafael Canyon (lower)
The San Rafael Canyon (lower) potential ACEC contains "the San Rafael River [which] has cut a channel creating what is known as the 'Little Grand Canyon' as viewed from the Wedge. The Black Boxes are world renowned." 153

153 Id.
#91])> <([#92 [*3.1.1*] The following potential ACECs in Utah that should be protected from oil shale and tar sands
development: e. Main Canyon
Main Canyon is a large, potential ACEC that was considered in the Vernal RMP. This potential ACEC covers 100,915 acres. Sitting in the heart of the remote Book Cliffs region, the Main Canyon ACEC is home to crucial habitat for deer and elk. 154 It also contains sites of the historical Northern Ute migration route.

154 Id. at 4-435.
#92])> <([#93 [*3.1.1*] The following potential ACECs in Utah that should be protected from oil shale and tar sands
development: f. Dirty Devil/North Wash
This large potential ACEC covers some of the most spectacular scenery on the Colorado Plateau. The Richfield RMP considered a potential ACEC that would have designated 205,300 acres of land for the protection of such values as scenery, cultural resources, paleontological resources, wildlife, and special status species. 155 The Mexican spotted owl is among the sensitive species that make their homes in this potential ACEC.156

155 Richfield Proposed RMP and Final EIS at 2-121.
156 Id.
#93])>

<([#94 [*3.1.1*] The following potential ACECs in Utah that should be protected from oil shale and tar sands
development: g. White River
The Vernal RMP included a potential ACEC of 47,130 acres surrounding the deep canyon of the White River. This potential ACEC would have protected "unique geologic formations with pectacular vistas and the high-value river riparian ecosystem." 157 The White River "provides critical habitat for the endangered Colorado pikeminnow, as well as habitat for other threatened, endangered, and sensitive species, including the razorback sucker, flannel mouth sucker, roundtail chub, Yellow-billed Cuckoo, Peregrine Falcon, and Bald Eagle."158

157 Vernal Proposed RMP and Final EIS at 4-433.
158 Id. **#94])>**
<([#95 [*3.1.1*] The following potential ACECs in Utah that should be protected from oil shale and tar sands
development: h. Coyote Basin-Kennedy Wash, Coyote Basin-Coyote Basin, Coyote Basin-Myton Bench, and Coyote Basin-Snake John
This complex of potential ACECs in the Vernal Field Office would provide protection for a myriad of sensitive species. Those special species that use this area include the pronghorn, bobolink, ferruginous hawk, peregrine falcon, sage grouse, long-billed curlew, grasshopper sparrow, short-eared owl, big free-tailed bat, black-footed ferret, ringtail cat, and dwarf shrew. 159

159 Id. at 4-430. **#95])> <([#96** [*3.1.1*] The following potential ACECs in Utah that should be

protected from oil shale and tar sands development: i. Four Mile Wash
This 50,280-acre potential ACEC is located along the Green River just north of Desolation Canyon. It includes "high-value scenery, riparian ecosystems, and special status fish species" as resources worthy of protection. 160 This potential ACEC includes amazing examples of more recent rock art. For example, visitors to this area can find representations of railroad trains drawn by Utes. BLM described the area as containing "spectacular scenery" that "[h]as significance due to qualities that make it fragile, sensitive, rare, irreplaceable, exemplary and unique."161

160 Id.
161 Id. at 3-89. **#96])> <([#97** [*3.1.1*] The following potential ACECs in Utah that should be protected from oil shale and tar sands development: j. Sids Mountain Potential ACEC
The Sids Mountain potential ACEC was identified by the BLM as containing outstanding scenery with a large diversity of landforms and colors. "Landforms include rounded domes, high truncated buttes, and vertical cliffs dissected by deep canyons. The change in form and elevation is highly visible." The BLM also stated that "[v]ivid colors range from light buff and brown sandstones to the light gray-green vegetation on the mesas and in the canyons." **#97])>**
<([#98 [*3.1.1*] E. Colorado: ACECs, lands with wilderness characteristics, and other lands
As the DPEIS and other BLM planning documents make clear, Colorado is home to important landscapes. ACECs, proposed wilderness areas, and lands with wilderness characteristics, to varying degrees, overlap with oil shale deposits, and should be declared off-limits to research and development.

i. Colorado proposed wilderness and wilderness-quality lands should be
protected from oil shale development
As noted above while we strongly endorse Alternative 3, we support the provision that Alternative 2(b) would exclude from commercial development "[a]ll areas that the BLM has identified or may identify as a result of inventories conducted during this planning process, as land having wilderness characteristics (LWC)." 162 The DPEIS makes clear that impacts of oil shale development are not compatible with protection of wilderness quality:
Commercial oil shale development and associated development of transmission line and pipeline ROWs within areas with wilderness characteristics would cause a loss of those characteristics in and around the disturbed areas. Development of oil shale and related facilities on nearby lands within the viewshed of an area with wilderness characteristics also could result in adverse impacts on wilderness characteristics. 163
The dearth of areas that retain wilderness character within Colorado portions of the planning area, combined with the economic and environmental import of these areas, necessitate protection of wilderness character to the exclusion of any oil shale development.
While the DPEIS does a substantially better job addressing lands with wilderness character than the 2008 PEIS-the 2008 PEIS included virtually no discussion of these areas- the DPEIS does not include a complete list of areas within the geologically prospective study area with wilderness character. Nor too does the DPEIS describe LWCs in specificity in all cases. For example, for L WCs within the White River Field Office in Colorado, the DPEIS provides the number of acres to be protected, but does not provide a land description or place name. There is also no discussion of L WCs in the Grand Junction Field Office, and it is not clear at all that the Field Office has undertaken an updated and thorough review to date.
Similarly, a 2000 wilderness inventory undertaken for the Roan Plateau Planning Area found

19,322 acres of wilderness quality lands. 164 (That entire landscape has been included in federal wilderness legislation.) In a decision that has been challenged and remains unresolved the BLM decided not to manage these areas to protect the wilderness character. While not all of the LWCs inventoried in 2000 overlap with the area opened to oil shale development in 2008, 10,389 acres in the East Fork of Parachute Creek met the criteria for a WSA165 and were opened to oil shale development in the 2008 PEIS and corresponding R.MP amendments. This 2012 DPEIS indicates
that there are another five areas that retain wilderness character in the White River Field Office overlapping the most geologically prospective areas for oil shale development. 166 The five areas
retaining wilderness character in the White River Field Office total only 21,974 acres. 167 Because areas with wilderness character like East Fork Parachute Creek and the five areas identified in the White River Field Office retain a wealth of visual, botanical, wildlife, and ecological values, oil shale should be excluded from these areas.
As stated above, BLM does have a statutory obligation to maintain an active and updated inventory of wilderness quality lands and to consider protecting those areas in management decisions. A thorough and updated wilderness inventory is a necessary prerequisite to opening vast swaths of public land to oil shale development. The relatively few areas that retain wilderness characteristics should be protected from oil shale development in any final plan.
To the extent that the BLM does not have an up-to-date inventory of lands with wilderness character for any of the impacted Colorado field offices, the agency must undertake such an inventory and consider protecting existing wilderness characteristics by disallowing development of oil shale. To the extent that recent inventories have been undertaken by the agency, those inventories must form the basis for analysis.

162 DPEIS, at ES-6.
163 DPEIS, at 4-21.
164 Roan FEIS (2006), at 3-113.
165 Roan Plateau RMP A (2002), at 20.
166 DPEIS, at 3-12.
167 DPEIS, Table 6.1.1-2 at 6-7. **#98])>**
<([#99 [*3.1.1*] In addition, Colorado State Wildlife Areas (SWAs) should be protected from oil shale
development. Six SW As abut BLM lands or overlap with BLM managed subsurface resources opened for oil shale development in 2008. These areas include:
• Shell Oil SW A - hunting lease
• Yellow Creek Unit
• Square S Summer Range Unit
• Square S Ranch Unit
• Little Hills Unit
• North Ridge Unit of the Piceance SWA
These areas provide important habitat for wildlife, as well as recreational opportunities and an economic draw for local communities. These areas must be protected from both direct and indirect impacts associated with oil shale development.
#99])> <([#100 [*3.1.1*] ii. Colorado ACECs that should be protected from oil shale development
The following ACEC's should be protected from development in the Final PEIS.

a. East Fork Parachute Creek

It appears that BLM will revisit and correct the illegal decision made in the 2008 PEIS and corresponding Record of Decision to open Naval Oil Shale Reserves (NOSRs) Nos. 1 and 3 to oil shale leasing. That 2008 decision ignored a withdrawal on the NOSRs preventing those lands from being leased for oil shale development. See DPEIS at 3-7.

We support BLM's direction in the 2012 DPEIS to correct the 2008 decision opening the NOSRs to oil shale development. BLM must identify the NOSRs as unavailable for application for commercial oil shale leasing in any Final PEIS barring issuance of an opening order. Such a decision would eliminate the threat of commercial oil shale development in the East Fork of Parachute Creek. Again, we support the direction in the DPEIS and urge BLM to ensure that the East Fork Parachute Creek area is unavailable for research and development.

Further, the East Fork Parachute Creek area should be unavailable for oil shale development regardless of decisions made related to the NOSRs because of rare and important values that are incompatible with such development. The area was designated as an ACEC for visual, wildlife, fisheries, botanical and ecological values. 168 East Fork Parachute Creek is a biologically significant tributary to the Colorado River. 169 Any oil shale development in this area will likely have significant impacts on the important values for which this ACEC was designated.

This creek provides year-round habitat for Colorado River Cutthroat Trout (CRCT), the only native trout in the Colorado River basin. The CRCT has been designated a "special status species" by the BLM and is classified as a "sensitive species" by Regions 2 and 4 of the US Forest Service, and the states of Colorado, Utah, New Mexico and Wyoming. 170

East Fork Parachute Creek is also identified as one of the five areas containing conservation populations by the Conservation Agreement and Strategy for Colorado River Cutthroat Trout in the States of Colorado, Utah, and Wyoming. 171 These populations also meet the BLM's own criteria for a conservation population. 172 The Conservation Agreement gives highest priority for

management and protection to streams identified as containing conservation populations. Populations of CRCT in East Fork Parachute Creek are at least 90% genetically pure. 173 The BLM considers the entire watershed to be important to the long-term functionality of vital ecosystem processes that maintain upland and stream habitats important to these fishes. 174 Also,

the BLM declared, "these streams are regionally and nationally important producers of native, genetically pure and naturally reproducing Colorado River cutthroat trout," going on to proclaim that these streams should be given the "highest priority for management and protection."175

The importance of these trout populations is clear. This area must be protected from oil shale development in order to ensure the subspecies continues reproducing and recruiting. Oil shale development will likely result in increased sedimentation, reductions in water quantity and quality, ground water flow alteration, and increased likelihood of water contamination with toxic byproducts. These impacts will add stresses to CRCT populations and, in so doing, may undermine one of the values this ACEC was designated to protect.

Other values for which this ACEC was designated include scenery as well as unique and rare plant communities. Of special note is a 200-foot canyon waterfall. The BLM has described the waterfall as a "national park quality scenic attraction." The ROD for the Designation of ACECs for the Roan RMPA and EIS designated the lower stretches of the East Fork of Parachute Creek as a VRM 1. 176

A rare community of Mancos columbine, and a BLM "sensitive plant," Eastwood's monkeyflower, are also present in the unique hanging gardens in this ACEC. Also found are several plant communities such as the Colorado blue spruce/red osier dogwood, the boxelder, narrowleaf cottonwood, red osier dogwood community, and the Indian ricegrass shale barrens community. These communities are considered rare globally and in Colorado.
There are also a few imperiled plants in this ACEC that may be particularly susceptible to oil shale development. Utah fescue, for example, is a perennial grass and an oil shale endemic species found within East Fork Parachute Creek ACEC. Hanging garden sullivantia is found in this area. Southwest stickleaf, a BLM sensitive species, is an oil shale endemic that frequently occurs in the area. The Roan Plateau Final EIS makes it clear that this ACEC "contains a diversity of rare or uncommon riparian plant communities and BLM sensitive plant species." 177
The EIS goes on to say: "the rare plants and plant communities found in this drainage are of excellent condition and abundance and are vulnerable to adverse change." 178
For these reasons, East Fork Parachute Creek ACEC is inappropriate for oil shale research and development and should be closed to development in the Final PEIS.

168 Roan Plateau Plan Amendment (2002), at 20.
169 ROD Designating ACECs for the Roan Plateau RMPA and EIS (2008), at 5.
170 Conservation Status of Colorado River Cutthroat Trout, USDA Forest Service (1996), at 1; Available at:
http://www. fs. fed .us/rm/pubs rm/rm gtr282.pdf.
171 Available at: http://www.USFWS.gov/mountain-prairie/species/fishlcrct/CRCT /.
172 A conservation population is defined as: "A reproducing and recruiting population of native cutthroat trout that is
managed to preserve the historical genome and/or unique genetic, ecological, and/or behavioral characteristics
within a specific population and within geographic units." See Roan Plateau Planning Area Proposed Plan/Final EIS,
pp. 3-114.
173 Roan Plateau Plan Amendment (2002), at 20.
174 Id
175 Id.
176 ROD (2008), at A-8.
177 Roan Plateau FEIS (2006), at 3-116.
178 Id. **#100|)>**
<([#101 [*3.1.1*] Colorado ACECs that should be protected from oil shale development: b. Trapper/Northwater Creek ACEC
Trapper/Northwater ACEC is also almost entirely within the NOSR and cannot be opened for oil shale development absent issuance of an opening order reversing the withdrawal that currently applies to the areas. See DPEIS at 3-4. As with East Fork Parachute Creek, it appears that the BLM is prepared to correct the illegal decision made in 2008 opening the area to oil shale development. See supra discussion related to East Parachute Creek. We support that decision. Importantly, though, this area should be unavailable for development regardless of the existing withdrawal due to the myriad of unique and important values that are incompatible with oil shale development. This area was designated for wildlife, fisheries, botanical and ecological values, and all values therein should be protected. Trapper and Northwater Creek are tributaries to the

Colorado River, and the creeks provide year-round habitat for CRCT. This ACEC is a critical conservation area for the CRCT. Three of the five conservation populations of CRCT that exist atop the plateau are found within this ACEC. Included in these are "core conservation populations," identified by a genetic purity of 99% or higher. 179
The BLM considers the entire watershed vital to the long-term functionality of ecosystem processes that maintain upland and stream habitats important to these fishes. 180 The BLM also said, "These streams are regionally and nationally important producers of native, genetically pure and naturally reproducing Colorado River cutthroat trout."181 The nearly pure genetic populations of CRCT that exist in this area are irreplaceable, and should be protected from any habitat degradation that may accompany development of oil shale in the area.
Botanical and ecological values sought to be protected in this ACEC include hanging garden sullivantia and Utah fescue. Combining known occurrences of hanging garden sullivantia in the Trapper/Northwater Creek ACEC with known occurrences in the East Fork Parachute Creek ACEC accounts for 62% of total known occurrences. 182 Utah fescue is a perennial grass and an oil shale endemic. The Indian ricegrass shale barrens community can also be found in this ACEC. This community is found in only three other Western Colorado counties. 183
The important CRCT populations as well as rare plant communities and species in this ACEC, should be protected. Opening this area to oil shale development may undermine protection of these values and undermine stated BLM management priorities.
For these reasons, the Trapper/Northwater Creek ACEC is inappropriate for oil shale research and development, should be closed to development in the Final PEIS.

179 Id. at 3-116.
180 Roan Plateau Plan Amd. (2002), at 27.
181 Roan Plateau FEIS (2006), at 3-116.
182 Id. at 3-117.
183 Id.
#101])> <([#102 [*3.1.1*] Colorado ACECs that should be protected from oil shale development:
c. The Duck Creek, Ryan Gulch, Dudley Bluffs ACECs
These areas are located within the White River Field Office in the northern portion of the Piceance. These ACECs provide habitat for several federally and state-listed threatened plant species and candidate pecies. 184 Federally threatened endangered, proposed, and candidate species include the Dudley Bluffs bladderpod, the Piceance twinpod, the Ute-lady's tresses orchid, the Graham beardtongue, and the White River beardtongue.
Along with important and imperiled plant species these ACECs also retain unique and irreplaceable cultural resources. 185 Among cultural resources of note is a Wickiup Village in and
around the Duck Creek ACEC. 186 This village is listed on the National Register of Historic Places and is one of the cultural resources that should remain unharmed by oil shale development. Other cultural resources in these ACECs identified by the cultural resource interpretation program undertaken by the White River Field Office should also be preserved.

184 DPEIS (2007) at 3-125.
185 Id.
186 White River Field Office RMP Amd. (2007), at 4-69.
#102])>

<([#103 [*3.1.1*] iii. Potential ACEC's in Colorado that should be declared off-limits from oil shale development
The 2008 PEIS provided "potential ACECs that are currently under consideration for designation as part of ongoing land use planning eff011s would be available for application for commercial leasing in the future.'" 87 The 2008 ROD opened these areas to oil shale development.

Given the critical nature of environmental values at risk in these ACECs and the BLM's admission that oil shale development is incompatible with other uses, including ACEC values, we urge BLM to make potential ACECs unavailable for future oil shale development. Alternative 2(b) would do exactly that. We support that part of the preferred alternative.

187 FPEIS (2008), at 4-21.
#103])> <([#104 [*3.1.1*] [*3.7.4.2*] Potential ACEC's in Colorado that should be declared off-limits from oil
shale development: a. Snake John Subcomplex of the Coyote Basin Complex
Portions of the Snake John Subcomplex that occur in the White River Field Office were nominated by the Center for Native Ecos~stems (CNE; now Rocky Mountain Wild) in 2007 due to mapping of white-tailed prairie dogs. 1 8 This area and this habitat should be protected from oil
shale development.
The Snake John Subcomplex is also important habitat for the endangered black-footed ferret. The black-footed ferret i one of the most endangered mammals in North America. Ferrets historically occupied more than 100 million acres of western grasslands, from the Rocky Mountains eastward throughout the Great Plains, but are now reduced to a handful of reintroduction sites in the wild. Healthy ferret populations require very large prairie dog complexes. Dramatic prairie dog declines have taken a brutal toll on the ferret. Prairie dogs make up 90% of the ferret's diet.
The Coyote Basin complex is thought to have been among the most robust white-tailed prairie dog colonies in Colorado historically. Reintroduced black-footed ferrets currently occupy the Wolf Creek complex in Colorado, the Coyote Basin complex in Utah and Colorado, and the Snake John complex in Utah. These complexes constitute the most important habitat for whitetailed
prairie dogs and black-footed ferrets in Colorado and Utah, and are within the portions of the white-tailed prairie dog's range in Utah and Colorado that are expected to see the most substantial increases in oil and gas development over the next 20 years. These areas were also opened to oil shale development through the 2008 PEIS and corresponding Record of Decision and RMPs. In areas where energy development overlaps occupied white-tailed prairie dog habitats, the resulting habitat Joss and fragmentation will have negative effects on individuals and populations, including mortality, noise disturbance, and habitat loss and fragmentation. There is a threshold level at which point habitat loss and fragmentation will threaten local whitetailed
prairie dog populations and reduce prairie dog abundance to a level that is too low to provide an adequate prey base for black-footed ferrets.
In addition to being a federally listed endangered species black-footed ferrets are a Colorado Division of Wildlife Endangered Species and a Comprehensive Wildlife Conservation Strategy Science Forum Species of Most Concern. The fact that the endangered black-footed ferret is

dependent on healthy populations of white-tailed prairie dog warrants special management of the habitat
that these specie rely upon to protect them from oil shale development.

188 Attachment 10. **#104])>**

<([#105 [*3.1.1*] [*3.7.4.2*] Potential ACEC's in Colorado that should be declared off-limits from oil
shale development: b. Dudley Bluffs bladderpod and twinpod habitat outside of existing ACECs
There are occurrences of Dudley Bluffs bladderpod and Dudley Bluffs twinpod outside of existing ACECs. These areas were nominated as ACECs by the CNE in 2007. 189 In that nomination, CNE recommended 300-foot buffers protecting all known occurrences of these plants to ensure ongoing function of ecosystem processes. USFWS 's 1993 recovery plan and the agency's 2008 5-Year Review of the Dudley Bluffs bladderpod and Dudley Bluffs twinpod listed oil shale development as "the primary threat to both species ... " 190 The Review called oil shale development an "imminent" threat. 1 1 BLM's own analysis lists threats to these plants associated with oil shale development:
... direct injury and mortality of individuals, soil and seed bank disturbance and removal, vegetation clearing, habitat fragmentation, dispersal blockage, alteration of topography, changes in drainage patters, erosion, sedimentation from runoff, oil and contamination spills, fugitive dust, increased human access and human collection, spread of invasive plant species, air pollution, and loss of pollinator habitat. 192
In the USFWS's 5-year review, the agency estimated that 36% of known occupied habitat for both the bladderpod and the twinpod is not protected by ACEC designation, and that "[p]ermanent protective land management designations are necessary on all, or nearly all, occupied BLM land in order to fully achieve recovery. 193 In other words, protection of occupied
Dudley Bluffs bladderpod and twinpod habitat in areas proposed for ACEC designation are necessary to ensure recovery of these listed species. The BLM should make these areas unavailable for oil shale development in the Final PEIS.

189 Id.
190 See http ://www.U FWS.gov/mountaio-
prairie/species/plants/dudleybluffs/FinaiSYearReview.pdf, at 12.
191 Id.
192 Bureau of Land Management-White River Field Office. 2007. Piceance Development Project Assessment and
Decision Record C0-110-2005-219-EA. 316 pp. See also,
http://www.USFWS.gov/mountainWairie/
species/plants/dudleybluffs/Finai5YearReview.pdf. at 13.
93 See http://www. USFWS.gov/mow1tain-
prairie/species/plants/dudleybluffs/Fina15YearReview.pdf, at 5.
#105])> <([#106 [*3.1.1*] [*3.7.4.2*] Potential ACEC's in Colorado that should be declared off-limits from oil
shale development: c. Graham's Penstemon habitat outside the Raven Ridge ACEC

In 2007 CNE petitioned for expansion of the existing Raven Ridge ACEC to include a USFWS designated critical habitat unit for Graham's penstemon. The petition included half-mile buffers around all known Graham's penstemon occurrences per recommendation of Dr. Vince Tepedino of the Logan Bee Lab. Half-mile buffers are necessary to protect Graham's penstemon pollinators. Again, these areas should be closed to oil shale development.
#106])> Potential ACEC's in Colorado that should be declared off-limits from oil shale development **<([#107** [*3.1.1*] Potential ACEC's in Colorado that should be declared off-limits from oil
shale development: d. Narrow-stem gilia habitat outside the existing Lower Greasewood ACEC
In 2007 CNE petitioned for expansion of the existing Lower Greasewood ACEC to include known additional occurrences of narrow-stemmed gilia. Known occurrences should be protected from oil shale development with 300-foot buffers.
#107])>
<([#108 [*3.1.1*] Potential ACEC's in Colorado that should be declared off-limits from oil shale development: e. Narrowleaf evening primrose habitat outside existing ACECs
In 2007 CNE petitioned for ACEC designation of two known narrow leaf evening primrose occurrences near existing and proposed ACECs in the White River Field Office. The petition also recommended a 300-foot buffer around known occurrences. These proposed ACECs should be protected from oil shale development.
#108])> <([#109 [*3.1.1*] [*3.7.1.1*] X. Wild and Scenic Rivers, and Watershed Protection
We support management direction across the DPEIS alternatives that all areas eligible for Wild and Scenic River (WSR) designation be protected from oil shale and tar sands development. 194 As part of recent revisions of a number of land use plans, WSR inventories have been undertaken. Where a river or river segment is found to be "eligible" for inclusion in the WSR system as part of one of these inventories, the BLM's Land Use Planning Handbook(H-1601-1) (BLM 2005) directs the BLM to protect the lands along the eligible segment with a 1/4 mile buffer. We urge the BLM to go a step further and consider protection of these WSR segments and other critical river segments on a watershed scale.
In Colorado, BLM examined the eligibility of streams and stream segments for Wild and Scenic River status in 2002. The eligibility report showed portions of East Fork Parachute Creek, East Middle Fork Parachute Creek, Trapper Creek, and Northwater Creek are all eligible for Wild and Scenic River status. 195 These streams are all "free-flowing" and contain outstandingly, remarkable values -unique, rare, or exemplary botanical/ecological, scenic features or fishery values that are significant on a regional or national scale. These river segments hold many and various important values and should not be open to commercial oil shale development. These areas, along with all watersheds eligible for Wild and Scenic designation, should be offlimits to development.
In addition, many other watersheds deserve protection. Some of these areas may have special designations, such as the Parachute Creek Watershed Management Area and portions of Trapper and Northwater Creeks designated as an ACEC. 196 Other undesignated watersheds also deserve protection. For example, portions of Trapper and Northwater Creeks are not included in the Trapper/Northwater Creek ACEC, but deserve protection from oil shale development. In fact, it is the critical high reaches of these watersheds that were excluded from ACEC designation. Obviously, industrial development higher up in these water beds bas the potential to impact downstream values, including the values for which the ACEC was designated. At risk, in this

case, would be nearly all of the Northwater Creek and a significant portion of the Trapper Creek populations of CRCT. In Wyoming, the BLM determined that Skull Creek is among the watercourses found to be eligible for Wild and Scenic River designation. 197
Potential impacts are serious. Sediment caused by surface disturbing activities may choke aquatic insects and trout eggs. In the event of a spill or a mining mishap, toxic effluent may do the same. In this drainage, downstream habitat is the best CRCT habitat. Below the confluence of Trapper and Northwater Creeks this drainage attains the volume and depth necessary to maintain suitable CRCT habitat. Allowing oil shale development, or any surface disturbing development, in the upstream portion of the Northwater drainage poses an unnecessary risk to CRCT populations lower in the watershed. In order to protect this sensitive resource, oil shale development be prohibited in the entire drainage. Importantly, we are not asking for expansion of the current ACEC boundary. We urge the BLM to eliminate the entire watershed from availability for future oil shale development to protect critical environmental values at risk.
Other watersheds where oil shale development should not be allowed include: Clear Creek, Spring Creek, Corral Gulch, Ryan Gulch, Black Sulphur Creek, Fawn Creek, Hunter Creek, Willow Creek, West Fork Parachute Creek, Parachute Creek, Piceance Creek, and Dry Fork Piceance Creek. Protection of these important streams is important to protect values associated with fisheries, botanical resources, and municipal water quality.
Eligible Wild and Scenic Rivers in Utah are:
White River- The White River includes eligible segments for wild and scenic classification with the outstandingly remarkable values of scenery, fish, wildlife habitat, recreational resources, and historic resources. This remarkable river features a deep canyon often visited by canoeists and rafters. Importantly, it contains habitat for endangered fish.
Evacuation Creek- This eligible recreational river includes historic values that are outstandingly remarkable. Evacuation Creek flows through a high, remote stretch of the Book Cliffs.
Bitter Creek- This eligible scenic river includes the outstandingly remarkable values for fish, wildlife habitat, cultural resources, historic resources, and recreational resources. It creates the heart of a remarkable canyon where coyotes, elk, bear, and deer still roam unimpeded. This area is also home to historic resources, relicts of both Native American and European-based cultures.
Nine Mile Creek- Nine Mile Creek has formed the world-class Nine Mile Canyon, an area extremely rich in cultural resources. In fact, the BLM refers to this area as the "world's longest art gallery" because of its high number of rock art sites. This eligible recreational and scenic river includes outstandingly remarkable values of scenery and cultural resources.

Range Creek - Range Creek is an area rich in cultural resources and remarkable wildlife habitat. This area was recently introduced to the public when a private ranch was transferred to public ownership. This eligible river includes the outstandingly remarkable values of cultural resources, scenery, historic resources, and wildlife.
Rock Creek- This eligible river includes the outstandingly remarkable values of cultural resources, recreation resources, scenery, historic resources, and wildlife. It ultimately flows into the Green River in the deep Desolation Canyon. Rock Creek is a superb wild area high in the Book Cliffs.

194 DPEIS, Table 2.3.2-2 at 2-28.

195 Roan FEIS (2006), at 3-121. see also DPEIS (2012) at 3-8.
196 The ROD for the Designation of ACECs for the Roan RMPA and EIS implemented a WMA for Parachute Creek.
This management tool was implemented to protect important watershed values in Parachute Creek from looming
threats like natural gas development. See ROD (2008), at 6.
197 BLM 2008. Proposed Resource Management Plan and Final Environmental Impact Statement for the Rawlins
Field Office, at 3-98.
#109])>
<([#110 [*3.7.4.1*] [*3.7.4.3*] XI. Other Species Protections
The DPEIS lacks basic information about the current status and trends of many species that are threatened by the proposed action. Those species include oil shale endemics and federally listed species. For some special status species, the DPEIS omits or gets wrong basic life history needs. For example, there were a number of sensitive species considered to be Wyoming Species of Concern (WYSC) that were not included in the DPEIS, thereby precluding the BLM from analyzing and disclosing to the public impacts of the proposed action to those species.
In another example, Appendix E lists the habitat description for several other species, such as Penstemon laricifolius ssp. Exilifolius, as "not available." However, a quick search on Natureserve (the Natural Heritage Program's national database) provides eight citations with information relating to this subspecies. Where Appendix E lists this subspecies occurring only in one Wyoming county, Natureserve lists seven Wyoming counties and one Colorado county. Similarly, habitat descriptions for several species lack elevation ranges, or are otherwise so general as to preclude an impact analysis. For example, Appendix E lists habitat for Phacelia salina as simply "alkalai flats and clay slopes," but fails to mention any elevation range or additional description of the plant's habitat requirements. This sort of general habitat description precludes a meaningful impact analysis by failing to precisely identify the spatial coincidence of those species and the proposed development.
#110])> <([#111 [*3.7.4.3*] A. Sclerocactus
The case of Sclerocactus species provides another example of an inadequate analysis of current conditions and potential impacts to species from oil shale and tar sands leasing. As was the case with the 2008 PEIS, the DPEIS continues to confuse the Sclerocactus species. As noted in the Center for Biological Diversity's comments on the 2008 DPEIS, Sclerocactus glaucus has been split into three distinct and federally threatened species; the two additional new species are Sclerocactus wetlandicus and Sclerocactus brevispinus. Appendix E lists S. glaucus as "Uinta Basin hookless cactus occurring in one Colorado and three Utah counties; USFWS lists S. glaucus as "Colorado hookless cactus" occurring in four Colorado counties. 198 Where USFWS lists S. wetlandicus as "Uinta Basin Hookless Cactus" occurring in three Utah counties, 199 neither the Chapter 6 nor Appendix E make any mention of S. wetlandicus. Whether the BLM is confusing nomenclature or entirely overlooking a threatened species is unclear.
Regardless, in its 2010 "Recovery Outline for the Sclerocactus wetlandicus (Uinta Basin Hookless Cactus), USFWS found that threats to S. wetlandicus from energy development, including oil shale and tar sands development, include outright destruction of individuals and habitat, soil erosion, soil compaction, sedimentation, dust accumulation and increased human collection and impacts from exotic plant spread facilitated by increased human access into energy development zones. 200 USFWS states that "energy development remains one of the

largest threats to this species through direct loss of habitat, and it is occurring in S. wetlandicus habitat at a rate much greater than existed at the time of the 1979 listing" and that "a significant portion of the species' range also is within areas with oil shale development potential."201
The USFWS also describes significant cumulative impacts of energy development that form baseline conditions for evaluating impacts of the proposed action to the species:
[S]ixty-three percent of the total range of the species (approximately 117,000 ha or 289,000 ac) occurs within approved energy field development projects (Service 2009).
An additional 10 percent of S. wetlandicus potential habitat bas been disturbed by historical energy field development. Seventy-nine percent of the potential range on Bureau of Land Management (BLM) land is within oil and gas development project boundaries. Thirty-seven percent of the potential range on tribal lands is within oil and gas development project boundaries. 202
None of this critical baseline information is included in the DPEIS, and the DPEIS fails to address S. wetlandicus altogether.

198 See: http://ecos. fWs.gov/speciesProfile/profi le/speciesProfile.action?spcode=0 21 I
199 See: btlp://ecos.fws.gov/speciesProflle/profile/speciesProfile.action?spcode=Q3N6
200 See: ht:tp://www.fws.gov/mountain·
prairielspecies/plautsfUj nlaBasin HooklessCacLUs/RccoveryOutl ineApri 120 I 0. pdf
201 Id, at 4·5.
202 Id, at 4.
#111])> <([#112 [*3.7.4.3*] B. Additional deficiencies
There are other deficiencies of federally listed species. The DPEIS cursory information about bonytail chub does not reveal that the species is virtually extinct due to the transformation of the Colorado River ecosystem. Similarly, there is no description of specific recovery measures set forth in the 2002 recovery plan for Colorado pikeminnow, or that the humpback chub is experiencing a declining population trend. The DPEIS also fails to discuss the fact that an interagency
team declared in 1997 that the current strategy to recover the Utah prairie dog is not working and is unlikely to ever result in the recovery of the species, or that threats to the whooping crane include oil spills and gas leaks.
#112])> <([#113 [*3.7.4.3*] The DPEIS likewise fails to make clear that all known populations of clay reed-mustard are
located on federal lands that have been leased for oil and gas activities. The remaining individuals are underlain by oil shale deposits, and continued development of oil and gas wells and ancillary facilities, and future potential oil shale development, is likely to threaten the continued existence of this species. **#113])>**
<([#114 [*3.7.4.3*] For many listed species-including the autumn's buttercup, Ute ladies'-tresses, clay reedmustard,
Dudley Bluffs bladderpod, Dudley Bluffs twinpod, humpback chub, Jones cycladenia, last chance townsendia, Maguire daisy, Wright fishhook cactus, bonytail, Debeque phacelia, Parachute beardtongue, western yellowbilled cuckoo, and the White River beardtongue-the DPEIS lacks basic information about current status or population numbers, estimates or trends. For instance, the Dudley Bluffs bladderpod was surveyed in 2006, and the results indicate a declining population trend, but this information is not provided in the DPEIS. Meanwhile, the species is known to occur only in the Piceance Basin, an area where extensive oil shale

development would be permitted under the proposed action.
#114])> <([#115 [*3.7.4.3*] Similarly, the DPEIS does not mention that demographic monitoring of Wright fishhook cactus
populations conducted between 1993 and 2000 found no sizeable populations with adult cacti greater than 9cm wide (the size class responsible for the most reproduction). That same survey noted low recruitment and a low mortality to-recruitment ratio, and indicated that populations of Wright fishhook cactus appeared to be in a slow decline.
#115])> <([#116 [*3.7.4.7*] C. Climate impacts on species
While the DPEIS acknowledges that rare species are inherently more vulnerable to the effects of disturbance that would accompany oil shale or tar sands development, the BLM must also consider how proposed action will contribute to climate change and therefore further imperil rare species in the region. Many of the rare plants that will be affected by oil shale and tar sands development are edaphic endemics (species tied to very specific substrates, many only found growing on oil shale.) These species may be particularly hard-pressed to respond to climate change, because the soils they rely on may be restricted to very narrow elevation and/or latitudinal bands that do not allow for refuge from warmer, drier conditions. These plants are literally tied down to oil shale soils, and cannot march up a mountain or move north in response to climate change without leaving behind the soils they require. The IPCC has come to consensus about several factors relevant to the potential threat of climate change to endemic species, including the following:
• With global average temperature changes of 2°C above pre-industrial levels, many terrestrial, freshwater and marine species (particularly endemics across the globe) are at a far greater risk of extinction than in the recent geological past (medium confidence). 203
• Warming and drying trends are likely to induce substantial species-range shifts, and imply a need for migration rates that will exceed the capacity of many endemic species. 204
• The likely synergistic impacts of climate change and land-use change on endemic species have been widely confirmed. 205

The Final PEIS must include this information, so that the environmental consequences of the proposed action may be meaningfully considered. Without establishing these baseline conditions, there is no way for the BLM or the public to fully understand, at this crucial, programmatic scale, the effects that the proposed action will have on the environment.

203 Fishlin et. al. 2007 at p. 213.
204 Id. at p. 226.
205 Id. at p. 241.
#116])> <([#117 [*6.1.1*] XII. Lands with deposits 15 gallons/ton or more and 15 feet thick or less
In Colorado and Utah, the most geologically prospective oil shale deposits are "those deposits that yield 25 gallons of shale per ton of rocks (gal/ton) or more and are 25 ft. thick or greater. " 206
In Wyoming, the standard is 15/15. The BLM's determination to alter for Wyoming the definition of "geologically prospective" highlights how poor the deposits are in that state. It also raises serious questions regarding how the agency defines "geologically prospective.' As the agency stated in the FPEIS, in Wyoming the oil shale resource is not as of high quality as it is in Colorado and Utah. 207

The BLM cites EPAct as the basis for opening resource-poor oil shale deposit in Wyoming to commercial application. EPAct provides the BLM "shall complete a programmatic environmental impact statement for a commercial leasing program for oil shale and tar sands resources on public lands, with an emphasis on the most geologically prospective lands within each of the States of Colorado, Utah, and Wyoming."208 In requiring the BLM to evaluate "the most geologically prospective lands" in each state, EPAct does not in turn require the BLM to open resource-poor lands to application for commercial development. That is a construct the BLM developed to meet a policy goal of opening large swaths of land for commercial development.

The BLM acknowledges that deposits less than the 25/25 standard are inferior resources and likely not suitable for development:

The BLM has determined that it would not make economic sense to open larger areas in Colorado and Utah to potential oil shale leasing where the resource is of low grade and unlikely to be developed at this time, because interest in future leasing would be directed at higher t:,rrade deposits .... In the future, once technology has progressed and the higher quality oil shale has been leased and developed, it may be economic to produce these lower--grade deposits. At that time, additional planning and NEPA analysis could be conducted to open these areas to leasing and development, where warranted. If however, technological progress and economic conditions rapidly come to support development of deposits less than 25 ft thick and yielding less than 25 gal/ton, the areas that would be open in Wyoming under Alternative 1, 2, or 4 would be available for future leasing without further land use planning amendments. 209

Additionally, because the BLM uses different standards for different states, the agency must define what "geologically prospective" means in each case. Congress did not define it, and nor did the BLM in the DPEIS. The closest the BLM comes to defining "geologically perspective" is found in footnote 4 on page 1-10. In that footnote, the BLM states that

Numerous sources of information were used to define the boundaries of the Green River Formation basins and the most geologically prospective oil shale resources. The basin boundaries were defined by digital data provided by the USGS taken from Green (1992), Green and Drouillard (1994), and Hintze et al. (2000). The most geologically prospective oil shale resources in the Piceance Basin were defined on the basis of digital data provided by the USGS taken from Pitman and Johnson (1978), Pitman (1979), and Pitman et al. (1989). In Wyoming, the most geologically prospective oil shale resources were defined on the basis of detailed analyses of available oil shale assay data (Wiig 2006a,b). In Utah, the most geologically prospective oil shale resources were defined by digital data provided by the BLM Utah State Office. 210

The question remains, if industry cannot economically develop the high-grade deposits found in Colorado and Utah, why would the BLM make available lands that fall below the 25/25 threshold in Wyoming. In October 2008, Scott Quillinan of the Wyoming State Geological Survey (WSGS) prepared a spatial analysis of oil shale deposits that met the 25/25 threshold. This analysis was based on data contained in the USGS Open-File Report 2008-1152, titled "Fischer assays of oil-shale drill cores and rotary cuttings from the greater Green River Basin, Southwestern Wyoming." The WSGS analysis shows that a substantial acreage of Wyoming lands meet the 25/25 threshold. (See Attachment 7.) Thus, it is completely unnecessary to lower the threshold for oil shale leasing in Wyoming. The lack of a consistent standard across the

three-state region suggests the BLM is acting arbitrarily and capriciously.
The BLM was right in making deposits unavailable for leasing in Colorado and Utah that were less than 25/25, but wrong to lower the standard in Wyoming. By adopting the 25/25 standard for all three states, the BLM can provide collateral protections from ill-considered oil shale projects for core or priority sage-grouse habitats, big game crucial ranges and migration corridors, and other valuable resources in Wyoming which are underlain by uneconomic oil shale deposits.

206 DPEIS, at 2-78.
207 Id.
208 EPAct Sec. 369(d)(l).
209 DPEIS, at 2-78.
210 DPEIS, at 1-10. **#117])>**

OSTS_070
Organization: Brent Fryer
Received: 4/27/2012 12:00:00 AM
Commenter1: Brent Fryer - Henderson, Wyoming 89012 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/7/2012 12:00:00 AM
Attachments: OSTS2012D00071.htm (OSTS_070-58804.htm Size = 1 KB)
OSTS_070_Fryer_Mail_OSTS2012D00071.pdf (OSTS_070-58803.pdf Size = 473 KB)
Submission Text
See Attachment.
Brent C. Fryer, Sc.D.
504 Winding Oak CT
Henderson, NV 89012
Telephone: 435-862-4848
Email: fryerbc I @aol.com
Date: April26, 2012
BLM Oil Shale and Tar Sands Draft Programmatic PEIS
Argonne National Laboratory
9700 S. Cass A venue
EVS 240
Argonne, IL 60439
Subject : Comments on "2012 Oil Shale and Tar Sands Draft
Programmatic Environmental Impact Statement (Draft PEIS)".
Summary of Comments
The following statements summarize my general conclusions on the subject document as well as the DOI/BLM oil shale program as a whole:
<([#1 [*1.5*] 1. As with the 2008 Draft/Final PEIS, this 2012 "Draft" is not a PEIS for commercial leasing as mandated by the Energy Policy Act of 2005

(EPA2005).
2. The 2008 Draft/Final PEIS was the result of the Bush Administration/DOIIBLM and some old guard republican/democrat senators bungling combined with the conniving of big oil and odd lot snake oil salesmen. That group and its policies has resulted in the largest historical giveaway of US natural energy resources to big oil (with the lion's share going to foreign big oil at that) and snake oil promoters with essentially nothing in return for the US citizen .The 2012 Draft PEIS is a result of the Obama Administration/DOI/IBLM and a few key democrat politicians combined with environmental special interest groups. Following this latest group's agenda will ultimately stop the development of this strategically important energy resource. Neither groups agendas are based on sound technical (engineering/science), economic, and environmental analysis combined with years of practical energy engineering experience. Both political groups and DOI/BLM administrators have systematically excluded small business/entrepreneur oil shale development that is based on sound technical, economic, and environmental science/engineering and may years of practical energy development experience.
3. If a new republican political administration is elected in November 2012, we can expect the Obama administration to follow suit with the previous Bush administration's action in late 2008/early 2009 wherein the Bushites rushed through so called "midnight" shale development regulations/legislation before Obama's inauguration in January 2009. If Romney is elected then it can be expected there will be significant midnight rushing by the Obamaites to finalize their oil shale development agenda-and subsequent action by the Romney administration to overturn the Obama agenda.
#1])> The following deals with specific statements made in the Draft and conclusions that can be drawn there from.
From the Draft, with content of particular interest marked in red type:
ES.6.3 Alternative 2, Oil Shale Conservation Focus Alternative (2a), and with RD&D First Requirement (2b), Oil Shale
RD&D First Requirement (2b). Under this alternative, the lands open for future leasing consideration would be the same as those in Alternative 2(a), but only for RD&D leases. The BLM would issue a commercial lease only when a lessee satisfies the conditions of its RD&D lease and the regulations at 43 CFR Subpart 3926 for conversion to a commercial lease. The preference right acreage, if any, which would be included in the converted lease, would be specified in the RD&D lease.
ES.7 PREFERRED ALTERNATIVE
2
At this stage in the planning and NEP A process, the BLM has chosen Alternative 2(b) as the preferred alternative for oil shale, and Alternative 2 as the preferred alternative for tar sands. With respect to oil shale, the BLM would like to maintain focus on RD&D projects, so as to obtain more information about the technological requirements for development of this resource, as well as the environmental implications, before committing to broad-scale commercial development. For instance, the BLM looks forward to gaining a clearer understanding of the implications of development of oil shale

for water quality and quantity.

2.3.3.1 Alternative 2, Oil Shale Conservation Focus (Alternative 2a), with RD&D First Requirement (2b)

Under this alternative, 10 land use plans in Colorado, Utah, and Wyoming would be amended to designate less than 830,000 acres (acreage opened under Alternative C in the 2008 OSTS PEIS) available for future commercial oil shale leasing. This alternative would exclude from commercial oil shale leasing the following categories or groups of categories of public lands and/or their resource values that may warrant protection from potential oil shale leasing and development:

The benefits of Alternative 2(b) would include facilitating a robust RD&D program. It would also avoid allowing a few companies to tie up large areas with speculative commercial leases. Thus it would promote access by innovative small companies to the federal oil shale resource for RD&D.

In the event that a commercially viable technology is demonstrated and becomes widely available in the near future, it is possible that Alternative 2(b) could result in delaying commercial leasing on federal lands. If that possibility, however speculative at the present, were to occur, the pertinent RMPs could be amended contemporaneously with review of proposed commercial leases. The oil shale leasing and management regulations at 43 CFR Part 3900 would not be affected by the selection of any alternative analyzed in this PEIS, and thus would remain available for future decisions concerning commercial leasing.

As the Draft PEIS was being developed, the idea for this alternative emerged. It is presented here in brief. This alternative is not noted elsewhere in the document but will be developed further in preparation of the Final PEIS. Analytically, this subalternative is indistinguishable from Alternative 2(a) in terms of environmental consequences. Therefore further environmental analysis in preparation of the Final PEIS is not anticipated, although more detailed explanation may be provided, particularly in response to comments received.

3

Lands that fall under items 1 through 4, above, in and around the most geologically prospective oil shale areas in Colorado, Utah, and Wyoming are shown in Figures 2.3.3-1, 2 2.3.3-2, and 2.3.3-3, respectively. The Adobe Town "Very Rare or Uncommon" area is shown in Figure 2.3.3-3 in the eastern portion of the Washakie Basin in Wyoming. These various areas excluded from lands available for application under Alternative 2 are lands that were considered for exclusion under Alternative C of the 2008 OSTS PEIS as noted in item 5 above.

Lands available for application for oil shale leasing within the most geologically prospective area under Alternative 2 in Colorado, Utah and Wyoming are shown in Figures 2.3.3-4 2.3.3-5 and 2.3 .3-6 respectively. Table 2.3.3-1 lists by state the approximate number of acres of BLM-administered land available for application for leasing under Alternative 2. Table 2.3.3-2 identifies the types of stipulations and restrictions in place for oil and gas leasing in each state that were used to identify those lands that would not be available for application for leasing for commercial oil shale development under Alternative C ofthe 2008 OSTS PEl . These lands total 57,657 acres.

[Commenter's note: From Table 2.3.2.2 Alternative 2 lists 461,965 acres available for leasing with 35,308 acres in Colorado, 252,181 acres in Utah, and 174,476 acres in Wyoming. Of the 30,720 acres included in the existing RD&D leases only 6,612 acres within the current RDD leases would be available if current leaseholders relinquish their leases. Note also

Table 2.3.3.1 is for Alternative 1 as stated in the Table, not Alternative 2 as stated in the above text. The entire discussion of alternative 2 throughout the "Draft" is confusing and misleading to say the least including the following paragraph.]
In Alternative 2, portions of three of the five PRLAs for the Colorado RD&D leases are not identified as available for application for commercial leasing. These include portions of the areas associated with the Chevron, AMSO, and Shell Site 2 RD&D projects. For the other two Colorado RD&D projects, Shell Sites 1 and 3, none of the PRLAs coincide with the area identified as available for application for commercial leasing.
Also, as discussed in Section 2.3 .1, commercial leases for surface mining projects would be allowed only on those lands in Utah and Wyoming where the overburden is 0 to 500 ft thick. In Utah, under Alternative 2, lands available for application for leasing for surface mining projects total about 85,640 acres in the Vernal RMP planning area. In Wyoming, under Alternative 2, these lands total about 248,000 acres in the Green River RMP planning area.
4
2.4.3.2 Alternative 3, Tar Sands Pending Commercial Lease
This alternative is designed as an analogue to the Research Lands Focus Oil Shale Alternative 3, described in Section 2.3.3.2, in order to respond to scoping comments that called for consideration of closing public lands to all development other than research projects. Unlike with respect to oil shale, there is no specific RD&D ' program for tar sands. Therefore, this alternative would also analyze foregoing the leasing of tar sands for the commercial development of fluid mineral resources entirely except for one tar sands lease currently under consideration. The Asphalt Ridge tar sands lease application, shown in Figure 2.4.3-3, is located approximately 11 mi south of Vernal, and the expression of commercial leasing interest that forms its basis was submitted on November 16, 2009. This prospective lease is for a commercial tar sands project; however as with oil shale the technology to develop tar sands commercially for fluid minerals development is in its nascent stages.
My comments and conclusions based on the above report extracted statements:
<([#2 [*2*] 1. The rationale and basis for the four alternatives selected for consideration are never explained-and have no technical, economic, or rational basis in fact.
They are simply "political" selections without justification. This conclusion about "political selections" is made even more apparent by the last minute selection of alternative 2(b) as the preferred alternative for oil shale. The statements that Alternative 2(b) "emerged" apparently late in the development of the draft PEIS-and is described only briefly and will be developed further in the "FINAL" PEIS follows a pattern of the DOI/BLM not knowing what they are doing and also being directed politically to come up with some politicians correct answer. Recall that the PEIS mandated by the Energy Policy Act of 2005 started out as mandated by congress-however, half way through the whole effort was changed to a land use planning document without telling anyone. Furthermore, the Commercial Leasing Rule had a similar parallel-in that the final Rule lease rates were a big surprise in the FINAL Rule-they just appeared out of the blue without being included as a preferred alternative in the Draft Rule.
#2])> <([#3 [*9.7*] 2. "The benefits of Alternative 2(b) would include facilitating a robust RD&D program". Just how is this robust RD&D program going to be facilitated or

evolve? Suggestions since 2004 to the DOI/BLM on the need for a common qualified RD&D site where all technologies could come and join in a national "cook off" have been dissed by the DOVBLM under both the Bush and Obama administrations. Furthermore what has actually been done on the RDD leases issued to date? (1) next to nothing; (2) technologies proposed have been abandoned; and (3) technologies proposed are not new advanced technologies, but old in many cases. How will this new RDD program be any different? In most cases the technologies being pursued should be forbidden as a National Policy because of the their lousy total energy (including kerogen) in to high quality energy out ratio, waste of kerogen not even processed, economics, and environmental impact. No RDD tests or commercial attempts are needed to demonstrate bad ideas and bad engineering. **#3])>**

5

<([#4 [*6.3*] 3. "It would also avoid allowing a few companies to tie up large areas with speculative commercial leases. Thus it would promote access by innovative small companies to the federal oil shale resource for RD&D". [Section 2.3.3.1] What has happened in the past DOI/BLM oil shale development program-i.e. over the last 8 years since it was initiated in 2004? Large tracks of federal oil shale lands have become tied up by both big oil and smaller snake oil salesmen-all of which have been speculators, and two of which have already sold off their speculative leases-and both of which have changed their proposed technologies---one of which has changed technologies not only once but is now on their third technology. Furthermore although advanced new technology was a requirement for lease acquisition, in the one speculative case wherein three different technologies have been proposed and two abandoned-all three technologies are old technologies-not new, and certainly not advanced. As for the large big oil lease tracks what has been done--essentially nothing-and these tracks contain more recoverable oil than the total known proven conventional reserves of the US. And the small entrepreneur oil shale technology and project developer-has he obtained access to federal oil shale reserves for RDD/testing/cookoff? Thus far he has been excluded by one means or another. **#4])>**

<([#5 [*10.3*] 4. "In the event that a commercially viable technology is demonstrated and becomes widely available in the near future, it is possible that Alternative 2(b) could result in delaying commercial leasing on federal lands". [Section 2.3.3.1] What's implied here is that such a commercially viable technology could be developed outside of the DOIIBLM development program/agenda. If a viable technology is developed outside of the DOI/BLM program one would have to ask why did the developers have to accomplish this outside of having access to federal oil shale lands-must be something wrong with the DOI/BLM program.

#5])> <([#6 [*2*] 5. If the focus is going to be on RDD, then why are large total acreages being considered at all? All DOIIBLM RDD leases and private development not part of the DOI/BLM program will not utilize more than fractions of an acre or less than 5 acres maximum in terms of oil shale resource area plan area. There is no basis in fact for the need for lease acreages any larger than that.

#6])> <([#7 [*2.2*] 6. Alternative 2(b) excludes much of the PRLA land from commercial leasing although
this is contractually committed to current RDD leases for PRLA what
does this mean? Although the entire description of Alternative 2 is less
than brief because it just recently "emerged", what description there is
contradictory and confusing. If this is the "preferred" alternative you'd think
DOI/BLM could at least write up a complete and comprehensive description
of that alternative. It also means that land already contractually committed to
in the RDD leases would now be reneged on by the DOI/BLM as far as any
new applicants are concerned-just another twisted example of the
fecklessness, incompetence, and corruption of the politicos who control the
DOI/BLM and the willingness of the DOIIBLM administrators and staff to go
along with folks in power. **#7])>**
<([#8 [*6.3.5*] 7. DOVBLM continues to use the term "nascent" technologies and that these
"nascent" technologies need RDD to prove their viability. The facts are most
of the technologies under consideration are old and their viability has been
discredited in prior projects. Other technologies which are regarded as new
are either not new, or their viability can be debunked by thorough engineering
analysis and no tests are required. This includes accurate estimates on energy
input (including kerogen chemical energy) to high quality energy output,
economics, environmental impacts, and total water use. For most of the
technologies under development (old or new) they are non starters not worthy
of the stockholders investment money, nor beneficial to the economy or
strategic interests of the United States. DOl/BLM simply has no oiJ shale
technology people, nor 3rd party consultants, qualified to conduct such
analysis. Furthermore any meaningful environmental impact analysis must
consider the specific technology--Qtherwise the entire environmental impact
analysis is meaningless. **#8])>**
<([#9 [*1.1*] 8. Bottom line-(1) other than maintaining legal standing for future possible
litigation it's been a waste of time providing comments to the DOVBLM over
the last 8 years. Time which would have been much better spent on the
development of my proprietary BLACK BOX PYROLYSIS I & II processes;
(2) The Federal Government (Presidential administrations, Senators, House
of Representatives, and the DOI/BLM/EPA) is feckless, incompetent, and
usually corrupt when it comes to stewarding the Federal land/resources as
evidenced by the state of the DOI/BLM oil shale program. **#9])>**
This concludes my comments and conclusions. If there are questions or anyone within
the DOI/BLM wishes to discuss the Draft PEIS or the DOI/BLM program or
technologies under consideration fill free to contact me by mail, telephone, or e-mail.
Sincerely,

Brent C. Fryer, ScD

OSTS_071
Organization: U.S. DOE, Fish and Wildlife Service, Region 6, Noreen Walsh
Received: 5/10/2012 12:00:00 AM
Commenter1: Noreen Walsh - Denver, Colorado 80225 (United States)

Organization1:U.S. DOE, Fish and Wildlife Service, Region 6
Commenter Type: Federal Government
Classification: none
Submission Category: Letter
Submitted As: E-Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** aziech 5/18/2012 12:00:00 AM
Attachments: OSTS2012D00072.htm (OSTS_071-59121.htm Size = 1 KB)
OSTS_071_FWS_Email_OSTS2012D00072.pdf (OSTS_071-59120.pdf Size = 1127 KB)
Submission Text
Comments on the Draft Oil Shale and Tar Sands Resource Management Plan
Amendments to address Land Use Allocation in Colorado, Utah, and Wyoming
Programmatic Environmental Impact Statement
The U.S. Fish and Wildlife Service (Service) has reviewed the subject draft Programmatic Environmental Impact Statement (PEIS). These comments are submitted pursuant to our authorities under the National Environmental Policy Act (NEPA) of 1969, as amended (42 U.S.C. 4321 et seq.); Fish and Wildlife Coordination Act (16 U.S.C. §661 et seq.); Endangered Species Act of 1973, as amended (16 U.S.C. §§1531 to 1543 et seq.); Migratory Bird Treaty Act of 1918, as amended (16 U.S.C. §703 et seq.); Executive Order 13186 for the Conservation of Migratory Birds; and, the Bald and Golden Eagle Protection Act, as amended (16 U.S.C. §668 et seq.).
We appreciate the considerable task before the Bureau of Land Management (BLM) in achieving the requirements of Section 369 of the 2005 Energy Policy Act while also meeting the requirements of the NEP A. The subject draft PEIS analyzes the effects of amending 10 land use plans in Colorado, Utah, and Wyoming to describe those areas that will be open and those that will be closed to application for commercial leasing, exploration, and development of oil shale and tar sands resources.
The draft PEIS analyzes four alternatives in detail for allocation of oil shale leases (two of these include subalternatives) and four analogous alternatives for allocation of tar sands. The BLM has selected Alternative 2(b) as the Preferred Alternative for oil shale and Alternative 2 as the Preferred Alternative for tar sands. The Preferred Alternative would make something less than 830,000 acres available for future leasing applications for commercial oil shale, but only for research, development, and demonstration (RD&D) purposes. The BLM would issue a commercial lease only when a lessee satisfies the conditions of its RD&D lease and the regulations at 43 CFR Subpart 3926 for conversion to a commercial lease. The preference right acreage, if any, which would be included in the converted lease, would be specified in the RD&D lease. The Preferred Alternative also would make something less than 229,000 acres available for application for commercial tar sands leasing.
<([#1 [*9.3*] Our primary concern with the draft PEIS is the lack of information about the potential mining
technologies to be employed, to the extent that identifying and mitigating cumulative impacts is extremely difficult. The BLM identified this problem in the draft PEIS "Because commercial oil shale development technologies are still largely in a research and development ·phase, many details regarding the specific technologies that would be used in the future to produce oil from oil shale are unknown" (p. 2-16). To remedy this concern, it is our understanding that once

viable technologies are determined through the RD&D program, the BLM will conduct additional NEP A analyses to evaluate the large-scale cumulative effects of a leasing program, including specific areas to be leased and the conditions and stipulations under which leases will be sold. At the future leasing stage we believe there may be a need to consider additional programmatic NEP A review.
#1])> <([#2 [*2.2.1*] The Service supports BLM's selection of Alternative 2(b)/Alterative 2 as the Preferred
Alternative. However, we believe more detailed information regarding direct, indirect, and cumulative impacts to water use and water quality in the Colorado River basin are needed to evaluate potentially substantial impacts on fish and wildlife resources. **#2])> <([#3** [*6.3*] In addition, more details
are needed about the type of heavy equipment, processing facilities, pipelines, storage tanks, industrial equipment, roads, and other infrastructure for fuel extraction and processing in order to adequately address the potential environmental implications.
#3])> We have provided General Comments in Attachment 1 and Specific Comments in Attachment 2
to assist the BLM in preparing the final PEIS. We appreciate the opportunity to provide comments. Please contact Michael Thabault, Assistant Regional Director- Ecological Services, at (303) 236-4210 if you have any questions or need further information.
Attachments

General Comments on the BLM's Resource Management Plan Amendments and Draft PEIS for the Allocation of Oil Shale and Tar Sands Resources on Lands Administered by the BLM in Colorado, Utah, and Wyoming (issued February 2012)
After reevaluating the earlier (2008) PEIS, the BLM proposes to amend 10 land use plans to designate lands available for commercial leasing of oil shale and tar sands. The BLM's preferred alternative for oil shale allocation is 2(b). This alternative would allow commercial oil shale development on available lease parcels only after the applicant satisfies the requirements under the Research, Development and Demonstration (RD&D) Program. The BLM's preferred alternative for tar sands land allocation is alternative 2. Under alternative 2, commercial tar sands development can occur without the RD&D program requirement. The areas excluded for leasing both minerals are:
• All areas that the BLM has identified or may identify as a result of inventories conducted during this planning process, as lands having wilderness characteristics;
• The whole of the Adobe Town "Very Rare or Uncommon" area, as designated by the Wyoming Environment Quality Council on April 10, 2008;
• Core or priority sage-grouse habitat, as defined by such guidance as the BL_M or the DOI may Issue;
• All Areas of Critical Environmental Concern (ACECs) located within the areas analyzed in the 2008 PEIS (76,666 acres in existing ACECs in the 2008 PEIS plus additional ACEC acreages as a result of Utah and Wyoming planning efforts recently completed); and
• All areas identified as excluded from commercial oil shale and tar sands leasing in Alternative C of the September 2008 PEIS.
USFWS understands that Section 369 requires the Department of the Interior to evaluate the effects of commercial leasing of ELM-administered lands in Colorado, Utah, and Wyoming, and we appreciate the stepwise fashion in which BLM has approached the development of a

commercial leasing program. It is our understanding that once viable technologies are identified through the RD&D program, BLM will conduct additional NEP A analyses to evaluate the large-scale impacts of a leasing program, including specific areas offered for lease and the conditions and stipulations under which leases will be sold.

<([#4 [*6.3*] The draft PEIS strives to assess the broad implications of designating lands that could be made
available for commercial leasing; however, that task is particularly difficult without knowing the viable mining technologies to be employed. More detail about the type of heavy equipment, processing facilities, pipelines, storage tanks, industrial equipment, roads, and other needed to extract these resources is necessary to appropriately evaluate impacts on wildlife resources.

#4])> <([#5 [*9.3*] Although the draft PEIS states that additional NEP A analysis will be required prior to
commercial leasing, it is unclear at what level additional analysis will take place. USFWS believes further NEP A analysis at the programmatic level will be needed to address the cumulative effects of a defined leasing program. We are concerned that without a programmatic level of analysis once technologies are determined and better understood, large-scale leasing may have significant impacts to certain listed and non-listed fish and wildlife resources. Cumulative effects resulting from incremental impacts on water quality, water quantity, air quality, traffic volume and other disturbance are some of the stressors that could affect populations of widely ranging species in the action area.

#5])> <([#6 [*3.7.5.1*] Sage Grouse

The preferred alternative (2b) in the oil shale/tar sands draft PEIS states that core or priority sage-grouse habitat would be excluded from leasing (Section 2.3.3.1; p. 2-34). However, the map of Colorado lands (Figure 2.3.3-4) that would be made available for oil shale lease applications under the preferred alternative appears to overlap areas that BLM has mapped [http://www.blm.gov/co/st/enfBLM Programs/wildlife/sage-grouse.print.html] as sage-grouse priority habitat. We recommend that all priority sage-grouse habitat be excluded from application for oil shale and tar sands leasing and that apparent inconsistencies in maps be resolved.

#6])> <([#7 [*3.7.4.3*] [*9.2*] Bald and Golden Eagle

Information concerning eagles in Chapter 3, Affected Environment, should be revised and updated to reflect the USFWS' new regulations for take of bald and golden eagles and their nests under 50 CFR §§ 22.26 and 2.27, as summarized below.

Activities that take eagles or eagle nests may violate the Bald and Golden Eagle Protection Act (BGEP A), That Act defines the "take" of an eagle to include a broad range of actions, including to: "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, or molest or disturb." In 2009, USFWS issued regulations (50CFR 22.3) that define "disturb" as:

to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, (1) injury to an eagle, (2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or (3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior.

Many of the field activities associated with oil shale and tar sands mining and processing have the potential to impact eagles, and protective measures necessary to comply with BGEP A will need to be considered.

On a limited basis, USFWS has the ability to authorize the take of eagles when: thresholds for

take in the eagle population have not yet been reached and take is compatible with stable or increasing breeding population; comprehensive measures to avoid and reduce take are developed in coordination with USFWS, and; any subsequent take is unavoidable. Permits will authorize limited, non-purposeful take of bald and golden eagles; authorizing individuals, companies, government agencies (including Tribal governments), and other organizations to disturb or otherwise take eagles in the course of conducting otherwise lawful activities. Removal of eagle nests would usually only be allowed when it is necessary to protect human safety or the safety of the eagles. Permits issued by USFWS may require pre- or post-project surveys, and may require that conservation measures be implemented to offset unavoidable take. **#7])>**
<([#8 [*3.7.4.1*] [*9.3*] [*1.4*] ESA Interagency Consultation
USFWS commends BLM for including a discussion within the draft PEIS of threatened and endangered species and critical habitat that are likely to be encountered by future oil shale and tar sands development projects. We also recognize the efforts of BLM to coordinate with USFWS in the development of measures to support the conservation of federally listed threatened and endangered species presented in Appendix F. However, USFWS remains concerned about the lack of information available on mining technologies and the potential for cumulative impacts to federally listed species.
With particular regard to the potential need for water and the impacts on water quality, the unknown effects of area-wide oil shale and tar sands development could threaten listed species within the Colorado River Basin. We encourage BLM to further develop and incorporate conservation measures for listed species in the final PEIS and into future NEP A documents associated with specific leasing and development actions. NEP A analyses should include specific conservation guidelines for special-status species that will be applied to site-specific NEPA, consultation, and implementation documents of all future proposed projects. We recommend that you contact our Field Offices for assistance in developing those guidelines. Including guidelines at this level of NEPA review would set standards to direct the future planning and implementation of oil shale projects and ensure that special-status species are considered in future site-specific projects within the PEIS study area.
BLM is proposing to conduct Section 7 consultations when developing supplemental Environmental Assessments associated with future lease sales and projects. We have concerns that a fragmented consultation process will preclude the ability to conduct a cumulative effects analysis, not only for oil shale and tar sands development but also for other land development in the action area. Therefore, we recommend that a landscape level evaluation be used once viable technologies and program details are identified. Species that should have landscape level plans based on land use and future oil shale tar sand development include the four endangered fish of the Colorado River and tributaries, black-footed ferret, white-tailed prairie dog, and the greater sage-grouse. Early consultation considering a landscape-scale view can identify concerns early in the planning process and help identify strategies to assist in recovery of listed species.
#8])>

Comment# EIS Section Page/Line Comment/Suggested Revision I
<([#9 [*3.7.4.11*] 1) Table 2.6.1 2-98: For Alternative 2 the PEIS states “no critical habitat will be impacted under this alternative.” We do I
not agree with this statement because water depletions from the upper Colorado River Basin, as well
as adverse changes to stream water quality, would have an adverse impact to critical habitat for

the
four endangered Colorado River Basin fish species. We recommend this statement of impacts be changed to indicate possible downstream impacts on critical habitat for listed fish.
#9])> <([#10 [*3.7.4.5*] 2) Table 2.6.1 2-123: It appears that information in the Table for Alternative 2 is incorrect. We recommend the BLM
delete the reference to 4 71 acres designated as critical to the Mexican spotted owl from consideration for commercial tar sands leases under Alternative 2.
#10])> <([#11 [*3.7.3.2*] 3) 3.7.3 and elsewhere: We do not believe wild horse and burros should be included as "wildlife" in the PEIS. BLM
manages these animals under separate legislation and programs from their wildlife management program. For purposes of the PEIS, feral horse and burro information, discussions, and analyses should be separate from that of "wildlife." This would apply to Chapters 3, 4, 5 and 6.
#11])> <([#12 [*3.7.3.12*] 4) Chapter 3, Section 3. 7.3 3-158, 1: It is unclear whether the statement here refers to BLM's wildlife management objectives. If so,
please qualify the statement by explaining that in general the goals and objectives of wildlife management are broader than those stated here.
#12])> <([#13 [*3.7.3.12*] 5) Chapter 3, Section 3. 7.3, 3-158, 7-9: If the text is supposed to be a statement about the U.S. Fish and Wildlife Service's (USFWS) roles and responsibilities relative to wildlife management then the statement is inaccurate and fails to fully
describe this for USFWS. However, if the statement is supposed to reflect USFWS' role in wildlife
management relative to BLM lands then the statement should be revised to properly qualify it.
#13])> <([#14 [*3.7.3.12*] 6) Chapter 3, Section 3. 7.3.2, 3-160, 14-15: "The following discussion describes important groups of birds ... " This statement and the
accompanying text infer an undefined 'value' on bird groups. Although some groups of migratory
birds have greater value to humans than others, the BLM has a responsibility to comply with the Migratory Bird Treaty Act (MBTA) (and BLM's MOU pursuant to E.O. 13186) to conserve migratory birds regardless of whether these species are "valued" by humans.
#14])> <([#15 [*3.7.3.3*] 7) Chapter 3, Section 3. 7 3.2, 3-159-3-162: Headers used for Section 3.7.3.2 Birds: The headers that are used do not address many bird species present in the PEIS study area. We suggest an alternate approach--to discuss each bird order that occurs in the PEIS area under a separate subheader.
#15])> <([#16 [*3.7.3.3*] 8) Chapter 3, Section 3. 7.3.2, 3-161-3-162: The PEIS subsection for Neotropical Migrants is inaccurate since all of the birds listed on lines
41-46 on page 3-161 and lines 1-2 on page 3-162 are passerines, whereas the term 'neotropical migrant' refers to about 3 86 bird species from 18 bird orders (see
http://www.fws.gov/birdhabitat/Grants/NMBCA/BirdList.shtm) not just passerine species.
#16])> <([#17 [*3.7.4.5*] 9) Table 3.7.3-2, Figure 3.7.3-2, 3-167, 168: The organizational format, with a table and figure for wild horses within the "Threatened,
Endangered, and Sensitive species" subsection, is inappropriate. We recommend that Table and Figure be moved.
#17])> <([#18 [*3.7.4.3*] 10) Chapter 3, Section 3.7.4.5, 3-201, 19-33: We recommend the discussion on the bald eagle also include language describing the prohibition of take under the Bald and Golden eagle Protection Act (BGEPA) and USFWS regulations.
#18])> <([#19 [*6.3.2*] 11) 4.1.2, 4.5.1.3 Waste Water, 4-9, 4-37: The PEIS states that retorts

produce 2 to 10 gallons of wastewater per ton of processed shale, which contains various organic and inorganic components that may need treatment depending on final use. Please quantify how much wastewater is likely to be produced overall, and how that water will be stored, treated and/or disposed.

#19])> <([#20 [*3.7.1.2*] [*3.4.6*] 12) 4.5.1 Water Resources, 4-31 to 4-37: USFWS shares all the concerns of water quality impacts identified on pages 4-31 and 4-32 in Section 4.5. USFWS has particular concern for designated critical habitat for the Colorado pikeminnow, razorback sucker, bonytail, and humpback chub in the White and Green Rivers, plus their associated tributaries (e.g., Piceance and Yellow Creeks). The PEIS should clarify that water depletions would decrease the assimilative capacity of the receiving streams for any discharges associated with oil shale and tar sands development, and incorporating the following information:

Many kinds of contaminants enter into the upper basin rivers- e.g., mercury from airborne power plant emissions, selenium entering the river via groundwater irrigation return, hydrocarbons running off of oil and gas development sites, pesticides from agricultural areas.

In addition, this section should include more discussion on the possible contaminants that may come off of runoff from oil shale and tar sands operations, including selenium, which is of particular concern for endangered fishes. Water depletions and replacement with lower quality waters are of particular concern in feeder streams and backwater areas with limited flushing (Woodward et al. 1985). In sum, water depletions alone can lead to increased concentrations of existing contaminants; that is, water quality is tied to water quantity. If there is less water to dilute these contaminant loads in western rivers, the effect on all aquatic organisms, endangered fish included, is magnified.

#20])> <([#21 [*3.4.1*] [*3.7.1.2*] [*3.7.2*] [*3.7.3.4*] [*3.7.3.6*] [*3.7.3.11*] 13) 4.5.1.3 Contaminants, 4-37 to 4-39: Oil shale and tar sands development may cause significant effects to threatened and endangered species, migratory birds and other wildlife species, as well as, ground and surface waters (Bartis et al. 2005).

Uncontrolled development associated with the oil shale industry in northeastern Estonia has resulted in significant ecological damage (Tuvikene et al. 1999). Runoff from oil shale mines, oil shale ash piles, and associated power plants have resulted in oil shale leachate polluting rivers and lakes (Truu 2004, Tuvikene et al. 1999). Pollution resulting from the leaching of oil shale deposits has also been documented in the United States (Amy et al. 1980, Strollenwerk and Runnells 1981).

There are interrelated and interdependent effects from infrastructure associated with oil shale and tar sands development including new roads, new reservoirs, new powerplants, pipelines, and powerlines. In future correspondence and ESA interagency consultation, the USFWS will request a more detailed analysis of all effects of the proposed action on federally-listed threatened and endangered species, migratory birds, and wetlands.

We recommend the BLM require ground and surface water quality data for each future project be measured and made available online. Waste water and leachate concentrations should be compared to established NPDES standards.

For contaminants where no NPDES levels have yet been set, we recommend that a Biological Technical Advisory Group (BTAG) be organized with EPA, BLM, and the USFWS to identify which contaminants should be monitored and what concentration levels would trigger enhanced mitigation to protect fish, wildlife, and plants.

#21])> <([#22 [*3.7.1.2*] [*3.7.4.6*] 14) 4.5.2 Water Budget, 4-41: All of the alternatives would require extensive water resources. The upper Colorado River basin is a

heavily-developed, desert river system. If any future project (or series of projects) that requires large quantities of water from the upper basin rivers is authorized, meeting stream flow needs of endangered fishes will be difficult.
Critical habitat has been designated for endangered fish species along segments of various large rivers in the upper Colorado River Basin, including the Green and White Rivers. Most of these rivers have established flow recommendations for endangered fish. (Flow recommendations for the
White River are currently under development.) However, even when flow recommendations exist,
this does not guarantee the flow recommendation will be met. As an example, in the San Juan River
there is only one major dam being regulated by one agency and base flows are supposedly being protected by an established set of flow recommendations. Despite this, there have been years when
the prescribed base flows were not met. This was the case in 2002, when the recommended minimum base flows of 500 CFS were not being met in the river channel downstream of Farmington, NM. In fact, flows were less than 250 CFS for long periods of time in almost 150 miles
of river. This had highly detrimental effects on the native fish community, concentrating both contaminants and nonnative fish into the same small pool habitats with the native fish. While most
larger sub-adult and adult native fish were able to weather that low-flow summer, almost an entire
year-class of newly-spawned native fishes (e.g., razorback sucker, Colorado pikeminnow, flannelmouth sucker, and bluehead sucker) were lost to predation by birds and nonnative fishes, high
water temperatures (leading to temperature-related stress and "ich" { *Ichthyophthirius multitiliis}* infections), and other associated stressors. The cumulative effect of large water depletion projects
on flows for endangere9. fish and critical habitat should be thoroughly considered and disclosed to
the public and other agencies in your analysis.
#22])> <([#23 [*3.7.1.2*] 15) Secs 4.5.2.1 and 4.5.2.2, 4-46-48: Upwards of 8,000 acre-feet of water could be required per project (less for underground projects).
Therefore, each project could be approaching 4.5 percent of the "available" water by 2050. We recommend that an analysis of how this might affect endangered fishes be included in the PEIS, and
we provide the following information for your consideration:
The White River, in particular, is at risk from oil shale related water depletions and potential . contamination. Flow recommendations are currently being developed by the Upper Colorado River
Endangered Fishes Recovery Program (Schmidt and Orchard 2002, Irving et al. 2002). Once the flow recommendations are finalized, a Programmatic Biological Opinion will be developed for the
White River. We recommend that BLM review the draft flow recommendations and determine the

effects of oil shale development on flows in the White River.
The White River has a relatively intact and healthy native fish community. Both the Utah Division
Water Budget for of Wildlife Resources (UDWR) and the USFWS have documented that both endangered Colorado
Colorado and Utah pikeminnow and the native three species (flannelmouth sucker, bluehead sucker, and roundtail chub)
of fishes are present in promising numbers in the White River. During the recent period, the number
of the endangered razorback sucker in the White River has increased, almost certainly due to augmentation of hatchery-raised fish. In 2011, razorback sucker larvae were collected in the White
River for the first time, indicating that natural spawning likely occurred.
The White River has relatively low numbers of nonnative fish species, which compete with native
endangered fish. Low, steady river flows that occur year-round and which lack high spring flow runoff tend to favor survival and proliferation of introduced, nonnative fishes over native fish species. Thus, any water development individually or cumulatively in the White River basin (or any
upper basin river), has the potential to modify the flow regime to favor introduced, nonnative fishes.
The PEIS provides no real cumulative quantification or rigorous landscape level analyses of change
given the overall developable acreage.
#23])> <([#24 [*3.7.3.12*] 16) 4.8 Impacts to Ecological Resources, Tables 4.8.1: Terms for impacts that are used in the PEIS such as "Large"/"Small" give no indication of how the impact was analyzed or the scale or scope of those impacts. It appears throughout the document that this was a judgment call. We recommend the PEIS provide more detail regarding the science, qualification, and scale of these impacts. **#24])>**
<([#25 [*3.7.3.4*] 17) 4.8.1.3 Wildlife and Migratory Birds 4-85: Please modify the wording because migratory birds do not always "fly over" mine sites. Whereas, water in contaminated leachate pools often attract them to mine sites, especially during migration.
The PEIS does not adequately address the potential use of wastewater impoundments or evaporation
ponds for wastewater disposal or identify measures to prevent migratory bird mortality in these facilities. Large tailings ponds are used in the tar sands development sites of Alberta. Those extensive impoundments have resulted in the loss of large numbers of birds.
#25])> <([#26 [*3.7.3.12*] 18) Chapter 4, Section 4.8.13.4 4-91,30-33: The PEIS states no raptors would be electrocuted because the spacing of the infrastructure would exceed that of the largest raptors in the study area. Without further definition of what the spacing would be this statement may be inaccurate. If the standard BLM intends to apply to any electric power lines constructed in conjunction with oil shale/tar sands development are those of the APLIC 2006 Suggested Practices manual then please be aware these standards will not eliminate raptor
electrocutions. The current APLIC standards are based on "dry feather" conditions. That is the spacing recommendations from APLIC would prevent electrocutions only if the bird feathers are dry. If they are wet then the spacing requirements to fully prevent bird electrocutions would be

greater. The APLIC 2006 Suggested Practices manual discusses this point directly.
#26])> <([#27 [*3.7.5.1*] 19) 4.8.2 (and 1.4.6) Greater sage-grouse Mitigation Measures, 4-124 to 4-126: We recommend that that the PEIS incorporate information related to the new effort by BLM to protect
the greater sage-grouse through range-wide resource management plan amendments, including the
relatively new delineation of priority and general habitat for sage-grouse (at least in Colorado). We also
recommend incorporating the noise restrictions as set forth in the relatively new Disturbance Density
Calculation Tool that is used for projects located in core or priority habitat areas.
#27])> <([#28 [*3.7.3.4*] [*5*] 20) 4.8.2.3 Migratory Birds 4-129: We recommend a more detailed discussion be provided outlining the potential for migratory birds to
be attracted to watery, yet contaminated, pits created for a project. Fencing and netting to prevent Wildlife and bird use may reduce potential impacts. Radar, noise makers, and regular effectiveness monitoring is also encouraged.
#28])> <([#29 [*3.7.3.5*] 21) Chapter 5, Section 5.8.1.3.9, 5-84,45-46: We disagree with the statement in this section regarding raptor response to fire (burned habitat). Rangeland systems with repeated fire (i.e. cheat grass fire cycles) are over time converted to annual grasslands with negative consequences for raptor populations. Ongoing work in Utah (with involvement from UDWR and the USFWS) is demonstrating this quantitatively for golden eagle populations. This is likely true for many other raptors that inhabit rangeland systems but corresponding investigations to demonstrate this have not yet been undertaken.
#29])> <([#30 [*3.7.4.3*] 22) Table 6.1.1-8, 6-38, Table 6.1.2-2, 6-97: Correction needed: The western yellow-billed cuckoo could be found in appropriate habitats in Colorado in Rio Blanco and Garfield Counties.
#30])> <([#31 [*3.7.4.3*] 23) Table 6.1.1-8, 6-47: Correction needed: The Mexican spotted owl could be found in appropriate habitats in Colorado in Rio Blanco and Garfield Counties.
#31])> <([#32 [*3.7.5.1*] 24) 6.1.2.7.4, Fig. 6.1.2-5 Greater sage-grouse Habitat, 6-80, 6-108: "Under this alternative [2], oil shale development would be excluded from core or priority habitats for the greater sage-grouse ... " This statement and section, and associated maps, should be updated
with the new Colorado Parks and Wildlife greater sage-grouse priority habitat map that was issued
March 13, 2012 (http://www.blm.gov/co/st/en!BLM_Programs/wildlife/sage-grouse.html). This may result in some areas being removed from the preferred alternative that occur within priority habitat (e.g., scattered parcels in the southern portion of the potential lease area in Colorado).
#32])> <([#33 [*3.7.3.2*] 25) Figure 6.1.2-3 6-81: It seems inappropriate to have the figure for wild herd management included here.
#33])> <([#34 [*3.7.4.5*] 26) Table 6.1.2-3 Figure 6.1.2-4 Figure 6.1.2-5, 6-104 to 108: The location of this table and figure seems misplaced; they should be relocated to the section that refers to them. (This table and figure should be located where Figure 6.1.2.3 is.)
#34])> <([#35 [*4.3*] 27) Sec. 6.2.6.1.1 Assumptions, 6-481: The assumptions presented here are based on data that are fairly old. We recommend that the
information be updated. Most companies in the region are developing surface locations with multi- well pads (UDOGM, 20 12). Many existing 40-acre surface locations in Utah have

multiple wells; in Colorado, most well pads have multiple wells. This is good since it restricts the amount of 20-acre surface developments; however, pad sizes have increased. Reclamation has not occurred at the levels anticipated with the continued expansion to add more wells to existing facilities.
#35])> <([#36 [*4.2*] 29) 6.2.6.2.4 Major Activities in Tar Sands Areas Table 6.2.6-4: Please clarify that phosphate and other mineral mining have the potential to become cumulative contaminant point sources for leachate contaminants (i.e., selenium and arsenic) along with Tar Sands development. In a large landscape such as the Colorado River basin, or the Diamond Mine area, each of these cumulative contaminant inputs have the potential to become highly significant over time and space with impacts to aquatic resources, Colorado River Basin fishes, and migratory birds.
#36])> <([#37 [*3.7.4.4*] [*9.2*] 30) F.1: The PEIS states that all post-lease activities will be required to comply with ESA, BGEPA, and MBTA. However, compliance with the MBTA is challenging. Oil shale and tar sands resources development is likely to result in the take of MBT A species and there is currently no mechanism for USFWS to permit the unintentional (incidental) take of migratory birds associated with these actions. The PDEIS should encourage the applicants to communicate with the USFWS to address and minimize the potential for unintentional take of migratory birds.
#37])> <([#38 [*3.7.4.4*] **31) F.1:** Text of the opening paragraph on page F-3 refers only to listed species. The text should be corrected
to indicate that the appendix addresses conservation measures for eagles covered under the BGEP A,
and birds covered under the MBTA, in addition to threatened and endangered species.
We suggest that the intent of the introductory paragraph of Appendix F is to provide measures to address each statute. If so, we suggest the use of separate headers for ESA, BGEP A, and MBT A
species and discuss conservation measures for each group of species covered under each of these Federal wildlife statutes. **#38])>**
<([#39 [*3.7.4.5*] [*5*] **32) page F-8:** For item 6 on page F-8, the APLIC manual for avoiding bird collisions with power lines should also be cited-- *Avian Power Line Interaction Committee (APLIC). 1994. Mitigating bird collisions with power lines: the state of the art in 1994. Washington, DC: Edison Electric Institute; 78 p* --along with a recommendation to follow all measures in the manual that apply. (A revised version ofthe APLIC manual is due to be issued in 2012.) **#39])>**
<([#40 [*3.7.4.4*] **33) F.2.8 F-17:** We recommend surveys for the Dudley Bluffs bladderpod and twinpod extend up to 600 meters (roughly 2,000 feet) from project activities within suitable habitat.
#40])>
<([#41 [*3.7.5.1*] [*3.7.5.3*] **34) F.3.1 F-19:** Please incorporate greater sage-grouse as a priority and include general habitat maps for sage-grouse. We also suggest changing the wording of#3 to state "When possible, avoid siting energy developments in priority habitats," rather than simply breeding habitats. **#41])>**
<([#42 [*3.7.4.3*] [*3.7.4.4*] **35) F.3.2 F-20:** To our knowledge, the yellow-billed cuckoo has not been documented within the oil shale lease area in Colorado. However, this could be due to lack of survey effort as cuckoos may occur in this area. The cuckoo conservation measures should be applied to suitable habitat in Colorado as well as in Utah.

#42])>
<([#43 [*3.7.4.4*] **36) F.4 F-21:** The text provides three items that BLM recommends for migratory bird conservation. In addition to these three items, the USFWS recommends that project planning include surveys for migratory birds and nests that would be undertaken prior to construction activities, as well as the identification of measures that will be taken to conserve active nests when located.
#43])>

OSTS_072
Organization: U.S. Environmental Protection Agency, Region 8, Suzanne Bohan
Received: 5/3/2012 12:00:00 AM
Commenter1: Suzanne Bohan - Denver, Colorado 80202 (United States)
Organization1:U.S. Environmental Protection Agency, Region 8
Commenter Type: Federal Government
Classification: none
Submission Category: Letter
Submitted As: Email & Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** aziech 5/18/2012 12:00:00 AM
Attachments: OSTS2012D00073.htm (OSTS_072-59123.htm Size = 1 KB)
OSTS_072_EPA_Email_OSTS2012D00073.pdf (OSTS_072-59122.pdf Size = 2679 KB)
Submission Text
In accordance with our responsibilities under Section 102(2)(C) of the National Environmental Policy Act (NEPA), 42 U.S.C. Section 4332(2)(C), and Section 309 ofthe Clean Air Act (CAA), 42 U.S.C. Section 7609, the U.S. Environmental Protection Agency Region 8 (EPA) has reviewed the Bureau of Land Management's (BLM) Draft Programmatic Environmental Impact Statement and Possible Land Use Plan Amendments for Allocation of Oil Shale and Tar Sands Resources on Lands Administered by the BLM in Colorado, Utah, and Wyoming (Draft PEIS).

Background and Project Description
In 2008, the BLM amended twelve land use plans in Colorado, Utah and Wyoming to designate public lands administered by the BLM as available for commercial leasing for oil shale or tar sands
development through the preparation of a PEIS (2008 OSTS PEIS). These 2008 amendments made
approximately 2 million acres of public land available for application for leasing and development of oil shale, and approximately 431 ,000 acres of public land available for application for leasing and
development of tar sands. In 2009 the 2008 OSTS PEIS was challenged in a lawsuit brought by a coalition of environmental organizations. As part of the resulting settlement agreement filed with the
U.S. District Court in Colorado in February of2011, BLM decided to take a fresh look at the land allocations analyzed in the 2008 OSTS PEIS and consider excluding certain lands from future leasing of oil shale and tar sands resources.
It is important to note that the Preferred Alternative represents an approximate 77% reduction in land

proposed as available for application for oil shale leasing as compared to the 2008 OSTS PEIS decision. Similarly for tar sands leasing, the Preferred Alternative represents an approximate 79% reduction in land proposed as available compared to the 2008 decision. These changes represent significant steps toward protecting environmental resources. The Draft PEIS analyses four alternatives: Alternative 1 (no action), Alternative 2 (conservation focus), Alternative 3 (research lands focus) and Alternative 4 (moderate development). Alternative 2 consists of two options for oil shale. Alternative 2(a) excludes all lands having wilderness characteristics (LWC), the whole of the Adobe Town "Very Rare or Uncommon Area," core or priority sage-grouse habitat and all areas of critical environmental concern (ACEC). Alternative 2(b) lands available for application for leasing and development of oil shale would be the same as Alternative 2(a); however, only for research, development and demonstration (RD&D) leases. A key benefit of Alternative 2(b) would be facilitation of a robust RD&D program for oil shale development. The BLM has identified Alternative 2(b) as the Agency's Preferred Alternative.

The EPA's Comments and Recommendations

The EPA appreciates having had the opportunity to consult with the BLM on the Draft PEIS and to see that many of our specific comments have been addressed. We remain committed to working with BLM to seek ways to address a few additional comments. The EPA focuses these comments on the need for rigorous NEPA analysis at future leasing and project decisions, particularly analysis regarding water resources and air quality. Along with an explanation of these comments, we offer recommendations on how the BLM might address them.

<([#1 [*9.3*] A. NEPA at Future Leasing and Project Decisions

The EPA's most essential remaining recommendation is that BLM make a strong and clear commitment in the Final PEIS that the agency will conduct additional NEP A analysis and disclosure prior to leasing any land for oil shale/tar sands development and also after development technologies and their potential impacts are better defined and understood. As the Draft PEIS explains, oil shale development will involve untested technologies where the magnitude and nature of impacts is currently undetermined, but may be significant. Furthermore, key information needed to evaluate and mitigate potential impacts is not yet available, including future project locations, operating characteristics, size and scope of the projects, and likely impacts and mitigation measures.

Given this situation, the EPA is reviewing this document with the assumption that the level ofNEPA at future leasing and project decisions will be an EIS, and that BLM will perform rigorous NEPA analyses when technologies are better understood. We believe it is important for the Final PEIS to include a commitment to preparing EISs for future leasing and project decisions, and to confirm that BLM will fully disclose direct, indirect and cumulative impacts of future leasing and development decisions and apply mitigation necessary to reduce those impacts.

The Draft PEIS notes that the concept for the Preferred Alternative emerged during development of this document, is presented only in brief, and will be developed further in preparation of the Final PEIS (page 2-35). The EPA believes the Preferred Alternative gives BLM an opportunity to acquire important data during RD&D leasing and prior to commercial leasing that will be useful to inform future NEP A analyses. The EPA recommends the Final PEIS discuss how the BLM intends to use the RD&D leasing process to assess potential impacts on water resources and air quality, thereby positioning BLM to mitigate these potential impacts in the event commercial leasing becomes viable. In addition, we recommend the Final PEIS identify the

types of data sets that BLM may require be provided by RD&D lessees. **#1|)>**
<([#2 [*9.6*] With respect to future leasing decisions, it would be useful to include information in the Final PEIS regarding criteria the BLM may be considering for converting research leases to commercial scale leases. This disclosure would be putting both industry and the public on notice regarding the decisionmaking process that BLM intends to undertake upon receipt of commercial lease applications.
#2|)> B. Water Resources

<([#3 [*3.4.5*] *I. Surface Water*
The EPA recommends that the Final PEIS include the most up-to-date information on the existing
quality of surface waters in these areas is included in the document, which can be obtained from each State (see below). This is particularly important since water bodies in portions of the study area
are already impacted where significant oil and gas development is occurring. The number of impaired streams listed on the current 303(d) lists of impaired waters within both the Piceance Basin
in Colorado and the Uinta Basin in Utah have increased since the previous listings, as outlined below.
Under the Clean Water Act (CWA), states are required to establish and maintain water quality standards to protect water bodies such as rivers, lakes and streams. Water bodies that do not meet these standards are placed on the State's Section 303(d) List of impaired waters. The Draft PEIS provides 2006 data for the 303(d) Lists from Colorado, Utah and Wyoming. Updated information is
now available to replace 2006 impaired water body data in Table 3.4.1-1 (pages 3-64 and 3-65) within the study areas of Colorado, Utah and Wyoming. 2010 data is available for Utah, while 2012
data is in the process of being finalized for Colorado and Wyoming. The EPA recommends that the
Final PEIS reflect these updates, as discussed in the following paragraphs.
In Colorado, the draft 2012 303(d) List indicates that water quality has become further impaired in
the Piceance Basin since 2006. This draft 2012 303(d) List identifies five additional river segments
in the basin. Colorado's Monitoring and Evaluation List (M&E List) identifies water bodies exhibiting some stress in the aquatic ecosystem, but where more data is needed to make an appropriate determination. The M&E List identifies one additional river segment within the Piceance-Yellow Creek watershed between the 2010 and 2012 lists. Based on the potential oil shale
development in this area in addition to ongoing and planned oil and gas development, there is a trend
toward further impairment and the potential for additional violations of surface water quality standards and the CW A if additional pollutant loads reach these impacted river segments. Colorado
finalized their 2012 303(d) and M&E lists and submitted the 303(d) list to EPA on March 23, 2012

for approval. These lists can be found online at
http://www.cdphe.state.co.us/op/wqcc/Reports/303(d)/93 20 12(03).pdf. The following table identifies 5 additional water segment impairments in the Piceance Basin.

Colorado ID/Water/Segment Impairment
COLCWH13c /Yell ow Creek Fe/ (Tree) and Aquatic Life
COLCWH14a/ Piceance Creek Fe/ (Tree)
COLCWH15/ Piceance Creek/ Aquatic Life (provisional)
COLCWH20/ Black Sulfur Creek/ Aquatic Life (provisional)
COLCWH23/ W. Douglas Creek/ Aquatic Life
Source: CDPHE, 2012

In Utah, the 2010 303(d) List indicates that water quality has also become further impaired in the Uinta Basin since 2006. Based on the ongoing and planned oil and gas development in this area in
addition to potential oil shale and tar sands development, there appears to be a high likelihood of further impairment and the potential for additional violations of surface water quality standards and
the Clean Water Act if additional pollutant loads reach these impacted river segments. The 2010 303(d) list can be found at http://www.epa.gov/waters/ir/index.html.

Utah ID/Water/ Segment Impairment
UT14050007-003/ Evacuation Creek/ TDS
UT14030001-001/ Cottonwood Wash/ Benthic Macro-invertebrate Assessment (BMAI)
UT14060006-00 1/ Willow Creek/ BMAI
UT14060004-002/ Indian Canyon Creek/ Arsenic and boron (in addition to TDS)
UT 14060005-003/ Ninemile Creek/ Temperature
Source: UDEQ, 2010

In Wyoming, the draft 2012 303(d) List indicates that water quality impairments have not changed
within the project's study area portion of the Green River Basin since 2006. Wyoming finalized their
draft 2012 303(d) list on March 27, 2012. This list can be found at
http://deq.state.wy.us/wqd/watershed/Downloads/305b/2012/WY2012IR_Draft_Doc11-1058.pdf.

The EPA recommends that BLM include all updated 303(d) list information for each state in the Final PEIS. EPA also recommends that the Final PEIS provide a discussion of the changes between
2006 and 2012 to clearly disclose any increases in impaired water bodies for each state's study area.

Inclusion of this data represents a key piece of information needed to fully disclose current water quality conditions and to evaluate, and if necessary mitigate, impacts of any future oil shale and tar
sands development. **#3])>**

<([#4 [*3.4.4*] *2. Groundwater*

In order to provide a baseline to accurately assess the potential impacts of the alternatives, we recommend that the Final PEIS add additional information to more thoroughly characterize

groundwater resources in Utah and Wyoming. Specifically, we recommend the Final PEIS include
the delineated depth of underground source of drinking water (USDWs) in the study areas as well as
the quality of each zone within these aquifers, to the extent there is existing information to do so.
Without this information, the Draft PEIS provides little information regarding the location or depth
of USDWs. All groundwater that has not been exempted through the aquifer exemption process and
meets the definition of USDW at 40 C.F.R. § 144.3 is protected under the Safe Drinking Water Act.
A USDW is defined as an aquifer or portion of an aquifer that supplies any public water system or
that contains a sufficient quantity of ground water to supply a public water system, and currently
supplies drinking water for human consumption, or that contains fewer than 10,000 mg/1 total
dissolved solids (IDS) and is not an exempted aquifer. Aquifers are presumed to be USDWs unless
they have been specifically exempted or ifthey have been shown to fall outside the definition of a
USDW (e.g., over 10,000 mg/L IDS). We provide the following sources for assistance to better
characterize groundwater resources in the Final PEIS within Utah and Wyoming:
• In Utah, the Utah Geologic Survey has collected detailed groundwater information for its
Uinta Basin Water Study. The purpose of this study is to better understand and characterize
groundwater resources in the Uinta Basin in recognition of the fact that areas of potential oil
shale development overlap with natural gas fields in the basin. The study can be found at
http://geology.utah.gov/emp/UBwater_study/.
In addition, the Greater Natural Buttes Draft Resource Management Plan (RMP) provides
extensive characterization of the three major aquifer systems in the Uinta Basin. This
information is provided in Section 3.13.3 of the Draft RMP, and can be found at
http://www. blm.gov /ut/st/enlfo/vemal/planning/nepa _*I* greater_ natural_ buttes.html.
• In Wyoming, the Water Development Office recently completed the 2010 Green River Basin
Plan Update, which presents a basinwide perspective on water resources and includes
identification of the major aquifers in the basin and the physical and chemical characteristics
of their groundwater. The plan can be found at http://waterplan.state.wy.us/planlgreenlgreenplan.
html.
#4])>
<([#5 [*3.4.4*] *3. Issues Pertaining to Both Groundwater and Surface Water*
Baseline Characterization of Drinking Water Sources:
In order to accurately assess the potential impacts of the alternatives on drinking water sources, we
recommend that all sources of drinking water in the study area be characterized in the Final PEIS.
These sources include water in streams, rivers, lakes, springs and aquifers that is used as a supply of
drinking water. This can be accomplished by including a discussion in the Final PEIS of each State's
source water protection program, and including state-designated surface and groundwater

protection
zones. The EPA recommends this step so that the reader can fully understand the extent and location
of these important resources. We recommend including a map illustrating locations of source water
protection zones (both groundwater and surface water) for municipal supply. In addition, we provide
the following contacts for assistance obtaining this information for each state:
• John Duggan at the Colorado Department of Public Health and Environment, Water Quality Control Division at (303) 692-3534
• Kate Johnson at the Utah Division of Environmental Quality, Division of Drinking Water at (801) 536-4206
• Kim Medina at the Wyoming Department of Environmental Quality, Water Quality Division at (307) 473-3476, and Mark Pepper at the Wyoming Association of Rural Water Systems at (307) 436-8636 **#5])>**

<([#6 [*3.7.2*] *4. Wetlands*
The Draft PEIS indicates that BLM will ensure that impacts to jurisdictional wetlands (those under
the regulatory jurisdiction of the Clean Water Act (CWA), Section 404, and the USACE) would be
avoided or mitigated. The EPA would like to clarify that the CW A §404(b)(1) guidelines require
applicants to avoid, minimize and mitigate for impacts to all waters of the United States. We also
note that according to Executive Order (EO) 11990, federal agencies are required to minimize the
destruction, loss or degradation of wetlands, and to preserve and enhance the natural and beneficial
values of wetlands in carrying out the agency's responsibilities, regardless of the jurisdictional status
of the wetlands. To this end, we recommend that the Final PEIS include a commitment from BLM to
comply with these requirements for all wetlands, not solely jurisdictional wetlands.
Throughout the Draft PEIS the BLM requires future projects to mitigate for impacts to wetlands and
riparian areas. CW A §404(b)(1) requires permit applicants to first avoid impacts to waters of the
U.S., then minimize the unavoidable impacts, prior to mitigating the remaining unavoidable impacts.
We recommend that the Final PEIS reflect these CWA 404(b)(l) requirements wherever there are
anticipated impacts to waters of the U.S. This will ensure that potential applicants are on notice of
the full extent of requirements for the protection of waters of the U.S.
C. Air Quality **#6])>**
<([#7 [*3.5.8*] [*3.5.5*] *1. Need for Additional Disclosure of New Clean Air Act Designations*
The Draft PEIS is lacking recently published important information regarding two CAA

designations
that will affect future development in the study area. While not a part of the NEPA requirements that
must be included in the PEIS, before finalizing an approval of any project, the CAA requires that the
BLM conduct a general conformity analysis for any project emissions occurring in such areas
designated as nonattainment or maintenance for the National Ambient Air Quality Standards
(NAAQS). The CAA states that in such areas, a determination must be made that the emissions
(either direct or indirect) from a federal action will not exceed a *de minimis* threshold level measured
in tons per year for the criteria pollutant of concern. If the Action exceeds the *de minimis* level, then
a conformity determination is required to document how the federal action will affect
implementation of the applicable implement plan to reach attainment.
The EPA issued a final rule on April30, 2012, designating Sublette County and portions of Lincoln
and Sweetwater counties in Wyoming as a marginal nonattainment area for ozone. Some of the
proposed area available for oil shale leasing under the Preferred Alternative in Wyoming overlaps
with this designated ozone nonattainment area in Sublette County and Sweetwater County. The final
rule also designated Duchesne and Uintah counties in Utah as an ozone unclassifiable area. Some
proposed areas for oil shale and tar sands leasing under the Preferred Alternative in Utah overlap
with this designated ozone unclassifiable area in both Duchesne and Uintah counties. Given this
situation, during the NEP A process for future leasing and project decisions in these areas, it will be
important for BLM to fully analyze and disclose impacts and necessary mitigation, including the
possibility of no net increase in emissions depending on the extent of the nonattainment problem.
Therefore, the EPA recommends that future oil shale leasing and plan development in the designated
ozone nonattainment area in Wyoming describe whether general conformity analysis is required
(i.e., whether the relevant emissions exceed *de minimis* thresholds) and how the future proposed
actions would comply with the applicable implementation plan. If a general conformity analysis is
necessary, the EPA recommends that it be included in the BLM's NEPA analysis. **#7])>**
<([#8 [*6.2.1*] *2. Power implications of in situ technologies for oil shale development*
The Draft PEIS assumes future in situ projects would require 600 MW of additional electrical
generation capacity when commercial production levels are reached, and that this new electricity
capacity would be provided by conventional coal-fired plants. In view of the potential magnitude of
this additional energy need and the air quality in the region, it will be essential to fully analyze and
be prepared to discuss in future NEP A documents the potential environmental impacts and
mitigation measures associated with additional energy sources. We also strongly recommend that
BLM commit to analyze a range of power generation options, including natural gas and renewable

sources in view of currently development activity and air quality. **#8])>**

The EPA's Rating
<([#9 [*1.4*] Consistent with Section 309 of the CAA, it is the EPA's responsibility to provide an independent review and evaluation of the potential environmental impacts of this project. In accordance with our policies and procedures for reviews under NEP A and Section 309 of the CAA, the EPA is rating this Draft EIS as "Environment Concerns - Insufficient Information" (EC-2). The "EC" rating indicates that our review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce these impacts. The "2" rating indicates that the Draft EIS does not contain sufficient information for the EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment. We have enclosed a description of the EPA's rating system for your convenience (Attachment 1). **#9])>**
We appreciate the opportunity to comment on this document, and hope our suggestions for improving it assist you with preparation of the Final PEIS. We would be happy to meet to discuss these comments and our suggested solutions. If you have any questions or requests, please feel free to contact either me at 303-312-6925 or David Fronczak of my staff at 303-312-6096.

OSTS_073
Organization: U.S. DOI, National Park Service, Intermountain Reg, John Wessels
Received: 5/3/2012 12:00:00 AM
Commenter1: John Wessels - Lakewood, Colorado 80228 (United States)
Organization1:U.S. DOI, National Park Service, Intermountain Reg
Commenter Type: Federal Government
Classification: none
Submission Category: Letter
Submitted As: E-Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/17/2012 12:00:00 AM
Attachments: OSTS2012D00074.htm (OSTS_073-59125.htm Size = 1 KB)
OSTS_073_NPS__Email_OSTS2012D00074.pdf (OSTS_073-59124.pdf Size = 3145 KB)
Submission Text
See Attachment.

United States Department of the Interior
NATIONAL PARK SERVICE
Intermountain Region
12795 West Alameda Parkway
Lakewood, CO 80228
In Reply Refer to: N16 (IMDE-NR) MAY 0 3 2012
Memorandum
To:
From:
Subject:

VIA ELECTRONIC COPY ONLY-NO HARD COPY TO FOLLOW
Colorado State Director, Bureau of Land Management
Attn: Sherri Thompson, Programmatic EIS Manager
Regional Director, Intermountain Region
National Park Service comments on Draft Programmatic Environmental Impact Statement and Possible Land Use Plan Amendments for Allocation of Oil Shale and Tar Sands Resources m1 Lands Administered by the Bureau of Land Management in Colorado, Utah, and Wyoming.

The National Park Service (NPS) thanks you for the opportunity to comment on the Bureau of Land Management's (BLM) subject Draft Programmatic Environmental Impact Statement (PEIS). These comments were developed jointly by the NPS's Natural Resource Stewardship and Science Directorate and h1termountain Region staff reviewers.

NPS Selection of Preferred Alternative

We understand the scope of decision making under the PEIS is essentially an administrative action designating public lands administered by the BLM as either available or unavailable (allocation) for applications for commercial leasing, exploration, and development for oil shale and tar sands resources.

NPS also recognizes that the allocation is programmatic in nature and based only upon available and known potential impacts on resources from BLM's oil shale and tar· sands decision making. Numerous NPS units, including: Arches, Black Canyon of the Gunnison, Canyonlands, Capitol Reef, and Rocky Mountain National Parks; Colorado and Dinosaur National Monuments; Glen Canyon National Recreation Area; National Historic Trails; and National Natural Landmarks could be potentially impacted by the decision making on this PEIS. Resources potentially affected are: air quality and climate, natural sound, ecological resources (aquatic, wildlife, plants, threatened and endangered species), visual, cultural (cultural landscapes, historic structures and setting, archaeological sites), and night sky.

<([#1 [*2.3.1*] Lacking successful demonstration of technologies necessary for commercial development of oil shale and tar sands, we believe it would be impractical to conduct site-specific National Environmental Policy Act (NEPA) or Section 106 of the National Historic Preservation Act (NHPA) analyses on any application for leasing oil shale or tar sand acreage at this time. We understand that BLM considers the most appropriate time to raise and consider leasing issues to be "if and when" commercial viability for oil shale and tar

sands is demonstrated and leasing applications occur. Information gained from the BLM's oil shale and
tar sands research, development, and demonstration program is critical and necessary to leasing considerations. Therefore, the NPS supports Alternative 3- The Research Focus Alternative as the
PEIS's Preferred Alternative by chronological necessity.
#1])> In addition to our comments herein, we incorporate by reference our previous subject correspondence: 1)
April 18, 2008 comment memo on the 2008 PEIS, 2) May 16, 2011 seeping comment memo for the
current PEIS in support of our selection of Alternative 3 as the preferred alternative and for future use,
and 3) November 11, 2011 comment memo on the Administrative Draft PEIS.
<([#2 [*3.1.1*] [*3.9.1*] National Historic Trails
The NPS conveyed preliminary comments from the National Trails Intermountain Region (NTIR) office
via a November 7, 2011 email to meet a comment deadline for Chapters 1 and 2.
The NPS supports the PEIS having a justified and current approach to management of National Historic
Trails. The NPS administers the California, Oregon, Mormon Pioneer, and Pony Express National
Historic Trails, which all cross the Green River Basin of Wyoming. The PEIS states that the national
historic trail corridor will consist of the trail and a corridor of "at least 0.25 mile" on either side of the
trail. However, recent revisions to BLM Resource Management Plans across the western states are
revising the past definition of a quarter-mile "trail corridor" and defining much broader corridors (up to
five miles or more on either side of the trail tread, depending on the nature of terrain that is visible from
contributing segments of the trail). In addition, new BLM guidance for the management of national
historic trails corridors, currently in national-level internal review, may adopt a similarly generous
definition of "trail corridor."
The NPS reiterates its belief that enough information exists at this time to devise a process for defining
appropriate adequate protective corridors for the National Trails. Without conducting site-specific
analysis, the PEIS could recommend a sufficient average protective corridor when calculating acreage
available or not available for application for commercial leasing. Instead of the specific acreage offered
in PEIS alternatives, the PEIS could use a range based on a defined process for corridor determination.

The NPS recommends this broader consideration of resource protection to National Historic Trails within
this PEIS.
#2])> <([#3 [*2.3.1*] Recommendation
While the NPS understands that additional analyses of specific proposals and technologies for the
development and production of oil shale or tar sands are committed to in this particular PEIS, NPS
believes that only Alternative 3- the Research, Development, and Demonstration (RD&D) action
alternative provides a phased process for resource protective decision-making. The NPS continues to
prefer Altemative 3 as the action alternative.
#3])> NPS Contacts
The NPS appreciates the opportunity to provide comments on the PEIS. If you have questions, or if we
can be of any further assistance, please do not hesitate to contact either of the NPS Cooperating Agency
representatives: 1) Geologic Resources Division- Pat O'Dell at 303-969-2013, or 2) Intennountain
Region- John Reber at 303-9q9-2418.
cc:
Tammy Whittington, Associate Regional Director, Resource Stewardship and Science, Intermountain Region (IMR)
Patrick Malone, Assistant Regional Director for Natural Resources, IMR
John Reber, Regional Energy Coordinator, Natural Resources, IMR
.Chris Turk, Environmental Quality Program, IMR
John Keck, Wyoming State Coordinator, IMR
Denis Davis, Utah State Coordinator, IMR
James Doyle, Chief of Communications and Legislation, IMR
Cheryl Eckhardt, NEP All 06 Specialist, IMR
Crystal Salas, Environmental Protection Assistant, IMR
Nida Shaheen, Environmental Resource Specialist, IMR
Paul Chattey, Program Manager; Cultural Resources, IMR
Aar9n Mahr, Superintendent, National Historic Trails, IMR
Michael Elliott, Cultural Resource Specialist, National Historic Trails, IMR
Mary Risser, Superintendent, Dinosaur National Monument (NM)
A. Wayne Prokopetz, Chief, Research and Resource Management, Dinosaur NM
Kate Cannon, Superintendent, Canyonlands National Park (NP)
Mark Miller, Chief, Resource Stewardship and Science, Canyonlands NP
Todd Brindle, Superintendent, Glen Canyon National Recreation Area
AI Hendricks, Superintendent, Capitol ReefNP
Connie Rudd; Superintendent, Black Canyon of the Gunnison NP
Chris Eckert, Superintendent, Colorado NM
Vaughn Baker, Superintendent, Rocky Mountain NP
Heather Germaine, National Natural Landmarks Program, IMR
Dave Steensen, Chief, NPS-NRSS Geologic Resources Division (GRD).

Gary Rosenlieb, Acting Chief, NPS-NRSS Water Resources Division
Carol McCoy, Chief, NPS-NRSS Air Resources Division
Pat O'Dell, Petroleum Engineer;NPS Co-Lead for OSTS DEIS, NPS-NRSS GRD
Sarah Quinn, Renewable Energy Coordinator, NPS-NRSS GRD ·
Ray Sauvajot, Chief, Natural Resources Program, NPS-Pacific West Region

OSTS_074
Organization: U.S. DOI, U.S. Geologocial Survey (USGS), James Devine
Received: 3/27/2012 12:00:00 AM
Commenter1: James Devine - Reston, Virginia 20192 (United States)
Organization1:U.S. DOI, U.S. Geologocial Survey (USGS)
Commenter Type: Federal Government
Classification: none
Submission Category: Letter
Submitted As: E-Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/14/2012 12:00:00 AM
Attachments: OSTS2012D00075.htm (OSTS_074-59127.htm Size = 1 KB)
OSTS_074_2012_BLM__OSTS_PEIS_USGS_OSTS2012D00075.doc (OSTS_074-59126.doc Size = 197 KB)
Submission Text
See Attachment.

United States Department of the Interior

U. S. GEOLOGICAL SURVEY
Reston, VA 20192

In Reply Refer To: March 27, 2012
Mail Stop 423

Bureau of Land Management
Oil Shale and Tar Sands PEIS
Argonne National Laboratory
EVS Division, Building 240
9700 South Cass Avenue
Argonne, Illinois 60439

Subject: Draft Resource Management Plan (RMP) Amendments and Draft Programmatic Environmental Impact Statement (PEIS) for the Allocation of Oil Shale and Tar Sands Resources on Lands Administered by the Bureau of Land Management (BLM) in Colorado, Utah, and Wyoming

Dear Sir,

As requested by your correspondence of January 27, 2012, the U.S. Geological Survey (USGS) has reviewed the subject draft resource management plan and draft programmatic environmental impact statement and offers the following comments.

COMMENTS

<([#1 [*3.7.3.12*] 3.7.3.2 Birds

General: The document does not include the data and information available from the USGS Breeding Bird Survey. The USGS Breeding Bird survey includes routes that are close to the project area. We suggest the Final EIS include the data and information available from the USGS Breeding Bird Survey.

Route locations are available at:
http://www.pwrc.usgs.gov/BBS/results/routemaps/routeMapStatic.html.

The list of species for each route is available at:
https://www.pwrc.usgs.gov/BBS/PublicDataInterface/index.cfm.

The routes are available at:
http://www.pwrc.usgs.gov/BBS/results/routemaps/routeAssignMap.cfm. **#1])>**

<([#2 [*3.7.4.11*] Pg. 3-185: We suggest that the Final EIS include the data and information on the home-range characteristics of adult Mexican Spotted Owls (Strix occidentalis lucida) in southern Utah available in: Willey, D. W.; van, Riper, III, C. 2007. Home range characteristics of Mexican Spotted Owls in the canyonlands of Utah. Journal of Raptor Research 41:10-15
#2])>
<([#3 [*3.7.4.11*] 6.2.1.7.4 Threatened, Endangered, and Sensitive Species

Table 6.2.1-9: The degree to which populations may be affected depends on the status of the species; however, the table does not provide information about the status of the listed species. We suggest the Final EIS provide a general summary of the status of the listed species. For example; the trends and status of the avian species listed can be found at http://www.mbr-pwrc.usgs.gov/bbs/bbs.html and in: Sauer, J. R., J. E. Hines, J. E. Fallon, K. L. Pardieck, D. J. Ziolkowski, Jr., and W. A. Link. 2011. The North American Breeding Bird Survey, Results and Analysis 1966 - 2009. Version 3.23.2011 USGS Patuxent Wildlife Research Center, Laurel, MD.
#3])>

Thank you for the opportunity to review and comment on the Draft RMP and Draft PEIS. If you have any questions concerning our comments, please contact Gary LeCain, USGS Coordinator for Environmental Document Reviews, at (303) 236-1475 or at gdlecain@usgs.gov.

Sincerely,

/Judy Nowakowski signed for/

James F. Devine
Senior Advisor for Science Applications

OSTS_075
Organization: State of Wyoming, Matthew Mead
Received: 5/4/2012 12:00:00 AM
Commenter1: Matthew Mead - Cheyenne, Wyoming 82002 (United States)
Organization1: State of Wyoming
Commenter Type: Coop Agency - State Govt
Classification: none
Submission Category: Letter
Submitted As: Email & Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/14/2012 12:00:00 AM
Attachments: OSTS2012D00076.htm (OSTS_075-59129.htm Size = 1 KB)
OSTS_075_State_of_Wyoming_Email_OSTS2012D00076.pdf (OSTS_075-59128.pdf Size = 169 KB)
Submission Text
See Attachment.

MATTHEW H. MEAD
GOVERNOR
May 4, 2012
Office of the Governor
Sherri Thompson, Project Manager
Bureau of Land Management
Colorado State Office
9700 S. Cass Ave.
Argonne, IL 60439
STATE CAPITOL
CHEYENNE, WY 82002
RE: Comments on the Draft Resource Management Plan Amendments and Draft Programmatic Environmental Impact Statement for the Allocation of Oil Shale and Tar Sands Resources on Lands Administered by the Bureau of Land Management in Colorado, Utah, and Wyoming
Dear Ms. Thompson,
Thank you for allowing me to comment on the Draft Resource Management Plan (RMP) Amendments and Draft Programmatic Environmental Impact Statement (DPEIS) for the Allocation of Oil Shale and Tar Sands (OSTS) Resources. My comments are specific to Wyoming oil shale resources administered by the Bureau of Land Management (BLM). Wyoming state agencies will provide separate comment based on the particular charge of individual offices.
<([#1 [*9.7*] Oil shale development technologies have not been proven on a commercial scale. Further
research, development, and demonstration (RD&D) is warranted. I am optimistic that sensible RD&D will result in recovery methods consistent with Section 369 of the Energy Policy Act of

2005. I support leasing land for RD&D, but not in the manner identified in any of the alternatives.
I believe lease areas that are least susceptible to adverse impacts from oil shale pilot projects and easiest to reclaim are best suited to RD&D objectives. **#1])> <([#2** [*1.3*] The exclusions identified in Alternatives
2, 3 and 4 undermine a local, participatory approach to land determinations made via the RMP process in cooperation with state and local interests ..
The BLM is required to consider precluding oil shale development in these areas; however it is not required to make changes to management decisions.
#2])>

<([#3 [*9.2.4*] Sage Grouse Core Areas
The 2012 OSTS DPEIS requires the BLM to analyze and consider excluding oil shale development in the Greater Sage-Grouse core area. This decision is not consistent with Wyoming's Greater Sage-Grouse Core Area Protection strategy. Wyoming's Executive Order 2011-5 is recognized by the U.S. Fish & Wildlife Service as an adequate regulatory mechanism for the conservation of Greater Sage-Grouse. Executive Order 2011-5 does not preclude mineral development. It establishes conditions designed to maintain and enhance Greater Sage-Grouse habitat. The BLM should modify its management objective as it applies to Wyoming to maintain consistency with Wyoming's Greater Sage-Grouse Core Area Protection strategy.
#3])> <([#4 [*3.1.3*] [*9.2.1*] Lands with Wilderness Characteristics
The preferred alternative of the 2012 OSTS DPEIS proposes to exclude oil shale development in all areas the BLM has identified or may identify during the planning process, as having wilderness characteristics. Section 201 of the Federal Land Policy and Management Act requires the BLM to maintain an inventory of all public lands and their resources. There is no requirement to manage lands with wilderness characteristics. The Rock Springs Field Office is in the process of combining the Green River and Jack Morrow Hills RMPs to a single Rock Springs RMP. If the BLM precludes development in lands with wilderness characteristics, the BLM will unduly constrain the Rock Springs RMP range of alternatives. These decisions should be left to the RMP revision process.
#4])> <([#5 [*3.1.5*] Areas of Critical Environmental Concern
In the 2012 OSTS DPEIS preferred alternative, the BLM proposes to preclude oil shale development in all Areas of Critical Environmental Concern (ACEC), regardless of allowances for mineral development. This blanket decision should not be made. In Volume 1, (p. 2-10), the BLM states, "The BLM designates ACECs through land use plans that outline management objectives and prescriptions for each ACEC." Prior land use plans have determined that some ACECs are open for mineral development. Management objectives for ACECs should be left to the RMP revision process. I request that the BLM make no additional determinations for management of ACECs in this OSTS DPEIS.
At various points in the Draft RMP Amendments and DPEIS for the Allocation of OSTS Resources, as they relate to Alternative 2, the BLM precludes oil shale and tar sands leasing from " ... all ACECs, but also areas that had been under consideration for designation as ACECs in the applicable plans undergoing revision or amendment at the time, but which were eventually not designated." [Emphasis added] This has the potential to exclude oil shale development from a majority of lands throughout the planning area. The BLM should remove this management decision from further consideration. **#5])>**
<([#6 [*3.1.5*] Adobe Town Verv Rare and Uncommon Area

The BLM proposed decision to close the Adobe Town Very Rare and Uncommon Area to oil shale development is not consistent with the Wyoming Environmental Quality Council's decision allowing in-situ processes or underground mining.
#6])> Thank you for the opportunity to comment. Please do not hesitate to contact me or my staff if you have questions or would like clarification.
Sincerely,

Matthew H. Mead
Governor
MHM:md
cc: The Honorable Mike Enzi, U.S. Senate
The Honorable John Barrasso, U.S. Senate
The Honorable Cynthia Lummis, U.S. House of Representatives
The Honorable John Hickenlooper, Governor, Colorado
The Honorable Gary Herbert, Governor, Utah
State BLM Director Don Simpson

OSTS_077
Organization: Lincoln County Board of Commissioners, Kent Connelly
Received: 4/14/2012 12:00:00 AM
Commenter1: Kent Connelly - , Wyoming (United States)
Organization1: Lincoln County Board of Commissioners
Commenter Type: Coop Agency - Local Govt
Classification: none
Submission Category: Resolution
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/16/2012 12:00:00 AM
Attachments: OSTS2012D00078.htm (OSTS_077-59133.htm Size = 1 KB)
OSTS_077_Lincoln_County_Resolution_OSTS2012D00078.pdf (OSTS_077-59132.pdf Size = 275 KB)
Submission Text
See Attachment.

THE BOARD OF COUNTY COMMISSIONERS
LINCOLN COUNTY, WYOMING
RESOLUTION#

OPPOSING THE BLM'S 2012 OIL SHALE AND TAR SANDS PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT, BLM PROJECT# W0-300-1310-PP-OSHL (HEREAFTER 2011 OSTS PEIS)
FOR LANDS ADMINISTERED BY THE BLM IN COLORADO UTAH AND WYOMING

This Resolution is adopted in open meeting after due opportunity for public comment, by the Board of Commissioners of Lincoln County, in order to redress the many violations of law, regulation, and policy by the BLM with respect to the BLM's 2012 OSTS PEIS.

BACKGROUND
As background to this Resolution, Lincoln County recites the following grievances:
WHEREAS, On April14, 2011 the BLM caused to be published in the Federal Register, Volume 76, No 72 Thursday, April 14, 2011, pages 21003-21005, a notice of intent to prepare the above-referenced 2012 OSTS PEIS; and
<([#1 [*9.2.1*] [*3.1.3*] WHEREAS, the preliminary purpose and need statement in the notice of intent, states the PEIS
will analyze removing from oil shale and tar sands leasing "All areas that the BLM has identified or may identify as a result of inventories conducted during this planning process, as lands containing wilderness characteristics[.]" Id., at page 21004; and
WHEREAS, the notice of intent further states at page 21 004:
Lands that the BLM identifies as having wilderness characteristics will be considered during this planning initiative, as described above, and consistent with Secretarial Order No. 3310, dated Dec. 22, 2010, and BLM Manuals 6301 and 6302. Future leasing of lands determined by the BLM to have wilderness characteristics, if compatible with the allocation decisions stemming from this initiative, will subsequently be assessed in accordance with BLM Manual 6303, as appropriate (i.e., where the BLM has not determined, consistent with BLM Manual 6302, whether the lands with wilderness characteristics at issue should be receive a wild lands designation, BLM Manual 6303 will apply); and
WHEREAS, this language documents the BLM's intent to implement, administer and/or enforce Secretarial Order 3310 and one or more of the BLM guidance manuals promulgated under Order 3310;and
WHEREAS, any attempt by the BLM to implement, administer and/or enforce Secretarial Order 3310, including any effort by the BLM to proceed further on the above-referenced Programmatic EIS, violates the spending moratorium of Section 1769 of the April21, 2011 Congressional Continuing Resolution to Fund Fiscal Year 2011 through September 30, 2011, which states:
For the fiscal year ending September 30, 2011, none of the funds made available by this division or any other Act may be used to implement, administer, or enforce Secretarial Order No. 3310 issued by the Secretary of the Interior on December 22, 2010; and
WHEREAS, this spending moratorium has been carried forward in all subsequent Congressional spending resolutions up to and including the current spending resolution; and
WHEREAS, the 2012 OSTS PEIS, is an admitted attempt by the BLM to implement, administer and/or enforce Secretarial Order 3310 and its policies and objectives, all in violation of the Spending Moratorium of the 2011 Continuing Resolution; and **#1])>**
<([#2 [*9.8*] WHEREAS, the 2008 Oil Shale and Tar Sands Programmatic EIS (2008 OSTS PEIS) was
required under Section 369 (d) (1) of the Energy Policy Act of2005 and was prepared in cooperation with 14 federal, state, and local governmental organizations; and
WHEREAS THE 2008 OSTS PEIS was 3 years in the making, and it honored the input of a task force of Governors and other stakeholders as per requirement of the 2005 Energy Policy Act;
WHEREAS, the Record of Decision (ROD) for the 2008 OSTS PEIS amended 10 land use plans in Colorado, Utah, and Wyoming to make approximately 2 million acres of public lands available for potential leasing and development of oil shale and approximately 430,000 acres available for tar sands leasing. Together with the regulations published in 2006 and 2008 for oil

shale and tar sands resources, the 2008 OSTS PEIS and subsequent land use amendments constituted a reasonable and rational establishment of an oil shale and tar sands program as mandated in the Energy Policy Act of 2005; and **#2])>**
<([#3 [*6.1.2*] WHEREAS, the oil shale and tar sands program to which the 2008 OSTS PEIS and related
regulations gave birth, was a reasonable response to the fact that oil shale and tar sands resources in the Green River Formation located in northeastern Utah, northwestern Colorado and southwestern Wyoming may reach 8 trillion barrels of oil; and **#3])>**
<([#4 [*9.8*] WHEREAS, the preferred alternative in the draft 2012 OSTS PEIS drastically shrinks,
diminishes and in many areas outright reverses virtually all of the lands made available for Oil Shale and Tar Sands development in 2008, and does so using the same data and science; and
#4])> <([#5 [*9.2.2*] WHEREAS, such a drastic reversal in lands available for Oil Shale and Tar Sands development
between the 2008 PEIS and the 2012 preferred alternative, violates regulatory ran Task Force requirements of certainty for industry and investors; and
WHEREAS such a drastic reversal of lands available for Oil Shale and Tar Sands development in 2008, constitutes a de facto, piece-meal revision of previous BLM Resource Management Plans, in violation of the Section 202 Planning Process under FLPMA;
WHEREAS, the preferred alternative in the draft 2012 OSTS PEIS entirely ignores the input of the task force and stakeholders which the 2005 Energy Policy Act directed the BLM to honor and follow; and moreover the draft 2012 OSTS PEIS may well violate various memoranda of understanding (MOUs) with counties which require the BLM to publish the written input of cooperators who disagree with the preferred alternative;
WHEREAS the draft 2012 OSTS PEIS preferred alternative significantly restricts the acreage allotted in the 2008 PEIS for research and development leasing;
WHEREAS the draft 2012 OSTS PEIS preferred alternative threatens to arbitrarily undermine the process and the work utilized in creation of the 2008 OSTS PEIS, and essentially dismantle a reasonable and rational oil shale and tar sands program in violation of Section 369 of the 2005 Energy Policy Act; and **#5])>**
<([#6 [*1.5*] WHEREAS, the 2012 OSTS PEIS preferred alternative is the creature of a friendly lawsuit
settlement agreement between the BLM and ideological opponents to oil shale development, and is therefore entirely pre-determined and pre-decisional in violation of NEPA, with no apparent rationale for revising the acreages approved in 2008; and
#6])> <([#7 [*2.2*] WHEREAS, the BLM has settled on a preferred alternative in the 2012 OSTS PEIS admittedly
without having first analyzed its impacts; BLM should be required to withdraw the preferred status of the alternative until it has performed this analysis; and
WHEREAS, the acreage approved for Oil Shale and Tar Sands development in the draft 2012 OSTS PEIS preferred alternative bears no rational relationship to the stated purpose and need;
#7])> <([#8 [*1.5*] WHEREAS, the Department of Energy has basically abdicated the responsibility Congress
placed upon it to defend and uphold a viable oil shale energy program in America, leaving it instead to the BLM encumbered by a host of anti-oil shale pro-wilderness groups steering BLM's every move;

#8])> <([#9 [*9.5*] WHEREAS, the alternative adopted in the ROD of the 2008 OSTS PEIS is now the No Action
Alternative of the draft 2012 OSTS PEIS; and
WHEREAS, the 2008 OSTS PEIS chosen alternative is consistent with the multiple use, sustained yield of the Federal Land Policy Management Act (FLPMA); and
WHEREAS, the 2008 OSTS PEIS chosen alternative is consistent with county general plans and policies which call for responsible development of available energy resources; and **#9])>**
<([#10 [*6.3.4*] WHEREAS, the development and production of oil from oil shale has been proven beyond a
doubt to be technologically and economically feasible; and **#10])>**
<([#11 [*6.3.2.1*] WHEREAS, this same technology to extract oil from the oil shale rock is not only economically
feasible, but it requires little to no consumption of water, contrary to the myths which falsely claim that oil shale extraction requires large consumption of water resources; and
#11])> <([#12 [*6.2.2*] WHERAS, the energy captured in the extract of oil from shale (natural gas capture, etc.,) more
than makes up for energy consumed in that extraction process, thus dispelling the myth that the oil shale extraction process consumes more energy than it produces;
#12])> <([#13 [*3.10.3*] WHEREAS, the rising price of gasoline, coupled with ever increasing loss of good paying jobs
due to the Administration's policies against energy development on western public lands, result in increasing hardships for families and the local economy, to the point where some fear the window of opportunity is about to close for a civil, lawful and orderly response as citizens feel more and more pressured and desperate financially; and
#13])> <([#14 [*6.3.3.1*] WHEREAS, the 2012 OSTS PEIS improperly limits technology testing to strictly in situ efforts
and does not allow for development of other technologies; and
#14])> <([#15 [*1.1.1*] WHEREAS, the BLM has left insufficient time for the public and cooperators to meaningfully
comment on the public draft 2012 OSTS PEIS by the present comment deadline of May 4, 2012, because a highly relevant commercial oil shale BLM regulation is not due to be published until May 15, 2012 and the public should have the right to view that regulation first and then submit comments on the draft 2012 OSTS PEIS in light of that regulation; and
#15])> <([#16 [*2.1.1*] WHEREAS, the same problems with lack of consistency with local plans and policies and failure
to honor the input of cooperators and all stakeholders, also besets many public lands EIS projects, in addition to the 2012 OSTS PEIS. The cooperators from Utah and Wyoming have already unanimously requested for the No-Action alternative in the draft 2012 OSTS PEIS become the preferred alternative.
#16])> RESOLUTION
<([#17 [*9.2.1*] NOW THEREFORE, BE IT RESOLVED BY LINCOLN COUNTY, STATE OF WYOMING
AS FOLLOWS:
1. Lincoln County declares the BLM's continuing to administer and carry out the 2012
OSTS PEIS to be an open contempt and flaunting of the Congressional Spending Moratorium first imposed in the 2011 Continuing Resolution and carried forward in all subsequent

Congressional spending resolutions up to and including the present;
2. Lincoln County calls upon the BLM to cease all further activities with respect to administering and carrying out the 2012 OSTS PEIS, because doing so constitutes an open contempt and violation of the Congressional Spending Moratorium against implementing, administering and/or enforcing Secretarial Order 3310, which Spending Moratorium was first imposed in the 2011 Continuing Resolution and carried forward in all subsequent Congressional spending resolutions up to and including the present;
3. Lincoln calls upon the BLM to immediately cease and desist all activities related to the above-referenced 2012 OSTS PEIS and immediately publish a revised notice in the Federal Register signifying its cessation of all work on the Programmatic EIS in obedience to the above quoted Spending Moratorium. Otherwise, the BLM would be in contempt of Congress;
#17])> <([#18 [*2.1.1*] 4. Should BLM continue to go forward with the 2012 OSTS PEIS regardless of these
grievances, the only legally, viable alternative would be if the BLM adopted the No-Action Alternative, which is identical to the Alternative chosen in the ROD of the 2008 OSTS PEIS;
#18])> <([#19 [*1.1.1*] 5. The BLM should extend the May 4, 2012 deadline for public comment on the draft 2012
OSTS PEIS at least 30 days after publication of the expected oil shale regulation due to be published on or around May 15, 2012.
#19])> <([#20 [*1.3*] 6. The BLM should honor the input of cooperators, particularly if they are local
governments, as required by Section 202(c)(9) of FLPMA, in all matters, not just with respect to the 2012 OSTS PEIS. **#20])>**
Adopted at the regularly scheduled meeting of the Board of County Commissioners of Lincoln County, held on the 4th day of April, 2012.
BOARD OF COUNTY COMMISSIONERS

T. Deb Wolfley

OSTS_078
Organization: Garfield County Board of Commissioners, Tom Jankovsky
Received: 4/14/2012 12:00:00 AM
Commenter1: Tom Jankovsky - Garfield County, Colorado (United States)
Organization1: Garfield County Board of Commissioners
Commenter Type: Coop Agency - Local Govt
Classification: none
Submission Category: Resolution
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/16/2012 12:00:00 AM
Attachments: OSTS2012D00079.htm (OSTS_078-59135.htm Size = 1 KB)
OSTS_078_Garfield_County_Resolution_OSTS2012D00079.pdf (OSTS_078-59134.pdf Size = 433 KB)
Submission Text
See Attachment.

STATE OF COLORADO)
)ss.
COUNTY OF GARFIELD)
At a regular meeting of the Board of County Commissioners for Garfield County, Colorado, held at the County
Administration Building in Glenwood Springs on the_day of 20___,) there were present:
_Tom Jankovsky, Commissioner
_Mike Samson, Commissioner
_John Martin, Commissioner Chairman
_Jean Alberico, Clerk to the Board
when the following proceedings, among others were had and done, to-wit:
RESOLUTION NO. 12-_
RESOLUTION OPPOSING THE BLM'S OIL SHALE AND TAR SANDS PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT, BLM PROJECT# W0-300-1310-PP-OSHL (HEREAFTER 2011 OSTS PEIS) FOR LANDS ADMINISTERED BY THE BLM IN COLORADO, UTAH AND WYOMING
WHEREAS, the Board of County Commissioners of Garfield County, State of Colorado ("BOCC") is a legal and political subdivision of the State of Colorado for which the BOCC is authorized to act; and
WHEREAS, this Resolution is adopted in open meeting after due opportunity for public comment, by the Board of Commissioners of Garfield County, in order to redress the many violations of law, regulation, and policy by the BLM with respect to the BLM's 2012 OSTS PEIS; and
BACKGROUND
As background to this Resolution, the BOCC recites the following grievances:
WHEREAS, on April14, 2011, the BLM caused to be published in the Federal Register, Volume 76, No 72ffhursday, April14, 2011, pages 21003-21005, a notice of intent to prepare the above-referenced 2012 OSTS PEIS; and
<([#1 [*9.2.1*] [*3.1.3*] WHEREAS, the preliminary purpose and need statement in the notice of intent, states the
PEIS will analyze removing from oil shale and tar sands leasing "All areas that the BLM has identified or may identify as a result of inventories conducted during this planning process, as lands containing wilderness characteristics[.]" Id, at page 21 004; and
WHEREAS, the notice of intent further states at page 21004:
Lands that the BLM identifies as having wilderness characteristics will be considered during this planning initiative, as described above, and consistent with Secretarial Order No. 3310, dated Dec. 22, 2010, and BLM Manuals 6301 and 6302. Future leasing of lands dete1mined by the BLM to have wilderness characteristics, if compatible with the allocation decisions stemming from this initiative, will subsequently be assessed in accordance with BLM Manual 6303, as appropriate (i.e., where the BLM has not determined, consistent with BLM Manual 6302, whether the lands with wilderness characteristics at issue should receive a wild lands designation, BLM Manual 6303 will apply); and
WHEREAS, this language documents the BLM's intent to implement, administer and/or enforce Secretarial Order 3310 and one or more of the BLM guidance manuals promulgated under Order 3310; and

WHEREAS, any attempt by the BLM to implement, administer and/or enforce
Secretarial Order 3310, including any effort by the BLM to proceed ftu1her on the above referenced
Programmatic EIS, violates the spending moratorium of Section 1769 of the April21,
2011 Congressional Continuing Resolution to Fund Fiscal Year 2011 through September 30, 2011, which states:
For the fiscal year ending September 30, 2011, none of the funds made available
by this division or any other Act may be used to implement, administer, or
enforce Secretarial Order No. 3310 issued by the Secretary of the Interior on
December 22, 2010; and
WHEREAS, this spending moratorium has been carried forward in all subsequent
Congressional spending resolutions up to and including the current spending resolution; and
WHEREAS, the 2012 OSTS PEIS, is an admitted attempt by the BLM to implement,
administer and/or enforce Secretarial Order 3310 and its policies and objectives, all in violation
of the Spending Moratorium of the 2011 Continuing Resolution; and **#1])>**
<([#2 [*9.8*] WHEREAS, the 2008 Oil Shale and Tar Sands Programmatic EIS (2008 OSTS PEIS)
was required under Section 369 (d) (1) of the Energy Policy Act of 2005 and was prepared in
cooperation with 14 federal, state, and local governmental organizations; and
WHEREAS, the 2008 OSTS PEIS was 3 years in the making, and it honored the input of
a task force of Governors and other stakeholders as per requirement of the 2005 Energy Policy Act; and
WHEREAS, the Record of Decision (ROD) for the 2008 OSTS PEIS amended 10 land
use plans in Colorado, Utah, and Wyoming to make approximately 2 million acres of public
lands available for potential leasing and development of oil shale and approximately 430,000
acres available for tar sands leasing. Together with the regulations published in 2006 and 2008
for oil shale and tar sands resources, the 2008 OSTS PEIS and subsequent land use amendments
constituted a reasonable and rational establishment of an oil shale and tar sands program as
1nandated in the Energy Policy Act of 2005; and **#2])>**
<([#3 [*6.1.2*] WHEREAS, the oil shale and tar sands program to which the 2008 OSTS PEIS and
related regulations gave birth was a reasonable response to the fact that oil shale and tar sands
resources in the Green River Formation located in northheastem Utah, northwestern Colorado and
southwestern Wyoming may reach 8 trillion[1] barrels of oil; and

[1]On information and belief, Garfield County believes 4 trillion barrels to be a more accurate estimate.
#3])>
<([#4 [*9.8*] WHEREAS, the preferred alternative in the draft 2012 OSTS PEIS drastically shrinks,
diminishes and in many areas outright reverses virtually all of the lands made available for Oil
Shale and Tar 'Sands development in 2008, and does so using the same data and science; and
#4])>
<([#5 [*9.2.2*] WHEREAS, such a drastic reversal in lands available for Oil Shale and Tar Sands
development between the 2008 PEIS and the 2012 preferred alternative, violates regulatory ran
Task Force requirements of certainty for industry and investors; and

WHEREAS such a drastic reversal of lands available for Oil Shale and Tar Sands development in 2008, constitutes a de facto, piece-meal revision of previous BLM Resource Management Plans, in violation of the Section 202 Planning Process under FLPMA; and
WHEREAS, the preferred alternative in the draft 2012 OSTS PEIS entirely ignores the input of the task force and stakeholders which the 2005 Energy Policy Act directed the BLM to honor and follow; and moreover the draft 2012 OSTS PEIS may well violate various memoranda of understanding (MOUs) with counties which require the BLM to publish the written input of cooperators who disagree with the preferred alternative; and
WHEREAS the draft 2012 OSTS PEIS preferred alternative significantly restricts the acreage allotted in the 2008 PEIS for research and development leasing; and
WHEREAS the draft 2012 OSTS PEIS preferred alternative threatens to arbitrarily undermine the process and the work utilized in creation of the 2008 OSTS PEIS, and essentially dismantle a reasonable and rational oil shale and tar sands pro grant in violation of Section 369 of
the 2005 Energy Policy Act; and **#5])>**
<([#6 [*1.5*] WHEREAS, the 2012 OSTS PEIS preferred alternative is the creature of a friendly lawsuit settlement agreement between the BLM and ideological opponents to oil shale development, and is therefore entirely pre-determined and pre-decisional in violation of NEPA, with no apparent rationale for revising the acreages approved in 2008; and **#6])>**
<([#7 [*2.2*] WHEREAS, the BLM has settled on a preferred alternative in the 2012 OSTS PEIS admittedly without having first analyzed its impacts; BLM should be required to withdraw the preferred status of the alternative until it has performed this analysis; and
WHEREAS, the acreage approved for Oil Shale and Tar Sands development in the draft 2012 OSTS PEIS preferred alternative bears no rational relationship to the stated purpose and need; and
#7])> <([#8 [*1.5*] WHEREAS, the Depat1tnent of Energy has basically abdicated the responsibility
Congress placed upon it to defend and uphold a viable oil shale energy program in America, leaving it instead to the BLM encumbered by a host of anti-oil shale pro-wilderness groups steering BLM's every move; and
#8])> <([#9 [*9.5*] WHEREAS, the alternative adopted in the ROD of the 2008 OSTS PEIS is now the No
Action Alternative of the draft 2012 OSTS PEIS; and
WHEREAS, the 2008 OSTS PEIS chosen alternative is consistent with the multiple use, sustained yield of the Federal Land Policy Management Act (FLPMA); and
WHEREAS, the 2008 OSTS PEIS chosen alternative is consistent with county general plans and policies which call for responsible development of available energy resources; and
#9])>
<([#10 [*6.3.4*] WHEREAS, the development and production of oil from oil shale has been proven
beyond a doubt to be technologically and economically feasible2; and

2 Garfield County states this recital as: "WHEREAS the development and production of oil from oil shale in some
processes has been proven to be technologically feasible; and, **#10])>**
<([#11 [*6.3.2.1*] WHEREAS, this same technology to extract oil from the oil shale rock is not

only
economically feasible, but it requires little to no consumption of water, contrary to the myths which falsely claim that oil shale extraction requires large consumption of water resources[3] ; and

[3] Garfield County states this recital as: "WHEREAS, this same technology to extract oil from the oil shale rock requires little to no consumption of water; and" **#11])>**
<([#12 [*6.2.2*] WHEREAS, the energy captured in the extract of oil from shale (natural gas capture,
etc.,) more than makes up for energy consumed in that extraction process, thus dispelling the myth that the oil shale extraction process consumes more energy than it produces; and
#12])> <([#13 [*3.10.3*] WHEREAS, the rising price of gasoline, coupled with ever increasing loss of good
paying jobs due to the Administration's policies against energy development on western public lands, result in increasing hardships for families and the local economy, to the point where some fear the window of opportunity is about to close for a civil, lawful and orderly response as citizens feel more and more pressured and desperate financially; and **#13])>**

<([#14 [*6.3.3.1*] WHEREAS, the 2012 OSTS PEIS improperly lin1its technology testing to strictly· in situ
efforts and does not allow for development of other technologies; and
#14])> <([#15 [*1.1.1*] WHEREAS, the BLM has left insufficient time for the public and cooperators to
meaningfully comment on the public draft 20 I 2 OSTS PEIS by the present comment deadline of
May 4, 20 I 2, because a highly relevant commercial oil shale BLM regulation is not due to be published until May 15, 2012 and the public should have the right to view that regulation first and then submit comments on the draft 2012 OSTS PEIS in light of that regulation; and
#15])> <([#16 [*2.1.1*] WHEREAS, the same problems with lack of consistency with local plans and policies
and failure to honor the input of cooperators and all stakeholders, also besets many public lands EIS projects, in addition to the 2012 OSTS PEIS. The cooperators from Utah and Wyoming have already unanimously requested for the No-Action alternative in the draft 2012 OSTS PEIS become the preferred alternative.
#16])> <([#17 [*9.2.1*] NOW THEREFORE, BE IT RESOLVED BY THE BOARD OF COUNTY
COMMISSIONERS OF GARFIELD COUNTY, STATE OF COLORADO AS FOLLOWS:
1. Garfield County declares the BLM's continuing to administer and carry out the
2012 OSTS PEIS to be an open contempt and flaunting of the Congressional Spending Moratorium first imposed in the 2011 Continuing Resolution and carried forward in all subsequent Congressional spending resolutions up to and including the present.
2. Garfield County calls upon the BLM to cease all further activities with respect to administering and carrying out the 2012 OSTS PEIS, because doing so constitutes an open Contempt and violation of the Congressional Spending Moratorium against implementing, administering and/or enforcing Secretarial Order 3310, which Spending Moratorium was first imposed in the 2011 Continuing Resolution and carried forward in all subsequent Congressional spending resolutions up to and including the present.

3. Garfield County calls upon the BLM to immediately cease and desist all activities related to the above-referenced 2012 OSTS PEIS and immediately publish a revised notice in the Federal Register signifying its cessation of all work on the Programmatic EIS in obedience to the above- quoted Spending Moratorium. Otherwise, the BLM would be in contempt of Congress.
#17])> <([#18 [*2.1.1*] 4. Should BLM continue to go forward with the 2012 OSTS PEIS regardless of
these grievances, the only legally, viable alternative would be if the BLM adopted the No-Action Alternative, which is identical to the Alternative chosen in the ROD of the 2008 OSTS PEIS.
#18])> <([#19 [*1.1.1*] 5. The BLM should extend the May 4, 2012 deadline fo1· public comment on the
draft 2012 OSTS PEIS at least 30 days after publication of the expected oil shale regulation due to be published on or around May 15,2012.
#19])> <([#20 [*1.3*] 6. The BLM should honor the input of cooperators, particularly if they are local governments, as required by Section 202(c)(9) of FLPMA, in all matters, not just with respect to the 2012 OSTS PEIS.
#20])>

DATED this __ day of ____,, 20_.
ATTEST:
Clerk to the Board
BOARD OF COUNTY COMMISSIONERS OF
GARFIELD COUNTY, STATE OF COLORADO
By: _____ __
Chairperson
Upon motion duly made and seconded the foregoing Resolution was adopted by the following vote:
STATE OF COLORADO)
) ss.
• COUNTY OF GARFIELD)
Tom Jankovsky Aye
Mike Samson Aye
John Martin Aye
Commissioners
I, Jean Alberico, County Clerk and ex-officio Clerk of the Board of County Commissioners in and for the County
and State aforesaid do hereby certify that the annexed and foregoing Resolution is truly copied from the Records of the
Proceedings of the Board of County Commissioners for said Garfield County, now in my office.
IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of said County, at Glenwood
Springs, this_ day of A.D. 20 .
County Clerk and ex-officio Clerk of
the Board of County Commissioners

OSTS_079

Organization: Mesa County Board of Commissioners, Sheila Reiner
Received: 4/14/2012 12:00:00 AM
Commenter1: Sheila Reiner - Mesa County, Colorado (United States)
Organization1: Mesa County Board of Commissioners
Commenter Type: Local Government
Classification: none
Submission Category: Resolution
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/16/2012 12:00:00 AM
Attachments: OSTS2012D00080.htm (OSTS_079-59137.htm Size = 1 KB)
OSTS_079_Mesa_County_Resolution_OSTS2012D00080.pdf (OSTS_079-59136.pdf Size = 361 KB)
Submission Text
See Attachment.

HCM 2012-034
RESOLUTION OF MESA COUNTY
STATE OF COLORADO
OPPOSING THE BLM'S 2012 OIL SHALE AND TAR SANDS PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT, BLM PROJECT #W0-300-1310-PP-OSHL (HEREAFTER 2011 OSTS PEIS)
FOR LANDS ADMINISTERED BY THE BLM IN COLORADO, UTAH, AND WYOMING,
This Resolution is adopted in open meeting after due opportunity for public comment, by the Board of Commissioners of Mesa County, in order to redress the many violations of law, regulation, and policy by the BLM with respect to the BLM's 2012 OSTS PEIS.
BACKGROUND
As background to this Resolution, Mesa County recites the following grievances:
WHEREAS, On April14, 2011, the BLM caused to be published in the Federal Register, Volume 76, No 721fhursday, April 14, 2011, pages 21003-21005, a notice of intent to prepare the above-referenced 2012 OSTS PEIS; and
<([#1 [*9.2.1*] [*3.1.3*] WHEREAS, the preliminary purpose and need statement in the notice of intent, states the PEIS
will analyze removing from oil shale and tar sands leasing "All areas that the BLM has identified or may identify as a result of inventories conducted during this planning process, as lands containing wilderness characteristics[.]" ld., at page 21004; and
WHEREAS, the notice of intent further states at page 21004:
Lands that the BLM identifies as having wilderness characteristics will be considered during this planning initiative, as described above, and consistent with Secretarial Order No. 3310, dated Dec. 22,2010, and BLM Manuals 6301 and 6302. Future leasing of lands determined by the BLM to have wilderness characteristics, if compatible with the allocation decisions stemming from this initiative, will subsequently be assessed in accordance with BLM Manual 6303, as appropriate (i.e., where the BLM has not determined, consistent with BLM Manual 6302, whether the lands with wilderness characteristics at issue should be

receive a wild lands designation, BLM Manual6303 will apply); and
WHEREAS, this language documents the BLM' s intent to implement, administer and/or enforce Secretarial Order 3310 and one or more of the BLM guidance manuals promulgated under Order 3310;and
WHEREAS, any attempt by the BLM to implement, administer and/or enforce Secretarial Order 3310, including any effort by the BLM to proceed further on the above-referenced Programmatic EIS, violates the spending moratorium of Section 1769 of the April21, 2011 Congressional Continuing Resolution to Fund Fiscal Year 2011 through September 30, 2011, which states:
For the fiscal year ending September 30, 2011, none of the funds made available
by this division or any other Act may be used to implement, administer, or
enforce Secretarial Order No. 3310 issued by the Secretary of the Interior on
December 22, 201 0; and
WHEREAS, this spending moratorium has been carried forward in all subsequent Congressional spending resolutions up to and including the current spending resolution; and
WHEREAS, the 2012 OSTS PEIS, is an admitted attempt by the BLM to implement, administer and/or enforce Secretarial Order 3310 and its policies and objectives, all in violation of the Spending Moratorium of the 2011 Continuing Resolution; and **#1])>**
<([#2 [*9.8*] WHEREAS, the 2008 Oil Shale and Tar Sands Programmatic EIS (2008 OSTS PEIS) was
required under Section 369 (d) (1) of the Energy Policy Act of 2005 and was prepared in cooperation with 14 federal, state, and local governmental organizations; and
WHEREAS the 2008 OSTS PEIS was 3 years in the making, and it honored the input of a task force of Governors and other stakeholders as per requirement of the 2005 Energy Policy Act; and
WHEREAS, the Record of Decision (ROD) for the 2008 OSTS PEIS amended 10 land use plans in Colorado, Utah, and Wyoming to make approximately 2 million acres of public lands available for potential leasing and development of oil shale and approximately 430,000 acres available for tar sands leasing. Together with the regulations published in 2006 and 2008 for oil shale and tar sands resources, the 2008 OSTS PEIS and subsequent land use amendments constituted a reasonable and rational establishment of an oil shale and tar sands program as mandated in the Energy Policy Act of 2005; and
#2])> <([#3 [*6.1.2*] WHEREAS, the oil shale and tar sands program to which the 2008 OSTS PEIS and related
regulations gave birth, was a reasonable response to the fact that oil shale and tar sands resources in the Green River Formation located in northeastern Utah, northwestern Colorado, and southwestern Wyoming may reach 4 trillion barrels of oil; and **#3])>**
<([#4 [*9.8*] WHEREAS, the preferred alternative in the draft 2012 OSTS PEIS drastically shrinks,
diminishes and in many areas outright reverses virtually all of the lands made available for Oil Shale and Tar Sands development in 2008, and does so using the same data and science; and
#4])>
<([#5 [*9.2.2*] WHEREAS, such a drastic reversal in lands available for Oil Shale and Tar Sands development
between the 2008 PEIS and the 2012 preferred alternative, violates regulatory ran Task Force requirements of certainty for industry and investors; and
WHEREAS such a drastic reversal of lands available for Oil Shale and Tar Sands development in 2008, constitutes a de facto, piece-meal revision of previous BLM Resource Management

Plans, in violation of the Section 202 Planning Process under FLPMA; and
WHEREAS, the preferred alternative in the draft 2012 OSTS PEIS entirely ignores the input of the task force and stakeholders which the 2005 Energy Policy Act directed the BLM to honor and follow; and moreover the draft 2012 OSTS PEIS may well violate various memoranda of understanding (MOUs) with counties which require the BLM to publish the written input of cooperators who disagree with the preferred alternative; and
WHEREAS the draft 2012 OSTS PEIS preferred alternative significantly restricts the acreage allotted in the 2008 PEIS for research and development leasing; and
WHEREAS the draft 2012 OSTS PEIS preferred alternative threatens to arbitrarily undermine the process and the work utilized in creation of the 2008 OSTS PEIS, and essentially dismantle a reasonable and rational oil shale and tar sands program in violation of Section 369 of the 2005 Energy Policy Act; and **#5])>**
<([#6 [*1.5*] WHEREAS, the 2012 OSTS PEIS preferred alternative is the creature of a friendly lawsuit
settlement agreement between the BLM and ideological opponents to oil shale development, and is therefore entirely pre-determined and pre-decisional in violation of NEPA, with no apparent rationale for revising the acreages approved in 2008; and **#6])>**
<([#7 [*2.2*] WHEREAS, the BLM has settled on a preferred alternative in the 2012 OSTS PEIS admittedly
without having frrst analyzed its impacts; BLM should be required to withdraw the preferred status of the alternative until it has performed this analysis; and
WHEREAS, the acreage approved for Oil Shale and Tar Sands development in the draft 2012 OSTS PEIS preferred alternative bears no rational relationship to the stated purpose and need; and **#7])>**
<([#8 [*1.5*] WHEREAS, the Department of Energy has basically abdicated the responsibility Congress
placed upon it to defend and uphold a viable oil shale energy program in America, leaving it instead to the BLM encumbered by a host of anti-oil shale pro-wilderness groups steering BLM's every move; and **#8])>**
<([#9 [*9.5*] WHEREAS, the alternative adopted in the ROD of the 2008 OSTS PEIS is now the No Action
Alternative of the draft 2012 OSTS PEIS; and
WHEREAS, the 2008 OSTS PEIS chosen alternative is consistent with the multiple use, sustained yield of the Federal Land Policy Management Act (FLPMA); and
WHEREAS, the 2008 OSTS PEIS chosen alternative is consistent with county general plans and policies which call for responsible development of available energy resources; and **#9])>**
<([#10 [*6.3.4*] WHEREAS, the development and production of oil from oil shale has been proven beyond a
doubt to be technologically and economically feasible; and **#10])>**
<([#11 [*6.3.2.1*] WHEREAS, this same technology to extract oil from the oil shale rock is not only economically
feasible, but it requires linle to no consumption of water. contrary to the myths which falsely claim that oil shale extraction requires large consumption of water resources; and
#11])> <([#12 [*6.2.2*] WHERAS, the energy captured in the extract of oil from shale (natural gas capture, etc.,) more
than makes up for energy consumed in that extraction process, thus dispelling the myth that the

oil shale extraction process consumes more energy than it produces; and
#12])> <([#13 [*3.10.3*] WHEREAS, the rising price of gasoline, coupled with ever increasing loss of good paying jobs
due to the Administration's policies against energy development on western public lands, result in increasing hardships for families and the local economy; and
#13])> <([#14 [*6.3.3.1*] WHEREAS, the 2012 OSTS PEIS improperly limits technology testing to strictly in situ efforts
and does not allow for development of other technologies; and
#14])> <([#15 [*1.1.1*] WHEREAS, the BLM has left insufficient time for the public and cooperators to meaningfully
comment on the public draft 2012 OSTS PEIS by the present comment deadline of May 4, 2012, because a highly relevant commercial oil shale BLM regulation is not due to be published until May 15, 2012 and the public should have the right to view that regulation first and then submit comments on the draft 2012 OSTS PEIS in light of that regulation; and
#15])> <([#16 [*2.1.1*] WHEREAS, the same problems with lack of consistency with local plans and policies and failure
to honor the input of cooperators and all stakeholders, also besets many public lands EIS projects, in addition to the 2012 OSTS PEIS. The cooperators from Utah and Wyoming have already unanimously requested for the No-Action alternative in the draft 2012 OSTS PEIS become the preferred alternative.
#16])> <([#17 [*9.2.1*] RESOLUTION
NOW THEREFORE, BE IT RESOLVED BY MESA COUNTY, STATE OF COLORADO AS FOLLOWS:
1. Mesa County declares the BLM's continuing to administer and carry out the 2012 OSTS PEIS to be an open contempt and flaunting of the Congressional Spending Moratorium first imposed in the 2011 Continuing Resolution and carried forward in all subsequent Congressional spending resolutions up to and including the present;
2. Mesa County calls upon the BLM to cease all further activities with respect to administering and carrying out the 2012 OSTS PEIS, because doing so constitutes an open contempt and violation of the Congressional Spending Moratorium against implementing, administering and/or enforcing Secretarial Order 3310, which Spending Moratorium was first imposed in the 2011 Continuing Resolution and carried forward in all subsequent Congressional spending resolutions up to and including the present;
3. Mesa County calls upon the BLM to immediately cease and desist all activities related to the above-referenced 2012 OSTS PEIS and immediately publish a revised notice in the Federal Register signifying its cessation of all work on the Programmatic EIS in obedience to the abovequoted
Spending Moratorium. Otherwise, the BLM would be in contempt of Congress; **#17])> <([#18** [*2.1.1*] 4. Should BLM continue to go forward with the 2012 OSTS PEIS regardless of these
grievances, the only legally, viable alternative would be if the BLM adopted the No-Action Alternative, which is identical to the Alternative chosen in the ROD of the 2008 OSTS PEIS;
#18])> <([#19 [*1.1.1*] 5. The BLM should extend the May 4, 2012 deadline for public comment on the draft 2012
OSTS PEIS at least 30 days after publication of the expected oil shale regulation due to be published on or around May 15, 2012;

#19])> <([#20 [*1.3*] 6. The BLM should honor the input of cooperators, particularly if they are local
governments, as required by Section 202(c)(9) of FLPMA, in all matters, not just with respect to
the 2012 OSTS PEIS.
#20])> DULY MOVED, SECONDED AND PASSED THIS 16th day of April, 2012
Sheila Reiner
Mesa County Clerk & Recorder
BOARD OF COUNTY COMMISSIONERS OF
MESA COUNTY, COLORADO
By: _____ ~~----------
Chairman

OSTS_080

Organization: Rio Blanco County Board of Commissioners, Shawn Bolton
Received: 4/14/2012 12:00:00 AM
Commenter1: Shawn Bolton - Rio Blanco County, Colorado (United States)
Organization1: Rio Blanco County Board of Commissioners
Commenter Type: Local Government
Classification: none
Submission Category: Resolution
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/16/2012 12:00:00 AM
Attachments: OSTS2012D00081.htm (OSTS_080-59139.htm Size = 1 KB)
OSTS_080_Rio_Blanco_Resolution_OSTS2012D00081.pdf (OSTS_080-59138.pdf Size = 333 KB)
Submission Text
See Attachment.

RESOLUTION NO. 2012- _
A RESOLUTION OF THE BOARD OF COUNTY COMMISSIONERS OF RIO BLANCO COUNTY, COLORADO, OPPOSING THE UNITED STATE BUREAU OF LAND · MANAGEMENT'S (BLM) 2012 OIL SHALE AND TAR SANDS PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT, BLM PROJECT# W0-300-1310-PP-OSHL (HEREAFTER 2012 OSTS PEIS) FOR LANDS ADMINISTERED BY THE BLM IN COLORADO,
UTAH AND WYOMING
Concerning Secretary of the Interior Secretarial Order 3310 issued December 22, 2010 ("Secretarial Order 3310").
WHEREAS, On April14, 2011, the BLM caused to be published in the Federal Register, Volume 76, No 72/Thursday, April14, 2011, pages 21003-21005, a notice of intent to prepare the above-referenced 2012 OSTS PEIS; and
<([#1 [*9.2.1*] [*3.1.3*] WHEREAS, the preliminary purpose and need statement in the notice of intent, states the 2012

OSTS PEIS will analyze removing from oil shale and tar sands leasing "All areas that the BLM has
identified or may identify as a result of inventories conducted during this planning process, as lands containing wilderness characteristics[.]" /d., at page 21004; and
WHEREAS, the notice of intent further states at page 21004:
"Lands that the BLM identifies as having wilderness characteristics will be considered during this planning initiative, as described above, and consistent with Secretarial Order No. 3310, dated Dec. 22, 2010, and BLM Manuals 6301 and 6302. Future leasing of lands determined by the BLM to have wilderness characteristics, if compatible with the allocation decisions stemming from this initiative, will subsequently be assessed in accordance with BLM Manual 6303, as appropriate (Le., where the BLM has not determined, consistent with BLM Manual 6302, whether the lands with wilderness characteristics at issue should be receive a wild lands designation, BLM Manual 6303 will apply)"; and
WHEREAS, this language documents the BLM's intent to implement, administer and/or enforce Secretarial Order 3310 and one or more of the BLM guidance manuals promulgated under Order3310;and
WHEREAS, any attempt by the BLM to implement, administer and/or enforce Secretarial Order 3310, including any effort by the BLM to proceed further on the 20120STS PEIS, violates the spending moratorium of Section 1769 of the April 21, 2011 Congressional Continuing Resolution to Fund Fiscal Year 2011 through September 30, 2011, which states:
"For the fiscal year ending September 30, 2011, none of the funds made available by this division or any other Act may be used to implement, administer, or enforce Secretarial Order No. 3310 issued by the Secretary of the Interior on December 22, 2010"; and
WHEREAS, this spending moratorium has been carried forward in all subsequent Congressional spending resolutions up to and including the current spending resolution; and
WHEREAS, the 2012 OSTS PEIS, is an admitted attempt by the BLM to implement, administer and/or enforce Secretarial Order 3310 and its policies and objectives, all in violation of the Spending Moratorium of the 2011 Continuing Resolution; and **#1])>**
Concerning the 2008 OSTS PEIS
<([#2 [*9.8*] WHEREAS, the 2008 Oil Shale and Tar Sands Programmatic EIS (2008 OSTS PEIS) was required
under Section 369 (d) (1) of the Energy Policy Act of 2005 and was prepared in cooperation with 14 Federal, state, and local governmental organizations; and
WHEREAS, the 2008 OSTS PEIS was three years in the making, and honored the input of a task force of Governors and other stakeholders as required by the 2005 Energy Policy Act; and
WHEREAS, the Record of Decision (ROD) for the 2008 OSTS PEIS amended 10 land use plans in
Colorado, Utah, and Wyoming to make approximately 2 million acres of public lands available for potential leasing and development of oil shale and approximately 430,000 acres available for leasing and development of tar sands. Together with the regulations published in 2006 and 2008 for oil shale and tar sands resources, the 2008 OSTS PEIS and subsequent land use amendments constituted a reasonable and rational establishment of an oil shale and tar sands program as mandated in the Energy Policy Act of 2005; and
#2])> <([#3 [*6.1.2*] WHEREAS, the oil shale and tar sands program which the 2008 OSTS PEIS

and related
regulations delivered, was a reasonable response to the fact that oil shale and tar sands resources in the Green River Formation located in northeastern Utah, northwestern Colorado and southwestern Wyoming are estimated to be the equivalent of 8 trillion barrels of oil; and
#3])> <([#4 [*9.8*] WHEREAS, the 2008 OSTS PEIS chosen alternative is consistent with the multiple use, sustained
yield of the Federal Land Policy Management Act (FLPMA); and
#4])> <([#5 [*9.5*] WHEREAS, the 2008 OSTS PEIS chosen alternative is consistent with the County Master Plan and
policies which call for responsible development of available energy resources; and
WHEREAS, the alternative adopted in the Record of Decision (ROD) of the 2008 OSTS PEIS is now the No Action Alternative of the draft 2012 OSTS PEIS; and **#5])>**

<([#6 [*9.8*] Concerning the 2012 OSTS PEIS
WHEREAS, the preferred alternative in the draft 2012 OSTS PEIS drastically shrinks, diminishes
and in many areas outright reverses virtually all of the lands made available for Oil Shale and Tar Sands development in 2008, and does so using the same data and science; and
#6])> <([#7 [*9.2.2*] WHEREAS, such a drastic reversal in lands available for Oil Shale and Tar Sands development
between the 2008 PEIS and the 2012 preferred alternative, violates regulatory Task Force requirements of certainty for industry and investors; and
WHEREAS, such a drastic reversal of lands available for Oil Shale and Tar Sands development in 2008, constitutes a de facto, piece-meal revision of previous BLM Resource Management Plans, in violation of the Section 202 Planning Process under FLPMA; and
WHEREAS, the preferred alternative in the draft 2012 OSTS PEIS entirely ignores the input of the task force and stakeholders which the 2005 Energy Policy Act directed the BLM to honor and follow; and moreover the draft 2012 OSTS PEIS may well violate various memoranda of understanding (MOUs) with counties which require the BLM to publish the written input of cooperators who disagree with the preferred alternative; and
WHEREAS, the draft 2012 OSTS PEIS preferred alternative significantly restricts the acreage allotted in the 2008 PEIS for research and development leasing; and
WHEREAS, the draft 2012 OSTS PEIS preferred alternative threatens to arbitrarily undermine the process and the work utilized in creation of the 2008 OSTS PEIS, and essentially dismantle a reasonable and rational oil shale and tar sands program in violation of Section 369 of the 2005 Energy Policy Act; and
#7])> <([#8 [*6.3.3.1*] WHEREAS, the 2012 OSTS PEIS improperly limits technology testing to strictly in situ efforts and
does not allow for development of other technologies; and
#8])> <([#9 [*1.5*] WHEREAS, the 2012 OSTS PEIS preferred alternative is the creature of a friendly lawsuit
settlement agreement between the BLM and ideological opponents to oil shale development, and is therefore entirely pre-determined and pre-decisional in violation of NEPA, with no apparent rationale for revising the acreages approved in 2008; and
#9])> <([#10 [*2.2*] WHEREAS, the BLM has settled on a preferred alternative in the 2012 OSTS PEIS admittedly

without having first analyzed its impacts; the BLM should be required to withdraw the preferred status of the alternative until it has performed this analysis; and
WHEREAS, the acreage approved for Oil Shale and Tar Sands development in the preferred alternative of the draft 2012 OSTS PEIS bears no rational relationship to the stated purpose and need; and **#10])>**
Concerning Oil Shale Facts
<([#11 [*6.3.4*] WHEREAS, the development and production of oil from oil shale has been demonstrated to be
technologically and economically feasible elsewhere in the world; and
#11])> <([#12 [*6.3.2.1*] WHEREAS, some technologies to extract oil from the oil shale rock are not only economically
feasible, but require little or no consumption of water; and
#12])> <([#13 [*6.2.2*] WHEREAS, the energy captured in the extraction of oil and other hydrocarbons from shale more
than makes up for energy consumed in that extraction process; and
#13])> Other Concerns
<([#14 [*3.10.3*] WHEREAS, the rising price of gasoline, coupled with ever-increasing loss of good paying jobs
due to the Administration's policies against energy development on western public lands, results in increasing hardships for families and the local economy; and
#14])> <([#15 [*1.5*] WHEREAS, the Department of Energy has basically abdicated the responsibility Congress placed
upon it to defend and uphold a viable oil shale energy program in America, leaving it instead to a BLM encumbered by a host of anti-oil shale pro-wilderness groups steering the BLM's oil shale
policy; and **#15])>**
<([#16 [*1.1.1*] WHEREAS, the BLM has left insufficient time for the public and cooperators to meaningfully
comment on the public draft 2012 OSTS PEIS by the present comment deadline of May 4, 2012, because a highly relevant commercial oil shale BLM regulation is not due to be published until May 15, 2012, and the public should have the right to view that regulation first and then submit comments on the draft 2012 OSTS PEIS in light of that regulation; and
#16])> <([#17 [*2.1.1*] WHEREAS, the same problems with lack of consistency with local plans and policies and failure
to honor the input of cooperators and all stakeholders, also besets many public lands EIS projects, in addition to the 2012 OSTS PEIS. The cooperators from Utah and Wyoming have already unanimously requested for the No-Action alternative in the draft 2012 OSTS PEIS become the preferred alternative;
#17])> <([#18 [*9.2.1*] NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS OF RIO BLANCO COUNTY, COLORADO, THAT:
1. Rio Blanco County declares the BLM's continuing to administer and carry out the 2012 OSTS PEIS to be an open contempt and flaunting of the Congressional Spending Moratorium first imposed in the 2011 Continuing Resolution and carried forward in all subsequent Congressional spending resolutions up to and including the present one in effect.
2. Rio Blanco County calls upon the BLM to cease all further activities with respect to administering and carrying out the 2012 OSTS PEIS, because doing so is an open contempt and

violation of the Congressional Spending Moratorium against implementing, administering and/or enforcing Secretarial Order 3310, for which the Spending Moratorium was first imposed in the 2011 Continuing Resolution and carried forward in all subsequent Congressional spending resolutions up to and including the present.
3. Rio Blanco County calls upon the BLM to immediately cease and desist all activities related to the above-referenced 2012 OSTS PEIS and immediately publish a revised notice in the Federal Register signifying its cessation of all work on the Programmatic EIS in obedience to the abovequoted
Spending Moratorium. Otherwise, the BLM would be in contempt of Congress.
#18])> <([#19 [*2.1.1*] 4. Should BLM continue to go forward with the 2012 OSTS PEIS regardless of these grievances,
the only legally, viable alternative would be if the BLM adopted the No-Action Alternative, which is identical to the Alternative chosen in the ROD of the 2008 OSTS PEIS.
#19])> <([#20 [*1.1.1*] 5. The BLM should extend the May 4, 2012, deadline for public comment on the draft 2012
OSTS PEIS by at least 30 days after publication of the expected oil shale regulation which is due to be published on or around May 15, 2012. **#20])>**
<([#21 [*1.3*] 6. The BLM should honor the input of cooperators, particularly if they are local governments, as
required by Section 202(c)(9) of FLPMA, in all matters, not just with respect to the 2012 OSTS PEIS.
#21])> DULY MOVED, SECONDED, AND PASSED ON A VOTE OF __ FOR AND
---·A GAINST THIS DAY OF 2012.
ATTEST:
Nancy R. Amick, Clerk to the Board
BOARD OF COUNTY COMMISSIONERS OF
RIO BLANCO COUNTY, COLORADO
Shawn J. Bolton, Chairman
Kenneth C. Parsons, Commissioner
Kai M. Turner, Commissioner

OSTS_081
Organization: Moffat County Board of Commissioners, Tom Gray
Received: 4/23/2012 12:00:00 AM
Commenter1**:** Tom Gray - Moffat County, Colorado (United States)
Organization1**:**Moffat County Board of Commissioners
Commenter Type: Local Government
Classification: none
Submission Category: Resolution
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/16/2012 12:00:00 AM
Attachments: OSTS2012D00082.htm (OSTS_081-59141.htm Size = 1 KB)
OSTS_081_Moffat_County_Resolution_OSTS2012D00082.pdf (OSTS_081-59140.pdf Size = 672 KB)

Submission Text
See Attachment.

MOFFAT COUNTY COMMISSION
RESOLUTION NO. #1012-51
A RESOLUTION OPPOSING THE BLM'S 2012 OIL SHALE AND TAR SANDS
DRAFT PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT,
BLM PROJECT #W0-300-131 0-PP-OSHL (HEREAFTER 2012 OSTS DPEIS)
FOR LANDS ADMINISTERED BY THE BLM IN COLORADO, UTAH AND WYOMING
This Resolution is adopted in open meeting after due opportunity for public comment, by the Board of
Commissioners of Moffat County, in order to redress the many violations of law, regulation, and policy by the
BLM with respect to the BLM's 2012 OSTS DPEIS.
BACKGROUND
As background to this Resolution, Moffat County recites the following grievances:
WHEREAS, On April 14,2011, the BLM caused to be published in the Federal Register, Volume 76, No
72/Thursday, April 14, 2011, pages 21 003-21005, a notice of intent to prepare the 2012 OSTS DPEIS; and
<([#1 [*9.2.1*] [*3.1.3*] WHEREAS, the preliminary purpose and need statement in the notice of intent, states the PEIS will analyze
removing from oil shale and tar sands leasing "All areas that the BLM has identified or may identify as a result
of inventories conducted during this planning process, as lands containing wilderness characteristics[.]'' Id., at
page 21 004; and
WHEREAS, the notice of intent further states at page 21004:
Lands that the BLM identifies as having wilderness characteristics will be considered during this planning initiative, as described above, and consistent with Secretarial Order No. 3310, dated Dec. 22,
2010, and BLM Manuals 6301 and 6302. Future leasing of lands determined by the BLM to have wilderness characteristics, if compatible with the allocation decisions stemming from this initiative, will
subsequently be assessed in accordance with BLM Manual6303, as appropriate (i.e., where the BLM
has not determined, consistent with BLM Manual 6302, whether the lands with wilderness characteristics at issue should be receive a wild lands designation, BLM Manual 6303 will apply); and
WHEREAS, this language documents the BLM's intent to implement, administer and/or enforce Secretarial
Order 3310 and one or more of the BLM guidance manuals promulgated under Order 3310; and
\VHEREAS, any attempt by the BLM to implement, administer and/or enforce Secretarial Order 331 0,
including any effort by the BLM to proceed further on the 2012 OSTS DPEIS, violates the spending

moratorium of Section 1769 of the April21, 2011 Congressional Continuing Resolution to Fund Fiscal Year
20 II through September 30, 2011 , which states:
For the fiscal year ending September 30, 2011, none of the funds made available by this division or any
other Act may be used to implement, administer, or enforce Secretarial Order No. 3310 issued by the
Secretary of the Interior on December 22, 20 I 0; and
WHEREAS, this spending moratorium has been carried forward in all subsequent Congressional spending
resolutions up to and including the current spending resolution; and
WHEREAS, the 2012 OSTS DPEIS, is an admitted attempt by the BLM to implement, administer and/or
enforce Secretarial Order 3310 and its policies and objectives, all in violation of the Spending Moratorium of
the 2011 Continuing Resolution; and **#1])>**
<([#2 [*9.8*] WHEREAS, the 2008 Oil Shale and Tar Sands Programmatic EIS (2008 OSTS PEIS) was required under
Section 369 (d) (I) of the Energy Policy Act of2005 and was prepared in cooperation with 14 federal, state, and
local governmental organizations; and
WHEREAS, the 2008 OSTS PEIS was 3 years in the making, and it honored the input of a task force of
Governors and other stakeholders as per requirement of the 2005 Energy Policy Act;
WHEREAS, the Record of Decision (ROD) for the 2008 OSTS PEIS amended 10 land use plans in Colorado,
Utah, and Wyoming to make approximately 2 million acres of public lands available for potential leasing and
development of oil shale and approximately 430,000 acres available for tar sands leasing. Together with the
regulations published in 2006 and 2008 for oil shale and tar sands resources, the 2008 OSTS PEIS and
subsequent land use amendments constituted a reasonable and rational establishment of an oil shale and tar
sands program as mandated in the Energy Policy Act of2005; and
#2])> <([#3 [*6.1.2*] WHEREAS, the oil shale and tar sands program to which the 2008 OSTS PEIS and related regulations gave birth, was a reasonable response to the fact that oil shale and tar sands resources in the Green River Formation
located in northeastern Utah, northwestern Colorado and southwestern Wyoming may reach 4 trillion barrels of
oil; and
#3])> <([#4 [*9.8*] WHEREAS, the preferred alternative in the 2012 OSTS DPEIS drastically shrinks, diminishes and in many
areas outright reverses virtually all of the lands made available for Oil Shale and Tar Sands development in
2008, and does so using the same data and science; and

#4])> <([#5 [*2.2*] WHEREAS, the 2012 OSTS DP~IS fails to analyze alternative 2b, and the BLM admits as much on pages 2-35 of the 2012 OSTS DPEIS; and
#5])> <([#6 [*9.2.2*] WHEREAS, such a drastic reversal in lands available for Oil Shale and Tar Sands development between the 2008 PEIS and the 2012 preferred alternative, violates regulatory Task Force requirements of certainty for
industry and investors; and
WHEREAS, such a drastic reversal of lands available for Oil Shale and Tar Sands development in 2008,
constitutes a de facto, piece-meal revision of previous BLM Resource Management Plans, in violation of the
Section 202 Planning Process under FLPMA;
WHEREAS, the preferred alternative in the 2012 OSTS DPEIS entirely ignores the input of the task force, and
stakeholders which the 2005 Energy Policy Act directed the BLM to honor and follow; and moreover the 2012
OSTS DPEIS may well violate various memoranda of understanding (MOUs) with counties, cities \vhich
require the BLM to publish the written input of cooperators who disagree with the preferred alternative; and
WHEREAS, the 2012 OSTS DPEIS restricts the acreage allotted in the 2008 PWID for research and
development leasing;
WHEREAS, the 2012 OSTS DPEIS threatens to arbitrarily undermine the process and the work utilized in
creation of the 2008 OSTS PEIS, and essentially dismantle a reasonable and rational oil shale and tar sands
program in violation of Section 369 of the 2005 Energy Policy Act; and
#6])> . .. .
<([#7 [*1.5*] WHEREAS, the 2012 OSTS DPEIS is the creature of a friendly lawsuit settlement agreement between the
BLM and ideological opponents to oil shale development, and is therefore entirely pre-determined and predecisional
in violation ofNEPA, with no apparent rationale for revising the acreages approved in 2008; and
#7])> <([#8 [*2.2*] WHEREAS, the BLM has settled on a preferred alternative in the 2012 OSTS DPEIS admittedly without
having first analyzed its impacts; BLM should be required to withdraw the preferred status of the alternative
until it has performed this analysis; and
WHEREAS, the acreage approved for Oil Shale and Tar Sands development in the 2012 OSTS DPEIS
preferred alternative bears no rational relationship to the stated purpose and need; **#8])>**
<([#9 [*1.5*] WHEREAS, the Department of Energy has basically abdicated the responsibility Congress placed upon it to defend and uphold a viable oil shale energy program in America. leaving it instead to the BLM encumbered by
a host of anti-oil shale pre-wilderness groups steering BLM's every move; **#9])>**
<([#10 [*9.5*] WHERAS, the alternative adopted in the ROD of the 2008 OSTS PEIS is now the

No Action Alternative of the 2012 OSTS DPEIS; and
WHEREAS, the 2008 OSTS PEIS chosen alternative is consistent with the multiple use, sustained yield
mandate of the Federal Land Policy and Management Act (FLPMA) ; and
WHEREAS, the 2008 OSTS PEIS chosen alternative is consistent with county general plans and policies
which call for responsible development of available energy resources; and **#10])>**
<([#11 [*6.3.2.1*] WHEREAS, even prior to 2008, technology to extract oil from the oil shale rock is not only economically
feasible, but certain oil shale recovery processes require little to no consumption of water, contrary to the myths
which falsely claim that oil shale extraction requires large consumption of water resources; and
#11])> <([#12 [*6.2.2*] WHEREAS, the energy captured in the extract of oil from shale (natural gas capture, etc.,) more than makes up for energy consumed in that extraction process, thus dispelling the myth that the oil shale extraction process
consumes more energy than it produces;
#12])> <([#13 [*3.10.3*] WHEREAS, the rising price of gasoline, coupled with ever increasing loss of good paying jobs due to the
Administration's policies against energy development on western public lands, result in increasing hardships for
families and the local economy; and
#13])> <([#14 [*6.3.3.1*] WHEREAS, the 2012 OSTS DPEIS improperly limits technology testing to strictly in situ efforts and does not allow for development of other technologies; and
#14])> <([#15 [*1.1.1*] WHEREAS, the BLM has left insufficient time for the public and cooperators to meaningfully comment on the
public 2012 OSTS DPEIS by the present comment deadline of May·4, 20 12, because a highly relevant
commercial oil shale BLM regulation is not due to be published until May I 5, 2012 and the public should have
the right to view that regulation first and then submit comments on the 2012 OSTS DPEIS in light of the
regulation; and
#15])> <([#16 [*2.1.1*] WHEREAS, the same problems with lack of consistency with local plans and policies and failure to honor the input of cooperators and all stakeholders, also besets many public lands EIS projects, in addition to the 2012
OSTS DPEIS. The cooperators from Utah and Wyoming have already unanimously requested for the NoAction
alternative in the 2012 OSTS DPEIS become the preferred alternative.
#16])> 0 • ., •
RESOLUTION
<([#17 [*9.2.1*] NOW TH EREFORE, BE IT RESOLVED BY MOFFAT COUNTY, STATE OF COLORADO AS FOLLOWS:
I. Moffat County declares the BLM's continuing to administer and carry out the 2012 OSTS DPEIS, and
updating any inventory of lands having wilderness characteristics, to be an open contempt and flaunting of the

Congressional Spending Moratorium first imposed in the 2011 Continuing Resolution and carried forward in all
subsequent Congressional spending resolutions up to and including the present;
2. Moffat County calls upon the BLM to cease all further activities with respect to administering and
carrying out the 2012 OSTS DP EIS, because doing so constitutes an open contempt and violation of the
Congressional Spending Moratorium against implementing. administering and/or enforcing Secretarial Order
33 10, which Spending Moratorium was first imposed in the 2011 Continuing Resolution and carried forward in
all subsequent Congressional spending resolutions up to and including the present;
3. Moffat County calls upon the BLM to immediately cease all activities related to the 2012 OSTS DPEIS
and immediately publish a revised notice in the federal Register signifying its cessation of all work on the
Programmatic EIS in obedience to the above-quoted Spending Moratorium. Otherwise, the BLM would be in
contempt of Congress;
#17])> <([#18 [*2.1.1*] 4. Should BLM continue to go forward with the 20 12 OSTS DPEIS regardless of these grievances, the
only legally, viable alternative would be if the BLM adopted the NO-Action Alternative, which is identical to
the Alternative chosen in the ROD of the 2008 OSTS PEIS; **#18])>**
<([#19 [*9.5*] 5. Should BLM decide to proceed with the 20 12 OSTS DPEIS, it is still obligated under FLPMA to be
consistent with State and Local plans to the maximum extent possible:
#19])> <([#20 [*1.1.1*] 6. The BLM should extend the May 4, 2012 deadline for public comment on the 2012 OSTS DPE IS at least 30 days after publication of the expected oil shale regulation due to be published on or around May 15, 2012.
#20])> <([#21 [*1.3*] 7. The BLM should honor the input of cooperators, particularly if they are local governments, as required
by Section 202(c)(9) of FLPMA and the relevant terms of the BLM-Cooperator MOUs, in all matters, not just
with respect to the 20 12 OSTS DPEIS.
#21])> APPROVED AND 1\DOPTED by the Board of County Commissioners of Moffat County Commissioners of
Moffat County this 23th day of April. 20 12.
Tom Gray,
District I

OSTS_082
Organization: Carbon County, Rex Sacco
Received: 5/1/2012 12:00:00 AM
Commenter1: Rex Sacco - Price, Utah 84501 (United States)
Organization1: Carbon County
Commenter Type: Coop Agency - Local Govt

Classification: none
Submission Category: Letter
Submitted As: E-Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/16/2012 12:00:00 AM
Attachments: OSTS2012D00083.htm (OSTS_082-59144.htm Size = 1 KB)
OSTS_082_Carbon_Cnty_Reqfor_ext_Email_OSTS2012D00083.pdf (OSTS_082-59143.pdf Size = 175 KB)
Submission Text
See Attachment.

CARBON COUNTY PUBLIC LANDS DEPARTMENT
Rex Sacco, Director
120 East Main Street Price, Utah. 84501
Phone 435-636-3712 Fax 435-636-3264
rex.sacco@carbon.utah.gov
May 1, 2012
Oil Shale and Tar Sands Resources Draft Programmatic EIS Argonne National Laboratory 9700 South Cass Avenue—EVS/240 Argonne, IL 60439.
Sent Via Email Transmission:
http://ostseis.anl.gov.
cc. Sherri Thompson
sthompso@blm.gov
Dear Ms. Thompson,
<([#1 [*1.1.1*] Please accept this correspondence as the Board of Commissioners of Carbon County, Utah's request for at least a 30-day extension to the comment period on the on the Draft Programmatic Environmental Impact Statement (PEIS) and Possible Land Use Amendments for Allocation of Oil Shale and Tar Sands Resources on Lands Administered by the BLM in Colorado, Utah and Wyoming. **#1])>**
<([#2 [*1.3*] As we understand it, the reason that this action has taken place is to quell a legal challenge. The DOI has since agreed to a settlement. Since the terms of that settlement agreement has not been shared with us; we as cooperators have not been given the full ability to make substantive comments. In all likelihood the additional information would probably rate additional comments from us pertaining the planning and implementation of this action. Without knowing the need of or terms for the settlement, we in fact are not being allowed to comment on the scope of or purpose for this important action. Until such time as the settlement information is brought forth and we are given a reasonable amount of time to comment we doubt that BLM has legally adhered to the dictates of federal land management planning through the processes of coordination (as described in FLPMA 43 U.S.C. 1712 and 43 CFR 1610 (BLM)) and cooperating agency status (as described in Section 1501.6 of NEPA and 40 CFR 1508.5 (CEQ) Real cooperation will not happen until all information needed to initiate a true NEPA planning process is met. Until then it is not appropriate to expect us to think our comments are really given due diligence or consideration. **#2])>**
We will await your reply.

Thank you for your consideration on this request.
rls

OSTS_083
Organization: Living Rivers/Colorado Riverkeeper, etal, John Weisheit
Received: 5/4/2012 12:00:00 AM
Commenter1: John Weisheit - , Utah (United States)
Organization1: Living Rivers/Colorado Riverkeeper, etal
Commenter Type: Misc. Organization
Classification: none
Submission Category: Letter
Submitted As: E-Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/16/2012 12:00:00 AM
Attachments: OSTS2012D00084.htm (OSTS_083-59146.htm Size = 1 KB)
OSTS_083_Weisheit_CBD_GCT_LR_CR_OSTS_Comments_Email_OSTS2012D00084.pdf (OSTS_083-59145.pdf Size = 196 KB)
Submission Text
See Attachment.

CENTER FOR BIOLOGICAL DIVERSITY
GRAND CANYON TRUST
LIVING RIVERS/COLORADO RIVERKEEPER
May 4, 2012
Draft OSTS PEIS
Argonne National Laboratory
9700 S. Cass Ave
EVS/240
Argonne, IL 60439
Via e-mail
Re: Bureau of Land Management (BLM) Oil Shale and Tar Sands (OSTS)
Draft Programmatic Environmental Impact Statement (PEIS) for
Colorado, Wyoming, Utah (tri-state area).
Responsible Officials:
Thank you for the opportunity to provide comments for the Draft OSTS PEIS; these comments, submitted by Center for Biological Diversity, Grand Canyon Trust and Living Rivers/Colorado Riverkeeper, supplement attached comments submitted by sixteen conservation groups dated April 27, 2012, which we incorporate by reference here. These supplementary comments specifically address cumulative impacts to water resources, air quality, climate, conservation of public lands, and conservation of threatened and endangered species. Our organizations are opposed to new or continued oil shale and tar sands development, leasing, or research on public lands. Commitments of public lands or resources to such greenhouse gas intensive energy development are incompatible with an energy or public lands policy to reduce greenhouse gas emissions on the timeframe that scientists tell us is absolutely necessary; such commitments also threaten Upper Basin water quality, water quantity,

imperiled species and biological diversity, recreational, agricultural and other values.
<([#1 [*1.5*] 1. Alternatives
We appreciate the work of BLM and Argonne Labs in the development of the OSTS PEIS, however we do not fully support any of the proposed alternatives offered. It is our opinion that any study to develop unconventional oil reserves in the Colorado River Basin remains presumptuous as stated in our scoping comments of May 16, 2011. No alternative has been presented that would provide unequivocal protection of water and air resources and biological diversity in the Colorado River watershed; therefore the DPEIS as presented is incomplete and needs additional review.
#1])> <([#2 [*3.4.1*] [*9.2*] [*3.7.1.2*] If the 2005 Energy Policy Act is designed to provide energy security for the nation, it
conversely creates water insecurity for the Colorado River Basin. Simply stated, water is the fundamental resource allowing any prosperity to exist in the arid Southwest and development of water intensive energy resources such as OSTS will threaten water security for millions of downstream users.
The cumulative loading of excessive greenhouse gases and dust into the atmosphere is already causing the annual snowpack of the Colorado River System to melt faster in the spring, creating runoff that will not be absorbed into mountain watersheds. Water moving too quickly through the system prevents groundwater absorption and prevents critical aquifers from recharging.
Attempts to improve critical wildlife habitat in the Colorado River Basin are failing and especially for aquatic species. For example, the cooperative agreement for the Endangered Fish Recovery Program has been extended primarily because the original objectives have not been met, and the established goals are weakening administratively over time.
In the Lower Basin of the Colorado River, two pieces of protective legislation have been introduced by Representative Raul Grijalva (D-AZ): 1) The Lower Colorado River Protection Act, and 2) The Grand Canyon Watershed Protection Act. It is important that decision makers and federal agencies understand that fossil and nuclear fuel development in the Upper Basin of the Colorado River, as detailed in the 2005 Energy Policy Act, would nullify the intent of this proposed legislation, if it is ever passed, and harm the drinking water supply of 25 million downstream users.
In the Upper Basin, downstream water users came together with citizens of Moab, Utah to effect cleanup of the massive Atlas uranium mill tailings pile on the banks of the Colorado River. If watershed protection legislation had been implemented decades ago, for the entire Colorado River System, taxpayers would not be saddled with paying to clean up toxic waste dumps sited in the river floodplain. Sane energy policy would include protecting and securing the water resources of the Colorado River System in perpetuity.
#2])> 2. Water Resources
<([#3 [*3.4.1*] The Colorado River Basin no longer has surplus water. According to recent science compiled by the Department of Interior: 1) the Colorado River Compact is over-allocated by 2 million acre feet; 2) the demand for Colorado River water presently exceeds the natural supply; 3) the annual supply in the last 50 years has decreased one million acrefeet, and; 4) the decline in the annual flow is expected to further reduce another one million acre-feet by 2060. Excluded from these studies is the annual loss of 750,000

acre-feet due to sublimation of the Rocky Mountain snowpack caused by fugitive dust derived from human activity and increasing aridity from anthropogenic climate change. According to the GAO report on oil shale development in the tri-state area, the amount of water necessary to fully develop this reserve is equivalent to 30 to 40 years of the entire Colorado River supply. Since water supply and demand is clearly imbalanced in the basin, all proposed OSTS development can only be speculative. Oil corporations may deliver clever messaging to the public about the ample resource awaiting full exploitation, but there is not enough water in the system to practically begin that development in the next decade. Also, there is no guarantee that existing water resources will not be further degraded by current development activity.

The Uinta Basin watershed in Utah contains two types of aquifers, shallow and deep. Deep aquifers would be completely exhausted by proposed strip mining and processing operations in the region. Eventually, to continue mining, developers would have to procure water from the mainstems; the White, Green and Colorado Rivers. These water sources are currently over-allocated to downstream users. **#3])>**

<([#4 [*3.7.4.10*] In a strip mining scenario in the Uinta Basin, shallow aquifers, comprised of alluvium,

would be transformed into piles of rubble and dust. Cloudbursts would mobilize toxins from residual chemical solvents used in processing, and stored in surface waste pits, and send them downstream toward the mainstems. The Colorado River via Westwater Creek is the closest mainstem to the PR Springs Special Tar Sands District. The mouth of Westwater Creek is home to a population of humpback chub in Westwater Canyon. Desolation Canyon on the Green River is prime spawning habitat for the Colorado pikeminnow. Labyrinth and Stillwater Canyons on the Green are prime nursery habitat for all the endangered fish species of the Colorado River.

#4])> <([#5 [*3.4.6*] [*6.3.2*] In regard to oil shale development, for mining and surface retorting, water is needed for

dust control during materials distraction, crushing, and transport; for cooling and reclaiming spent shale; for upgrading raw shale oil; and for various plant utilities associated with power production and environmental control (Bartis et al. 2005). The U.S. Water Resources Council estimates that oil shale development will increase annual consumptive water use in the Upper Colorado Region by about 150,000 acre-feet per year for each million barrels per day of production (Bartis et al. 2005). While the in situ process reduces a number of these water requirements, the facilities will still need considerable volumes for oil/natural gas extraction, postextraction cooling, products upgrading and refining, environmental control systems and power production (Bartis et al. 2005). Likewise, tar sands production also relies on large amounts of water (Dyer et al. 2008). It takes approximately 2-4.5 barrels of water to extract and upgrade one barrel of oil from a tar sands mine (Dyer et al. 2008). This is important because at the same time production of fuel from oil shale and tar sands in the U.S. will depend on large amounts of water, the greenhouse gas emissions from the project will contribute to the global warming which dangerously threatens the water supply.

In a recent article published in Science, researchers found that an increase in atmospheric greenhouse gases has contributed to a "coming crisis in water supply for the western United States" (Barnett 2008). The research found that between 1950 and 1999, a shift in the character of mountain precipitation occurred, with more winter

precipitation falling as rain instead of snow, earlier snow melt, and associated changes in river flow (Barnett 2008). The variants among the "most important metrics of the western and the average January through March temperatures in the mountainous regions of the western U.S. (Barnett 2008). Using several climate models and comparing the results, the researchers found that "warmer temperatures accompany" decreases in snow pack and precipitation and the timing of runoff, impacting river flow and water levels (Barnett 2008). These researchers concluded with high confidence that up to 60 percent of the "climate related trends of river flow, winter air temperature and snow pack between 1950-1999" are human-induced (Barnett 2008). This, the researchers wrote, is "not good news for those living in the western United States." (Barnett 2008). **#5])>**

<([#6 [*4.2*] [*3.4.1*] The impact greenhouse gas emissions and global warming is having on the western

United States' water resources is a critical consideration that the BLM must analyze in its final EIS. Likewise, it must analyze how the changes in the water systems in the project area will affect plants and animals that will be impacted by the project. Many species will be detrimentally affected not only by the direct impact of water usage by oil shale and tar sands facilities, but also by the cumulative impact the facilities will have on global warming and the resulting adverse effect on the river flow and water levels. The DPEIS must also analyze how the project's direct impact on species from impacts like habitat destruction may act in a cumulative and synergistic way with impacts to species from global warming. **#6])>**

<([#7 [*3.5.2*] [*4.2*] [*3.5.4*] [*3.5.8*] 3. Air Quality

We emphatically endorse the comments of our colleagues, Western Resource Advocates et al regarding air quality issues in attached document. Specifically, more time should be taken to adequately study cumulative air impacts establishing baseline information for existing impacts from industrial development in the region covered by the OSTS PEIS and from the reasonably foreseeable development scenario proposed as required by NEPA.

In Utah, air quality monitoring in the heavily developed Uinta Basin over the past two winters revealed some of the nation's highest ozone measurements, even outpacing San Bernardino County in Los Angeles. Emissions from Uinta and Duchesne counties' 15,000 oil and gas wells are suspect. The problem is being investigated in a 5.5 million dollar study conducted by the state, NOAA, EPA, the University of Colorado, BLM, the Energy Dynamics Lab, Uintah Impact Mitigation Special Service District and the Western Energy Alliance. Preliminary results and conclusions are scheduled for release in July 2012, however due to the lack of snow on the ground this winter which contributes to ozone formation; data gathered in winter 2012 will not reflect conditions present during snowy years.

Air quality data used for analysis in the OSTS PEIS, if obtained from industry sources, should be verified by BLM, EPA, NOAA or some entity without financial interests in development scenarios.

Fugitive emissions from oil and gas development infrastructure including pipelines, compressor stations, wells, storage tanks and transport trucks is a major source of methane, Volatile Organic Chemicals and Hazardous Air Pollutants, all of which is unmonitored and unmeasured. The DPEIS must assess and acknowledge impacts from

fugitive emissions. The EPA has used FLIR video cameras to reveal the presence of these otherwise "invisible" sources. For example see www.youtube.com/watch?v=N2cHGx0Q1qM&feature=relmfu
For a comprehensive database on known chemicals used in the oil and gas development industry and their effects on human health please see www.endocrinedisruption.com . The population of the Uinta Basin is at 30,000 residents, and any heavily concentrated oil/gas development scenario such as proposed in the OSTS PEIS, which augments existing impacts, should assess possible effects on human health. **#7])>**
<([#11 [*3.5.1.1*] a. The DPEIS Must Assess Carbon Dioxide Emissions
Carbon dioxide is one of the most important greenhouse gases and tends to stay in the atmosphere for centuries (Archer 2005). The IPCC found that emission rates of carbon dioxide have grown by 80 percent from 1970 to 2004 and that the 2005 atmospheric concentration of carbon dioxide at 379 parts per million greatly exceeded the natural range over the last 650,000 years (Bernstein et al. 2007). The rise of carbon dioxide emissions in the air is commensurate with the rise of global temperatures.
Scientists have described the atmospheric carbon dioxide ceiling that must not be exceeded in order to avoid a dangerous rise in temperatures. Previously, scientists have described this "ceiling" as approximately 450 parts per million (ppm) of carbon dioxide, and have warned that this may need to be adjusted downwards (Hansen 2006, Hansen 2006a,b). Recently, Dr. James Hansen has stated that the limit will need to be revised downward to 350 ppm (McKibben 2007). We are already well past that ceiling at 383 ppm (McKibben 2007).
It is possible to slow and then reverse the increase in carbon dioxide emissions concentrations by slashing anthropogenic emissions, improving land use, and utilizing alternative energy sources. See, e.g. Hansen 2006, Hansen et al. 2006a,b; Hansen and Sato 2004. However, the necessary measures have not yet been implemented, and carbon dioxide emissions have continued to increase by 2 percent per year since 2000 (Hansen 2006; Hansen et al. 2006a,b). If this growth continues, the 35 percent increase in carbon dioxide emission between 2000 and 2015 will make it impossible to get below even the previously identified ceiling of 450 ppm (Hansen 2006; Hansen et al. 2006a,b).
b. The DPEIS Must Assess Methane Emissions
Methane is the most important of the non-CO2 pollutants, with a global warming potential 21 times greater than carbon dioxide, and an atmospheric lifetime of 12 years (Forster and Ramaswamy 2007). Methane constitutes approximately 20% of the anthropogenic greenhouse effect globally, the largest contribution of the non-CO2 gases. As a precursor to tropospheric ozone, methane emissions have an even more powerful impact on climate. In the Arctic, which is already struggling in the face of global warming, this impact is strongest in winter months, which can result in an acceleration of the onset of spring melt (Shindell 2007). Tropospheric ozone, unlike other greenhouse gases, absorbs both infrared radiation and shortwave radiation (visible light). Thus, tropospheric ozone is a particularly powerful greenhouse gas over highly reflective surfaces like the Arctic, because it traps shortwave radiation both as it enters the Earth's atmosphere from the sun and when it is reflected back out again by snow and ice. Reducing global methane emissions will reduce ozone concentrations in the sensitive Arctic and elsewhere.

c. The DPEIS Must Assess Black Carbon or Soot Emissions

Black carbon, or soot, consists of particles or aerosols released through the inefficient burning of fossil fuels, biofuels, and biomass (Quinn et al. 2007). Black carbon warms the atmosphere, but it is a solid, not a gas. Unlike greenhouse gases, which warm the atmosphere by absorbing longwave infra-red radiation, soot has a warming impact because it absorbs shortwave radiation, or visible light (Chameides and Bergin 2002). Black carbon is an extremely powerful greenhouse pollutant. Scientists have described the average global warming potential of black carbon as about 500 times that of carbon dioxide over a 100 year period (Hansen et al. 2007; see also Reddy and Boucher 2007). This powerful warming impact is remarkable given that black carbon remains in the atmosphere for only about four to seven days, with a mean residence time of 5.3 days (Reddy and Boucher 2007).

Black carbon presents a particularly troubling problem for the Arctic. It contributes to warming in this region through the formation of "Arctic haze" and through deposition on snow and ice which increases heat absorption (Quinn et al. 2007; Reddy and Boucher 2007). Arctic haze results from a number of aerosols in addition to black carbon, including sulfate and nitrate (Quinn et al. 2007). The effects of Arctic haze may be to either increase or decrease warming, but when the haze contains high amounts of soot, it absorbs incoming solar radiation and leads to heating (Quinn et al. 2007).

Soot also contributes to heating when it is deposited on snow because it reduces reflectivity of the white snow and instead tends to absorb radiation. A recent study indicates that the direct warming effect of black carbon on snow can be three times as strong as that due to carbon dioxide during springtime in the Arctic (Flanner 2007). Black carbon emissions that occur in or near the Arctic contribute the most to the melting of the far north (Reddy and Boucher 2007; Quinn et al. 2007). Black carbon is a significant contributor to global climate change, and, like methane and carbon dioxide, its emissions must be reduced to curb future warming of the earth.

d. The DPEIS Must Assess Nitrous Oxide and All Other Greenhouse Gas Pollutants

Nitrous oxide has a global warming potential 310 times that of carbon dioxide and an atmospheric lifetime of approximately 114 years (Forster and Ramaswamy 2007). It constitutes the second largest proportion of anthropogenic non-CO2 gases at 7%. The main sources of nitrous oxide emissions are agriculture, wastewater, fossil fuel combustion, and industrial adipic and nitric acid production. As discussed further below, because oil shale and tar sands production relies heavily on fossil fuel combustion, and because the fuel eventually produced will also be burned by consumers, the project will likely lead to an increase in nitrous oxide emissions. The BLM must explore these emissions in its DPEIS. The BLM must also discuss any other greenhouse gas pollutants that may result from the proposed project.

In sum, the science concerning greenhouse gases and global warming is advanced and makes clear that we must stop the growth of greenhouse gas emissions, and then rapidly reduce overall emissions to a very small fraction of current levels. The DPEIS fails to fully acknowledge this critical context in which the oil shale and tar sands development's greenhouse gas emissions must be analyzed. The greenhouse gas intensive oil shale and tar sands development is completely incompatible with any rational energy policy to reduce greenhouse gas emissions on the timeframe that

scientists tell us is absolutely necessary. Without analyzing the greenhouse gas emissions from the proposal within the overall context of the climate crisis we are facing, the BLM cannot comply with its legal obligations to fully analyze and disclose the unacceptable impact that a commercial leasing program will have on the environment. **#11])>**
<([#8 [*3.1.1*] 4. Public Lands
The current custom and culture of the BLM allows even multi-national corporations to appropriate U.S. public lands and sue the federal government for obstructing their rights to develop wherever they please even when The Department of Interior chooses to withdraw certain special lands from mining activity. Such is the case with Interior's recent uranium mining withdrawal at the Grand Canyon. Clearly there is a need for reform of the system. In the interim we are losing far more public land to destructive industrial development than is being protected by conservation measures; this status is not representative of balanced management.
When the BLM was established in 1946 from the melding of the General Land Office and the Grazing Service, a preference for mining and grazing uses for federal public lands was embedded in the culture of the agency. Although implementation of the Federal Land Policy and Management Act of 1976 allowed public participation in creation of BLM Resource Management Plans and gave a voice to other user groups such as hunters, fishermen, recreationists and other values such as clean air, clean water, intact wildlife habitat and wilderness; it did not effectively loosen the preferential grip of mining and grazing interests on public lands. We understand that Multiple Use does not mean every use on every acre of land, however the mining activities covered in the OSTS PEIS would relegate proposed mining areas to a single use in perpetuity. We do not believe that is an acceptable outcome.
The Tavaputs Plateau and the Uinta Basin of northeast Utah includes Dinosaur National Monument, Flaming Gorge National Recreation Area, and counties including Daggett, Duchesne, Carbon, Emery, Grand and Uintah. The BLM has identified about 650,000 total acres of potential contiguous wilderness in northeast Utah. These units include Bull Canyon (12,297 acres), Coal Canyon(61,430 acres), Cold Spring Mountain (17,682 acres), Cripple Cowboy (15,200 acres) Daniels Canyon (2,496 acres), Desolation Canyon (290,845 acres), Diamond Breaks (35,380 acres), Floy Canyon (72,605 acres), Flume Canyon (50,800 acres), Jack Canyon (7,500 acres), Moonshine Draw (3,900 acres), Turtle Canyon (33,690 acres), Spruce Canyon (20,900 acres), White River (13,500 acres) Westwater Creek (10,100 acres), Wild Mountain (500 acres). Additionally, the citizen's proposal contained in America's Red Rock Wilderness Act identifies a total of 838,600 acres of wilderness in this region.
The special tar sands districts in the San Rafael Swell, the Triangle Tar Sands and White Canyon should be completely eliminated from the PEIS for reasons of their close proximity to extensive wilderness lands, Canyonlands National Park, Capitol Reef National Park, Glen Canyon National Recreation Area and the formerly proposed San Rafael Swell National Monument.
Keeping these wilderness lands intact is an excellent opportunity to preserve pristine ecosystem functions for both wildlife and human enjoyment. In Utah, surface and underground mining for either tar sands or oil shale would be devastating to wilderness and national park values. Which of these uses is an appropriate and balanced management decision for the nation's public lands? **#8])>**

<([#9 [*9.2.2*] 5. The Program Would Not Meet the Requirements of Section 369 of the EPAct. Oil Shale and Tar Sands Development Cannot Proceed
Because, as the DPEIS Demonstrates, it Cannot Be Done in an
"Environmentally Sound Manner."
Section 369 of the EPAct makes clear that as a substantive matter, oil shale or tar sands development on public lands in the Rockies may proceed, if at all, only in an "environmentally sound manner." Thus, while NEPA standing alone does not necessarily mandate an environmentally sound outcome as a substantive matter, such result is required here. See, e.g., Wyo. Outdoor Council v. U.S. Army Corps of Eng'rs, 351 F. Supp. 2d 1232, 1240 (D. Wyo. 2005) ("NEPA mandates that federal agencies take into consideration the impacts of their actions on the environment in the hopes that such consideration will lead to environmentally sound decisions that balance the needs of humans and the environment in which they live").
The DPEIS and other studies demonstrate, however, that oil shale and tar sands development, as would be facilitated by the proposed action, would not proceed in an "environmentally sound" way. According to the DPEIS, the proposed development could destroy habitat, alter topography, displace birds and animals, kill animals, destroy plants including many oil shale endemic species, and could even drive some highly imperiled plant species to extinction, like the clay reed-mustard, Dudley Bluffs bladderpod, Dudley Bluffs twinpod, shrubby reed-mustard, and Uinta Basin hookless cactus. It will also, as described below, require vast energy inputs that may produce up to four times more greenhouse gas pollution than conventional oil production—rendering a global warming impact that the nation and world simply cannot afford.
Indeed, such impacts are not just possible, but quite likely. Many studies have documented the severe environmental effects of oil shale and tar sands development. See, e.g., Environmental Defense (2008) at 7-18 (documenting impacts of tar sands development, including toxic contamination of air and water, and increased global warming); WWF (2008) at 13-53 (documenting impacts to land, air, water, and climate); Rand (2005) at 35-43 (documenting environmental and social impacts of oil shale development in the United States); OTAa (1980) at 255-356 (discussing environmental considerations relevant to oil shale development in the United States); OTAb. For example, tar sands development in Canada is some of the most polluting, toxic, greenhouse-gas emitting, energy-intensive, destructive, and unsustainable activities on earth, and it is most certainly not "environmentally sound." Environmental Defense (2008); WWF (2008). Oil shale development on public lands is likely to have longlasting, devastating consequences. Rand (2005); OTAa (1980). As unconventional sources of fossil fuel energy, there really is no way to avoid the insidious impacts that will inevitably result from oil shale and tar sands development, or minimize them to an "acceptable" degree.
At the very least, it is clear that the BLM lacks sufficient information to be able to evaluate fully the environmental consequences of such development—in particular, about project-specific technologies and their impacts to sensitive species and their habitats—as the agency itself acknowledges. If the BLM cannot determine whether oil shale and tar sands development will proceed in an environmentally sound manner, it cannot proceed with the proposed action. **#9])>**
<([#10 [*3.7.4.7*] 6. The DPEIS Must Analyze Greenhouse Gas Emissions' Threat to

Ecosystems and Endangered Species

The dangerous consequences of continued "business as usual" greenhouse gas emissions are all too foreseeable. Global warming is already profoundly changing our planet, representing the most significant and pervasive threat to biodiversity worldwide and affecting both terrestrial and marine species from the tropics to the poles.

The IPCC report recognizes this, finding that the resilience of several ecosystems is likely to be overcome this century by a dangerous brew of climate change, associated disturbances, such as flooding, drought, wildfire, insects and ocean acidification, and other environmental drivers like pollution and over-exploitation of resources (Bernstein et al. 2007). Along with increases in global average temperatures beyond 1.5-2.5º C and accompanying increased levels of atmospheric carbon dioxide concentrations will come major changes in ecosystem structure and function, species' ecological interactions, and species' geographical ranges (Bernstein et al. 2007). In fact, global warming has already resulted in the extinction of at least dozens of species (Pounds et al. 2006). Absent major reductions in greenhouse gas emissions, by the middle of this century upwards of 35 percent of the earth's species will be extinct or committed to extinction as a result of global warming (Thomas et al. 2004).

Other scientific reports have reached the same conclusion as the IPCC that anthropogenic warming has had a recognizable influence on biological systems (Adger et al. 2007). In a study published in Nature in 2003, the authors reported a "globally coherent fingerprint of climate change impacts across natural systems" (Parmesan and CBD, GCT, LR/CR comments for OSTS Draft PEIS 9

Yohe 2003). In documenting this "fingerprint" of global warming on ecosystems, scientists have predicted three categories of measurable impacts from recent warming: (1) earlier timing of spring events and later autumn events (i.e. changes in "phenology"), (2) extension of species' range poleward or upward in elevation, and (3) a decline in species adapted to cold temperatures and an increase in species adapted to warm temperatures (Parmesan and Galbraith 2003).

In the abstract, changes in phenology, distribution, or even an abundance of a species may not by themselves be harmful to the species' long-term persistence. But if such changes put essential life history traits of the species out of sync with other components of the ecosystem, or if natural or anthropogenic barriers prevent poleward or upward migration, the consequences can be catastrophic.

The Edith's checkerspot butterfly (Euphydryas editha) and the American pika (Ochotona princeps), two North American species, demonstrate such deleterious effects of global warming. The Edith's checkerspot butterfly is one of the first species for which scientists documented a clear range shift due to global warming. The butterfly's range has moved both northward and upward in elevation in response to a 0.72° C increase in regional warming (Parmesan and Yohe 2003). The range shift was not due to butterfly populations actually moving, but instead to a higher proportion of population extinctions in the southern and lowland portions of the range (Parmesan and Yohe 2003). These population extinctions are the result of the fact that the species' host plant, Plantago erecta, now develops earlier in the spring, while the butterfly's caterpillars continue to hatch at the same time (Parmesan and Yohe 2003). As a result, the caterpillars now hatch on plants that have already completed their lifecycle and dried up, instead of on younger edible plants (Parmesan and Yohe 2003). The tiny checkerspot caterpillars are

unable to move far enough to find other food and, as a result, starve to death (Parmesan and Yohe 2003).

Another animal struggling under the heavy hand of climate change is the American pika. This small mammal, a relative of the rabbit, is adapted to life in talus piles on high, treeless mountain peaks. Fossil evidence demonstrates that pikas once ranged widely over North America, but their range has contracted to a dwindling number of isolated peaks during the warm periods of the last 12,000 years (Krajick 2004). Pikas are limited by their metabolic adaptation to their cold habitat niche (Krajick 2004).

Hence, while more mobile alpine species such as birds may be able to shift their ranges poleward as warming temperatures and advancing treelines, competitors, and predators impact their mountain habitat, pikas are generally incapable of such long range dispersal (Krajick 2004). Rather, they can only migrate upslope as the climate warms (Krajick2004). In large portions of its range, however, the American pika is already occupying the highest elevation talus habitats that exist on a given mountain range; in such cases there is no upslope habitat to migrate to, and the mountain's population will ultimately disappear as the climate continues to warm. Already, at least 9 of 25 (36%) of pika populations found in the Great Basin have been extirpated and the pika range has shifted upslope by 900 feet in this region. This small creature may well become one of global warming's first victims.

Species like the checkerspot butterfly and American pika demonstrate how climate change brought about by global warming will influence the earth's biodiversity as various species struggle to adapt to their changing habitats. Likewise, sensitive ecosystems, some literally melting under the impacts of global warming, have provided even more evidence of the dire consequence global warming will have on the earth's biological balance. **#10])>**

Thank you for your consideration of these comments.

Sincerely,

/s/

Laura Kamala
Grand Canyon Trust
HC 64 Box 1705
Castle Valley, UT 84532
laurakamala@gmail.com

/s/

John Weisheit
Living Rivers/Colorado Riverkeeper
PO Box 466
Moab, UT 84532
john@livingrivers.org

/s/

Taylor McKinnon
Center for Biological Diversity
P.O. Box 1178
Flagstaff, AZ 86002-1178
tmckinnon@biologicaldiversity.org

Cited and Supporting Literature

Aars, J., N.J. Lunn, and A.E. Derocher. 2006. Polar Bears: Proceedings of the 14th Working Meeting of the IUCN/SSC Polar Bear Specialist Group, 20-24 June 2005, Seattle, Washington, USA, at 44. IUCN, Gland, Switzerland and Cambridge, UK.
Adger et. al. 2007. Summary for Policy Makers In Climate Change 2007: Impacts, Adaptation and Vulnerability Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. [M.L. Parry, O.F. Canziani, J.P. Palutikof, P.J. van der Linden and C.E. Hanson, (eds.)] Cambridge University Press, Cambridge, UK.
Alley et al. 2007. Summary for Policy Makers In Climate Change 2007: The Physical Science Basis Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. [Solomon, S., D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M.Tignor and H.L. Miller (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.
Amstrup, S.C., I. Stirling, T.S. Smith, C. Perham, and G.W. Thiemann. 2006. Recent observations of intraspecific predation and cannibalism among polar bears in the southern
Beaufort Sea. Polar Biology DOI 10.1007/s00300-006-0142-5.
Amstrup, S.C., B.G. Marcot, and D.C. Douglas. 2007. Forecasting the Range-wide Status of Polar Bears at Selected Times in the 21st Century. U.S. Geological Survey, Reston, Virginia, USA.
Arizona Game and Fish Department. 2001. Gila elegans. Unpublished abstract compiled
and edited by the Heritage Data Management System, Arizona Game and Fish Department, Phoenix, AZ. 4 pp.
American Geophysical Union. 2007. Human Impacts on Climate, Statement. Available at: http://www.agu.org/sci_soc/policy/climate_change_position.html. (Last visited March 17, 2008).
Barnett, T. et al. Human-induced changes in the hydrology of the western United States. Science Express. 10.1126/science.1152538.
Bartis, J. T., LaTourrette, T., Dixon, L., Peterson, D. J. and Cecchine, G. Oil shale development in the United States: Prospects and policy issues. Technical report, RAND, 2005.
Bernstein et al. 2007. Synthesis Report In Climate Change 2007: A Report of the Intergovernmental Panel on Climate Change. Available at http://www.ipcc.ch.
Brandt, A. and A. Farrell. 2008. Dynamics of the Oil Transition: Modeling Capacity, Costs, and Emissions. Technical report, University of California Energy Institute.
CBD, GCT, LR/CR comments for OSTS Draft PEIS 12
Brandt, A. Converting Green River oil shale to liquid fuels with the Alberta Taciuk Processor: energy inputs and greenhouse gas emissions; WORKING PAPER, Energy and Resources Group University of California, Berkeley, Berkeley, CA 94720-3050, http://abrandt.berkeley.edu/ June 1st, 2007.
Bureau of Land Management: Utah Wilderness Inventory, 1999. Government Printing Office. http://www.gpo.gov/fdsys/search/pagedetails.action?st=utah+wilderness +inventory&granuleId=&packageId=GPO-DOI-BLM-UTAH99
Bureau of Reclamation, Lower Colorado Region: Colorado River Basin Water Supply

and Demand Study. http://www.usbr.gov/lc/region/programs/crbstudy.html
Caldeira, K. and 25 others. 2007. Comment on "Modern-age buildup of CO2 and its effects on seawater acidity and salinity" by Hugo A. Loáiciga, Geophysical Research Letters 34: L18608.
Chameides, W.L., and M. Bergin. 2002. Soot takes center stage. Science 297:2214-2215.
Chazan, G. "Oil Sands are Shifting in Alberta. Costs, Regulation are Slowing Boom; Game for Big Players." The Wall Street Journal. (Feb. 5, 2008).
Clarke, K. May 10, 2006. Letter to Henry Maddox (2 pp.) with Enclosure: The Bureau of Land Management's Formal Response to the U.S. Fish and Wildlife Service's Proposed Threatened Status for the Penstemon grahamii and Graham's Beardtongue with Critical Habitat (Proposed Rule: 71 Fed. Reg. 3158 (Jan. 19, 2006))
Denver Post, 2012: Salazar says Colorado River Compact over-allocated by 2 million acre-feet. http://www.denverpost.com/news/ci_20359715/colorado-river-preservationsharing-spotlight
Derocher, A.E., N.J. Lunn, I. Stirling. 2004. Polar bears in a warming climate. Integrated Comparative Biology 44:163-176.
Dowd, A. "Canadian emission rules target new oil sands plants." Reuters. (March 10, 2008).
Dyer S., Moorhouse J., Laufenberg K., and Powell R. Under-Mining the Environment: The Oil Sands Report Card. Technical report, World Wildlife Fund, et al., 2008.
Feely, R.A., C. L. Sabine, and V. J. Fabry. 2006. Carbon Dioxide and Our Ocean Legacy.
Fischlin, A., G.F. Midgley, J.T. Price, R. Leemans, B. Gopal, C. Turley, M.D.A. Rounsevell, O.P. Dube, J. Tarazona, A.A. Velichko, 2007. Ecosystems, their properties, CBD, GCT, LR/CR comments for OSTS Draft PEIS 13
goods, and services. Climate Change 2007: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change. [M.L. Parry, O.F. Canziani, J.P. Palutikof, P.J. van der Linden and C.E. Hanson, eds., Cambridge University Press].
Flanner, M. G., C. S. Zender, J. T. Randerson, and P. J. Rasch (2007), Present-day climate forcing and response from black carbon in snow. J. Geophys. Res., 112, D11202, doi:10.1029/2006JD008003.
Gardner, T.A., I.M. Côtè, J.A. Gill. 2003. Long-term Region-wide Declines in Caribbean Corals. Science 301: 958.
Hansen, J., L. Nazarenko, R. Ruedy, , M. Sato, , J. Willis, A. Del Genio., D. Koch, A. Lacis, K. Lo, S. Menon, T. Novakov, J. Perlwitz, G. Russell, G. A. Schmidt, N. Tausnev. 2005. Earth's Energy Imbalance: Confirmation and Implications. Science 308: 1431-1435.
Hansen, J. 2006. Expert report submitted to the United States District Court, District of Vermont in regard to Case No. 2:05-CV-302 and 2:05-CV-304, Green Mountain Chrysler-Plymouth-Dodge-Jeep et al. v. Thomas W. Torti, Secretary of Vermont Agency of Natural Resources, et al.
Hansen, J., M. Sato, R. Ruedy, K. Lo, D.W. Lea, and M. Medina-Elizade 2006a. Global temperature change. PNAS Published online September 25, 2006, doi: 10.1073/pnas.0606291103.

Hansen, J., M. Sato, R. Ruedy, P. Kharecha, A. Lacis, R. Miller, L. Nazarenko, K. Lo, G.A. Schmidt, G. Russell, I. Aleinov, S. Bauer, E. Baum, B. Cairns, V. Canuto, M. Chandler, Y. Cheng, A. Cohen, A. Del Genio, G. Faluvegi, E. Fleming, A. Friend, T. Hall, C. Jackman, J. Jonas, M. Kelley, N.Y. Kiang, D. Koch, G. Labow, J. Lerner, S. Menon, T. Novakov, V. Oinas, Ja. Perlwitz, Ju. Perlwitz, D. Rind, A. Romanou, R. Schmunk, D. Shindell, P. Stone, S. Sun, D. Streets, N. Tausnev, D. Thresher, N. Unger, M. Yao, S. Zhang2 2006b. Dangerous human-made interference with climate: A GISS modelE study. 13 October 2006 Draft. Available at http://arxiv.org/abs/physics/0610115. (Last visited March 17, 2008).
Hansen, J. and M. Sato. 2004. Greenhouse gas growth rates. PNAS 101: 16109-16114.
Hansen, J., M. Sato, P. Kharecha, G. Russell, D.W. Lea, and M. Siddall. 2007. Climate Change and Trace Gases. Phil. Trans. R. Soc. A (2007) 365, 1925–1954 doi:10.1098/rsta.2007.2052.
Harvell, C.D., C.E. Mitchell, J.R. Ward, S. Altizer, A.P. Dobson, R.S. Ostfeld, M.D. Samuel. 2002. Climate Warming and Disease Risks for Terrestrial and Marine Biota. Science 296: 2158-2162.
CBD, GCT, LR/CR comments for OSTS Draft PEIS 14
Hatch C. and Price M. Canada's Toxic Tar Sands: The Most Destructive Project on Earth. Technical report, Environmental Defence, 2008.
Hoegh-Guldberg, O. 2005. Marine Ecosystems and Climate Change. Climate Change & Biodiversity, [Lovejoy, T.E., L. Hannah (eds.)].
Hoegh-Guldberg, O., P.J. Mumby, A.J. Hooten, R.S. Steneck, P. Greenfield, E. Gomez, C.D. Harvell, P.F. Sale, A.J. Edwards, K. Caldeira, N. Knowlton, C.M. Eakin, R. Iglesias-Prieto, N. Muthiga, R.H. Bradbury, A. Dubi, M.E. Hatziolos. 2007. Coral Reefs Under Rapid Climate Change and Ocean Acidification. Science 318: 1737-1742.
Holland, M.M., Bitz, C.M., Tremblay, B. 2006. Future Abrupt Reductions in the Summer Arctic Sea Ice. Geophysical Research Letters. 33: L23503 doi:10.1029/2006GL028024.
H.R. 644: Grand Canyon Watersheds Protection Act of 2009 http://thomas.loc.gov/cgi-bin/query/z?c111:H.R.644:
H.R. 3481: Lower Colorado River Protection Act http://thomas.loc.gov/cgi-bin/query/z?c111:H.R.3481:
Hughes, T.P. 1994. Catastrophes, Phase Shifts and Large-Scale Degradation of a Caribbean Coral Reef. Science 265: 1547-1551.
Hughes, T. P., A. H. Baird, D. R. Bellwood, M. Card,2 S. R. Connolly, C. Folke, R. Grosberg, O. Hoegh-Guldberg, J. B. C. Jackson, J. Kleypas, J. M. Lough, P. Marshall, M. Nyström, S., R. Palumbi, J. M. Pandolfi, B. Rosen, J. Roughgarden. 2003. Climate Change, Human Impacts, and the Resilience of Coral Reefs. Science 301: 929-933.
Johnson, H.R., P.M. Crawford, J.W. Bunger. 2004. Oil shale resources, technology and economics, volume II. Prepared for the Office of Deputy Assistant Secretary for Petroleum Reserves and the Office of Naval Petroleum and Oil Shale Reserves, U.S. Department of Energy.
Kass, R.J. 2000. Demographic Monitoring of Wright Fishhook Cactus. In J. Maschinski, L. Holter, and Rocky Mountain Research Station (tech coords) Southwestern Rare and Endangered Plants: Proceedings of the Third Conference.

September 25-28, 2000. USDA Forest Service Proceedings RMRS-P-3. Flagstaff, AZ.
Kizzia, T. 2008. Lacking Studies, State Still Disputes Polar Bear "Doom." Anchorage Daily News. January 27, 2008. Available at http://www.adn.com/626/story/295420.html. (Last visited March 17, 2008).
Kleypas, J.A., R.A. Feely, V.J. Fabry, C. Langdon, C.L. Sabine, L.L. Robbins. 2006. Impacts of Ocean Acidification on Coral Reefs and Other Marine Calcifiers: A Guide for CBD, GCT, LR/CR comments for OSTS Draft PEIS 15
Future Research. Available at http://www.ucar.edu/news/releases/2006/report.shtml. (Last visited March 17, 2008).
Kolbert, E. "Unconventional Crude. Canada's synthetic-fuels boom." The New Yorker. (Nov. 12, 2007).
Krajick, K. 2004. All Downhill From here? Science 303: 1600-1602.
Krishnan, S. 2007. Conservation Corner: Dudley Bluffs Bladderpod (Lesquerella congesta). In Aquilegia 31:1 (Spring 2007).
Lovich J. and Melis T. 2007. The state of the Colorado River ecosystem in Grand Canyon: Lessons from 10 years of adaptive ecosystem management. Intl. J. River Basin Management Vol. 5, No. 3, pp. 207–221
McKibben, Bill. "Remember This: 350 Parts Per Million." The Washington Post. (Dec. 28, 2007, A12). Available at: http://www.washingtonpost.com/wpdyn/ content/article/2007/12/27/AR2007122701942.html (Last visited March 17, 2008).
Meehl, G.A., T.S. Stocker, W.D. Collins, P. Friedlingstein, A.T. Gaye, J.M. Gregory, A. Kitoh, R. Knutti, J.M. Murphy, A. Noda , S.C.B. Raper, I.G. Watterson, A.J. Weaver, Z. Zhao. 2007: Global Climate Projections. Climate Change 2007: The Physical Science Basis of Climate Change. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, [Solomon, S., D. Qin, M.] Manning, Z. Chen, M. Marquis, K.B. Averyt, M.Tignor and H.L. Miller (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.
Monnett, C. and J.S. Gleason. 2006. Observations of mortality associated with extended open water swimming by polar bears in the Alaskan Beaufort Sea. Polar Biology 29(8):861-687.
Mueller, G.A. 2006. Ecology of bonytail and razorback sucker and the role of offchannel habitats in their recovery. Scientific Investigations Report 2006-5065. Fort Collins, CO: U.S. Geological Survey, Fort Collins Science Center. 64 p.
Mueller, G and P Marsh. 1995. Bonytail and Razorback Sucker in the Colorado River Basin. In LaRoe, E.T., G.S. Farris, C.E. Puckett, P.D. Doran, and M.J. Mac (eds). Our living resources: a report to the nation on the distribution, abundance, and health of U.S. plants, animals, and ecosystems. U.S. Department of the Interior, National Biological Service, Washington, DC. 530 pp.
National Snow and Ice Data Center (NSIDC). 2007a. Arctic Sea Ice News Fall 2007. http://www.nsidc.org/news/press/2007_seaiceminimum/20070810_index.html (last visited March 17, 2008).
NatureServe Explorer. 2008a. Colton's Milkvetch (Astragalus coltonii var. moabensis). CBD, GCT, LR/CR comments for OSTS Draft PEIS 16
Jones M.E. Website, www.natureserve.org/explorer, accessed March, 2008.
NatureServe Explorer. 2008a. Ownbey thistle (Cirsium ownbeyi). Jones M.E. Website, www.natureserve.org, accessed March, 2008.

Orr, J.C., V.J. Fabry, O. Aumont, L. Bopp, S.C. Doney, R.A. Feely, A. Gnanadesikan, N. Gruber, A. Ishida, F. Joos, R.M. Key, K. Lindsay, E. Maier-Reimer, R. Matear, P. Monfray, A. Mouchet, R.G. Najjar, G. Plattner, K.B. Rodgers, C.L. Sabine, J.L. Sarmiento, R. Schlitzer, R.D. Slater, I.J. Totterdell, M. Weirig, Y. Yamanaka, A. Yool. 2005. Anthropogenic ocean acidification over the twenty-first century and its impact on calcifying organisms. Nature 437: 681-686.
Painter, Thomas H., et al. 2010. Response of Colorado River runoff to dust radiative forcing in snow. Proceedings of the National Academy of Science. http://www.pnas.org/cgi/doi/10.1073/pnas.0913139107
Parmesan, C. & G. Yohe. 2003. A globally coherent fingerprint of climate change impacts across natural systems. Nature 421: 37-42.
Parmesan, C. & Galbraith, H. 2004. Observed impacts of global climate in the U.S. Pew Center on Global Climate Change.
Pounds, J.A., M.R. Bustamante, L.A. Coloma, J.A. Consuegra, M.P. L. Fogden, P.N. Foster, E. La Marca, K.L. Masters, A. Merino-Viteri, R. Puschendorf, S.R. Ron, G.A. Sánchez-Azofeifa, C.J. Still, B.E. Young. 2006. Widespread amphibian extinctions from epidemic disease driven by global warming. Nature 439: 161-167.
Precht, W. & A. Aronson. 2004. Climate Flickers and Range Shifts of Reef Corals. Front. Ecol. Environ. 2(6): 307-314.
Quinn, P.K., T.S. Bates, E. Baum, N. Doubleday, A. Fiore, M. Flanner, A. Fridlind, T. Garrett, D. Koch, S. Menon, D. Shendell, A. Stohl, and S.G. Warren. 2007. Short-lived pollutants in the Arctic: Their climate impact and possible mitigation strategies. Available at http://niflheim.nilu.no/spac/QuinnEtAl_EOSsubmitted.pdf.
Raupach, M. R., G. Marland, P. Ciais, C. Le Quéré, J. G. Canadell, G. Klepper, and C. B. Field. 2007. Global and regional drivers of accelerating CO2 emissions. Proceedings of the National Academy of Sciences of the United States of America 104:10288-10293.
Reddy, M.S., and O. Boucher. 2007. Climate impact of black carbon emitted from energy consumption in the world's regions. Geophysical Research Letters 34, L11802, doi:10.1029/2006GLO28904.
Regehr et al. 2007. Effects of earlier sea ice breakup on survival and population size of polar bears in Western Hudson Bay. Journal of Wildlife Management 71(8):2673-2683.
Rosenzweig, C., G. Casassa, D.J. Karoly, A. Imeson, C. Liu, A. Menzel, S. Rawlins, T.L. Root, B. Seguin, and P. Tryjanowski, 2007: Assessment of observed changes and
CBD, GCT, LR/CR comments for OSTS Draft PEIS 17
responses in natural and managed systems. Climate Change 2007: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, M.L. Parry, O.F. Canziani, J.P. Palutikof, P.J. van der Linden and C.E. Hanson, Eds., Cambridge University Press, Cambridge, UK, 79-131.
Sabine, C.L., R.A. Feely, N. Gruber, R.M. Key, K. Lee, J.L. Bullister, R. Wanninkhof, Wong, C. S., D.W. R. Wallace, B. Tilbrook, F.J. Millero, T. Peng, A. Kozyr, T. Ono, A.F. Rios. 2004. The Oceanic Sink for Anthropogenic CO2. Science 305: 367-371.
Santer, B. D., T. M. L. Wigley, P. J. Glecklera, C. Bonfilsd, M. F. Wehnere, K. AchutaRaoa, T. P. Barnettf, J. S. Boylea, W. Brüggemanng, M. Fiorinoa, N. Gilletth, J. E. Hanseni, P. D. Jonesh, S. A. Kleina, G. A. Meehlc, S. C. B. Raperj, R.W. Reynoldsk, K. E. Taylora, W. M. Washington. 2006. Forced and Unforced Ocean Temperature

Changes in Atlantic and Pacific Tropical Cyclogenesis Regions. Proceedings of the National Academy of Sciences (PNAS). Published online September 19, 2006, doi:10.1073/pnas.0602861103.
Shindell, D., 2007: Local and remote contributions to Arctic warming. Geophys. Res. Lett., 34, L14704, doi:10.1029/2007GL030221.
Southern Utah Wilderness Alliance: Utah Wilderness Inventory. http://action.suwa.org/site/PageServer?pagename=WATE_longtoc
Southwest Energy Efficiency Project (SWEEP). 2002. The New Mother Lode: The Potential for More Efficient Electricity in the Southwest. Available at: http://www.swenergy.org. (Last visited March 17, 2008).
Stroeve, J. et al. 2008. Arctic sea ice extent plummets in 2007. Eos 89:13-20.
Thomas, C.D., A. Cameron, R.E. Green, M. Bakkenes, L.J. Beaumont, Y.C. Collingham, B.F.N. Erasmus, M. Ferreira de Siqueira, A. Grainger, L. Hannah, L. Hughes, B. Huntley, A.S. van Jaarsveld, G.F. Midgley, L. Miles, M.A. Ortega-Huerta, A. Townsend Peterson, O.L. Phillips, S.E. Williams. 2004. Extinction Risks from Climate Change. Nature 427: 145-148.
Udall, R. & A. Andrews. 2004. The Illusive Bonanza: Oil Shale in Colorado "Pulling the Sword from the Stone." Energy Bulletin.
Woynillowicz, D., C.S. Baker, M. Raynolds. 2005. Oil sands fever: The environmental implications of Canada's oil sands rush. The PEMBINA Institute.
U.S. Fish and Wildlife Service. 1994a. Utah Reed-Mustards Recovery Plan. Region 6. Website http://ecos.fws.gov/docs/recovery_plans/1994/940914.pdf, accessed March, 2008.
CBD, GCT, LR/CR comments for OSTS Draft PEIS 18
U.S. Fish and Wildlife Service. 1994b. Final Biological Opinion on the Operation of Glen Canyon Dam.
U.S. Fish and Wildlife Service. 2001. Species Account: Bonytail. Website http://ecos.fws.gov/docs/life_histories/E020.html, accessed March, 2008.
U.S. Fish and Wildlife Service. 2002a. Bonytail (Gila elegans) Recovery Goals: Amendment and Supplement to the Bonytail Chub Recovery Plan. Region 6; Denver, Colorado. Website www.fws.gov/mountain-prairie/crrip/doc/rg/Bonytail.pdf, accessed March, 2008.
U.S. Fish and Wildlife Service. 2002b. Colorado Pikeminnow Recovery Goals: Amendment and Supplement to the Colorado Squawfish Recovery Plan. Region 6; Denver, Colorado. Website http://ecos.fws.gov/docs/recovery_plans/2002/020828b.pdf, accessed March, 2008.
U.S. Fish and Wildlife Service. 2002c. Humpback chub (Gila cypha) Recovery Goals: amendment and supplement to the Humpback Chub Recovery Plan. Region 6; Denver, Colorado. Website www.fws.gov/mountain-prairie/crrip/doc/rg/Humpbackchub.pdf, accessed March, 2008.
U.S. Fish and Wildlife Service. 2004. Appendix A. Recovery Report to Congress for Federally listed Threatened and Endangered Species. Region 6; Denver, Colorado.
U.S. Fish & Wildlife Service. 2005. Whooping Crane (Grus americana) Draft Revised International Recovery Plan.
U.S. Fish and Wildlife Service. 2008. Final Biological Opinion on the Operation of Glen Canyon Dam.

U.S. Fish and Wildlife Service. 2002. Humpback chub (Gila cypha) Recovery Goals: amendment and supplement to the Humpback Chub Recovery Plan. Region 6; Denver, Colorado.
U.S. Fish and Wildlife Service. 2004. Appendix A. Recovery Report to congress for Federally listed Threatened and Endangered Species. Region 6; Denver, Colorado.
U.S. Fish & Wildlife Service. 2005. Whooping Crane (Grus americana) Draft Revised International Recovery Plan.
U.S. Geological Survey. 2003. An Overview of Status and Trend Information for the Grand Canyon Population of the Humpback Chub, Gila Cypha. Prepared by the Grand Canyon Monitoring and Research Center U.S. Geological Survey, Flagstaff, AZ For the Glen Canyon Dam Adaptive Management Work Group Ad Hoc Committee on Humpback Chub
CBD, GCT, LR/CR comments for OSTS Draft PEIS 19
U.S. Geological Survey. 2005. Gloss, S.P., Lovich, J.E., and Melis, T.S., eds., The state of the Colorado River ecosystem in Grand Canyon: U.S. Geological Survey Circular 1282, 220
Utah Department of Environmental Quality, 2011. Uintah Basin Winter Ozone Study Plan and Budget. http://www.deq.utah.gov/locations/uintahbasin/docs/2012/Feb/Unitah_Basin_Winter_Ozone_Study_V3noWatermark.PDF
Utah Prairie Dog Implementation Team. 1997. Utah Prairie Dog Interim Conservation Strategy. National Park Service, U.S. Bureau of Land Management, USDA APHIS Wildlife Services, USDA Forest Service, U.S. Fish and Wildlife Service, Utah Division of Wildlife Resources, and Utah State University.
CBD, GCT, LR/CR comments for OSTS Draft PEIS 20

OSTS_084

Organization: Glen Miller
Received: 5/3/2012 12:00:00 AM
Commenter1: Glen Miller - Grand Junction, Colorado 81507 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Email & Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/17/2012 12:00:00 AM
Attachments: OSTS2012D00085.htm (OSTS_084-59148.htm Size = 1 KB)
OSTS_084_Miller1_Mail_OSTS2012D00085.pdf (OSTS_084-59147.pdf Size = 468 KB)
Submission Text
See Attachment.

Sherri-
My May 3, 2012 comment letter contains an error on Page 2.
The reference noted in Comment #1 should be Vol. 1, pp 3-76, 77, 78
Attached is a corrected copy of my letter.
Sherri Thompson, Project Mgr., BLM

Colorado State Office
2850 Youngfield St.
Lakewood, CO 80215-7093
Dear Ms. Thompson:
Glen A. Miller
2264 Willow Wood Rd.
Grand Jet., CO 81507
May 3, 2012
RE: Comments on DES 12-01
Oil Shale and Tar Sands

Thank you for the opportunity to comment on some aspects of the BLM management plans for oil shale. My comments are limited to the Piceance Basin, Colorado. I have 12 years experience as a Geologist-Hydrologist in the Interior Dept's 1970's-80's prototype program.
Because of location problems with several maps in the EIS, I may send additional comments.
<([#1 [*9.7*] This EIS, presumably aimed at reducing the acreage available for oil shale leasing, includes several statements and maps that appear to be in error and/or misleading. Their use can adversely affect the prudent management/development of this very large oil shale reserve. (The 1.5 trillion bbl of shale oil in Piceance Basin, if fully recovered, could supply our country's current needs for oil (20 million BP Day) for 200 years!) This EIS does not appear to take the long-term view on such a valuable resource.
This reviewer has no great problem with reducing the acreage available.
We need a long period of intense R&D ahead before continuing to lease under present lease terms (most envision only a 20/40% recovery with no plans for recovery of several co-products). Some studies suggest that co-products (aluminum, cement, lithium, fertilizer, etc.) could double the value of oil shale.
Current RD & D Leases:
Because of the large array of uncertainties involving in-situ recovery, it would seem prudent to allow the existing leases (in Piceance) to "mature", and thus provide a usable knowledge base, prior to issuing more leases based on in-situ methods. **#1])> <([#2** [*6.3.3*] Several problems with in-situ methods are noted below:
1. Low resource recovery. The publicly available projected resource recovery for in-situ ranges from less than 20% to about 40%. For an 8 square mile "commercial" lease (15 billion+ bbl resource) such low recovery is not good, is probably unacceptable to the taxpayer owners [at current prices $1.5 trillion], and appears to be contrary to the "waste of resources" provisions in the Mineral Leasing Act. A "prudent" resource owner would not normally settle for a return of 50 cents on the dollar, when more efficient methods are available.
#2])> <([#3 [*6.3.2*] Several problems with in-situ methods are noted below:
2. Water for In-Situ. Water needs and effects on groundwater are as yet unknown. Residual spent shale in in-situ retorts could require years of leaching or "rinsing", and, thus, lots of water. Subsidence effects on the

post-recovery aquifers are likely to be significant, and not beneficial, but are, as yet, unknown.
#3])> SPECIFICCOMMENTS
<([#4 [*3.4.4*] 1. VI PP.76, 77, 78
The message that the lower aquifer ground water is of "unusable" quality is in error. USGS Report (open-file report 78-734, prepared in cooperation with BLM & EPA) is the definitive data source on ground water quality. It notes that the average TDS in the lower aquifer is 3460 mg/L, and only one test hole encountered highly saline water. Thus, perhaps several million acre-feet of stored ground water there cannot be casually written off, or placed in the "unprotected" EPA category of water quality regulation. **#4])>**

<([#5 [*6.3.6*] 2. V2 P .2-20, paragraph 2 lines 17-19 (Exclusion of surface mining leases): The rather remarkable conclusion that the 0-500' overburden zone, although being "Geologically Prospective" is " ... very limited, and it would be difficult to assemble a logical mining unit", is an ill-drawn conclusion, according to the opinions of several experienced oil shale geologists and engineers. Along the NW edge of the basin are about 65 square miles of Federal oil shale with less than 500' overburden. Oil shale resource here is about 20 billion bbl, or about 2.5 Billion bbl on the eight (8) standard leases that would fit into the area. This federally owned area of less than 500' of overburden (see Donnell, USGS PP 131 0) probably contains a minimum of 20 billion bbl oil equivalent. To not consider surface mining and retorting as a recovery method, even for this small area, is to potentially "waste" or lose about ½ or more of the resource, which would be about 10+/- billion bbl with a current oil value of$1 trillion (and perhaps $100 billion in royalties to The Public Treasury (Fed & State). Surface mining, in the long run, probably would be less expensive and less detrimental to the environment than other methods. **#5])>**
<([#6 [*3.15*] [*6.1*] 3. Map, P 3-11 ("Decisions" Map) raises several questions. The small scale and lack of "locatable" features make reviewing it an uncertain effort.
A. Around 100 mi2 of shallow shale, containing perhaps 50-100 billion bbl of oil, appears to be left blank in the northern part of the basin (see Donnell Fig. USGS PP 1310). This area includes much/most of the "less than 500' overburden area.
B. The "multi-mineral" zone appears to generally match the thickest Nacholite area, but does not include a larger area of Dawsonite (alumina) resource.
C. Why does the "underground mining" areas in the NW exclude a much larger area of "geologically prospective" resources? The existence of the two patterns on the map do not support such a decision.
#6])> Note: per our recent phone conversation, I plan to submit

more detailed review on some aspects of the above, many of the maps are difficult to interpret, especially as to more exact locations. I'm awaiting map data from other sources.

Sincerely,

Glen Miller

Sherri Thompson, Project Mgr., BLM
Colorado State Office
2850 Youngfield St.
Lakewood, CO 80215-7093

Glen A. Miller
2264 Willow Wood Rd.
Grand Jet., CO 81507
May 3, 2012
RE: Comments on DES 12-01
Oil Shale and Tar Sands
Dear Ms. Thompson:
Thank you for the opportunity to comment on some aspects of the BLM management plans for oil shale. My comments are limited to the Piceance Basin, Colorado. I have 12 years experience as a Geologist-Hydrologist in the Interior Dept's 1970's-80's prototype program.
Because of location problems with several maps in the EIS, I may send additional comments.
This EIS, presumably aimed at reducing the acreage available for oil shale leasing, includes several statements and maps that appear to be in error and/or misleading. Their use can adversely affect the prudent management/development of this very large oil shale reserve. (The 1.5 trillion bbl of shale oil in Piceance Basin, if fully recovered, could supply our country's current needs for oil (20 million BP Day) for 200 years!) This EIS does not appear to take the long-term view on such a valuable resource.
This reviewer has no great problem with reducing the acreage available.
We need a long period of intense R&D ahead before continuing to lease under present lease terms (most envision only a 20/40% recovery with no plans for recovery of several co-products). Some studies suggest that co-products (aluminum, cement, lithium, fertilizer, etc.) could double the value of oil shale.
Current RD & D Leases:
Because of the large array of uncertainties involving in-situ recovery, it would seem prudent to allow the existing leases (in Piceance) to "mature", and thus provide a usable knowledge base, prior to issuing more leases based on in-situ methods. Several problems with in-situ methods are noted below:
1. Low resource recovery. The publicly available projected resource recovery for in-situ ranges from less than 20% to about 40%. For an 8 square mile "commercial" lease (15 billion + bbl resource) such low recovery is not

good, is probably unacceptable to the taxpayer owners [at current prices $1.5 trillion], and appears to be contrary to the "waste of resources" provisions in the Mineral Leasing Act. A "prudent" resource owner would not normally settle for a return of 50 cents on the dollar, when more efficient methods are available.

2. Water for In-Situ. Water needs and effects on groundwater are as yet unknown. Residual spent shale in in-situ retorts could require years of leaching or "rinsing", and, thus, lots of water. Subsidence effects on the post-recovery aquifers are likely to be significant, and not beneficial, but are, as yet, unknown.

SPECIFIC COMMENTS

1. VI P.79, last paragraph, P. 80 cont'd:

The message that the lower aquifer ground water is of "unusable"

quality is in error. USGS Report (open-file report 78-734, prepared

in cooperation with BLM & EPA) is the definitive data source on

ground water quality. It notes that the average TDS in the lower aquifer is 3460 mg/L, and only one test hole encountered highly saline water. Thus, perhaps several million acre-feet of stored ground water there cannot be casually written off, or placed in the "unprotected" EPA category of water quality regulation.

2. V2 P .2-20, paragraph 2 lines 17-19 (Exclusion of surface mining leases): The rather remarkable conclusion that the 0-500' overburden zone, although being "Geologically Prospective" is " ... very limited, and it would be difficult to assemble a logical mining unit", is an ill-drawn conclusion, according to the opinions of several experienced oil shale geologists and engineers. Along the NW edge of the basin are about 65 square miles of Federal oil shale with less than 500' overburden. Oil shale resource here is about 20 billion bbl, or about 2.5 Billion bbl on the eight (8) standard leases that would fit into the area. This federally owned area of less than 500' of overburden (see Donnell, USGS PP 131 0) probably contains a minimum of 20 billion bbl oil equivalent. To not consider surface mining and retorting as a recovery method, even for this small area, is to potentially "waste" or lose about ½ or more of the resource, which would be about 10+/- billion bbl with a current oil value of $1 trillion (and perhaps $100 billion in royalties to The Public Treasury (Fed & State). Surface mining, in the long run, probably would be less expensive and less detrimental to the environment than other methods.

3. Map, P 3-11 ("Decisions" Map) raises several questions. The small scale and lack of "locatable" features make reviewing it an uncertain effort.

A. Around 100 mi2 of shallow shale, containing perhaps 50-100 billion bbl of oil, appears to be left blank in the northern part

of the basin (see Donnell Fig. USGS PP 1310). This area
includes much/most of the "less than 500' overburden area.
B. The "multi-mineral" zone appears to generally match the thickest
Nacholite area, but does not include a larger area of
Dawsonite (alumina) resource.
C. Why does the "underground mining" areas in the NW exclude a
much larger area of "geologically prospective" resources?
The existence of the two patterns on the map do not support
such a decision.
Note: per our recent phone conversation, I plan to submit
more detailed review on some aspects of the above, many of
the maps are difficult to interpret, especially as to more exact
locations. I'm awaiting map data from other sources.

Sincerely,
Glen Miller

OSTS_085
Organization: 2264 Willow Wood Road, Glen Miller
Received: 5/4/2012 12:00:00 AM
Commenter1: Glen Miller - Grand Junction, Colorado 81507 (United States)
Organization1:2264 Willow Wood Road
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Email & Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/17/2012 12:00:00 AM
Attachments: OSTS2012D00086.htm (OSTS_085-59150.htm Size = 1 KB)
OSTS_085_Miller2_Mail_OSTS2012D00086.pdf (OSTS_085-59149.pdf Size = 125 KB)
Submission Text
See Attachment.

Glen A. Miller
2264 Willow Wood Road
Grand Junction, CO 81507
May 4, 2012
Sherri Thompson, Project Manager
BLM State Office
2850 Youngfield Street
Lakewood, CO 80215-7093
2012 MAY -1 AM II: 59
Re: Further Comments on the Piceance Basin part of DES 12-0; and my letter dated 5-3-12
Dear Ms. Thompson,
<([#1 [*3.1.8*] [*6.1*] During my review of the DES, I initially overlooked Figure 2.3.3.1

(Exclusions,
Alternative 2). The "Wilderness Characteristics" designation of a large area (more than 70 square miles of oil shale resource is surprising. I did not find this in the 2008 FES 08-32. Using the resource map of Donnel (1987, Figure 19), the resource here ranges from about one-half million to more than 2 million bbl/acre, and contains more than 50 billion barrels. The "Wilderness" area appears to include 20-30 square miles of the "multi-mineral" area, which contains a large amount of Nahcolite and Dawsonite (aluminum). The area is underlain by productive gas-bearing strata. The "shallow" gas reservoir contains a large reserve, and the deeper ("Niobrara"-Mancos, etc.) resource may be larger.
Several issues are apparent:
1. I am a proponent of The Wilderness Act, have worked in the area, and am of the opinion that is falls far short of the necessary features for "Wilderness."
2. There are several well-used roads crossing the area.
3. My map data are incomplete, but there appears to be several oil and gas leases and several wells in the area.
4. The "Wilderness" coverage of most of the readily surface-mineable shale in northern Piceance Basin is of interest. The mid-2000's RMP draft revision proposed a ban on surface mining. This proposed "Wilderness," if put in place would do so.
#1])> Glen A. Miller letter to Ms. Sherri Thompson dated May 4, 2012 -Page 2
<([#2 [*6.3.6*] If the BLM has a policy against surface mining in Piceance, it owes the public an explanation. Too much is at stake. Potential market value of oil in the area is on the order of 5 to 10 trillion dollars (and hundreds of billions in royalties). The value of natural gas, aluminum, and other co-products (fertilizer, lithium, etc.) could be several multiples of this value. However, the true value is much greater as raw materials for our industry, and eventually as consumer products.
Discouraging surface mining will delay the much-needed R & D for this method, which currently is the ONLY known method to approach 100% resource recovery, and to recover potential co-products. Many reclamation experts, engineers and geologists are of the opinion that proper surface mining will cause minimum environmental damage and much better postmining land reclamation than other methods.
#2])> Thank you for your interest in this important national resource.
Sincerely,
Glen A. Miller
970-208-4586

OSTS_086
Organization: Samson Resources Company, John Witucki
Received: 4/30/2012 12:00:00 AM
Commenter1: John Witucki - Denver, Colorado 80202 (United States)
Organization1: Samson Resources Company
Commenter Type: Gas / Oil Company
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/17/2012 12:00:00 AM

Attachments: OSTS2012D00087.htm (OSTS_086-59152.htm Size = 1 KB)
OSTS_086_Witucki_Samson_Resources_Mail_OSTS2012D00087.pdf (OSTS_086-59151.pdf Size = 623 KB)

Submission Text

See Attachment.

p ": = Samson
SUITE 3000
370 17TH ST
DENVER CO 80202
USA
720/904-1391
FAX: 720/904-1392
April 30, 2012
Oil Shale and Tar Sands Resources Draft Programmatic EIS
Argonne National Laboratory
9700 South Cass A venue - EVS/240
Argonne, IL 60439
Re: Samson Resources Company Comments on the Oil Shale and Tar Sands Resources Draft Programmatic Environmental Impact Statement
Ladies and Gentlemen:
Samson Resources Company (Samson) hereby submits the following comments in response to the Bureau of Land Management's (BLM) Oil Shale and Tar Sands and Resources Draft Programmatic Environmental Impact Statement (Oil Shale DEIS) as announced in the Federal Register on February 6, 2012. 77 Fed. Reg. 5833 (Feb. 6, 2012). Samson submits these comments to the BLM because of the potential impact the Oil Shale DEIS, and the information contained therein, may have upon Samson's ongoing and future oil and gas operations on public lands within Wyoming.
GENERAL COMMENTS
Samson owns significant federal oil and gas leases within the United States, including the State of Wyoming. Samson has its principal place of business in Tulsa, Oklahoma, but maintains offices throughout the western United States including Denver, Colorado and Rawlins, Wyoming. Samson owns and operates numerous oil and gas fields in Colorado and Wyoming. Samson operates approximately 200 wells, 166,000 acres of federal oil and gas leases, and in 2011 produced approximately 13,638 bcf of natural gas and 149 mbl of oil from federal lands. Given its existing operations on federal lands, and particularly those in Wyoming, Samson may be potentially significantly impacted by some of the BLM's information analyses contained in the Oil Shale DEIS.
Samson is particularly concerned about impacts of information analyses contained in the Oil Shale DEIS on its conventional oil and gas development projects in Wyoming. Representative of Samson, John Witucki, attended the BLM's open house for the Oil Shale DEIS in Rock Springs, Wyoming on March 15,2012.

Samson is the operator of three (3) federal units located within the Green River Resource Management Area (GRRA) and the Rock Springs Resource Management Area (Rock Springs RA) in south central Wyoming. In particular, Samson is the operator of the Barricade Federal

Oil and Gas Exploratory Unit, BLM Serial Register No. WYW-16399X; the Endurance Federal Oil and Gas Exploratory Unit, BLM Serial Register No. WYW-168995X; and the Desolation Road Federal Oil and Gas Exploratory Unit, BLM Serial Register No. 177629X. These units are all located in or adjacent to areas the BLM has suggested contain wilderness characteristics. Samson currently operates 30 wells within these units and the surrounding lands. Samson's oil and gas development within these units is a significant source of employment and local revenue for the federal government, the State of Wyoming, and the surrounding communities. Samson has expended over $71 million dollars developing oil and gas resources in the area, which has led to the direct and indirect employment of approximately 100 people per each of 20 wells drilled. Oil and gas development is critically important to the economy of Wyoming and, in particular, the communities surrounding Samson's oil and gas operations in the region.
<([#1 [*1.5*] Samson understands and acknowledges that "oil shale" as used in the Oil Shale DEIS does not include conventional oil and gas development or so-called shale oil. Oil Shale DEIS, pg. 2-15. Samson is, however, concerned that some of the information analyses in the Oil Shale DEIS is inaccurate, misleading, and may impact conventional oil and gas development on its lands and leases within the Rawlins RA and the GRRA [Green River Resource Management Area].
#1])> <([#2 [*3.1.7*] Lands with Wilderness Characteristics
Samson is concerned and opposed to, BLM's decision to "designate" or "identify" lands with wilderness characteristics (LWCs) within the GRRA [Green River Resource Management Area] or the Rawlins RAin the Oil Shale DEIS. These designations are not consistent with or supported by the existing land use plans for the area or the actual condition of the lands in question. Samson is also opposed to the BLM's decision to identify LWCs outside of a local, resource management plan (RMP) revision or amendment process.
Under Alternatives 2 and 4 in the Oil Shale DEIS, the BLM has identified L WCs in which oil shale leasing and development will be prohibited. Oil Shale DEIS, pgs. 2-34- 2-36, 2-43 - 2-54. Unfortunately, the BLM's analyses with respect to the Rawlins RA is incorrect because the BLM has identified L WCs that are different from, and even inconsistent with, those identified with even recently completed RMPs. The BLM also arbitrarily misinterpreted current land use designations and allocations in the existing Rawlins RMP and Green River RMP. The BLM should not use a programmatic process, such as that for oil shale and tar sands development, to create new and de facto L WCs in Wyoming. Instead, the BLM should rely upon locally driven RMP amendments and revisions to identify and develop appropriate mitigation measures for lands that allegedly contain wilderness characteristics. In the Oil Shale DEIS, the BLM suggests that the agency has identified L WCs in both the GRRA and the Rawlins RA that are inconsistent with past decisions of the BLM, past approvals of the BLM, and the current conditions on the ground. The BLM should remove any and all suggestions that the lands surrounding the Adobe Town Wilderness Study Area (Adobe WSA) contain or should be managed to protect L WCs. Although the BLM may intend the information analyses in the Oil Shale DEIS to apply only to future oil shale and tar sands leasing and development, opponents to conventional oil and gas development will certainly use the information analyses contained in the Oil Shale DEIS to prevent, delay or impair future oil and gas development, even on existing leases, within this area. For the past twenty (20) years, non-governmental organizations advocating the expansion of the Adobe WSA have challenged and delayed oil and gas development in the area arguing that the BLM is required to protect alleged wilderness characteristics and values within the area. Samson sets further additional information with

regard to each resource area described in the Oil Shale DEIS below. **#2])>**
<([#3 [*3.1.7*] Green River RMP
The BLM has identified two (2) areas outside of the Adobe WSA, but within the GRRA [Green River Resource Management Area], and suggested they are or should be managed for wilderness characteristics. These areas include
the so-called Adobe Fringe Area and the Adobe Rare or Uncommon Area, a reference to an Order from the Wyoming Environmental Quality Council designating certain lands in Wyoming as Rare or Uncommon in April of 2010. See Oil Shale DEIS. Figure 3.1.1 - 13, pg. 3-35. Neither of these areas should be subject to a L WCs designation.
Over the last several decades, the BLM has extensively considered the potential wilderness characteristics of lands outside of the Adobe WSA and declined to manage these lands to preserve any wilderness characteristics. The area was not included in the lands believed to have wilderness characteristics when the BLM prepared its recommendations for wilderness protection during the inventory and review process required by Section 603 of the federal Land Policy and Management Act of 1976 (FLPMA). 43 U.S.C. § 1782(a). The lands within the area are neither included in the 85 710 acres contained within the Adobe WSA nor the 10,920 acre subset of the Adobe Town that the BLM actually recommended for inclusion in the Wilderness System. See generally Adobe Town- Ferris Mountains Wilderness Final Environmental Impact Statement (1987). TI1e BLM specifically did not recommend more than 10,920 acres of the Adobe WSA for wilderness protection because of the area's high potential for natural gas development and the likelihood of development. 'The remaining 74 790 acres were recommended for non-wilderness because of the area s high potential for the development of natural gas. Given the WSA's high potential for natural gas it is likely that development would indeed occur here, with a potential for wells located throughout the nonwilderness portion. Wyoming Statewide Wilderness Study Report Wilderness Study Area Specific Recommendations, Vol. I, pg. 187 (Sept. 1991).

Further, as early as 1987 the BLM considered and rejected the option of creating a larger Adobe WSA because of low wilderness values and high potential for oil and gas development. "Through this examination, it was found that larger partial wilderness alternatives would either increase conflicts with oil and gas development on pre-FLPMA leases in areas of high wilderness values, or would add areas of low wilderness values on post-FLPMA leases." Adobe Town - Ferris Mountains Wilderness Final Environmental Impact Statement, pg. 6. Even back in 1987 the BLM recognized that a larger wilderness alternative was "unmanageable" and the agency properly eliminated a larger Adobe WSA from consideration. Id.
Then, as part of the planning process for the Green River RMP in the late 1990s, the BLM again evaluated the lands north of the Adobe WSA in the EIS accompanying the Green River RMP (BLM 1997). At the end of this multi-year process, which included extensive consultation with State and local governments, the BLM determined that the federal lands and minerals north of the Adobe WSA should be made available for oil and gas leasing and development under specific management guidelines and objectives. Green River RMP, pg. 37.
In light of these determinations, the BLM cannot and should not suggest the areas surrounding Adobe WSA be treated as lands with wilderness characteristics. "BLM is not required to consider the likely effects of oil and gas exploration and development on wilderness characteristics or the overall suitability of the affected lands for wilderness designation or regard such impacts as significant, when it has previously determined, with administrative finality, that

the area of public lands at issue does not qualify for wilderness designation." Biodiversity Conservation Alliance, 171 IBLA 218, 234 (2007) (citing cases). The Interior Board of Land Appeals (IBLA) has made clear that "BLM need not consider the impact of such activity on possible future recognition by Congress ·or the Department, since it constitutes a remote and highly speculative impact." Id.

Moreover, the BLM should not treat these lands as L WCs simply because a nongovernmental organization suggests that they should be managed as such. The IBLA has also clearly recognized that the BLM is not required to manage areas for wilderness protection simply because a citizen group has suggested a different management approach from that contained in the governing land use plan.

We have repeatedly rejected the notion that BLM must manage the public lands in light of proposals by the public to designated lands as wilderness ... We have repeatedly held that we know of no legal mandate that required BLM to manage [a public land area] on the basis that, although finally rejected as a [wilderness study area], it might, at some unspecified future time, be designated by Congress as a protected wilderness area.

Biodiversity Conservation Alliance, eta!. 171 IBLA 313, 318-19 (2007) (citations and quotations omitted). The IBLA has recognized the BLM's treatment of LWCs remaining consistent with a new inventory conducted. "We again reject the notion that citizens' groups may negate or undermine BLM's statutory authority and discretion by conducting their own inventory and then arguing that BLM must reconsider its inventories when it attempts to undertake land use decisionmaking." !d. The BLM has repeatedly declined to manage lands around the Adobe WSA to preserve their alleged natural character.

Existing Development

Consistent with the management decisions in the Green River RMP, the BLM approved the Desolation Flats Oil and Gas Development project in 2004 (Desolation Flats). The Desolation Flats project approved the development of three hundred eight five (385) natural gas wells from three hundred sixty one (361) locations, five hundred forty two (542) miles of new or upgraded access roads, three hundred sixty one (361) miles of pipelines, one (1) gas processing plant, four (4) compressor stations, ten (10) water wells and two (2) water disposal wells. Desolation Flats Development Project Record of Decision, pg. 2; Desolation Flats Development Project Final Environmental Impact Statement, pg. 1-2. The Desolation Flats project was appealed to the IBLA on two (2) occasions and affirmed in both instances. See Biodiversity Conservation Alliance, et al., IBLA No. 1 (2008); Biodiversity Conservation Alliance, et al., IBLA No. 2005-218 (Jan. 31, 2007). The Desolation Flats Project area completely surrounds the Adobe WSA to the east and north, precisely within the areas the BLM has identified as L WCs as

part of the Adobe RUC. This entire area has been extensively developed with more than 66 wells and approximately 45 miles of pipelines. Although the BLM and operators in the area strive to reduce potential impacts, it is impossible to suggest the area contains or could be managed for wilderness characteristics. Please find attached as Exhibit A is a map showing existing oil and gas development and the areas allegedly being managed as L WCs.

Further, the lands identified as the Kinney Rim North and Kinney Rim South L WCs are, again, far from undeveloped. Indeed, much of this area is already leased for oil and gas development, therefore making it impossible to suggest the area has been or could be managed

for wilderness characteristics. As indicated on Exhibit A, these areas have been extensively developed for oil and gas resources. The area has been crisscrossed with miles of existing and upgraded roads and even a State Highway. Despite the erroneous allegations in the Oil Shale DEIS, these lands have not been managed for wilderness characteristics.

More recently, the BLM evaluated lands north of the Adobe WSA area for wilderness characteristics in 2007 and again found them lacking. The BLM determined that the checkerboard portion (interspaced private and federal lands and minerals) of the lands in this area fails to meet the size and naturalness requirements necessary to manage the lands for wilderness characteristics. Ex. B, Desolation Road Amended EA, pgs. 24-25 (BLM 2010). The BLM also concluded that a slightly larger contiguous area of land managed by the BLM south of the checkerboard does not meet the naturalness and solitude requirements associated with wilderness characteristics. ld.

In the Desolation Road Amended EA, the BLM confirmed its prior discussions that lands within the area north of the Adobe WSA lacked wilderness character. The BLM observed that the small size and isolated nature of federal lands in the area precludes wilderness management. Id. Further, the BLM determined that the larger contiguous portion of federal lands within the Desolation Road Project Area contained existing roads and other intrusions that precluded its management for wilderness characteristics. ld. Additionally, the BLM rejected the contention that the lands north of the Adobe WSA were undeveloped, explaining, "A number of existing approved and unapproved two-track roads exist in the Proposed Project Area. Grazing also occurs in the area." Jd. at 145. The BLM also observed that "[n]umerous two-tracks from light vehicles and off-road vehicles (ORVs) are evident throughout the Project Area." ld. at 47. Thus, the BLM has consistently determined that the lands surrounding the Adobe WSA lack wilderness character. It is inconsistent with existing and past determinations of the BLM to suggest lands surrounding the Adobe WSA have been or could be managed for wilderness characteristics.

Monument Valley Management Area

In the Oil Shale DEIS the BLM also suggests that lands within the Monument Valley Special Management Area (Monument Valley MA) could be more managed as L WCs. Oil Shale DEIS, pg. 3-37, lines 21 - 25. The Monument Valley MA is an area the BLM manages to provide protection of wildlife, geologic, cultural, watershed, scenic, and scientific values. Green River RMP/Record of Decision, pg. 37. The BLM has made lands within the Monument Valley MA open to oil and gas leasing, exploration, and development provided mitigation can be applied to protect resource values. ld. Additionally the BLM ha authorized three (3) separate oil and gas projects that are partially inside the Monument Valley MA: the Desolation Flats Project, the Mulligan Draw Project, and now the Desolation Road Project. Desolation Road EA pg. 23. As demonstrated above, the lands in this area are not managed for wilderness characteristics, nor has the BLM made a public, formal determination that such lands contain wilderness characteristics. As a practical matter, the lands to the north and east of the Adobe WSA have been extensively developed for oil and gas resources. To date there are currently 107 oil and gas wells in the lands and federal oil and gas leases immediately north and adjacent to the Adobe WSA. The BLM should not manage or suggest the lands to the north or east of the Adobe WSA should be, or could be, managed as L WCs. The simple and undisputed fact is that the lands have been managed for multiple use for the past twenty (20) years, and will continue to be managed for multiple use, including oil and gas development, in the years to come. **#3])>**
<([#4 [*3.1.7*] Rawlins RMP

The BLM also suggest that lands within the Rawlins RMP, and specifically in the area identified as the Kinney Rim South Area, should be managed for wilderness characteristics. Oil Shale DEIS, Figure 3.1.1-13, pg. 3-35. In fact, neither the Rawlins RMP nor the EIS accompanying said RMP contain any reference to the Kinney Rim area. 1The record of decision for the Rawlins RMP unequivocally states that there are no lands within the entire Rawlins RA managed for the protection of wilderness characteristics. Rawlins Record of Decision, pg. 1-3;see also, Director's Protest Resolution Report, Rawlins Resource Management Plan pgs. 149-153. The BLM itself seems to recognize this fact in the Oil Shale DEIS by noting that no lands within the Rawlins RA are currently managed for wilderness characteristics. Oil Shale DEIS, pg. 3-34, lines 42- 45. Despite this clear admission, the BLM later suggested that lands within the Rawlins RA are managed as L WCs. The BLM must explain this inconsistency and provide information to the public demonstrating how and why lands within the Rawlins RA are or should be managed for wilderness characteristics despite the unequivocal language in the Rawlins RMP. **#4])>**

<([#5 [*3.1.5*] Adobe Town Rare or Uncommon Area

Finally, the BLM suggests that lands within the Adobe Town Very Rare or Uncommon Area (RU) as designated by the Wyoming Environmental Quality Council (WEDQ) require the lands to be managed for wilderness characteristics. The BLM's position is untenable for several reasons. First, and as described above, the lands to the north and east of the Adobe WSA have been leased for oil and gas development and extensive oil and gas development has already been approved within those areas. As described above, the rare and uncommon area contains 22 wells and 100 miles of roads and pipelines. Second, the EQC RU designation approved by the WEDQ on April 10, 2008, specifically and unequivocally does not relate to or impact oil and gas operations. See Exhibit C EQC Order ~ 34, 35, and 36. Further, the RU designation does not prevent the construction of roads or other changes and current allowable uses. EQC Order~ 45. Oil and gas leasing development was specifically authorized prior to April 10, 2008, and is therefore not impacted by the RU designation. EQC Order ~ 45. Further, the Wyoming Supreme Court itself has recognized the RU designation does not, by itself, prohibit other activities including non-coal mining operations. Ristler&McMurry Co. v. State, 917 P.2d 1157, 1162-63 (Wyo. 1996). The BLM's position that the RU designation somehow equates to a wilderness characteristics management approach is inconsistent with the BLM' s specific guidance for lands to the north and east of the Adobe WSA, inconsistent with Wyoming state law, and unsupportable. **#5])>**

CONCLUSION

<([#6 [*3.1.7*] Overall, Samson has no disputes relating to BLM' s proposed management for oil shale
and tar sand leasing and development, so long as such development does not interfere with

1 Instead, that term only appears in proposals from non-governmental organizations advocating the creation of
additional wilderness areas within the Rawlins RA.

conventional oil and gas development. Samson is concerned, however, and strenuously opposes the BLM's description of lands with wilderness characteristics in both the GRRA and the Rawlins RA as the BLM' s descriptions of these areas are inaccurate., misleading, and simply untrue. There are no lands north or east of the Adobe WSA that have been, or ever could be, managed for wilderness characteristics. As described herein, and in the BLM's resource management plans for both the Green River RMP A and the Rawlins RMP A, the lands to the

north and east of the Adobe WSA have been extensively leased and developed for oil and gas resources. It would appear from Samson's review of the Oil Shale DEIS that BLM has followed the advice and recommendations of a few isolated, non-governmental organizations in their belief these areas can or should be managed for wilderness characteristics. Samson strenuously urges the BLM to update the information in the final environmental impact statement for the oil shale and tar sands leasing analyses to more accurately reflect accurate information. If the BLM prefers to withhold these areas from future oil shale or tar sands leasing, the BLM can certainly justify that decision based on other factors rather than on unsupported and erroneous assumptions regarding wilderness characteristics. Such characteristics are simply not pre ent and any suggestion by the BLM to the contrary is incorrect and could lead to substantial delays in future oil and gas development projects including those proposed by Samson. If you have any questions or comments regarding this matter please contact me at the letterhead address or by phone at (303) 222-0973. **#6])>**
SAMSON RESOURCES COMPANY
~==·~~---------

OSTS_087
Organization: Larry Moyer
Received: 5/4/2012 12:00:00 AM
Commenter1: Larry Moyer - Grand Junction, Colorado 81502 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/17/2012 12:00:00 AM
Attachments: OSTS2012D00088.htm (OSTS_087-59154.htm Size = 1 KB)
OSTS_087_Moyer_Larry_Mail_OSTS2012D00088.pdf (OSTS_087-59153.pdf Size = 822 KB)
Submission Text
See Attachment.

May 4, 2012
Larry R. Moyer
P.O. Box 1812
Grand Junction, CO 81502
lrmoyer@bresnan.net
Via: Certified Mail Return Receipt
7004 0750 0003 1404 3802
Draft OSTS PEIS
Argonne National Laboratory
9700S. Cass Ave.
EVS/240
Argonne,IL 60439
Re: Comments on DES 12-01
I have reviewed electronic copies of the document and have the following comments.

<([#1 [*3.15*] 1. Important maps in the document, Figure 2.3.3-1 (included as Exhibit A here) as an example contain no geographic registration information. i.e. Lat-Lon tick marks, township and range lines, etc. to accurately locate the items featured. I do not believe that the maps meet any reasonable standard of best practice nor does it meet criteria in Reference Manual on Scientific Evidence where rules on the reliability of scientific evidence consistent with the Supreme Court opinion in Daubert v. Merrell Dow, 509 where rules were set out. The lack of registration data inhibits evaluation of data presented. Further, no GIS data files were made available to allow for individual manipulation. The maps must be corrected.
#1])> <([#2 [*6.1.1*] 2. The term "Most Geologically Prospective Area" is not defined in the glossary and is not a standard term used in resource assessments. I find no place in my review of the material in the OSTS where it is defined and what methods were used to determine the location. This is definately a very subjective term that undoubtedly does not meet the above mentioned criteria in the Reference Manual on Scientific Evidence. To the best of my knowledge it is not a term used in the USGS DDS-69-Y Johnson, R.C. et al, 2010, An Assessment of In-Place Oil Shale Resources in the Green River Formation, Piceance Basin, Colorado. A more technically correct method must be used to evaluate the Oil Shale area. **#2])>**
<([#3 [*2*] 3. Important shallow Oil Shale Resources that may be amenable to surface mining where total recovery is possible were placed outside the "Most Geologically Prospective Area". These resources are substantial as Exhibit B - Map from DDS-69-Y indicates. Something in the range of 60 billion bbls. The failure to consider and provide for opportunities for research and commercial developments that involve surface mining makes the DES 12-01 incomplete. This again fails to meet the criteria for scientific evidence. Surface Mining must be considered. The map on the following page is from DDS-69-Y and shows the resource estimates.
#3])>
<([#4 [*3.1.7*] 4. In order to evaluate the "Lands with Wilderness Characteristics" on Figure 2.3.3-1, an image of the map page was stretched and squeezed into a mapping program that I use. A copy is shown as Exhibit C. This is a busy map, but it shows several things, some of which are better displayed in a subsequent map that I made incorporating oil and gas wells from the Colorado Oil and Gas Commission, the Mahogany Outcrop from GIS data associated with DDS-69-Y, Local Roads from the Colorado Department of Transportation, and Oil Shale Core holes from the GIS data associated with DDS-69-Y.
I have been in the area on the ground and do not believe the area should be considered to have "Wilderness Characteristics" There are roads, oil and gas wells, and Oil Shale Core Holes. I challenge the designation as having Wilderness Characteristics. From the map the fabled flag pole looks to be in place. This means that dust from the road can blow in my face in the Wilderness. This is a corruption of the definition of Wilderness - Untouched by the hand of man.
Further, I downloaded the Wilderness Study Area data from the Colorado BLM office and I do not see this area listed there. How and when were these lands designated to have Wilderness Characteristics? Who did the work? When was the work done? Was any of this work done recently when it is my understanding

that Congress has forbidden any money to be spent on Wilderness Characterization?
Clearly this does not meet a standard of best practices. **#4])>**
<([#5 [*3.4.6*] 5. The characterizations of the aquifers on pages 3-77 and 3-78 do not incorporate data from hydrology wells drilled in the last 15 years on BLM lands in the Northern Piceance basin. The Upper and Lower aquifers are an oversimplification, and the distribution of dissolved solids has been further refined. In general, only in near proximity to the dissolution surface will the water in the "Lower Aquifer" be above 10,000 IDS. Thus the OSTS fails to meet standards of best practice because not all data has been used.
#5])> <([#6 [*3.10.3*] 6. On page 3-270 that statement is made that "the three-state ROI is primarily used for hunting and other forms of dispersed outdoor activities" I question this assertion. Being a hunter myself and an outdoor person, I also know what pays the freight with the economies. Look at the values generated from oil and gas in the Piceance Basin as an example. Look at the local tax bases. Look at the monies to the Federal Government. All of that is missing in this OSTS.
The implication is that recreation is at odds with other uses. This is a false choice.
I believe the economic analysis is incomplete and not supported by sound economic evaluation. This is best stated by the following: Dr. Thomas Sowell in his book Basic Economics has an entire chapter on "Non-Economic Values":
"Beware the people who moralize about great issues; moralizing is easier than facing hard facts. John Corry ...
While economics offers many insights, and makes it easier to see through some popular notions that sound good but will not stand up under scrutiny, economics has also acquired the name 'the dismal science' because it pours cold water on many otherwise attractive and exciting - but fallacious - notions about how the world can be arranged. One of the last refuges of someone whose pet project or theory has been exposed as economic nonsense is to say: 'Economics is all very well, but there are also non-economic values to consider.' Presumably, these are supposed to be higher and nobler concerns that soar above the level of crass materialism.
Of course there are non-economic values. In fact, there are only noneconomic values. Economics is not a value in and of itself. It is only a way of weighing one value against another ...
What lofty talk about 'non-economic values' often boils down to is that some people do not want their own particular values weighted against anything. If they are for saving Mono Lake or preserving some historic building, then they do not want that weighted against the cost - which is to say, ultimately, against all the other things that might be done instead with the same resources ....
In the world that people live in, and are likely to live in for centuries to come, trade-offs are inescapable. Even if we refuse to make a choice, circumstances will make choices for us, as we run out of resources for many important things that we could have had, if only we had taken the trouble to weigh alternatives."

I believe that the economic evaluation done in the OSTS exactly matches
the situation discussed above by Dr. Sowell. Where is a discussion of
values for the Oil shale? **#6])>**
<([#7 [*3.10.3*] 7. The BLM has a history of ignoring sound economics, and I urge you to do
better. On April 7, 1995 I submitted the following comment on the White River
Resource Draft Management Plan:
"No determination or comparison of Values
8. During the "Scoping" process the planning issues (page 1-7) included
"Comparing the public values of oil and gas development with the public
values of other alternative uses which may be precluded or impacted."
Also see 6/90 letter "Dear public land user" p. 3 which contains identical
language and was used by the BLM during the scoping process.
• The RMP does not determine the value of oil and gas
resources."
On page A-81 of the June 1996 White River Resource Area Proposed Resource
Management Plan and Final Environmental Impact Statement the response by the
BLM to my question (480) above was:
"Response: The value of oil and gas resources are difficult to measure, as well as
being very price dependent."
This response was insulting and displayed an appalling lack of economic literacy.
It is proof to me that in the past, unsound economic analysis was done by the
BLM during the planning process. This kind of action leads to impoverishment of
the country.
For this OSTS-What about the Oil and Gas in the Area? Where does that fit in?
#7])> <([#8 [*1.1*] 8. I have reviewed the document and see that some Colorado entities are
involved as
cooperating agencies. I have also reviewed the preparers and best I can and it appears
to me that there is not one Colorado Registered Engineer involved with the OSTS. Is
that true? If so, is that not a violation of Colorado Regulations. Was the engineering
in the OSTS done without a license? Very clearly this violates any kind of best
practices effort. I do believe it is fair to question the technical expertise of the BLM
preparers. **#8])>**
Statement of Qualifications: I am a member of a Western Colorado Territorial Family
and I was raised outside of Meeker Colorado. I have been in Grand Junction for the past
25 years. I hold a Master of Science in Geology from the University of Colorado. I have
worked as a geologist for over 30 years. I have first hand experience in the Piceance
Basin.
It is my belief that not everyone is entitled to an opinion. People are only entitled to an
informed opinion. No one is entitled to be ignorant.

My Father's School Picture - Summer of 1934 Southeast of Meeker, Colorado
This is what it looks like when resources are not available or miss-used.
Do NOT let this come again.

OSTS_088

Organization: Wyoming Outdoor Council, Bruce Pendery
Received: 4/27/2012 12:00:00 AM
Commenter1: Bruce Pendery - Logan, Utah 84321 (United States)
Organization1: Wyoming Outdoor Council
Commenter Type: Misc. Organization
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/17/2012 12:00:00 AM
Attachments: OSTS2012D00089.htm (OSTS_088-59156.htm Size = 1 KB)
OSTS_088_Pendery_WY_Outdoor_Council_Mail_OSTS2012D00089.pdf (OSTS_088-59155.pdf Size = 509 KB)

Submission Text

Wyoming Outdoor Council
wyomingoutdoorcouncil.org
444 East 800 North
Logan, UT 84321
t & f: 435.752.2111
e: bruce@wyomingoutdoorcouncil org
April27, 2012
Oil Shale and Tar Sands Resources Draft Programmatic EIS
Argonne National Laboratory .
9700 South Cass A venue-EVS/240
Argonne, IL 60439
To whom it may concern:
Please accept these comments from the Wyoming Outdoor Council regarding the Bureau of Land Management's (BLM) "Draft Programmatic Environmental Impact Statement and Possible Land Use Plan Amendments for Allocation of Oil Shale and Tar Sands Resources on Lands Administered by the Bureau of Land Management in Colorado, Utah, ,and Wyoming" (hereinafter Oil Shale PEIS)'. The Wyoming Outdoor Council is Wyoming's oldest statewide environmental advocacy group and has a 45-year history of seeking to ensure public lands management is protective of the natural environment on these important national assets. :
Support for Provisions in the Oil Shale PEIS Preliminary Preferred Alternative. · . ... . .
<([#1 [*2.2*] Areas of Support.
The Wyoming Outdoor Council supports several of the provisions proposed for the preferred alternative specified in the Oil Shale PEIS, alternative 2(b). The preferred alternative would make approximately 461,965 acres available for future consideration for commercial oil shale leasing (174,476 acres in Wyoming), but only for research, development, and demonstration (RD&D) leases. This is a significant reduction from the approximately 2 million acres approved for oil shale leasing pursuant to the environmental impact statement

(EIS) BLM prepared in 2008. We appreciate that under the preliminary preferred alternative the following areas or kinds of lands would be excluded from oil shale leasing: (1) lands with wilderness characteristics; (2) the whole ‘of the Adobe. Town Very Rare or Uncommon area in south-central Wyoming; (3) Greater sage-grouse core areas; (4) all areas of critical environmental concern (ACEC); and (5) other areas identified as excluded pursuant to the 2008 EIS, including a requirement for future NEP A analyses and consultation activities to occur prior to any decision to lease and/or develop oil shale and tar sands resources, and a decision that the BLM will consider and give priority to the use of land exchanges to facilitate commercial oil shale development pursuant to Section 369(n) of the Energy Policy Act of 2005.

In addition, under all alternatives commercial leasing would be excluded from all designated Wilderness Areas, wilderness study areas (WSA), areas that are components of the National Landscape Conservation System (NLCS), and lands within incorporated town and city limits. Moreover, the following areas also would not be available for leasing under all alternatives: (1) areas in the trona mining area in Wyoming; (2) segments of rivers and a 0.25 mile corridor on either side that the BLM has determined to be potentially eligible for Wild and Scenic River status; (3) historic trails identified by the BLM Wyoming State Office and a corridor 0.25 miles wide on either side of the trails; (4) the Monument Valley Management Area in the BLM’s Rock Springs, Wyoming Field Office; (5) Management Area 3 in the Jack Morrow Hills Planning Area in Wyoming; (6) urban expansion areas around Rock Springs and Green River, Wyoming; and (7) lands within incorporated towns and cities.

We appreciate these provisions and urge the BLM to adopt them in its final EIS for this management decision and in the accompanying record of decision.

We believe that making these areas unavailable for leasing is well justified and well supported. Wilderness quality lands have values of remoteness and opportunities for primitive and unconfined recreation that should not be compromised. Making these areas unavailable for leasing is consistent with BLM’s wild lands policy. The Adobe Town Very Rare or Uncommon Area “exhibits surface geological, historical, archeological, wildlife, and scenic values that is very rare or uncommon when compared to other areas of the state or region. These values are seldom found within the state and could become extinct or extirpated if left unprotected.”[1]Sage-grouse core areas are critical to conserving sage-grouse populations and maintaining the long-term viability of this species, and thus perhaps avoiding a listing of this species pursuant to the Endangered Species Act.2 ACECs are established specifically because special management is required “to protect and prevent irreparable damage to important historical, cultural, or scenic values, fish and wildlife resources or other natural systems or processes, or to protect life and safety from natural hazards.” 43 U.S.C. § 1702(a). These areas are only established after an exhaustive planning process that determines their “relevance” and “importance” and thus they should not be degraded by industrial development occurring within them. The other areas that would be excluded from leasing, such as components of the NLCS, historic

trails, potential additions to the Wild and Scenic Rivers System, and areas such as the Monument Valley Management Area and Area 3 zones in the Jack Morrow Hills, also have important values making oil shale leasing in these areas unadvised. Consequently, we again support BLM's proposed decision to make these areas unavailable for oil shale leasing.

[1] Wyoming Environmental Quality Council, In the Matter of the Petition of Biodiversity Conservation Alliance for Designation of "Adobe Town" as Very Rare or Uncommon, Findings of Fact, Conclusions of Law and Order, at 19 (April 10, 2008).
2 See generally State of Wyoming Executive Department Executive Order, Order No. 20 ll-5 (June 2, 20 I 1) (establishing the State of Wyoming's sage-grouse core area policy which has been widely adopted and supported by agencies such as the BLM and the U.S . Fish and Wildlife Service). **#1])>**

<([#2 [*3.1.1*] Areas of Improvement Needed in the Preliminary Preferred Alternative.
While we appreciate the above provisions that would accompany implementation of alternative 2(b), we believe there are shortcomings in this proposal that should be rectified or improved upon.
First, under this proposal some lands in the Adobe Town area in southcentral Wyoming would remain available for oil shale leasing. Oil Shale PEIS at Fig. 2.3.3-6. In our view no lands in the Adobe Town Area should be available for leasing. As shown in Figure 3.1.1-13 of the Oil Shale PEIS, there are a number of tremendously important areas or values that would essentially be adjacent to the areas available for leasing, such as the Monument Valley Management Area, Adobe Town WSA, the Adobe Town Very Rare or Uncommon Area, and the Kinney Rim North and Kinney Rim South lands with wilderness characteristics. As shown in Figure 6.1.2-8, the areas available for leasing in Adobe Town are within 5 miles or 15 miles of scenic resource areas, namely the Adobe Town WSA. There are also mule deer and elk winter ranges located in these available for leasing areas. Oil Shale PEIS at Figs. 6.1.2-1 and 6.1.2-2. Numerous sensitive species could potentially be negatively impacted by leasing in the Adobe Town area. Oil Shale PEIS at Table 6.1.2-2.
Given these potential impacts, oil shale leasing should not be permitted anywhere in the Adobe Town area. Essentially the BLM is proposing to close this area to leasing with the exception of two rather small areas that would remain available for leasing, one on the north side of the area and the other on the west or southwest side of the area. See Oil Shale PEIS at Figs. 2.3.3-6 and 3.1.1-13. However, these two relatively small areas create potentially serious and destructive intrusions into the heart of the larger protected area, as Figure 3.1.1-13 shows. These intrusions into this generally protected area should not be permitted because oil shale development would threaten wilderness, open space, and wildlife values in the overall protected area. We would note that if these areas were not available for leasing it would have little impact on the overall area that would remain available for leasing, even in Wyoming, as shown by Figure 2.3.3-6. The BLM should fulfill the overall protective management approach for the Adobe Town area evident in alternative 2(b) by ensuring the area is fully

protected and not allow potential threats to the entire protected area by opening these two relatively small areas to oil shale leasing.
The second area of concern we have relative to alternative 2(b) relates to the Jack Morrow Hills (JMH) area. It appears to us that a very small portion of this area would remain available for oil shale leasing. Oil Shale PEIS at Fig. 3.3.3-6. This figure shows a very small area of leasing availability that is east of U.S. Highway 191. In our view, no lands east of highway 191 that are in the JMH planning area should be available for leasing. The JMH is replete with special values, including important wildlife habitats; special management areas such as ACECs, WSAs, and lands with wilderness characteristics; and national historic trails and numerous other historical, archeological, paleontological features. This area should not be allowed to be threatened by potential oil shale development, even on a small scale. See generally Figure 6.1.2-8 (showing scenic resource areas within 5 or 15 miles of this potential leasing area). Not making this area east of U.S. Highway 191 unavailable for leasing would have essentially no impact on the overall availability of lands for oil shale leasing in Wyoming. **#2])>**
<([#3 [*2.3.1*] The BLM Should Adopt Alternative 3 As its Preferred Alternative in the Final EIS and the Record of Decision.
Pursuant to alternative 3 in the Oil Shale PEIS, rather than the 461,965 acres that would be available for leasing under alternative 2(b), only 32,640 acres would be available for potential oil shale leasing. Due to the highly experimental and uncertain environmental and social aspects and impacts of oil shale development we believe the BLM should adopt this alternative as its final decision for oil shale leasing.
Under alternative 3, the six existing RD&D leases and the three new lease proposals would be available for development. These leases are in Colorado and Utah. We believe that development of these initial leases is the place to start in determining whether oil shale development will be acceptable from environmental and social standpoints, and that it would be inappropriate to open much larger areas to oil shale leasing before these impacts are fully illuminated and understood.

The BLM has made a number of statements that emphasize the uncertain and experimental nature of oil shale development. For example in the press release related to the Oil Shale PEIS available at http://www.blm.gov/wo/st/en/info/newsroom/2012/february/NR 02 03 2012.html, the BLM made these statements:
• "Because there are still many unanswered questions about the technology, water use, and impacts of potential commercial-scale oil shale development, we are proposing a prudent and orderly approach that could facilitate significant improvements to technology needed for commercial scale activity. If oil shale is to be viable on a commercial scale, we must take a common-sense approach that encourages research and development first." Statement of BLM Director Bob Abbey.
• To date, technological and economic conditions have not combined to support a sustained commercial oil shale industry in the United States, and

there is currently no commercial development of oil shale in the areas under review in the draft PEIS.
• Additionally, following the recommendations of the Government Accountability Office[3]
- which determined that several fundamental questions about oil shale technologies remain unanswered, including critical questions about water demands- the United States Geological Survey (USGS) is undertaking an analysis of baseline water resources conditions to improve the understanding of groundwater and surface water systems that could be affected by commercial-scale oil shale development.
Given these uncertainties, it is appropriate to initially allow for only approximately 32,000 acres of oil shale leasing, as would occur under alternative 3, rather than the approximately 460,000 acres that would be available for leasing pursuant to alternative 2(b).
Moreover, other statements made by the BLM in the Oil Shale PEIS emphasize the uncertain and experimental nature of this technology. For example,
• "With respect to oil shale, the BLM would like to maintain focus on RD&D projects, so as to obtain more information about the technological

[3]United States Government Accountability Office, Energy-Water Nexus, A Better and Coordinated Understanding of Water Resources could Help Mitigate the Impacts of Potential Oil Shale Development, GAO 11-35 (Oct. 2010).

requirements for development of this resource, as well as the environmental implications, before committing to broad-scale commercial development. For instance, the BLM looks forward to gaining a clearer understanding of the implications of development of oil shale for water quality and quantity." Oil Shale PEIS at ES-9.
• "While it is not presently known how much surface water will be needed to support future development of an oil shale industry, or the role that groundwater would play in future development, it is likely that additional agricultural water rights could be acquired. Depending on the locations and magnitude of such acquisitions, there could be a noticeable reduction in local agricultural production and land use when the water is eventually converted to supporting oil shale development." Oil Shale PEIS at 4-19. **#3])>**
<([#4 [*3.4.1*] In the PEIS the BLM emphasized some of the potential significant impacts to water resources, stating that there was concern regarding:
• Degradation of surface water quality caused by increased sediment load or contaminated runoff from project sites;
• Surface disturbance that may alter natural drainages by both diverting and concentrating natural runoff;
• Surface disturbance that becomes a nonpoint source of sediment and dissolved salt to surface water bodies;
• Withdrawal of water from a surface water body that reduces its flow and degrades the water quality of the stream downgradient from the point of the withdrawal;
• Withdrawals of groundwater from a shallow aquifer that produce a cone of

depression and reduce groundwater discharge to surface water bodies or to the springs or seeps that are hydrologically connected to the groundwater;
• Accidental chemical spills or product spills and/or leakages could potentially contaminate surface water and/or groundwater;
• Construction of reservoirs that might alter natural streamflow patterns, alter local fisheries, increase salt loading, cause changes in stream profiles downstream, reduce natural sediment transport mechanisms, and increase evapotranspiration losses;
• Discharged water from a project site that could have a lower water quality than the intake water that is brought to a site;
• Spent shale piles and mine tailings that might be sources of contamination for salts, metals, and hydrocarbons for both surface and groundwater;
• Degradation of groundwater quality resulting from injection of lower quality water; from contributions of residual hydrocarbons or chemicals from retorted zones after recovery operations have ceased; and, from spent shales replaced in either surface or underground mines;
• Reduction or loss of flow in domestic water wells from dewatering operations or from production of water for industrial uses; and
• Dewatering operations of a mine, or dewatering through wells that penetrate multiple aquifers, that could reduce groundwater discharge to seeps, springs, or surface water bodies if the surface water and the groundwater are connected.
Oil Shale PEIS at 4-31 to 4-32. Moreover, in the Oil Shale PEIS BLM estimates that for a 30,000- to 50,000-bbl/day in situ project in Wyoming, the amount of water consumption is estimated to be 2,800 to 8,700 ac-ft/yr. An underground mine with a surface retort project or a surface mine with surface retort projects at 25,000 to 30,000 bbl/day are estimated to consume 2,450 to 4,500 ac-ft/yr of water. The remaining available water from the Colorado River in Wyoming is expected to decline from 226,000 ac-ft/yr in 2000 to a range of 80,000 to 202,000 ac-ft/yr in 2030. With a range of 4,900 to 34,700 ac-ft/yr required for individual oil shale development projects, the water requirements per project represent 1.1 to 3.9% of the currently available water and would be 1.2 to 10.9% of the water available in 2030. Oil Shale PEIS at 4-49. **#4])>**
<([#5 [*2.3.1*] So again, given these difficulties and uncertainties relative to water quality and supply it is proper and appropriate that only 32,000 acres be made available for oil shale leasing at this time rather than 460,000 acres. **#5])>**
<([#6 [*3.5.7*] In addition to impacts to water quality, oil shale development could also have significant impacts on air quality. Given that formerly pristine areas in Wyoming and Utah are rapidly moving into noncompliance with the National Ambient Air Quality Standard for ozone, the BLM should be cautious about unleashing industrial development that could exacerbate these problems.
#6])> <([#7 [*2.3.1*] In addition to uncertain impacts related to water and air quality, the potential for oil shale development to significantly impact wildlife resources is clear. And there are very real concerns about the "boom and bust" economic difficulties that have accompanied oil shale development proposals in the past. So again, alternative 3 should be adopted as BLM's final approved proposal for oil

shale leasing in Colorado, Utah, and Wyoming because this alternative will afford the BLM the best opportunity to address and mitigate the impacts of oil shale development.
#7])> Conclusion.
Provisions made in alternative 2(b) of the Oil Shale PEIS, BLM' s current preferred alternative for oil shale development, would include important provisions for protecting important resources such as sage-grouse habitats and wilderness quality lands. For that reason we support these provisions and urge the BLM to adopt them in its final plan. However, in our view alternative 3, which would make less land available for oil shale leasing, is preferable to alternative 2(b) because this alternative would better allow the BLM to investigate and consequently mitigate the numerous uncertain and unknown impacts of oil shale development, particularly relative to water and air resources, as well as impacts to wildlife and local communities. For that reason we believe the BLM should adopt alternative 3 as its preferred alternative in the record of decision for this project.
Sincerely,

Wyoming Outdoor Council
444 East 800 North
Logan, UT 84321

Oil Shale and Tar Sands Resources Draft
Programmatic EIS
Argonne National Laboratory
9700 South Cass Ave.--EVS/240
Argonne, IL 60439

OSTS_089
Organization: Craig Chamber of Commerce, Christina Oxley
Received: 4/27/2012 12:00:00 AM
Commenter1: Christina Oxley - Craig, Colorado 81625 (United States)
Organization1: Craig Chamber of Commerce
Commenter Type: Local Government
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/17/2012 12:00:00 AM
Attachments: OSTS2012D00090.htm (OSTS_089-59158.htm Size = 1 KB)
OSTS_089_Oxley_Craig_Chamber_of_Commerce_Mail_OSTS2012D00090.pdf (OSTS_089-59157.pdf Size = 85 KB)
Submission Text
See Attachment.

360 E. Victory Way

Craig, CO 81625
CRAIG
CHAMBER OF
COMMERCE
www.craig-chamber.com • info@craig-chamber.com
Argonne National Laboratory
9700 S. Cass Ave.
EVS/240
Argonne, IL 60439
Re: Draft OSTS PEIS
Dear sir /madam;
1-800-864-4405
(970) 824-5689
(Y70) 824-0231 (fax)
Thank you for the opportunity to offer input on the 2012 oil shale PEIS. It is important that the voice of
local businesses and the community at large be heard during this important process.
<([#1 [*1.3*] Whereas Moffat County connects the Green River Basin with the Piceance Basin oil shale reserves,
making it a transportation hub for oil shale development; and, whereas, commercial oil shale development represents a major economic opportunity for the Western Slope and for the Craig region,
The Craig Chamber of Commerce believes that the Bureau of Land Management should honor the input
and opinions of the cooperating agencies and local communities when considering modifying any existing
land management plans. **#1])>**
<([#2 [*11*] The Craig Chamber of Commerce fully supports responsible, commercial-scale development of our
energy reserves.
As you are aware, there have been some incredible advances made in the production of oil from shale,
which are encouraging to say the least. Shell has recently made huge strides towards commercialization,
in fact successfully producing several hundred barrels of oil from its RD&D lease in the Piceance Basin.
The biggest obstacle to large-scale commercial development seems to be bureaucratic, as federal land use
restrictions block the access required to pursue such development.
In the interests of the long term economic health of our region, we would hope that the BLM will consider
the input of those of us who live and work in the impacted areas.
#2])> Sincerely,
Executive director

OSTS_090
Organization: Sierra Club, Glen Canyon Group - Utah Chapter, Deb Walter
Received: 4/26/2012 12:00:00 AM
Commenter1: Deb Walter - Moab, Utah 84532 (United States)
Organization1: Sierra Club, Glen Canyon Group - Utah Chapter
Commenter Type: Environmental Organization
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/17/2012 12:00:00 AM
Attachments: OSTS2012D00091.htm (OSTS_090-59161.htm Size = 1 KB)
OSTS_090_Walter_Sierra_Club_GlenCanyon_Mail_OSTS2012D00091.pdf (OSTS_090-59160.pdf Size = 292 KB)
Submission Text
See Attachment.

SIERRA
CLUB

Draft OSTS PEIS
Argonne National Laboratory
9700 S. Cass Ave.
EVS/240
Argonne, IL 60439
GLEN CANYON GROUP--UTAH CHAPTER
P.O. BOX 622
MOAB, UT 84532

April26, 2012
<([#1 [*2.3.1*] Research Design and Development of tar sands and oil shale has not yet come up with solutions to environmental, economic, and social issues. As steward of our public lands, the BLM has an obligation to make sure safeguards are in place before leases are issued. For this reason, the Glen Canyon Group of the Sierra Club advocates a decision which reduces lands available for leasing to those already allocated for RD&D. We endorse Alternative 3. If and when companies are ever able to mine the tar sands and oil shale on public lands in a manner that is not harmful to the water, the air, the habitat, the wildlife, and the people, then and only then should the BLM grant these leases. **#1])>**
<([#2 [*3.4.1*] [*6.3.2.2*] Preserve Water Quality and Quantity of Flow
We can live without oil, but we cannot live without water. Utah is the second driest state in the United States. We need to take care of and cherish the water we have. It is our most precious commodity. The developers must prove that the energy they produce does not kill us in the

process. That may seem like a radical statement, but in reality it is not. We cannot live without water. Yet producing a barrel of oil from oil shale takes 4 - 5 barrels of water and producing a barrel of oil from tar sands takes 4-6 barrels of water. With the recent and ongoing reduction in snowpack in the Rocky Mountains caused by climate change, our Colorado River will have less water flowing into it. With the growth in populations in Utah as well as in all areas downstream that depend on the Colorado River, human demand will be increasing for drinking water. With that population growth will come the need for more irrigation for agriculture. The bottom line is that tar sands and oil shale developers must not only prove they will not need large amounts of water to produce this energy source, they must also prove that they will be able to mine and produce it without the use of toxic chemicals that will contaminate our surface water, ground water, aquifers, watersheds, and the Colorado River.
#2])> <([#3 [*3.7.4.10*] Protect Endangered Fish
There are several endangered species of fish that live in the Colorado River. They need large amounts of water to survive. The endangered species are the canaries in the coal mine - they are indicators to us that we in fact are in danger. Is is time to take care of them.
#3])> <([#4 [*3.5.4*] Preserve Air Quality
Tar sands and oil shale developers must not be allowed to pollute our air or produce greenhouse gases. Health consequences of breathing polluted air completely undermine the quality of life for any species, whether human or wild.
The RD&D sites are poor examples of responsible use of our air. In the process of building the site, strip mining the land, processing materials, extensive traveling on the roads, creating energy to run the operation, the strip miners create many toxic substances as well as ozone depleting chemicals and particulates. Citizens are protected from these forms of pollution by the Clean Air Act. Yet the pollution remains. The visibility, noise level of operating machinery, light pollution at night which disrupts wildlife habits, toxic contamination of the air, and creation of greenhouse gases are all reasons to limit acreage available for RD&D until the developers have proven that they can mine the tar sands and oil shale without polluting the air or contributing to global warming. They need to be proven to be in line with the Clean Air Act before they are issued leases. **#4])> <([#5** [*3.10.2*] Preserve Local Communities and Their Economies
Tar sands and oil shale mining will hurt our communities and our way of life. Many people come to our area for recreation opportunities of hiking, biking, jeeping, river rafting, bird watching, hunting, fishing, camping, rock climbing, horseback riding, and any other activities in which they can experience clean air, clean water, scenic open vistas, quiet. The tourist and recreation industries in this part of Utah provide our livelihoods as well as a way of life. Service industries such as new hospitals, recreation centers, senior centers have grown up in the small towns. Retirees have moved to these areas because of the healthy community spirit and

beautiful surroundings. The economies and way of life of the rural communities would be destroyed and would be replaced by inflation, inadequate infrastructures, population explosion, housing shortages, increase in demands on social services like schools, police protection, fire protection, health care. We in the small towns cannot afford these mining operations. The BLM should require mining companies to pay communities in advance for updating infrastructures as well as increases in all the other expenses the local communities will have to bear.

#5])> <([#6 [*8*] Preserve Public Lands for Multiple Uses

Public lands have historically been used for many purposes including hunting, camping, grazing, trail riding, recreation, fishing, etc. These multiple uses will have to cease if the mining of tar sands and oil shale causes environmental damage. The BLM should grant more permits for Research and Development for nonpolluting renewable sources of energy esp. wind and solar in Utah. The influx of those industries would benefit our energy development, benefit our environment, and benefit our communities.

#6])> <([#7 [*3.7.5.1*] Preserve Wildlife Habitat for Endangered Greater Sage Grouse

Wildlife habitat on public lands must be preserved. The Greater Sage Grouse is under protection of the Endangered Species Act and requires a contiguous range that encompasses its needs during various seasons and during various times in the life and breeding cycle. The Resilient Habitats Campaign of the Sierra Club has as its goal the preservation of critical habitats to insure the survival of species in the face of climate change, which causes the suitable available habitat to shrink in area. The developers who want to lease public lands must not be permitted any leases within the sagebrush ecosystem that is so critical to the survival of the Greater Sage Grouse.

#7])> <([#8 [*3.1.1*] Preserve Lands with With Wilderness Characteristics and ACEC's

The BLM should consider all lands with Wilderness Characteristics or Areas of Critical Environmental Concern off limits to leasing for tar sands or oil shale exploration or Research Design and Development. The RD&D that we have seen so far greatly pollutes the water, the air, and completely destroys the land. These areas cannot undergo the burden of irresponsible development when the companies still have not proven they have the technology to develop the strip mining process.

#8])> <([#9 [*2.3.1*] Choose Alternative 3

In summary, the Glen Canyon Group of the Sierra Club endorses Alternative 3. The RD&D projects already have 32,640 acres available for them to develop technologies that extract oil in an environmentally sound manner. If they can prove to interested third parties that the technologies are dependably predictable and safe for the water, air, wildlife, and community impact, the BLM can issue permits at that time. Until that time, the land should be kept intact, safe from their experimentation with all its consequences. We must not put the cart before the horse, giving away our land without regard to the long term consequences.

#9])> Thank you for your consideration of these issues.
Sincerely,
Deb Walter
Volunteer, Glen Canyon Group of the Sierra Club
Moab, Utah

OSTS_091
Organization: Grand Junction Chamber of Commerce, Phyllis Norris
Received: 4/17/2012 12:00:00 AM
Commenter1: Phyllis Norris - Grand Junction, Colorado 81501 (United States)
Organization1: Grand Junction Chamber of Commerce
Commenter Type: Local Government
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/17/2012 12:00:00 AM
Attachments: OSTS2012D00092.htm (OSTS_091-59163.htm Size = 1 KB)
OSTS_091_Norris_Grand_Junction_Chamber_of_Com_Mail_OSTS2012D00092.pdf (OSTS_091-59162.pdf Size = 134 KB)
Submission Text
See Attachment.
Grand Junction Area
April17, 2012
Draft OSTS PEIS
Argonne National Laboratory
9700 S. Cass Ave.
EVS/240
Argonne, IL 60439
Dear Sirs;
<([#1 [*2.1.1*] The Grand Junction Area Chamber of Commerce, an organization of 1,000 mostly small
businesses representing over 30,000 employees in Mesa County Colorado opposes the BLM preferred alternative number 2 found in the Draft OSTS PEIS. This alternative will drastically reduce the federal acreage available for potential development of oil shale in our area and impact our long term ability to create jobs and strengthen the local economy. Our organization joins more than 70% of the fourteen cooperating agencies in supporting alternative number 1, the NO ACTION OPTION.
As an organization that represents business interests and understands and supports economic development we take this action based on the following;
• Businesses will only invest in research and development if there is some degree of certainty that the raw materials for their processes will be available in sufficient quantities to recoup their upfront costs and make a profit. By drastically reducing the potential acreage that could be available in the future the BLM effectively insures that businesses will not make the upfront investments in technology that will be necessary to recover this national resource and kills any hope of developing the resource in the future.

• The fact that 2,000,000 acres were deemed available for leasing in the 2008 PEIS does not mean that anywhere near that amount would be leases or developed. Industry would choose the acreage that it believed could be profitably developed. BLM has the discretion under its current proposals to limit acreage to be leased. BLM already has the authority to control development through environmental analyses and approval of development plans.
• The oil shale resource is a huge domestic energy asset that should be developed for the benefit of the American people and American businesses, especially in light of the looming increases in the prices we pay at the pump based upon the price of imported oil that is out of our control.
• The time to get into production is long, and even though it may be years away, we must start now to develop all our domestic energy supplies, including oil shale.
#1])> <([#2 [*9.8*] [*2.1.1*] • Businesses need some degree of certainty within the regulatory framework in order to make
long term investments. There was no valid reason for redoing the PEIS and Regulations completed in 2008. There is little if any new information to be considered, and the new draft PEIS looks largely as a reprint of the 2008 PEIS -except for BLM's preferred alternative that dramatically reduces the acreage available for leasing.
• Most local residents are more worried about jobs and economic development than the rehashing of the politics of oil shale development. The current re-visitation by this administration is just delaying the time that oil shale can provide more jobs in the region. Members of the Grand Junction Area Chamber include tourism entities and business owners that live in the region and support responsible development of all energy resources in a manner that allows free enterprise to thrive while protecting and enhancing the environment. This PEIS was not needed, is clearly not balanced in its approach and as a result the preferred alternative should be rejected in favor of the no change alternative.
#2])> <([#3 [*1.1.1*] Additionally, we would request that the comment period on the PEIS be extended 90 days to
allow for more thoughtful review. This is a reasonable request in light of the fact that the regulations regarding this PEIS are scheduled to be released AFTER the current comment period has expired on May 4th. **#3])>**
Sincerely,
c;8u-~
Phyllis Norris
Chairman of the Chamber Board
Grand Junction Area
360 Grand Avenue
RETURN SERVICE REQUESTED
Draft OSTS PEIS

OSTS_092
Organization: Americans for Prosperity, Jeff Crank
Received: 4/15/2012 12:00:00 AM
Commenter1: Jeff Crank - Colorado Springs, Colorado 80908 (United States)
Organization1: Americans for Prosperity
Commenter Type: Misc. Organization
Classification: none
Submission Category: Letter

Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/17/2012 12:00:00 AM
Attachments: OSTS2012D00093.htm (OSTS_092-59165.htm Size = 1 KB)
OSTS_092_Crank_Am_for_Properity_Mail_OSTS2012D00093.pdf (OSTS_092-59164.pdf Size = 182 KB)
Submission Text
See Attachment.

AMf-iJCffl ftR H·89Pf·R+Tr
COLORADO
PO Box 88003 • Colorado Springs, CO 80908 • 719.494.0797 • Fax: 719.495.5041
BLM 2012 OS/TS PEIS
Argonne National Laboratory
9700 S. Cass Ave
EVS/240
Argonne, IL 60439
Cc. BLM CRVFO
2300 River Frontage Road
Silt, CO 81652
To whom it may concern,
April 15, 2012
<([#1 [*9.8*] As the state's leading grass-roots free-market economic policy and advocacy organization, American's For Prosperity Colorado would like to express some key concerns and recommendations regarding the 2012 oil Shale PEIS.
First, and most critical, is our dismay at the reason for this most recent PEIS in the first place. The initial PEIS, completed in 2008, was very professionally done, and was the end product of three years of study, research, and input by many scientists, energy and environmental experts, every local government, and many members of the public. There has been no significant new information or evidence develop in the interim, and yet taxpayers money is being spent to completely redo the document. It seems incredible that the information contained in the 2012 is virtually identical to that in the 2008 version, and yet the BLM's conclusions are different. It is no secret, of course, that this is due to a settlement resulting from a lawsuit directed against the Department of the Interior over the findings of the 2008 PEIS, from environmental extremist lobby groups. We believe that it sets a terrible precedent, that any special interest group unhappy that the results of a public process did not fit their ideological agenda, can hijack that process using the courts.
#1])> <([#2 [*2.2*] Beyond that, the BLM's preferred alternative in the 2012 re-write, is far too restrictive, and hostile to commercial development of oil shale. The 2008 PEIS identified 2,017, 714 acres of the most geologically prospective oil shale lands in the tri-state area as being available for application for commercial leasing. This
www afpcolorado com

did not mean, of course, that all that acreage was to opened for development, but simply for application for leasing. This was a reasonable amount of land, which protected identified sensitive areas, and provided for an environmental review of individual lease application, but still provided the industry with the flexibility required to allow for future planning of commercial operations. The new Preferred Alternative, 2b, drastically slashes that acreage by more than 70% overall, and by almost 90% in Colorado. It also places almost all of the Preference Rights Acreage off limits, and disperses the little bit of land it does leave available for leasing in small pockets throughout the area, with no consideration for access, geology, commercial viability, or any other relevant factors. As if all of that were not disincentive for investment and commercial expansion enough, Alternative 2b also places a draconian requirement for companies to demonstrate to the satisfaction of a federal bureaucrat, that their production technology is viable; this is an arbitrary determination, and something that no other industry must submit to. It should be up to the individual companies if they want to take the risk on paying for leases before their technology is ready, not the federal government.
#2])> <([#3 [*3.10.3*] Oil shale is a vital national resource, representing 4 trillion barrels of recoverable oil, which holds the potential for American energy independence, and self-reliance. It can create jobs, prosperity and growth for a region currently experiencing 10% unemployment. This growth will generate revenue for local governments to remedy their funding shortfalls without raising the tax burden on their citizens. And it will do all this without government money- all of the investment currently in oil shale development is private, not subsidized with tax payer dollars. **#3])>**
<([#4 [*2.1.1*] With all of this in mind, we recommend that the BLM remove the government created obstacles to job growth and regional success, and adopt Alternative 1, the no-action Alternative, which re-instates the ROD from the 2008n PEIS, and offers the best chance at providing for economic recovery and prosperity, while protecting truly at-risk eco-systems. **#4])>**

Jeff r
Colorado State Director
Americans for Prosperity

OSTS_093
Organization: Herschella Smith
Received: 4/27/2012 12:00:00 AM
Commenter1: Herschella Smith - Grand Junction, Colorado 81504 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/17/2012 12:00:00 AM

Attachments: OSTS2012D00094.htm (OSTS_093-59167.htm Size = 1 KB)
OSTS_093_Smith_H_Mail_OSTS2012D00094.pdf (OSTS_093-59166.pdf Size = 78 KB)
Submission Text
See Attachment.

2012 OS/TS PEIS
Argonne National laboratory
9700 S. Cass Ave
EVS/240
Argonne, ll 60439
To whom it may concern,
Apr i I 27, 2012
<([#1 [*9.8*] I believe that this redoing of the 2008 oil shale PEIS is a waste of valuable tax dollars, and sets a terrible precedent for the future. Since the only reason that another PEIS was undertaken on this issue was because extreme environmentalist groups sued the federal government over the outcome of the one done in 2008, I presume we can now expect that it will be the status quo to sue whenever a public process does not produce a result that some particular interest group disagrees with.
This is making a mockery out of the processes in place to establish such management plans, and of the EIS system in particular. Clearly, the process means nothing if its results are swept aside at the first complaint from society' s fringe. The 2008 PEIS incorporated the testimony, evidence and input from several local governmental, industry, environmental, and scientific organizations, experts, and studies, and was completed after months of work and evaluation. Is the BLM suggesting that all of that was for nothing?
If this farce is continued, someone needs to take public responsibility for the millions of taxpayer dollars, and the hundreds of man-hours wasted in redoing what was adequately completed only a few short years ago. **#1])> <([#2** [*2.1.1*] The only logical thing to do is
for the BLM to choose the no action alternative.
This 2012 PEIS would be a stereotypical caricature of government waste and mismanagement, if the stakes for the nation and the affected regions were not so high. **#2])>**
Sincerely,

OSTS_094
Organization: Jerry Walker
Received: 4/25/2012 12:00:00 AM
Commenter1: Jerry Walker - Whitewater, Colorado 81527 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:

Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/17/2012 12:00:00 AM
Attachments: OSTS2012D00095.htm (OSTS_094-59169.htm Size = 1 KB)
OSTS_094_Walker_J_Mail_OSTS2012D00095.pdf (OSTS_094-59168.pdf Size = 92 KB)
Submission Text
See Attachment.
April 25, 2012
Draft OSTS PEIS
Argonne National Laboratory
9700 S. Cass Ave.
EVS/240
Argonne, IL 60439
Re: 2012 Oil Shale Programmatic Environmental Impact Statement
To whom it may concern,
<([#1 [*2.1.1*] Oil shale development represents an incredible opportunity for northwestern Colorado, and indeed, the
rest of the nation. The trillions of barrels of oil that exist in our own backyard easily outstrip the reserves
in the middle east, and that can mean energy independence for America in a relatively short time. Given
the advances made in oil shale recovery technology made not only by companies here in Colorado, but
around the world, it seems the only thing standing in the way of realizing the potential of this vast
resource is our own government.
This PEIS offers four alternatives for the BLM to pursue going forward with regards to oil shale; only one,
the alternative which calls for maintaining the acreage decided upon in the 2008 PEIS, even comes close
to helping foster a commercial oil shale industry in this country. Alternative one will allow roughly 2
million acres to be available for leasing - not actually open to development mind you - which means that
each company that applies for a commercial lease will need to sweat out yet another Environmental
Impact Statement, and the related red tape before they can proceed. In fact, this will inevitably mean that
many of these acres will actually be placed of limits.
This, however, is better than the other alternatives, including the BLM's preferred one, which will cut that
acreage available for leasing by over 70%. And not only is the acreage slashed, but the parcels that are left
available are isolated little outposts here and there, selected with no regard whatsoever to the geology of
the oil shale resource, or practical considerations for the energy companies trying to extract it.
I, like most in western Colorado, appreciate the need to balance conservation and development. However,

it appears that the scales are being tilted dangerously towards no development at all. As important as
environmental factors are, the economic effects can not, and should not, be ignored. Allowing for commercial development of oil shale is good for the local economy, national energy security, and is in line
with the 2005 Energy Policy Act. Alternative 1 is the only option in the PEIS that accomplishes all of the
goals that the BLM should be pursuing. **#1])>**
Regards,

OSTS_095
Organization: Luke Conner
Received: 4/24/2012 12:00:00 AM
Commenter1: Luke Conner - Grand Junction, Colorado 81504 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/17/2012 12:00:00 AM
Attachments: OSTS2012D00096.htm (OSTS_095-59171.htm Size = 1 KB)
OSTS_095_Conner_L_Mail_OSTS2012D00096.pdf (OSTS_095-59170.pdf Size = 90 KB)
Submission Text
See Attachment.

April 24th, 2012
Bureau of Land Management
Argonne National Laboratory
9700 S. Cass Ave
EVS/240
Argonne, IL 60439
Colorado River Valley Field Office
2300 River Frontage Road
Silt, CO 81652
Ref: 2012 Oil Shale Programmatic EIS
<([#1 [*2.1.1*] [*9.8*] I would like to express my profound disappointment over the re-hashing of the 2008 effort to establish a
set of rules and processes for oil shale development.
As a result of a pair of lawsuits, and the subsequent settlement by the federal government, the entire
years-long process, that involved work of hundreds, and input from many local counties, municipalities,
and specialists, as well as hours of further input from the public, is being needlessly redone, at the
expense of the taxpayer.

The 2008 PEIS identified just over 2,000,000 acres for which a company could apply for a lease for future
commercial development. This did not open up these 2,000,000 acres for development, merely made
them available for lease application, subject to full NEPA analysis, EIS studies, etc. This would simply
provide oil shale companies some flexibility in their long-term planning, and establish an orderly process
for the expansion of the industry into large-scale commercialization.
The alternative to this, the restriction of leasing to merely RD&D, is perpetual delays, an unfriendly
environment of uncertainty for current and potential producers, and a denial of economic activity to one of
the hardest hit regions in the state.
A further result of rejecting the 2008 findings is to set our region up for a haphazard, impromptu
development plan if and when circumstances, such as a national emergency, demand that oil shale be
put on line in relatively short order, with predictable consequences for the environment and local municipalities.
For these reasons, the only responsible course of action for the BLM to take is to either scrap the
renewed PEIS altogether, or at the very least to adopt Alternative 1 (no action) as the preferred alternative.
#1])> Sincerely,

OSTS_096
Organization: D.T. Spach
Received: 4/24/2012 12:00:00 AM
Commenter1: D.T. Spach - Fruita, Colorado 81521 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/17/2012 12:00:00 AM
Attachments: OSTS2012D00097.htm (OSTS_096-59173.htm Size = 1 KB)
OSTS_096_Spach_DT_Mail_OSTS2012D00097.pdf (OSTS_096-59172.pdf Size = 87 KB)
Submission Text
See Attachment.

April24, 2012
Argonne National Laboratory
9700 S. Cass Ave.
EVS/240
Argonne, IL 60439
RE: BLM 2012 OS/TS PEIS

To whom it may concern,
<([#1 [*9.8*] I do not believe that there was any for a do-over on an Environmental Impact Statement
that was already done in 2008. It seems to be a waste of tax payer's money at a time when the government is supposed to be looking for ways to cut fat from the budget. This is exactly the type of redundant spending that makes people suspicious of, and angry at, the government. **#1])>**
<([#2 [*2.1.1*] With that said, the most sensible option for the BLM now is to adopt the No Action alternative, and enact the provisions in the original EIS. These call for 2 million acres of prime oil shale land to be made available for leasing, giving oil shale companies the flexibility to be able to plan ahead in an orderly manner for commercial development. **#2])>**
<([#3 [*6.3.5*] Despite what some opponents of energy development are saying, the technology is there
to take the next step; oil shale is being produced on a commercial scale in Estonia and China, and Shell has recently reported commercial success with its project here in Colorado.
#3])> <([#4 [*9.8*] The biggest obstacle to progress, the reason oil shale is "always 10 years away", is largely
due to land use restrictions, and failure on the part of government to enact a long-term management plan.
The 2008 PEIS laid the groundwork for such a plan; the land allocation alternatives described in the 2012 PEIS will only serve to keep development on hold. It is bad enough that the government is wasting money redoing work already done, but for it to deny economic opportunity at the same time is frankly offensive.
#4])> Thank you for allowing this opportunity to submit comment on this important matter.

OSTS_097
Organization: Megan Weaver
Received: 4/22/2012 12:00:00 AM
Commenter1: Megan Weaver - Fruita, Colorado 81521 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/17/2012 12:00:00 AM
Attachments: OSTS2012D00098.htm (OSTS_097-59175.htm Size = 1 KB)
OSTS_097_Weaver_M_Mail_OSTS2012D00098.pdf (OSTS_097-59174.pdf Size = 100 KB)
Submission Text
See Attachment.

2012 OSPEIS
Argonne National Laboratory
9700 S. Cass Ave
EVS/240

Argonne, IL 60439
Apr. 22, 2012
Re: 2012 Oil Shale Programmatic EIS
<([#1 [*2.1.1*] I am writing in support of the no-action Alternative in the current PEIS. The no-action
alternative (Alternative 1) offers the best balance of economic growth, conservation, and longterm
planning. By keeping the same amount of acreage available for application for commercial leasing as was allowed in the previous 2008 PEIS, the BLM would allow not only for the widest range of options to be available to the industry for expansion and commercial development, but for an orderly system to be established for the commercial development of this important strategic resource. Failure to have such a system in place early on (for instance, by prohibiting commercial leasing as the BLM's preferred alternative, and Alternatives 3 and 4b do), would only lead to the distinct likelihood of a more haphazard production system being implemented when and if development of oil shale becomes a national priority due to some emergency or shortage.
Alternative one does not blindly open up large swaths of land to the oil shale industry,
but offers them up for commercial lease application, which would involve a lengthy environmental audit and evaluation. Not all, perhaps even not most, of the land made available will ever actually developed - but keeping that acreage available at least presents more options to companies wishing to expand and commercialize, than the dispersed, isolated little pockets made available in Alternative 2b (the BLM's current preference).
Keeping these lands open for consideration is a much preferable approach than arbitrarily excluding huge tracts of land based on habitat studies that have not even yet been completed, wilderness characteristics that no one but congress has any business designating, and areas once under evaluation as Areas of Critical Environmental Concern, that later had that designation removed. Only Alternative One offers a controlled, orderly path to commercialization, and the economic and strategic benefits that come with it, while protecting the environment. **#1])>**
Sincerely,

OSTS_098
Organization: Andrew Weaver
Received: 4/15/2012 12:00:00 AM
Commenter1: Andrew Weaver - Fruita, Colorado 81521 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/17/2012 12:00:00 AM
Attachments: OSTS2012D00099.htm (OSTS_098-59177.htm Size = 1 KB)
OSTS_098_Weaver_A_Mail_OSTS2012D00099.pdf (OSTS_098-59176.pdf Size = 73 KB)
Submission Text
See Attachment.

April. 15, 2012
BLM 2012 OSPEIS
Argonne National Laboratory
9700 S. Cass Ave
EVS/240
Argonne, IL 60439
Cc. BLM CRVFO
2300 River Frontage Road
Silt, CO 81652
To whom it may concern,
<([#1 [*1.1.1*] I am writing to ask the BLM to please extend the public comment period for the 2012
Oil Shale/Tar Sands Programmatic EIS, long enough to allow important information that directly Impacts this issue to be released to the public.
A new set of oil shale leasing regulations are due to be released on May 15, 11 days after the deadline for public comment on the PEIS. It seems only fitting that enough time be allowed for interested persons to review these regulations before commenting on the PEIS and the land use alternatives presented within.
Furthermore, some of the alternatives exclude land from future oil shale leasing, based on Sage Grouse habitat, even though the study that designates that habitat has not yet been made public. It again would be useful to those who wish to participate in the process to have this information prior to making any sort of comment as to the suitability of the various alternatives.
Please extend the 2012 OS/TS PEIS public comment period sufficiently to allow for review and incorporation of these critical documents. **#1])>**

OSTS_099
Organization: Jarry Brandon
Received: 4/27/2012 12:00:00 AM
Commenter1: Jarry Brandon - Fruita, Colorado 81521 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/17/2012 12:00:00 AM
Attachments: OSTS2012D00100.htm (OSTS_099-59179.htm Size = 1 KB)
OSTS_099_Brandon_Jarry_Mail_OSTS2012D00100.pdf (OSTS_099-59178.pdf Size = 100 KB)
Submission Text
See Attachment.

Apr. 27, 2012
RE: 2012 OSTS PEIS
To whom it may concern:
<([#1 [*10.6.3*] I was disappointed by the BLM's decision to scrap the oil shale PEIS done in

2008, and
replace it with one that is far more restrictive, and that severely limits the commercial potential of oil shale. The regions in question contain as much as 4 trillion barrels of recoverable oil, far more than even the Middle East, and enough to satisfy America's demand for oil for many, many years. It is as much a matter of national security that we develop this resource as it is an economic issue for the local region.
#1])> <([#2 [*2.1.1*] Allowing the acreage that was made available in the 2008 PEIS to remain available for
potential commercial leasing will go a long way towards realizing this potential, without posing any danger to the environment. The BLM, and other federal agencies, have strict processes in place to evaluate each lease individually. As the current PEIS even states clearly, not all of the 2 million-plus acres that the 2008 PEIS, as reflected in the No Action Alternative (Ait.1), leaves available for application for leasing, will ever actually be developed, due to these processes. Alt.1 will, however, provide far more options to companies wishing to expand, go commercial, or enter the oil shale market. The technology is there, and improving steadily, as demonstrated not only in places like Estonia and China, which are successfully producing oil from shale, but even here, as Shell commercially produced several thousand barrels from its limited RD&D lease in the Piceance Basin last month. I would therefore ask that you select Alt. 1 as the management plan.
#2])> <([#3 [*1.1.1*] I would further ask that the public comment period be extended; as I understand it, the
BLM is releasing a critical set of regulations regarding oil shale on May 15, 2012, and it would make sense for the public to see what these rules are, in order to make informed decisions and offer the best input. **#3])>**
Thank you for your time and for listening to the local communities on this issue.
Sincerely,

OSTS_100
Organization: Cyn Kohls
Received: 4/27/2012 12:00:00 AM
Commenter1: Cyn Kohls - Grand Junction, Colorado 81505 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/17/2012 12:00:00 AM
Attachments: OSTS2012D00101.htm (OSTS_100-59181.htm Size = 1 KB)
OSTS_100_Kohls_C_Mail_OSTS2012D00101.pdf (OSTS_100-59180.pdf Size = 86 KB)
Submission Text
See Attachment.

2012 OSPEIS
Argonne National Laboratory

9700 S. Cass Ave
EVS/240
Argonne, IL 60439
BLM Colorado River Valley Field Office
2300 River Frontage Road
Silt, CO 81652
Dear Director,
Apr. 27, 2012
<([#1 [*2.1.1*] I would like to urge the Bureau of Land Management, that if they must continue with this redundant PEIS, to
select Alternative one as their final management plan. Alternative one restores the available acreage to that
which was decided upon after 3 years of intensive study and community input in the 2008 PEIS. This
acreage allows oil shale developers the most flexibility and options in determining their long-term
commercial plans.
This is as opposed to the new PEIS, which closes off thousands of acres of land for even consideration for
leasing, prohibits commercial production on any land remaining, and even places the existing Preferred
Right Lease Areas. All that the land allocation alternatives (2 -4b) will accomplish is to delay indefinitely the
commercial development and production of oil shale, and the jobs and opportunities that would come with
such development. **#1])>**
<([#2 [*3.10.3*] It is unconscionable that this sort of economic development would be delayed further, at a time when the
region is experiencing heavy unemployment, when families who have lived in the area for years, have
made roots here, have aging parents living nearby, and kids in local schools, are forced to follow energy
jobs to other parts of the country- and take their money with them -when this region sits on top of enough
energy resource to keep these people and many others employed, and the nation's engine running, for
years to come. **#2])>**
<([#3 [*1.1.1*] Please not only reconsider completely undoing years of work and forward planning, and perpetually
delaying economic development in the region, but I would also ask that you extend the public comment
period at least until after the BLM oil shale regulations are published on May 15, 2012, in order allow
sufficient time for the people of our affected communities to properly weigh in with all the facts.
#3])>
Sincerely,

OSTS_101
Organization: Janet Spach
Received: 4/27/2012 12:00:00 AM
Commenter1: Janet Spach - Fruita, Colorado 81521 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/17/2012 12:00:00 AM
Attachments: OSTS2012D00102.htm (OSTS_101-59183.htm Size = 1 KB)
OSTS_101_Spach_Janet_Mail_OSTS2012D00102.pdf (OSTS_101-59182.pdf Size = 110 KB)
Submission Text
See Attachment.

Bureau of Land Management
2012 Oil Shale Programmatic EIS
Argonne National Laboratory
9700 S. Cass Ave
EVS/240
Argonne, IL 60439
Dear Sir or Madam;
<([#1 [*2.1.1*] I support the adoption of Alternative 1 (no-action) as outlined in the 2012 PEIS for 3 main
reasons; 1) the economic benefits that commercial oil shale development will bring to our region; 2) the advantages of having a structured process for commercialization in place, especially as related to local municipalities, and 3) the balanced approach that this Alternative offers.
#1])> <([#2 [*3.10.3*] The socio-economic benefits of Alternative 1 are described in detail in Chapter 6 of the
PEIS. Commercial oil shale development will bring hundreds of jobs to the region, in the form of construction, operations, homebuilding, and various support industries. These jobs will support the economies of the local municipalities and counties, and provide for growth and increased tax receipts for those local governments. These are good paying jobs that this industry will create, and that income will have a ripple effect on the region, and will benefit all local industries, including recreation and tourism.
In addition, I support the orderly system of commercialization that Alternative 1 provides for, one that will simultaneously accommodate the industry's growth, and give local governments a cushion to be able to plan for the complications that tend to arise from such growth. Is this not a more preferable approach than one where the sudden emergency need for oil shale production ends up overwhelming other planning concerns? I believe it is.
#2])> <([#3 [*2.1.1*] I also feel that this Alternative, which preserves the actions agreed upon in the initial

2008 PEIS, offers the most balanced approach between economic development, and the protection of the region's environment. Both Alternative 1, and the 2oo8 PEIS, identify just over 2,ooo,ooo acres as being available for application for commercial leasing; however, as part of the process, each of these leases would be subject to a full NEPA analysis, including individual EIS's, to determine any potential negative impact to any sensitive areas, before a lease could be issues. This provides the industry with the flexibility necessary for planning of commercial operations, while also ensuring that sensitive ecosystems will be properly identified and protected. **#3])>**
<([#4 [*1.1.1*] Finally, I would ask that the BLM extend the public comment period at least 30 days, in
order to give people the opportunity to see and evaluate the latest round of oil shale regulations that are set for release on May 15. This would give us all a clearer picture of how oil shale development might be impacted, or proceed under the various alternatives.
#4])> Very Sincerely,

OSTS_102
Organization: Bruce Kresin
Received: 4/27/2012 12:00:00 AM
Commenter1: Bruce Kresin - Grand Junction, Colorado 81507 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/17/2012 12:00:00 AM
Attachments: OSTS2012D00103.htm (OSTS_102-59185.htm Size = 1 KB)
OSTS_102_Kresin_B_Mail_OSTS2012D00103.pdf (OSTS_102-59184.pdf Size = 128 KB)
Submission Text
See Attachment.

Apr. 27, 2012
ATTN:
Argonne National Laboratory
9700 S. Cass Ave
EVS/240
Argonne, IL 60439
To whom it may concern,
<([#1 [*2.1.1*] I am writing in support of the no-action Alternative in the 2012 oil shale Programmatic Environmental Statement. This Alternative (No.1) offers the best balance of commercial development opportunity, certainty for the industry, conservation of sensitive environmental areas, and an established process for orderly economic expansion in the region.
By keeping the acreage available for application to leasing that was provided for in the initial, non-politicized PEIS in 2008,

Alternative 1 provides oil shale companies more options in how
to proceed with their long-term plans for expansion and
commercial development. **#1])> <([#2** [*2.2*] The drastically reduced acreage
prescribed in your preferred alternative (No.2b), in addition to
cutting off from availability most of that land, the remaining
parcels that are open for lease application are small, widely
spread out, and not cited with any consideration to access,
interoperability with other leases, geological suitability, or
any other factor that a business would need to take into
consideration. This alone, in effect, blocks commercial
development even from existing companies by denying them any
reasonable opportunity for future planning and expansion. It
certainly serves as a disincentive for any new company to move
into the area.
#2])> <([#3 [*9.6*] The other elements of the preferred alternative stifle
commercialization as well. The requirement that a viable
technology be demonstrated prior to the issuing of any
commercial lease is a clear barrier to future planning. A
company will not go through the expense and hassle of beginning
development of a lease until they are certain they can get a
return on their investment. However, as they near
commercialization, they will want to have a long-term plan in
place to properly manage their operations over the ensuing
years. This includes, first and foremost, securing commercial
leases, and starting the arduous NEPA ball rolling so that there
is as little delay as possible, and as a cushion in the,
oftentimes likely, event that their applied for lease is
restricted due to the EIS identifying sensitive habitat or
ecosystems. The land allocation alternatives prevent this
sensible, and important, business step from taking place. **#3])>**
<([#4 [*3.10.3*] The tragedy of this is the loss of job growth that will result
from overly restrictive BLM practices. With an unemployment rate
stubbornly around 10% on the western slope, this is desperately
needed economic development. This is not 1980 either; many
things have changed, including the technology, management
practices, and the source of capital - all of the current
investment in oil shale is private, meaning that it is far less
prone to being carelessly risked than was the government money
that funded the industry prior to “Black Sunday”.
Many lessons have been learned over the years. Many of those
lessons were incorporated in the 2008 PEIS. It would be a shame
to disregard them all for the shallow political considerations
of a noisy minority.
#4])> Cordially,

OSTS_103

Organization: Karen Bell
Received: 4/15/2012 12:00:00 AM
Commenter1: Karen Bell - Grand Junction, Colorado 81505 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/17/2012 12:00:00 AM
Attachments: OSTS2012D00104.htm (OSTS_103-59187.htm Size = 1 KB)
OSTS_103_Bell_Karen_Mail_OSTS2012D00104.pdf (OSTS_103-59186.pdf Size = 99 KB)
Submission Text
See Attachment.

April. 15, 2012
2012 OSPEIS
Argonne National Laboratory
9700 S. Cass Ave
EVS/240
Argonne, IL 60439
To whom it may concern,
<([#1 [*2.1.1*] I would like to preface my comments by stating that I am an environmentalist, and one
who believes in conserving our land, resources, and ecology. That is why I support the
no-action alternative, and American oil shale development. **#1])>**
<([#2 [*10.8*] Oil shale is already being produced in other places in the world, including China, and
Estonia, places with environmental records that are dismal at best. The United States
has some of the world's most stringent environmental controls and processes in place to
monitor and protect air, water, plant and animal species, and sensitive eco-systems;
therefore I would much sooner have the oil that the economic and industrial survival of
our nation depends on produced here, where it is subject to such controls, than
overseas, where no such controls exist, or are at best intermittently enforced. We may
not be able to stop those countries from producing oil shale, but we need not cede the
monopoly to them. **#2])>**
<([#3 [*9*] There is common agreement that oil shale will be produced at some time. It is quite
simply too valuable a resource, not to develop. The question is, do we put an ordered
system, and a long range plan in place now, or when we have no time for such steady,
incremental growth? I believe that by keeping the maximum amount of suitable land
open for consideration and planning, under the aegis of an evaluative process, we will
create that essential long term planning, and avoid the massive impacts of pell-mell
development on local communities. Allowing for commercialization now will provide
time, impetus, and even money (through taxes garnered from the added employment, as
projected in the PEIS Impacts of Alternatives chapter) to prepare for these impacts.

#3])> <([#4 [*2.1.1*] Alternative one is the most responsible alternative environmentally, economically, and
in terms of forward planning, and I would urge the BLM, as one who wishes to see the best for the region, and the world, to adopt it in place of the current preferred alternative.
#4])> Signed,

OSTS_104
Organization: Jody Brandon
Received: 4/30/2012 12:00:00 AM
Commenter1: Jody Brandon - Fruita, Colorado 81521 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/17/2012 12:00:00 AM
Attachments: OSTS2012D00105.htm (OSTS_104-59189.htm Size = 1 KB)
OSTS_104_Brandon_Jody_Mail_OSTS2012D00105.pdf (OSTS_104-59188.pdf Size = 94 KB)
Submission Text
See Attachment.

Bureau of Land Management
2012 OSTS PEIS
Argonne National Laboratory
9700 S. Cass Ave.
EVS/240
Argonne, IL 60439
Dear Sir/Madam,
<([#1 [*1.5*] I wish to register my objection to the overall tone of this latest Environmental Impact Statement regarding
oil shale management on federal lands, as being one that is heavily tilted towards dissuading commercial
development. The Environmental Protection Act of 2005 explicitly calls for the establishment of separate
research and commercial development tracks for oil shale; however, the BLM's preferred alternative, 2b,
specifically does not allow for a commercial leasing option. This would seem to be in clear violation of an
existing federal statute.
#1])> <([#2 [*2.2*] Additionally, the amount and location of the land that is made available for application to leasing under
Alternative 2b would suggest that the BLM has little or no interest in providing for commercial, or even
R&D, expansion. The available acreage, reduced from 2,017,714 acres to 461, 968 (or from

346,609 acto
35,308 ac in Colorado), is located in small, isolated, non-contiguous pockets, with no regard given to
commercial viability, access, or future expansion. Not only that, but the existing preferred rights leasing
areas are almost entirely placed off limits, further discouraging commercial expansion, and the vast
majority of existing RD&D leases would be also be excluded from development if the current leaseholders relinquish the lease.
#2])> <([#3 [*2.1.1*] In contrast, Alternative 1, which would simply recognize the existing ROD from the 2008 PEIS, leaves a
fairly contiguous 2,017,714 acres available for lease application, and leaves the preferred rights lease
lands intact, and permits development of existing leases in the event that the current lease holder relinquishes the lease. It is recognized that not all2 million+ acres will actually be open to develop, as
BLM NEPA processes will place much of the land off limits, but it does provide a much higher degree of
flexibility for the industry, and some incentive to expand commercially.
It should be incumbent upon the BLM to uphold existing government statutes and policies to enable a
viable oil shale industry. No one is asking for preferential treatment for the industry, nor for subsidies;
just for a reasonable policy of access to this invaluable national resource by private industry, as established in the 2008 PEIS.
#3])> Thank you,

OSTS_105
Organization: Jeff Kohls
Received: 4/27/2012 12:00:00 AM
Commenter1: Jeff Kohls - Grand Junction, Colorado 81505 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/17/2012 12:00:00 AM
Attachments: OSTS2012D00106.htm (OSTS_105-59191.htm Size = 1 KB)
OSTS_105_Kohls_Jeff_Mail_OSTS2012D00106.pdf (OSTS_105-59190.pdf Size = 74 KB)
Submission Text
See Attachment.

April 27, 2012
Draft OSTS PEIS
Argonne National Laboratory

9700 S. Cass Ave.
EVS/240
Argonne, IL 60439
Re: 2012 Oil Shale /Tar Sands Programmatic Environmental Impact Statement
Dear Sir:
<([#1 [*3.10.3*] Thank you for the opportunity to express my opinions over this PEIS. I am concerned that the
provisions outlined in this current draft would place undue restrictions on future oil shale development, and correspondingly limit job growth and economic opportunity for our region of north western Colorado. **#1])>**
<([#2 [*2.1.1*] The PEIS seeks to change the outcome of a previous PEIS, completed in 2008, which set aside
just over 2,000,000 acres for possible commercial lease consideration. The preferred alternative (2) in the current one reduces that acreage by an almost unbelievable amount- by 77% overall (including the land in Utah and Wyoming), and by a staggering 90% in Colorado alone. This is especially striking when you look at the maps contrasting Alternative 1 and Alternative 2.
I ask you to choose Alternative One, which leaves the land allocations originally made available in the 2008 document as is. There is no compelling reason to change the rules of the game on oil shale development right now. We should give the companies pursuing this resource some predictability and consistency in the regulatory scheme so that they can focus on getting this resource out of the ground.
Please don't buckle to political pressure from extremists. Out in Western Colorado, we need these jobs.
#2])> Thanks for your consideration.

OSTS_106
Organization: Richard Bell
Received: 4/25/2012 12:00:00 AM
Commenter1: Richard Bell - Grand Junction, Colorado 81505 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/17/2012 12:00:00 AM
Attachments: OSTS2012D00107.htm (OSTS_106-59193.htm Size = 1 KB)
OSTS_106_Bell_R_Mail_OSTS2012D00107.pdf (OSTS_106-59192.pdf Size = 80 KB)
Submission Text
See Attachment.

April. 25, 2012
2012 OSPEIS
Argonne National Laboratory
9700 S. Cass Ave
EVS/240

Argonne, IL 60439
To whom it may concern,
<([#1 [*3.10.3*] I am deeply concerned about the effect that re-visiting the PEIS on oil shale will have on the
industry and the prospects for the overall region. This redo will only serve to delay the commercialization of oil shale development, and the jobs and economic growth that it would bring to the tri-state area. Western Colorado is currently experiencing double-digit unemployment, with the effects being felt throughout the region. Most of the people who live out here welcome the introduction of a major industry that produces a vital product, and provides jobs and income for thousands of families.
#1])> <([#2 [*9.8*] Oil shale projects take a significant amount of time to construct and get up and running, so
any delay now will only postpone actual development and production. This new PEIS is just the latest in a string of artificial delays that are keeping oil shale from achieving its full potential. The industry needs predictability in the regulatory and land allocation framework in order to make the investments needed to commercially develop oil shale. There is no reason to change the rules in the middle of the game.
#2])> <([#3 [*11*] This is an important national resource that needs to be developed for the sake of national
security, economic prosperity, and fuel supply stability. I call on the BLM to put an end to the delays, and allow the industry to move forward with oil shale development and the resulting job creation. **#3])>**

OSTS_107
Organization: Teresa Kresin
Received: 4/30/2012 12:00:00 AM
Commenter1: Teresa Kresin - Grand Junction, Colorado 81507 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/17/2012 12:00:00 AM
Attachments: OSTS2012D00108.htm (OSTS_107-59195.htm Size = 1 KB)
OSTS_107_Kresin_T_Mail_OSTS2012D00108.pdf (OSTS_107-59194.pdf Size = 88 KB)
Submission Text
See Attachment.
TO: 2012 OSPEIS
Argonne National Laboratory
9700 S. Cass Ave
EVS/240
Argonne, IL 60439
Dear Sir/Madam,
<([#1 [*11*] I would like to offer my full support for oil shale development in northwestern Colorado, and the

surrounding regions, and for BLM management practices that recognize the importance of this valuable
resource. **#1])>**
<([#2 [*10.6.3*] Oil shale is an immense energy source that can help move America towards energy independence,
and wean our nation off foreign oil. An estimated 4 Trillion barrels of recoverable oil lie underneath the lands
being discussed in the current PEIS, enough to meet the United States' energy needs for decades to come.
#2])> <([#3 [*6.2.2*] [*6.3.2.1*] Oil shale is also efficient, in that it produces much more energy than it consumes in its development, at a
ratio of between 3:1 and 6:1, depending on the retorting technology used. As well, the production of oil from
shale uses far less water than its opponents would lead some to believe, in fact far less than some other fuel
sources, such as biomass from corn, which requires irrigation. Many companies already own water rights
sufficient to meet long-term, large scale commercial development.
#3])> <([#4 [*10.8*] This vital resource can and will be developed responsibly. The main companies engaged in current
oil shale RD&D have strict and well established environmental policies in place, and the track records to
show successful stewardship. To back even that up, the United States, and Colorado in particular, have
some of the most stringent environmental protections in the world, especially compared to some of the other
places where oil shale development is taking place. It would be an environmental shame if oil shale
companies and investors were to locate in these places, rather than develop the resource more responsibly
in the U.S.
#4])> <([#5 [*2.1.1*] All of these are reasons for a policy that simply allows oil shale development to occur. Restricting
land access and delaying commercial leasing will not help in this regard. Alternative 1, no-action, provides
the best balance of orderly conversion to commercialization, and a cushion to ensure protection of the
environment, and to allow local municipalities the chance to adapt to the economic and population growth
that will result. Please adopt Alternative 1 in the 2012 Oil Shale PEIS.
#5])> Sincerely,

OSTS_108
Organization: Tyler Rogers
Received: 4/28/2012 12:00:00 AM
Commenter1: Tyler Rogers - Fruita, Colorado 81521 (United States)
Organization1:

Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/17/2012 12:00:00 AM
Attachments: OSTS2012D00109.htm (OSTS_108-59197.htm Size = 1 KB)
OSTS_108_Rogers_Mail_OSTS2012D00109.pdf (OSTS_108-59196.pdf Size = 77 KB)
Submission Text
See Attachment.

Bureau of Land Management
2012 OS/TS PEIS
Argonne National Laboratory
9700 S. Cass Ave
EVS/240
Argonne, IL 60439
Dear Sir/Madam,
April. 28, 2012
<([#1 [*2.2*] It is no mistake that of the 14 cooperating agencies in the 2012 Oil Shale PEIS, not one
supported the BLM's preferred alternative, 2b. It is similarly not surprising that a majority of them support Alternative 1, the no-action alternative, which keeps the acreage provided for in the original 2008 PEIS.
The local governments out here know how important commercial oil shale development is to their communities, and they reflected that in their selections for a preferred alternative. By selecting 2b, which slashes the amount of land available for potential future lease applications by almost 80% overall, and allows only RD&D leases to applied for, the BLM shows just how out of touch it is with the people who live and work in the area they are establishing the plans for. **#1])>**
<([#2 [*9.8*] The entire re-working of the PEIS shows a level of contempt for not only the local governments, but of the many individuals, businesses, groups and associations which contributed hundreds of hours of work and testimony to the 2008 initiative. By arbitrarily rejecting the conclusions of that study, without any new evidence or information coming to light, the BLM is signaling that all that work and public comment was worthless, and that all that really matters is the opinion of a handful of activists who use the legal system to try and get their way. **#2])>**
<([#3 [*2.1.1*] I join with the majority of cooperating agencies in calling for the BLM to support Alternative 1. **#3])>**
Sincerely,

OSTS_109
Organization: Centennial Institute, John Andrews
Received: 4/12/2012 12:00:00 AM
Commenter1: John Andrews - Lakewood, Colorado 80226 (United States)
Organization1: Centennial Institute

Commenter Type: Misc. Organization
Classification:
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/17/2012 12:00:00 AM
Attachments: OSTS2012D00110.htm (OSTS_109-59199.htm Size = 1 KB)
OSTS_109_Andrews_Centennial_Institute_Mail_OSTS2012D00110.pdf (OSTS_109-59198.pdf Size = 159 KB)
Submission Text
See Attachment.

CENTENNIAL
INSTITUTE
April12, 2012
Bureau of Land Management
Argonne National Laboratory
9700 South Cass Ave
EVS/240
Argonne, IL 60439
Ref: 2012 Oil Shale/Tar Sand Programmatic EIS
To whom it may concern,
Centennial Institute is a nonpartisan, nonprofit public policy center affiliated with Colorado Christian
University. Our issues research, supported by the Centennial Fellows policy board of scholars and experts,
includes a focus on energy, environment, economic growth, federalism, and regulatory reform.
Based on this, we strongly recommend that the BLM adopt the No-Action Alternative (Alternative 1) as
presented in the 2012 Oil Shale PEIS, and restore the land allocation plan decided on in the 2008 PEIS.
<([#1 [*9.8*] Oil shale development is important to both the regional economy of northwestern Colorado, and the energy
security of the United States as a whole. As such, the federal government, which manages the majority of the
land under which this valuable resource is deposited, should make it a priority to encourage responsible
commercial development and production of oil shale by removing as many bureaucratic obstacles as possible,
while still ensuring the protection of sensitive ecosystems. Unfortunately, this latest PEIS seems to take a much
more restrictive approach, one which will actually discourage commercialization and development.
The initial PEIS, completed in 2008, was thoroughly researched, and incorporated the input of many experts in

the field, local governmental and economic development entities, and the public. The result of the many months
of work that went into it was the identification of 2,017,714 acres of some of the most oil shale-rich land in the
world as eligible for commercial lease application. The fact that these 2 ,000,000- plus acres were only made
available for lease applications all but ensured that not all of it would be developed- each commercial lease
that was applied for under the plan would be subject to another full analysis, involving a new NEPA process,
and several government agencies, before the lease would be granted. Clearly, this was not a land give-away to
the oil shale industry.
Nevertheless, a small number of vocal environmental extremists took issue with the results of the process, and
initiated two lawsuits against the government, the settlements of which resulted, in part, with the current
redone PEIS- redone, in spite of no new information being developed in the interim period which might
otherwise justify the immense cost to the taxpayer, and further delays in the production of an important
strategic resource, associated with restarting such an undertaking.
#1])> <([#2 [*2.3*] [*2.2*] Under this new PEIS, the BLM has adopted as its preferred Alternative,
one which would close off some 70% of the land deemed suitable in 2008 for eligibility for commercial leasing. Among the lands placed off limits are
areas that may have wilderness characteristics (even though such a designation is strictly a Congressional
responsibility and privilege), lands considered at one time for ACEC designation that were later determined not
to qualify for such distinction, and sage grouse habitat- with no specification as to exact location or definition of
such habitat. Not only is the acreage drastically reduced, but the remaining acreage is in isolated and noncontiguous
portions, with absolutely no consideration given to geological suitability, or economical access.
In fact, the preferred Alternative, like the other land allocation alternatives offered in the 2012 redone PEIS,
does not allow for near-term commercial development at all, calling instead for companies to demonstrate
viability- an arbitrary requirement that lacks specific guidelines as to how viability is determined- which will
necessarily exclude many smaller companies from entering the oil shale market. Alternative 3 goes so far as to
disallow any development beyond existing RD&D leases whatsoever. Both ofthese approaches are in
contravention of the Energy Policy Act of 2005, which prescribed a dual and concurrent RD&D and commercial

leasing program for oil shale. **#2])>**
<([#3 [*1.5*] The current PEIS ignores the science, expertise, and proven technological advances surrounding oil shale
recovery, and instead caters to a narrow, agenda-driven interpretation ofthe facts, as promulgated by certain
well-heeled interest groups. The facts are that oil shale generates many times more energy than it takes to
extract it, uses far less water to produce than some other energy sources (such as biomass), and is well within
reach of commercial production with current technologies. The main impediment to large scale oil shale
production is the bureaucratic hurdles put up by the federal government. **#3])>**
<([#4 [*2.1.1*] The 2008 PEIS was a step in the direction of removing those hurdles in a responsible, environmentally
conscious manner. It is the responsibility of the BLM, as an agency of the national government, to respect the
honest work that went into drafting that professional PEIS, as well as to recognize the national strategic
importance- and the economic benefits locally and to the state- of oil shale, and to adopt Alternative 1. **#4])>**
JOHN ANDREWS
Director, Centennial Institute
at Colorado Christian University

OSTS_110
Organization: Michael Vohland
Received: 4/26/2012 12:00:00 AM
Commenter1: Michael Vohland - Grand Junction, Colorado 81504 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/17/2012 12:00:00 AM
Attachments: OSTS2012D00111.htm (OSTS_110-59201.htm Size = 1 KB)
OSTS_110_Vohland_Mail_OSTS2012D00111.pdf (OSTS_110-59200.pdf Size = 99 KB)
Submission Text
See Attachment.

TO: Argonne National Laboratory
9700 South Cass Ave
EVS/240
Argonne, IL 60439
April 26th, 2012
<([#1 [*9.8*] In regards to the 2012 Oil Shale PEIS, I have some concerns I would like to share

with the BLM. The first
revolves around the fact that a new PEIS is even being considered. A full PEIS was completed in 2008,
following months of input from local residents and the scientific community. Since that time, the federal
government under the current administration has been steadily dismantling the programs put in place
previously to provide for oil shale development, such as downsizing the second round of RD&D leasing
so much as to make the available acreage unattractive for the industry, and settling lawsuits brought
forth by radical environmental lobbyists in the plaintiffs favor, which the current PEIS re-do is a result of.
This has all been done for purely political reasons, and not based on any new scientific or environmental
evidence. **#1])>**
<([#2 [*2.1.1*] With this in mind it only seems proper for the BLM to select the no-action Alternative, which will restore
the acreage and use plans developed and accepted in the initial, legitimate PEIS. The other presented
alternatives in the current one will prevent commercial development from going forward by drastically
reducing the land available for leasing for such development. The economic advantages to developing
oil shale are clear, both locally and nationally. There has been incredible progress made towards
commercialization- Shell has in fact been able to produce thousands of barrels from their limited RD
and D leases.
Anti-development opponents to energy and oil shale production like to say that oil shale is always 10
years away from commercial production- which they will be if public policies keep them from
expanding and actually going commercial. I would ask the BLM to allow the industry to break that cycle
by keeping the maximum amount of land available for them to apply for expansion and development, as
represented by the no-action alternative. **#2])>**
J

OSTS_111
Organization: Nicole Conner
Received: 4/26/2012 12:00:00 AM
Commenter1: Nicole Conner - Grand Junction, Colorado 81504 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail

Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/17/2012 12:00:00 AM
Attachments: OSTS2012D00112.htm (OSTS_111-59203.htm Size = 1 KB)
OSTS_111_Conner_N_Mail_OSTS2012D00112.pdf (OSTS_111-59202.pdf Size = 84 KB)
Submission Text
See Attachment.

April 261
h, 2012
Bureau of Land Management
Argonne National Laboratory
9700 South Cass Ave
EVS/240
Argonne, IL 60439
Ref: 2012 OSTS PEIS
To whom it may concern,
<([#1 [*2.1*] I appreciate the opportunity to extend comment on the current PEIS for oil shale in Northwestern
Colorado, Southwestern Wyoming and Northeastern Utah. This is a very important issue for many of us
who live in the region, due to the tremendous economic impact that commercial oil shale development will bring. I think it is difficult for people who don't live here to understand just how important oil shale
development would be to our small towns in Western Colorado.
A PEIS done in 2008 identified 2 million acres as being suitable for being kept available for possible
development. In an action that has become far too common, certain lobby groups sued the government
over this, and the settlement resulted in the PEIS needlessly being redone. As a resident of western
Colorado, I resent my economic future, and that of my kids, being held hostage by political games. As a
taxpayer, I am outraged that the government would waste my money on redoing an assessment that was
done only a few short years ago, when nothing material has changed.
There will always be small segments of society that object to development, however the vast majority of
them do not live in the areas they are trying to lock up, and do not have to live with the consequences of
their actions. It is unfortunate that these few can hold up the advancement of an entire industry that is as
important to our nation's energy strategy as it is to our regional economy. The only responsible approach
for the BLM to take in regards to this PEIS is to select Alternative 1, which will restore the acreage

properly allocated in 2008, and hopefully some sanity to the situation.
There is absolutely no reason to reduce the acreage available for oil shale research and commercial
development to less than what was decided in the 2008 PEIS. **#1])>**
Regards,
v

OSTS_112
Organization: Vernal Area Chamber of Commerce, Adam Massey
Received: 4/12/2012 12:00:00 AM
Commenter1: Adam Massey - Vernal, Utah 84078 (United States)
Organization1: Vernal Area Chamber of Commerce
Commenter Type: Misc. Organization
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/17/2012 12:00:00 AM
Attachments: OSTS2012D00113.htm (OSTS_112-59205.htm Size = 1 KB)
OSTS_112_Massey__Vernal_Chamber_of_Com_Mail_OSTS2012D00113.pdf (OSTS_112-59204.pdf Size = 116 KB)
Submission Text
See Attachment.

Vernal Area Chamber of Commerce
134 West Main • Vernal, Utah 84078
April12, 2012
Bureau of Land Management
Argonne National Laboratory
9700 S. Cass Ave.
EVS/240
Argonne, IL 60439
RE: 2012 Oil Shale and Tar Sands Programmatic Environmental Impact Statement.
To Whom It May Concern:
<([#1 [*2.1.1*] The Vernal Area Chamber of Commerce, as part of our mission to advance the economic growth and health of our
community, would like to offer our support for the adoption of Alternative 1 in the above referenced PEIS.
Commercial Oil Shale development is important both on a local and a national scale. Locally, it will bring much
needed employment, income, and economic growth to our region, both directly and indirectly. Nationally, oil shale
represents a major resource that can fuel our economic recovery, lower the price of energy, and go a very long ways
towards securing American energy independence.
Alternative 1 of the current PEIS keeps the roughly 2 million acres of oil shale rich land

available for commercial lease
application that was identified in the original 2008 PEIS, thus maximizing the potential for the industry to pursue long
range development and production.
The other Alternatives, including the BLM's preferred alternative, number 2, place most of this acreage permanently
off limits, and discourage commercialization. This is clearly out of synch with the majority of local governments,
businesses, economic development organizations, and Chambers of Commerce who wish to see this valuable
resource developed in a responsible and economic manner, and may also violate the 2005 Energy Policy Act, which
prescribes a dual track - R&D and commercial - for oil shale development.
The Vernal Area Chamber does not feel it is in the best interests of our community and region for the Federal
Government to continue to place unnecessary obstacles in the way of oil shale development. We firmly believe that
we can produce the resources available in our own back yard in a responsible and balanced manner, without the
Federal Government needing to micromanage every step of the way.
In fact, we feel that this current PEIS is a waste of time and taxpayers money, considering that a very thorough and
complete PEIS was done in 2008. No new scientific or ecological information has been developed in the interim,
making this effort superfluous. That 8 of the 14 cooperating agencies in this process chose Alternative 1 (no action
from the 2008 PEIS) is indicative that this sentiment is widespread throughout the affected region. We further believe
that it sets a poor precedent when such a vast undertaking is re-done in response to a lawsuit by special interests
who were unhappy with the previous outcome.
That said, we appreciate the opportunity to contribute to the process, and strongly encourage the BLM to adopt the
only economically responsible Alternative available, which is Alternative 1 (No Action).
#1])> Sincerely,

www.vernalchamber.com + vchambermgr@easilink.com
" Good for Business, Good for the Community"

OSTS_113
Organization: Kevin Borman
Received: 4/25/2012 12:00:00 AM
Commenter1: Kevin Borman - Grand Junction, Colorado (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter

Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/17/2012 12:00:00 AM
Attachments: OSTS2012D00114.htm (OSTS_113-59207.htm Size = 1 KB)
OSTS_113_Borman_K_Mail_OSTS2012D00114.pdf (OSTS_113-59206.pdf Size = 100 KB)
Submission Text
See Attachment.

April 25, 2012
Bureau of Land Management
Argonne National Laboratory
9700 S. Cass Ave
EVS/240
Argonne, IL 60439
RE: 2012 Oil Shale/Tar Sands Programmatic Environmental Impact Statement.
Gentlemen:
<([#1 [*2.1.1*] The purpose of this letter is to offer our comments and recommendation on the 2012 Oil Shale Programmatic
Environmental Impact Statement (PEIS). The Board of Directors of the Grand Junction Area REAL TORS®
Association voted unanimously to support the selection of Alternative No. 1 as the option to be adopted by the
Bureau of Land Management (BLM). We have made this recommendation based on the following comments:
The current PEIS draft forecasts the impacts that the implementation of Alternative 1 would have on the local
housing market. As detailed in the "Impact Assessment for Oil Shale and Tar Sands Alternatives" section under
"Socio-Economic Impacts", oil shale development and directly related projects will result in upwards of 1300
housing construction jobs, representing over $25 million in revenue. In addition, the oil shale development
provided for under Alternative 1 is projected to result in a population increase that could absorb 2.9% to 6.2% of
housing vacancies in the area. Two other projects directly related to commercial oil shale development, a power
plant for the in-situ processing facility, and a coal mine, could absorb 3.8%- 6.4%, and .5%- 2.9% of vacancies
respectively, under Alternative 1.
In contrast, the implementation of Alternative 3 is projected to result in only approximately 500 housing
construction jobs, representing $12 million in revenue- the overwhelming majority of that would be temporary
housing and would have no measurable effect on the vacancy rate. The housing impacts for Alternatives 4, and

the BLM's preferred Alternative 2, were not analyzed in the PEIS. The document merely states that the impacts
would be similar to those of Alternative 1, only to a lesser extent due to less acreage being made available for
leasing in these options. On that basis, and taking into account that Alternative 2 cuts available acreage by
roughly 70%, and 2(b) limits that acreage currently to RD&D leases, this could be considered to be a major
understatement.
At the outset, we find it questionable and disappointing that the BLM via the Secretary of the Interior would see
fit to revisit this Issue in this manner and in this time frame. The companies involved in these operations need to
be able to depend on the commitment of BLM to stand by the agreements that were made originally. For this
reason and in light of the positive effects that Alternative 1 will have on the housing market, in general, and
specifically the vacancy rate of the local area, we fully support the adoption of this Alternative.
#1])> <([#2 [*1.1.1*] In addition, it is our understanding that the comment period for the 2012 Oil Shale PEIS expires on May 4, 2012,
with implementation of the new Alternative scheduled for May 15, 2012. We would respectfully request the
extension of this period to allow a reasonable amount of time for other members of the business community to
comment on the PEIS. **#2])>**
Signed,
Grand Junction Area REAL TORS® Association
Kevin Borman
Chairman, Board of Directors

OSTS_114
Organization: Grand Junction Area Realtors Association, Kevin Borman
Received: 4/25/2012 12:00:00 AM
Commenter1: Kevin Borman - Grand Junction, Colorado 81506 (United States)
Organization1: Grand Junction Area Realtors Association
Commenter Type: Misc. Organization
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/17/2012 12:00:00 AM
Attachments: OSTS2012D00115.htm (OSTS_114-59209.htm Size = 1 KB)
OSTS_114_Borman__Grand_Junction_Realtor_Assoc_Mail_OSTS2012D00115.pdf (OSTS_114-59208.pdf Size = 95 KB)
Submission Text
See Attachment.

Apri125, 2012
Bureau of Land Management
Argonne National Laboratory
9700 S. Cass Ave
EVS/240
Argonne, IL 60439
GRAND JUNCTION AREA
REALTOK
ASSOCIATION
RE: 2012 Oil Shale/Tar Sands Programmatic Environmental Impact Statement.
Gentlemen:

<([#1 [*2.1.1*] The purpose of this letter is to offer our comments and recommendation on the 2012 Oil Shale Programmatic
Environmental Impact Statement (PEIS). The Board of Directors of the Grand Junction Area REALTORS®
Association voted unanimously to support the selection of Alternative No. 1 as the option to be adopted by the
Bureau of Land Management (BLM). We have made this recommendation based on the following comments:
The current PEIS draft forecasts the impacts that the implementation of Alternative 1 would have on the local
housing market. As detailed in the "Impact Assessment for Oil Shale and Tar Sands Alternatives" section under
"Socio- Economic Impacts", oil shale development and directly related projects will result in upwards of 1300
housing construction jobs, representing over $25 million in revenue. In addition, the oil shale development
provided for under Alternative 1 is projected to result in a population increase that could absorb 2.9% to 6.2% of
housing vacancies in the area. Two other projects directly related to commercial oil shale development, a power
plant for the in-situ processing facility, and a coal mine, could absorb 3.8%- 6.4%, and .5%- 2.9% of vacancies
respectively, under Alternative 1.
In contrast, the implementation of Alternative 3 is projected to result in only approximately 500 housing
construction jobs, representing $12 million in revenue- the overwhelming majority of that would be temporary
housing and would have no measurable effect on the vacancy rate. The housing impacts for Alternatives 4, and
the BLM's preferred Alternative 2, were not analyzed in the PEIS. The document merely states that the impacts
would be similar to those of Alternative 1, only to a lesser extent due to less acreage being made available for

leasing in these options. On that basis, and taking into account that Alternative 2 cuts available acreage by
roughly 70%, and 2(b) limits that acreage currently to RD&D leases, this could be considered to be a major
understatement.
#1])> <([#2 [*9.8*] At the outset, we find it questionable and disappointing that the BLM via the Secretary of the Interior would see
fit to revisit this issue in this manner and in this time frame. The companies involved in these operations need to
be able to depend on the commitment of BLM to stand by the agreements that were made originally. For this
reason and in light of the positive effects that Alternative 1 will have on the housing market, in general, and
specifically the vacancy rate of the local area, we fully support the adoption of this Alternative.
#2])> <([#3 [*1.1.1*] In addition, it is our understanding that the comment period for the 2012 Oil Shale PEIS expires on May 4, 2012,
with implementation of the new Alternative scheduled for May 15, 2012. We would respectfully request the
extension of this period to allow a reasonable amount of time for other members of the business community to
comment on the PEIS. **#3])>**
Signed,
Grand J unctio,n Area REAL TORS® Association
i.nBorman
Chairman, Board of Directors
2743 Crossroads Boulevard • Grand Junction, Colorado 81506
(970) 243-3322 • Fax: (970) 241-9324 • Email: gjboard@ wic.net
GRAND JUNCTION AREA REALTOK
ASSOCIATION
2743 Crossroads Blvd.
Grand Junction, CO 81506
Bureau of Land Management
Argonne National Laboratory
9700 S. Cass Avenue
EVS/240
Argonne, IL 60439

OSTS_115
Organization: Craig Wortmann
Received: 4/24/2012 12:00:00 AM
Commenter1: Craig Wortmann - Fruita, Colorado 81521 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail

Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/17/2012 12:00:00 AM
Attachments: OSTS2012D00116.htm (OSTS_115-59211.htm Size = 1 KB)
OSTS_115_Wortmann_Mail_OSTS2012D00116.pdf (OSTS_115-59210.pdf Size = 91 KB)
Submission Text
See Attachment.

April 24th, 2012
Bureau of Land Management
Argonne National Laboratory
9700 S. Cass Ave
EVS/240
Argonne, IL 60439
Colorado River Valley Field Office
2300 River Frontage Road
Silt, CO 81652
Ref: 2012 Oil Shale Programmatic EIS
<([#1 [*9.8*] I would like to express my profound disappointment over the re-hashing of the 2008 effort to establish a
set of rules and processes for oil shale development.
As a result of a pair of lawsuits, and the subsequent settlement by the federal government, the entire
years-long process, that involved work of hundreds, and input from many local counties, municipalities,
and specialists, as well as hours of further input from the public, is being needlessly redone, at the
expense of the taxpayer. **#1])>**
<([#2 [*2.1.1*] The 2008 PEIS identified just over 2,000,000 acres for which a company could apply for a lease for future
commercial development. This did not open up these 2,000,000 acres for development, merely made
them available for lease application, subject to full NEPA analysis, EIS studies, etc. This would simply
provide oil shale companies some flexibility in their long-term planning, and establish an orderly process
for the expansion of the industry into large-scale commercialization.
The alternative to this, the restriction of leasing to merely RD&D, is perpetual delays, an unfriendly
environment of uncertainty for current and potential producers, and a denial of economic activity to one of
the hardest hit regions in the state.
A further result of rejecting the 2008 findings is to set our region up for a haphazard, impromptu
development plan if and when circumstances, such as a national emergency, demand that oil shale be
put on line in relatively short order, with predictable consequences for the environment and local

municipalities.
For these reasons, the only responsible course of action for the BLM to take is to either scrap the renewed PEIS altogether, or at the very least to adopt Alternative 1 (no action) as the preferred alternative. **#2])>**
Sincerely,

OSTS_116
Organization: Terri Cavanaugh
Received: 5/4/2012 12:00:00 AM
Commenter1: Terri Cavanaugh - Grand Junction, Colorado (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/17/2012 12:00:00 AM
Attachments: OSTS2012D00117.htm (OSTS_116-59213.htm Size = 1 KB)
OSTS_116_Cavanaugh_Mail_OSTS2012D00117.pdf (OSTS_116-59212.pdf Size = 97 KB)
Submission Text
See Attachment.

Draft OSTS PEIS
Argonne National Laboratory
9700 S. Cass Ave.
EVS/240
Argonne, IL 60439
Re: 2012, Oil Shale Programmatic Environmental Impact Statement
To whom it may concern,
<([#1 [*2.1.1*] As a resident of the Western Slope, I felt compelled to offer my opinion that the responsible
development of the vast oil shale resources in our region should be encouraged, and further that Alternative 1 in the current PEIS is the best solution for doing so.
Enabling the development of oil shale on a commercial basis will bring many economic benefits to northwestern Colorado. The job growth that the adoption of Alternative 1 is estimated to generate will have direct and positive impacts on the quality of life within the region, not only through the direct jobs and income produced by the oil shale industry itself, but the residual job growth that such development will bring, from housing construction, to service industries, to retail growth. As well, the growth of a commercial oil shale industry will mean increased tax revenue at all levels, which will help provide for our local infrastructure needs, public schools, and police, fire, and ambulance services, along with other public amenities.
Alternative 1 reflects the great efforts of many that went into formulating the 2008 EIS and management plan. By leaving over 2 million acres of resource-rich land available for application for commercial leasing, a balance is struck between maximizing the economic benefits of development, and the need to preserve our natural heritage. Each of these potential leases would be required to go through a full NEP A analysis prior to commercial leases being granted;

therefore, any concerns over endangered species habitat, sensitive area's and water issues would be addressed, without simply placing wide swaths of potential land off the table.
We in Western Colorado take stewardship of our land and resources very seriously, and take great pride in our ability to provide for both economic prosperity and natural conservation. Denying our region the opportunity to realize our full economic potential by arbitrarily closing hundreds of thousands of acres to development of a resource of national importance is not only unsound, but unnecessary. Please strongly consider Alternative 1 as you go ahead with developing a plan to manage oil shale in our area. **#1])>**
Thank you for your time and efforts,

OSTS_117
Organization: Diane Schwenke
Received: 5/2/2012 12:00:00 AM
Commenter1: Diane Schwenke - Grand Junction, Colorado 81501 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/17/2012 12:00:00 AM
Attachments: OSTS2012D00118.htm (OSTS_117-59215.htm Size = 1 KB)
OSTS_117_Schwenke_Mail_OSTS2012D00118.pdf (OSTS_117-59214.pdf Size = 95 KB)
Submission Text
See Attachment.

Bureau of Land Management
2012 Draft Oil Shale/Tar Sands PEIS
Argonne National Laboratory
9700 S. Cass Ave
EVS/240
Argonne, IL 60439
Dear Director,
<([#1 [*2.1.1*] I am writing to express my support for Alternative 1 in the 2012 Draft OSTS PEIS. This is the only alternative that
takes into account the social and economic benefits of commercial oil shale development. **#1])>**
<([#2 [*3.10.3*] Chapter six of the
document outlined the job growth and income generation that is projected to occur if Alternative 1 is adopted, as
well as housing construction impacts. A similar analysis of Alternative 3 demonstrates dramatically how these
benefits would be reduced.
No such detailed analysis was conducted for either the Preferred Alternative or Alternative 4. This is, in my opinion,
a critical oversight. I do not believe that a land allocation plan should be prescribed without first

assessing how that
plan will impact the people, businesses and communities of the affected region. **#2])>**
<([#3 [*2.1.1*] Allowing a commercial oil shale industry to establish itself will not just bring jobs to the region, but also increase
revenues going to local, state and federal government, through individual income taxes, sales and business taxes, and
lease payments. This will help restore some of the funding shortfalls experienced in recent years, mostly as a result of
high unemployment.
The importance of this to the national economy should also not be overlooked. Production of oil shale would provide
for the United States a steady, abundant source of energy, and contribute to American energy independence.
Selecting Alternative 1 will signal to potential oil shale investors that the federal government will not stand in the
way of commercial expansion beyond what is absolutely necessary to protect the most sensitive ecosystems, and in
doing so will help the people of western Colorado provide for their own future.
#3])> Sincerely,

OSTS_118
Organization: Jeff Smith
Received: 5/2/2012 12:00:00 AM
Commenter1: Jeff Smith - Craig, Colorado 81625 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/17/2012 12:00:00 AM
Attachments: OSTS2012D00119.htm (OSTS_118-59217.htm Size = 1 KB)
OSTS_118_Smith_Jeff_Mail_OSTS2012D00119.pdf (OSTS_118-59216.pdf Size = 74 KB)
Submission Text
See Attachment.

Argonne National Laboratory
9700 S. Cass Ave
EVS/240
Argonne, IL 60439
Ref. 2012 Oil Shale PEIS
Ladies and Gentlemen,
<([#1 [*9.8*] As someone who lives in a region that depends on energy production, and as someone whose livelihood also
depends on energy, I find the 2012 oil shale PEIS very worrisome. If the BLM can whisk aside three years of study

and effort on oil shale simply because an environmental obstructionist group decides to sue over the outcome, what
is to stop them from doing the same every time any energy project is proposed on federal lands (which make up
around 70% of the land in western Colorado)? By re-doing this PEIS, and tailoring the conclusions to the agenda of
the environmentalists, the BLM has given the anti-development groups a potent weapon they can use against any
new energy project or expansion of an existing one - be it oil shale, gas drilling, or mining. **#1])>**
<([#2 [*2.2*] In this case, the conclusions they have accepted include reducing the amount of land available for oil shale leasing by
roughly 80%; disbursing the remainder into small, widely separated bits; placing the preference rights lease areas
around existing RD&D leases mostly off limits; restricting leases to only RD&D; and only allowing commercial leases
to be awarded if the applicant can demonstrate their production technology ahead of time.
These provisions will ensure that a commercial oil shale industry does not get up and going in northwestern Colorado
anytime soon. Sadly, it also means that many communities in northwestern Colorado will continue to suffer. **#2])>**
.. . .

OSTS_119
Organization: DOn Pettygrove
Received: 5/2/2012 12:00:00 AM
Commenter1: DOn Pettygrove - Grand Junction, Colorado (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/17/2012 12:00:00 AM
Attachments: OSTS2012D00120.htm (OSTS_119-59219.htm Size = 1 KB)
OSTS_119_Pettygrove_Mail_OSTS2012D00120.pdf (OSTS_119-59218.pdf Size = 97 KB)
Submission Text
See Attachment.

BLM 2012 OS!TS PEIS
C/0 Argonne National Laboratory
9700 S. Cass Ave
6/S/240
Argonne, IL 60439
Cc. BLM Colorado River Valley Field Office
2300 River Frontage Road
Silt, CO 81652

Dear Sir or Madam,
<([#1 [*2.2*] I would like to ask the 8LM to not unduly restrict oil shale development, as the provisions in your
preferred Alternative in the 2012 PEIS dearly would do. Alternative 2b excludes almost 90% of the
land in Colorado that was determined suitable for oil shale lease application in the original 2008 document, and limits the remaining small, isolated parcels to further RD&D only. It places most, or in
some cases all, of the preferred rights acreage surrounding the current RD&D leases off limits as well. This acreage was in place specifically to allow for commercial expansion from those existing
RD&D leases. We need to provide as much area as possible to make any future development viable. Limiting the availability of the resource will limit the viability. This is not unlike telling a retail
business that they can expand, they just can't buy or construct a new building, and by the way, you
can't use the parking lot anymore either. If this is not a disincentive to commercial development. I
would hate to see what is.
Eliminating commercial leasing also shuts out smaller companies that might have otherwise been in
a position to invest in oil shale development, and bring their operations, shops, money and jobs into
the region. But who can blame any company for not wanting to take that step if they know that their hopes for commercial production could be kept years away by nothing other than government
policy. Chances are they would set up shop somewhere else, perhaps Estonia or China where commercial oil shale development is already taking place, without, I might add, the environmental
protections in place in this country.
#1])> <([#2 [*2.1.1*] [*1.1.1*] As a final note, the draft 2012 oil shale regulations are not due for release until May 15, 11 days
after the deadline for public comment. In addition to calling on your office to adopt Alternative 1.
which would restore the reasonable acreage provided for in the 2008 PEIS, and which is the only alternative to truly allow for commercial expansion of the industry, I also would ask that you extend
the public comment period past the May 15th release of oil shale regulations. I believe that the full
2,000,000 acres should be restored as previously studied. Enough study has been done, we need to progress with research and development. Do no restrict these to research only. Provide surety that development of the resource is going to happen if the research works.
#2])> Yours Cordially,

Don Pettygrove, P.E

OSTS_120
Organization: Todd Jourgensen
Received: 5/2/2012 12:00:00 AM
Commenter1: Todd Jourgensen - Craig, Colorado 81625 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/17/2012 12:00:00 AM
Attachments: OSTS2012D00121.htm (OSTS_120-59221.htm Size = 1 KB)
OSTS_120_Jourgensen_Mail_OSTS2012D00121.pdf (OSTS_120-59220.pdf Size = 81 KB)
Submission Text
See Attachment.

Re: BLM Draft 2012 OSTS PEIS
To whom it may concern,
<([#1 [*9.8*] There is no valid reason for this PEIS to have been re-done. The 2008 PEIS was a complete and thoroughly
prepared document that took in all of the data, and resulted in a management plan that allowed for responsible oil
shale development, and environmental preservation at the same time. Re-doing the entire PEIS, following yet another
lawsuit by the green lobby, is a complete waste of taxpayer's money, and will delay even longer the job growth and
other socio-economic benefits of oil shale. **#1])>**
<([#2 [*2.2*] I ask the BLM to not be cowed by anti-development extremists who poison the well with many misconceptions and
falsehoods about oil shale. The technology is available, as Shell demonstrated a few weeks ago, which means that
the largest obstacle to unlocking this treasure remains the federal government and its regulations and restrictions.
The Preferred Alternative in the 2012 PEIS is a clear example; by shutting out nearly all of the land previously made
available for oil shale leasing, and excluding commercial leasing, the BLM is making it harder for companies to plan
for the future, thereby making oil shale artificially unattractive.
#2])> <([#3 [*2.1.1*] I ask that instead, the BLM revert to the 2008 land use plan, by adopting the no-action alternative. Doing so will take
into account all of the information gathered in the initial process, and meet the dual objectives of allowing responsible
development, and caring for sensitive environmental areas.
Please do what is right for the people of the Western Slope, not the well-paid lawyers of the

green lobby.
#3])>

OSTS_121
Organization: Marcia Neal
Received: 5/2/2012 12:00:00 AM
Commenter1: Marcia Neal - Grand Junction, Colorado 81506 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/17/2012 12:00:00 AM
Attachments: OSTS2012D00122.htm (OSTS_121-59223.htm Size = 1 KB)
OSTS_121_Neal_Mail_OSTS2012D00122.pdf (OSTS_121-59222.pdf Size = 90 KB)
Submission Text
See Attachment.

Argonne National Laboratory
Q7()(l ~ r,H~S A-vP.
EVS/240
Argonne, IL 60439
Re: 2012 Oil Shale and Tar Sands PEIS
To whom it may concern,
<([#1 [*2.2*] I am deeply concerned by a number of provisions in the 2012 oil shale PEIS, particularly as they relate to the possibility of commercial production.
The Preferred Alternative (Alternative 2b) reduces the amount of land made available for leasing in the 2008 PEIS by an astonishing 77% overall-- even worse in Colorado, at 90%. It also eliminates commercial leasing, restricting leases to RD&D only. And the land that is left available is relegated to tracts so small and segregated that they cannot realistically support commercial-scale projects.
This is sending a very clear statement that the BLM does not welcome commercial development of this rich resource on federal lands, under which most of the oil shale is located. This is a shame, when you consider the tremendous economic benefits that such development would bring.
#1])> <([#2 [*2.1.1*] A commercial oil shale program, as mandated in the 2005 Energy Policy Act, would
bring hundreds of new jobs to the tri-state region. It would also provide a revenue boost to local and state governments, whose budgets have been stretched thin for the last several years. The taxes, royalties, and lease payments would provide more money for local schools, emergency personnel, and other vital services.
With this in mind, I recommend the BLM adopt the No Action Alternative, Alternative 1, for this PEIS, which retains the actions decided upon in the 2008 PEIS.
#2])> Thank you,

~f)1 CJA.(~ J1~
Marcia Neal.
1155 Lakeside Dr. #501
Grand Junction, Colo. 81506

OSTS_122
Organization: WCJA, Kathy Hall
Received: 5/2/2012 12:00:00 AM
Commenter1: Kathy Hall - , (United States)
Organization1:WCJA
Commenter Type: Misc. Organization
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/18/2012 12:00:00 AM
Attachments: OSTS2012D00123.htm (OSTS_122-59225.htm Size = 1 KB)
OSTS_122_Hall_WCJA_Mail_OSTS2012D00123.pdf (OSTS_122-59224.pdf Size = 127 KB)
Submission Text
See Attachment.

WCJA
ATIN: BLM Draft 2012 OS/TS PEIS
Argonne National laboratory
9700 S. Cass Ave
EVS/240
Argonne, ll60439
To whom it may concern,
April 30, 2012
<([#1 [*2.2*] We would like to object strongly to the 2012 Oil Shale PEIS on a number of grounds. First, the
Preferred Alternative, 2b, places such extreme restrictions on commercial oil shale leasing as to effectively ban it. It reduces the amount of land available to the industry in Colorado to apply for leasing by 90%, and distributes what remains into small, segregated bits with no consideration given to any economic factors.
Among the lands placed off limits are the vast majority of Preference Rights lease Areas, in place to accommodate commercial development from existing RD&D leases. This is a major disincentive to commercialize even the existing research acreage, where some companies have shown considerable potential, and only need to expand on what they have to make it viable. In fact, Alternative 2b, as well as 4b, disallows the issuance of commercial leases altogether, until an applicant can demonstrate their production technology to the satisfaction of government officials.
Each of these proposals alone would serve as a serious impediment to commercial development of oil shale, and the job growth it would create. Together, they effectively shut down any prospects for economic growth, energy development, and regional prosperity from the oil shale industry whatsoever, for the foreseeable future.

This is occurring in an area that is experiencing some of the worst unemployment in the state, if not the nation. Tourism and recreation, important as they are, cannot sustain themselves without a solid industry to form an economic base. Oil shale is at a point where it could provide this base for the long term, but the land allocation alternatives as spelled out in the 2012 PEIS would deny the region this opportunity, for no good reason.
#1])> <([#2 [*9.8*] The most troubling issue surrounding this 2012 PEIS is that there shouldn't even be a 2012
document. Starting in 2005, the federal government dedicated three years, millions of dollars, and a great deal of effort to complete a PEIS, and develop a management plan for oil shale that complied with all relevant statutes, including the Energy Policy Act of 2005. They included the thousands of hours of input and testimony from a variety of local sources, agencies, governments, and the public, and came out in 2008 with a reasonable, workable model that identified just over 2,000,000 acres for potential future application for commercial leasing. **#2])> <([#3** [*2.1.1*] Radical environmental groups, in continuing their attack on the western slope, filed a lawsuit
against the DOl over these findings. Now, as part of a settlement, the government is completely re-doing the PEIS, with the exact same information, only this time with a preferred alternative that mirrors the anti-development demands of the extremists who used the court system to bully the federal government.
This is entirely unacceptable. The people of the Western Slope have a vested interest in preserving their natural heritage, but we realize that we can do that without sacrificing jobs and economic opportunity. The 2008 PEIS recognized this as well, and that is why we support the no-action alternative, Alternative 1, in the current PEIS.
#3])>

Executive Director

OSTS_123
Organization: Rob Schmitzer
Received: 4/25/2012 12:00:00 AM
Commenter1: Rob Schmitzer - Craig, Colorado 81625 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/18/2012 12:00:00 AM
Attachments: OSTS2012D00124.htm (OSTS_123-59227.htm Size = 1 KB)
OSTS_123_Schmitzer_Mail_OSTS2012D00124.pdf (OSTS_123-59226.pdf Size = 99 KB)
Submission Text
See Attachment.

April25,2012
Ref: BLM 2012 OS/TS PEIS
Dear Sir/Madam,

<([#1 [*2.1.1*] In reviewing this PEIS, it was interesting to note that of the 14 cooperating agencies taking part In its preparation, not
a single one chose the BLM's Preferred Alternative, 2b, as their own. A majority selected Alternative 1, the same one
I am encouraging the BLM to adopt. Alternative 1 reinstates the Record Of Decision arrived at as a result of this very
same process having been done in 2008. That process was three years in the making, and involved the cooperation
and input of many stakeholders, including local governments, and a multi-state Governors task force. It culminated in
opening around 2 million acres of oil shale land for possible future leasing. This was in compliance with the 2005
Energy Policy Act, which mandated the establishment of a commercial oil shale program along with the RD&D
program.
This would lead to the beginning of an industry that would start producing the 4 trillion barrels of oil that lies
underneath our region. This is enough resource to make America energy independent, and supply our demand for oil
for generations.
More locally, it would mean a vibrant industry creating jobs in our own backyard. Northwest Colorado needs this
economic development, and the people of the region overwhelmingly support the establishment of a viable oil shale
industry.
What we do NOT support is the way a handful of environmentalists decided that they could hijack the system, and
thorough litigation and a friendly settlement with their allies in the federal government, force the BLM to undermine all
the work done on the 2008 PEIS, and ram through their anti-energy development agenda instead.
Alternative 1 will help bring jobs and economic growth to this region, as detailed in the "Impacts" chapter of your
PEIS. I urge you to adopt it, as opposed to Alternative 2b, as the BLM's final Alternative.
#1])> Sincerely,

OSTS_124
Organization: Craig Freeborn
Received: 4/29/2012 12:00:00 AM
Commenter1: Craig Freeborn - Grand Junction, Colorado 81501 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/18/2012 12:00:00 AM

Attachments: OSTS2012D00125.htm (OSTS_124-59229.htm Size = 1 KB)
OSTS_124_Freeborn_Mail_OSTS2012D00125.pdf (OSTS_124-59228.pdf Size = 109 KB)
Submission Text
See Attachment.

BLM Colorado River Valley Field Office
2300 River Frontage Road
Silt, CO 81652
Argonne National Laboratory
9700 S. Cass Ave
EVS/240
Argonne, IL 60439
Re: 2012 Oil Shale Programmatic EIS
Apr. 29, 2012
As part of the Public comment phase of this process, I want to point out a number of flaws that I see in the 2012 Oil Shale PEIS.
<([#1 [*2.2*] The first and most obvious is the extreme reduction in the amount of land being made available for application for leasing in the BLM's preferred alternative, 2b. The massive reduction in acreage is excessive and unnecessary. The 2 million acres allowed for under the 2008 PEIS, and the no action alternative, are not actually open for development, but only for application for leasing. As the PEIS points out, this application process will include a full round ofEIS studies and evaluations, which will consider many different statutes. Much of this land will in fact be excluded under this process. But by leaving the maximum amount of acreage available to undergo the process, the BLM would be affording oil shale exploration and development companies a measure of flexibility in planning that is not afforded under the more restrictive alternatives.
#1])>
<([#2 [*9.6.1*] Second is the bias against commercial development inherent in the 2012 PEIS. The reduced acreage in 2b, and the dispersed placement of the remaining available parcels, makes commercial planning and expansion, let alone new investments, most impracticable. 2b, the BLM's preferred Alternative, further hinders commercialization by refusing to award ANY commercial leases until the applicant demonstrates viable technology. This is a very subjective and arbitrary request, and one that is not required of any other industry, even within the energy sector. The simple economic fact is that a company may wish to secure leases in preparation for commercial expansion, as part of their long-term planning process. 2b and 4b would deny them that management option. In addition, Alternative 3 prohibits any leasing beyond the existing RD&D leases currently held, and both 2 and 3 exclude most or all of the preferred rights lease areas around those RD&D leases, put in place specifically to allow expansion of those leases in the event of commercial success. **#2])>**

<([#3 [*9.2.1*] Finally, I am concerned with the legal ramifications. In the first place, the alternatives that hinder or prohibit commercial leasing seem to be doing so in direct defiance of the Energy Policy Act of2005, which calls for parallel commercial development programs in oil shale; The lands excluded under 2 and 2b for reasons of having "wilderness characteristics", may represent an attempt at circumvention of the right of congress alone to define areas as "wilderness"; and the whole reason for doing the 2012 PEIS- a response to a lawsuit by

environmental extremists - sets a bad precedent for the future, and for the EIS process in general. **#3])>**
For these reasons, I recommend Alternative 1.
Craig Freebo

OSTS_125
Organization: Lois Dunn
Received: 4/20/2012 12:00:00 AM
Commenter1: Lois Dunn - Grand Junction, Colorado 81506 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/18/2012 12:00:00 AM
Attachments: OSTS2012D00126.htm (OSTS_125-59231.htm Size = 1 KB)
OSTS_125_Dunn_Mail_OSTS2012D00126.pdf (OSTS_125-59230.pdf Size = 77 KB)
Submission Text
See Attachment.

April 20, 2012
Bureau of Land Management
Argonne National Laboratory
9700 S. Cass Ave
EVS/240
Argonne, IL 60439
RE: 2012 Oil Shale/Tar Sands Programmatic Environmental Impact Statement
Dear Sir or Madam,
<([#1 [*2.1.1*] I recommend Alternative 1 as the option to be adopted by the BLM regarding the current PEIS.
As spelled out in Chapter 6, "Impact Assessment for Oil Shale and Tar Sands Alternatives" under "SocioEconomic
Impacts", commercial oil shale development, as provided for under Alternative 1, is projected to will
provide thousands of jobs, and millions of dollars in personal and corporate income, and government revenue.
This development, and directly related projects, will also be responsible for area population growth that will
spur further economic activity, absorb housing vacancies, and attract even more, diversified services and
industries to the region. **#1])>**
<([#2 [*3.10.3*] In contrast, the economic impacts of the ELM's Preferred Alternative, 2b, were not analyzed, the document
simply stating that the impacts would be similar to alternative 1, but lesser in scale due to the decreased acreage.

This is not only an understatement, but signals to me that the BLM did not sufficiently do its homework in this
regard before settling on a Preferred Alternative. The same is true of Alternative 4. The socio-economic impacts
of Alternative 3 were analyzed, and the results are a tiny fraction of the job creation and income generation that
Alternative 1 would produce. **#2])>**
<([#3 [*2.1.1*] In light of the positive effects that Alternative 1 will have on the regional economy, to say nothing of the benefits
to the nation of developing such a rich energy resource, I wholeheartedly recommend the adoption of this
Alternative.
#3])> Respectfully Submitted.

OSTS_126
Organization: Sandra Mansfield
Received: 4/17/2012 12:00:00 AM
Commenter1: Sandra Mansfield - Grand Junction, Colorado (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/18/2012 12:00:00 AM
Attachments: OSTS2012D00127.htm (OSTS_126-59233.htm Size = 1 KB)
OSTS_126_Mansfield_Mail_OSTS2012D00127.pdf (OSTS_126-59232.pdf Size = 91 KB)
Submission Text
See Attachment.

Bureau of Land Management
2012 osrrs PEIS
Argonne National Laboratory
9700 S. Cass Ave
EVS/240
Argonne, IL 60439
Apr. 17, 2012
Dear Sir/Madam,
<([#1 [*11.2*] I consider myself an environmentalist; I care deeply for the land, air, and water, enjoy spending time outdoors, and hope that this beautiful landscape will be around for my great-grand children to enjoy. But I am embarrassed and insulted by those who claim to be environmentalists, and seem to have only one agenda, and that is to stop anything that could be considered development in its tracks, and do so through any means possible.
The current debate over oil shale, and this PEIS in particular, is unfortunately being shaped by these sort of individuals. When a PEIS was published that did not agree with their idea's 100%,

they took it to court, wasting precious time and fiscal resources to hold up the entire oil shale process for years longer. Now they are actively pushing for the BLM to adopt the most restrictive of possible alternatives, one that would not allow any expansion of oil shale whatsoever. It was bad enough that they got their way with the Preferred Alternative, which slashes acreage previously available for leasing into bit pockets here and there, and limits any lease application to RD&D only.
As I noted, I too care about the environment - but that does not mean that I support keeping it all closed down, off limits to all but a few. It also does not mean that I am blind to economic realities. The counties in this region are hurting, and allowing
orderly, responsible expansion of an industry as important to our national economy and security as oil shale, only makes sense. If a process is not established now, it is quite possible that in a few years time, when some national disaster or emergency requires that we put oil shale online as soon as possible, that development will occur in a much more haphazard and environmentally damaging way. **#1])>**
<([#2 [*10.8*] I also do not want to cede energy production of this scale to countries like Estonia and China, where the environmental controls are rather less stringent than what we are accustomed to. **#2])>**
<([#3 [*2.1.1*] Therefore, as an environmentalist, I recommend the selection of Alternative 1 as the most responsible, forward thinking option in the current PEIS. **#3])>**

OSTS_127
Organization: John Justman
Received: 5/2/2012 12:00:00 AM
Commenter1: John Justman - Fruita, Colorado 81521 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/18/2012 12:00:00 AM
Attachments: OSTS2012D00128.htm (OSTS_127-59235.htm Size = 1 KB)
OSTS_127_Justman_Mail_OSTS2012D00128.pdf (OSTS_127-59234.pdf Size = 78 KB)
Submission Text
See Attachment.

BLM 2012 Draft Oil Shale/Tar Sands PEIS
Argonne National laboratory
9700S. Cass Ave
EVS/240
Argonne Il 60439
CcBLM CRVFO
2300 River Frontage Road
Silt, CO 81652
To whom it may concern,
<([#1 [*2.1.1*] Thank you for allowing this chance to comment on the 2012 Oil Shale / Tar Sand

Programmatic Environmental
Impact Statement. I fully support Alternative 1 and would urge the BLM to do the same. Keeping the amount of
land provided for in the 2008 PEIS in place will provide a sense of security to oil shale producers that they will
I have options available to them in the coming years as they plan their long-term strategies in regards to
commercial-scale oil shale recovery.
Choosing this Alternative will also provide some assurances to local residents that federal government agencies
and regulations will not unnecessarily block this industry from getting off the ground. Unemployment remains
high in tt1f region, many businesses are closing their doors, and many families are moving away. People in the
region simply want to know that their government will work with them, not against them, as they try to recover
from the grim past four years.
Alternative 1 represents an example of government working with the local population. and should be considered
for adoption by your agency. **#1])>**
Regards,
c;JA
John Justran

OSTS_128
Organization: Eileen McGuire Mahony
Received: 4/15/2012 12:00:00 AM
Commenter1: Eileen McGuire Mahony - Centennial , Colorado 80112 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/18/2012 12:00:00 AM
Attachments: OSTS2012D00129.htm (OSTS_128-59237.htm Size = 1 KB)
OSTS_128_Mahony_Mail_OSTS2012D00129.pdf (OSTS_128-59236.pdf Size = 106 KB)
Submission Text
See Attachment.

BLM 2012 OS/TS PEIS
Argonne National Laboratory
9700 S. Cass Ave
EVS/240
Argonne, IL 60439
Cc. BLM CRVFO

2300 River Frontage Road
Silt, CO 81652
To whom it may concern,
April 15, 2012
<([#1 [*9.8*] In reference to the current Oil Shale Programmatic Environmental Impact Statement (PEIS), it is important to note that one was already completed in 2008, which opened 2,017,714 acres of geologically prospective oil shale land for possible (not preapproved) leasing, providing the best possibility for commercialization, expansion, job creation and economic development. This determination was based on three years of intensive work and study, and the input of geologists, environmental scientists, biologists, industry leaders, economists, local governments, and the public. **#1])>**
<([#2 [*2.2*] The preferred alternative of this new PEIS not only cuts that available land by over 70% overall (around 90% in Colorado), but situates it in small, isolated pieces over the area, making it virtually impossible for any company to formulate any sort of long-range commercial production plan - contravening the clear directives of the Energy Policy Act of 2005 - and also making it unattractive for any new company to invest in the region.
#2])> <([#3 [*2.1.1*] Regardless of the fact that this new PEIS was undertaken merely as the result of a
lawsuit by fringe environmental factions against the 2008 one, it should not be the role of the BLM to actively dissuade any particular economic activity on the land under its care. The BLM is supposed to manage public lands for the good of the nation, not any specific interest group with their own political agenda. Oil shale is a strategic national resource with economic, trade, and national security implications. The BLM should be looking for the best way to manage the recovery of this resource, while concurrently minimizing impact on the environment, and maximizing the local and national socio-economic benefits.
The 2008 PEIS accomplished this. It is therefore an egregious waste of taxpayer's money, and the nation's time and resources, to restart the process all over again, in the absence of any new information or empirical evidence to justify it.
I therefore call on the BLM to abandon this fool's errand, or, if seeing this redundant farce through is a foregone conclusion, to at least adopt Alternative 1, the no action alternative, which would restore the decisions properly made in the 2008 PEIS. **#3])> <([#4** [*1.1.1*] I further call on the BLM, in that event, to extend the public comment period at
least until the ELM's newest oil shale regulations are released on May 15th, to allow for comments based on the most complete information possible. **#4])>**
6971 S. Poplar Way
Centennial CO 80112

OSTS_129
Organization: Rebekah Greenwood
Received: 5/2/2012 12:00:00 AM
Commenter1: Rebekah Greenwood - Craig, Colorado 81625 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none

Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/18/2012 12:00:00 AM
Attachments: OSTS2012D00130.htm (OSTS_129-59239.htm Size = 1 KB)
OSTS_129_Greenwood_Mail_OSTS2012D00130.pdf (OSTS_129-59238.pdf Size = 88 KB)
Submission Text
See Attachment.

BLM
Argonne National Laboratory
9700 S. Cass Ave.
EVS/240
Argonne, IL 60439
Re: Draft OSTS PEIS
To whom it may concern,
<([#1 [*11.2*] In regards to the most recent PEIS on oil shale development in Northwestern Colorado, I would
like to weigh in as a resident. Oil shale development represents a major opportunity for our region, in terms of job growth, economic development, revenue, and stability. This industry simply needs to be allowed to proceed without the type of hindrances that actions such as those prescribed in the 2012 PEIS Preferred Alternative, as well as alternatives 3 and 4b. **#1])>**
<([#2 [*2.2*] The Preferred Alternative, 2b, takes so much land off the table that it essentially shuts down
any chance for a viable, commercial oil shale industry. The companies that would otherwise pursue this resource will look elsewhere if they are denied the opportunity to be able to plan future expansion, and to continue operating in the area in the long term. There is no question that oil shale is more expensive to produce that traditional energy, and no business will take the risk in the absence of a clear, set plan that provides some long-tern assurances.
Eliminating 70 -90% of the oil-shale prospective land from leasing, and limiting the few spots that remain to only RD&D leasing does not provide this stability and assurance.
It is also well established that oil shale projects take longer to become operational, so any delay inflicted on the industry just pushes farther off the day that the industry can become profitable and begin generating greater royalty revenue. **#2])>**
<([#3 [*2.1.1*] With all of this in mind, I choose to support Alternative 1, which will reopen a reasonable
amount of land for application for leasing, and I urge the BLM to do the same. **#3])>**
Sincerely,

OSTS_130
Organization: Don Jones
Received: 4/15/2012 12:00:00 AM
Commenter1: Don Jones - Craig, Colorado 81625 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none

Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/18/2012 12:00:00 AM
Attachments: OSTS2012D00131.htm (OSTS_130-59242.htm Size = 1 KB)
OSTS_130_Jones_Mail_OSTS2012D00131.pdf (OSTS_130-59241.pdf Size = 101 KB)
Submission Text
See Attachment.

BLM 2012 OSTS PEIS
Argonne National Laboratory
9700 S. Cass Ave
EVS/240
Argonne, IL 60439
Dear Sir or Madam,
April 15, 2012
<([#1 [*2.1.1*] The purpose of this letter is to express both my support for Alternative 1 in the 2012 Oil Shale PEIS, and my outrage at the reason for the new PEIS in the first place.
First, I support Alternative 1 because it provides the best opportunity for allowing a viable, profitable oil shale industry
to take hold in this region. It keeps in place the outcome of the 2008 PEIS, leaving just over 2,000,000 acres available
to the industry for commercial lease application. Since each lease would have to undergo an individual NEPA
analysis, so any threat to sensitive environmental areas would be negated. It also allows for a commercial oil shale
program to be established, in accordance with the direction given in the Energy Policy Act of 2005. All of this is
important because of the great importance of oil shale no the nation and the region .
Nationally, oil shale provides us a way to wean ourselves off of overseas oil. There is far more oil in the oil shale
areas of the west, than there is in the entire middle east. This will provide for our nation's demand for oil for such
things as fuel, plastics, soap, and any number of other products.
Regionally, oil shale means jobs, income, and a bright economic future for northwestern Colorado. Chapter 6 of the
PEIS documents how many jobs this Alternative will help generate just for construction and operation of a few
production facilities and in housing. In contrast, no similar jobs analysis was done on the Preferred Alternative presumably
because the results would not be pleasant. **#1])>**
<([#2 [*9.8*] As for the reason that a new PEIS was done, let me just say that it is infuriating that a small group of environmental
extremists can hire lawyers, and keep this development, and all of its benefits on hold for years. Even worse, is that

as a result of their lawsuit, the taxpayer is now footing the bill for a whole new study, complete with a predetermined
conclusion that oil shale development is bad, and should be severely limited. **#2])>**
It is important that extremists on all sides get the message that they cannot use the courts to so flagrantly manipulate
the public policy process. Please help me do so by selecting Alternative 1, and restoring the work and properly
formulated conclusions of the first PEIS.

OSTS_131
Organization: Dan Redmond
Received: 5/2/2012 12:00:00 AM
Commenter1: Dan Redmond - Fruita, Colorado 81521 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/18/2012 12:00:00 AM
Attachments: OSTS2012D00132.htm (OSTS_131-59244.htm Size = 1 KB)
OSTS_131_Redmond_Mail_OSTS2012D00132.pdf (OSTS_131-59243.pdf Size = 97 KB)
Submission Text
See Attachment.

Bureau of Land Management
2012 OS/TS PEIS
Argonne National Laboratory
9700 S. Cass Ave
EVS/240
Argonne, IL 60439
Cc. BLM Colorado River Valley Field Office
2300 River Frontage Road
Silt, CO 81652
To whom it may concern :
<([#1 [*2.1.1*] This most recent PEIS for oil shale is widely missing the mark, in my opinion. The bulk of the three
land allocation Alternatives, including the BLM's preferred Alternative, make no allowance for commercial expansion, the next major step in realizing the potential for oil shale. There is in the neighborhood of 4 trillion barrels of oil in this region, waiting to be tapped and used by our nation for
domestic fuel, feedstock for a multitude of products, and for export. Allowing commercial production of
oil shale could mean energy independence for America, and a permanent severing of any reliance on
places that are unstable and hostile to the United States for energy needs.

Placing giant swaths of land off limits to commercial leasing, including the preferred rights lease acreage at existing RD&D locations, and relegating the industry to a handful of tiny, remote, isolated
bits scattered around the overall area, only AFTER they have proven to the federal government's satisfaction that they have the technology the need, is in no way conducive to enabling this development. It is also more than a little insulting to the investors and engineers that devote their time, money and labor to recovering this energy.
A far more sensible and pragmatic approach would be to return to the findings of the 2008 PEIS, which left just over 2 million acres available for potential leasing. This plan effectively balanced environmental protection by requiring that each lease applied for be subjected to a full EIS, and economic development, by providing oil shale companies the maximum flexibility and opportunity for
planning their commercial operations. It also allowed for adequate expansion of existing RD&D leases
into commercial by leaving the preferred rights acreage intact.
Please reconsider your position on this PEIS, and adopt the No-Action alternative, Alt.1, which would
restore a common-sense, scientifically based approach to oil shale development in our region.
#1])>
Dan Redmond
1321 17 RD
Fruita, CO 81521

OSTS_132
Organization: Matt Moore
Received: 5/2/2012 12:00:00 AM
Commenter1: Matt Moore - Craig, Colorado 81625 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/18/2012 12:00:00 AM
Attachments: OSTS2012D00133.htm (OSTS_132-59246.htm Size = 1 KB)
OSTS_132_Moore_Mail_OSTS2012D00133.pdf (OSTS_132-59245.pdf Size = 84 KB)
Submission Text
See Attachment.

RE: BLM 2012 Oil Shaleff ar Sands Programmatic EIS
Dear Madam/Sir,
<([#1 [*1.1.1*] I would like to ask the BLM to extend the public comment period for this PEIS by lit le.1st 30 days, to allow more information to develop, and to allow public review of the 2012 Oil Shale leasing guidelines that are due for release on May 15th. l think it is important to have this extra time allotted to make sure that local residents and businesses have all the pertinent information they need to make an honest assessment of this PEIS. This is especially vital given

that much of the land excluded from potential leasing in Alternative 2b, the BLM's Preferred Alternative, is done so on the basis of information that has not yet been made public, namely Sage Grouse habitat. The Forest Service has yet to release details of Sage Grouse habitat locations, but the Alternative excludes lands due to their containing this habitat. Similarly, knowing the details of the leasing regulations could prove very helpful when evaluating and commenting on land allocation alternatives that will determine what land is available for this leasing. **#1])>**
<([#2 [*2.1.1*] Should the BLM see fit not to extend the comment period, Alternative 1, which calls for no change from the 2006 Record of Decision, should be adopted. This Alternative keeps 2 million acres available to oil shale developers to apply for commercial leasing, while keeping the most truly vulnerable ecosystems protected. This balances the economic need for development with the need to conserve. **#2])>**

OSTS_133
Organization: Dan Severson
Received: 4/15/2012 12:00:00 AM
Commenter1: Dan Severson - Craig, Colorado 81625 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/18/2012 12:00:00 AM
Attachments: OSTS2012D00134.htm (OSTS_133-59248.htm Size = 1 KB)
OSTS_133_Severson_Mail_OSTS2012D00134.pdf (OSTS_133-59247.pdf Size = 82 KB)
Submission Text
See Attachment.

Argonne National Laboratory
9700 S. Cass Ave
EVS/240
Argonne, IL 60439
Re: BLM 2012 OSTS PEIS
I believe that this newest PEIS, and especially the Preferred Alternative, is invalid.
April15, 2012
<([#1 [*9.8*] It is a re-do of the 2008 PEIS, without there being any new information to justify a revision or review, let alone
a complete from the start do-over. It is simply being done in response to litigation put forth by environmental
special interest groups who were not satisfied with how the process turned out the first time. This should not set
the precedent of how public business is carried out. These groups had ample opportunity to present their
opinions and offer their input during the public comment phase. The facts simply were not in their favor, as the

results of the 2008 PEIS reflected. But for them to now go to the courts and use a bogus lawsuit to get your
agency to change its conclusions (after needlessly spending tax dollars to rehash the same information), is
ridiculous, and cannot be allowed to stand in a society that values process and rule of law. **#1])>**
<([#2 [*9.2.1*] [*3.1.3*] As for the new Preferred Alternative, by eliminating from consideration lands that the BLM has identified as
having "wilderness characteristics", the document violates a spending moratorium put in [place by Congress
last year banning funds from being used to implement Sec. Order 3310, which would have granted the BLM
that ability. As it is, only an act of Congress can designate a wilderness area.
#2])> <([#3 [*2.2*] Finally, by allowing only RD&D leases, the Alternative violates the 2005 Energy Policy Act, which called for a dual track (RD&D, and commercial approach to oil shale development. Alternative 2b clearly does not allow for
a separate commercial development track, placing it at odds with the statute. Alternatives 3 and 4b also run
afoul of this law, by excluding commercial leasing.
#3])> <([#4 [*2.1.1*] As such, Alternative 1 remains the only Alternative that is legal and valid.
#4])>

OSTS_134
Organization: Rose Pugliese
Received: 4/23/2012 12:00:00 AM
Commenter1: Rose Pugliese - Palisade, Colorado 81526 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/18/2012 12:00:00 AM
Attachments: OSTS2012D00135.htm (OSTS_134-59250.htm Size = 1 KB)
OSTS_134_Pugliese_Mail_OSTS2012D00135.pdf (OSTS_134-59249.pdf Size = 96 KB)
Submission Text
See Attachment.

Bureau of Land Management
Argonne National Laboratory
9700 S. Cass Ave
EVS/240
Argonne, IL 60439
Cc. CRVFO
2300 River Frontage Road
Silt, CO 81652
Re: 2012 Oil Shale Programmatic EIS

Ladies and Gentlemen:
April23, 2012
<([#1 [*2.1.1*] Thank you for extending this opportunity to express our views and concerns over this most recent PEIS involving oil shale. As a non -native resident of the Western Slope, I appreciate the natural heritage and beauty of Northwest
Colorado. I also appreciate the fact that the people of this area are hurting due to double-digit unemployment; that
Americans across the country are hurting from high fuel prices.
This resource can be developed and produced in an environmentally responsible manner, and that can create enough
jobs and economic activity to return prosperity and growth to the region. The tax revenue generated by a healthy and
vibrant commercial oil shale industry will also ease the strain on local, state, and federal budgets, and help fund
schools, roads, emergency personnel, and other key local government functions. Furthermore, having the ability to
produce energy here at home will help relieve pressure on fuel prices, and enable the United States to scale back its
reliance on foreign sources of oil.
The 2008 PEIS, and the first, "No-Action" Alternative in the 2012 version that retains the recommendations of that
thoroughly prepared document, is the best, most responsible and most legally acceptable approach to seeing these
benefits come to fruition. The recommendations in the current PEIS, on the other hand, will only hinder and delay
commercial production and economic development for well into the future. The BLM's preferred Alternative, 2b,
for example, would drastically scale back the amount ofland available for application for commercial leasing, from
2, 017,714 acres to 461,968 acres. **#1])>**
<([#2 [*1.1.1*] I would also urge the BLM to extend the public comment period for at least 30 days, in light of the fact that the draft 2012 oil shale leasing regulations are due to be released on May 15, nearly two weeks after the public comment
period closes. Extending the period would help citizens to form comments with the benefit of more thorough
information. **#2])>**
Thank you again for the opportunity to express my concerns, and I encourage you to adopt Alternative 1.

OSTS_135
Organization: Carol Skubic
Received: 4/30/2012 12:00:00 AM
Commenter1: Carol Skubic - Grand Junction, Colorado 81507 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none

Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/18/2012 12:00:00 AM
Attachments: OSTS2012D00136.htm (OSTS_135-59252.htm Size = 1 KB)
OSTS_135_Skubic_Mail_OSTS2012D00136.pdf (OSTS_135-59251.pdf Size = 93 KB)
Submission Text
See Attachment.

To: BLM 2012 OS/TS PEIS
Argonne National Laboratory
9700 S. Cass Ave
EVS/z4o
Argonne, IL 60439
Cc: BLM CRVFO
z3oo River Frontage Road
Silt, CO 8165z
Dear Sir/Madam,
z340 Promontory Court
Grand Junction, CO 81507
April 30, 2012
<([#1 [*2.1.1*] This letter is intended to provide comment on the zo1z Oil Shale/Tar Sand Programmatic Environmental Impact
Statement (PEIS), which is a redo of the initial PEIS and Oil Shale Leasing Regulations completed in 2ooS. This current
PEIS is being done as a result of a settlement between the Department of Interior and certain environmental groups
who sued over the outcome of the 2008 PEIS and Regulations. There is little or no new information on which to base
this second PEIS, and in fact the information contained in it is virtually identical to the information in the 2008 study.
Despite this, the BLM settled on a different Preferred Alternative in the current one, Alternative 2b, which substantially
reduces the amount of land available for application for leasing, and eliminates commercial leasing.
These terms are a disincentive to oil shale development, make it much harder for smaller companies to enter into the
market, and delay the economic benefits of this development, such as jobs, growth, increased revenues to local and
state governments, and the addition of domestically produced energy to the national mix.
Alternative 1 in the current PEIS, the "No Action Alternative", preserves the Record of Decision made in the 2008 PEIS,
and should be adopted by the BLM in the Final PEIS draft.
#1])> <([#2 [*1.1.1*] In addition, it should be noted that the 2012 draft of the Oil Shale Leasing Regulations are not being released until 11 days after the close of the public comment period. I

believe that that comment period should be extended long enough to allow for those regulations to be released, and to give the public, local governments, businesses and other interested parties sufficient time to review these regulations, which are such an important part of the overall oil shale picture.
Thank you for taking the time to consider my comments.
#2])> Yours Sincerely,
Carol Skubic

OSTS_136
Organization: Phyllis Hunsinger
Received: 5/2/2012 12:00:00 AM
Commenter1: Phyllis Hunsinger - Grand Junction, Colorado 81506 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/18/2012 12:00:00 AM
Attachments: OSTS2012D00137.htm (OSTS_136-59254.htm Size = 1 KB)
OSTS_136_Hunsinger_Mail_OSTS2012D00137.pdf (OSTS_136-59253.pdf Size = 94 KB)
Submission Text
See Attachment.

BLM Colorado River Valley Field Office
2300 River Frontage Road
Silt, CO 81652
Argonne National Laboratory
9700 S. Cass Ave
EVS/240
Argonne, IL 60439
Ref: 20 12 Oil Shale PEIS
To Whom It May Concern,
<([#1 [*9.8*] I would like to express my outrage over this latest PEIS. At the very least it is a massive waste of the taxpayer's money, since this is a redo of a PEIS finished in 2008. There was absolutely no new information develop between the 2008 PEIS and the current one, and still the BLM pursued this new one. The only reason they did so was in response to a lawsuit by a certain "Green" groups. It is outrageous that a handful of extremists would be able to hold jobs and economic development hostage, and more so that the BLM, an agency of the federal government, would allow it to happen.
Oil shale development could mean hundreds, if not thousands, of jobs for western Colorado. The technology is quickly emerging, in some cases is in place already. The industry is no longer "10 years behind". Commercialization is a distinct reality, and it is irresponsible of the federal government to needlessly hinder this based on the protests of a minority. The 2008 PEIS was a very well thought out, balanced document that allowed the maximum amount of land to be available for potential expansion,

while still making sure that the environment is protected, and should be returned to.
Please do not continue to let this fringe element dictate how the BLM and the people of western Colorado conduct their business. **#1])>**
Sincerely,

Phyllis Hunsinger
661 Tammarron Dr
Grand Junction, CO 81506

OSTS_137
Organization: Elsie Wattson Lamb
Received: 5/2/2012 12:00:00 AM
Commenter1: Elsie Wattson Lamb - Tucson, Arizona 85719 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/18/2012 12:00:00 AM
Attachments: OSTS2012D00138.htm (OSTS_137-59256.htm Size = 1 KB)
OSTS_137_Lamb_Mail_OSTS2012D00138.pdf (OSTS_137-59255.pdf Size = 112 KB)
Submission Text
See Attachment.

Draft OSTS PEIS
Argonne National Lab
9700 S. Cass Ave.
EVS/240
Argonne, IL 60439
To the Bureau of Land Management:
<([#1 [*12.3*] [*2.5*] I am writing regarding the BLM's "draft programmatic environmental impact statement" for oilshale
and tar-sands development in Colorado, Utah and Wyoming.
I am well beyond 'concerned' about the dilatory environmental effects if the BLM opens a commercial leasing program for oil-shale and tar-sands development. It would pollute our land, our
air and our water and it would exacerbate climate change. Endemic, threatened and endangered species would be lost. People would be harmed.
It is hard for me to imagine a much less prudent use of public lands than oil-shale and tar-sands development, which would contribute to the crisis of global warming, exacerbate species extinctions, and further deplete the Colorado River!
I oppose action by the BLM to continue or to authorize any new oil-shale or tar-sand development
on public lands, or to create or continue land-use allocations that would allow for such uses ever.
The draft programmatic environmental impact statement should have included an alternative that

does not in any way endorse additional public-land use for this unproven industry- one we already
know is harmful on many fronts.
#1])> <([#2 [*3.10.4*] [*3.10.5*] The Congressional Budget Office confirmed that the oil shale industry is not expected to produce
significant revenues through 2022. Even if oil shale were an economic boom for a few, it would be
devastating for the many-- simply NOT WORTH IT.
The land on top of the oil-shale resources in Utah, Colorado and Wyoming is some of the best wildlife habitat in the West, and outdoor recreation and tourism are huge economic drivers for the
region. We must protect this sustainable economy by making smart decisions based on sound information. It is not smart to des troy these lands, and it would be particularly stupid and shortsighted
to do so for oil shale or tar sands.
#2])> <([#3 [*3*] I ask that you evaluate carefully and disclose fully the serious impacts of all new energy required
for oil-shale and tar-sand production and its potentially devastating impacts to our climate, as well
as the threat it poses to wildlife, special-status , threatened and endangered species, and to the water,
air and land on which people and communities depend. **#3])>**
848 N. Norris Ave.
Tucson, AZ 85719

OSTS_138
Organization: Grow Our Western Economy, Jennifer Bailey
Received: 4/30/2012 12:00:00 AM
Commenter1: Jennifer Bailey - Grand Junction, Colorado 81502 (United States)
Organization1: Grow Our Western Economy
Commenter Type: Misc. Organization
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/18/2012 12:00:00 AM
Attachments: OSTS2012D00139.htm (OSTS_138-59258.htm Size = 1 KB)
OSTS_138_GROW_Bailey_J_Mail_OSTS2012D00139.pdf (OSTS_138-59257.pdf Size = 104 KB)
Submission Text
See Attachment.

Argonne National Laboratory
9700 S. Cass Ave EVS/240
Argonne, IL 604gg
4/30/12

PO 4437 . Grand Junction . Colorado . 81502 . 970.201.2670 .
westerconeedsjobsnov.@gmail.com
Re: 2012 Oil Shale/ Tar Sands Programmatic EIS
To whom it may concern,
<([#1 [*2.2*] We appreciate the opportunity to weigh in on this most recent Oil Shale PEIS draft. We feel that the
BLM's preferred alternative, 2b, is the wrong direction to go when planning the future of oil shale
development. The sharp reduction in land available for leasing will present major obstacles to investment, development, and expansion of this important industry. Few companies, of any size, will be
willing to expend the capital and other resources to develop an RD&D lease, without some assurance
that they will be allowed to expand commercially in the future.
The tragic result of this will be the denial of the many economic and social benefits to Western Colorado that such development would produce. Delaying or denying commercial oil shale development
means delaying or denying good paying jobs in operations, construction, engineering, transport, finance, retail, and a host of other fields. It also means delaying or denying economic growth and increased tax receipts for not only the immediate area, but for the state and federal coffers as well. It
could very well mean delaying or denying the opportunity for a bright, prosperous future for the people
of this region.
In addition, this would be delaying or denying the nation access to a vital resource that could fuel a
national economic recovery, wean us off of foreign oil, and provide energy security for the long term,
providing a cushion to allow the private sector to develop a replacement for oil. **#1])>**
<([#2 [*2.1.1*] Alternative 1 restores the findings of the 2008 PEIS, which took all of this, as well as important
environmental factors, into account and produced a balanced, pro-growth land use plan. We recommend
that Alternative 1, therefore, be selected as the BLM's blueprint going forward.
#2])> <([#3 [*1.1.1*] We would also ask that the public comment period be extended until early June. This will provide
enough time for the public, including organizations like ours, to examine and take into consideration the
new round of oil shale leasing regulations that are to be released on or near May 15th.
#3])> Thank you for listening to our concerns, and we trust the BLM will take them into consideration during
its final decision-making process.
Sincerely,

OSTS_139
Organization: Ward Johnston
Received: 5/4/2012 12:00:00 AM

Commenter1: Ward Johnston - Grand Junction, Colorado 81501 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/18/2012 12:00:00 AM
Attachments: OSTS2012D00140.htm (OSTS_139-59260.htm Size = 1 KB)
OSTS_139_Johnston_Mail_OSTS2012D00140.pdf (OSTS_139-59259.pdf Size = 75 KB)
Submission Text
See Attachment.
Dear BLM,
<([#1 [*12*] I am concerned to see oil and gas development on the western slope growing because I value my water, wildlife, and air quality. I feel the BLM is leasing land that belongs to every American and not considering the public opinion. I am extremely weary about "research" done by companies who have no stake in the land they destroy. I want the BLM to fully understand the reprecussions of this "research" and the environmental impacts it could have. Once we alter the land there is no going back. Please consider caution before destruction. **#1])>**
-Ward Johnston

OSTS_140
Organization: Sam Susuras
Received: 5/4/2012 12:00:00 AM
Commenter1: Sam Susuras - Grand Junction, Colorado 81506 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/18/2012 12:00:00 AM
Attachments: OSTS2012D00141.htm (OSTS_140-59263.htm Size = 1 KB)
OSTS_140_Susuras_Mail_OSTS2012D00141.pdf (OSTS_140-59262.pdf Size = 92 KB)
Submission Text
See Attachment.

Draft OSTS PEIS
Argonne National Laboratory
9700 S. Cass Ave.
EVS/240
Argonne, IL 60439
To whom it may concern,
<([#1 [*2.1.1*] 1 would like to offer my recommendation for Alternative 1, the no action alternative, in the 2012 Oil Shale

Programmatic EIS.
This recommendation is based on a number of factors; first, it represents the hours of hard work and input
by various individuals, groups, and government agencies that went in to the initial PEIS, completed in
2008. There has been no new information develop since that time to warrant a new PEIS process, and
therefore I feel that the findings and acreage made available for commercial lease application identified in
the 2008 document should stand.
Second, I am concerned that the remaining alternatives, including the BLM's preferred one, contravene
the 2005 Energy Policy Act, which explicitly called for a separate commercial development track for oil
shale, alongside an RD&D one. None of the other Alternatives presented in the 2012 PEIS allow for a
concurrent commercial leasing program.
Third, I believe that having an established process in place ahead of time, to allow for commercialization
of this vast resource, is preferable to a hastily implemented, ad hoc program in the event of
circumstances (national emergency, geo-political turmoil, external market conditions, etc.) dictating its
rapid development. Under Alternative 1, the maximum amount of land is made available for commercial
leasing; however, each lease applied for would be subject to a full NEPA evaluation, and individual EIS's.
This ensures the best balance between economic development, and environmental protection. Having
such a program in place will also provide for an orderly adjustment on the part of local municipalities to
cope with the effects of this development, including population increase, housing construction,
infrastructure demands, and the like.
Finally, I cannot ignore the social and economic benefits that will come to the region as a result of
allowing commercial oil shale production. In addition to the jobs that will be created, the tax revenue
generated by the additional workers, royalties, severance taxes and the like will help backfill the funding
shortfalls experienced in recent years by local, county and state governments.
I believe that Alternative 1 offers the most balanced, forward-thinking, and strategic option for going
forward with the development of a local oil shale industry.
#1])> Sam Susuras

OSTS_141

Organization: Dennis Eichinger
Received: 4/19/2012 12:00:00 AM
Commenter1: Dennis Eichinger - Grand Junction, Colorado 81506 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/18/2012 12:00:00 AM
Attachments: OSTS2012D00142.htm (OSTS_141-59265.htm Size = 1 KB)
OSTS_141_Eichinger_Mail_OSTS2012D00142.pdf (OSTS_141-59264.pdf Size = 78 KB)
Submission Text
See Attachment.

Argonne National Laboratory
9700 S. Cass Ave
EVS/240
Argonne, IL 60439
April19, 2012
Re: ELM Draft 2012 Oil Shale/Tar Sand Programmatic EIS
Dear Sir or Madam,
<([#1 [*2.1.1*] I would like to state for the record that I have some concerns with this PEIS. Northwestern Colorado, along
with parts of neighboring Utah and Wyoming, holds up to 4 trillion barrels of oil, according to the U.S.
Geological Survey. That is 5 times as much oil as in the Middle East, trapped in shale. Industry has been
researching this for years, and is now at the point where the technology is there to produce this oil. In fact, the
Chinese and Estonians are already producing oil shale on a commercial scale. Here at home, Shell Oil, on one of
its tiny research leases in Colorado, has already produced several hundred thousand barrels - off a research
lease. Clearly, the industry is ready to move on to the next stage.
In 2008, recognizing this, ELM conducted a PEIS which incorporated input from all the local governments,
energy and environmental experts, and the public. The result was a reasonably balanced evaluation that
identified just over 2 million acres of the most geologically prospective oil shale lands as being available for
application for commercial leasing.
Radical environmentalists sued the Department of the Interior over the outcome of the PEIS. Now, as a result of
this lawsuit by the obstructionists, the ELM is redoing this PEIS- at a cost of millions of tax

dollars - despite
the fact that nothing has fundamentally changed. Not the science, not the environmental risks, not the input;
just the ELM's conclusion.
This time, the ELM's preferred alternative will slash the available acreage down by over 70%, and what is left
available to the oil shale industry is scattered in small, isolated pockets that will only dissuade companies from
investing in this resource, and in this region. In Colorado, the acreage is reduced by a shameful 90%.
Meanwhile, the people of Northwestern Colorado wait, struggling under double-digit unemployment.
I ask your agency to please select Alternative 1, and go back to the good work done in the 2008 PEIS. We do
not wish any harm to the environment, and would never countenance any; we just want a viable industry to be
allowed to establish itself here. **#1])>**
Sincerely,

OSTS_142
Organization: Shannon Russell
Received: 5/2/2012 12:00:00 AM
Commenter1: Shannon Russell - Craig, Colorado 81625 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/18/2012 12:00:00 AM
Attachments: OSTS2012D00143.htm (OSTS_142-59267.htm Size = 1 KB)
OSTS_142_Russell_Mail_OSTS2012D00143.pdf (OSTS_142-59266.pdf Size = 95 KB)
Submission Text
See Attachment.

Bureau Of Land Management
2012 Oil Shale/Tar Sands Programmatic EIS
To whom it may concern,
<([#1 [*2.1.1*] I would like to ask the Department of the Interior, and the BLM, to not give in to pressure from radical
environmental groups, and adopt Alternative 1 as your final decision in regards to this PEIS.
Alternative 1 will help put in place the framework needed to establish a commercial oil shale industry in
northwestern Colorado, by implementing the findings of the 2008 PEIS, by keeping available for leasing
some 2 million acres of rich oil shale land.

The Preferred Alternative would significantly reduce that land, disregarding the work and conclusions of
the 2008 PEIS, and also making it infinitely more difficult for companies to expand, or enter the pil shale
market.
The industry is ready for this expansion. Not only is oil shale currently being produced commercially by
other countries, certain companies here have had tremendous success with their RD&D projects, and need
the assurance and flexibility provided by having land available to lease.
The region is ready for this as well. We have been hurting since the recession took hold, and have
experienced high unemployment, layoffs, businesses closing, and families moving away. We welcome an
industry that will bring good jobs, spin off economic benefits, and that will produce a vital resource
cleanly and responsibly. Oil shale can do this for us.
The benefits of adopting Alternative 1 were well analyzed, yet no such analysis was provided for the
preferred alternative. A full socio-economic evaluation should be done before selecting an alternative as
the preferred one.
The BLM should adopt Alternative 1; it offers the best balance of conservation and development, allows
for a commercial oil shale program, job creation and economic vitality, and reflects the best work done by
various agencies. **#1])>**

OSTS_143

Organization: Ray Scott
Received: 5/2/2012 12:00:00 AM
Commenter1: Ray Scott - Grand Junction, Colorado (United States)
Organization1:
Commenter Type: Elected Official
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/18/2012 12:00:00 AM
Attachments: OSTS2012D00144.htm (OSTS_143-59270.htm Size = 1 KB)
OSTS_143_Scott_Mail_OSTS2012D00144.pdf (OSTS_143-59269.pdf Size = 87 KB)
Submission Text
See Attachment.
Argonne National Laboratory
9700 S. Cass Ave
EVS/240

Argonne, IL 60439
Re: 2012 Draft Oil Shale/Tar Sands Programmatic EIS
To Whom it May Concern,
<([#1 [*9.8*] This latest version of the Oil Shale PEIS is an insult to the people of the Western Slope and a waste of
taxpayer's money.
The initial PEIS, completed in 2008, was the culmination of 3 years of intensive study, hard work, and input from local governments, geological and environmental scientists, and the residents of the area in question. The PEIS concluded that just over 2,000,000 acres of the most geologically viable oil shale land was suitable for application for commercial leasing. Political opponents of oil shale development were unhappy with this result and sued the Department of the Interior. The product of the resulting settlement is this new PEIS, the preferred alternative, which cuts the acreage available for leasing by over 70% and limits those leases to RD&D only.
#1])>
<([#2 [*2.1.1*] The new PEIS provides disincentives to commercialization and economic development. This
makes absolutely no sense at a time when fuel prices are rising and America is seeking ways to cut its dependence on foreign oil. Unemployment rates remains unacceptably high, a problem that could be directly addressed by the original PEIS. With tremendous advances in responsible oil shale recovery technology, the industry is poised to take the next step, only to find the wall of government bureaucracy in front of it.
Adopting Alternative 1 for this PEIS, and keeping in place the findings of the 2008 study, would go a long way in removing this wall and bring jobs to the Western Slope. I would ask the BLM to please consider this, to not make policy at the behest of environmental extremists, and put the needs of the people of Colorado first.
#2])> Ray Scott
State Representative HD54

OSTS_144
Organization: Kari Harmon
Received: 5/2/2012 12:00:00 AM
Commenter1: Kari Harmon - Grand Junction, Colorado 81504 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/18/2012 12:00:00 AM
Attachments: OSTS2012D00145.htm (OSTS_144-59272.htm Size = 1 KB)
OSTS_144_Harmon_Mail_OSTS2012D00145.pdf (OSTS_144-59271.pdf Size = 93 KB)
Submission Text
See Attachment.
Argonne National Laboratory
9700 S. Cass Ave
EVS/240

Argonne, IL 60439
RE: 2012 Oil Shale/Tar Sands Programmatic Environmental Impact Statement.
To whom it may concern,
<([#1 [*9.8*] To the extent that this PEIS is valid, I would like to express my support for Alternative 1, and urge the BLM to
do the same.
I phrase it in such a way, because I believe that there was absolutely no legitimate reason to revisit the PEIS
that was completed in 2008 following the input from many experts, local governments, and the community. A
frivolous lawsuit leveled by one particular group unhappy with the outcome is not sufficient reason to waste tax
payer's money, and impose further delays on an industry and the region it supports, when there has been no
new information come to light to support such a drastic move. **#1])>**
<([#2 [*2.1.1*] That said, Alternative 1, which will restore the Record of Decision arrived at from the 2008 PEIS, is the only
logical, and moral choice. The excessive land restrictions and exclusion of commercial leasing prescribed in the
Preferred Alternative are not decisions based on sound, un-biased scientific analysis but instead are the product
of a friendly legal settlement with a special interest group. This is not the way public policy should be decided in
this country.
Commercial oil shale development is critical to the economic well being of the Western Slope, and to the nation
at large. It is an immense energy resource that can supply our needs for many, many years to come, and provide
growth and good paying jobs to an area that is suffering tremendously from the ongoing recession. There is no
question, of course, that oil shale is a complex resource that require time and cutting-edge technology to bring
on-line, but that is all the more reason to stop the endless delays and restrictions. The ingenuity inherent in the
American private sector will find a way to produce this safely, responsibly, and profitably, if only it is allowed to
do so. Recent developments suggest the industry may be at that point now, and Alte1·nativel is the only option
on the table that will allow this industry, and this region, a future. **#2])>**
Yours very sincerely,

OSTS_145
Organization: Eric Dougherty
Received: 5/4/2012 12:00:00 AM
Commenter1: Eric Dougherty - Grand Junction, Colorado 81506 (United States)
Organization1:
Commenter Type: Member of the Public

Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/18/2012 12:00:00 AM
Attachments: OSTS2012D00146.htm (OSTS_145-59274.htm Size = 1 KB)
OSTS_145_Dougherty_Mail_OSTS2012D00146.pdf (OSTS_145-59273.pdf Size = 67 KB)
Submission Text
BLM 2012 OS/TS PEIS
Argonne National laboratory
9700 S. Cass Ave
EVS/240
Argonne, ll60439
To whom it may concern,
<([#1 [*9.8*] I appreciate the opportunity to comment on this important issue, although I find it appalling that
this is even coming up again. A thoroughly prepared, well-thought-out EIS was completed only a few short years ago, in 2008. There have been no fundamental changes, new studies, or any information at all that would justify spending taxpayer money on redoing the PEIS. Nevertheless,
because an extreme environmentalist group sued the government over the outcome, the BLM saw
fit to do just that.
In doing so, they kowtowed to the "green" lobby, by agreeing to cut the available acreage previously set aside for potential commercial oil shale leasing, from 2,017,714 acres to 461, 965, and not allowing commercial leases. **#1])> <([#2** [*9.6.1*] Additionally, the requirement to first demonstrate a viable
production technology to the government before being able to convert up to a commercial lease is a requirement not imposed on any other industry; certainly not the wind and solar industries, for example. **#2])>**
<([#3 [*2.1.1*] I strongly recommend adoption of Alternative 1 as the BLM's preferred alternative, keeping the
land use plans as determined in the 2008 PEIS. **#3])>**

OSTS_146
Organization: Jeffery Welch
Received: 5/4/2012 12:00:00 AM
Commenter1: Jeffery Welch - Grand Junction , Colorado 81507 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/18/2012 12:00:00 AM

Attachments: OSTS2012D00147.htm (OSTS_146-59276.htm Size = 1 KB)
OSTS_146_Welch_Mail_OSTS2012D00147.pdf (OSTS_146-59275.pdf Size = 65 KB)
Submission Text
See Attachment.

Bureau of Land Management
2012 OS/TS PEIS
Argonne National Laboratory
9700 S. Cass Ave
EVS/240
Argonne, IL 60439
To whom it may concern,
<([#1 [*2.1.1*] The benefits of allowing a commercial oil shale industry in the western United States far outweigh any
potential environmental costs. The national benefits are obvious; tapping the 4 trillion barrels of oil- at least
500,000,000,000 of which are estimated as recoverable - would be a huge leap towards American energy
independence. Additionally, having such a prolific domestic source of oil would help level and stabilize gas
and other fuel prices.
At the local level, oil shale will bring jobs and income to a very hard hit part of the nation.
The environmental impacts will be minimized largely by processes currently in place. The NEPA analysis
that will need to be done on each lease will ensure that environmental issues and concerns are adequately
dealt with.
I implore the BLM to take a hard look at this PEIS, and look at it from a cost/benefits analysis standpoint; I
am convinced that if you do, you will arrive at the same conclusion as your agency did four years ago, and
keep land available for commercial leasing opportunities. To that end, I support Alternative 1, and urge you
to do the same. **#1])>**
Cordially,
--

OSTS_147
Organization: Craig Springer
Received: 5/4/2012 12:00:00 AM
Commenter1: Craig Springer - Grand Junction, Colorado 81505 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:

Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/21/2012 12:00:00 AM
Attachments: OSTS2012D00148.htm (OSTS_147-59279.htm Size = 1 KB)
OSTS_147_Springer_Mail_OSTS2012D00148.pdf (OSTS_147-59278.pdf Size = 128 KB)
Submission Text
See Attachment.

<([#1 [*2.2*] I have a number of concerns regarding this PEIS I would like to share.

The first involves the amount of land taken off the table in the preferred alternative. The 2008 PEIS identified a little
more than 2 million acres for potential oils shale leasing; the current preferred alternative cuts that down by almost
8o%. This drastically reduced acreage is then made even more unattractive to investors by being scattered over a large
area, in small, segregated parcels. Moreover, much of this newly-excluded land is shut down on the basis of undefined
Sage Grouse habitat, lands once considered for ACEC designation that are no longer, and lands that the BLM
determines to have "wilderness characteristics'', in spite of Congress last year passing a spending moratorium that
prohibited the BLM from using this designation as an end-run around Congressional authority to alone designate
wilderness areas. **#1])>**

<([#2 [*9.8*] My second concern involves the manner in which this PEIS came into being. The previously mentioned 2008 PEIS
was an extensively researched and prepared study; the 2012 PEIS is a complete re-start of this effort, for no good
reason. There has been no new infom1ation come about between 2008 and now, that would justify spending tax
dollars re-doing the PEIS, only a settlement of a lawsuit brought against the DOI by radical environmentalists. This
PEIS is solely the product of that settlement, which to me is a very corrupt way of doing business.
#2])>
<([#3 [*1.1.1*] Third, I am concerned about when the public comment period ends in relation to the release of related, relevant
information, including the Sage Grouse habitat designation, and the new oil shale leasing regulations coming out on
May 15th. I would ask that he public comment period be extended at least 30 days to accommodate for this. **#3])>**

<([#4 [*3.10.3*] Finally, my greatest concern is with the Jack of attention given to the socio-economic impacts of the Preferred
Alternative. While a fairly detailed projection was provided for the job creation, income, and

housing impacts of
Alternative 1, there was no similar analysis done for 2 or 2b (the Preferred Alternative.) Considering the enormous
benefits that the entire region will enjoy should a commercial oil shale industry emerge, and the fact that
unemployment and reduced revenue is a huge continuing problem for the Western Slope, one would think that an full
evaluation of the comparative in1pacts of the various alternatives would be a given. **#4])>**

<([#5 [*2.1.1*] With all of these factors in mind, I have no choice but to recommend Alternative 1 as the final option for the BLM in its deliberations. **#5])>**

OSTS_148
Organization: Richard Schoenradt
Received: 5/4/2012 12:00:00 AM
Commenter1: Richard Schoenradt - Grand Junction, Colorado 81501 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/21/2012 12:00:00 AM
Attachments: OSTS2012D00149.htm (OSTS_148-59281.htm Size = 1 KB)
OSTS_148_Schoenradt_Mail_OSTS2012D00149.pdf (OSTS_148-59280.pdf Size = 88 KB)
Submission Text
See Attachment.

<([#1 [*6.2.2*] [*6.3.2.1*] [*6.3.5*] A few facts about oil shale should serve to make the direction your agency should take a
little more clear.

1) The technology is available to economically develop this resource. Oil shale is already being produced commercially in China, Estonia, and Brazil, and the same processes being used in Estonia are ready for adaptation in the Utah portion of the field. And Shell has demonstrated the viability of its process by producing 117,000 barrels of oil from its RD&D lease in Colorado. To the extent that the technology is behind, it is only because of disincentives inflicted by government- why would anyone invest in R&D if the opportunity to go commercial is uncertain, or denied?

2) Energy efficiency. Oil shale is an efficient source, providing more energy than it takes to produce it. Depending on the development process utilized, the efficiency ratio is between 1:3 and 1:6, units of energy consumed to units produced.

3) Water usage. Oil shale development will not take up near the water resources claimed by its opponents. Independent and government studies confirm that a large

scale oil shale industry will use only a fraction of the water available, less even than some other forms of energy (biomass, for example, which relies on irrigated corn). Also, many new processes use even less water-some almost none.

4) Environmental damage. Opponents like to paint oil shale development as whole-scale strip mining-in fact most of the technologies being perfected are in-situ, meaning they occur underground, more like traditional drilling. Also, the industry in the U.S. has a long history of good environmental stewardship, many of the best practices having been developed and instituted by the industry itself.
#1])>
<([#2 [*2.1.1*] The fact is that oil shale IS more expensive and time-consuming to produce; but that
does not mean that it is impossible, or impracticable. It DOES suggest that if we as a nation and a region wish to benefit from this resource, we had better start planning for it now. Alternative 1 offers the best option for accommodating such planning, and should be the Alternative adopted by your agency. **#2])>**

OSTS_149
Organization: Randy Baumgardner
Received: 5/3/2012 12:00:00 AM
Commenter1: Randy Baumgardner - Cowdrey, Colorado 80451 (United States)
Organization1:
Commenter Type: Elected Official
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/21/2012 12:00:00 AM
Attachments: OSTS2012D00150.htm (OSTS_149-59283.htm Size = 1 KB)
OSTS_149_Baumgardner_Mail_OSTS2012D00150.pdf (OSTS_149-59282.pdf Size = 170 KB)
Submission Text
See Attachment.

<([#1 [*2.1.1*] As a resident and Representative of Northwest Colorado, where a great deal of the land under consideration in this PEIS is located, I would like to support the adoption Alternative 1, the "no-action" Alternative which would restore the findings of the initial PEIS, completed in 2008.

I embrace an "all-the-above" strategy when it comes to energy development in this country, and I believe that oil shale
can be an important part of that strategy. Estimates by the U.S. Geological Survey place the amount of oil in place in
the oil shale region at around 4 Trillion barrels- well more than the reserves of the entire Middle East. Allowing
American companies to tap this resource would create hundreds of new, good paying jobs for northwestern Colorado,

and provide new revenues to local, state, and federal governments for education, public safety and other important
projects. It will also help make America more energy self-sufficient, and no longer reliant in any way upon volatile,
oftentimes tyrannical regimes, many of which wish our country and her people harm.

The 2008 PEIS, which was completed after three years of solid effort on the part of many people, organizations, and
agencies, identified 2,017, 714 acres of geologically prospective oil shale land as being suitable for application for
leasing. Each of those individual lease applications would then undergo a full NEPA analysis, making sure that nothing
was being done that would harm critically sensitive environment. This approach offered the most opportunity and
flexibility to the oil shale industry for long term planning purposes, while utilizing effective, existing processes to
protect the land, water, air, and wildlife.

This approach unleashes the entrepreneurial spirit of the American people, and the power of innovation and invention
that has always permitted Americans to accomplish any goal they set their minds to. All too often, government, albeit
with the best of intentions, only stifles that spirit, and mutes that power-- more often than not resulting in
consequences more damaging than what they had hoped to remedy. I unfortunately find that to be the case with the
land allocation alternatives in the 2012 PEIS, which severely limit land access, and place unreasonable restriction on
the commercialization of this strategic resource. **#1])>**

<([#2 [*9.8*] Just as troubling to me and many of my constituents, is the reason why we are
spending taxpayer money to re-do the PEIS-a settlement by the Department of the Interior in response to a lawsuit by a special interest group representing a
minority of the population. I am forced to ask myself, how can the federal government re-do the same study, talk to the
same people, and analyze the same data as they did only four years ago, and come up with different results? This is an
all-too-common case of government pending money it doesn't have on something it doesn't need to spend money on. **#2])>**
<([#3 [*9.2.1*] And finally, I am concerned with the legality and propriety of this new PEIS; first, by not allowing for a distinct
commercial leasing track, the Land Allocation Alternatives would seem to be in contravention of the Energy Policy
Act of 2005. *Also,* in making unavailable for lease application lands with what the document states are "lands with
wilderness characteristics", the BLM seems to be attempting to circumvent Congress, which

defunded Secretarial
Order 331 0 which would have granted the BLM the right to designate such areas, a right and duty which falls solely to
the Congress. I am certain this is not the case, and trust this was simply an oversight on the part of the BLM.
#3])>
<([#4 [*2.1.1*] Alternative l, and the 2008 PEIS whose findings it reinstates, offers the best avenue for adopting a truly "All The Above" energy strategy, creating much needed wealth and job growth to get this economy moving again, and putting
America on the path to energy independence, without causing harm to our environment. I hope and trust that the BLM
will adopt this alternative as the most responsible, pragmatic, and balanced option available
#4])>

OSTS_150
Organization: Sweetwater County Board of County Commissioners, Wally Johnson
Received: 4/19/2012 12:00:00 AM
Commenter1: Wally Johnson - Green River, Wyoming 82935 (United States)
Organization1: Sweetwater County Board of County Commissioners
Commenter Type: Coop Agency - Local Govt
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/21/2012 12:00:00 AM
Attachments: OSTS2012D00151.htm (OSTS_150-59285.htm Size = 1 KB)
OSTS_150_Sweetwater_Cty_Mail_OSTS2012D00151.pdf (OSTS_150-59284.pdf Size = 448 KB)
Submission Text
See Attachment.

NOTE: The attachment includes a resolution which was binned as part of Web submittal 50255

<([#1 [*2*] Sweetwater County hereby formally submits to the Bureau of Land Management Sweetwater County Resolution
12-04-CC-02. By this Resolution, Sweetwater County joins other counties in Wyoming, Utah and Colorado in
opposing the BLM's OSTS PEIS for lands administered by the BLM in Colorado, Utah and Wyoming .

Sweetwater County opposes the OSTS PEIS for the purposes of preserving the mineral based economy of the
economy of the tri-state region, and for ensuring that the BLM's OSTS PEIS National Environmental Policy Act
(NEPA) review process is fair, allows enough for review and is in compliance with all applicable

laws.
#1])>

OSTS_151
Organization: Rio Blanco County Board of County Commissioners, Kai Turner
Received: 4/16/2012 12:00:00 AM
Commenter1: Kai Turner - Meeker, Colorado 81641 (United States)
Organization1: Rio Blanco County Board of County Commissioners
Commenter Type: Local Government
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/21/2012 12:00:00 AM
Attachments: OSTS2012D00152.htm (OSTS_151-59287.htm Size = 1 KB)
OSTS_151_Rio_Blanco_Cty_Apr_16_Mail_OSTS2012D00152.pdf (OSTS_151-59286.pdf Size = 124 KB)
Submission Text
See Attachment.

<([#1 [*1.1.1*] As the Commissioners have been preparing their comments for the 2012 OSTS PEIS it has come to our
attention that the Draft BLM Oil Shale Regulations are not to be published until May 15, 2012. That date
is almost 2 weeks after the aforementioned comments are due and yet it would seem that the OSTS PEIS
and draft Oil Shale Regulations are intertwined and should be reviewed simultaneously.

Our jurisdiction includes the richest and most promising of all the oil shale deposits within the Green River Formation and it seems most likely, given the proportion of RDD leases being developed in our county, that commercial leasing interest will be focused here:

In the interest of developing sound public policy surrounding the future of this resource we respectfully request that the comment period for the 2012 OSTS PEIS be extended for 90 days so as to allow time for us and our staff to properly review both documents together. We believe our request to be consistent with the goals of the NEPA process and will result in a better final product for each document.
#1])>

OSTS_152
Organization: Sunewin Energy, Tom Schwerin
Received: 5/4/2012 12:00:00 AM
Commenter1: Tom Schwerin - Snowmass, Colorado 81654 (United States)
Organization1: Sunewin Energy
Commenter Type: Private Company
Classification: none

Submission Category: Comment Form
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/21/2012 12:00:00 AM
Attachments: OSTS2012D00153.htm (OSTS_152-59289.htm Size = 1 KB)
OSTS_152_Schwerin_CommentForm_Mail_OSTS2012D00153.pdf (OSTS_152-59288.pdf Size = 220 KB)
Submission Text
See Attachment.

Appendix to PEIS Written Comment Form:

<([#1 [*6.3.1*] Please consider by December,2012 publishing federal regulations and a call for a Research,
Demonstration and Development Lease for exclusively underground mining seeking to extract 15 gallon
per ton kerogen shale in the Piceance Basin, Colorado. The size below grade should be several surface
sections.

NO strip mining in such an RD&D Lease.

NO in-situ retorting.

NO surface drilling or drilling rigs used for developing an in-situ retort system for liquid extractions.

NO surface water requirements. My plans are to dewater the oil shale underground leaving the local
water on site.

NO surface protrusions except OSHA approved ventilations ducts and employee emergency exits. The
3% grade rail entrance will be the only indication of underground RD&D work.

Think Underground Mining of salt or potash.

These mines have evolved into large scale underground rooms with 20 foot ceilings suitable for large
scale equipment and direct underground ore loading onto all-electric trains. Specifically, the plan is to
load 220 railroad gondola cars underground with dewatered oil shale rock on standard rail tracks for an
all-electric delivery to Utah with union labor. In Utah, a central 'special purpose' refinery produces only

high quality jet propulsion fuel, no gasoline. It also has ultra-low refinery carbon emissions.

The RD&D lessee is required to post with the US Treasury $1.6 billion of AA rated bonds in exchange for
a BLM supervised lease issued by the US Treasury. Here, the lessee needs to amortize its long term costs
and furnish a $1.6 billion performance fee.

Again, no surface drilling or surface modifications are needed nor any subsurface retorting.
#1])>

OSTS_153
Organization: Brenda Sloan
Received: 5/2/2012 12:00:00 AM
Commenter1: Brenda Sloan - Grand Junction, Colorado 81501 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/21/2012 12:00:00 AM
Attachments: OSTS2012D00154.htm (OSTS_153-59291.htm Size = 1 KB)
OSTS_153_Sloan_Mail_OSTS2012D00154.pdf (OSTS_153-59290.pdf Size = 76 KB)
Submission Text
See Attachment.

<([#1 [*9.8*] The current re-do of the BLM's 2008 Programmatic Environmental Impact Statement regarding oil shale development, is a massive waste of tax-payer's dollars, and unreasonably restricts development of a resource that dwarfs the oil reserves of the middle east. The BLM's preferred land use alternative, in the 2012 re-do, cuts by nearly 8o% the amount of land left available for oil shale companies to apply for commercial leases. This flies in the face of the three years of study and effort that went into preparing an oil shale plan in 2oo8. **#1])>**

<([#2 [*2.1.1*] The environmental lobby and their friends in the current White House seem intent on
using our own tax dollars to make sure that oil shale forever remains unavailable to Americans, at the cost of jobs and energy security. For this reason, I support Alternative 1, as providing a more reasonable, forward-looking option. **#2])>**

OSTS_154
Organization: Lois Kiefer
Received: 4/15/2012 12:00:00 AM
Commenter1: Lois Kiefer - Grand Junction, Colorado 81504 (United States)
Organization1:

Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/21/2012 12:00:00 AM
Attachments: OSTS2012D00155.htm (OSTS_154-59293.htm Size = 1 KB)
OSTS_154_Kiefer_Mail_OSTS2012D00155.pdf (OSTS_154-59292.pdf Size = 92 KB)
Submission Text
See Attachment.

<([#1 [*2.2*] The latest draft of the oil shale / Tar Sands Programmatic Environmental Impact Statement is a sad example of environmental obstructionism at its worst. The initial PEIS completed in 2008 was a very well-studied and forward looking document that opened 2,000,000 acres for application for commercial oil shale leasing. This put in place process for orderly expansion of oil shale into a commercial industry, while utilizing the processes in place to ensure proper environmental protections.

It did not, however, fit with the extreme anti-development lobby, who sued, and under a friendly settlement made sure a few more millions of our tax dollars were spent to totally re-do the PEIS. Despite using the exact same date, this latest version comes to a completely different outcome, as Alternative 2b (the Preferred Alternative) reduces the amount of land available for leasing to a few hundred thousand acres - roughly 20% of what the 2008 PEIS left available. **#1])>**

<([#2 [*2.1.1*] Alternative 1 would leave the results of the 2008 PEIS in place, and allow for commercial development to begin on the approximately 4 trillion barrels of oil from the oil shale deposits in our region. With gas prices constantly rising, and the international situation increasingly unstable, it only makes sense to permit a domestic energy industry of this magnitude.

As long-time residents, we do not wish to see harm come to the environment of this area. we love he natural beauty of western Colorado, and regularly take our kids hunting and camping in the area. We want as much as anyone to make sure that this will be available to them when they are grown.

At the same time, we realize that that does not mean that development cannot or should not occur. We are also keenly aware of the pain inflicted on communities when economic development is halted by groups with a very narrow agenda.

Please adopt Alternative 1 as being the only afforded option to balance the needs of environmental protection, and crucial economic development.
#2])>

OSTS_155

Organization: Kevin McCarney
Received: 4/24/2012 12:00:00 AM
Commenter1: Kevin McCarney - Clifton, Colorado 81520 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/21/2012 12:00:00 AM
Attachments: OSTS2012D00156.htm (OSTS_155-59295.htm Size = 1 KB)
OSTS_155_McCarney_Mail_OSTS2012D00156.pdf (OSTS_155-59294.pdf Size = 93 KB)
Submission Text
See Attachment.

<([#1 [*6.3.5*] [*6.2.2*] [*6.3.2.1*] Opponents of oil shale development are dusting off some commonly used fallacies in an attempt to coerce your agency into adopting a land allocation plan that is over1y restrictive and postpones commercial development of this valuable resource for years.

Among the falsehoods is the one that the technology is not available to produce oil shale on a profitable, commercial basis.
In fact, this technology is not only available, but is in use in several countries, including China and Estonia. This is the same
type of technology and process that could be used in the Utah portion of the vast oil shale lands. Here in Colorado,
companies such as Shell have proven that their processes work, by actually managing to produce sizable quantities from
their RD&D projects. They now need to be able to expand those operations in order to be able to make the transition to
commercial-level production. Aside from Alternative 1, the current PEIS does not allow for this to take place.

Low energy efficiency is another anti-development myth. Oil shale is actually quite efficient, producing between 3 and 6 units
of energy to each unit that it uses in its extraction and processing.

Excessive water usage is also often claimed by the opponents, despite evidence to the contrary. Not only do most
companies currently involved in oil shale research already own the water rights they require, but the Federal Government's
own estimate, as compiled by the GAO, predict that there is more than sufficient water to sustain a 500,000 barrel a day
industry. Some oil shale extraction processes are being developed that actually use very little water. **#1])>**

<([#2 [*2.1.1*] These faulty assumptions, mainly derived from very loose interpretation, obsolete information, or political agendas, should not be the basis for formulating a land management plan that will have a huge impact on the regional and national economy. Alternative 1 , which was based on solid scientific information compiled between 2005 and 2008, should be the alternative chosen by the BLM to manage oil shale production in the near to long term.

I am a former small business owner who knows all to well the impacts that an arbitrary political decision can have on the
economy. I am personally asking your group not to give in to the scare tactics of the environmental lobby; to decide for jobs
and the economy of Western Colorado and Eastern Utah.
#2])>

OSTS_156
Organization: Sandy Peeso
Received: 4/15/2012 12:00:00 AM
Commenter1: Sandy Peeso - Grand Junction , Colorado 81504 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/21/2012 12:00:00 AM
Attachments: OSTS2012D00157.htm (OSTS_156-59297.htm Size = 1 KB)
OSTS_156_Peeso_Mail_OSTS2012D00157.pdf (OSTS_156-59296.pdf Size = 100 KB)
Submission Text
See Attachment.

<([#1 [*2.1.1*] Thank you for this opportunity to offer input into the 2012 Oil Shale PEIS process. I support Alternative 1 (no action), and would urge the BLM to do the same. This alternative maintains the findings of the initial PEIS, completed in
2008, which made available what I believe to be a suitable amount of land to encourage and enable private,
commercial oil shale development.

Businesses need options, flexibility and reasonable assurances of future growth potential in order to plan, forecast, and
invest in a given venture or area The 2008 Record of Decision provided all of that, and in a way that ensured
protection of the region's air, soil, water, and any fragile habitats and ecosystems. **#1])>**

<([#2 [*2.2*] This new PEIS, however, undid most of the hard work that went into the 2008 project, and made permanently
unavailable almost 90% of the land (in Colorado) that was previously identified. The BLM's

preferred alternative, 2b,
along with Alternative 4b, would also prohibit the issuance of commercial leases, until such time as the company
applying for the lease demonstrated their production technology to the satisfaction of a government official. Not only
does no other sector of any energy-related industry need to do such a thing, but the standards for 'passing' such
technology are arbitrary and not published.

Finally, the lands excluded in this preferred alternative include land that was once considered for designation as an
ACEC, but has since been determined not to be; lands the BLM designates as having "wilderness characteristics",
despite the fact that only Congress can make such a designation; and potential Sage Grouse habitat, even though the
location of that habitat is still under review. **#2])>**

<([#3 [*1.1.1*] It is also worth noting that a new set of leasing regulations will be coming out on May 15, nearly 2 weeks after the public comment period ends. I would suggest strongly that the comment period be extended 30 days to accommodate
for that release. **#3])>**

In closing, I wish to thank you and your office again, and once more urge you to select Alternative 1.

OSTS_157
Organization: Mardi Anson
Received: 5/2/2012 12:00:00 AM
Commenter1: Mardi Anson - Craig, Colorado 81626 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/21/2012 12:00:00 AM
Attachments: OSTS2012D00158.htm (OSTS_157-59299.htm Size = 1 KB)
OSTS_157_Anson_Mail_OSTS2012D00158.pdf (OSTS_157-59298.pdf Size = 85 KB)
Submission Text
See Attachment.

<([#1 [*11.2*] I am writing to express my disappointment over the BLM's Preferred Altetnative in the current PEIS. Reducing the land
available for application for potential leasing to a few thousand acres, on small, widely dispersed parcels, is a clear signal to the
oil shale industry that the BLM does not support commercial development- not· apparently the

jobs and economic opportunity
that comes with such development Oil shale is an extremely valuable and rich resource, and holds up to 4 trillion barrels of
recoverable oil -and perhaps more. The United States government should be encouraging the production of this as a key to
long-term American energy independence. Instead, the government seems to again be influenced by the extreme fringe of the
environmental movement, and is promoting policies that would keep this resource from being developed for years, perhaps
ever.

In addition to being a commodity of national importance, oil shale represents an incredible opportunity for the people of this
region. Allowing commercial development, as called for in the 2005 Energy Policy Act, would bring jobs to the region that are
sorely needed. It seems almost every day that we see another local business shut its doors or a family move to another state
because there is such limited job growth here. The saddest part of that is that it is entirely unnecessary, given the amount of
natural resource contained in the area. More often than not, it is government, doing the bidding of the "green" movement,
which prevents the safe, responsible development of these resources. **#1])>**

<([#2 [*2.1.1*] We are not asking for any industry to receive handouts or subsidies; we do not want the government picking winners and
losers. We simply ask that the roadblocks be removed, so that a viable oil shale industry can be allowed to proceed and bring
with it the many benefits of a healthy, stable, long term industry. The only Alternative in the current PEIS that does this is
Alternative 1, which I recommend to your office to be the final selection. **#2])>**

OSTS_158
Organization: Ruth Ehlers
Received: 5/2/2012 12:00:00 AM
Commenter1: Ruth Ehlers - Grand Junction, Colorado 81507 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/21/2012 12:00:00 AM
Attachments: OSTS2012D00159.htm (OSTS_158-59301.htm Size = 1 KB)
OSTS_158_Ehlers_Mail_OSTS2012D00159.pdf (OSTS_158-59300.pdf Size = 67 KB)
Submission Text
See Attachment.

<([#1 [*2.1.1*] Thank you for this opportunity to provide comment on this PEIS.

I would like to support Alternative 1, and urge the BLM to do the same. This Alternative keeps a sufficient amount
of land available for leasing to help foster a commercial oil shale industry.

Such an industry would provide increased employment in a region that has been struggling under 9- 10%
unemployment rates for the past several years. In addition, oil shale is an important resource that can add
significantly to the U.S. energy mix, help stabilize fuel prices, and wean us off of overseas oil.

Please adopt Alternative 1 as the final product of the 2012 Oil Shale PEIS. **#1])>**

OSTS_159
Organization: Ed Stephens
Received: 4/20/2012 12:00:00 AM
Commenter1: Ed Stephens - Grand Junction, Colorado 81507 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/21/2012 12:00:00 AM
Attachments: OSTS2012D00160.htm (OSTS_159-59303.htm Size = 1 KB)
OSTS_159_Stephens_Mail_OSTS2012D00160.pdf (OSTS_159-59302.pdf Size = 92 KB)
Submission Text
See Attachment.

<([#1 [*2.1.1*] [*6.2.2*] [*6.3.2.1*] [*6.3.5*] I am writing to offer my input on the 2012 Oil Shale PEIS. I would specifically like to address a
number of fallacies that opponents to oil shale are putting out there, and that this PEIS seems to validate.

First, in terms of water usage, oil shale production will use far less than some would have us believe. There are, in fact, some processes that use little to almost no water at all. Further, the GAO estimates that there is sufficient water available to comfortably support a 500,000 barrel a day industry, far beyond what any accurate estimates predict the industry will actually use. Every company currently involved in oil shale says that their water consumption will be in the range of 1 to 3 barrels of water used per barrel of oil produced, an amount which can easily be accommodated.

Second, is the argument that oil from shale is not efficient. The fact is that oil shale development produces far more energy than it consumes, to the tune of 3:1 - 6:1.

Finally, is the fallacy that oil shale development technology remains years behind. In fact, oil shale is being produced commercially in several places around the world. Shell recently produced several thousand barrels of oil off one of its RD&D leases; the technology is clearly there, and improving every day.

And finally is the fallacy that oil shale development will destroy the environment. This is nonsense, and is reminiscent of similar arguments against natural gas drilling in the area. There are several in -situ processes that require no surface mining, and the industry has a proven track record, and vested economic interest, in being good stewards.

With this in mind, I recommend Alternative 1, which does by far the best job of permitting this industry
to develop and create jobs and energy.
#1])>

OSTS_160
Organization: Jay Harmon
Received: 5/3/2012 12:00:00 AM
Commenter1: Jay Harmon - Grand Junction, Colorado 81504 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/21/2012 12:00:00 AM
Attachments: OSTS2012D00161.htm (OSTS_160-59306.htm Size = 1 KB)
OSTS_160_HarmonJ_Mail_OSTS2012D00161.pdf (OSTS_160-59305.pdf Size = 108 KB)
Submission Text
See Attachment.

<([#1 [*2.1.1*] This letter is in response to the 2012 draft PEIS for oil shale. I wish to register my opposition to the BLM's Preferred Alternative, and the other Land Allocation Alternatives in the document, and express instead my support for Alternative 1, the No Action Alternative.

Our nation is experiencing ever increasing fuel prices and an energy policy that has us reliant on hostile foreign
governments for a good deal of our oil. Meanwhile, this region holds as much as 4 trillion barrels of oil in place, according to
the U.S. Geological Survey, and perhaps even more. This is more oil than in the entire Persian Gulf, right in our backyard.
#1])>
<([#2 [*2.2*] [*9.2.1*] So it was disappointing that the BLM chose as their Preferred Alternative, one that takes the acreage made available for oil shale commercial leasing in the original2008 PEIS, and cuts it from 2,017, 714 acres, to a mere 461,965 acres- a reduction of77%. Moreover, the

acreage that is left is spread out in small, isolated pockets. It would also specifically not allow the issuance of commercial leases, until such time as the applicant demonstrated a viable recovery technology- a requirement that no other segment of the energy sector is subjected to. This is in violation of the 2005 Energy Policy Act, which explicitly called for a separate and concurrent commercial development program for oil shale. Also, by excluding lands that exhibit "wilderness characteristics" from being available for leasing, the BLM appears to be in violation of a Congressional spending moratorium from April21, 2011, that defunded the Secretary of the Interior's Order 3310. **#2])>**

<([#3 [*9.8*] In addition, I feel the need to comment on the reason for redoing this PEIS in the first place; as part of a settlement over
lawsuits directed at the Department of the Interior by certain extremist groups who were unhappy with the outcome of the
three-year long 2008 PEIS. I think it sets a bad precedent for a particular interest group to be able to force the government
to spend more money that it does not have to redo a major undertaking such as this, without any new information having
been developed, just to appease that group. No unelected, unaccountable special interest organization should have that
much power over critical national policy, and the national purse. This is another reason that the BLM should at least adopt
the Alternative that reinforces the results of a lengthy, professionally done process that included thousands of hours of input
from experts, scientists, local governments, and the people themselves. **#3])>**

Please adopt Alternative 1, and allow commercial oil shale development to take place responsibly in western Colorado.

OSTS_161

Organization: Shannon Rogers
Received: 5/3/2012 12:00:00 AM
Commenter1: Shannon Rogers - Fruita , Colorado 81521 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/21/2012 12:00:00 AM
Attachments: OSTS2012D00162.htm (OSTS_161-59308.htm Size = 1 KB)
OSTS_161_Rogers_Mail_OSTS2012D00162.pdf (OSTS_161-59307.pdf Size = 107 KB)
Submission Text
See Attachment.

<([#1 [*2.1.1*] I am supporting Alternative one in the current oil shale PEIS, that calls for no action from the original 2008 one. The

preferred alternative in this PEIS poses a couple of problems for me as a Western Slope resident. Most important is
the apparent lack of concern over economic effects and job creation. The Preferred Alternative drastically cuts
acreage available for oil shale leasing, and will greatly discourage and even actively prevent commercial
development of oil shale. This development would create hundreds of jobs in the region, both directly and indirectly.
The income generated from these jobs will help backfill the shortfalls in local and state funding of infrastructure,
schools and other services, and spur further economic activity in a region experiencing over 10% unemployment.

The arguments against commercial oil shale development that led to this new PEIS are faulty; Leaving land open to
be available for them to apply for leases and expand their operations does not automatically mean that the
environment will be put at risk for the sake of these companies. The industry has a vested interest in looking after
the land on which they operate, and in being good stewards of the environment. The energy industry in our area in
fact has an excellent track record of doing so. The water issues that many opponents are so concerned about are also
over-stated. Many of the industry's established production technologies use very little water, and for the ones that
use more, most of the necessary water rights are already owned by companies seeking to commercially develop this
resource, and are accounted for. In fact, the oil shale industry will use considerably less water than some 'renewable'
energies, such as bio-mass from corn which requires irrigation.

The technology is available, and improves every day, to produce oil shale. They are already commercially
developing it in Estonia, China, and elsewhere. Even here, Shell successfully produced several thousand barrels of
oil just off one of its RD&D leases, and has done so with the utmost care being given to the environment. Each of
the leases that would be allowed for under the Alternative 1 would be subject to NEP A analysis, providing a further
level of protection. There is no excuse for the BLM to stand in the way of this industry from creating jobs and
prosperity for western Colorado by adopting a more restrictive option.
#1])>

OSTS_162
Organization: Bill Aaslan
Received: 5/3/2012 12:00:00 AM

Commenter1: Bill Aaslan - , Colorado 81503 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/21/2012 12:00:00 AM
Attachments: OSTS2012D00163.htm (OSTS_162-59310.htm Size = 1 KB)
OSTS_162_Aaslan_Mail_OSTS2012D00163.pdf (OSTS_162-59309.pdf Size = 87 KB)
Submission Text
See Attachment.

<([#1 [*2.1.1*] ln regards to this PEIS, 1 support Alternative 1 as being the most economically sensible option available. The socio-economic benefits of oil shale are too great to ignore. ln terms of jobs alone, a commercial oil shale industry will directly create hundreds, in production operations, engineering, transport and logistics, directly-related construction, such as in-situ processing facilities, power plants and the like, hundreds more in operation of these facilities, and even more indirectly, through supporting industries, retail businesses, housing construction and so on. Much of the income from these jobs would be spent in the area, and some would go to local and state government in the form of taxes, providing money for schools, roads, and emergency services. Oil shale development would also provide a boost to non-related industries, such as tourism and recreation, and more people moved to the area, and more disposable income was generated to be able to pay for recreational activities.

On a national level, oil shale could scarcely be more important. With fuel costs rising on an almost daily basis, and the geo-political
situation getting progressively worse in the Middle East, America is, or soon will be, desperate to find ways to increase domestic sources of energy. Oil shale has the potential to do that, and to meet America's demands for energy for the foreseeable future, without having to rely on oil from unstable and hostile foreign markets.

Alternative 1 will keep 2 million acres of prime oil shale rich land available to the industry for lease application. Various processes already in place will ensure that environmentally fragile areas are adequately protected, and having a plan established for commercial development will provide local communities and municipalities the chance to prepare for the growth to come. This balanced method of addressing the issue of oil shale is the only option that makes sence from all angles, and should be adopted by the BLM in the final draft. **#1])>**

OSTS_163
Organization: William Burkett
Received: 5/3/2012 12:00:00 AM
Commenter1: William Burkett - Fruita, Colorado 81521 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none

Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/21/2012 12:00:00 AM
Attachments: OSTS2012D00164.htm (OSTS_163-59312.htm Size = 1 KB)
OSTS_163_Burkett_Mail_OSTS2012D00164.pdf (OSTS_163-59311.pdf Size = 71 KB)
Submission Text
See Attachment.

<([#1 [*1.1.1*] I am writing to advocate for two things in regards to this oil shale PEIS; the first is to extend the public comment
period at least 2 weeks beyond the date of the release of the new oil shale leasing regulations, which are due to
come out May 15th.

It seems only proper that sufficient time be allowed for interested persons to review these regulations before offering
comment on the PEIS and the various land allocation alternatives. **#1])>**

<([#2 [*2.1.1*] The second thing I ask is for the BLM to reconsider its Preferred Alternative, and instead select Alternative 1. The
Preferred Alternative, 2b, eliminates commercial leasing altogether, and takes far too much land off the table for any
kind of leasing. Alternative 1 would restore the findings of the 2008 PEIS, the information underlying it still being valid,
which would make just over 2,000,000 acres available for application to commercial leasing. It is important to note,
that not all of these acres would ever be developed; this simply allows companies a wider option of land from which to
apply for a lease. Each application would be vetted by the BLM, EPA, and other agencies, and any fragile
environmental features, terrain, or habitat would be duly protected. **#2])>**

In summary, please extend the public comment period sufficiently to allow review of all the pertinent information, and
in the meantime, consider Alternative 1 as your Preferred Alternative.

OSTS_164
Organization: Steven Smythe
Received: 5/3/2012 12:00:00 AM
Commenter1: Steven Smythe - Grand Junction, Colorado 81504 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail

Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/22/2012 12:00:00 AM
Attachments: OSTS2012D00165.htm (OSTS_164-59314.htm Size = 1 KB)
OSTS_164_Smythe_Mail_OSTS2012D00165.pdf (OSTS_164-59313.pdf Size = 107 KB)
Submission Text
See Attachment.

<([#1 [*11*] I want to convey my frustration with the current Draft PEIS for oil shale, and the manner in which it dismisses the
"people element" - the social and economic factors that should enter into any public policy decision of this
magnitude.

Energy is the lifeblood of Colorado's western slope, where much of the oil shale land is located. We not only
understand the importance of these resources to a functioning modem society, and what their extraction means to
the economic life of our local communities, we also know how to develop them in a way that is safe and respectful of
our natural environment. Anyone who has been to Craig knows how closely we depend on coal mining, and how
beautiful our landscape is, and how clean our air and water. There is no reason to suspect that we would deal with
our other natural resources any differently.

The new 2012 OS/TS PEIS contains land allocation alternatives that would suggest otherwise. Instead approaching
oil shale as the 2008 PEIS, and Alternative 1 that would implement it does, the BLM's preferred alternative, 2b, takes
a highly restrictive approach, cutting off over 1.5 million acres from potential leasing, that had previously been
determined acceptable. Alternative 3 goes even farther, by not allowing any development beyond the existing RD&D
leases.

The oil shale industry will never be able to establish itself and bring the job growth and economic development that it
promises, if it is kept perpetually in the research phase by the government. If the technology truly is not there, the
industry will not proceed; if it is there, then a process needs to be in place to allow orderly expansion and
commercialization. Only Alternative 1 does that.

I would ask the BLM to place some trust and faith in the people who live, work and raise their families in the areas

you are determining land access policies for. We have more than proven that we know how to care for what we have
been given, and simply ask the federa government to let us do it. **#1])>**

Thanks for the opportunity to offer comment on this important matter,

OSTS_165
Organization: Abbey Channel
Received: 5/3/2012 12:00:00 AM
Commenter1: Abbey Channel - Grand Junction, Colorado 81504 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/22/2012 12:00:00 AM
Attachments: OSTS2012D00166.htm (OSTS_165-59317.htm Size = 1 KB)
OSTS_165_Channel_Mail_OSTS2012D00166.pdf (OSTS_165-59316.pdf Size = 95 KB)
Submission Text
See Attachment.

<([#1 [*2.1.1*] I would first like to thank the BLM for extending the opportunity for public input into this important
matter. As a resident of the Western Slope, I would further like to take advantage of the opportunity to
express my support for the commercial development of oil shale in general, and for Alternative 1, the
no-action alternative, as described in the current 2012 Oil Shale PEIS.

The politics of oil shale development have been, and will continue to be debated for some time. However, the reality on the ground for the affected communities is that the socio-economic benefits,
the job growth, the income, and tax revenue that the commercialization of oil shale will bring are the
foremost concerns. It is a shame that the politicization of the process has had the effect of further delaying the establishment of an industry that bears such promise.

The PEIS completed in 2008 made available 2,000,000 acres for potential leasing; this is land that would
not necessarily be developed, as much of the land may be unsuitable economically for leasing, and each
lease would be subject to BLM assessment and approval prior to the lease actually being issued. This
would, however, maximize the opportunity for careful expansion and commercial development, and the

benefits that come along with it.

The new proposals for land allocation in the current PEIS, undertaken only as a result of litigation by
certain interest groups, would restrict the amount of land available for *application* for leasing, enough
so that some companies with an interest in developing and producing oil shale and bringing good jobs to
the region, would be forced to abandon their plans for Western Colorado and seek their success elsewhere.

We who live and raise our families in western Colorado are as much or more concerned than any over
the conservation and stewardship or our natural environment, in conjunction with our economic health
and future. We believe that the two goals are not mutually exclusive; we trust that the BLM can make
wise decisions regarding the approval of individual leases- we only ask that the BLM trust us enough to
keep in place the acreage deemed suitable for application 4 years ago.
#1])>

OSTS_166
Organization: R. Musser
Received: 5/3/2012 12:00:00 AM
Commenter1: R. Musser - Palisade, Colorado 81526 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/22/2012 12:00:00 AM
Attachments: OSTS2012D00167.htm (OSTS_166-59319.htm Size = 1 KB)
OSTS_166_Musser_Mail_OSTS2012D00167.pdf (OSTS_166-59318.pdf Size = 91 KB)
Submission Text
See Attachment.

<([#1 [*2.1.1*] I support Alternative 1 in the above referenced PEIS, and hope that the BLM will as well. The current Preferred Alternative
Is far too restrictive, not only in the amount of land that is has placed off limits to any consideration for leasing potential,
but also in the fact that it does not allow for commercial leases to be issued at all, Instead permitting only RD&D leases
until a viable technology is demonstrated by the lease holder. Part of the problem with this is that the acreage that is not

excluded from leasing is so small and in such remote areas, that commercial expansion would prove impractical, if not
Impossible. Even commercial expansion of existing RD&D leases would be severely limited, since the Preferred
Alternative puts most of the preference rights leasing areas around them off limits as well - in many cases, 100% of that
area.

This obvious prevention of commercial development makes no sense from an environmental perspective; first, the larger
acreage allowed for lease application under alternative 1 would not automatically be open for large scale development,
each lease would first have to undergo a full NEPA environmental assessment. Secondly, the area deemed suitable under
Alternative 1 had initially been determined to be following an extensive three-year environmental impact evaluation
process - It was only after legal interference by environmental extremist organizations that vast swaths of additional land
were also excluded. Finally, If the U.S. does not take the lead in oil shale development, we will cede the industry to places
like Estonia and China, where oil shale development is already taking place on a commercial scale, and where
environmental protections are considerably less stringent that they are here.

It certainly makes no sense from an economic standpoint; allowing a commercial oil shale Industry to establish itself in
this region would mean prosperity, growth, and opportunity for the people who live here. On a national scale, of course, it
would mean a huge step towards energy independence, and a large, stable, long tern domestic fuel source.

These are the reasons why I would urge the BLM to replace the current Preferred Alternative with Alternative 1. **#1])>**

OSTS_167
Organization: Charity Meinhart
Received: 5/3/2012 12:00:00 AM
Commenter1: Charity Meinhart - Grand Junction, Colorado (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/22/2012 12:00:00 AM
Attachments: OSTS2012D00168.htm (OSTS_167-59321.htm Size = 1 KB)

OSTS_167_Meinhart_Mail_OSTS2012D00168.pdf (OSTS_167-59320.pdf Size = 85 KB)
Submission Text
See Attachment.

I believe that the 2012 Oil Shale PEIS is not valid in that it violates federal statute.

<([#1 [*9.2.1*] By limiting leasing to RD&D and not allowing commercial leases until further requirements were met, the BLM's
Preferred Alternative contravenes the 2005 Energy Policy Act, which explicitly mandates a commercial development
track for oil shale alongside the RD&D track.

The 2012 oil shale PEIS also attempts to circumvent Congress by excluding huge swaths of land from any potential
future leasing on the basis that they possess "wilderness characteristics". As you are well aware, only Congress can
designate wilderness area. A Secretarial Order attempting to grant the BLM the power to designate land as having
"wilderness characteristics", and subjecting it to the same restrictions as wilderness, was defunded last year by
Congress. **#1])>**

<([#2 [*1.1.1*] Finally, excluding land from potential leasing due to the possibility of it containing Sage Grouse habitat before the
details and boundaries of such habitat are released by the state Division of Wildlife disallows adequate assessment
by the public. The BLM should extend the comment period at least until all such pertinent information (including the
2012 oil shale leasing regulations) is made available to the general public. **#2])>**

<([#3 [*2.1.1*] Placing thousands of acres forever off limits, and relegating the remaining available acreage to a few small, scattered outposts that make commercial leasing unviable is a roadblock, not a management plan. In addition to extending the
public comment period, I call on the BLM to reconsider its support for Alternative 2b, and instead consider Alternative
1 as the most workable, prudent management alternative.
#3])>

OSTS_168
Organization: Martin and Jeanne Chazen
Received: 5/2/2012 12:00:00 AM
Commenter1: Martin and Jeanne Chazen - Grand Junction, Colorado 81506 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail

Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/22/2012 12:00:00 AM
Attachments: OSTS2012D00169.htm (OSTS_168-59323.htm Size = 1 KB)
OSTS_168_Chazen_Mail_OSTS2012D00169.pdf (OSTS_168-59322.pdf Size = 115 KB)
Submission Text
See Attachment.

<([#1 [*2.1*] Opponents of oil shale development who launched the lawsuit that created this new PEIS are offering conflicting excuses to not allow commercial oil shale leasing, as provided for in the 2008 PEIS, and Alternative 1 of the current PEIS.
On one hand, they say that the technology is not there, that the industry is not ready for commercial development, and that the companies involved do not therefore really need or want the land at this time, and so there is no need to go ahead with any commercialization plan.

Paradoxically, opponents claim that the influx of people that a commercial oil shale project would bring to the region would overwhelm the local communities, and that therefore commercial development should be further delayed to allow time for these communities to plan for it.

So which is it? Is oil shale not viable, and therefore not ready to plan for commercial expansion, or will commercial leasing lead to such extensive and immediate economic development that it will quickly stress existing infrastructure and local services? Is commercial production an impossibility, or so likely that it is a "threat"?

The fact is that the technology has advanced to the point where oil shale is not only viable, but actually being produced in various places around the globe, including on certain RD&D leases here. And if the industry does not need access to the land for expansion to commercial-level production, and strategic planning purposes, then why is it asking for it?

As to the second contention, if the industry will lead to massive economic development, are they suggesting that it is better to not have a process in place to allow orderly commercial leasing, complete with NEPA processes being applied to each lease, and instead wait until such production is inevitable, or demanded in response to a crisis, and then approach it haphazardly?
#1])>
<([#2 [*2.1.1*] Alternative 1, the No-Action alternative, puts such a process in place, by allowing a maximum safe amount of land available for application for commercial leasing. This will both allow for a commercial program to get going, and ensure that it is done in a safe, responsible, orderly manner.

At any rate, if the introduction of an industry will create economic growth, isn't that a pretty good problem to have right now? **#2])>**

OSTS_169

Organization: Pat and Gerry Tucker
Received: 5/2/2012 12:00:00 AM
Commenter1: Pat and Gerry Tucker - Grand Junction, Colorado 80501 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/22/2012 12:00:00 AM
Attachments: OSTS2012D00170.htm (OSTS_169-59325.htm Size = 1 KB)
OSTS_169_Tucker_Mail_OSTS2012D00170.pdf (OSTS_169-59324.pdf Size = 133 KB)
Submission Text
See Attachment.

<([#1 [*2.1.1*] I support Alternative 1 in the 2012 Oil Shale PEIS, which would reopen land to potential commercial leasing, and provide a way forward for a commercial oil shale industry. I believe this industry is essential not only to our national energy security, but for the economy of western Colorado.

Many of the arguments currently being made against oil shale development are reminiscent of the arguments made against oil sands in Alberta, Canada, 30 years ago. Opponents then claimed that oil sand development would use too much water; would ruin the land; and that anyway, the technology was not there to do it, and was too expensive.

Now, 30 years later, we find that the water supply is more than adequate to support the industry; the apocalyptic environmental disasters did not come to pass; and that oil sand is being profitably produced on a large, commercial scale, in fact supplying the United states with the bulk of its imported oil. The town of Fort McMurray is thriving, Alberta's unemployment rate is low, and many smaller companies are investing and entering the industry, creating even more jobs and income. The Alberta government runs a surplus that they do not know what to do with, and there is still hunting, fishing and related activities going on in northeastern Alberta.

All of these benefits could be enjoyed by the people of western Colorado, and the tri-state area, if the government would just get out of the way, and let the industry establish itself. For that reason, I urge the BLM to adopt Alternative 1, which would allow this to happen.
#1])>

OSTS_170
Organization: CLUB 20, Bonnie Peterson
Received: 4/13/2012 12:00:00 AM
Commenter1: Bonnie Peterson - Grand Junction, Colorado 81502 (United States)

Organization1:CLUB 20
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/22/2012 12:00:00 AM
Attachments: OSTS2012D00171.htm (OSTS_170-59327.htm Size = 1 KB)
OSTS_170_Peterson_Club20_Mail_OSTS2012D00171.pdf (OSTS_170-59326.pdf Size = 80 KB)
Submission Text
See Attachment.

<([#1 [*1.1.1*] CLUB 20 members are in the process of reviewing the recently published 2012 OSTS PEIS in order to
provide comments on that voluminous document. It is our understanding that the highly relevant commercial Draft BLM Oil Shale Regulation document is not expected to be published until May 15,
2012, well after comments are due on the 2012 OSTS PEIS.

These two documents outlining impacted areas and development regulations are inextricably tied to
one another and our members believe that making comments on one without the benefit of knowing
the contents of the other may result in inconsistent and confusing responses, undermine the NEP A
process, and interfere with the formation of well-considered public policy. It makes sense that comments should be considered simultaneously on these two important documents. In that light, CLUB 20 respectfully requests that the comment period on the 2012 OSTS PEIS be extended to at
least 90 days past the publication of the Draft BLM Oil Shale Regulations. Thank you for your consideration.
#1])>

OSTS_171
Organization: George Rau
Received: 5/2/2012 12:00:00 AM
Commenter1: George Rau - Grand Junction, Colorado (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/22/2012 12:00:00 AM

Attachments: OSTS2012D00172.htm (OSTS_171-59329.htm Size = 1 KB)
OSTS_171_Rau_Mail_OSTS2012D00172.pdf (OSTS_171-59328.pdf Size = 71 KB)
Submission Text
See Attachment.

<([#1 [*2.1.1*] This PEIS poses some serious questions and concerns for me. I am primarily concerned with how much land the new PEIS places off limits to oil shale leasing, and what that might mean for both the industry and the economic future of the region. Western Colorado is facing sustained unemployment levels of 9% and more, and these jobs would be key to turning this region's economy around.

I would prefer to see a return to the land use plan agreed upon in the 2008 PEIS, which left available just over 2 million acres for potential oil shale leasing. This was not done *as* a blanket land give-away, but as part of a set process that included additional EIS's being done on each individual lease. This plan would in no way permit harm to the environment, but it would give companies the options they need to be able to plan for their own futures, and create jobs and wealth.

Allowing these companies to lease land and expand their operations would also help fill the holes in our education and infrastructure funding, as royalties and taxes paid by the companies acquiring the leases, and the income and property taxes paid by the additional workers would help replace revenue that has been lost over the past 3 years.

The best and only option available to allow all of this to happen is to not tinker with the plan agreed to in the 2008 study. Therefore, I support the no action alternative, Alternative 1, and urge the BLM to do the same. **#1])>**

OSTS_172
Organization: Jerry Hunsinger
Received: 5/2/2012 12:00:00 AM
Commenter1: Jerry Hunsinger - Grand Junction, Colorado 81506 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/22/2012 12:00:00 AM
Attachments: OSTS2012D00173.htm (OSTS_172-59331.htm Size = 1 KB)
OSTS_172_Hunsinger_J_Mail_OSTS2012D00173.pdf (OSTS_172-59330.pdf Size = 91 KB)
Submission Text
See Attachment.

<([#1 [*9.8*] I would like to voice my objections to the current PEIS on the following grounds:

First, the 2012 PEIS is redundant, the process having already been completed back in

2008. That effort garnered the support and input of many different specialists, industry experts, county and local governments, development agencies, environmental interests, scientists, and more; it was a thorough, three year process, and resulted in a balanced management plan that encouraged commercial development of oil shale while protecting the environment. There has been nothing in terms of new evidence or information emerge since that time, that would begin to justify re-starting the whole process.

Second, the reason for redoing the PEIS is frankly appalling, and makes a mockery of the whole NEPA system. To restart such a major undertaking solely because a small, radical environmentalist group sues because they don't like the outcome, is not only ridiculous, but sets a terrible precedent; that each time the outcome of a government study, analysis or process is not to the liking of a particular special interest group, with no real legal claim, they can sue, under a more friendly administration, and have the entire process redone to fit their agenda. The current PEIS completely turns the findings of the original on its head, and reduces the amount of land available for potential commercial leasing by a huge margin, with disastrous effects on the outlook for future oil shale development. This is a tragic mistake.

Third, is the cost involved. An EIS costs millions to prepare, in man hours, government resources, research, travel, etc. At a time when governments, businesses and families are tightening their belts, it makes no sense to waste valuable public dollars on something that was already done. It would be comical, if the stakes were not so high. **#1])>**

<([#2 [*2.1.1*] As a veteran I understand full well what it means to bear responsibility to the people
and resources of this great nation. I would therefore urge you to either A) scrap this nonsense and commit to the professional, non-politically motivated PEIS completed four years ago, or B) adopt the No Action Alternative, to achieve the same result. **#2])>**

OSTS_173
Organization: Jonathan Baysinger
Received: 5/2/2012 12:00:00 AM
Commenter1: Jonathan Baysinger - Craig, Colorado 81625 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/22/2012 12:00:00 AM
Attachments: OSTS2012D00174.htm (OSTS_173-59333.htm Size = 1 KB)
OSTS_173_Baysinger_Mail_OSTS2012D00174.pdf (OSTS_173-59332.pdf Size = 84 KB)
Submission Text
See Attachment.

<([#1 [*9.8*] The BLM should either scrap this PEIS now, or at least adopt Alternative 1, which calls for no action
from the previous PEIS, finished only 4 years ago. Having environmental extremists mad at your agency is not sufficient reason to toss aside years of work, hours of public testimony, and exhaustive
input from local governments, spend money that the government does not have, and re-write the entire PEIS. One can hardly blame our neighbors in Mesa County for refusing to participate this time
around, after they already contributed extensively to the earlier one, noting that nothing substantial
has changed.

In fact the only thing that did change was the BLM's conclusions. After analyzing the same data, and
receiving the same input, your agency decided to reduce by hundreds of thousands of acres, the land
to be made available for oil shale leasing, and to impose new requirements on companies seeking commercial leasing opportunities. Can you really tell me that your department could look at the same
information a second time and come up with such a dramatically opposing conclusion, without there
having been political factors involved? **#1])>**

<([#2 [*2.1.1*] We on the Western Slope are growing sick and tired of radical, left wing environmentalists
constantly holding up development and job creation. It is obvious to most that energy development
and nature can co-exist. We who actually live and try to make our livings out here full time not only
know how to be good caretakers of the land, we want to.

So when we ask you to support Alternative 1, and to maximize the potential of the oil shale industry
to grow and bring all of us up along with it, we are not asking you to allow some sort of pillage of the
land - we are simply asking for a chance. **#2])>**

OSTS_174
Organization: Chaz Vaughn
Received: 4/24/2012 12:00:00 AM
Commenter1: Chaz Vaughn - Grand Junction, Colorado 81501 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail

Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/22/2012 12:00:00 AM
Attachments: OSTS2012D00175.htm (OSTS_174-59336.htm Size = 1 KB)
OSTS_174_Vaughn_Mail_OSTS2012D00175.pdf (OSTS_174-59335.pdf Size = 73 KB)
Submission Text
See Attachment.

<([#1 [*2.1.1*] I am writing to express my opposition to the Preferred Alternative in the 2012 oil shale PEIS, and to recommend Alternative
1 as a replacement.

The Preferred Alternative, 2b, severely restricts commercial leasing opportunities by slashing the land available for
application to leasing, relegating what is left to small isolated pieces, and issuing only RD&D leases, imposing unreasonable
requirements on companies before they can upgrade to a commercial lease.

These provisions not only hamper and delay commercial development, and the regional and national economic benefits it
would bring, but could even prove to be against the law, as the Energy policy Act of 2005 specifically called for a dual track
for oil shale development, an RD&D program, and a concurrent, but separate, commercial program.

Alternative 1 retains in place the findings from her initial 2008 PEIS, which set aside roughly 2 million acres for potential
commercial leasing, subject to individual EIS's. I recommend that the BLM adopt this as their final alternative. **#1])>**

OSTS_175
Organization: J. Capozzelli
Received: 5/2/2012 12:00:00 AM
Commenter1: J. Capozzelli - New York, New York (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/22/2012 12:00:00 AM
Attachments: OSTS2012D00176.htm (OSTS_175-59339.htm Size = 1 KB)
OSTS_175_Capozzelli_J_May2_Mail_OSTS2012D00176.pdf (OSTS_175-59338.pdf Size = 72 KB)
Submission Text
See Attachment.

<([#1 [*2.2.1*] I support the Bureau of Land Management's preferred alternative in the draft plan for oil shale
development.

The preferred alternative would close many valuable and important lands to oil shale, such as lands with wilderness characteristics, areas of critical environmental concern, and sage-grouse habitat. Maintaining wilderness values and ecological integrity on our wild public lands contributes to our way of life and to our economy.

The recreation industry in Colorado alone generates $3 billion of economic activity every year. We should not risk our water, air, pristine lands, crucial species habitat and outstanding recreation opportunities for any energy development, much less one dependent on unproven technology.

For all the unknowns about oil shale, what is known is that it threatens water resources and clean air. To even attempt to generate a single barrel of oil from oil shale, 3-5 barrels of water are needed in the refining process alone.

Taking the oil shale out of the ground will waste more water on top of that. And since this development would be taking place in western states like Colorado, water is already a very precious commodity, often in short supply.

In addition to threatening our water, oil shale would also pollute our air. In order to create one million barrels of oil a day from oil shale, ten new coal-fired power plants would be needed, leading to the emission of 121 million tons of carbon dioxide.

Oil shale is the world's dirtiest fossil fuel. Please finalize the preferred alternative and ensure that wilderness, wildlife, clean air and precious water supplies are not sacrificed to oil shale.

Thank you for your help on behalf of America's irreplaceable lands, water and wildlife. **#1])>**

OSTS_176
Organization: Grand Junction Economic Partnership, Kelly Flenniken
Received: 5/2/2012 12:00:00 AM
Commenter1: Kelly Flenniken - Grand Junction, Colorado 81501 (United States)
Organization1: Grand Junction Economic Partnership
Commenter Type: Misc. Organization
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/22/2012 12:00:00 AM
Attachments: OSTS2012D00177.htm (OSTS_176-59341.htm Size = 1 KB)
OSTS_176_Flenniken_GJEP_Mail_OSTS2012D00177.pdf (OSTS_176-59340.pdf Size = 100 KB)

Submission Text
See Attachment.

<([#1 [*2.1.1*] The Grand Junction Economic Partnership (GJEP) is the official economic development agency for Mesa
County, Colorado. The mission of the organization is to enhance the economic vitality of our community
creating a strong, diverse economy and an improved quality of life. GJEP focuses on five target industries, one of which is the energy industry.

The 2012 PEIS has the potential of impacting the energy industry in the region. For this reason GJEP
supports the adoption of Alternative 1 (no-action) as outlined in the 2012 PEIS. Our reasons for supporting this alternative focus on the following areas; 1) the economic benefits that responsible commercial oil shale development will bring to our region; 2) the advantages to local communities to
having a structured process for commercialization in place.

The development of the Western Slope's energy resources has a positive and significant impact on our
local economy through increased tax revenues, payrolls, local vendor purchases and the creation of
quality jobs. Allowing for the responsible commercial expansion of oil shale development to take place
will bring hundreds of jobs to the region, both directly and indirectly, in construction, production operations, housing, and various support industries. Understanding there is a direct correlation between
energy activity and jobs and living in a time of increasingly restricted state and Federal budgets, we must
continue to promote business opportunities in the area.

Lastly, alternative 1 establishes an orderly system of commercialization, one that will accommodate the
growth of the industry, while providing local entities the time and a stable framework under which to be
able to appropriately plan for population growth, housing, and other impacts. Ultimately, GJEP supports
responsible development of energy resources with consideration given to the strength and stability of
local economies as well as the environment, health and public safety.

For these reasons, we support the adoption of Alternative one, and urge the BLM to do the same.
#1])>

OSTS_177
Organization: Steve King
Received: 5/2/2012 12:00:00 AM

Commenter1: Steve King - Denver, Colorado 80203 (United States)
Organization1:
Commenter Type: Elected Official
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/22/2012 12:00:00 AM
Attachments: OSTS2012D00178.htm (OSTS_177-59343.htm Size = 1 KB)
OSTS_177_King_Mail_OSTS2012D00178.pdf (OSTS_177-59342.pdf Size = 121 KB)
Submission Text
See Attachment.

I wish to express my support for Alternative 1 in the referenced PEIS, and also my deep concern over the
way aspects of this process have been handled.

<([#1 [*9.8*] Public policy for this nation should not be determined by a court settlement. This current PEIS is just that,
the product of a settlement with opponents to oil shale development, unhappy with the outcome of the
2008 PEIS. As a result of this settlement, the BLM has disregarded 3 years of hard work and input from
community leaders, local governments, scientific experts, and the public. Instead they have seen fit to
mold their conclusions based on the questionable motives and agenda of a few.

It is unacceptable to allow environmental obstructionists to play the system for their own narrow and
selfish agenda, at cost to the taxpayer. The cost of further delay in much needed economic development is
also unacceptable. The people of the Western Slope do not want to see our tax dollars wasted on re-doing
an Environmental Impact Statement for no other reason than to satisfy the environmental extremists'
quest for a renewable utopia that is not economically viable, functional, or practical at this time in the
United States. **#1])>**

<([#2 [*2.1.1*] Alternative 1, and the 2008 Record of Decision that it would be upholding, offers the best balance of
conservation and energy development. Oil shale is a tremendous national resource that holds one of many
keys to our energy independence, and long-term energy stability. A commercial oil shale industry will

create jobs, and help the Western Slope out of this recession. The biggest obstacle to this is no longer
technological; it is the federal government's ill conceived and short sighted policies.

The people of the Western Slope will never sacrifice our environmental heritage, or the health and safety
of future generations. As stewards of our region, we realize that protecting our land does not mean
placing it under lock and key, and sacrificing our economic future instead. **#2])>**

OSTS_178
Organization: Kelsie Betz
Received: 5/2/2012 12:00:00 AM
Commenter1: Kelsie Betz - Grand Junction, Colorado 81501 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/22/2012 12:00:00 AM
Attachments: OSTS2012D00179.htm (OSTS_178-59345.htm Size = 1 KB)
OSTS_178_Betz_Mail_OSTS2012D00179.pdf (OSTS_178-59344.pdf Size = 83 KB)
Submission Text
See Attachment.

<([#1 [*2.1.1*] Thank you for the opportunity to comment on the 2012 oil shale PEIS. I believe that Alternative 1 is the only Alternative that meets all the proper requirements for being accepted as a land management plan.

The initial PEIS, completed in 2008, allowed just over 2,000,000 acres to be available for consideration for commercial oil shale leasing. This new PEIS is simply a redo of the 2008 one, using the exact same information, yet arriving at a different Preferred Alternative. **#1])>**

<([#2 [*2.2*] The Preferred Alternative in this latest PEIS would reduce that available acreage by almost 80%, and locate what was left in widely scattered, tiny, parcels, too small and isolated to adequately support commercial development. It would also eliminate commercial leasing, until a "viable" technology was first demonstrated to the satisfaction of BLM officials - something that no other industry is subject to. **#2])>**

<([#3 [*2.1.1*] These land and leasing restrictions will have a further delaying effect on the industry, at a time when it is just getting started. The real tragedy of this is the denial of economic progress and prosperity to the people ofthe regions involved. Commercial oil shale development will bring muchneeded employment to this very hard-hit area. Also, the sheer size and potential of this resource dictates that it is in the national interest to produce it. With gas prices reaching all time highs, and increasing turmoil enveloping the Middle East, it would make

sense to encourage, not hinder, the development of such an extensive domestic energy supply.

For these reasons, I support Alternative 1, which restores the findings and land use plan agreed to in the 2008 PEIS, and I would urge this agency to do the same. **#3])>**

OSTS_179
Organization: Leslie White
Received: 5/2/2012 12:00:00 AM
Commenter1: Leslie White - Littleton, Colorado 80120 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/22/2012 12:00:00 AM
Attachments: OSTS2012D00180.htm (OSTS_179-59347.htm Size = 1 KB)
OSTS_179_White_Leslie_Mail_OSTS2012D00180.pdf (OSTS_179-59346.pdf Size = 94 KB)
Submission Text
See Attachment.

<([#1 [*9.8*] I object strongly to the manner in which this current PEIS came about. It is a do-over of an earlier version completed in 2008, using the exact same information. The only reason it is being re-done is because some environmental zealots sued the DOI over the outcome, which allowed lease application on 2 million acres of prime oil shale land in the
west. Now, as part of the friendly settlement, the BLM is taking my tax dollars, looking at the exact same information
again, but this time adopting a Preferred Alternative that reduces the previously allowed acreage by 80%, and
eliminated commercial leasing.

What sort of message does this send, that every time a particular special interest group does not get their way, that
they can sue for no solidly legal reason, and have the settlement reflect their agenda? This is a terrible precedent that
is an affront to the way public policy decisions are supposed be made in America. **#1])>**

<([#2 [*2.1.1*] Allowing the free market the opportunity to develop oil shale on a commercial basis would have incredible benefits both for the nation and the local economy. Oil shale does represent a great technological challenge, but it is one that American industry is capable of meeting. Denying them the ability to take out commercial leases would only hinder and delay the establishment of this industry, and put off the job creation, royalty payments, energy independence, and other benefits for the indeterminate future.

For this reason, I support Alternative 1, which calls for no action against the 2008 PEIS, keeping the 2 million acres

available for commercial lease application and providing the same opportunities for oil shale developers as is
afforded any other industry. **#2])>**

OSTS_180
Organization: Bob Rankin
Received: 5/2/2012 12:00:00 AM
Commenter1: Bob Rankin - Grand Junction, Colorado (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/22/2012 12:00:00 AM
Attachments: OSTS2012D00181.htm (OSTS_180-59349.htm Size = 1 KB)
OSTS_180_Rankin_Mail_OSTS2012D00181.pdf (OSTS_180-59348.pdf Size = 103 KB)
Submission Text
See Attachment.

<([#1 [*2*] I am writing to object to the current 2012 Oil Shale Programmatic EIS, particularly in that it blocks
commercial development of the resource.

Each of the Land Allocation Alternatives, excepting number 1 (the "No Action" alternative), fail to
allow for commercial leasing as prescribed in the 2005 Energy Policy Act. Alternative 2 not only drastically reduces the amount of prospective land available for application for leasing from 2,017,714
acres to 461,965 acres over the tri-state area (or from 346,609 acres in Colorado to 35,308 acres, a cut
of neady 90%), but the acreage that :remains is widely scattered in small, isolated pockets, the locations decided upon with no regard as to commercial suitability, access, or geological considerations. The potential lease lands are not contiguous, either with each other or existing RD&D
leases. All of this serves as a serious barrier to future planning, commercial expansion, as well as to
the decision to go commercial in the first place. It certainly makes the region unattractive to new oil
shale development. Furthermore, Alt 2 places nearly all of the existing Preference Rights Leasing
Areas, set aside currently to allow for commercial expansion from existing RD&D leases, off limits. So
even minor expansion from the RD&D leases currently in place would be disallowed under this alternative. **#1])>**

<([#2 [*9.6.1*] The BLM's preferred alternative, 2b, goes even a step further, by requiring that a viable recovery
technology first be demonstrated before a lease permit will be granted. This is a requirement unique
to the oil shale industry- no other industry, including other energy industries, are subject to that test
before they are allowed to secure leases. This will only deny companies the planning option of
securing commercial land while they perfect their process. At any rate, no company would wish to
risk their investment, and make lease payments, if' they do not have a viable method for generating a
return on their investment. There is also no defined standard for what constitutes "viable technology''
in the BLM's eyes, which would be a further disincentive to invest in this resource.
#2])>
<([#3 [*2.1.1*] As for the remaining Alternatives, 3 makes absolutely no allowance for commercial
development, limiting oil shale work to only the existing RD&D leases. 4b leaves a little more acreage available for
leasing, but under the same restrictions as 2b, prohibiting commercial leases until a demonstration of
viability.

All of this adds up to a program purposely designed to delay and hinder commercial development of
oil shale, at a time when there can be no argument that the jobs are needed, and the energy source is
needed. I therefore strongly request that the BLM adopt Alternative l, and take no action deviating
from the findings properly arrived at in the 2008 PEIS. **#3])>**

OSTS_181
Organization: Larry Tice
Received: 4/23/2012 12:00:00 AM
Commenter1: Larry Tice - Grand Junction, Colorado (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/22/2012 12:00:00 AM
Attachments: OSTS2012D00182.htm (OSTS_181-59351.htm Size = 1 KB)
OSTS_181_Tice_Mail_OSTS2012D00182.pdf (OSTS_181-59350.pdf Size = 71 KB)
Submission Text
See Attachment.

<([#1 [*11.2*] I wish to thank the BLM for this opportunity to offer input on the 2012 oil shale Programmatic Environmental Impact Statement. This region holds a tremendous amount of energy, and it is incumbent upon the federal government to allow its development to go forward. This will benefit us as both a nation and as western Coloradans; the amount of oil that could potentially be produced is sufficient to meet America's demands for petroleum and petroleum-based products for decades, and is also enough to replace the oil imports currently coming from places like the Middle East and Venezuela. On the regional side, the job growth that this industry would spur would generate enough wealth, income and revenue to lift the state out of the recession that has been holding us down for years now. **#1])>**

<([#2 [*2.1.1*] Alternative 1 is the only option presented in the 2012 OS/TS PEIS that will come close to adequately providing for such development, and I would ask the BLM to adopt it as the final Preferred Alternative. **#2])>**

OSTS_182
Organization: Jared Wright
Received: 5/2/2012 12:00:00 AM
Commenter1: Jared Wright - Grand Junction, Colorado (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/22/2012 12:00:00 AM
Attachments: OSTS2012D00183.htm (OSTS_182-59353.htm Size = 1 KB)
OSTS_182_Wright_Mail_OSTS2012D00183.pdf (OSTS_182-59352.pdf Size = 83 KB)
Submission Text
See Attachment.

<([#1 [*2.1.1*] I wholeheartedly recommend the adoption of Alternative 1 in this PEIS. Alternative 1
will pave the way to job growth and economic development stemming from a productive commercial oil shale industry, by providing that industry with the options it needs to get started. **#1])>**

<([#2 [*2.2*] The BLM's Preferred Alternative, on the other hand, severely limits the options available to the nascent industry by eliminating hundreds of thousands of acres of land from availability for leasing, and restricting what little bit is left to only RD&D leasing. This will make it next to impossible for smaller companies to enter the oil shale market, and make it all but impossible to establish a viable, profitable commercial oil shale industry in the United States. **#2])>**

<([#3 [*2.1.1*] This is just the kind of government interference, buoyed by an unaccountable, yet powerful, environmentalist lobby that prevents private sector job creation and

economic recovery. At stake is not the health of the environment- the NEPA process ensures that every lease applied for on federally controlled land is properly evaluated for potential environmental impacts; and at any rate, the people who live and raise their families on the Western Slope, and who would be the backbone of any commercial oil shale project, are not about to place their own environment or their children's health at risk.

Please select Alternative 1 , and place the future of this region into the hands of those who are most affected by the policies that govern it. **#3])>**

OSTS_183
Organization: Thomas Burrows
Received: 5/1/2012 12:00:00 AM
Commenter1: Thomas Burrows - Grand Junction, Colorado 81502 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/22/2012 12:00:00 AM
Attachments: OSTS2012D00184.htm (OSTS_183-59355.htm Size = 1 KB)
OSTS_183_Burrows_Mail_OSTS2012D00184.pdf (OSTS_183-59354.pdf Size = 74 KB)
Submission Text
See Attachment.

Concerning the oil shale PEIS, I would like to recommend:

<([#2 [*1.1.1*] 2. The period for public comment should be extended. **#2])>**

<([#1 [*2.1.1*] 1. Alternative #1 should be followed instead of #2b.

My reasoning includes the following points:

I have attended public seminars describing the technological improvements which have been made in recent years. I believe much of the delay we are seeing currently is due to foot-dragging on the part of government agencies and (to an even greater extent) red herrings from extreme environmental organizations. As long as reasonable (as opposed to totally obstructionist) environmental concerns are kept in mind, technology will continue to improve.

I am familiar with some of the tactics of the environmental groups trying to block this. These include abuse of the Equal Access to

Justice Act (for raiding the public treasury) and the Endangered
Species Act (for justifying blind opposition to human activity) . **#1])>**

OSTS_184
Organization: Anthony Urignen
Received: 5/2/2012 12:00:00 AM
Commenter1: Anthony Urignen - Grand Junction, Colorado (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/22/2012 12:00:00 AM
Attachments: OSTS2012D00185.htm (OSTS_184-59357.htm Size = 1 KB)
OSTS_184_Urignen_Mail_OSTS2012D00185.pdf (OSTS_184-59356.pdf Size = 90 KB)
Submission Text
See Attachment.

<([#1 [*9.8*] The U.S. Geological Survey estimates that as much as 4 Trillion barrels of oil are trapped in shale under
this region. That is far more than the amount of oil in the vast Persian Gulf fields, more even than
Canada's oil sands, which currently supplies the bulk of America's oil imports, and enough by far to supply
America's energy needs well into the future, without needing to rely on oil from foreign, often hostile
nations.

The 2008 Oil Shale PEIS seemed to recognize this, and produced a reasonable, balanced plan for harvesting this important national resource, identifying around 2 million acres of the most geologically
prospective oil shale lands as being available for application for potential future leasing, pending environmental assessments of the individual leases. While it is recognized that not all of this acreage
would actually end up being available, it still offered companies looking to invest in oil shale development
the flexibility required to plan into the future.

That PEIS is now being re-done, at taxpayer expense, not because any new information has been discovered (none has), but instead, because of a lawsuit leveled at the government by a radical environmental lobby group. The BLM's new conclusion from this PEIS is that most of the land deemed fit
for consideration just 4 years ago, is now off limits. This includes the Preferred Rights acreage around
existing RD&D leases. These land restrictions make it virtually impossible to expand

commercially, and
economically impractical to try. **#1])>** **<([#2** [*9.6.1*] Alternative 2b goes as far as not allowing any commercial leasing until a
company demonstrates a viable recovery technology. This is something that no other industry is required
to do. If this was demanded of the renewable energy industry, for example, there would not be even as
much of a solar industry as there is today. **#2])>**

<([#3 [*2.1.1*] Alternative 1 keeps in place the findings of the 2008 PEIS, and is therefore the only responsible, balanced,
and economically viable alternative available to the BLM. I would urge you to do what is best for the
people of the region, and for the country, and adopt Alternative 1 as management plan going forward.
#3])>

OSTS_185
Organization: Michelle Hemmer
Received: 5/2/2012 12:00:00 AM
Commenter1: Michelle Hemmer - Grand Junction, Colorado 81501 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/22/2012 12:00:00 AM
Attachments: OSTS2012D00186.htm (OSTS_185-59359.htm Size = 1 KB)
OSTS_185_Hemmer_Mail_OSTS2012D00186.pdf (OSTS_185-59358.pdf Size = 97 KB)
Submission Text
See Attachment.

<([#1 [*11*] I am writing to express both my concerns over the 2012 Oil Shale PEIS, particularly the BLM's preferred
alternative, 2b, as well as my support for the No-Action alternative. As a small business owner, I appreciate
the positive impacts to the retail sector that the growth of a major industry can provide. Increased oil shale
investment, development, and commercial production will bring employment opportunities to the region, and
people to fill them. The resulting increase in both population and income will provide immediate benefits to
businesses such as mine. We do not live in an economic vacuum, and the ripple effects of a successful and
vibrant oil shale industry will reverberate throughout the region.

It is therefore somewhat distressing to see that the BLM, this time around, favors a plan that would all but
stop commercial oil shale development before it even has a chance to get started. The draconian land
restrictions, along with unreasonable demands on oil shale companies to prove to the satisfaction of
government officials that their production technology is good enough before a commercial lease is even
considered, essentially ensure that no commercial production will ever take place on federal lands in the tristate
area. Alternative 3 goes even farther, not allowing any expansion at all beyond the currently held RE&D
leases; and alternative 4, while not reducing acreage available for leasing by quite as much as 2 does, still
comes attached with a sub-alternative, 4b, that would impose the same unreasonable requirements on
companies as 2b.

What all of this means for business people such as myself, is yet another delay in the job growth and
economic development we are all hoping for to salvage our livelihoods. I doubt very much that there is any
one of us who would support anything that would truly pose a serious risk to the environment, but we are
not willing to stand aside and watch our businesses and families suffer, while extreme environmental groups
continue to hold up economic progress and development.
#1])>
<([#2 [*2.1.1*] I therefore ask two tings of the BLM in this matter: First, please adopt Alternative 1, which would leave
available sufficient land for possible commercial leasing, and set up a process by which a viable oil shale
industry can emerge; **#2])>** and second, **<([#3** [*1.1.1*] to please extend the public comment period, to allow for more input by the
small business community in the region. **#3])>**

OSTS_186
Organization: Mike Bambino
Received: 4/19/2012 12:00:00 AM
Commenter1: Mike Bambino - Grand Junction, Colorado (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:

Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/22/2012 12:00:00 AM
Attachments: OSTS2012D00187.htm (OSTS_186-59361.htm Size = 1 KB)
OSTS_186_Bambino_Mail_OSTS2012D00187.pdf (OSTS_186-59360.pdf Size = 81 KB)
Submission Text
See Attachment.

<([#1 [*9.2.1*] I am getting very sick and tired of hearing about radical environmentalists continually hijacking progress In this country. This latest PEIS is just the latest example. A perfectly well done PEIS was completed only four years ago, and simply because it dared to make enough land available for application for development to make it economically viable for the oil shale industry to expand and invest, the "greens" sued, and now we are spending who knows how many of our dollars to completely redo it to fit their anti-development views.

This is completely outrageous. We have unemployment in this region above 10%, and the options in this new PEIS, other than
the no action alternative, place heavy land restrictions and requirements on the industry that will prevent it from creating jobs. We are facing crippling debt, due to out of control spending, and the federal government adds fuel to the fire by re-doing a major PEIS in response to a complaint by a fringe group.

Where will this end? **#1])> <([#2** [*2.1.1*] Put some trust in the people who really run this nation, and allow for the oil shale industry to develop and expand. Adopt Alternative 1, which keeps in place the 2008 PEIS, and provides for enough land to be available for application for leasing that the industry might be able to invest and create jobs and economic opportunity for our region, and our young people. Please have more consideration for the people and future of the regions that are impacted by your decisions, than on a noisy, but small, group of radicals that have no consideration for anything but their own narrow agenda. **#2])>**

OSTS_187
Organization: Brandon Cupp
Received: 5/2/2012 12:00:00 AM
Commenter1: Brandon Cupp - Fruita, Colorado 81521 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/22/2012 12:00:00 AM
Attachments: OSTS2012D00188.htm (OSTS_187-59363.htm Size = 1 KB)
OSTS_187_Cupp_Brandon_Mail_OSTS2012D00188.pdf (OSTS_187-59362.pdf Size = 96 KB)
Submission Text
See Attachment.

<([#1 [*11*] I would first like to thank the BLM for offering this opportunity to comment on this

important matter. Oil shale
development will affect all of us on Colorado's Western Slope, and I appreciate the chance to let my voice
be heard.

Oil shale is an enormous resource with incredible potential. The best estimates are that 4 Trillion barrels of
recoverable oil are trapped in the shale that lies underneath federal land in those parts of Colorado,
Wyoming and Utah, that you are considering. It should be a national priority to encourage the production of
that oil for both economic and security reasons. With the international situation being what it is, and the
price of fuel continually rising to the point where families are going to have to choose between gas to get
the kids to school, and groceries to get through the weekend, it only makes sense that we would develop
our own resources, especially if they are among the largest deposits in the world.

Forever cutting off the *vast* majority of those lands from *even* being considered for *application* tor leasing, is
not the best way to go about that. No one, especially those of us who live and raise our families in western
Colorado wish to see harm come to the environment. But the fact is that the energy industry has many
years of experience in how to develop resources responsibly, and to leave as little impact as possible.
Shutting off all access to these areas makes little sense from any perspective.

What the Western Slope needs most right now is jobs. I have watched *over* the last few years many friends
and neighbors moveaway, because the energy jobs had left. Tourism and recreation industries are great,
but cannot sustain themselves; they need a vibrant, productive economy to produce the income to support
them. **#1])>**

<([#2 [*2.1.1*] It is time to set political interests aside, and allow private industry to do what they do best, and create jobs
and national prosperity. For this reason, I support Alternative 1, and ask the BLM to do the same.
#2])>

OSTS_188
Organization: Brad Steig
Received: 4/18/2012 12:00:00 AM
Commenter1: Brad Steig - Fruuita, Colorado 81521 (United States)
Organization1:

Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/22/2012 12:00:00 AM
Attachments: OSTS2012D00189.htm (OSTS_188-59365.htm Size = 1 KB)
OSTS_188_Steig_Mail_OSTS2012D00189.pdf (OSTS_188-59364.pdf Size = 92 KB)
Submission Text
See Attachment.

<([#1 [*9.8*] I think it is an absolute shame that the taxpayer is paying for yet another Environmental Impact Statement, only four years after paying for one covering the exact same area, resource and issues. It is nothing less than insulting to consider why it is being done over in the first place. It is abhorrent that a federal government agency would allow itself to be used by any special interest, the way that the BLM has allowed its processes and procedures to be hijacked by the extreme environmentalists. By re-doing this PEIS, the BLM is in essence admitting that it screwed up the first time around, and that all of the work done by various agencies, institutions, and individuals was a waste of time and money.

I for do not believe that to be the case. I know that the many cooperating agencies, including Mesa County, put a Jot of effort into ensuring a quality product, and a management plan that balanced the need for critical energy development with environmental stewardship. And the product of that 2008 PEIS was a reasonable document that allowed opportunity for companies to expand their operations, and begin the long process of developing an energy resource that bears the potential to wean America off of foreign oil, and give out nation more control over fuel prices, all while providing an economic boon for the people of the Western Slope, and north eastern Utah.

Instead, in response to a frivolous lawsuit by some on the fringe of reasoned society, Our current administration chose to throw away all of that work, and abandon all of the important social and economic considerations, and go back to the drawing board with the extremists agenda as the driving principle. While we all foot the bill. **#1])>**

<([#2 [*2.1.1*] As a veteran, a business owner, a taxpayer, a local resident and a citizen, I urge, in the strongest terms, the BLM to put a stop to this nonsense before more money, time and opportunities are wasted. If it is too late for that, at the very least, the BLM needs to adopt Alternative 1, which will restore sanity to the situation, and return to the well thought out plan worked out in 2008. **#2])>**

Thank you for taking the time to read my comments,

OSTS_189
Organization: Western Slope Conservation Alliance, Sandra Pesso
Received: 5/2/2012 12:00:00 AM
Commenter1: Sandra Pesso - Grand Junction, Colorado (United States)

Organization1: Western Slope Conservation Alliance
Commenter Type: Misc. Organization
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/22/2012 12:00:00 AM
Attachments: OSTS2012D00190.htm (OSTS_189-59367.htm Size = 1 KB)
OSTS_189_Peeso_WesternSlopeConservationAlliance_Mail_OSTS2012D00190.pdf (OSTS_189-59366.pdf Size = 89 KB)
Submission Text
See Attachment.

<([#1 [*9.8*] We would like to register our opposition to the 2012 PEIS, both in terms of the overly restrictive and antidevelopment
land allocation alternatives it offers, particularly the BLM's Preferred alternative, and in terms of how the
process was handled.

This PEIS is a redo of one completed in 2008, which involved years of study and extensive input from many and
varied sources, and arrived at the conclusion that just over 2 million acres of land in the richest oil shale region should
be made available for potential commercial leasing by the industry. Following a lawsuit from extreme environmental
interests, the new administration settled, resulting in the entire PEIS being redone, all at taxpayer's expense.

No new information is contained in this new PEIS, and yet the conclusion is dramatically different; the BLM's
preferred Alternative cuts the available acreage down by 77% to a scant 461, 965 acres total. The total available
acreage in Colorado is slashed by a stunning 90%, from 346,609 acres to a mere 35, 308, widely dispersed in small,
isolated tracts that make even this little bit of acreage unattractive to commercial development. **#1])>**

<([#2 [*9.6.1*] The Preferred Alternative does not, in fact, even permit commercial leasing, limiting the small allotment to RD&D leasing only, and not permitting conversion to a commercial lease until the BLM bureaucrats are sufficiently happy
that the lease applicants technology meets their unpublished requirements. NO other industry within the energy
sector is required to do such a thing- not oil and gas, not mining, certainly not solar, wind, or geothermal, whose
technologies are far more experimental than those related to oil shale development. **#2])>**

<([#3 [*2.1.1*] Considering this, we support Alternative 1, which would return land access back to what was properly decided in the 2008 PEIS, and best allows for private-sector job growth, wealth creation, and American energy independence. We would urge the BLM to be guided by the best available science, and the best interests of the nation and the region, rather than by the agenda of an ideological extremist lobby, and to adopt Alternative 1 in the final draft. **#3])>**

OSTS_190

Organization: Gary Bailey
Received: 5/2/2012 12:00:00 AM
Commenter1: Gary Bailey - Grand Junction, Colorado (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Post Card
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/22/2012 12:00:00 AM
Attachments: OSTS2012D00191.htm (OSTS_190-59369.htm Size = 1 KB)
OSTS_190_Bailey_G_Mail_OSTS2012D00191.pdf (OSTS_190-59368.pdf Size = 91 KB)
Submission Text
See Attachment.

<([#1 [*9.6*] In commenting on the 2012 oil shale PEIS, I would like to point out a number of fallacies that are being put out there
by oil shale opponents. The first revolves around the amount of acreage that the 2008 PEIS opens to development.
The opponents would have you believe that all 2 million acres are to be handed over to the oil shale industry. This
is not so; as you are ware, that acreage is only open for *application for leasing;* each lease would be individually
evaluated by the BLM, using the criteria spelled out in the PEIS itself, which lists dozens of statutes that these lands
would need to comply with before being granted a lease. Given such a strict protocol, it makes sense to leave as
much land available as possible, in order to have a possibility of a viable commercial oil shale operation. **#1])>**

<([#2 [*10.5*] Second, is the issue of the oil shale royalty rate. The environmental lobby claims that the rates amount to a give-away
to the industry. The fact is that the initial rates are indeed lower than conventional oil and gas, because oil shale is not
conventional oil and gas; it is more expensive to produced, due to its geological characteristics, and therefore it is a
sensible incentive to keep the governments take a bit lower during the industry's inaugural stage. The same system

was used in Canada for their oil sands industry- that industry is currently driving the Canadian economy, providing
the U.S. with the bulk of our non-domestic oil, and is now paying a higher, more normalized rate. **#2])>**

<([#3 [*6.3.2.1*] The third fallacy involves water usage. Not only do other energy sources use more water to produce (i.e. irrigating
corn for bio-fuels), but the most recent GAO estimates conclude that there is enough water to account for an oil
shale industry that consumes as much as 500,000 barrels/day- an amount that is at the high end of any legitimate,
scientific consumption estimate. Several companies involved in oil shale are promoting 'technologies for oil shale
production use very little water whatsoever. In addition •. many oil shale companies already own the water rights they
require to meet their long term needs. **#3])>**

<([#4 [*6.2.2*] Finally, Oil from shale is far more efficient than opponents incredulously claim. The energy production-to-consumption
ratio is between 3:1 and 6:1 depending on the processing technology used. This is eve~higher than the Canadian oil
sand oil that provides so much our fuel feedstock. **#4])>**

<([#5 [*2.1.1*] It is imperative that the BLM move forward with all the facts, and not be beguiled by the false claims of a few
extremists. It is bad enough that the government is devoting taxpayer dollars to re-doing this entire EIS based on just
that, the wild claims of a fringe movement, but it ought not compound the mistake by adopting a plan that is overly
restrictive and hostile to a commercial oil shale industry. Please support the no action alternative, Alternative 1. **#5])>**

OSTS_191

Organization: Marilyn Oden
Received: 4/27/2012 12:00:00 AM
Commenter1: Marilyn Oden - Rifle, Colorado 81650 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/22/2012 12:00:00 AM
Attachments: OSTS2012D00192.htm (OSTS_191-59371.htm Size = 1 KB)
OSTS_191_Oden_Mail_OSTS2012D00192.pdf (OSTS_191-59370.pdf Size = 66 KB)
Submission Text

See Attachment.

<([#1 [*2.1.1*] I would like to offer my support for oil shale development, and Alternative 1 of the current PEIS. While I think it is a shame that this PEIS is being redone at all, after all of the effort, time, and money that went into the first one, I also think that if it is being done, that the BLM should adopt the alternative that best promotes the free market development of oil shale, for the good of both this area, and the country ion general. **#1])>**

OSTS_192

Organization: Jennifer Cupp
Received: 5/2/2012 12:00:00 AM
Commenter1: Jennifer Cupp - Fruita, Colorado 81521 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/22/2012 12:00:00 AM
Attachments: OSTS2012D00193.htm (OSTS_192-59373.htm Size = 1 KB)
OSTS_192_Cupp_Jennifer_Mail_OSTS2012D00193.pdf (OSTS_192-59372.pdf Size = 90 KB)
Submission Text
See Attachment.

<([#1 [*2.1.1*] I feel that Alternative 1 as presented in the current Oil Shale PEIS represents the most
balanced and reasonable approach to oil shale management on federal lands.

Western Colorado relies heavily on energy production for our economic survival. We have seen what happens when government gets in the way of energy development. Allowing companies to begin commercial leasing is the first step in establishing a viable, productive oil shale industry here that will create jobs, and keep the Western Slope economy from falling even further behind.

Tapping into the 4 Trillion barrels of oit under our feet in this region would go a long way towards increasing domestic production, freeing us from reliance on foreign oil, and keeping fuel prices reasonable. There is no good reason to prevent the commercial expansion of the oil shale industry, especially considering the many environmental safeguards and procedures in place to protect our air, water, and land.

Please help us preserve our economy, our communities, and our way of life by selecting Alternative 1 for this current PEIS. **#1])>**

OSTS_193

Organization: Janet Blackman
Received: 4/15/2012 12:00:00 AM

Commenter1: Janet Blackman - Grand Junction, Connecticut (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/22/2012 12:00:00 AM
Attachments: OSTS2012D00194.htm (OSTS_193-59375.htm Size = 1 KB)
OSTS_193_Blackman_Mail_OSTS2012D00194.pdf (OSTS_193-59374.pdf Size = 81 KB)
Submission Text
See Attachment.

<([#1 [*2.1.1*] This letter is to offer my support for the No Action alternative in the 2012 PEIS. I support oil shale development has a way to create jobs in our region, and to provide America with the energy needed to fuel her economic recovery and industrial might. There is an estimated 4 trillion barrels of oil in oil shale lands right outside our back door, and tapping this resource should be a national priority.

Instead, the BLM, egged on by extreme environmental groups, seems determined to obstruct the establishment of this industry in any way it can. The preferred alternative eliminates commercial leasing, allowing only leases for RD&D, which will inevitably delay commercial production, and the resulting economic benefits, for years to come.

This alternative also drastically reduces the amount of land made available for leasing, which will act as a further deterrent to
commercial investment.

In contrast, Alternative 1 restores the findings of an earlier PEIS, which would allow companies to apply for commercial leases out of a pool of 2 million acres. While this may seem like a lot, the fact is that not all of this land would be developed. Since each lease would have to undergo a full environmental analysis, as per the protocols set in place for the BLM, EPA, and other agencies.

To me, this seems like the most honest, balanced approach to dealing with development on public lands, as opposed to simply
shutting down large swaths. For this reason, I recommend that your office select Alternative 1 as the management plan for oil
shale in this PEIS. **#1])>**

OSTS_194
Organization: Garry Worthen
Received: 5/2/2012 12:00:00 AM
Commenter1: Garry Worthen - Grand Junction, Colorado 81504 (United States)
Organization1:
Commenter Type: Member of the Public

Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/22/2012 12:00:00 AM
Attachments: OSTS2012D00195.htm (OSTS_194-59377.htm Size = 1 KB)
OSTS_194_Worthen_Mail_OSTS2012D00195.pdf (OSTS_194-59376.pdf Size = 85 KB)
Submission Text
See Attachment.

<([#1 [*9.8*] I think it is outrageous that your department would authorize a re-do of the 2008 Oil Shale PEIS,
simply because a handful of environmental extremists were unhappy over its outcome. What does
this say about the systems we have in place, that anytime some special interest group decides it didn't get exactly what it wants, it can sue and get a "do-over" at taxpayer's expense?

The three land allocation alternatives in the 2012 PEIS completely disregard science, economics, and the input of many people from many fields, and instead draw up plans from thin air to reduce acreage available for oil shale development, and impose restrictions on the industry. That this is being done not as a result of any new information, or new studies, but at the behest of a small, noisy bunch of extremists, is quite frankly disgusting. **#1])>**

<([#2 [*2.1.1*] Our government is not in place to cater to the whims of a loud minority who try to use the legal
system as a back-door way to push their agenda. I ask that you adopt Alternative 1, which keeps the finding s of the original PEIS **#2])>**

OSTS_195
Organization: Debbie Healy
Received: 4/30/2012 12:00:00 AM
Commenter1: Debbie Healy - Grand Junction, Colorado (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/22/2012 12:00:00 AM
Attachments: OSTS2012D00196.htm (OSTS_195-59379.htm Size = 1 KB)
OSTS_195_Healy_Mail_OSTS2012D00196.pdf (OSTS_195-59378.pdf Size = 97 KB)
Submission Text
See Attachment.

<([#1 [*2.2*] I am deeply concerned with a number of Items In the new 2012 PEIS for oil shale,

especially as contained In Alternative
2b, the BLM's Preferred Alternative.

2b markedly decreases the amount of land available for application for commercial leasing, by nearly 80%, from 2,017,
714 acres to a mere 461,965 acres. The acreage that is left is distributed in portions too small and isolated to support a
large-scale commercial industry. These locations were also not selected on any economic or geological basis.
2b goes even further by not allowing for commercial leasing on these properties in the first place. Leasing would be
restricted to RD&D only until the lease demonstrated a viable recovery technology.

It should be left to the individual companies to make these sorts of management decisions. If a company wants to secure a
lease without yet possessing the ability to develop it, it Is on that company to decide for itself if the long term strategic
planning interests of having the lease outweigh the costs Of paying for it every year. That is NOT a decision for
government to make. **#1])>**

<([#2 [*9.3*] The 2,000,000 acres allowed for in the 2008 PEIS, and in Alternative one which would retain its findings, would not
automatically be given up for development; each lease applied for would have to undergo a full NEPA analysis, including
at least one EIS, which would ensure that truly fragile eco-systems are granted any protection they warrant **#2])>**

<([#3 [*2.1.1*] Alternative lis the most prudent, balanced, and economically sound model, and I recommend its adoption. **#3])>**

OSTS_196
Organization: Western Colorado Contractors Association, Chad Saunders
Received: 4/25/2012 12:00:00 AM
Commenter1: Chad Saunders - Grand Junction, Colorado 81505 (United States)
Organization1: Western Colorado Contractors Association
Commenter Type: Misc. Organization
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/22/2012 12:00:00 AM
Attachments: OSTS2012D00197.htm (OSTS_196-59381.htm Size = 1 KB)
OSTS_196_Western_CO_Contractors_Assoc_Saunders_Mail_OSTS2012D00197.pdf (OSTS_196-59380.pdf Size = 129 KB)
Submission Text

See Attachment.

<([#1 [*2.1.1*] The purpose of this letter is to offer our comments and recommendation on the 2012 Oil Shale Programmatic Environmental
Impact Statement (PEIS). The Board of Directors of the Western Colorado Contractors Association voted to support the
selection of Alternative No. 1 as the option to be adopted by the Bureau of Land Management (BLM). We have made this
recommendation based on the following comments:

The current PEIS outlines in its Socio-Economic Impacts section, Alternative No. 1 will result in a substantial amount of
construction and corresponding job growth. The PEIS estimates that adoption of Alternative No. 1 will create roughly 10,000 commercial jobs in the region and hundreds more in residential housing construction. The projected income associated with housing construction for oil shale workers and their families alone is in the range of $10 to $15 million. This figure does not include incomes for housing construction associated with ancillary projects such as a power plant for in-situ processing which would generate hundreds more construction jobs and millions more in income.

In contrast, the implementation of Alternative 3 is projected to result in a reduction in housing construction jobs by over 2/3
and that commercial construction jobs created would be approximately one quarter of the jobs created by Alternative No. 1. **#1])>**
<([#2 [*3.10.3*] The BLM's preferred Alternative 2b, does not include an actual estimate of the economic impacts but only comments that the jobs and income generated would be "lesser in scale" due to the drastically reduced acreage available from the original project parameters. **#2])>**

<([#3 [*2.1.1*] The wider economic benefits of oil shale development will not only benefit our membership but the community at large as well. Continuing with these development operations under Alternate No. 1 is critical to developing a reliable method of
harvesting this immense natural resource which will contribute to the reduction of our nation's dependence on foreign
sources of energy production. Dictating a reduction in the land being made available for these projects by nearly 90% from the originally approved PEIS disrupts the process and potentially jeopardizes the feasibility of the projects for the participants. **#3])>**

<([#4 [*1.1.1*] For these reasons and in light of the positive effects that Alternative 1 will have on the local economy, we fully support the adoption of this Alternative. In addition, it is our understanding that the comment period for the 2012 Oil Shale PEIS expires on May 4, 2012, with implementation of the new Alternative scheduled for May 15, 2012. We would respectfully request the extension of this period to allow a reasonable amount of time for other members of the business community to comment on the PEIS. **#4])>**

OSTS_197

Organization: Dennis White
Received: 5/2/2012 12:00:00 AM
Commenter1: Dennis White - Grand Junction, Colorado 81507 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/22/2012 12:00:00 AM
Attachments: OSTS2012D00198.htm (OSTS_197-59383.htm Size = 1 KB)
OSTS_197_White_D_Mail_OSTS2012D00198.pdf (OSTS_197-59382.pdf Size = 101 KB)
Submission Text
See Attachment.

<([#1 [*9.8*] Alternative 1 is the only responsible alternative for the BLM to select as you re-complete this PEIS process for oil shale. The efforts by a few highly ill-informed individuals and groups should not the basis for making major
decisions that have national economic and security implications. The 2008 PEIS identified just over 2 million acres
within the most geologically prospective oil shale area as being suitable for application for leasing. This would,
among other things, maximize the opportunity for oil shale development, and ensure that sensitive areas were
protected by conducting a full EIS analysis on each applied lease.

There is little if anything of substance for opponents of oil shale development to intelligently debate about; the
technology has made great strides since the much-ballyhooed "Black Sunday" crash back in 1980, as evidenced
by successful operations in other parts of the world, and exciting recent developments on Shell's oil shale RD&D
lease in Colorado. **#1])> <([#2** [*6.3.2.1*] Properly estimated water usage is far less than the unscientific and fear-mongering claims of the opponents - in fact some surface retort processes use little to no water. **#2])> <([#3** [*6.2.2*] Oil shale is highly efficient, in that it produces far more energy than it uses to produce it, at a ratio of between 3:1 and 6:1, depending on processing method used. Leaving the maximum amount of acreage available for potential commercial leasing puts in place
an orderly process for such commercial expansion, allowing local towns and counties to prepare for greater
economic development. The income and sales tax produced by greater employment would have immediate
beneficial impacts on local and state coffers. And these projects are being funded by private investment, not
taxpayer subsidies.

#3])>
<([#4 [*11.2*] The benefits of oil shale are many and varied. Obviously, the economic activity and job growth would be a boon
to the Western Slope. Making use of the processes in place to ensure environmental protection, establishing an
orderly program for commercial development, and producing this resource here, rather than ceding it to less
environmentally-conscious countries, are all of enormous benefit to the environment. And being able to replace
the oil America purchases from mostly hostile regions of the earth, with a domestic product, is the lynchpin of an
effective strategic, national energy program. **#4])>**

<([#5 [*2.1.1*] It is therefore in the best interests of the region, the environment, and the nation to adopt the least restrictive
option on the table, Alternative 1. **#5])>**

OSTS_198
Organization: John and Mickey Allen
Received: 5/3/2012 12:00:00 AM
Commenter1: John and Mickey Allen - Rangely, Colorado 81648 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Comment Form
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/22/2012 12:00:00 AM
Attachments: OSTS2012D00199.htm (OSTS_198-59385.htm Size = 1 KB)
OSTS_198_Allen_Comment_Form_Mail_OSTS2012D00199.pdf (OSTS_198-59384.pdf Size = 159 KB)
Submission Text
See Attachment.

<([#1 [*12*] A few years ago we marked the bicentennial of the Lewis and Clark expedition. About the same time, we heard that the furthest you could get from a road in the Lower 48 was 27 miles. And we said, "If we had the bodies and the horses we had in 1965, we could probably cover that in one day." We find that appalling. We accept that some of what's left will have to be sacrificed for energy exploration, but it is beyond us that we are asked to gamble on a form of energy that required large amounts of our scarce water and more energy that it will produce to make use of it. And yes, we've been in Rangely for 36 years and we remember 1982. **#1])>**

OSTS_199
Organization: Tatianna Gruen
Received: 5/2/2012 12:00:00 AM
Commenter1: Tatianna Gruen - Denver, Colorado (United States)

Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** klett
Attachments: OSTS2012D00200.htm (OSTS_199-59387.htm Size = 1 KB)
OSTS_199_Gruen_Mail_OSTS2012D00200.pdf (OSTS_199-59386.pdf Size = 131 KB)
Submission Text
See Attachment.

<([#1 [*9.8*] Thank you for this opportunity to voice key concerns on the draft 2012 Oil Shale/Tar Sands Programmatic Environmental Impact Statement. Oil shale has an important impact on our nation's economy, security and future of our country especially in my home state of Colorado.

As a taxpayer, I am very displeased by the reason behind this new PEIS. The final outcome of the 2008 PEIS, and the no action alternative in the current one which retains this outcome, allows for the delicate balance between environmental conservation and economic growth. Both the 2008 and 2012 PIES have nearly identical information but completely different conclusions. Little evidence has been discovered since the initial 2008 PIES to warrant redoing the report. In reality, the only reason for this new PEIS is to please extremist environmental lobbying groups who have sued the Department of Interior in order to set their own agenda.

It is unreasonable to waste taxpayer money, at a time when our national debt is nearly $15 trillion, when the initial PEIS 2008 study was professionally done. Wasting taxpayer dollars to produce a new PEIS sets a dangerous precedent of manipulating the courts to dictate public policy. **#1])>**

<([#2 [*2.2*] Oil shale exploration will help the United States reach 4 trillion barrels of oil lying below
our soil. Not only will oil shale exploration allow our nation to become self reliant but will lead us towards an energy independent future. The 2008 PIES identified over 2 million acres of prospective oil shale lands in three western states. The preferred 28 alternative under the 2012 PIES would cut the previously recommended exploration by 90 percent in Colorado - and only permit exploration of small pockets in the area. If Alternative 28 passes, it would be too limited and expensive for companies to even consider oil shale expiration in Colorado. **#2])>**

<([#3 [*2.1.1*] It is important for us to consider the impact of such a dangerous policy in Colorado. As a
native Coloradan, and someone with strong ties to the Western Slope, I have seen the impact of job losses in the oil industry due to overzealous regulations. As federal and

state-regulations against oil-exploration have tightened, I have-watched hundreds of Coloradans lose their jobs and homes and struggle to survive. With a 10 percent unemployment rate on the Western Slope and gas prices at $4 per gallon, the time is now to find a balance between economic development and environmental protections.

As a native Colorado taxpayer, and former resident of the Western Slope, I stand firmly against these strangling regulations that have setback oil exploration, extracted jobs, harmed communities and thwarted our quest for oil independence. I strongly urge you to select Alternative 1 in the final 2012 PEIS report. **#3])>**

OSTS_200

Organization: Rebecca Goad
Received: 4/24/2012 12:00:00 AM
Commenter1: Rebecca Goad - Grand Junction, Colorado 81506 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/22/2012 12:00:00 AM
Attachments: OSTS2012D00201.htm (OSTS_200-59389.htm Size = 1 KB)
OSTS_200_Goad_Mail_OSTS2012D00201.pdf (OSTS_200-59388.pdf Size = 87 KB)
Submission Text
See Attachment.

<([#1 [*9.8*] In regards to the most recent PEIS on oil shale development in Colorado, Utah and Wyoming, I find it appalling that we are even going through this again. This issue was studied, analyzed, and worked through only a few short years ago, and it is a waste of taxpayer's money, not to mention an unjustifiable delay in progress towards commercial oil shale development, to redo the PEIS based solely on a lawsuit brought against the Department of the Interior by a handful of individuals discontented with the outcome of the first one. What does this say about the systems we have in place, and the EIS process? That every time the outcome of the long, expensive process is disputed, some group can sue until it receives a decision they like? Where does this end?

There has been nothing, aside from a change in administration, happen between when the first PEIS was completed and this new one started, that would justify redoing the whole thing. As a taxpaying citizen, I am frankly outraged that our federal government would be so flippant with my money. **#1])>**

<([#2 [*2.1.1*] Oil shale development is crucial to the nation and the region, and is ready to take the
next steps forward. It should not have to be held hostage by a process that seems intent on delaying it to death.

With that said, the BLM should choose Alternative 1, the "no action alternative" and leave things the way they were after we went through this the first time in 2008. Anything else is just a political game. **#2])>**

OSTS_201
Organization: Linda Gregory
Received: 5/2/2012 12:00:00 AM
Commenter1: Linda Gregory - Grand Junction, Colorado 81504 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/24/2012 12:00:00 AM
Attachments: OSTS2012D00202.htm (OSTS_201-59391.htm Size = 1 KB)
OSTS_201_Gregory_Mail_OSTS2012D00202.pdf (OSTS_201-59390.pdf Size = 117 KB)
Submission Text
See Attachment.

<([#1 [*2.1.1*] This letter is in response to the 2012 draft PEIS for oil shale. I wish to state my opposition to the BLM's
Preferred Alternative, and other Land Allocation Alternatives in the document and express instead my
support for Alternate 1, the No Action Alternative. **#1])>**

<([#2 [*10.6.3*] Our nation is experiencing ever increasing fuel prices and an energy policy that has us dependant on foreign
governments who are not our friends for a large percentage of our oil. Meanwhile, this region holds as
much as 4 trillion barrels of oil in place, according to the U.S. Geological Survey and perhaps even more.
This is more oil than in the entire Persian Gulf, right in our own backyard. **#2])>**

<([#3 [*9.8*] It is rather ridiculous to reduce the amount of acreage by 77% and then to spread them out in small isolated
pockets. I expect this will cost the Oil Shale Companies more money to extract the oil. This is a violation
of the 2005 Energy Policy Act, which explicitly called for a separate and concurrent commercial development program for oil shale. Putting limitations on oil shale development in this way points to a
much larger problem. The larger problem I am referring to is the bullying being done by various environmental groups who brought a lawsuit against the outcome of the three-year long 2008 PEIS. The
intent of these groups is to make it impossible to drill for oil because of their ideological belief that the use

of this substance causes damage to our earth's atmosphere. As long as they are able, they will continue to
hamper any form of oil shale development. It is about time that someone or some entity stood up to them
and said "ENOUGH!"

Just think what these environmentalists would have had to say about the expansion and growth of our
country, the industrial revolution, the inventions of the automobile, airplanes, space rockets. We would still
be a small but very crowded area located on the eastern seaboard and the rest of the country belonging to
Mexico or Canada. I don't think we would have the type of power plants that have efficiently powered our
cities with many many daily electric conveniences. Their idea is to make everything so expensive that we
as consumers cannot afford it. Just another thought- we would never have been able to travel to the moon.
They seem to wish to move us backwards in time. Isn't it time to say no to them and yes to a future based
upon sound common sense. I think that the BLM should at least adopt the Alternative that reinforces the
results of a lengthy, professionally done process that included thousands of hours of input from experts,
scientists, local governments, and the people, who are the taxpayers and you are supposed to work for them.

Please adopt Alternative 1, put a stop to the nonsense, and allow commercial oil shale development to take place responsibly in western Colorado.
#3])>

OSTS_202
Organization: John Pugliese
Received: 4/23/2012 12:00:00 AM
Commenter1: John Pugliese - Palisade, Colorado 81526 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/24/2012 12:00:00 AM
Attachments: OSTS2012D00203.htm (OSTS_202-59393.htm Size = 1 KB)
OSTS_202_Pugliese_Mail_OSTS2012D00203.pdf (OSTS_202-59392.pdf Size = 74 KB)
Submission Text
See Attachment.

<([#1 [*2.1.1*] Thank you for extending this opportunity to express our views and concerns over this most recent PEIS involving oil shale. This is a resource that can be developed and produced in an environmentally responsible manner, and that can
create enough jobs and economic activity to return prosperity and growth to the region.
The tax revenue generated by a healthy and vibrant commercial oil shale industry will also ease the strain on local,
state, and federal budgets, and help fund schools, roads, emergency personnel, and other key local government
functions. Furthermore, it goes without saying that having the ability to produce energy here at home will help
relieve pressure on fuel prices, and enable the United States to scale back its reliance on foreign sources of oil.
The 2008 PEIS, and the first, "No-Action" Alternative in the 2012 version that retains the recommendations of that
thoroughly prepared document, is the best, most responsible and most legally acceptable approach to seeing these
benefits come to fruition.
I encourage you to adopt Alternative I. **#1])>**

OSTS_203
Organization: Ciru Kroese
Received: 5/2/2012 12:00:00 AM
Commenter1: Ciru Kroese - Craig, Colorado 81625 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/24/2012 12:00:00 AM
Attachments: OSTS2012D00204.htm (OSTS_203-59395.htm Size = 1 KB)
OSTS_203_Kroese_Mail_OSTS2012D00204.pdf (OSTS_203-59394.pdf Size = 91 KB)
Submission Text
See Attachment.

<([#1 [*2.2*] This latest PEIS for oil shale is disappointing on many levels. First is the she~r amount of land that is placed off limits to any oil shale leasing. The 2008 PEIS
identified about 2 million acres that could be made available to the oil shale industry
to apply for commercial leases, and the Preferred Alternative in the new PEIS cuts
that down to a mere 346,000, a fraction of the land allowed for in 2008. Shutting
all of this land off forever will delay the commercial development of oil shale, and the
economic benefits to the region that such development would bring. **#1])>**

<([#2 [*6.3*] This PEIS seems to buy into the many falsehoods spread about oil shale by its opponents; that the technology is not there to develop it, that it is a 'dirty' industry,

that it will use all of the water, that it will destroy the land through extensive strip mining == none of these insinuations are true, based on scientific date that industry, academia, and even the federal government has compiled over the years, and yet the current PEIS, especially Alternatives 4b, 3, 2, and the Preferred Alternative, 2b, all seem to accept these allegations in prohibiting commercial leasing, and imposing extreme restrictions to land access.
#2])>
<([#3 [*2.1.1*] It is mostly disappointing that the BLM would let the environmental lobby bully it into
making these restrictive recommendations. A lot of work, time and money went into the 2008 PEIS, just to be dismissed at the behest of a couple environmentalist organizations.

The BLM should start looking out for the people who live and work in and around the land they manage, not for their friends in the 'green' lobby, and they should start by selecting Alternative 1 as their new Preferred Alternative. **#3])>**

OSTS_204
Organization: Doug Thompson
Received: 4/15/2012 12:00:00 AM
Commenter1: Doug Thompson - Grand Junction , Colorado 81506 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/24/2012 12:00:00 AM
Attachments: OSTS2012D00205.htm (OSTS_204-59397.htm Size = 1 KB)
OSTS_204_Thompson_Mail_OSTS2012D00205.pdf (OSTS_204-59396.pdf Size = 91 KB)
Submission Text
See Attachment.

<([#1 [*9.8*] There is no valid reason for the federal government to have restarted the Programmatic EIS on oil shale, just a few years after completing one in 2008. There has been virtually nothing change between then and now, except for the conclusions, which all of a sudden severely restrict oil shale development.

Mesa County was entirely correct in not participating as a cooperating agency this time around, as they participated fully in the 2008 PEIS, and their input would not have changed one iota. Participating in this latest round, would have been a waste of time and money that we don't have.
#1])>

<([#2 [*2.2*] With this PEIS, and the BLM's stated preferred alternative which cuts land available for commercial oil shale lease application down from just over 2 million acres to just *over* 460,000 acres, unreasonably prohibits commercial leasing, and *even* disallows commercial

expansion off existing RD&D leases, the BLM is placing itself directly at odds with the people of the region, who are tired of rehashing old arguments, and simply want to see the industry establish itself, and bring in jobs and economic opportunity. **#2])>**

<([#3 [*2.1.1*] Despite what some misinformed opponents might say, this is not a choice between economic development and the environment. Both development and conservation can work hand in hand, as they have for many years in this very region. The land made available in the 2008 PEIS is not 'open for development" but 'available for application for leasing", meaning that each individual lease would be subject to vigorous environmental evaluation prior to a lease permit being issued. So the claims of environmental catastrophe by oil shale's opponents are really just claims that your agency cannot do its job, something that we know is no more true than their many other claims regarding oil shale.

The fact of the matter is that oil shale is a resource that has been proven feasible economically and technologically, and the only major impediment to commercial development in the United States is arbitrary government action, as determined by small but vocal extremist groups. Please do not let a special interest group determine our future; please select alternative 1 as your preferred alternative for oil shale
management. **#3])>**

OSTS_205
Organization: Colton Vaughn
Received: 5/2/2012 12:00:00 AM
Commenter1: Colton Vaughn - Grand Junction, Colorado 81501 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/24/2012 12:00:00 AM
Attachments: OSTS2012D00206.htm (OSTS_205-59399.htm Size = 1 KB)
OSTS_205_Vaughn_Colton_Mail_OSTS2012D00206.pdf (OSTS_205-59398.pdf Size = 100 KB)
Submission Text
See Attachment.

<([#1 [*9.8*] The BLM is redoing an Oil Shale Programmatic EIS simply on the basis of a lawsuit brought against the
Department of the Interior over the findings of the first one, completed in 2008. There has been absolutely no new information develop over the course of the few short years between that PEIS and
the current one, and yet the BLM has adopted as its preferred alternative one that recklessly slashes
the amount of land found under the 2008 PEIS to be suitable for application for oil shale leasing by

90% in Colorado, and eliminated commercial leasing.

If nothing has changed in terms of science, environmental analysis, economics, or any other factor,
why such a drastic change in the BLM's conclusions? The only possible reason for this is that the BLM
is allowing itself to be held hostage by environmental extremists with an agenda that cares nothing for
the economic and social well being of the people of the Western Slope. **#1])>**

<([#2 [*2.1.1*] The 2008 PEIS was a very thoroughly done project that involved all the local governments, the public,
and experts in many fields, and resulted in a preferred alternative that provided for a reasonable amount of land to be made available for potential future commercial leasing, while excluding truly
sensitive ecological areas from any development.

This approach would maximize the economic potential of recovering some of the 4 trillion barrels of oil
that is under this region (according to the U.S. Geological Survey), and provide hundreds or more of
long-term, well-paying jobs. As a college student, this is vitally important to me, as I contemplate
graduation facing student loan debt and a bleak job market.

Alternative 1 of the current re-done PEIS preserves the findings of the 2008 PEIS, and should be the route chosen by the BLM. **#2])>**

OSTS_206
Organization: Jeffrey Thompson
Received: 4/24/2012 12:00:00 AM
Commenter1: Jeffrey Thompson - Irvine, California 92606 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/24/2012 12:00:00 AM
Attachments: OSTS2012D00207.htm (OSTS_206-59401.htm Size = 1 KB)
OSTS_206_Thompson_Mail_OSTS2012D00207.pdf (OSTS_206-59400.pdf Size = 111 KB)
Submission Text
See Attachment.

This letter pertains to the BLM's "draft programmatic environmental impact statement"
for oil-shale and tar-sand development in Colorado, Utah and Wyoming.

<([#1 [*11*] I am fully supportive of the BLM initiating a commercial leasing program for oil-shale
and tar-sands development in this area. It would provide much needed, domestically developed energy for our country, as well as providing gainful employment for
thousands of people.

Although there are those who claim that carbon dioxide has a significant impact on the earth's climate, there has been significant recent research that clearly links changes in the sun's activity level as the true driver of the earth's climate. Therefore, there is no reason to not proceed with oil-shale and tar-sand development.

I therefore fully support any action by the BLM to continue or to authorize any new oilshale or tar-sand development on public land, or create or continue land-use allocations that would allow for such uses in the future. The draft programmatic environmental impact statement properly endorses additional public-land use for oil shale extraction.
#1])>
<([#2 [*8.1*] The land overlying oil-shale resources in Utah, Colorado and Wyoming is some of the
best open land in the West, and outdoor recreation and tourism are huge economic drivers for the region. Based on the economic activity in the deserts of the southwest to develop solar plants, and on my own experience as a frequent visitor to the area, I have observed how recreation successfully co-exists with tar sands development, since the area developed is only a small percentage of the land in the region. In other words, there is enough land for everyone, and I think that striking a balance between recreation and oil shale development is readily achievable. **#2])>**

<([#3 [*11*] I ask that you approve oil shale and tar sand development for these areas. It is essential for our nation to continue to prosper and remain independent. **#3])>**

OSTS_207
Organization: Kenneth Robar
Received: 4/15/2012 12:00:00 AM
Commenter1: Kenneth Robar - Grand Junction, Colorado 81506 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/24/2012 12:00:00 AM
Attachments: OSTS2012D00208.htm (OSTS_207-59403.htm Size = 1 KB)
OSTS_207_Robar_Mail_OSTS2012D00208.pdf (OSTS_207-59402.pdf Size = 98 KB)
Submission Text
See Attachment.

<([#1 [*2.2*] I would like to express and explain my objections to the land allocation alternatives as described in the PEIS
referenced above.

Alternative 2, and the BLM's preferred Alternative 2b, both reduce the amount of land available for
commercial lease application to such an extent, and into such small and widely dispersed tracts, that
commercialization becomes all but impossible. Most of the tiny, isolated pockets that are not placed forever
off limits to even consideration for leasing are far too small to support a commercial operation. In the
meantime, the alternative also places the current Preferred Acreage Leases, designed to allow commercial
expansion of existing research and development leases, mostly or, in some cases, completely off limits as
well. **#1])>**

<([#2 [*9.6*] 2b, the "preferred Alternative", also eliminates commercial leasing by only allowing RD&D leases until the
applicant can demonstrate to the government its technology for producing the oil from shale. It should be
none of the governments business to pass arbitrary judgment on a company's tools and processes before it
grants a lease. If a company wishes to take the risk of renting a lease before its technology has caught
completely up, that is the business of that company; if they want to make the lease payments while
perfecting their systems, let them. It is their call whether or not the reward is worth the risk, and laws of
economics dictate that only companies that think they will be able to turn a profit relatively quickly off
their investment will go ahead and bear the risk. But to deny them the flexibility of being able to secure
those leases in the interim is an unconscionable intrusion on their rights as businesses, and a strong
disincentive to investment.
#2])>
<([#3 [*2.3*] Alternative 3 restricts leasing to existing RD&D leases only, without even pretending to be open to the
possible of expansion. This is totally unacceptable.
#3])>
<([#4 [*2.4*] Alternative 4 may be similar to the best Alternative, Alternative 1, but 4b places the same restrictions on
commerdalleasing as does 2b. **#4])>**

<([#5 [*2.1.1*] Alternative 1 will keep available the 2,000,000 acres found in the 2008 PEIS to be suitable for commercial
lease application, and as such is the only reasonable alternative to consider. **#5])>**

OSTS_208
Organization: James Fletcher
Received: 5/2/2012 12:00:00 AM
Commenter1: James Fletcher - Palisade, Colorado 81526 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/24/2012 12:00:00 AM
Attachments: OSTS2012D00209.htm (OSTS_208-59405.htm Size = 1 KB)
OSTS_208_Fletcher_Mail_OSTS2012D00209.pdf (OSTS_208-59404.pdf Size = 92 KB)
Submission Text
See Attachment.

<([#1 [*2.1.1*] This letter is intended as part of the public comment period for the above referenced PEIS. I would like
to express my support for Alternative 1, no-action.

As a business owner in western Colorado, I understand the importance of energy development to the
economy of the region. As a resident, I also understand the importance of conserving our rich natural
areas. Alternative 1 is the only alternative in the 2012 PEIS, in my opinion, that manages to accomplish
both.

Unlike the Preferred Alternative, 2b, Alternative 1 leaves available for potential commercial leasing
enough land to make it economical and practical for energy companies to invest and expand into the
region. 2b, by leaving only a small fraction of that land available, locating it in widely separated parcels, and limiting leasing to only RD&D, deters both the establishment of a commercial-scale industry, and the long-range planning and investment that a commercial oil shale program would require ..

This would not only hurt companies which might want to pursue oil shale extraction, but would deny
the people of this region the opportunity to make a bright, more prosperous future for themselves and
their children. Many families and businesses have already moved out of the area, and without a

solid
industry to sustain the local economy, many more will.

Alternative one goes back to the land allocation plan that was decided upon in the 2008 PEIS, which
collected years of data, and hours of testimony and input from the people and businesses in the region, and concluded that just over 2,000,000 acres of prime oil shale land was suitable to be made
available for commercial leasing. This ensured that a process would be in place to evaluate each lease
for environmental hazards, while also allowing industry the flexibility needed to plan commercial
expansion.

I would ask your office not to throw aside all the work done by various parties in developing a sound oil
shale management plan that accommodates commercial development, in favor of the agenda of a handful of environmental obstructionists. Please make the right decision for our region's economy, and
our nation's energy future, and adopt Alternative 1. **#1])>**

OSTS_209
Organization: Duncan McArthur
Received: 4/30/2012 12:00:00 AM
Commenter1: Duncan McArthur - Grand Junction , Colorado 81503 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/24/2012 12:00:00 AM
Attachments: OSTS2012D00210.htm (OSTS_209-59407.htm Size = 1 KB)
OSTS_209_McArthur_Mail_OSTS2012D00210.pdf (OSTS_209-59406.pdf Size = 110 KB)
Submission Text
See Attachment.

<([#1 [*1.1.1*] In regards to the 2012 oil Shale PEIS, I would first like to request that the comment period
be extended for 30 days for to allow the public to offer comments on the current PEIS in light of the release of the 2012 Oil Shale Leasing Regulations. **#1])>**

<([#2 [*9.6.1*] I also take issue with certain provisions in the preferred Alternative, 2b, and 4b. The
requirement for companies to demonstrate their recovery technology is an unreasonable request that does not apply to any other industry to my knowledge, certainly not to any

other energy sub-sector including oil and gas, solar or wind. There does not appear a reason for oil shale to be held to a different standard than any other form of energy other than a desire to prevent oil shale from becoming a viable commercial industry.

This requirement added to the land restrictions imposed by alternatives 2, 2b, and 3, combine to serve as a disincentive for commercial development. This contributes to an indefinite delay in the economic benefits that could be reaped by the communities in the area by allowing a structured commercialization of the industry. Not just in terms of jobs not being created but in the loss of lease bonus payments and other taxes that would otherwise be going to the federal government.
#2])>
<([#3 [*2.1.1*] The oil shale industry is not asking for special treatment or for the subsidies being granted
other energy industries - most notably renewable energy. They simply want an equal opportunity to grow their businesses that every other industry enjoys. For this reason I support Alternative 1, the no-action alternative, for the current PEIS, which will preserve the more reasonable, pro-growth plan of the 2008 PEIS. **#3])>**

OSTS_210
Organization: Christopher Skowronski
Received: 5/2/2012 12:00:00 AM
Commenter1: Christopher Skowronski - Craig, Colorado 81625 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/24/2012 12:00:00 AM
Attachments: OSTS2012D00211.htm (OSTS_210-59409.htm Size = 1 KB)
OSTS_210_Skowronski_Mail_OSTS2012D00211.pdf (OSTS_210-59408.pdf Size = 80 KB)
Submission Text
See Attachment.

<([#1 [*9.6*] The Land Allocation Alternatives in this PEIS contain restrictions on commercial leasing that are in violation of federal statutes and congressional orders.

Most importantly, the Alternatives 2b (the Preferred Alternative) and 4b, both prohibit commercial leasing until such time as a developer demonstrates a "viable technology" for harvesting oil shale. This is in contravention of the 2005 Energy Policy Act, which explicitly calls for allowing a separate commercial leasing program, as distinct from the RD&D track. The BLM needs, therefore, to allow issuance of commercial leases alongside RD&D ones. Limiting leasing to only RD&D is not only in violation of the statute, but serves as a major disincentive to commercial investment and resulting growth. **#1])>**

<([#2 [*9.2.1*] Similarly, excluding lands from lease availability on the basis of having

"wilderness characteristics", is A) an attempted endrun around Congress, which alone has the authority to designate wilderness, and B) a violation of a Congressional spending moratorium issued last year to defund any activity related to Secretarial Order 3310, which would have permitted the DOI to label lands as having Wilderness characteristics". **#2])>**

<([#3 [*2.1.1*] Unlike the specious claims of the environmentalist lobby that initiated the lawsuit that brought about the costly re-do of the 2008 PEIS, these are real violations that will most likely result in substantive lawsuits, should these provisions be enacted. It makes no sense for the BLM to continue on the path it is on, and willfully back an alternative that clearly breaks the law. Alternative 1 is the only real, legal option, and should be selected. **#3])>**

OSTS_211

Organization: Laureen Gutierrez
Received: 5/2/2012 12:00:00 AM
Commenter1: Laureen Gutierrez - Grand Junction , Colorado 81506 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/24/2012 12:00:00 AM
Attachments: OSTS2012D00212.htm (OSTS_211-59411.htm Size = 1 KB)
OSTS_211_Gutierrez_Mail_OSTS2012D00212.pdf (OSTS_211-59410.pdf Size = 78 KB)
Submission Text
See Attachment.

<([#1 [*1.5*] The current oil shale PEIS is unacceptable. It is the result of a settlement stemming from a lawsuit over the 2008
version, and not the result of fresh analysis or empirical evidence. Drastically reducing the amount of land available for leasing from just over 2 million acres to a few hundred thousand widely scattered acres is not conducive to cultivating a healthy regional industry, and will only serve to prolong the economic hardship of the northwest Colorado region. **#1])>**

<([#2 [*9.2.3*] Also, by limiting leasing to only RD&D, the preferred alternative in the 2012 document may be a violation of federal statute. The Energy Policy Act of 2005 explicitly mandated a commercial oil shale program be permitted, separate and distinct from the RD&D program. **#2])>**

<([#3 [*2.1.1*] I urge you to reconsider this PEIS and return to the land allocation plan decided upon in the 2008 PEIS, as provided for by Alternative 1. **#3])>**

OSTS_212

Organization: Ken Leis
Received: 5/2/2012 12:00:00 AM
Commenter1: Ken Leis - Grand Junction, Colorado 81501 (United States)

Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/24/2012 12:00:00 AM
Attachments: OSTS2012D00213.htm (OSTS_212-59413.htm Size = 1 KB)
OSTS_212_Leir_Mail_OSTS2012D00213.pdf (OSTS_212-59412.pdf Size = 87 KB)
Submission Text
See Attachment.

<([#1 [*9.8*] It is my opinion that this most recent PEIS for oil shale is ill-founded in general, and the Preferred Alternative is unsound technically.

The fact that the only reason for this latest version to have been drafted is as part of a settlement with an environmental extremist group, who disputed the amount of land left available for potential leasing in the 2008 PESI, is outrageous. The land allocation plan in the 2008 document was determined after three years of intensive study, and hours of community, government and scientific input. It makes no sense that the BLM would arrive at such a dramatically different conclusion, cutting the available acreage by well over 70%, without them being any new information develop since the original PEIS was drafted. **#1])>**

<([#2 [*9.6.1*] The Preferred Alternative (2b) does not only eliminate hundreds of thousands of acres from availability for potential leasing, but distributes the little remaining land into tiny, segregated tracts with no consideration given as to commercial viability or access. It limits leasing to RD&D only. and requires that in order to upgrade to a commercial lease, the operating company must demonstrate its technology to the satisfaction of the BLM. This is a requirement that is unique to the oil shale industry, and is very arbitrary, as there are no published guidelines for what constitutes a "viable" technology in the BLM's eyes. Like the rest of this current process, this requirement seems extremely vulnerable to political whim. **#2])>**

<([#3 [*9.2.1*] Finally, the selection of which land to exclude in Alternative 2b is, at best, ill thought out. In excluding lands with what the BLM determines as having "wilderness characteristics", seems to be an attempt to implement Secretarial Order 3310, in contravention of a Congressional spending moratorium passed last year which specifically prohibited doing so. It also excludes from any possibility for future leasing, potential Sage Grouse habitat, ahead of the Forest Service releasing details of where that habitat is located.
#3])>
<([#4 [*2.1.1*] With all of this in mind, I call on the BLM to implement Alternative 1, which restores the findings of the 2008 PEIS. **#4])> <([#5** [*1.1.1*] I would also ask that the public comment period be extended by at least 30 days, to allow for all the relevant information to be released and examined. **#5])>**

OSTS_213

Organization: Brian Hull
Received: 5/2/2012 12:00:00 AM
Commenter1: Brian Hull - Grand Junction, Colorado 81504 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/24/2012 12:00:00 AM
Attachments: OSTS2012D00214.htm (OSTS_213-59415.htm Size = 1 KB)
OSTS_213_Hull_Mail_OSTS2012D00214.pdf (OSTS_213-59414.pdf Size = 78 KB)
Submission Text
See Attachment.

<([#1 [*2.1.1*] I would like to express my support for Alternative 1 as described in the 2012 Oil Shale Programmatic EIS.
Alternative 1 offers the best opportunity for industry to expand commercially, and to bring jobs and
prosperity to the region, while still ensuring that our environmental heritage is protected.

Alternative 1 restores the findings of the initial PEIS done in 2008, and leaves 2 million acres available for
potential commercial leasing, pending environmental analysis of each lease. This is an adequate amount
of land to make commercial expansion attractive to oil shale companies, and to provide for a stable,
long term industry. The industry will never take off if it is relegated by government to forever be stuck in
research and development mode. Should that happen, the entire region will be denied the enormous
economic benefits of a major industry, our local, state and federal governments will be denied a wider
tax base, and our nation will be denied the energy security that we have been seeking for decades.

As a veteran of this nation, I care deeply about its future, in terms of security, economics, and, yes, its
environment. Putting a process in place now to provide for orderly commercial development of oil shale
will help meet the requirements for each of these terms. Alternative 1 does this best, and I urge you to
adopt it as your final position on this PEIS. **#1])>**

OSTS_214

Organization: Rick and Susan Crippen
Received: 4/25/2012 12:00:00 AM
Commenter1: Rick and Susan Crippen - Grand Junction, Colorado 81507 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/24/2012 12:00:00 AM
Attachments: OSTS2012D00215.htm (OSTS_214-59417.htm Size = 1 KB)
OSTS_214_Crippen_Mail_OSTS2012D00215.pdf (OSTS_214-59416.pdf Size = 88 KB)
Submission Text
See Attachment.

<([#1 [*2.1.1*] As business owners in Grand Junction, CO, we wholeheartedly support oil shale development, and
accordingly, alterative 1 in the current PEIS. This is the only alternative presented that makes an honest attempt at encouraging commercial development of this massive resource. In restoring the actions taken in the original 2008 PEIS, which set aside just over 2 million acres of federal land for
commercial lease application, this alternative removes unnecessary obstacles from the path towards commercial development. **#1])>**

<([#2 [*2.2*] In contrast, the BLM's preferred alternative, 2b, places the vast majority of this land off limits, and
restricts what is left to only more RD&D leasing. This will do nothing to help the industry get itself up off the ground, and bring jobs, people, and dollars back into the region. This preferred alternative will in fact be a disincentive to commercial development, and even to more research, as few companies will want to enter into a market that they know will not be made available to them for commercial production for many years - or indefinitely.
#2])>
<([#3 [*2.1.1*] Business owners on the Western Slope have for long enough been at the mercy of extreme
environmentalist groups and their anti-business agenda. We are asking you, as agents of our elected federal government, to stand up for us and to allow reasonable, environmentally responsible oil shale leasing and development take place, as provided adequately for under Alternative 1. **#3])>**

OSTS_215
Organization: Marjorie Haun
Received: 5/2/2012 12:00:00 AM
Commenter1: Marjorie Haun - Grand Junction, Colorado 81507 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none

Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/24/2012 12:00:00 AM
Attachments: OSTS2012D00216.htm (OSTS_215-59419.htm Size = 1 KB)
OSTS_215_Haun_Mail_OSTS2012D00216.pdf (OSTS_215-59418.pdf Size = 106 KB)
Submission Text
See Attachment.

<([#1 [*9.8*] I would like to voice my objection to the implication in the current, 2012 Programmatic EIS for oil shale and tar
sands, that the findings from the 2008 PEIS would somehow lead to wholesale damage to the environment.

The 2008 document did indeed identify just over 2,000,000 acres for prime oil shale land as being available for
application for commercial leasing, but that does not translate into 2,000,000 acres actually being leased, much
less developed. In the first place, those acres *available* for leasing would be subject to a full NEPA analysis prior to actually being leased and developed. Also the BLM is taking upon itself to decide where the industry should take out leases and conduct its business. This is on top of its g1·anting itself the power to determine if a
company's technology is sufficient in the eyes of the government to be allowed to proceed. Combined with the
proposed policy of only granting RD&D leases until it approves of a particular technology, this represents an
egregious intrusion of government into private business decisions, and blesses the government with the sole,
Caesar-like discretion of which companies and which technological processes succeed and which fail.

The BLM should limit its role to analyzing the land in question, identifying which areas are truly in need of
special protection, and opening up lands for commercial access based on that criteria, combined with an
evaluation of the socioeconomic factors. The BLM did in fact sufficiently and thoroughly do this, resulting in a
PEIS in 2008 which nicely balanced the needs for conservation with the economic development. **#1])>** **<([#2** [*2.1.1*] I therefore
recommend, and wholeheartedly support the adoption of Alternative 1, which maintains these findings. **#2])>**

<([#3 [*1.1.1*] I would also recommend that the public comment period be extended, in order to allow time for study of the new
oil shale regulations coming out on May 15th. **#3])>**

OSTS_216
Organization: J. Capozzelli
Received: 4/25/2012 12:00:00 AM
Commenter1: J. Capozzelli - New York, New York 10024 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/24/2012 12:00:00 AM
Attachments: OSTS2012D00217.htm (OSTS_216-59421.htm Size = 1 KB)
OSTS_216_Capozzelli_Apr25_Mail_OSTS2012D00217.pdf (OSTS_216-59420.pdf Size = 114 KB)
Submission Text
See Attachment.

<([#1 [*3*] I am writing about the BLM's "draft programmatic environmental impact statement" for oil-shale and tarsand
development in Colorado, Utah and Wyoming. Oil-shale and tar-sands development are two of the
filthiest ways to produce energy.

I am deeply concerned about the potential environmental effects if the BLM initiates a commercial
leasing program for oil-shale and tar-sands development. It would pollute our land, air and water and
exacerbate climate change. Endemic, threatened and endangered species would be lost.

Between global warming, rampant extinction and a quickly drying Colorado River-- problems that oil-shale
and tar-sand development would only worsen -- it's hard to imagine a less prudent use of our public lands. **#1])>**

<([#2 [*12.3*] I oppose any action by the BLM to continue or to authorize any new oil-shale or tar-sand development on
public land, or create or continue land-use allocations that would allow for such uses in the futur . **#2])> <([#3** [*2.5*] The
draft programmatic environmental impact statement should have included an alternative that does not in
any way endorse additional public-land use for this unproven industry. **#3])>**

<([#4 [*3.10.3*] Oil shale is currently producing no jobs and no revenue; the Congressional Budget Office confirmed that
it is not expected to produce significant revenues through 2022.

The land overlying oil-shale resources in Utah, Colorado and Wyoming is some of the best wildlife
habitat in the West, and outdoor recreation and tourism are huge economic drivers for the region. We
must protect this sustainable economy by making smart decisions based on sound information.
#4])>

<([#5 [*6.2.3*] Oil shale requires a huge amount of electricity to heat it enough to extract liquid from the rock. The BLM
estimates that producing one million barrels per day would require ten new coal-fired power plants, each
with a capacity to power a city of 500,000 people.
#5])>
<([#6 [*3*] During fracking millions of litres of water, sand and numerous chemicals most of which are toxic,
carcinogic as well as teratogenic (they include benzene, toluene, ethyl benzene, xylene, ethylene glycol
[antifreeze], diesel fuel, naphthalene [moth ball] compounds boric acid arsenic poly nuclear organic
hydrocarbons, only to name a few of 600-odd chemicals used), are pumped into boreholes at high
pressure to release natural gas (called shale gas) trapped in layers of underground rock.

The toxic chemicals used in fracking have had devastating consequences across the country- contaminating
lakes and streams, and sickening and killing wildlife. Fracking creates many problems for
wildlife besides increased mortality from toxic chemicals: increase of edge habitats, altered
rnicroclimates, increased traffic -noise -lighting- well flares.

We cannot develop this resource without putting the health and safety of our citizens at risk. The research
increasingly shows that fracking has contaminated groundwater resources from Wyoming to Pennsylvania.

I urgently ask that you evaluate carefully and disclose fully the serious impacts of all new energy required
for oil-shale and tar-sand production and its potentially devastating impact to our climate, as well as the
threat it poses to wildlife, special-status, threatened and endangered species, and to our water air and
communities.
#6])>

OSTS_217
Organization: Institute for Energy Research Campaign, Johnny Russell
Received: 5/8/2012 12:00:00 AM

Commenter1: Johnny Russell - Washington, 20005 (United States)
Organization1: Institute for Energy Research Campaign
Commenter Type: Misc. Organization
Classification: none
Submission Category: Campaign Letter
Submitted As: Postal Mail
Form Letter Category: Form Letter Master
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** klett
Attachments: OSTS2012D00218.htm (OSTS_217-59423.htm Size = 1 KB)
OSTS_217_IER_Campaign_Mail_OSTS2012D00218.pdf (OSTS_217-59422.pdf Size = 74 KB)
Submission Text
See Attachment.

Re: Draft Programmatic Environmental Impact Statement for Allocation of Oil Shale and Tar Sands Resources on Lands Administered by the Bureau of Land Management in Colorado, Utah, and Wyoming

<([#1 [*2.1.1*] The United States has 1 trillion recoverable barrels of oil in taxpayer-owned oil shale deposits, but the federal government is standing in the way of the production of this oil.

I write to ask that the Department of Interior (DOI) reject the "preferred alternative" in the oil shale Programmatic Environmental Impact Statement (PEIS) and instead adopt the "no action" alternative allowing America's vast, game-changing oil shale energy resources to be developed, consistent with federal law and our nation's best interests.

President Obama claims he favors an "all-the-above" energy strategy, but DOI's preferred alternative locks up billions of barrels of oil. This is consistent with Interior Secretary Ken Salazar's long anti-oil shale history. DOI's preferred alternative is directly at odds with the President's professed energy plan. If President Obama truly believes in an "all-the-above" energy policy, DOI would open more land for oil shale permitting. The fact that DOI's preferred alternative locks up more oil and land shows that the administration is not serious about domestic oil production.

It is notable that many of the most affected counties in Colorado have adopted positions that reject Secretary Salazar's proposed plan and instead supporting commercial leasing with proper safeguards and the inclusion of more lands in the plan. I stand with those local counties in favor of oil shale development jobs, investment and national security and against the embargo of our own energy resources represented by the preferred alternative. I stand with those who want to produce energy domestically.
#1])>

OSTS_218
Organization: The Wilderness Society campaign, Juli Slivka
Received: 5/4/2012 12:00:00 AM
Commenter1: Juli Slivka - Denver, Colorado 80202 (United States)
Organization1: The Wilderness Society campaign

Commenter Type: Environmental Organization
Classification: none
Submission Category: CD
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** klett
Attachments: OSTS2012D00219.htm (OSTS_218-59425.htm Size = 1 KB)
OSTS_218_TWS_Campaign_CD_Mail_OSTS2012D00219.pdf (OSTS_218-59424.pdf Size = 47 KB)
Submission Text
See Attachment.

I support the Bureau of Land Management's preferred alternative in the draft plan for oil shale development.

<([#1 [*3*] [*3.10.4*] The preferred alternative would close many valuable and important lands to oil shale, such as lands with wilderness characteristics, areas of critical environmental concern, and sage-grouse habitat. Maintaining wilderness values and ecological integrity on our wild public lands contributes to our way of life and to our economy. The recreation industry in Colorado alone generates $3 billion of economic activity every year. We shouldn't risk our water, air, pristine lands, crucial species habitat and outstanding recreation opportunities for any energy development, much less one dependent on unproven technology.
#1])>
<([#2 [*6.3.2.2*] For all the unknowns about oil shale, what is known is that it threatens our water resources and clean air. To even attempt to generate a single barrel of oil from oil shale, 3-5 barrels of water are needed in the refining process alone. Taking the oil shale out of the ground will waste more water on top of that. And since this development would be taking place in western states like Colorado, water is already a very precious commodity, often in short supply.
#2])> <([#3 [*6.2.3*] [*3.5.3*] In addition to threatening our water, oil shale would also pollute our air. In order to create I million barrels of oil a day from oil shale, I 0 new coal-fired power plants would be needed, leading to the emission of 121 million tons of carbon dioxide.
#3])>
<([#4 [*2.2.1*] Therefore, I hope you will finalize the preferred alternative and ensure that wilderness, wildlife, clean air and precious water supplies are not sacrificed to oil shale.
#4])>

OSTS_219
Organization: Donna Jones
Received: 5/3/2012 12:00:00 AM
Commenter1: Donna Jones - Grand Junction , Colorado 81507 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Postcard Campaign
Submitted As: Postal Mail
Form Letter Category:

Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** klett
Attachments: OSTS2012D00220.htm (OSTS_219-59427.htm Size = 1 KB)
OSTS_219_Jones_Postcard_OSTS2012D00220.pdf (OSTS_219-59426.pdf Size = 103 KB)
Submission Text
See Attachment.

<([#1 [*3*] I am deeply concerned about the potential effects to our water, wildlife, communities and public lands if the BLM initiates a commercial leasing program. The two million acres in UT, WY and CO previously allocated for commercial leasing is a massive amount of public, taxpayer land that would be sacrificed for a singular use of the landscape.

Oil shale is currently producing no jobs and no revenue the Congressional Budget Office confirmed that it is not expected to produce significant revenues through 2022. So we have the time to assess the impacts of development to our water, wildlife, and communities.

I recommend that you carefully consider the serious impacts of new energy required for oil shale production and the potential devastating impacts to our wildlife, water, air, and communities as you take another look at oil shale development.
#1])>

OSTS_220
Organization: Jan Burch
Received: 5/3/2012 12:00:00 AM
Commenter1: Jan Burch - Grand Junction, Colorado 81507 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Postcard Campaign
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** klett
Attachments: OSTS2012D00221.htm (OSTS_220-59429.htm Size = 1 KB)
OSTS_220_Burch_Postcard_OSTS2012D00221.pdf (OSTS_220-59428.pdf Size = 106 KB)
Submission Text
See Attachment.

<([#1 [*3*] I am deeply concerned about the potential effects to our water, wildlife, communities and public lands if the BLM initiates a commercial leasing program. The two million acres in UT, WY and CO previously allocated for commercial leasing is a massive amount of public, taxpayer land that A L 0 1H1 A would be sacrificed for a singular use of the landscape.

Oil shale is currently producing no jobs and no revenue the Congressional Budget Office confirmed that it is not expected to produce significant revenues through 2022. So we have the time to assess the impacts of development to our water, wildlife, and communities.

I recommend that you carefully consider the serious impacts of new energy required for oil shale production and the potential devastating impacts to our wildlife, water, air, and communities as you take another look at oil shale development.
#1])>

OSTS_221
Organization: Piera Kllanxhja
Received: 5/3/2012 12:00:00 AM
Commenter1: Piera Kllanxhja - Grand Junction, Colorado 81501 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Postcard Campaign
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** klett
Attachments: OSTS2012D00222.htm (OSTS_221-59431.htm Size = 1 KB)
OSTS_221_Kllanxhja_Postcard_OSTS2012D00222.pdf (OSTS_221-59430.pdf Size = 91 KB)
Submission Text
See Attachment.

<([#1 [*3*] I am deeply concerned about the potential effects to our water, wildlife, communities and public lands if the BLM initiates a commercial leasing program. The two million acres in UT, WY and CO previously allocated for commercial leasing is a massive amount of public, taxpayer land that would be sacrificed for a singular use of the landscape.

Oil shale is currently producing no jobs and no revenue the Congressional Budget Office confirmed that it is not expected to produce significant revenues through 2022. So we have the time to assess the impacts of development to our water, wildlife, and communities.

I recommend that you carefully consider the serious impacts of new energy required for oil shale production and the potential devastating impacts to our wildlife, water, air, and communities as you take another look at oil shale development.
#1])>

OSTS_222

Organization: Mary Martin
Received: 5/3/2012 12:00:00 AM
Commenter1: Mary Martin - Grand Junction, Colorado 81503 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Postcard Campaign
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** klett
Attachments: OSTS2012D00223.htm (OSTS_222-59433.htm Size = 1 KB)
OSTS_222_Martin_Postcard_OSTS2012D00223.pdf (OSTS_222-59432.pdf Size = 96 KB)
Submission Text
See Attachment.

<([#1 [*3*] I am deeply concerned about the potential effects to our water, wildlife, communities and public lands if the BLM initiates a commercial leasing program. The two million acres in UT, WY and CO previously allocated for commercial leasing is a massive amount of public, taxpayer land that would be sacrificed for a singular use of the landscape.

Oil shale is currently producing no jobs and no revenue the Congressional Budget Office confirmed that it is not expected to produce significant revenues through 2022. So we have the time to assess the impacts of development to our water, wildlife, and communities.

I recommend that you carefully consider the serious impacts of new energy required for oil shale production and the potential devastating impacts to our wildlife, water, air, and communities as you take another look at oil shale development.
#1])>

OSTS_223
Organization: Carol Crawford
Received: 5/3/2012 12:00:00 AM
Commenter1: Carol Crawford - Grand Junction, Colorado 81505 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Postcard Campaign
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** klett
Attachments: OSTS2012D00224.htm (OSTS_223-59435.htm Size = 1 KB)
OSTS_223_Crawford_Postcard_OSTS2012D00224.pdf (OSTS_223-59434.pdf Size = 95 KB)

Submission Text
See Attachment.

<([#1 [*3*] I am deeply concerned about the potential effects to our water, wildlife, communities and public lands if the BLM initiates a commercial leasing program. The two million acres in UT, WY and CO previously allocated for commercial leasing is a massive amount of public, taxpayer land that would be sacrificed for a singular use of the landscape.

Oil shale is currently producing no jobs and no revenue the Congressional Budget Office confirmed that it is not expected to produce significant revenues through 2022. So we have the time to assess the impacts of development to our water, wildlife, and communities.

I recommend that you carefully consider the serious impacts of new energy required for oil shale production and the potential devastating impacts to our wildlife, water, air, and communities as you take another look at oil shale development. **#1])>**

OSTS_224
Organization: Carole Chowen
Received: 5/3/2012 12:00:00 AM
Commenter1: Carole Chowen - Grand Junction, Colorado 81502 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Postcard Campaign
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** klett
Attachments: OSTS2012D00225.htm (OSTS_224-59437.htm Size = 1 KB)
OSTS_224_Chowen_Postcard_OSTS2012D00225.pdf (OSTS_224-59436.pdf Size = 102 KB)
Submission Text
See Attachment.

<([#1 [*3*] I am deeply concerned about the potential effects to our water, wildlife, communities and public lands if the BLM initiates a commercial leasing program. The two million acres in UT, WY and CO previously allocated for commercial leasing is a massive amount of public, taxpayer land that would be sacrificed for a singular use of the landscape.

Oil shale is currently producing no jobs and no revenue the Congressional Budget Office confirmed that it is not expected to produce significant revenues through 2022. So we have the time to assess the impacts of development to our water, wildlife, and communities. Water is essential!

I recommend that you carefully consider the serious impacts of new energy required for oil shale production and the potential devastating impacts to our wildlife, water, air, and communities as you take another look at oil shale development.
#1])>

OSTS_225
Organization: Joyce Olson
Received: 5/1/2012 12:00:00 AM
Commenter1: Joyce Olson - Grand Junction, Colorado 81507 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Postcard Campaign
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** klett
Attachments: OSTS2012D00226.htm (OSTS_225-59439.htm Size = 1 KB)
OSTS_225_Olson_Postcard_OSTS2012D00226.pdf (OSTS_225-59438.pdf Size = 108 KB)
Submission Text
See Attachment.
<([#1 [*3*] I am deeply concerned about the potential effects to our water, wildlife, communities and public lands if the BLM initiates a commercial leasing program. The two million acres in UT, WY and CO previously allocated for commercial leasing is a massive amount of public, taxpayer land that would be sacrificed for a singular use of the landscape.

Oil shale is currently producing no jobs and no revenue the Congressional Budget Office confirmed that it is not expected to produce significant revenues through 2022. So we have the time to assess the impacts of development to our water, wildlife, and communities. Yes. We live here - our water and air could be compromised - Please go slow on shale.

I recommend that you carefully consider the serious impacts of new energy required for oil shale production and the potential devastating impacts to our wildlife, water, air, and communities as you take another look at oil shale development.
#1])>

OSTS_226
Organization: Janice Shepherd
Received: 5/3/2012 12:00:00 AM
Commenter1: Janice Shepherd - Grand Junction, Colorado 81506 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none

Submission Category: Postcard Campaign
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** klett
Attachments: OSTS2012D00227.htm (OSTS_226-59441.htm Size = 1 KB)
OSTS_226_Shepherd_Postcard_OSTS2012D00227.pdf (OSTS_226-59440.pdf Size = 110 KB)
Submission Text
See Attachment.

<([#1 [*3*] I am deeply concerned about the potential effects to our water, wildlife, communities and public lands if the BLM initiates a commercial leasing program. The two million acres in UT, WY and CO previously allocated for commercial leasing is a massive amount of public, taxpayer land that would be sacrificed for a singular use of the landscape. We are having yet another draugt. 2 barrels of water per barrel produced oil is too much

Oil shale is currently producing no jobs and no revenue the Congressional Budget Office confirmed that it is not expected to produce significant revenues through 2022. So we have the time to assess the impacts of development to our water, wildlife, and communities.

I recommend that you carefully consider the serious impacts of new energy required for oil shale production and the potential devastating impacts to our wildlife, water, air, and communities as you take another look at oil shale development.
#1])>
<([#2 [*3.2*] Underground heating may have unexpected environmental impact. Volume of material removed may lead to sink holes. Slow experimenting is the way to go.

#2])>

OSTS_227
Organization: Sierra Club Campaign, Kate Colarulli
Received: 5/10/2012 12:00:00 AM
Commenter1: Kate Colarulli - Washington, 20001 (United States)
Organization1: Sierra Club Campaign
Commenter Type: Environmental Organization
Classification: none
Submission Category: Campaign Letter
Submitted As: CD and Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** klett
Attachments: OSTS2012D00228.htm (OSTS_227-59443.htm Size = 1 KB)
OSTS_227_Sierra_Club_Campaign_OSTS2012D00228.pdf (OSTS_227-59442.pdf Size = 125 KB)

Submission Text
See Attachment.

Subject: Re: Draft Programmatic Environmental Impacts State for Oil Shale and Tar Sands Development --Please Choose Alternative 3

<([#1 [*2.3.1*] Thank you for this opportunity to comment on the Draft Programmatic Environmental Impacts State for Oil Shale and Tar Sands development on our nation's public lands. As a citizen concerned about the increasing impacts of climate change on our nation's health and welfare, I am appalled by the notion of allowing oil companies to develop tar sands and oil shale projects on public lands. I thank the Obama administration for your work to roll back dangerous provisions enacted by the Bush administration, and I urge you and your agency to select Alternative 3 in the Final EIS.
#1])>
<([#2 [*12.3*] The magnitude of potential impacts to the West's delicate public lands and shrinking water resources is simply too great to grant unfettered access to the oil industry in these areas. It is foolhardy and irresponsible to open up public lands to these industries--particularly before we even understand the magnitude their footprint. Public lands should be held in trust for American citizens, not for private profits **#2])>** .

<([#3 [*3.5.1.6*] At a time of record-breaking temperatures, debilitating droughts, devastating floods, and increasingly severe weather, we simply cannot afford to increase our reliance on higher-carbon fuels. Producing oil from both tar sands and oil shale generates significantly more carbon pollution than production of conventional petroleum. Granting the oil industry access to our public lands to lock-in production of these types of fuels is simply incompatible with a sustainable energy future that will mitigate the impacts of climate change.
#3])>
<([#4 [*3*] Large-scale development of oil shale and tar sands on our public lands would also come at a major cost to the West's land, wildlife, air quality, and water resources. Already subject to significant oil and gas developments, some of the areas assessed in the DPEIS suffer extremely poor air quality. And although very little is known about the impacts of oil shale production, even the low-end ofthe estimates of how much water it would consume is significant: a 20 I 0 study by the Government Accountability Office demonstrated the range of estimated water impacts from 5-25 barrels of water consumed for every barrel of oil produced-- a toll the West simply cannot afford.
#4])>
<([#5 [*12.3*] For all these reasons, I am strongly opposed to opening up our public lands to oil shale or tar sands development **#5])>** .

OSTS_228
Organization: Natonal Wildlife Federation campaign, Whitney Coombs
Received: 5/2/2012 12:00:00 AM
Commenter1: Whitney Coombs - Boulder, Colorado 80303 (United States)
Organization1: Natonal Wildlife Federation campaign
Commenter Type: Environmental Organization
Classification: none
Submission Category: CD

Submitted As: CD and Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** klett
Attachments: OSTS2012D00229.htm (OSTS_228-59445.htm Size = 1 KB)
OSTS_228_NWF_Campaign_OSTS2012D00229.pdf (OSTS_228-59444.pdf Size = 34 KB)
Submission Text
See Attachment.

<([#1 [*2.2.1*] Thank you for the opportunity to comment on the Bureau of Land Management's 2012 Oil Shale and Tar Sands Draft Programmatic Environmental Impact Statement. I urge you to choose Alternative 2(b) of the Programmatic Environmental Impact Statement. I support this proposal to limit leasing to research and development projects and to exclude vital fish and wildlife habitats from all development activities for oil shale. It is the prudent way forward to safeguard wildlife and to investigate whether we can avoid impacts on our air and water. In addition to this, I urge the BLM to wait for the results from current research before permitting the use of any additional public lands. **#1])>**

<([#2 [*3*] The federal public land overlying oil shale resources in Utah, Colorado and Wyoming is some of the best fish and wildlife habitat in the West. It is home to the largest remaining big game migration in the lower 48 states. It is the "mule deer factory." It provides important habitat for sage-grouse, a species that is on the brink. All of the proposed extraction methods for oil shale will have devastating impacts on wildlife and on other values of these public lands, including clean air and water.
#2])>

OSTS_229
Organization: Fenwick / Irene Carlile
Received: 4/30/2012 12:00:00 AM
Commenter1: Fenwick / Irene Carlile - , (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: E-Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** klett
Attachments: OSTS2012D00230.htm (OSTS_229-59447.htm Size = 1 KB)
OSTS_229_Carlile_Email_OSTS2012D00230.pdf (OSTS_229-59446.pdf Size = 20 KB)
Submission Text
See Attachment.

Good Sirs: **<([#1** [*3.5.1.6*] My knowledge is limited to that which Others-Cause Media-Covered. I'mconfident BLM-Awareness is Detailed—as necessary for Protecting-Public-Interest; that my-writing of aspects Already-Existing in Public-Concern, will be Accepted/ Recorded; I contend Obama/ Interior/ BLM Erred-Severely in Omitting-Concern about CO2 V Global-

Warming.

I've read the Mesa County Resolution 2012-034, Objecting BLM 's 2012 OSTS Programmatic Environmental Impact Statement(which I've-Not-read), and apparently this latter failed to mention Global-Warming/ Storm-Magnification/ Sea-Rise—Horrific-Specie-Suffering—because the Mesa Commissioners' MCM-034, above-link, also so failed to Discuss-Such-Consequences.

I suspect EISes rarely focus the Rising-Sea, when-expectedly more-germane-Issues are of Immediate-Consequence; however, this-aspect of disputed-Warming-Criticality—the 'Tipping/ Too-Late-Problem', accepted by most-Scientists—IS-They-Believe of-Immediacy; thus-Here.

https://www.google.com/#hl=en&gs_nf=1&gs_mss=the%20'too-&tok=3-tkEVwiEBaO7No7qEokdQ&cp=39&gs_id=4k&xhr=t&q=the+'toolate'+timing+of+global-warming&pf=p&rlz=1C2GGGE_enUS452US455&sclient=psyab&oq=the+'too-late'+timing+of+globalwarming&aq=f&aqi=&aql=&gs_l=&pbx=1&bav=on.2,or.r_gc.r_pw.r_qf.,cf.osb&fp=be21acf9a25b1028&biw=1280&bih=812

I recall-constructively that Interior Failed to exercise it's MMS/ EIS-Prerogative against BP's Deepwater-Horizon drill-rig—NOT-suggesting a blast-stack, often-installed elsewhere, and-which if present—because-Environmentally, rig-blasts are Not-Uncommon, and Blast-Stacks ARE-Effective-Historically—would likely have limited damage to 'Repairable'.

The Essence-of-Safety IS-Prevention; that Warming is THE Premier-Application;

BY FAR the Most-Expansive/ Permanent-Catastrophe Humans-Will-Have-Caused; NOT Presently to be Ignored in ANY-EIS, particularly when Billion?-Tons-CO2 is this(Mesa)-Object Outcome; and when You-at-BLM ARE(these-Leases) the Last-Regulatory-Influence.
#1])>
<([#2 [*6.3.2*] Other Environmental Comments: P4/par1 asserts 'little/ no-water-consumption' for the
entire oil-shale oil-production-process, contradicting-'myths by prior-Objectors'. This does not-compare to my personal underground-experience, where stream-to-pond diversion and large-water-trucks were constantly-engaged in road/ floor-wetting, together with mixing-graders; I urge You contact several(for comparison) Miningschools(Nevada/ Colorado/ Missouri) with the specifics for shale-removal; also, to Schools-Knowledgeable(TX?) about subsequent-processing oil-refineries; also, Waste-Disposition Experts: TVA-Kingston. I've read the Canadian-Tar Sands are quite-'dirty', and that processing requires considerable-water; surely some correspondence would reward-specific-Awareness. ALL-about Water.

If-indeed, no-significant-water is required, then only Lakewood-sized-piping/ meters

need-be-installed. I think Integrity Ought-Be Expected-Throughout these-Subject-Leases.
#2])>
<([#3 [*9*] P2/par7 refers to some 2.5million acres in(perhaps-not-'of') Colorado set-aside for the Permanent-Use(Possession) of Business—not-unlike Railroad-Incentive—and probably 'near-free', in Unlimited-Freedom, together-with-Water Rights. This Fed Land Ought be Overseen by an Agency(short-leash) of Colorado-Legislature; Oil-Turmoil will absolutely be-Adverse to-Colorado-Law/ Citizens(imagine in-DC); Colorado-Legislature Ought-Be Continuum-Cognizant, with NO-Need to Ask-Permission/ Discuss-BLM.
#3])>
<([#4 [*3.10.3*] Also, Colorado is Hurting-Financially. I think-Reasonable, that-NO Governing-Entity
sustain-ANY-Cost, Ever. Not, for-Example, the Additional-Schooling/ Police/ Sheriff/ Administration/ Fire-required; HealthCare-Complete ought-be Company-Provided, to assure the Medical-Part of No Cost-Concept. I'm sure Mesa(Others) County will be Selfly-Concerned.

Lease-Documents Ought-Require Zero-Pollution/ Damage; because, as has-occurred with-livestock, fracking/ other-wells/ roads/ streams/ etc, there WILL Otherwise-Develop a Cost/ Consequence-To-State/ Citizens; the 'Mineral-Fee' will be State-Utilized for Whatever-Issues, and will-NEVER get-to Individual-Citizens-Adversed;

Examples-of-Which are in the Alleghany Coal Deposits: Poverty-Stricken-Families(You've-seen the media.), Uneducated, Working-Unsafe; essentially-Company-Serfs. BLM/ Colorado Can/ Ought-Preclude That-Destiny for This-State, since BLM/ CO-HAVE-Now Sufficient-Control. Have I made a mistake in-Addressing my-CO/Fed-Politicians??
#4])>
<([#5 [*9.6*] With Mine-Caused/ Acid-Discharges into WV/ CO-Streams, Alleghany-Demonstrated
Collapsed-Ground(underground-openings failing), and Environmental-Problems occur—CO has Drill/ Fracking-problems, so Those-Lease-Contracts ARE-Failures—what kind Lease-Language will CO-Politicians(State/ Fed) Expect of BLM/ Interior. Has Salazar 'Gone-DC'?? Are Your-Speeches About-Environment for-naive School-Kid-Listening?? IAM-Insistent; Environment-Failure, NOT-Success, IS-Oil(Coal-too)-History!!; plausible-Reason most-Citizens have Quite-Lost Political-Respect; here,
UnDemonstrated-Integrity About-Citizen-Protection(Environment/ Budget); Mesa-Resolution displaying scant Office-Concern-About Oil-Activity-Consequence; only Angst-About That-Reduction.

A CO-Lease-Complaint, is-that Leases Aren't-Being-Pumped: just-'Held', which-Speculative-Behavior does-zero to reduce-fuel-price(Second-After-Jobs, US-Economy-Bane.); ShaleOil-Ownership, by/for Rapid-Depreciation, without-Production, =NO-Jobs/ Fuel.

BLM Ought-Write a Lease-Contract that, Besides-Protection, Benefits-US(reducing-gasprice),

by Requiring-Prompt/ Continued Oil-Production; common-in-Construction, so Court-Proof; nor-can fundamental-Need(pump-price), of such-Lease-Terms be Successfully-Objected.

Interior/ BLM's-Reduced-Acreage(Go-Slow) Dissipates-'Rush'; sensible when a Different-Type-Refinery is 'Proto'(Change-Anticipated). Nothing is Best first-time; a 3-x-larger 'Mesa-Rush' will produce 'scaled-errors/ costs/ bids that-are 3-x-greater(risk/ profit/ pump-price)'; larger-unit-cost for Rush-Mistakes, regardless-Issues, but especially where Oil-Controls-Policies—Intrinsically-For Self-Benefit—while Citizens-Engage Transferred-Responsibility for Expenses, and Oil-Collects-Profit. Citizens ALWAYS Lose (Gain-Less) confronting-Corporations'-Lawyers. Writing-Leases is when Near-Equality in Law is Available; Going-Slow—sequenced-Leases—reduces-Mistakes; Good/ Better/ Best-for BLM/ Citizens, which BLM-Realized.
#5])>

OSTS_230
Organization: DOI, BLM, Rawlins Field Office, Dennis Carpenter
Received: 5/3/2012 12:00:00 AM
Commenter1: Dennis Carpenter - Rawlins, Wyoming 82301 (United States)
Organization1:DOI, BLM, Rawlins Field Office
Commenter Type: Federal Government
Classification: none
Submission Category: Letter
Submitted As: E-Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** klett
Attachments: OSTS2012D00232.htm (OSTS_230-59451.htm Size = 1 KB)
OSTS_230_BLM_RawlinsFO_OSTS2012D00232.pdf (OSTS_230-59450.pdf Size = 569 KB)
Submission Text
See Attachment.

<([#1 [*3.1.7*] Page 3-34, Line 39: After the sentence ending" .. . overlaps 50,025 acres ofthe oil shale basin"
insert «The WEQC ruling through EQC Docket No. 07-1101 at number 38 states, the designation protects the area from non-surface coal mining only. The designation would prevent surface mining for oil shale and uranium, as well as gravel pit mining. The designation does not limit oil and gas leasing, exploration, drilling, production or related construction. The designation does not limit or curtail any type of access to private in-holdings or for purposes other than non-coal surface mining on public lands, including livestock grazing."
#1])>
<([#2 [*3.1.7*] Page 3-34, Lines 39-41: Delete the sentence that reads "Finally, these areas are located within a
much larger area of land that has been identified as having wilderness characteristics."
#2])>
<([#3 [*3.1.7*] Page 3-34, Lines 41 & 42: After the sentence "Table 3.1.1-7 presents the acreage

overlapping
the oil shale resource within the Adobe Town specially designated areas and identified lands with wilderness characteristics" add the following: As depicted in Figure 3.1.1-13, certain portions of the Adobe Town/Kinney Rim area have been determined to contain lands with wilderness characteristics; whereas other areas did not meet the size criteria or were determined to not have wilderness characteristics. Based on the proliferation of existing oil and gas leases in the Adobe Town areas outside the WSA, the Rawlins RMP determined these areas would not be managed for those wilderness characteristics, but rather, would remain available for multiple-use management with emphasis on reclamation. Specifically the RMP at page 1-3 states, "*The BLM's analysis of wilderness characteristics is consistent with the agency's policy and guidance. BLM IM-2003-275 states that considering wilderness characteristics in the land use planning process may result in several outcomes, including, but not limited to: 1) emphasizing other multiple uses as a priority over protecting wilderness characteristics; 2) emphasizing other multiple uses while applying management restrictions (e.g., conditions of use, mitigation measures) to reduce impacts to some or all of the wilderness characteristics. As a result, the BLM is not required to manage for wilderness characteristics just because they may exist. The BLM chose not to carry the analysis of wilderness characteristics into the Proposed RMP/Final EIS because valid existing lease rights prohibit implementation of management actions to protect the wilderness characteristics identified. The BLM Approved RMP was selected from an alternative in the Proposed RMP/Final EIS that did not include management for wilderness characteristics.*

Text on page 2-11 of the Proposed RMP/Final EIS is clarified to read as follows: "Because the BLM found the lands to be unmanageable for wilderness character because of preexisting oil and gas leases, the BLM elected to manage lands with wilderness character for multiple use and not for protection of wilderness character. Accordingly, measures to provide protection for any wilderness characteristics of lands (outside of previously established WSAs) will not be considered in the alternatives in this RMP. This is consistent with BLM policy as presented in BLM IM 2003-275."

The approved RMP at Management Objective 4 and Management Action 6 on page 2-25, as well as through Maps 2-17, 2-58, 2-59, and Appendix 37 designates the area within the Rawlins Field Office that surrounds the Adobe Town WSA as the Adobe Town Dispersed Recreation Use Area (DRUA).
#3])>
<([#4 [*3.1.7*] Page 3-34, Lines 43-45: Delete this sentence "During the process of developing the Rawlins
RMP, the BLM chose not to carry the analysis of wilderness characteristics into the Proposed RMP/Final EIS because valid existing lease rights prohibit management actions to protect the identified wilderness characteristics."
#4])>
<([#5 [*3.1.7*] [*3.15*] Page 3-35, Figure 3.1.1-13: This figure wrongly depicts areas to be managed for LWC. Please
incorporate the attached Kinney Rim/Adobe Town 2002/2011 LWC Inventory Map which correctly depicts the LWC inventory status for the Adobe Town and Kinney Rim area.
#5])>

<([#6 [*3.1.7*] Page 3-36, Table 3.1.1-7: Correct the values/numbers in this table to correlate with revised
map/Figure 3-1.1-13. **#6])>**

OSTS_231
Organization: David Marshall
Received: 5/14/2012 12:00:00 AM
Commenter1: David Marshall - Duncannon, Pennsylvania 17020 (United States)
Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 6/1/2012 12:00:00 AM
Attachments: OSTS2012D00233.htm (OSTS_231-59453.htm Size = 1 KB)
OSTS_231_Marshall_Mail_May_14_OSTS2012D00233.pdf (OSTS_231-59452.pdf Size = 114 KB)
OSTS_231_Marshall_Mail_May_14.pdf (OSTS_231-59454.pdf Size = 123 KB)
Submission Text
See Attachment.

This letter pertains to the BLM's "draft programmatic environmental impact statement" for oil-shale and tar-sand development in Colorado, Utah and Wyoming.

<([#1 [*3*] I am deeply concerned about the potential environmental effects if the BLM initiates a commercial leasing program for oil-shale and tar-sands development. It would pollute our land, air and water and exacerbate climate change. Endemic, threatened and endangered species would be lost.

Between global warming, rampant extinction and a quickly drying Colorado River -problems that oil-shale and tar-sand development would only worsen -- it's hard to imagine a less prudent use of our public lands. **#1])>**

<([#2 [*12.3*] I therefore oppose any action by the BLM to continue or to authorize any new oil-shale
or tar-sand development on public land, or create or continue land-use allocations that would allow for such uses in the future. The draft programmatic environmental impact statement should have included an alternative that does not in any way endorse additional public-land use for this unproven industry. **#2])>**

<([#3 [*3.10.3*] Oil shale is currently producing no jobs and no revenue -- the Congressional Budget
Office confirmed that it is not expected to produce significant revenues through 2022.

The land overlying oil-shale resources in Utah, Colorado and Wyoming is some of the

best wildlife habitat in the West, and outdoor recreation and tourism are huge economic drivers for the region. We must protect this sustainable economy by making smart decisions based on sound information.
#3])>
<([#4 [*3*] I ask that you evaluate carefully and disclose fully the serious impacts of all new energy
required for oil-shale and tar-sand production and its potentially devastating impacts to our climate, as well as the threat it poses to wildlife, special-status, threatened and endangered species, and to our water, air and communities. **#4])>**

Thank you for your time and consideration regarding my comments.

OSTS_232
Organization: Industrial Energy Consumers of America, Paul Cicio
Received: 5/6/2012 12:00:00 AM
Commenter1: Paul Cicio - Washington, 20005 (United States)
Organization1: Industrial Energy Consumers of America
Commenter Type: Misc. Organization
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 6/1/2012 12:00:00 AM
Attachments: OSTS2012D00234.htm (OSTS_232-59456.htm Size = 1 KB)
OSTS_232_Indust_Energy_Consumers_of_Am_Mail_May_16_OSTS2012D00234.pdf (OSTS_232-59455.pdf Size = 192 KB)
Submission Text
See Attachment.

Summary

As a result of the settlement by the U.S. Department of the Interior (DOl) in regards to lawsuits brought against the 2008 Oil Shale and Tar Sand Programmatic Environmental Impact Statement(PEIS) and Commercial Oil Shale Leasing Regulations (Regulations), the Bureau of Land
Management (BLM) has solicited comments on a new draft PEIS. **<([#1** [*2.1.1*] The Industrial Energy Consumers of
America (IECA) urges BLM to reaffirm the 2008 PEIS and supports Alternative 1, Oil Shale No Action
Alternative in the new draft PEIS.

Commercial oil shale and tar sands leasing programs are in the best interest of the nation in helping
to meet the country's energy needs. Premature and precautionary removal of access to the vast majority of land with this resource potential will put the viability of continued research and development at risk by making commerciality of development far less likely. The proposed

removal
of 90 percent of lands in Colorado and three-quarters of currently available land in the three-state area will discourage continued Research, Development and Demonstration (RD&D) expenditure by
drastically shrinking the size of, and introducing major uncertainty for, potential resource recovery.
#1])>
Comments

The Industrial Energy Consumers of America is a nonpartisan association of leading manufacturing
companies with $700 billion in annual sales and with more than 650,000 employees nationwide. IECA member companies are substantial consumers of natural gas, natural gas and coal fired power
generation and refined crude oil products. The cost of energy can often determine competitiveness
with offshore competitors. IECA membership represents a diverse set of industries including: chemicals, plastics, cement, paper, food processing, brick, fertilizer, steel, glass, industrial gases, pharmaceutical, aluminum and brewing.

<([#2 [*11*] [*3.10.3*] IECA member companies have good reason to be concerned about access to Federal lands and the
associated oil and natural gas resources. In the period from 2000 to 2005 natural gas prices doubled
and tripled because demand exceeded supply. We recall that the Bureau of Land Management's (BLM) permitting system, heavy with increased bureaucracy and inadequate staffing, resulted in thousands of drilling permit backlogs. Wells did not get drilled, oil and natural gas did not get produced, and the manufacturing sector and the economy as a whole suffered. There were plenty of
oil and natural gas reserves and the Federal Government was directly responsible for the failure to
allow producers access to the oil and natural gas in order to produce it for us, the consumer.

The manufacturing sector lost 3.0 million jobs from 2000 to 2005 and a great number of these jobs
were directly related to the high price of oil and natural gas. Thousands of chemical, plastics, fertilizer, steel, paper, glass and aluminum manufacturing plants shut down. We cannot and should
not let this happen again. **#2])>**

<([#3 [*2.1.1*] The 2012 draft PEIS contains largely the same information as the 2008 final PEIS. There is little, if
any, new information to be considered. However, the BLM has chosen a different preferred alternative 2(b) that substantially reduces the acreage available for oil shale leasing, eliminates the
issuance of commercial *leases,* and restricts leasing to RD&D leases only.

Alternative 1, Oil Shale No Action Alternative, in the new PEIS, preserves the actions taken in the
2008 PEIS, and is the alternative favored by IECA.

The 2008 PEIS was recent, and substantively and procedurally thorough. The preferred alternative
provided a reasonable amount of acreage for potential commercial leasing, while still designating environmentally sensitive and other areas deemed unsuitable for leasing. **#3])>**

<([#4 [*2.2*] BLM's preferred alternative 2(b) in the new PEIS restricts leasing to RD&D leases only and defers
decisions on commercial leasing for years. This disaggregation of RD&D from commercial leasing
simply discourages companies with commercially viable technology with delay, uncertainty and disincentive for resource development.

Commercial leasing for oil shale development is merely a first step. The BLM and other government
agencies require additional environmental reviews and permitting activities with public oversight before a project can begin. Two or three Environmental Impact Statements would be required, in addition to this PEIS, before a developer could break ground on a commercial venture.

In the 2008 PEIS, *2,000,000* acres were made available for leasing, but the amount of land that would
be leased or developed would likely be far less. Industry would choose the acreage that it believes
can be profitably developed. Under the new PEIS, BLM appears be choosing the lands that hold commercial potential.
#4])>
<([#5 [*9.8*] Western U.S. oil shale resources- 4 trillion barrels according to the USGS- are an important
domestic energy asset that should be developed for the benefit of the American people. Revisiting
the PEIS and regulations completed in 2008 is at best delaying and at worst destroying, the responsible development of the oil shale resource. **#5])>**

OSTS_233
Organization: Unidentified Campaign
Received: 4/30/2012 12:00:00 AM
Commenter1: - , (United States)
Organization1: Unidentified Campaign
Commenter Type: Member of the Public
Classification: none
Submission Category: Campaign Letter
Submitted As: E-Mail

Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** klett
Attachments: OSTS2012D00235.htm (OSTS_233-59458.htm Size = 1 KB)
OSTS_233_Unidentified_Campaign_OSTS2012D00235.pdf (OSTS_233-59457.pdf Size = 38 KB)
Submission Text
See Attachment.

Dear The Bureau of Land Management,

<([#1 [*2.1.1*] Thank you for this opportunity to provide comment on the Draft 2012 Oil Shale/Tar Sands Programmatic Environmental Impact Statement. Oil shale is a vitally important national resource, and policies involving its management on federally controlled lands will have profound impacts on our nation's economy, national security, and energy independence.

I urge the The Bureau of Land Management (BLM) to adopt Alternative 1, the no-action alternative, in the current PEIS, which would restore the findings of the 2008 PEIS. Like most Americans, I recognize the need to balance the twin objectives of environmental conservation, and economic development. I do not believe the two are mutually exclusive. The Record of Decision from the 2008 Oil Shale PEIS reflected this reality, and established a reasonable and balanced plan for going forward with development of our nation's oil shale resources. This ROD protected sensitive areas and habitats, while providing private industry the opportunity and flexibility required to take the next step towards commercial production. It would have also provided much-needed employment and economic growth in one of the hardest hit regions of the nation. **#1])>**

<([#2 [*9.8*] I find it shocking that your agency would casually disregard the hours of input by scientists, experts, local government leaders and the public, and spend precious government resources to completely re-do this PEIS, in the absence of any new information or evidence. I further believe it sets a negative precedent to allow a special interest group to dictate public policy simply by suing when the outcome of a public process does not fit their agenda.
#2])>
<([#3 [*2.1.1*] Oil shale is an abundant national resource that has the potential to meet America's energy needs well into the future, cut our reliance on oil imports from unstable, often hostile, regions of the world and provide thousands of private-sector jobs and economic growth. The BLM should not be in the business of putting up obstacles to development and prosperity in response to a noisy fringe element of society.

For these reasons I again urge the BLM to adopt Alternative 1 in the final PEIS.
#3])>
Sincerely,

OSTS_234
Organization: Ruth Gutt
Received: 4/25/2012 12:00:00 AM
Commenter1: Ruth Gutt - New Canaan, Connecticut 06840 (United States)

Organization1:
Commenter Type: Member of the Public
Classification: none
Submission Category: Letter
Submitted As: Postal Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** klett
Attachments: OSTS2012D00236.htm (OSTS_234-59460.htm Size = 1 KB)
OSTS_234_Gutt_mail_OSTS2012D00236.pdf (OSTS_234-59459.pdf Size = 100 KB)
Submission Text
See Attachment.

<([#1 [*3*] Just read an article by an environmental group about a push by an oil shale group wanting large acres of land in Colorado for oil shale development. I had heard that there has been some oil shale work or testing done in Pennsylvania - my childhood state and it had caused much damage to the land of farmers there. I realize it may be useful in some places. I hope you might be able to test it on a small scale before you approve of thousands of acres. It may be harmful to oru water, clean air, and wildlife. I understand that the technology has not been proven yet.
#1])>
I know you must have a difficult job to do there. I'm trying to help.

OSTS_235
Organization: Colorado Environmental Coalition campaign
Received: 7/27/2012 12:00:00 AM
Commenter1: - , Colorado (United States)
Organization1: Colorado Environmental Coalition campaign
Commenter Type: Environmental Organization
Classification: none
Submission Category: Campaign Letter
Submitted As: E-Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** klett
Attachments: OSTS2012D00237.htm (OSTS_235-59462.htm Size = 1 KB)
OSTS_235_CEC_Campaign_Sample_Letter_OSTS2012D00237.pdf (OSTS_235-59461.pdf Size = 55 KB)
Submission Text
See Attachment.

<([#1 [*3*] I am deeply concerned about the potential effects to our water, wildlife, communities and public lands if the BLM initiates a commercial leasing program. The two million acres in UT, WY and CO previously allocated for commercial leasing is a massive amount of public, taxpayer land that would be sacrificed for a singular use of the landscape.
#1])>

<([#2 [*2.2*] [*12.3*] While the preferred alternative (Alternative 2) is a step in the right direction, I would like to have seen a draft document that does not give away hundreds of thousands of taxpayer lands to a failed industry to tinker with. I would have liked to have seen an alternative that does not endorse giveaways of even more public lands to this unproven industry.
#2])>
<([#3 [*3*] Oil shale is currently producing no jobs and no revenue the Congressional Budget Office confirmed that it is not expected to produce significant revenues through 2022. So we have the time to assess the impacts of development to our water, wildlife, and communities.
#3])>
<([#4 [*3.10.4*] The land overlying oil shale resources in Utah, Colorado and Wyoming is some of the best wildlife habitat in the West, outdoor recreation and tourism are huge economic drivers in the West. We must protect these jobs by making smart about how we allow oil companies to move forward with oil shale speculation.
#4])>
<([#5 [*3*] Finally, I recommend that you carefully consider the serious impacts of new energy required for oil shale production and the potential devastating impacts to our wildlife, water, air, and communities as you take another look at oil shale development.
#5])>

OSTS2_230
Organization: DOI, BLM, Rawlins Field Office, Dennis Carpenter
Received: 5/3/2012 12:00:00 AM
Commenter1: Dennis Carpenter - Rawlins, Wyoming 82301 (United States)
Organization1:DOI, BLM, Rawlins Field Office
Commenter Type: Federal Government
Classification: none
Submission Category: Letter
Submitted As: E-Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** klett
Attachments: OSTS2012D00231.htm (OSTS2_230-59449.htm Size = 1 KB)
OSTS_230_BLM_RawlinsFO_OSTS2012D00231.pdf (OSTS2_230-59448.pdf Size = 569 KB)
Submission Text
See Attachment.

See OSTS_230

OSTS2012D50001
Organization: Floyd London
Received: 2/3/2012 9:01:58 PM
Commenter1: Floyd London - Deatsville, Alabama 36022 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form

Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/13/2012 12:00:00 AM
Attachments: OSTS2012D50001.htm (OSTS2012D50001-58125.htm Size = 1 KB)
Submission Text
<([#1 [*3.4.1*] Having been born and lived in Montana i understand the importance of water. Lets research and plan mitigation that protects precious water resources. The United States needs the oil but we need to protect water resource to prevent the shale and tar sands areas from becoming wasteland. Thank you for the opportunity to comment on this vital question. **#1])>**

OSTS2012D50002
Organization: Mark
Received: 2/4/2012 9:44:35 AM
Commenter1: Mark - , California (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/13/2012 12:00:00 AM
Attachments: OSTS2012D50002.htm (OSTS2012D50002-58127.htm Size = 1 KB)
Submission Text
I am a practicing professional licensed geologist and an Sr engineering geologist for the State of California. I hold a degree in Geography, with a Rural Land Use Planning emphasis. **<([#1** [*11*] [*2.1*] The potential petroleum reserves being discussed exceed those of Saudi Arabia. The full and unrestricted development of this resource should the primary focus of any government endeavor or agency action. If our next generation is to have any future, it will have to be powered with our own resources. The areas available for exploration should not be reduced from the 2008 levels.
#1])>

OSTS2012D50003
Organization: Verna Pottorff
Received: 2/4/2012 3:25:44 PM
Commenter1: Verna Pottorff - Grand Junction, Colorado 81501 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/13/2012 12:00:00 AM
Attachments: OSTS2012D50003.htm (OSTS2012D50003-58129.htm Size = 1 KB)
Submission Text

<([#1 [*2.2*] This comment is to express my approval of the steps taken to control the stampede of entities ready and willing to overrun Colorado and r western states with what I call "Gold Rushers"(from the 19th century) without regard to what the western states have become. . . A fragile, attractive, beautiful, home to millions of people. We must continue along the course being set for us by our Governor, the Bureau of Land Management, State Senators and the Interior Secretary: who are endeavoring to craft for the use of the oil/gas industries, a program to help them in gaining drilling leases. These "gold Rushers" enthusiasm reminds me of the frantic, loud, and uncaring attitudes of those who were just WILD over oil shale exploration (1960s), and remember, Gilsonite? JUST KEEP UP THE GOOD WORK. YES, i WILL VOTE FOR YOU AGAIN!!! **#1])>**

OSTS2012D50004

Organization: FRANK LITTLE
Received: 2/5/2012 10:47:41 AM
Commenter1: FRANK LITTLE - GRAND JUNCTION, Colorado 81506 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/13/2012 12:00:00 AM
Attachments: OSTS2012D50004.htm (OSTS2012D50004-58147.htm Size = 1 KB)
Submission Text
I AM A LIFE-LONG RESIDENT OF WESTERN COLORADO. IN 1952 THE MESA JUNIOR COLLEGE (THEN)OFFERED A TERRIFIC CLASS IN WESTERN COLORADO GEOLOGY. A FIELD TRIP TOOK OUR CLASS TO A SITE JUST WEST OF RIFLE, COLORADO TO THE ANVIL POINTS OIL SHALE MINE. IT WAS OPERATIONAL AND WE TOURED THE INTERIOR OF THE MINE. IN SUCCEEDING MONTHS, OIL SHALE WAS PRODUCED AND RETORTED FOR USE BY THE U.S. NAVY. SINCE THEN (NOW 72 YEARS LATER), **<([#1** [*11.2*] OIL SHALE PRODUCTION HAS BEEN STUDIED AND STUDIED AD-NASEUM. BOTH SURFACE AND UNDERGROUND ESTRATION HAS BEEN USED. THIS ENORMOUS AREA OF OIL SHALE (UTAH, COLORADO, AND WYOMING) HAS MORE RECOVERABLE OIL THAN ALL OF SAUDI ARABIA. HERE IS MY COMMENT: THE CURRENT INTERIOR DEPARTMENT (SALAZAR AND OBAMA)SPEAK OUT OF BOTH SIDES OF THEIR MOUTHS, THEY SAY WE MUST STOP PURCHASING OIL FROM OUR ENEMIES YET NOW PROPOSE TO REDUCE THE AMOUNT OF AVAILABLE ACREAGE BY 90%. HOW ABSOLUTELY ABSURD IT IS ABSOLUTELY STUPID - THOUSANDS OF JOBS AND MILLIONS OF BARRELLS OF OIL ARE WAITING - AND IT CAN BE DONE ENVIRONMENTALLY SAFE. POLITICS, POLITICS, WE ARE GETTING SICK AND TIRED OF STUDIES AND WASTING OUR MONEY,
#1])>

OSTS2012D50005

Organization: jean public
Received: 2/6/2012 11:18:59 AM
Commenter1: jean public - not available, New Jersey 08822 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/13/2012 12:00:00 AM
Attachments: OSTS2012D50005.htm (OSTS2012D50005-58141.htm Size = 1 KB)
Submission Text
<([#1 [*12*] this land should not be touched by blm or developed. developign this land is hurtful to america. 2million acres is a big swath of destruction. you are destroying clean water with these plans. greed and money is paramount at blm. blm should be closed down it is a destructive cesspool of an agency. this attack on the west needs to be shut down. blm is a vicious, venal agency which just sent all the wild horses out to die grisly deaths in slaughterhouse. they killed them. blm gives giveaway leases/contracts to profiteers so that the land is left destroyed and the pubilc treasury gets nothing. the blm employees do though - they get bribe money, trips to superbowl, etc. these leases/sales are written by idioiits and involving hurting the taxpayers of this country. wilderness needs to be preserved. i reject totally this plan. it stinks to high heaven **#1])>**

OSTS2012D50006
Organization: Design Firm, Larry Steinbach
Received: 2/6/2012 12:02:16 PM
Commenter1: Larry Steinbach - Salt Lake City, Utah 84111 (United States)
Organization1: Design Firm
Commenter Type: Affiliation Only
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/13/2012 12:00:00 AM
Attachments: OSTS2012D50006.htm (OSTS2012D50006-58143.htm Size = 2 KB)
Submission Text
Although I or the firm I work for (A Canadian design firm headquartered in Toronto) are not in the Oil business we do get involved with the design of facilities and infrastructure related to the economic impacts of the oil development. Currently our Edmonton, Alberta office, along with one of my associates here in our Salt Lake City Office, is providing design services for new subdivisions in Edmonton and Fort McMurray, Alberta. The economic impact of the oil rich Alberta oil sands is far reaching. However, the US economy has caused much of the design professions to see heavy layoffs. I was recently told that fully 1/2 of licensed architects in Oregon were unemployed. I personally have had to work extensively in our Edmonton office and now in our Vancouver office because of diminished work in our Salt Lake City Office. It all

started with the downturn in 2008. I am very concerned about world political issues, our dependence on oil (not to change anytime soon despite alternate energy options simply due to population growth worldwide as well as domestically), and the current economy sluggish to recover. I have managed to keep my job (I am nearly 63 and cannot retire under these conditions) by being willing to work extensively in our Canada offices away from my wife and family.**<([#1** [*2.1.1*] I do not believe this BLM strategy is conducive to improving the current economic struggle. There are more than adequate environmental protections in current lay and plenty of opportunity for proponents and opponents to be heard. We must become less dependent on Middle Eastern oil and more self sufficient to make a more stable domestic economy. That will help my procession as a licensed architect and the construction industry as well. We cannot let politics dictate good thinking. I am not in favor of this lease are a reduction on BLM land. Opinions aside, technology will eventually make these resources and the vast oil reserve economically feasible. We must encourage this with all the protections needed to ensure minimizing environmental impacts, but restricting lease area is not the way. Thank you for this opportunity. I hope my firm and others in the design arena will not have to suffer further due the bureaucratic mismanagement of our public natural resources. **#1])>** Thank you. Larry Steinbach, AIA Architect

OSTS2012D50007

Organization: Industrial Systems, Inc., Glenn Lewis
Received: 2/6/2012 6:11:53 PM
Commenter1: Glenn Lewis - Delta, Colorado 81416 (United States)
Organization1: Industrial Systems, Inc.
Commenter Type: OSTS Tech Company
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/13/2012 12:00:00 AM
Attachments: OSTS2012D50007.htm (OSTS2012D50007-58145.htm Size = 1 KB)
Submission Text

Industrial Systems Inc.,(ISI) was founded in 1991. ISI is: A Service Disabled Veteran Owned Small Business employing about 35 employees full time. ISI has employed as many as 200 employees depending on larger projects. ISI is currently completing a Pilot Shale Oil project in Pieance Creek area of western CO. This project has generated full time work for over 100 full time employees for the most part of the last two years. The above mentioned employees are not into acount for the various companies who manufactured pipe, pumps, other pieces of equipment too numerous to listOther firms, such as freight company, equipment dealers such as Catapillar, Ford, Chevy trucks,etc. co on and on. Many millions of dollars have went through ISI's payroll and accounting systems. **<([#1** [*11.2*] Failure to list theseshale oil lands for lease would have of course, not allowed this important project [a Pilot Shale Oil project in Pieance Creek area of western CO] to proceed. The shale oil leases must continue to insure America has a chance to not be dependent on foreign countries for our energy. This work is being done without adverse enviromental stress or damage to the BLM lands. I strongly urge BLM support of continued leasing of BLM land to private companies to push forward with pilot programs ti insure

America's independence of other countries who may not have our best interests at heart regarding our energy future. **#1])>** Thank you Thank you

OSTS2012D50009
Organization: Peaceful Uprising, Stephanie Pace
Received: 2/6/2012 8:01:40 PM
Commenter1: Stephanie Pace - , Utah 84103 (United States)
Organization1: Peaceful Uprising
Commenter Type: Affiliation Only
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/13/2012 12:00:00 AM
Attachments: OSTS2012D50009.htm (OSTS2012D50009-58151.htm Size = 1 KB)
Submission Text
<([#1 [*12.3*] This proposal does not go far enough; 'far enough' would mean no drilling on public lands; it would mean BLM awareness that tourism in Utah is the major money source for the future (along with alternate energy sources), but THIS IS NEVERTHELESS VERY GOOD NEWS! THANK YOU. **#1])>**

OSTS2012D50010
Organization: Peaceful Uprising, Lindsy Floyd
Received: 2/7/2012 9:31:30 AM
Commenter1: Lindsy Floyd - Salt Lake City, Utah 84105 (United States)
Organization1: Peaceful Uprising
Commenter Type: Affiliation Only
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/13/2012 12:00:00 AM
Attachments: OSTS2012D50010.htm (OSTS2012D50010-58131.htm Size = 1 KB)
Submission Text
<([#1 [*12.1*] While I commend the BLM for reducing the number of available acreage for tar sands development, I believe that tar sands exploration/excavation in Utah should be completely prohibited. Extracting tar sands is extremely energy inefficient and requires more water than is sustainably available in the desert. NO tar sands! **#1])>**

OSTS2012D50011
Organization: Rebecca Hall
Received: 2/8/2012 5:17:49 PM
Commenter1: Rebecca Hall - Park City, Utah 84098 (United States)
Organization1:
Commenter Type: Member of the Public

Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/13/2012 12:00:00 AM
Attachments: OSTS2012D50011.htm (OSTS2012D50011-58153.htm Size = 1 KB)
Submission Text
<([#1 [*12.1*] Thank you for limiting Utah's exposure to Tar Sands development. I support an outright ban on this industry, But limiting it is an excellent first step. **#1])>**

OSTS2012D50012
Organization: Nancy Power
Received: 2/8/2012 6:17:50 PM
Commenter1: Nancy Power - Altadena, California 91001 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/16/2012 12:00:00 AM
Attachments: OSTS2012D50012.htm (OSTS2012D50012-58155.htm Size = 1 KB)
Submission Text
<([#1 [*2.2.1*] I favor alternative 2. **#1])> <([#2** [*10.6.1*] As a nation, we need to invest in clean energy that gets a high return on energy invested, such as wind, and hugely reduce our carbon dioxide emissions in order to stave off the worst effects of global climate change. To this end, we also need to require huge increases in the efficiency of the fossil fuels that we continue to use, such as raising the CAFE standards to 70 mpg, which would make us not need tar sands and oil shale. Climate change, according to the scientists, is happening faster than expected and has potentially catastrophic implications if we do not reduce our carbon dioxide and methane emissions now. **#2])>**

OSTS2012D50013
Organization: Ashley Sanders
Received: 2/8/2012 6:36:07 PM
Commenter1: Ashley Sanders - Salt Lake City, Utah 84108 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/13/2012 12:00:00 AM
Attachments: OSTS2012D50013.htm (OSTS2012D50013-58157.htm Size = 1 KB)

Submission Text
<([#1 [*12.1*] Thank you for doing your job and reducing the number of acres available for tar sands extraction. This is hugely important in a state that has no extra water as it is, that boasts beautiful and delicate desert ecosystems, and that has plenty of other options for energy creation. This reduction is not adequate, however. There is no need for the tragedy of tar sands, especially when there are so many other options. If you want to cry, look at what tar sands has done to the boreal forest of Canada. It is an environmental and public health nightmare. Take all these lands off the table. **#1])>**

OSTS2012D50014
Organization: iMatter Utah , Ryan Pleune
Received: 2/9/2012 10:11:24 AM
Commenter1: Ryan Pleune - Salt Lake City, Utah 84103 (United States)
Organization1:iMatter Utah
Commenter Type: Environmental Organization
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/25/2012 12:00:00 AM
Attachments: OSTS2012D50014.htm (OSTS2012D50014-58159.htm Size = 1 KB)
Hansen_et._al._A_Case_for_Young_People_OSTS2012D50014.pdf (OSTS2012D50014-58158.pdf Size = 417 KB)
Submission Text
<([#1 [*12*] Secretary Salazar I am writing to thank you for taking a stand against the Oil Industry. I call this a holding action that will buy some time for us to create a strong paradigm shift that leads to an ecologically sustainable, socially just and spiritually fulfilling human culture. By reducing acreage for oil shale and tar sands extraction on BLM lands you have helped buy us some time. I hope that in the future there will be zero exctraction of this type of dirty energy that is killing my future. Currently my wife and I do not feel comfortable having kids because the effects of climate change 50 years from now are likely to leave them without adequate food and water quality. Poor countries and communities in our country are feeling that effect now. Please use the attached scientific article about recommendations for ensuring a livable future for us. The title A Case for Young People refers to impacts during my life time. Please continue to be bold in your actions and decisions. There are many people out there that I work with in 350.org, iMatterMarch, Peaceful Uprising and the Citizen's Climate Lobby that are willing to make large risks and sacrifices to make this issue a top priority. **#1])>** Thanks Ryan Pleune Salt Lake City Utah 84103 See Attachment.

1
<([#2 [*3.5.1.6*] The Case for Young People and Nature: A Path to a Healthy, Natural, Prosperous Future

James Hansen1, Pushker Kharecha1, Makiko Sato1, Paul Epstein2, Paul J. Hearty3, Ove Hoegh-Guldberg4, Camille Parmesan5, Stefan Rahmstorf6, Johan Rockstrom7, Eelco J.Rohling8, Jeffrey

Sachs1, Peter Smith9, Konrad Steffen10, Karina von Schuckmann11, James C. Zachos12,

1 Columbia University Earth Institute, New York
2 Center for Health and the Global Environment, Harvard Medical School, Boston
3 Department of Environmental Studies, University of North Carolina at Wilmington, North Carolina
4 Global Change Institute, University of Queensland, St. Lucia, Queensland, Australia
5 Integrative Biology, University of Texas, Austin, Texas
6 Potsdam Institute for Climate Impact Research, Germany
7 Stockholm Resilience Center, Stockholm University, Sweden
8 Southhampton University, United Kingdom
9 University of Aberdeen, United Kingdom
10 Cooperative Institute for Research in Environmental Sciences, University of Colorado
11 Centre National de la Recherche Scientifique, LOCEAN, Paris (hosted by Ifremer, Brest), France
12 Earth and Planetary Science, University of California at Santa Cruz

Abstract. We describe scenarios that define how rapidly fossil fuel emissions must be phased down to restore Earth's energy balance and stabilize global climate. A scenario that stabilizes climate and preserves nature is technically possible and it is essential for the future of humanity. Despite overwhelming evidence, governments and the fossil fuel industry continue to propose that all fossil fuels must be exploited before the world turns predominantly to clean energies. If governments fail to adopt policies that cause rapid phase-down of fossil fuel emissions, today's children, future generations, and nature will bear the consequences through no fault of their own. Governments must act immediately to significantly reduce fossil fuel emissions to protect our children's future and avoid loss of crucial ecosystem services, or else be complicit in this loss and its consequences.

1. Background

Humanity is now the dominant force driving changes of Earth's atmospheric composition and thus future climate on the planet. Carbon dioxide (CO2) emitted in burning of fossil fuels is, according to best available science, the main cause of global warming in the past century. It is also well-understood that most of the CO2 produced by burning fossil fuels will remain in the climate system for millennia. The risk of deleterious or even catastrophic effects of climate change driven by increasing CO2 is now widely recognized by the relevant scientific community.
The climate system has great inertia because it contains a 4-kilometer deep ocean and 2-kilometer thick ice sheets. As a result, global climate responds only slowly, at least initially, to natural and human-made forcings of the system. Consequently, today's changes of atmospheric composition will be felt most by today's young people and the unborn, in other words, by people who have no possibility of protecting their own rights and their future well-being, and who currently depend on others who make decisions today that have consequences over future decades and centuries.

Governments have recognized the need to stabilize atmospheric composition at a level

that avoids dangerous anthropogenic climate change, as formalized in the Framework Convention on Climate Change in 1992. Yet the resulting 1997 Kyoto Protocol was so ineffective that global fossil fuel emissions have since accelerated by 2.5% per year, compared to 1.5% per year in the preceding two decades.

Governments and businesses have learned to make assurances that they are working on clean energies and reduced emissions, but in view of the documented emissions pathway it is not inappropriate to describe their rhetoric as being basically 'greenwash'. The reality is that most governments13, strongly influenced by the fossil fuel industry, continue to allow and even subsidize development of fossil fuel deposits. This situation was aptly described in a special energy supplement in the New York Times entitled 'There Will Be Fuel' (Krauss, 2010), which described massive efforts to expand fossil fuel extraction. These efforts include expansion of oil drilling to increasing depths of the global ocean, into the Arctic, and onto environmentally fragile public lands; squeezing of oil from tar sands; hydro-fracking to expand extraction of natural gas; and increased mining of coal via mechanized longwall mining and mountain-top removal. The true costs of fossil fuels to human well-being and the biosphere is not imbedded in their price. Fossil fuels are the cheapest energy source today only if they are not made to pay for their damage to human health, to the environment, and to the future well-being of young people who will inherit on-going climate changes that are largely out of their control. Even a moderate but steadily rising price on carbon emissions would be sufficient to move the world toward clean energies, but such an approach has been effectively resisted by the fossil fuel industry.

The so-called 'north-south' injustice of climate disruption has been emphasized in international discussions, and payment of $100B per year to developing countries has been proposed. Focus on this injustice, as developed countries reap the economic benefits of fossil fuels while developing countries are among the most vulnerable to the impacts of climate change, is appropriate. Payments, if used as intended, will support adaptation to climate change and mitigation of emissions from developing countries. We must be concerned, however, about the degree to which such payment, from adults in the North to adults in the South, are a modern form of indulgences, allowing fossil fuel emissions to continue with only marginal reductions or even increase.

The greatest injustice of continued fossil fuel dominance of energy is the heaping of climate and environmental damages onto the heads of young people and those yet to be born in both developing and developed countries. The tragedy of this situation is that a pathway to a clean energy future is not only possible, but even economically sensible.

Fossil fuels today power engines of economic development and thus raise the standards of living throughout most of the world. But air and water pollution due to extraction and burning of fossil fuels kills more than 1,000,000 people per year and affects the health of billions of people (Cohen et al., 2005). Burning all fossil fuels would have a climate impact that literally produces a different planet than the one on which civilization developed. The consequences for young people, future generations, and other species would continue to mount over years and centuries. Ice sheet disintegration would cause continual shoreline adjustments with massive civil engineering cost implications as well as widespread heritage loss in the nearly uncountable number of coastal cites. Shifting of climatic zones and repeated climate disruptions would have

enormous economic and social costs, especially in the developing world.

These consequences can be avoided via prompt transition to a clean energy future. The benefits would include a healthy environment with clean air and water, preservation of the shorelines and climatic zones that civilization is adapted to, and retention of the many benefits humanity derives from the remarkable diversity of species with which we share this planet.
13 Some nations are working hard to reduce their emissions, some with notable success. But there is not global
recognition that most of the remaining fossil fuel carbon cannot be emitted to the atmosphere without great damage
to the future of young people.

It is appropriate that governments, instituted for the protection of all citizens, should be required to safeguard the future of young people and the unborn. Specific policies cannot be imposed by courts, but courts can require governments to present realistic plans to protect the rights of the young. These plans should be consistent with the scientifically-established rate at which emissions must be reduced to stabilize climate.

Science can also make clear that rapid transition to improved energy efficiency and clean energies is not only feasible but economically sensible, and that rapid transition requires a steadily rising price on undesirable emissions. Other actions by governments are needed, such as enforcement of energy efficiency standards and investment in technology development. However, without the underlying incentive of a price on carbon emissions, such actions, as well as voluntary actions by concerned citizens, are only marginally effective. This is because such actions reduce the demand for fossil fuels, lower their price, and thus encourage fossil fuel use elsewhere. The price on carbon emissions, to be most effective, must be transparent and acrossthe-
board, for the sake of public acceptance, for guidance of consumer decisions, and for guidance of business decisions including technology investments.

Here we summarize the emission reductions required to restore Earth's energy balance, limit CO2 change to a level that avoids dangerous human-made interference with climate, assure a bright future for young people and future generations, and provide a planet on which both humans and our fellow species can continue to survive and thrive.

Figure 1. Global surface temperature anomalies relative to 1951-1980 mean for (a) annual and 5-year
running means through 2010, and (b) 60-month and 132-month running means through March 2011.
Green bars are 2-s error estimates, i.e., 95% confidence intervals (data from Hansen et al., 2010).

2. Global Temperature

Global surface temperature fluctuates chaotically within a limited range and it also responds to natural and human-made climate forcings. Climate forcings are imposed perturbations of Earth's energy balance. Examples of climate forcings are changes in the

luminosity of the sun, volcanic eruptions that inject aerosols (fine particles) into Earth's stratosphere, and human-caused alterations of atmospheric composition, most notably the increase of atmospheric carbon dioxide (CO2) due to burning of fossil fuels.

2.1. Modern Temperature

Figure 1(a) shows annual-mean global temperature change over the past century. The year-to-year variability is partly unforced chaotic variability and partly forced climate change. For example, the global warmth of 1998 was a consequence of the strongest El Nino of the century, a natural warming of the tropical Pacific Ocean surface associated with a fluctuation of ocean dynamics. The strong cooling in 1992 was caused by stratospheric aerosols from the Mount Pinatubo volcanic eruption, which temporarily reduced sunlight reaching Earth's surface by as much as 2 percent.

Figure 1(b) shows global temperature change averaged over 5 years (60 months) and 11 years (132 months), for the purpose of minimizing year-to-year variability. The rapid warming during the past three decades is a forced climate change that has been shown to be a consequence of the simultaneous rapid growth of human-made atmospheric greenhouse gases, predominately CO2 from fossil fuel burning (IPCC, 2007).

The basic physics underlying this global warming, the greenhouse effect, is simple. An increase of gases such as CO2 makes the atmosphere more opaque at infrared wavelengths. This added opacity causes the planet's heat radiation to space to arise from higher, colder levels in the atmosphere, thus reducing emission of heat energy to space. The temporary imbalance between the energy absorbed from the sun and heat emission to space, causes the planet to warm until planetary energy balance is restored.

The great thermal inertia of Earth, primarily a consequence of the 4-kilometer (2½ mile) deep ocean, causes the global temperature response to a climate forcing to be slow. Because

atmospheric CO2 is continuing to increase, Earth is significantly out of energy balance – the solar
energy being absorbed by the planet exceeds heat radiation to space. Measurement of Earth's energy imbalance provides the most precise quantitative evaluation of how much CO2 must be reduced to stabilize climate, as discussed in Section 2.

However, we should first discuss global temperature, because most efforts to assess the level of climate change that would be 'dangerous' for humanity have focused on estimating a permissible level of global warming. Broad-based assessments, represented by the 'burning embers' diagram in IPCC (2001, 2007), suggested that major problems begin with global warming of 2-3°C relative to global temperature in year 2000. Sophisticated probabilistic analyses (Schneider and Mastrandrea, 2005) found a median 'dangerous' threshold of 2.85°C above global temperature in 2000, with the 90 percent confidence range being 1.45-4.65°C. The conclusion that humanity could readily tolerate global warming up to a few degrees Celsius seemed to mesh with common sense. After all, people readily tolerate much larger regional and seasonal climate variations.

The fallacy of this logic became widely apparent only in recent years. (1) Summer sea ice cover in the Arctic plummeted in 2007 to an area 30 percent less than a few decades earlier. Continued growth of greenhouse gases will likely cause the loss of all summer sea ice within the next few decades, with large effects on wildlife and indigenous people, increased heat absorption at high latitudes, and potentially the release of massive amounts of methane, a powerful greenhouse gas, presently frozen in Arctic sediments on both land and sea floor. (2) The great continental ice sheets of Greenland and Antarctic have begun to shed ice at a rate, now several hundred cubic kilometers per year, which is continuing to accelerate. With the loss of protective sea ice and buttressing ice shelves, there is a danger that ice sheet mass loss will reach a level that causes catastrophic, and for all practical purposes irreversible, sea level rise. (3) Mountain glaciers are receding rapidly all around the world. Summer glacier melt provides fresh water to major world rivers during the dry season, so loss of the glaciers would be highly detrimental to billions of people. (4) The hot dry subtropical climate belts have expanded, affecting climate most notably in the southern United States, the Mediterranean and Middle East regions, and Australia, contributing to more intense droughts, summer heat waves, and devastating wildfires. (5) Coral reef ecosystems are already being impacted by a combination of ocean warming and acidification (a direct consequence of rising atmospheric CO2), resulting in a 1-2% per year decline in geographic extent. Coral reef ecosystems will be eliminated with continued increase of atmospheric CO2, with huge consequences for an estimated 500 million people that depend on the ecosystem services of coral reefs (Bruno and Selig, 2007; Hoegh-guldberg et al., 2007; Veron et al., 2009). (6) So-called mega-heatwaves have become noticeably more frequent, for example the 2003 and 2010 heatwaves over Europe and large parts of Russia, each with heatdeath
tolls in the range of 55,000 to 70,000 (Barriopedro et al., 2011).
Reassessment of the dangerous level of global warming has been spurred by realization that large climate effects are already beginning while global warming is less than 1°C above preindustrial levels. The best tool for assessment is provided by paleoclimate, the history of ancient climates on Earth.

Figure 2. Global temperature relative to peak Holocene temperature (Hansen and Sato, 2011).
2.2. Paleoclimate Temperature

Hansen and Sato (2011) illustrate Earth's temperature on a broad range of time scales. Figure 2(a) shows estimated global mean temperature14 during the Pliocene and Pleistocene, approximately the past five million years. Figure 2(b) shows higher temporal resolution, so that the more recent glacial to interglacial climate oscillations are more apparent.

Climate variations summarized in Figure 2 are huge. During the last ice age, 20,000 years ago, global mean temperature was about 5°C lower than today. But regional changes on land were larger. Most of Canada was under an ice sheet. New York City was buried under that ice sheet, as were Minneapolis and Seattle. On average the ice sheet was more than a mile (1.6 km) thick. Although thinner near its southern boundary, its thickness at the location of the above cities dwarfs the tallest buildings in today's world. Another ice sheet covered northwest Europe.

These huge climate changes were instigated by minor perturbations of Earth's orbit about

the sun and the tilt of Earth's spin axis relative to the orbital plane. By altering the seasonal and geographical distribution of sunlight, the orbital perturbations cause small temperature change. Temperature change then drives two powerful amplifying feedbacks: higher temperature melts ice globally, thus exposing darker surfaces that absorb more sunlight; higher temperature also causes the ocean and soil to release CO2 and other greenhouse gases. These amplifying feedbacks are responsible for practically the entire glacial-to-interglacial temperature change.

In these slow natural climate changes the amplifying feedbacks (ice area and CO2 amount) acted as slaves to weak orbital forcings. But today CO2, global temperature, and ice area are under the command of humanity: CO2 has increased to levels not seen for at least 3 million years, global temperature is rising, and ice is melting rapidly all over the planet. Another ice age will never occur, unless humans go extinct. A single chlorofluorocarbon factory can produce gases with a climate forcing that exceeds the forcing due to Earth orbital perturbations.

[14 This estimate of global mean temperature is obtained from ocean sediments at many locations around the world
(Zachos et al., 2001; Hansen et al., 2008). The composition of the shells of deep-sea-dwelling microscopic animals
(foraminifera), preserved in ocean sediments, carry a record of ocean temperature. Deep ocean temperature change
is about two-thirds as large as global mean surface temperature change for the range of climates from the last ice age
to the present interglacial period; that proportionality factor is included in Figure 2.]

During the climate oscillations summarized in Figure 2, Earth's climate remained in near equilibrium with its changing boundary conditions, i.e., with changing ice sheet area and changing atmospheric CO2. These natural boundary conditions changed slowly, over millennia, because the principal Earth orbital perturbations occur on time scales predominately in the range of 20,000 to 100,000 years.

Human-made changes of atmospheric composition are occurring much faster, on time scales of decades and centuries. The paleoclimate record does not tell us how rapidly the climate system will respond to the high-speed human-made change of climate forcings – our best guide will be observations of what is beginning to happen now. But the paleoclimate record does provide an indication of the eventual consequences of a given level of global warming.
The Eemian and Hosteinian interglacial periods, also known as marine isotope stages 5e and 11, respectively about 130,000 and 400,000 years ago, were warmer than the Holocene, but global mean temperature in those periods was probably less than 1°C warmer than peak Holocene temperature (Figure 2b). Yet it was warm enough for sea level to reach mean levels 4-6 meters higher than today.

Global mean temperature 2°C higher than peak Holocene temperature has not existed since at least the Pliocene, a few million years ago. Sea level at that time was estimated to have been 15-25 meters higher than today (Dowsett et al., 1999). Changes of regional climate during these warm periods were much greater than the global mean changes.

How does today's global temperature, given the warming of the past century, compare with prior peak Holocene temperature? Holocene climate has been highly variable on a regional basis (Mayewski et al., 2004). However, Hansen and Sato (2011) show from records at several places around the globe that mean temperature has been remarkably constant during the Holocene. They estimate that the warming between the 1800s and the period 1951-1980 (a warming of ~0.25°C in the Goddard Institute for Space Studies analysis, Hansen et al., 2010) brought global temperatures back to approximately the peak Holocene level.

If the 1951-1980 global mean temperature approximates peak Holocene temperature, this implies that global temperature in 2000 (5-year running mean) was already 0.45°C above the peak Holocene temperature. The uncertainty in the peak Holocene temperature is a least several tenths of a degree Celsius. However, strong empirical evidence that global temperature has already risen above the prior peak Holocene temperature is provided by the ongoing mass loss of the Greenland and West Antarctic ice sheets, which began within the last fewdecades. Sea level was relatively stable for the past five to six thousand years, indicating that these ice sheets were in near mass balance. Now, however, both Greenland and West Antarctica are shedding ice at accelerating rates. This is strong evidence that today's global temperature has reached a level higher than prior Holocene temperatures.

The conclusion is that global warming of 1°C relative to 1880-1920 mean temperature (i.e., 0.75°C above the 1951-1980 temperature or 0.3°C above the 5-year running mean temperature in 2000), if maintained for long, is already close to or into the 'dangerous' zone. The suggestion that 2°C global warming may be a 'safe' target is extremely unwise based on critical evidence accumulated over the past three decades. Global warming of this amount would be putting Earth on a path toward Pliocene-like conditions, i.e., a very different world marked by massive and continual disruptions to both society and ecosystems. It would be a world in which the world's species and ecosystems will have had no recent evolutionary experience, surely with consequences and disruptions to the ecosystem services that maintain human communities today. There are no credible arguments that such rapid change would not have catastrophic circumstances for human well-being.

Figure 3. (a) Estimated planetary energy imbalance in 1993-2008, and (b) in 2005-2010. Data sources
are given by Hansen et al. (2011).

3. Earth's Energy Imbalance

Earth's energy balance is the ultimate measure of the status of Earth's climate. In a period of climate stability, Earth radiates the same amount of energy to space that it absorbs from incident sunlight. Today it is anticipated that Earth is out of balance because of increasing atmospheric CO2. Greenhouse gases such as CO2 reduce Earth's heat radiation to space, thus causing a temporary energy imbalance, more energy coming in than going out. This imbalance causes Earth to warm until energy balance is restored.

The immediate planetary energy imbalance due to an increase of CO2 can be calculated precisely. It does not require a climate model. The radiation physics is rigorously understood.

However, the current planetary energy imbalance is complicated by the fact that increasing CO2 is only one of the factors affecting Earth's energy balance, and Earth has already partly responded to the net climate forcing by warming 0.8°C in the past century.

Thus authoritative determination of the state of the climate system requires measuring the planet's current energy imbalance. This is a technical challenge, because the magnitude of the imbalance is expected to be only about 1 W/m2 or less, so measurements must have an accuracy that approaches 0.1 W/m2. The most promising approach to achieve this accuracy is to measure ongoing changes of the heat content of the ocean, atmosphere, land, and ice on the planet. The vast global ocean is the primary reservoir for changes of Earth's heat content. Because of the importance of this measurement, nations of the world launched a cooperative Argo float program, which has distributed more than 3000 floats around the world ocean (Roemmich and Gilson, 2009). Each float repeatedly yoyos an instrument package to a depth of two kilometers and satellite-communicates the data to shore.

The Argo program did not attain planned distribution of floats until late 2007, but coverage reached 90% by 2005, allowing good accuracy provided that systematic measurement errors are kept sufficiently small. Prior experience showed how difficult it is to eliminate all measurement biases, but the exposure of the difficulties over the past decade leads to expectationthat the data for the 6-year period 2005-2010 are the most precise achieved so far. The estimated standard error for that period, necessarily partly subjective, is 0.15 W/m2.15 15 Barker et al. (2011) describe a remaining bias due to sensor drift in pressure measurements. That bias is reduced
in the analysis of von Schuckmann and Le Traon by excluding data from floats on a pressure-bias black list and data
from profiles that fail climatology checks, but errors remain and require further analysis.

Smaller contributions to the planetary energy imbalance, from changes in the heat content of the land, ice and atmosphere, are also know more accurately in recent years. A key improvement during the past decade has been provided by the GRACE satellite that measures Earth's gravitational field with a precision that allows the rate of ice loss by Greenland and Antarctica to be monitored accurately.

Figure 3 summarizes the results of analyses of Earth's energy imbalance averaged over the periods 1993-2008 and 2005-2010. In the period 1993-2008 the planetary energy imbalance ranges from 0.57 W/m2 to 0.80 W/m2 among different analyses, with the lower value based on upper ocean heat content analysis of Levitus et al. (2009) and the higher value based on Lyman et al. (2010). For the period 2005-2010 the upper ocean heat content change is based on analysis of the Argo data by von Schuckmann and Le Traon (2011), which yields a planetary energy imbalance of 0.59 ± 0.15 W/m2 (Hansen et al., 2011).

The energy imbalance in 2005-2010 is particularly important, because that period coincides with the lowest level of solar irradiance in the period since satellites began measuring the brightness of the sun in the late 1970s. Changes of solar irradiance are often hypothesized as being the one natural climate forcing with the potential to compete with human-made climate forcings, so measurements during the strongest solar minimum on record provide a conclusive

evaluation of the sun's potential to reduce the planet's energy imbalance.

The conclusion is that Earth is out of energy balance by at least ~0.5 W/m2. Our measured 0.59 W/m2 for 2005-2010 suggests that the average imbalance over the 11-year solar cycle may be closer to 0.75 W/m2.

This planetary energy imbalance is substantial, with implications for future climate change. It means that global warming will continue on decadal time scales, as the 0.8°C global warming so far is the response to only about half of the net human-made climate forcing. Knowledge of Earth's energy imbalance allows us to specify accurately how much CO2 must be reduced to restore energy balance and stabilize climate. CO2 must be reduced from the current level of 390 ppm to 360 ppm to increase Earth's heat radiation to space by 0.5 W/m2, or to 345 ppm to increase heat radiation to space by 0.75 W/m2, thus restoring Earth's energy balance and stabilizing climate.

Earth's energy imbalance thus provides accurate affirmation of a conclusion reached earlier (Hansen et al., 2008), that the appropriate initial target level of atmospheric CO2 to stabilize climate is "<350 ppm". This target level may need to be adjusted as it is approached, but, considering the time required to achieve a reversal of atmospheric CO2 growth, more precise
knowledge of the ultimate target for CO2 will be available by the time CO2 has been restored to a
level approaching 350 ppm.

One reason that more precise specification than "<350 ppm" is inadvisable now is the uncertainty about the net effect of changes of other human-made climate forcings such as methane, other trace gases, reflecting aerosols, black soot, and the surface reflectivity. These forcings are smaller than that by CO2, but not negligible.

Indeed, there is a concern that expected future reductions of particulate air pollution will exacerbate global warming via reduction of reflective aerosols. It has been suggested (Hansen et al., 2000) that a concerted effort to reduce methane, tropospheric ozone, other trace gases and black soot could substantially reduce the human-made climate forcing, possibly enough to counteract the warming effect of a decline in reflective aerosols. Our calculations of future global temperature in section 5 assume that a major effort will be made to reduce the non-CO2 forcings sufficient to obviate warming due to a decline of reflective aerosols. To the degree that this goal is not achieved, future warming could exceed that which we calculate.

Figure 4. (a) Decay of instantaneous (pulse) injection and extraction of atmospheric CO2, (b) atmospheric CO2 if fossil fuel emissions terminated at end of 2011, 2030, 2050.
The important point is that CO2 is the dominant climate forcing agent and it will be all the more so in the future. The CO2 injected into the climate system by burning fossil fuels will continue to affect our climate for millennia. We cannot burn all of the fossil fuels without producing a different planet, with changes occurring with a rapidity that will make Earth far less hospitable for young people, future generations, and most other species.

4. Carbon Cycle and Atmospheric CO2

The 'carbon cycle' that defines the fate of fossil fuel carbon injected into the climate system is well understood. This knowledge allows accurate estimation of the amount of fossil fuels that can be burned consistent with stabilization of climate this century.

Atmospheric CO2 is already about 390 ppm. Is it possible to return to 350 ppm or less within this century? Yes. Atmospheric CO2 would decrease if we phased out fossil fuels. The CO2 injected into the air by burning fossil fuels becomes distributed, over years, decades, and centuries, among the surface carbon reservoirs: the atmosphere, ocean, soil, and biosphere. Carbon cycle models simulate how the CO2 injected into the atmosphere becomes distributed among the carbon reservoirs. We use the well-tested Bern carbon cycle model (Joos et al., 1996)16 to illustrate how rapidly atmospheric CO2 can decrease.

Figure 4 (a) shows the decay of a pulse of CO2 injected into the air. The atmospheric amount is reduced by half in about 25 years. However, after 500 years about one-fifth of the CO2 is still in the atmosphere. Eventually, via weathering of rocks, this excess CO2 will be deposited on the ocean floor as carbonate sediments. However, that process requires millennia. It is informative, for later policy considerations, to note that a negative CO2 pulse decays at about the same rate as positive pulse. Thus if we decide to suck CO2 from the air, taking CO2 out of the carbon cycle, for example by storing it in carbonate bricks, the magnitude of the CO2 change will decline as the negative increment becomes spread among the carbon reservoirs. It is also informative to examine how fast atmospheric CO2 would decline if fossil fuel use were halted today, or in 20 years, or in 40 years. Results are shown in Figure 4 (b). If emissions were halted in 2011, CO2 would decline to 350 ppm at mid-century. With a 20 year delay in halting emissions, CO2 returns to 350 ppm at about 2250. With a 40 year delay, CO2 does not return to 350 ppm until after year 3000.

[16 Specifically, we use the dynamic-sink pulse-response function representation of the Bern carbon cycle model
(Joos et al., 1996), as described by Kharecha and Hansen (2008) and Hansen et al. (2008).]

The scenarios in Figure 4 (b) assume that emissions continue to increase at the 'businessas-usual' (BAU) rate of the past decade (increasing by just over 2% per year) until they are suddenly halted. The results are indicative of how difficult it will be to get back to 350 ppm, if fossil fuel emissions continue to accelerate.

Do these results imply that it is implausible to get back to 350 ppm in a way that is essentially 'natural', i.e., in a way other than a 'geo-engineering' approach that sucks CO2 from the air? Not necessarily. There is one other major factor, in addition to fossil fuel use, that affects atmospheric CO2 amount: deforestation/reforestation.

Fossil fuel emissions account for about 80 percent of the increase of atmospheric CO2 from 275 ppm in the preindustrial atmosphere to 390 ppm today. The other 20 percent is from net deforestation (here net deforestation accounts for any forest regrowth in that period). We take net deforestation over the industrial era to be about 100 GtC (gigatons of carbon), with an

uncertainty of at least 50 percent (Stocker et al., 2011)17.

[17 Net historical deforestation of 100 GtC and historical fossil fuel use yield good agreement with historical growth
of atmospheric CO2 (Figure S16 of Hansen et al., 2008), based on simulations with the Bern carbon cycle model.]

There is considerable potential for extracting CO2 from the atmosphere via reforestation and improved forestry and agricultural practices. The largest practical extraction is probably about 100 GtC (IPCC, 2001), i.e., equivalent to restoration of deforested land. Complete restoration of deforested areas is unrealistic, yet a 100 GtC drawdown seems feasible for the following reasons: (1) the current human-enhanced atmospheric CO2 level leads to an increase of carbon uptake by vegetation and soils, (2) improved agricultural practices can convert agriculture from being a large CO2 source into a carbon sink, as discussed in the following paragraph, (3) part of this CO2 drawdown can be achieved by burning biomass at powerplants and capturing the CO2, with the provision that the feedstock for this bioenergy is residues and wastes, unlike most current-generation bioenergy sources, thus avoiding loss of natural ecosystems and cropland (Tilman et al., 2006; Fargione et al., 2008; Searchinger et al., 2008). Competing uses for land – primarily expansion of agriculture to supply a growing world population – could complicate reforestation efforts. A decrease in the use of animal products would substantially decrease the demand for agricultural land, as more than half of all crops are currently fed to livestock (Stehfest et al., 2009; UNEP, 2010).

The 100 GtC 'reforestation' thus is a major task, but it is needed to get CO2 back to 350 ppm and it is an opportunity to achieve other major benefits. Present agricultural practices, based on plowing and chemical fertilizers, are dependent on fossil fuels and contribute to loss of carbon from soil via land degradation. World agriculture could sequester 0.4-1.2 GtC per year by adopting minimum tillage and biological nutrient recycling (Lal, 2004). Such a strategy can also increase water conservation in soils, build agricultural resilience to climate change, and increase productivity especially in smallholder rain-fed agriculture, thereby reducing expansion of agriculture into forested ecosystems (Rockstrom et al., 2009).

We thus assume a 100 GtC drawdown (biospheric C uptake) in our reforestation scenarios, with this obtained via a sinusoidal drawdown over the period 2031-2080. Alternative timings for this reforestation drawdown of CO2 would have no qualitative effect on our conclusions about the potential for achieving a given CO2 level such as 350 ppm.

Figure 5. (a) Atmospheric CO2 if fossil fuel emissions are cut 6% per year beginning in 2012 and 100
GtC reforestation drawdown occurs in the 2031-2080 period, (b) Atmospheric CO2 with BAU emission
increases until 2020, 2030, 2045, and 2060, followed by 5% per year emission reductions.
Figure 5 (a) shows that 100 GtC reforestation results in atmospheric CO2 declining to 350 ppm by the end of this century, provided that fossil fuel emissions decline by 6% per year beginning in 2013. Figure 5 (b) shows the effect of continued BAU fossil fuel emission (just over 2% per year) until 2020, 2030, 2045 and 2060 with 100 GtC reforestation in 2031-2080.

The scenario with emission cuts beginning in 2020 has atmospheric CO2 return to 350 ppm at about 2300. If the initiation of emissions reduction is delayed to 2030 or later, then atmospheric CO2 does not return to the 350 ppm level even by 2500.
The conclusion is that a major reforestation program does permit the possibility of returning CO2 to the 350 ppm level within this century, but only if fossil fuel emission reductions
begin promptly.

What about artificially drawing down atmospheric CO2? Some people may argue that, given the practical difficulty of overcoming fossil fuel lobbyists and persuading governments to move rapidly toward post-fossil-fuel clean energy economies, 'geo-engineering' is the only hope.
At present there are no large-scale technologies for air capture of CO2. It has been suggested that with strong research and development support and industrial scale pilot projects sustained over decades, it may be possible to achieve costs of about ~$200/tC (Keith et al., 2006).
At this rate, the cost of removing 50 ppm18 of CO2 is ~$20 trillion. However, as shown by Figure 4 (a), the resulting atmospheric CO2 reduction is only ~15 ppm after 100 years, because most of the extraction will have leaked into other surface carbon reservoirs. The cost of CO2 extraction needed to maintain a 50 ppm reduction on the century time scale is thus better estimated as ~$60 trillion.

In section 7 we note the economic and social benefits of rapidly phasing over to clean energies and increased energy efficiency, as opposed to continued and expanded extraction of fossil fuels. For the moment, we simply note that the present generation will be passing the CO2 clean-up costs on to today's young people and future generations.

5. Future Global Temperature Change

Future global temperature change will depend primarily upon atmospheric CO2 amount. Although other greenhouse gases, such as methane and chlorofluorocarbons, contributed almost
18 The conversion factor to convert atmospheric CO2 in ppm to GtC is 1 ppm ~ 2.12 GtC.
as much as CO2 to the total human-caused climate forcings over the past century, CO2 now accounts for more than 80 percent of the growth of greenhouse gas climate forcing (over the past 15 years). Natural climate forcings, such as changes of solar irradiance and volcanic aerosols, can cause global temperature variations, but their effect on the long-term global temperature trend is small compared with the effect of CO2.

A simple climate response function can provide a realistic estimate of expected global temperature change for a given scenario of future atmospheric CO2. Indeed, Hansen et al. (2011) show that such a function accurately replicates the results from sophisticated global climate models. In the simulations here we use the 'intermediate' response function of Hansen et al. (2011), which accurately replicates observed ocean heat uptake and observed temperature change over the past century, and we assume that the net change of other human-made climate forcings is small in comparison with the effect of CO2.

One important caveat must be stressed. These calculations, as with most global climate

models, incorporate only the effect of the so-called 'fast feedbacks' in the climate system, such as
water vapor, clouds, aerosols, and sea ice. Slow feedbacks, such as ice sheet disintegration and climate-induced changes of greenhouse gases, as may occur with the melting of tundra and warming of continental shelves, are not included.

Exclusion of slow feedbacks is appropriate for the past century, because we know the ice sheets were stable and our climate simulations employ observed greenhouse gas amounts. The observed greenhouse gas amount includes any contribution from slow feedbacks. Exclusion of slow feedbacks in the 21st century is a dubious assumption, used in our illustrative computations only because the rate at which slow feedbacks come into play is poorly understood. However, we must bear in mind the potential for slow feedbacks to fundamentally alter the nature of future climate change, specifically the possibility of creating a situation in which continued climate change is largely out of humanity's control.

Slow feedbacks are thus one important consideration that helps to crystallize the need to keep maximum warming from significantly exceeding 1°C. With the current global warming of ~0.8°C evidence of slow feedbacks is beginning to appear, e.g., melting of tundra with release of methane (Walter et al., 2006), submarine methane release from dissociation of sea-bed gas hydrates in association with sea water temperature increase (Westbrook et al., 2009), and increasing ice mass loss from Greenland and Antarctica (Velicogna, 2009). The fact that observed effects so far are small suggests that these feedbacks may not be a major factor if maximum global warming is only ~1°C and then recedes.

On the other hand, if BAU CO2 emissions continue for many decades there is little doubt that these slow feedbacks will come into play in major ways. Because the CO2 injected into the air stays in the surface carbon reservoirs for millennia, the slow feedbacks surely will occur. It is only a question of how fast they will come into play, and thus which generations will suffer the greatest consequences.

There is thus strong indication that we face a dichotomy. Either we achieve a scenario with declining global CO2 emissions, thus preserving a planetary climate resembling that of the Holocene or we set in motion a dynamic transition to a very different planet.

Figure 6. Simulated future global temperature for the CO2 scenarios of Figure 5. Observed temperature
record is from Hansen et al. (2010). Temperature is relative to the 1880-1920 mean. Subtract 0.26°C to
use 1951-1980 as zero-point. Subtract 0.70°C to use 5-year running mean in 2000 as zero point.
Can we define the level of global warming that would necessarily push us into such a dynamic transition? Given present understanding of slow feedbacks, we cannot be precise. However, consider the case in Figure 6 in which BAU emissions continue to 2030. In that case, even though CO2 emissions are phased out rapidly (5% per year emission reductions) after 2030 and 100 GtC reforestation occurs in 2031-2080, the (fast-feedback) human-caused global temperature rise reaches 1.5°C and stays above 1°C until after 2500. It is highly unlikely that the major ice sheets could remain stable at their present size with such long-lasting warmth. Even if

BAU is continued only until 2020, the temperature rise exceeds 1°C for about 100 years. In contrast to scenarios with continued BAU emissions, Figure 6 (a) shows the scenario with 6% per year decrease of fossil fuel CO2 emissions and 100 GtC reforestation in the period 2031-2080. This scenario yields additional global warming of ~0.3°C. Global temperature relative to the 1880-1920 mean would barely exceed 1°C and would remain above 1°C for only about 3 decades. Thus this scenario provides the prospect that young people, future generations, and other life on the planet would have a chance of residing in a world similar to the one in which civilization developed.

The precise consequences if BAU emissions continue several decades are difficult to define, because such rapid growth of climate forcing would take the world into uncharted territory. Earth has experienced a huge range of climate states during its history, but there has never been such a large rapid increase of climate forcings as would occur with burning of most fossil fuels this century. The closest analogy in Earth's history is probably the PETM (Paleocene-Eocene Thermal Maximum) in which rapid global warming of at least 5°C occurred (Zachos et al., 2001), probably as a consequence of melting methane hydrates (Zeebe et al., 2009). The PETM is instructive because it occurred during a 10-million year period of global warming, and thus the methane release was probably a feedback effect magnifying the warming. Global warming that occurred over the period from 60 Mya (million years ago) to 50 Mya can be confidently ascribed to increasing atmospheric CO2. That was the period in which the Indian subcontinent was moving rapidly through the Indian Ocean, just prior to its collision with Asia, when it began to push up the Himalayan Mountains and Tibetan Plateau. Continental

drift over carbonate-rich ocean crust is the principal source of CO2 from the solid Earth to the surface reservoirs of carbon.19

[19 The principal sink of CO2, i.e., the mechanism that returns carbon to the solid Earth on long time scales, is the
weathering process. Chemical reactions associated with weathering of rocks results in rivers carrying carbonate
sediments that are deposited on the ocean floor.]

The global warming between 60 Mya and 50 Mya was about 5°C, thus at a rate less than 1°C per million years. Approximately 55 Mya there was, by paleoclimae standards, a very rapid release of 3000-5000 GtC into the surface climate system, presumably from melting of methane hydrates based on the absence of any other known source of that magnitude. This injection of carbon and rapid additional warming of about 5°C occurred over a period of about 10,000 years, with most of the carbon injection during two 1-2 thousand year intervals. The PETM witnessed the extinction of almost half of the deep ocean foraminifera (microscopic shelled animals, which serve as a biological indicator for ocean life in general), but, unlike several other large warming events in Earth's history, there was little extinction of land plants and animals.

The important point is that the rapid PETM carbon injection was comparable to what will occur if humanity burns most of the fossil fuels, but the PETM occurred over a period that was 10-100 times longer. The ability of life on Earth today to sustain a climate shock comparable to the PETM but occurring 10-100 times faster is highly problematic, at best. Climate zones would

be shifting at a speed far faster than species have ever faced. Thus if humanity continues to burn most of the fossil fuels, Earth, and all of the species residing on it, will be pushed into uncharted climate change territory, with consequences that are practically impossible to foresee.

6. Consequences of Continued Global Warming

The unparalleled rapidity of the human-made increase of global climate forcing implies that there are no close paleoclimate analogies to the current situation. However, the combination of paleoclimate data and observations of ongoing climate change provide useful insight. Paleoclimate data serve mainly as an indication of likely long-term responses to changed boundary conditions. Observations of ongoing climate change provide information relevant to the rate at which changes may occur.

Yet we must bear in mind that some important processes, such as ice sheet disintegration and species extermination, have the potential to be highly non-linear. That means changes can be slow until a tipping point is reached (Lenton et al., 2008) and more rapid change occurs. Sea level. If most fossil fuels are burned global temperatures will rise at least several degrees Celsius. The eventual sea level change in response to the global warming will be many meters and global coast lines will be transfigured. We do not know how rapidly ice sheets can disintegrate, because Earth has never experienced such rapid global warming. However, even moderate sea level rise will create millions of global warming refugees from highly-populated low-lying areas, who must migrate from the coastline, throwing existing global demographics into chaos.

During the most recent prior interglacial period, the Eemian, global temperature was at most of the order of 1°C warmer than the Holocene (Figure 2). Sea level reached heights several meters above today's level and there were instances of sea level change by 1-2 meters per century
(Rohling et al., 2008; Muhs et al., 2011). Hearty and Neumann (2001) and Hearty et al. (2007) interpret geologic shoreline evidence as indicating a rapid sea level rise to a peak 6-9 meters above present late in the Eemian followed by a precipitous sea level fall, but there is not unanimity in the research community about this specific history. The important point is that the high sea level excursions in the Eemian imply rapid partial melting of Antarctic and/or Greenland ice when the world was little warmer than today. During the Pliocene, when global mean temperature may have been 2°C warmer than the Holocene (Figure 2), sea level was probably 15-25 meters higher than today (Dowsett et al., 1999, 2009; Naish et al., 2009). Expected sea level rise due to human-caused climate change has been controversial partly because the discussion and the predictions of IPCC (2001, 2007) have focused on sea level rise at a specific date, 2100. Recent estimates of likely sea level rise by 2100 are of the order of 1 m (Vermeer and Rahmstorf, 2009; Grinsted et al., 2010). Ice-dynamics studies estimate that rates of sea-level rise of 0.8 to 2 m per century are feasible (Pfeffer et al., 2008) and Antarctica alone may contribute up to 1.5 m per century (Turner et al., 2009). Hansen (2005, 2007) has argued that BAU CO2 emissions produce a climate forcing so much larger than any experienced in prior interglacial periods that a non-linear ice sheet response with multi-meter sea level rise may occur this century.

The best warning of an imminent period of sustained nonlinear ice sheet loss will be provided by accurate measurements of ice sheet mass. The GRACE satellite, which has been measuring Earth's gravitational field since 2003 reveals that the Greenland ice sheet is losing mass at an accelerating rate, now more than 200 cubic kilometers per year, and Antarctica is losing more than 100 cubic kilometers per year (Sorensen and Forsberg, 2010; Rignot et al., 2011). However, the present rate of sea level rise, 3 cm per decade, is moderate, and the ice sheet mass balance record is too short to determine whether we have entered a period of continually accelerating ice loss.

Satellite observations of Greenland show that the surface area with summer melting has increased over the period of record, which extends back to the late 1970s (Steffen et al., 2004; Tedesco et al., 2011). Yet the destabilizing mechanism of greatest concern is melting of ice shelves, tongues of ice that extend from the ice sheets into the oceans and buttress the ice sheets, limiting the rate of discharge of ice to the ocean. Ocean warming is causing shrinkage of ice shelves around Greenland and Antarctica (Rignot and Jacobs, 2002).

Loss of ice shelves can open a pathway to the ocean for portions of the ice sheets that rest on bedrock below sea level. Most of the West Antarctic ice sheet, which alone could raise sea level by 6 meters, is on bedrock below sea level, so it is the ice sheet most vulnerable to rapid change. However, parts of the larger East Antarctic ice sheet are also vulnerable. Indeed, satellite gravity and radar altimetry reveal that the Totten Glacier of East Antarctica, fronting a large ice mass grounded below sea level, is already beginning to lose mass (Rignot et al., 2008) The important point is that uncertainties about sea level rise mainly concern the timing of large sea level rise if BAU emissions continue, not whether it will occur. If all or most fossil fuels are burned, the carbon will be in the climate system for many centuries, in which case multi-meter sea level rise should be expected (e.g., Rohling et al., 2009).

Children born today can expect to live most of this century. If BAU emissions continue, will they suffer large sea level rise, or will it be their children, or their grandchildren? Shifting climate zones. Theory and climate models indicate that subtropical regions will expand poleward with global warming (Held and Soden, 2006; IPCC, 2007). Observations reveal that a 4-degree poleward expansion of the subtropics has occurred already on average (Seidel and Randel, 2006), yielding increased aridity in southern United States (Barnett et al., 2008; Levi, 2008), the Mediterranean region, and Australia. Increased aridity and temperatures have contributed to increased forest fires that burn hotter and are more destructive in all of these regions (Westerling et al., 2006).

Although there is large year-to-year variability of seasonal temperature, decadal averages reveal that isotherms (lines of a given average temperature) having been moving poleward at a rate of about 100 km per decade during the past three decades (Hansen et al., 2006). This rate of shifting of climatic zones exceeds natural rates of change. The direction of movement has been monotonic (poleward) since about 1975. Wild species have responded to this climatic shift, with at least 52 percent of species having shifted their ranges poleward (and upward) by as much as 600 km in terrestrial systems and 1000 km in marine systems (Parmesan and Yohe, 2003). As long as the planet is as far out of energy balance as at present, that trend necessarily will continue, a conclusion based on comparison of the observed trend with interdecadal variability in

climate simulations (Hansen et al., 2007).

Humans may be better able to adapt to shifting of climate zones, compared with many other species. However, political borders can interfere with migration, and indigenous ways of life have already been adversely affected. Impacts are apparent in the Arctic, with melting tundra, reduced sea ice, and increased shoreline erosion. Effects of shifting climate zones may also be important for native Americans who possess specific designated land areas, as well as other cultures with long-standing traditions in South America, Africa, Asia and Australia.
Loss of Species. Explosion of the human population and its presence on the landscape in the past few centuries is having a profound influence on the well being of all the other species. As recently as two decades ago biologists were more concerned with effects on biodiversity other than climate change, such as land use changes, nitrogen fertilization, and direct effects of increased atmospheric CO2 on plant ecophysiology (Parmesan, 2006). However, easily discernible impacts on animals, plants, and insects of the nearly monotonic global warming during the past three decades (Figure 1) has sharply altered perceptions of the greatest threats. A dramatic awakening was provided by sudden widespread decline of frogs, with extinction of entire mountain-restricted species attributed to global warming (Pounds et al., 1999, 2006). Although there are somewhat different interpretations of detailed processes involved in global amphibian declines and extinctions (Alford et al., 2007; Fagotti and Pascolini, 2007), there is agreement that global warming is a main contributor to a global amphibian crisis: "The losses portend a planetary-scale mass extinction in the making. Unless humanity takes immediate action to stabilize the climate, while also fighting biodiversity's other threats, a multitude of species is likely to vanish" (Pounds et al., 2007).

Mountain-restricted species in general are particularly vulnerable to global warming. As warming causes isotherms to move up the mountainside so does the specific climate zone in which a given specific species can survive. If global warming continues unabated, i.e., if all fossil fuels are burned, many mountain-dwelling species will be driven to extinction.
The same is true for species living in polar regions. There is documented evidence of reductions in the population and health of Arctic species living in the southern parts of the Arctic and Antarctic species in the more northern parts of the Antarctic.

A critical factor for survival of some Arctic species will be retention of all-year sea ice. Continued BAU fossil fuel use will result in loss of all Arctic summer sea ice within the next several decades. In contrast, the scenario in Figure 5a, with global warming peaking just over 1°C and then declining slowly, should allow some summer sea ice to survive and then gradually increase to levels representative of recent decades.

The threat to species survival is not limited to mountain and polar species. Plant and animal distributions are a reflection of the regional climates to which they are adapted. Although species attempt to migrate in response to climate change, their paths may be blocked by humanconstructed
obstacles or natural barriers such as coast lines. As the shift of climate zones

Figure 7. Extant reefs used as analogs (Hoegh-Guldberg et al., 2007) for ecological structures anticipated

for scenarios A (375 ppm CO_2, +1°C), B (450-500 ppm CO_2, +2°C), C (>500 ppm CO_2, >+3°C)
becomes comparable to the range of some species, the less mobile species will be driven to extinction. Because of extensive species interdependencies, this can lead to mass extinctions. The IPCC Working Group II assessment (IPCC WG-II, 2007) reviews studies relevant to estimating the eventual extinction rate for different magnitudes of global warming. If global warming relative to the pre-industrial level exceeds 1.5°C, they estimate that 9-31 percent of species will be committed to extinction. With global warming of 2.7°C, an estimated 21-52 percent of species will be committed to extinction.

Mass extinctions have occurred in conjunction with rapid climate change during Earth's long history, and new species evolved over hundreds of thousands and millions of years. But such time scales are almost beyond human comprehension. If we drive many species to extinction we will leave a more desolate planet for our children, grandchildren, and as many generations as we can imagine.

Coral reef ecosystems. Coral reef ecosystems are the most biologically diverse marine ecosystem, often described as the rainforests of the ocean. An estimated 1-9 million species (most of which have not yet been described; Reaka-Kudla 1997) populate coral reef ecosystems generating ecosystem services that are crucial to the well-being of at least 500 million people that populate tropical coastal areas. These coral reef ecosystems are vulnerable to current and future warming and acidification of tropical oceans. Acidification arises due to the production of carbonic acid as increasing amounts of CO_2 enter the world's oceans. Comparison of current changes with those seen in the palaeontological record indicate that ocean pH is already outside where it has been for several million years (Raven et al. 2005; Pelejero et al. 2010).
Mass coral bleaching and a slowing of coral calcification are already disrupting coral reef ecosystem health (Hoegh-Guldberg et al 2007; De'Ath et al. 2009). The decreased viability of reef-building corals have led to mass mortalities, increasing coral disease, and slowing of reef carbonate accretion. Together with more local stressors, the impacts of global climate change and ocean acidification are driving a rapid contraction (1-2% per year, Bruno and Selig 2007) in the extent of coral reef ecosystems.

Figure 7 shows extant reefs that are analogs for ecological structures anticipated by Hoegh-Guldberg et al. (2007) to be representative of ocean warming and acidification expected to accompany CO_2 levels of 375 ppm with +1°C, 450-500 ppm with +2°C, and >500 ppm with > +3°C. Loss of the three-dimensional framework that typifies coral reefs today has consequences for the millions of species that depend on this coral reef framework for their existence. The loss of these three-dimensional frameworks also has consequences for other important roles coral reefs play in supporting fisheries and protecting coastlines from wave stress. The consequences of losing coral reefs are likely to be substantial and economically devastating for multiple nations across the planet when combined with other impacts such as sea level rise.

The situation with coral reefs is summarized by Schuttenberg and Hoegh-Guldberg (2007) thus: "Although the current greenhouse trajectory is disastrous for coral reefs and the millions of people who depend on them for survival, we should not be lulled into accepting a world without corals. Only by imagining a world with corals will we build the resolve to solve

the challenges ahead. We must avoid the "game over" syndrome and marshal the financial, political, and technical resources to stabilize the climate and implement effective reef management with unprecedented urgency."

Hydrologic extremes and storms. The extremes of the hydrologic cycle are intensified as Earth becomes warmer. A warmer atmosphere holds more moisture, so heavy rains become more intense and increase flooding. Higher temperatures, on the other hand, cause an intensification of droughts, as does expansion of the subtropics with global warming. The most recent IPCC (2007) report confirms existence of expected trends, e.g., precipitation has generally increased over land north of 30°N and decreased in more tropical latitudes. Heavy precipitation events have increased substantially. Droughts are more common, especially in the tropics and subtropics. Tropospheric water vapor has increased.

Mountain glaciers. Mountain glaciers are in near-global retreat (IPCC, 2007). After a one-time added flush of fresh water, glacier demise will yield summers and autumns of frequently dry rivers originating in the Himalayas, Andes, and Rocky Mountains (Barnett et al., 2008) that now supply water to hundreds of millions of people. Present glacier retreat, and warming in the pipeline, indicate that 390 ppm of CO2 is already a threat for future fresh water security.

Human health. Children are especially vulnerable to the health impacts of climate change. Principal effects are categorized in Table 1 under the headings: (1) heat waves, (2) asthma and allergies, (3) infectious disease spread, (4) pests and disease spread across taxa: forests, crops and marine life, (5) winter weather anomalies, (6) drought, (7) food insecurity. Climate change poses a threat to child health through many pathways, especially by placing additional stress on the availability of food, clean air, clean water, and potentially expanding the burden of disease from vector-borne diseases (Bernstein and Myers, 2011).
World health experts have concluded with "very high confidence" that climate change already contributes to the global burden of disease and premature death (IPCC WG-II, 2007). At this point the effects are small but are projected to progressively increase in all countries and regions. IPCC (WG-II, 2007) describes evidence that climate change has already altered the distribution of some infectious disease vectors, altered the seasonal distribution of some allergenic pollen species, and increased heat-related deaths.

Table 1. Climate Change Impacts on Human Health

Heatwaves.

Heatwaves are not only increasing in frequency, intensity and duration, but their nature is changing. Warmer
nighttime temps [double the increase of average temperature since 1970 (Karl et al.)] and higher humidity (7%
more for each 1ºC warming) that raises heat indices and makes heat-waves all the more lethal.
Asthma and allergies.

Asthma prevalence has more than doubled in the U.S. since 1980 and several exacerbating

factors stem from
burning fossil fuels.

Increased CO2 and warming boost pollen production from fast growing trees in the spring and ragweed in the
fall (the allergenic proteins also increase). Particulates help deliver pollen and mold spores deep into the lung sacs.
Ground-level ozone primes the allergic response (and O3 increases in heat-waves). Climate change has extended
the allergy and asthma season two-four weeks in the Northern Hemisphere (depending on latitude) since 1970.
Increased CO2 stimulates growth of poison ivy and a chemical in it (uruschiol) that causes contact dermatitis.

Infectious disease spread.

The spread of infectious diseases is influenced by climate change in two ways: warming expands the
geographic and temporal conditions conducive to transmission of vector-borne diseases (VBDs), while floods can
leave "clusters" of mosquito-, water – and rodent-borne diseases (and spread toxins). With the ocean the repository
for global warming and the atmosphere holding more water vapor, rain is increasing in intensity -- 7% overall in
the U.S. since 1970, 2"/day rains 14%, 4"/day rains 20%, and 6"/day rains 27% since 1970 (Groisman et al.,
2005), with multiple implications for health, crops and nutrition.

Tick-borne Lyme disease (LD) is the most important VBD in the U.S. LD case reports rose 8-fold in New
Hampshire in the past decade and 10-fold (and now include all of its 16 counties). Warmer winters and
disproportionate warming toward the poles mean that the changes in range are occurring faster than models based
on changes in average temperatures project. Biological responses of vectors (and plants) to warming are, in
general, underestimated and may be seen as leading indicators of warming due to the disproportionate winter
(Tminimum or Tmin) and high latitude warming.

Pests and disease

spread across taxa:
forests, crops and
marine life.

Pests and diseases of forests, crops and marine life are favored in a warming world. Bark beetles are
overwintering (absent sustained killing frosts) and expanding their range, and getting in more generations, while
droughts in the West dry the resin that drowns the beetles as they try to drive through the bark. (Warming
emboldens the pests while extremes weaken the hosts.) Forest health is also threatened in the Northeast U.S.
(Asian Long-horned beetle and wooly adelgid of hemlock trees), setting the stage for increased wildfires with
injury, death and air pollution, loss of carbon stores, and damage to oxygen and water supplies. In sum, forest pests
threaten basic life support systems that underlie human health.

Crop pests and diseases are also encouraged by warming and extremes. Warming increases their potential
range, while floods foster fungal growth and droughts favor whiteflies, aphid and locust. Higher CO2 also
stimulates growth of agricultural weeds. More pesticides, herbicides and fungicides (where available) pose other
threats to human health. Crop pests take up to 40% of yield annually, totaling ~$300 billion in losses (Pimentel)
Marine diseases (e.g., coral, sea urchin die-offs, and others), harmful algal blooms (from excess nutrients, loss
of filtering wetlands, warmer seas and extreme weather events that trigger HABs by flushing nutrients into
estuaries and coastal waters), plus the over 350 “dead zones” globally affect fisheries, thus nutrition and health.

Winter weather anomalies.

Increasing winter weather anomalies is a trend to be monitored. More winter precipitation is falling as rain
rather than snow in the Northern Hemisphere, increasing the chances for ice storms, while greater atmospheric
moisture increases the chances of heavy snowfalls. Both affect ambulatory health (orthopedics), motor vehicle
accidents, cardiac disease and power outages with accompanying health effects.

Drought.

Droughts are increasing in frequency, intensity, duration, and geographic extent. Drought and water stress are
major killers in developing nations, are associated with disease outbreaks (water-borne cholera, mosquito-borne
dengue fever (mosquitoes breed in stored water containers)), and drought and higher CO2

increase the cyanide
content of cassava, a staple food in Africa, leading to neurological disabilities and death.

Food insecurity.

Food insecurity is a major problem worldwide. Demand for meat, fuel prices, displacement of food crops with
those grown for biofuels all contribute. But extreme weather events today are the acute driver. Russia's extensive
2010 summer heat-wave (over six standard deviations from the norm, killing over 50,000) reduced wheat
production ~40%; Pakistan and Australian floods in 2010 also affected wheat and other grains; and drought in
China and the U.S. Southwest are boosting grain prices and causing shortages in many nations. Food riots are
occurring in Uganda and Burkino Faso, and the food and fuel hikes may be contributing to the uprisings in North
Africa and the Middle East. Food shortages and price hikes contribute to malnutrition that underlies much of poor
health and vulnerability to infectious diseases. Food insecurity also leads to political instability, conflict and war.

If global warming increases IPCC (WG-II, 2007) projects the following trends, where we include only those that are assigned either high confidence or very high confidence: (1) increased malnutrition and consequent disorders, including those related to child growth and development, (2) increased death, disease and injuries from heat waves, floods, storms, fires and droughts, (3) increased cardio-respiratory morbidity and mortality associated with ground-level ozone, (4) some benefits to health, including fewer deaths from cold, although it is expected that these would be outweighed by the negative effects.

7. Societal Implications

The science is clear. Human-made climate forcing agents, principally CO2 from burning
of fossil fuels, have driven planet Earth out of energy balance – more energy coming in than
going out. The human-made climate forcing agents are the principal cause of the global
warming of 0.8°C in the past century, most of which occurred in the past few decades.
Earth's energy imbalance today is the fundamental quantity defining the state of the
planet. With the completion of the near-global distribution of Argo floats and reduction of
calibration problems, it is confirmed that the planet's energy imbalance averaged over several
years, is at least 0.5 W/m2. The imbalance averaged over the past solar cycle is probably closer
to 0.75 W/m2. An imbalance of this magnitude assures that continued global warming is in the
pipeline, and thus so are increasing climate impacts.

Global climate effects are already apparent. Arctic warm season sea ice has decreased
more than 30 percent over the past few decades. Mountain glaciers are receding rapidly all over
the world. The Greenland and Antarctic ice sheets are shedding mass at an accelerating rate,

already several hundred cubic kilometers per year. Climate zones are shifting poleward. The subtropics are expanding. Climate extremes are increasing. Summer heat of a degree that occurred only 2-3 percent of the time in the period 1950-1980, or, equivalently, in a typical summer covered 2-3 percent of the globe, now occurs over 20-40 percent of Earth's surface each summer (http://www.columbia.edu/~jeh1/mailings/2011/20110327_Perceptions.pdf). Within these expanded areas smaller regions of more extreme anomalies, such as the European heat wave of 2003 and the Moscow and Pakistan heat waves of 2010.

Global climate anomalies and climate impacts will continue to increase if fossil fuel use continues at current levels or increases. Earth's history provides our best measure of the ultimate climate response to a given level of climate forcing and global temperature change. Continuation of business-as-usual fossil fuel emissions for even a few decades would guarantee that global warming would pass well beyond the warmest interglacial periods in the past million years, implying transition to literally a different planet than the one that humanity has experienced. Today's young people and following generations would be faced with continuing climate change and climate impacts that would be out of their control.

Yet governments are taking no actions13 to substantially alter business-as-usual fossil fuel emissions. Rhetoric about a 'planet in peril' abounds. But actions speak louder than words. Continued investments in infrastructure to expand the scope and nature of fossil fuel extraction expose reality.

The matter is urgent. CO2 injected into the atmosphere by burning fossil fuels remains in the surface climate system for millennia. The practicality of any scheme to extract CO2 from the air is dubious. Potentially huge costs would be left to young people and future generations. The apparent solution is to phase out fossil fuel emissions in favor of clean energies and energy efficiency. Governments have taken steps to promote renewable energies and encourage energy efficiency. But renewable energies total only a few percent of all energy sources, and

improved efficiency only slows the growth of energy use. The transition to a post-fossil fuel world of clean energies is blocked by a fundamental fact, as certain as the law of gravity: as long as fossil fuels are the cheapest energy, they will be burned.
However, fossil fuels are cheapest only because they are subsidized directly and indirectly, and because they are not made to pay their costs to society – the costs of air and water pollution on human health and costs of present and future climate disruption and change. Those people who prefer to continue business-as-usual assert that transition to fossil fuel alternatives would be economically harmful, and they implicitly assume that fossil fuel use can continue indefinitely. In reality, it will be necessary to move to clean energies eventually, and most economists believe that it would be economically beneficial to move in an orderly way to the post fossil fuel era via a steadily increasing price on carbon emissions.

A comprehensive assessment of the economics, the arguments for and against a rising carbon price, is provided in the book The Case for a Carbon Tax (Hsu, 2011). An across-theboard
price on all fossil fuel CO2 emissions emerges as the simplest, easiest, fastest and most effective way to phase down carbon emissions, and this approach presents fewer obstacles to

international agreement.

The chief obstacles to a carbon price are often said to be the political difficulty, given the enormous resources that interest groups opposing it can bring to bear, and the difficulty of getting the public to understand arcane economic issues. On the other hand, a simple, transparent, gradually rising fee on carbon emissions collected, with the proceeds distributed to the public, can be described succinctly, as it has by Jim DiPeso, Policy Director of Republicans for Environmental Protection http://www.rep.org/opinions/weblog/weblog10-10-11.html
A gradually rising carbon price is the sine qua non, but it must be combined with a portfolio of other actions: energy research and development with demonstration programs; public investment in complementary infrastructure such as improved electric grids; global monitoring systems; energy efficiency regulations; public education and awareness; support for climate change mitigation and adaptation in undeveloped countries. In economic theory, within a nation or a common block of nations, a carbon trading system may be useful, but given the need for rapid global emissions reduction, a simple across-the-board carbon tax is the preferred approach from the standpoint of conservative economics (Mankiw, 2007).

The basic matter, however, is not one of economics. It is a matter of morality – a matter of intergenerational justice. The blame, if we fail to stand up and demand a change of course, will fall on us, the current generation of adults. Our parents honestly did not know that their actions could harm future generations. We, the current generation, can only pretend that we did not know.

Acknowledgements. A number of helpful suggestions have been received, which will be addressed before this paper is submitted for publication.

References

Ackerman, F., E.A. Stanton, S.J. DeCaanio, E. Goodstein, R.B. Howarth, R.B. Norgaard, C.S. Norman, K.A.
Sheeran, 2009: The economics of 350: the benefits and costs of climate stabilization, October 2009 report for
ecotrust (www.ecotrust.org) and Stockholm environment Institute (www.sei-us.org), 50 pp.
Alford, R.A., K.S. Bradfield, S.J. Richards, 2007: Global warming and amphibian losses, Nature, 447, E3-E4.
Barker, P.M., J.R. Dunn, C.M. Domingues, S.E. Wijffels, 2011: Pressure sensor drifts in Argo and their impacts, J.
Atmos. Ocean. Technology, Early Online Release. doi: 10.1175/2011JTECHO831.1.
23
Barnett, T.P., D.W. Pierce, H.D. Hidalgo, et al., 2008: Human-induced changes in the hydrology of the Western
United States, Science, 319, 1080-1083.
Barriopedro, D., E. M. Fischer, J. Luterbacher, R.M. Trigo, R. Garcia-Herrera, 2011: The hot summer of 2010:
redrawing the temperature record map of Europe, Science Express, 10.1126/science.1201224.
Bernstein, A., S. Myers, 2011: Climate change and children's health, Current Opin. Pediatrics, 23, 221-226.

Bruno, J.F., E.R. Selig, 2007, Regional decline of coral cover in the Indo-Pacific: timing, extent, and subregional
comparisons: PLoS ONE, v. 2, p. e711.
Cohen, A.J., H.R. Andrson, B. Ostro, K.D. Pandey, M. Krzyzanowski, N. Kunzli, K. Gutschmidt, A. Pope, I.
Romieu, J.M. Samet, K. Smith, 2005: The global burden of disease due to outdoor air pollution, J. Toxicol. Environ.
Health, 68, 1301-1307, doi:10.1080/152873905909361666
De'ath, G., J.M. Lough, K.E. Fabricius, 2009: Declining Coral Calcification on the Great Barrier Reef, Science, 323,
116-119.
Dowsett, H. J., J. A. Barron, R. Z. Poore, R. S. Thompson, T. M. Cronin, S. E. Ishman, and D. A. Willard, 1999:
Middle Pliocene paleoenvironmental reconstruction: PRISM2, U.S. Geol. Surv. Open File Rep., 99-535. (Available
at http://pubs.usgs.gov/openfile/of99-535)
Dowsett, H.J., M.M. Robinson, K.M. Foley, 2009: Pliocene three-dimensional global ocean temperature
reconstruction, Clim. Past, 5, 769-783.
Epstein, P.R., J.J. Buonocore, K. Eckerle, M. Hendryx, B.M. Stout, R. Heinberg, R.W. Clapp, B. May, N.L.
Reinhart, M.M. Ahern, S.K. Doshi, L. Glustrom, 2011: Full cost accounting for the life cycle of coal, Ann. New York
Acad. Sci., 1219, 73-98.
Fargione, J., J. Hill, D. Tilman, S. Polansky, P. Hawthorne, 2009: Land clearing and the biofuel carbon debt,
Science, 319, 1235-1238.
Fagotti, A., R. Pascolini, 2007: The proximate cause of frog declines? Nature, 447, E4-E5.
Grinsted, A., J.C. Moore, S. Jevrejeva, 2010: Reconstructing sea level from paleo and projected temperatures 200 to
2100 AD, Clim. Dyn., 34, 461-472.
Groisman, P.Y., R.W. Knight, D.R. Easterling, T.R. Karl, G.C. Hegerl, V.N. Razuvaev, 2005: Trends in intense
precipitation in the climate record, J. Clim., 18, 1326-1350.
Hansen, J.E., 2005: A slippery slope: How much global warming constitutes "dangerous anthropogenic
interference"? An editorial essay. Climatic Change, 68, 269-279, doi:10.1007/s10584-005-4135-0.
Hansen, J., M. Sato, R. Ruedy, K. Lo, D.W. Lea, M. Medina-Elizade, 2006: Global temperature change, Proc. Nat.
Acad. Sci., 103, 14288-14293.
Hansen, J.E., 2007: Scientific reticence and sea level rise, Environ. Res. Lett., 2, 1-6.
Hansen, J., M. Sato, R. Ruedy, et al., 2007: Dangerous human-made interference with climate: a GISS modelE
study, Atmos. Chem. & Phys., 7, 2287-2312.
Hansen, J., M. Sato, P. Kharecha, D. Beerling, R. Berner, V. Masson-Delmotte, M. Pagani, M.

Raymo, D.L. Royer,
and J.C. Zachos, 2008: Target atmospheric CO2: where should humanity aim? Open Atmos. Sci. J., 2, 217-231.
Hansen, J., R. Ruedy, M. Sato, K. Lo, 2010: Global surface temperature change, Rev. Geophys., 48, RG4004, 29 pp.
Hansen, J.E., and Mki. Sato, 2011: Paleoclimate implications for human-made climate change. http://arxiv.org/abs/1105.0968 pdf also available at http://www.columbia.edu/~jeh1/
Hansen, J., Mki. Sato, P. Kharecha, and K. von Schuckmann, 2011:Earth's energy imbalance and implications.
http://arxiv.org/abs/1105.1140 pdf also available at http://www.columbia.edu/~jeh1/
Hearty, P.J., A.C. Neumann, 2001: Rapid sea level and climate change at the close of the Last Interglaciation (MIS
5e): evidence from the Bahama Islands, 2001: Quatern. Sci. Rev., 20, 1881-1895.
Hearty, P.J., J.T. Hollin, A.C. Neumann, M.J. O'Leary, M. McCulloch, 2007: Global sea-level fluctuations during
the last interglaciation (Mis 5e), Quarter. Sci. Rev., 26, 2090-2112.
24
Held, I.M., B.J. Soden, 2006: Robust rsponses of the hydrological cycle to global warming, J. Clim, 19, 5686-5699.
Hoegh-Guldberg, O., P.J. Mumby, A.J. Hooten, R.S. Stenek, P. Greenfield, E. Gomez, C.D. Harvell, P.F. Sale, A.J.
Edwards, K. Caldeira, N. Knowlton, C.M. Eakin, R. Iglesias-Prieto, N. Muthiga, R.H. Bradbury, A. Dubi, M.E.
Hatziolos, 2007: Coral reefs under rapid climate change and ocean acidification, Science, 318, 1737-1742.
Hsu, S.-L., 2011: The Case for a Carbon Tax, Island Press, Washington (in pressf).
Intergovernmental Panel on Climate Change (IPCC), Climate Change 2001: The Scientific Basis, Houghton, J.T., Y.
Ding, D.J. Griggs, et al. (eds., Cambridge University Press, 881 pp.
Intergovernmental Panel on Climate Change (IPCC), Climate Change 2007: The Physical Science Basis, S.
Solomon, Q. Dahe, M. Manning, et al. (eds., Cambridge Univ. Press, 996 pp.
Intergovernmental Panel on Climate Change (WGII), Climate Change 2007: Impacts, Adaptation and Vulnerability,
M.L. Parry, O.F. Canziani, J.P. Palutikof, P.J. van der Linden, C.E. Hanson (eds., Cambridge Univ. Press, 996 pp.
Joos, F., M. Bruno, R. Fink, U. Siegenthaler, T. F. Stocker, C. Le Quéré, J. Sarmiento, 1996: An efficient and
accurate representation of complex oceanic and biospheric models of anthropogenic carbon uptake, Tellus B, 48/3,
397-417.
Karl, T.R., P.D. Jones, R.W. Knight, G. Kukla, N. Plummer, V. Razuvayev, K.P. Gallo, J. Linday, R.J. Charlson,
T.C. Peterson, 1993: A new perspective on recent global warming: asymmetric trends of daily maximum and
minimum temperature, Bull. Amer. Meteorol. Soc., 74, 1007-1023.

Keith, D.W., M. Ha-Duong, J.K. Stolaroff, 2006: Clim. Change, 74, 17-45.
Kharecha, P.A., and J.E. Hansen, 2008: Implications of "peak oil" for atmospheric CO2 and climate. Global
Biogeochem. Cycles, 22, GB3012.
Lal, R., 2004: Soil carbon sequestration impacts on global climate change and food security, Science, 304, 1623 –
1627.
Lenton, T.M., H. Held, E. Kriegler, J.W. Hall, W. Lucht, S. Rahmstorf, H.J. Schellnhuber, 2008: Tipping elements
in the Earth's climate system, Proc. Natl. Acad. Sci., 105, 1786-1793.
Levi, B.G., 2008: Trends in the hydrology of the western U.S. bear the imprint of manmade climate change, Phys.
Today, April 16-18.
Levitus, S., J. Antonov, T. Boyer, R.A. Locarnini, H.E. Garcia, A.V. Mishonov, 2009: Global ocean heat content
1955-2008 in light of recently revealed instrumentation problems, Geophys. Res. Lett., 36, L07608,
doi:10.1029/2008GL037155
http://www.nodc.noaa.gov/OC5/3M_HEAT_CONTENT/basin_data.html (1955-2010)
Lyman, J.M., S.A. Good, V.V. Gouretski, M. Ishii, G.C. Johnson, M.D. Palmer, D.A. Smith, J.K. Willis, 2010:
Robust warming of the global upper ocean, Nature, 465, 334-337, doi:10.1038/nature09043
Mankiw, N.G., 2007: One answer to global warming: a new tax, New York Times, 16 September,
http://www.nytimes.com/2007/09/16/business/16view.html).
Mayewski, P.A., E.E. Rohling, J.C. Stager, W. Karlen, K.A. Maasch, L.D. Meeker, E.A. Meyerson, F. Gasse, S. van
Kreveld, K. Holmgren, J. Lee-Thorp, G. Rosqvist, F. Rack, M. Staubwasser, R.R. Schneider, E. J. Steig, 2004:
Holocene climate variability, Quat. Res., 62, 243-255.
Muhs, D.R., K.R. Simmons, R.R. Schumann, R.B. Halley, 2011: Sea-level history of the past two interglacial
periods: new evidence from U-series cating of reef corals from south Florida, Quarter. Sci. Rev., 30, 570-590.
Kopp, R.E., F.J. Simons, J.X. Mitrovica, A.C. Maloof, M. Oppenheimer, 2009: Probabilistic assessment of sea level
during the last interglacial stage. Nature 462, 863-867
Krauss, C., 2010: There will be fuel, New York Times, Page F1 of the New York edition, November 17, 2010.
Naish, T. et al., 2009: Obliquity-paced Pliocene West Antarctic ice sheet oscillations. Nature 458, 322–328).
Olson, S.I., P.J. Hearrty, 2009: A sustained +21 m highstand during MIS 11 (400 ka): direct fossil and sedimentary
evidence from Bermuda, Quat. Sci. Rev., 28, 271-285.
25
Pelejero, C., E. Calvo, O. Hoegh-Guldberg, 2010: Paleo-perspectives on ocean acidification,

Trends in Ecology &
Evolution. doi: 10.1016/j.tree.2010.02.002.
Parmesan, C., G. Yohe, 2003: A globally coherent fingerprint of climate change impacts in natural systems, Nature,
421, 37-42.
Parmesan, C., 2006: Ecological and evolutionary responses to recent climate change, Ann. Rev. Ecol. Evol. Syst., 37,
637-669.
Pfeffer, W.T., J.T. Harper, S. O'Neel, 2008: Kinematic constraints on glacier contributions to 21st-century sea-level
rise. Science 321, 1340–1343.
Pounds, J.A., M.P.L. Fogden, J.H. Campbell, 1999: Biological response to climate change on a tropical mountain,
Nature, 398, 611-615.
Pounds, J.A., M.R. Bustamante, L.A. Coloma, J.A. Consuegra, M.P.L. Fogden, P.N. Foster, E. La Marcall, K.L.
Masters, A. Merino-Viteri, R. Puschendorf, S.R. Ron, G.A. Sanchez-Azofeifa, C.J. Still, B.E. Young, 2006:
Widespread amphibian extinctions from epidemic disease driven by global warming, Nature,
439, 161-167.
Pounds, J.A., M.R. Bustamante, L.A. Coloma, J.A. Consuegra, M.P.L. Fogden, P.N. Foster, E. La Marcall, K.L.
Masters, A. Merino-Viteri, R. Puschendorf, S.R. Ron, G.A. Sanchez-Azofeifa, C.J. Still, B.E. Young, 2007: Reply,
Nature, 447, E5-E6.
Raven, J., K. Caldeira, H. Elderfield, O. Hoegh-Guldberg, P. Liss, U. Riebesell, J. Shepherd, C. Turley, A. Watson,
2005: Ocean acidification due to increasing atmospheric carbon dioxide, Policy document 12/05, Volume ISBN 0
85403 617 2: London Royal Society.
Reaka-Kudla, M.L., 1997, Global biodiversity of coral reefs: a comparison with rainforests., in Reaka-Kudla, M.L.,
and Wilson, D.E., eds., Biodiversity II: Understanding and Protecting Our Biological Resources, Volume II, Joseph
Henry Press, p. 551.
Rignot, E., S.S. Jacobs, 2002: Rapid bottom melting widespread near Antarctic ice sheet grounding lines, Science,
296, 2020-2023.
Rignot, E., J.L. Bamber, M.R. van den Broeke, C. Davis, Y. Li, W.J. van de Berg, E. van Meijgaard, 2008: Recent
Antarctic ice mass loss from radar interferometry and regional climate modeling, Nature Geoscience, 1, 106 – 110.
Rignot, E., I. Velicogna, M.R. van den Brooke, A. Monaghan, J.T.M. Lenarts, 2011: Acceleration of the
contribution of the Greenland and Antarctic ice sheets to sea level rise, Geophys. Res.. Lett., 38, L05503,

doi:10.1029/2011GL046583
Rockström, J., M. Falkenmark, L. Karlberg, H. Hoff, S. Rost, D. Gerten, 2009: Future water availability
for global food production: The potential of green water for increasing resilience to global change, Water
Resour. Res., 45, W00A12, doi: 10.1029/2007WR006767.
Roemmich, D., J. Gilson, 2009: The 2004-2008 mean and annual cycle of temperature, salinity, and steric height in
the global ocean from the Argo Program, Prog. Oceanogr., 82, 81-100.
Rohling, E.J., K. Grant, M. Bolshaw, A.P. Roberts, M. Siddall, Ch. Hemleben, M. Kucera,, 2009: Antarctic
temperature and global sea level closely coupled over the past five glacial cycles. Nat. Geosci. 2, 500-504.
Rohling, E.J., K. Grant, C. Hemleben, M. Siddall, B.A. Hoogakker, M. Bolshaw, M. Kucera, 2008: High rates of
sea-level rise during the last interglacial period, Nat. Geosci., 1, 38-42.
Schneider, S.H., and M.D. Mastrandrea, 2005: Probabilistic assessment of "dangerous" climate change and
emissions pathways, Proc. Nat. Acad. Sci., 102, 15728-15735.
Searchinger, T., R. Heimlich, R.A. Houghton, F. Dong, A. Elobeid, J. Fabiosa, S. Tokgoz, D. Hayes, T. Yu, 2008:
Use of U.S. croplands for biofuels increases greenhouse gases through emissions from land-use change, Science,
319, 1238-1240.
Seidel, D.J., W.J. Randel, 2006: Variability and trends in the global tropopause estimated from radiosonde data, J.
Geophys. Res., 111, D21101
26
Sherwood, S.C., M. Huber, 2010: An adaptability limit to climate change due to heat stress, Proc. Natl. Acad. Sci.,
Early Edition, www.pnas.org/cgi/doi/10.1073/pnas.0913352107
Socolow, R., et al., 2011: Direct air capture of CO2 with chemicals, American Physical Society report, 28 April,
http://www.aps.org/policy/reports/popa-
reports/loader.cfm?csModule=security/getfile&PageID=244407
Sorensen, L.S., R. Forsberg, 2010: Greenland ice sheet mass loss from GRACE monthly models, in Gravity, Geoid
and Earth Observations, S.P. Mertikas (ed.), International Association of Geodesy Symposia 135, doi 10.1007/978-
3-10634-7_70
Steffen, K., S.V. Nghiem, R. Huff, G. Neumann, 2004: The melt anomaly of 2002 on the Greenland Ice Sheet from
active and passive microwave satellite observations, Geophys. Res. Lett., 34, L204210/2004GL020444
Stocker, B.D., K. Strassmann1, F. Joos, 2011: Sensitivity of Holocene atmospheric CO2 and the modern carbon

budget to early human land use: analyses with a process-based model. Biogeosciences, 8, 69–88.
Stehfest, E., L. Bouwman, D.P. van Vuuren, M.G.J. den Elzen, B. Eikhout, P. Kabat, 2009: Climate benefits of
changing diet, Clim. Change, 95, 83-102.
Tedesco, M., X. Fettweis, M.R. van den Broeke, R.S.W. van de Wal, C.J.P.P. Smeets, W.J. van de berg, M.C.
Serreze, J.E. Box, 2011: The role of albedo and accumulation in the 2010 melting record in Greenland, Environ.
Res. Lett., 6, 014005.
Tilman, D., J. Hill, C. Lehman, 2006: Carbon-negative biofuels from low-input high-diversity grassland biomass,
Science, 314, 1598-1600.
Turner J. et al. (eds.), 2009: Antarctic Climate change and the environment: a contribution to the International
Polar year 2007-2008, Scientific Committee on Antarctic Research, Scott Polar Research Institute, Lensfield Road,
Cambridge UK.
United Nations Environment Programme (UNEP), 2010: Assessing the Enviromental Impacts of Consumption and
Production: Priority Products and Materials, A Report of the Working Group on the Environmental Impacts of
Products and Materials to the International Panel for Sustainable Resource Management, Hertwich, E. E. van der
Voet, S. Suh, A. Tukker, M. Huijbregts, P. Kazmierczyk, M. Lenzen, J. McNeely, Y. Moriguchi.
Velicogna, I., 2009: Increasing rates of ice mass loss from the Greenland and Antarctic ice sheets revealed by
GRACE, Geophys. Res. Lett., 36, L19503, doi:10.1029/2009GL040222.
Vermeer, M., and S. Rahmstorf, 2009: Global sea level linked to global temperature, Proc. Natl. Acad. Sci., 106,
21527-21532.
Veron, J.E.N., O.Hoegh-Guldberg, T.M. Lenton, J.M. Lough, D.O. Obura, P. Pearce-Kelly, C.R.C. Sheppard, M.
Spalding, M.G. Stafford-Smith, A.D. Rogers, 2009: The coral reef crisis: the critical importance of <350 ppm CO2,
Marine Poll. Bull., 58, 1428-1436.
von Schuckmann, K., P.-Y. Le Traon, 2011: How well can we derive global ocean indicators from Argo data?
Walter, K.M., S.A. Zimov, J.P. Chanton, D. Verbyla, F.S. Chapin, III, 2006: Methane bubbling from Siberian thaw
lakes as a positive feedback to climate warming, Nature, 443, 71-75.
Westbrook, G.K., Thatcher, K.E., Rohling, E.J., Piotrowski, A.M., Pälike, H., Osborne, A.H., Nisbet, E.G.,
Minshull, T.A., Lanoisellé, M., James, R.H., Hühnerbach, V., Green, D., Fisher, R.E., Crocker, A.J., Chabert, A.,
Bolton, C., Beszczynska-Möller, A., Berndt, C., and Aquilina, A., 2009: Escape of methane gas from the seabed

along the West Spitsbergen continental margin. Geophys. Res. Lett., 36, L15608, doi:10.1029/2009GL 039191.
Westerling, A., H. Hidalgo, D. Cayan, T. Swetnam, 2006: Warming and earlier spring increases western U.S. forest
wildfire activity, Science, 313, 940-943.
Zachos, J., M. Pagani, L. Sloan, E. Thomas, and K. Billups, 2001: Trends, rhythms, and aberrations in global
climate 65 Ma to present. Science, 292, 686-693.
Zeebe, R.E., J.C. Zachos, G.R. Dickens, 2009: Carbon dioxide forcing alone insufficient to explain Paleocene-
Ereocene Thermal Maximum warming, Nature Geoscience, 2, 576-580.
#2])>

OSTS2012D50015
Organization: Daniel Pearce
Received: 2/9/2012 3:04:33 PM
Commenter1: Daniel Pearce - Claremont, California 91711 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/2/2012 12:00:00 AM
Attachments: OSTS2012D50015.htm (OSTS2012D50015-58133.htm Size = 1 KB)
Submission Text
<([#1 [*12*] I am against Fracking unless it is well proven to be safe for the environment as far as chemicals in the water table, discarded chemicals on the ground or in waterways, and earthquake risk. Do the science. **#1])>** Thank you

OSTS2012D50017
Organization: Audrey Graham
Received: 2/14/2012 2:21:28 PM
Commenter1: Audrey Graham - Moab, Utah 85432 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/13/2012 12:00:00 AM
Attachments: OSTS2012D50017.htm (OSTS2012D50017-58137.htm Size = 1 KB)
Submission Text
<([#1 [*1.1*] A second comment; in examining the maps more closely, I see that apparently the proposed area is not located in Grand County at all, nor in its watershed, except for the Green

River. In addition, I can see that many communities which are located nearer than Moab to potential sites are not listed as hearing locations. I therefore respectfully withdraw my request to have a public hearing in Moab. **#1])>** Thank you.

OSTS2012D50018

Organization:
Received: 2/20/2012 6:45:21 PM
Commenter1: - Grand Junction, Colorado (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/13/2012 12:00:00 AM
Attachments: OSTS2012D50018.htm (OSTS2012D50018-58139.htm Size = 1 KB)
Submission Text
<([#1 [*2.2*] I am very disappointed with the BLM preference fore Alternative 2. It sounds like the BLM has taken a firm stance agains any Oil Shale Research and development programs. The BLM has obviously not asked for input from the industry, because this alternative does not provide incentive for industry to invest their monies into this resource. If it is the BLM responsiblity to manage our resources, I would say your progress so far has failed miserably. The BLM will be effectively shutting down the potential for long term job creation and sending a very bad message to the industry. What about national security? Is production of U.S. Oil reserves not part of the big picture? Alternative energies are a great mix to the energy spectrum, but you can't walk around blind expecting them to take the place of fossil fuels in the near future. **#1])>**

OSTS2012D50019

Organization: Barbara Parsons
Received: 2/24/2012 2:25:15 PM
Commenter1: Barbara Parsons - Rawlins, Wyoming (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/13/2012 12:00:00 AM
Attachments: OSTS2012D50019.htm (OSTS2012D50019-58215.htm Size = 1 KB)
Submission Text
<([#1 [*8*] At this time oil shale mining in not at all compatible with multiple use. It totally strips the land of any other use. Rehabilitation would be difficult. This type of development on the public lands should only be done in the future if there is a crucial need for it. Now, there is not! **#1])>**

OSTS2012D50020
Organization: John Bailey Sr
Received: 2/25/2012 11:31:46 AM
Commenter1: John Bailey Sr - Centreville, Virginia 201201527 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/13/2012 12:00:00 AM
Attachments: OSTS2012D50020.htm (OSTS2012D50020-58217.htm Size = 1 KB)
Submission Text
<([#1 [*11*] Every dollar's worth of energy we can pull from our own ground, is a dollar less we have to borrow from the Chicoms to send to the Islamist. That makes for a stronger dollar and a stronger USA. This seems to me to be a no-brainer. **#1])>**

OSTS2012D50021
Organization: National Council of Churches, Tyler Edgar
Received: 2/29/2012 4:23:51 PM
Commenter1: Tyler Edgar - , (United States)
Organization1: National Council of Churches
Commenter Type: Misc. Organization
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/13/2012 12:00:00 AM
Attachments: OSTS2012D50021.htm (OSTS2012D50021-58265.htm Size = 1 KB)
Thank_you_Letter_to_Interior-Grand_Canyon_and_Oil_Shale_OSTS2012D50021.pdf (OSTS2012D50021-58264.pdf Size = 44 KB)
Submission Text
See Attachment.

Mr. Ken Salazar

Secretary

Department of the Interior

1849 C Street NW

Washington DC 20240

February 29, 2012

Dear Secretary Salazar,

<([#1 [*2.2.1*] As faith based organizations and religious institutions, we write to express our gratitude for recent decisions made by the Department of the Interior, regarding uranium mining in the Grand Canyon, as well as removing two million acres of public land from oil shale development. As people of faith, we are called to serve as stewards of God's great Creation and we believe that lands serve as a place for reflection, prayer, and time with God. Each of these actions taken by the Department of the Interior will ensure more places and spaces are available, while limiting the amount of large scale development that can cause detrimental impacts to the lands and all those that depend on them. **#1])>**

Mining for uranium in the Grand Canyon has long been a controversial issue. Though we, as communities of faith, do not share a collective position on the use of nuclear power as an energy source, we do share the belief that mining for uranium is not appropriate in fragile places such as the Grand Canyon. The beauty of this place is irreplaceable and surface mining of this nature would have a devastating long-term impact on the health of the Grand Canyon and the areas that surround it.

In addition to protecting the beauty of the Grand Canyon, we stand in solidarity with the tribal communities that oppose mining in the Grand Canyon and have cultural and spiritual ties to the Canyon. The Hopi, Navajo, and Havasupai, along with other tribal entities, oppose expanded mining and have suffered from historical mining in the region that has contaminated the local water and air.

<([#2 [*2.2.1*] Finally, your decision to withdraw more than two million acres from proposed oil shale development is appropriate for this time and the place. Designating any public lands for energy development that is not yet commercially viable is not a wise use of the lands that have been given to us. Stewardship in our traditions addresses stewardship of all our gifts – including money and Creation.

Within the territory withdrawn from oil shale development lies Adobe Town a unique formation in the heart of Wyoming's Red Desert. Adobe Town represents those parts of God's Creation that are worthy of permanent protection. While we believe that energy development is appropriate for certain parts of God's Creation, there are places and spaces that should remain untouched so that future generations can enjoy the beauty of Creation while also having a place to pray and reflect as Christ, Moses, and Abraham did in Biblical times.

Thank you for recognizing that using God's Creation wisely and protecting unique and valuable parts of Creation should be central in our development of land use practices and policy. We look forward to working with you in the future as you continue to plan for the use of public lands all across the United States. **#2])>**

Sincerely,

Church of the Brethren

Columban Center for Advocacy and Outreach

The Episcopal Church

Maryknoll Office of Global Concerns

National Council of Churches USA

Presbyterian Church (USA) Office of Public Witness

Union for Reform Judaism

Unitarian Universalist Association of Congregations

United Church of Christ – Justice and Witness Ministries

United Methodist Church – General Board of Church and Society

OSTS2012D50022

Organization:
Received: 3/4/2012 11:07:38 AM
Commenter1: - , Georgia (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/12/2012 12:00:00 AM
Attachments: OSTS2012D50022.htm (OSTS2012D50022-58219.htm Size = 1 KB)
Submission Text
<([#1 [*12.2*] I oppose the plans to open two million acres of public land to commercial leases for oil shale exploration and exploitation. Oil shale currently produces no jobs and no revenue. The Congressional Budget Office confirmed no significant revenues through 2022. Oil shale mining will destroy some of the best wild life habitat in Colorado, Utah and Wyoming. Outdoor recreation, tourism and agriculture are huge economic drivers in the West. The price of undisturbed wilderness is incalculable Already the West faces significant water shortages. Estimates range from 3 to 12 barrels of water are needed for every one barrel of oil produced from oil shales. Entire aquifers and watersheds could be polluted with heavy metal and chemical runoff. Thank you for your attention to this serious environmental decision. **#1])>** Cynthia Patterson

OSTS2012D50023

Organization: Alexander Greig
Received: 3/6/2012 8:48:56 PM
Commenter1: Alexander Greig - Berrien Springs, Michigan 49103 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/12/2012 12:00:00 AM
Attachments: OSTS2012D50023.htm (OSTS2012D50023-58221.htm Size = 1 KB)
Submission Text
<([#1 [*12.2*] I am an opponent of oil shale development anywhere, not only in Wyoming and Colorado. Oil extraction from shale will contribute to pollution of air and water on a massive scale, and once this source of fuel is tapped and hydrocarbons from this source are put into the air, we can say goodbye to the climate. **#1])>**

OSTS2012D50024
Organization: Noah Syroid
Received: 3/7/2012 12:44:14 PM
Commenter1: Noah Syroid - Salt Lake City, Utah 84121 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/16/2012 12:00:00 AM
Attachments: OSTS2012D50024.htm (OSTS2012D50024-58249.htm Size = 1 KB)
Submission Text
<([#1 [*12*] While domestic energy is important, tar sands and oil shale go against common sense good practices and the prevailing science. Tar sands and oil shale extraction is energy intensive, which means more expense and more CO2 released. Local air pollution and water pollution is a great concern, and the science has not been adequate to show that extraction can be accomplished without significant pollution side effects. Additionally, too much water is used in the extraction process, particularly in areas where water is scarce (consider availability in severe to extreme droughts which are inevitable). **#1])> <([#2** [*10.6.1*] BLM should be prioritizing solar, wind and geothermal sources of energy.
#2])>

OSTS2012D50025
Organization: Daniel Syroid
Received: 3/7/2012 1:06:08 PM
Commenter1: Daniel Syroid - Park City, Utah 84098 (United States)
Organization1:

Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/12/2012 12:00:00 AM
Attachments: OSTS2012D50025.htm (OSTS2012D50025-58223.htm Size = 1 KB)
Submission Text
<([#1 [*12.2*] Oil shale rock found in the Green river basin contains solid bituminous materials called kerogen. With great difficulty, expense, heat and water the rock can yield oil. After billions of government dollars spent over 86 years, all attempts to develop oil shale have failed. The BLM estimates that it takes 1 to 4 barrels of water to produce a barrel of oil. Water is scarce in Utah and oil shale demand will harm agriculture and future populations. Even with in-situ processes, water pollution is virtually inevitable and CO2 emissions are estimated to be 25 to 75% higher than conventional oil. We live on a finite planet and must greatly reduce use of fossil fuels in the near future if the planet is to sustain our children. Scientists that study climate are nearly unanimous that global warming is serious and human caused. However, propaganda from the fossil fuel industry, has 60% of the general public in doubt. Clean solar and wind energy with electric vehicles are much better choices for Utah and the US. I strongly urge the BLM to end or greatly limit any oil shale development.
#1])>

OSTS2012D50026
Organization: Michele and Rob Irwin
Received: 3/7/2012 4:31:08 PM
Commenter1: Michele and Rob Irwin - Green River, Wyoming 82935 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/16/2012 12:00:00 AM
Attachments: OSTS2012D50026.htm (OSTS2012D50026-58225.htm Size = 1 KB)
Submission Text
<([#1 [*4.3*] The area being considered for oil shale development has already seen energy development that has negatively impacted wildlife and air quality. Before the BLM leases any new projects, the downward trends need to be addressed. **#1])> <([#2** [*5*] [*10.4*] In addition, oil shale development under current technology uses too much water, and produces high levels of emissions. Any new development in this region needs to be held to a higher standard. The posting of bonds, a detailed plan to reduce impacts, and mitigation that should leave the environment better than before are minimal steps that need to be taken to ensure the long term sustainability of this ecoregion. The BLM could go a long way to rehabilitate this region by returning bison, whose beneficial influence has long been missing. The most important thing about this region is the open space, the lack of noise and people, clean air and water, and

abundant wildlife. The whole is greater than the sum of the parts. All of these things need protected. **#2])>** Thank you.

OSTS2012D50027

Organization: CHC - Citizens for Huerfano County, Rena Kaplowitz
Received: 3/7/2012 6:48:33 PM
Commenter1: Rena Kaplowitz - La Veta, Colorado 81055 (United States)
Organization1:CHC - Citizens for Huerfano County
Commenter Type: Affiliation Only
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/12/2012 12:00:00 AM
Attachments: OSTS2012D50027.htm (OSTS2012D50027-58227.htm Size = 1 KB)
Submission Text
<([#1 [*12*] Living in a pristine environment where tourism is our number one source of income, I am strongly opposed to oil shale and tar sands exploration and extraction. Not only are these activities dirty, dangerous and environmentally unsound, but the economic base of our rural lifestyle is completely undermined. A tremendous amount of water is lost and the time to "recharge" is unknown. Surely this is madness. Fracking needs to be stopped, now, for the health of our forests, rivers air and land. Pity the poor ranchers that will go bankrupt when their properties are destroyed by the degradation attendant upon this type of drilling. Let adjacent communities decide the best use of BLM land, e.g. grazing, hiking, fishing, hunting. We need to protect our health and safety, and that of domestic and wild animals, not enrich foreign oil and gas interests. **#1])>**

OSTS2012D50028

Organization: Claire Seelinger
Received: 3/7/2012 7:03:58 PM
Commenter1: Claire Seelinger - ABQ, New Mexico 87108 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/16/2012 12:00:00 AM
Attachments: OSTS2012D50028.htm (OSTS2012D50028-58229.htm Size = 1 KB)
Submission Text
<([#1 [*12.1*] Please end or greatly limit oil shale development. **#1])> <([#2** [*10.6.1*] Solar, wind energy and electric vehicles are much better choices. **#2])>**

OSTS2012D50029

Organization: Larry Hardebeck
Received: 3/9/2012 8:45:11 AM
Commenter1: Larry Hardebeck - Park City, Utah 84098 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/12/2012 12:00:00 AM
Attachments: OSTS2012D50029.htm (OSTS2012D50029-58263.htm Size = 1 KB)
Submission Text
Dear sirs:**<([#1** [*12.3*] I strongly feel that the whole oil shale and tar sands issue is a total waste of our resources; especially our limited water supplies. This technology is unproven and devastating to the areas where it is done and will greatly degrade our environment and outdoor recreation in our state of Utah. I feel that no federal land should be leased to these companies until more renewable forms of energy are supported and explored. **#1])>** Sincerely, Larry Hardebeck

OSTS2012D50030
Organization: Roger Moore
Received: 3/9/2012 12:30:04 PM
Commenter1: Roger Moore - Grand Junction, Connecticut 815071280 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/25/2012 12:00:00 AM
Attachments: OSTS2012D50030.htm (OSTS2012D50030-58268.htm Size = 1 KB)
REMoore_Comments_on_PEIS_OSTS2012D50030.pdf (OSTS2012D50030-58267.pdf Size = 26 KB)
Submission Text
See Attachment.

Comments on PEIS
by Roger E. Moore, P.E. Chemical Engineer
<([#1 [*2*] [*3.15*] The draft PEIS encourages surface mining in Utah and Wyoming and precludes surface mining
in Colorado. The draft spells out the criteria for surface mining, < 500 ft of over burden and beds >25 ft thick, yet ignores the Donnell (1987) paper that the PEIS references. The Donnell paper identifies a large area in the northwest corner of the Piceance Basin which satisfy the selection criteria. Estimates of the surface mineable acreage are larger than the total proposed for new leasing in Alternative 2(b). (page 2-20). The maps in the various figure need section lines so they

can be compared to previous work by others such as Donnell
#1])> <([#2 [*6.3.6*] The retorting technology discussion does not mention the Brazilian oil shale surface retorting
process, Petrosix. This technology has operated a large commercial retort since the 1980's. (page 2-19)
The use of surface mining and surface retorting is probably the least expensive combination for producing shale oil commercially and is the most logical first step. Environmentally, it probably has the least long term impact, ie Unocal's project, and avoids the unanswered questions of cleaning up in-situ retorts.
#2])> <([#3 [*2.2*] The Alternative 2(b) identifies 35,000 acres to lease which is about 7% of the Picaence Basin
resource. This PEIS is not encouraging development of the United States resources. (page 2-43)
The leasing program does not need to be an RD&D lease first. If a company believes they can do a commercial project, they will have to meet all the regulations for emissions and cleanup. The PEIS seems to ignore what was done in the 1980's. Shale mining and retorting was proven technically by Unocal but development stopped when the oil prices dropped from $30-35/bbl to $12-15/Bbl. We are certainly above those oil price levels now and those prices will never be seen again.(ES-7)
Personally, this plan reflects Secretary Salazar's "no development in Colorado" attitude.
#3])>
.

OSTS2012D50031
Organization: Peggy Tibbetts
Received: 3/12/2012 10:12:43 AM
Commenter1: Peggy Tibbetts - Silt, Colorado 81652 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/12/2012 12:00:00 AM
Attachments: OSTS2012D50031.htm (OSTS2012D50031-58231.htm Size = 1 KB)
Submission Text
<([#1 [*12*] What saddens me more than anything is that to date billions of dollars have been spent and decades have been lost to oil shale exploration. Years and dollars that could have gone to alternative, renewable energy resources. If the BLM truly cared about our natural resources they would protect them, rather than exploit them. If the "energy" companies were truly about "energy" they would put their valuable time and money into energy sources that don't obliterate the environment and make people sick. **#1])>**

OSTS2012D50032
Organization: Philip Blevins
Received: 3/12/2012 10:06:34 PM
Commenter1: Philip Blevins - Salt Lake City, Utah 84103 (United States)

Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/12/2012 12:00:00 AM
Attachments: OSTS2012D50032.htm (OSTS2012D50032-58233.htm Size = 1 KB)
Submission Text
<([#1 [*2.3.1*] In the recently-released Draft PEIS, the BLM's preferred alternative (Alternative 2b) proposes to make 252,181 acres available for shale leasing in Utah and 91,045 acres available for tar sands leasing. BLM's proposal would leave these lands open for speculative development that could foul public lands, air and water quality, and result in large quantities of greenhouse gasses. I support the alternative that prohibits new oil shale leasing and most tar sands development. Under this alternative, only existing oil shale research, development, and design leases would remain on public lands. One commercial tar sands project just outside of Vernal could continue to undergo environmental reviews and permitting. **#1])>**

OSTS2012D50033
Organization: Michael Hurley
Received: 3/13/2012 3:20:26 PM
Commenter1: Michael Hurley - Roosevelt, Utah 84066 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/12/2012 12:00:00 AM
Attachments: OSTS2012D50033.htm (OSTS2012D50033-58235.htm Size = 1 KB)
Submission Text
<([#1 [*11*] We should develop every viable oil producing means available to us. We certainly need oil as a nation, and as an economic contributor in this disaster of an economy! I fully support oil shale development in this nation, particularly on lands that are serving no real purpose for the people of this nation. **#1])>** Sincerely, Michael A Hurley

OSTS2012D50034
Organization: utah state university, jack greene
Received: 3/13/2012 9:30:30 PM
Commenter1: jack greene - smithfield, Utah 84335 (United States)
Organization1:utah state university
Commenter Type: Affiliation Only
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form

Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/12/2012 12:00:00 AM
Attachments: OSTS2012D50034.htm (OSTS2012D50034-58237.htm Size = 1 KB)
Submission Text
<([#1 [*12.2*] Given the current technology, I oppose oil shale development for the following reasons: Oil shale would foul our air and water, soak up enormous amounts of water, and disrupt local economies. Annual commercial oil shale production could require one-and-a-half times the water needs of all 1.3 million Denver Water customers. Where would that water come from? Oil and gas companies are abandoning oil shale research independently, yet the State of Utah is still preparing to turn over public resources for speculative development. That's like building a factory before you know how to make the widget. It doesn't economic, environmental, or social sense. **#1])>**

OSTS2012D50036
Organization: derek peterson
Received: 3/14/2012 10:19:16 AM
Commenter1: derek peterson - salt lake city, Utah 84109 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/12/2012 12:00:00 AM
Attachments: OSTS2012D50036.htm (OSTS2012D50036-58241.htm Size = 1 KB)
Submission Text
To whom it may concern: **<([#1** [*12.2*] Utah Government has always had a reputation of fiscal conservancy. With this established fact I would ask "why is the BLM moving forward with oil shale considerations"? Utahs western neighbor states have realized oil shale ventures are not commercially viable. Lets use our resources more pragmatically. **#1])>** Derek Peterson

OSTS2012D50037
Organization: Violet Corkle
Received: 3/14/2012 10:47:43 AM
Commenter1: Violet Corkle - Salt Lake City, Utah (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/12/2012 12:00:00 AM
Attachments: OSTS2012D50037.htm (OSTS2012D50037-58243.htm Size = 1 KB)
Submission Text

<([#1 [*12.2*] I do not support oil shale development. It is too dirty, too expensive and requires too much water. The process contaminates the ground. Other more productive sources of energy. **#1])>**

OSTS2012D50038

Organization: Ben Mates
Received: 3/14/2012 11:04:43 AM
Commenter1: Ben Mates - Salt Lake City, Utah 84106 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/12/2012 12:00:00 AM
Attachments: OSTS2012D50038.htm (OSTS2012D50038-58245.htm Size = 1 KB)
Submission Text
<([#1 [*12*] I urge you to reject the development of oil shale and tar sands in Utah and on any BLM lands. The net yield of energy (energy produced versus energy required to extract the resource)is small or even negative. Oil shale and tar sands carry onerous environmental costs to our air, water, landscape and climate that could be avoided by developing clean renewable energy resources. I will be watching your decision with interest and I will use my voice to ensure that my stand for a resilient and livable future is reflected by those who represent me in government. Thank you. **#1])>**

OSTS2012D50039

Organization: Siera Club, Kirt Williamson
Received: 3/14/2012 11:09:10 PM
Commenter1: Kirt Williamson - Grantsville, Utah 84029 (United States)
Organization1: Siera Club
Commenter Type: Affiliation Only
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/12/2012 12:00:00 AM
Attachments: OSTS2012D50039.htm (OSTS2012D50039-58247.htm Size = 1 KB)
Submission Text
<([#1 [*12*] I have been doing a significant degree of research on the issue of global warming and I am convinced (despite what the current candidates for the Republican Nomination are claiming) that Global warming is a real and significant threat to the welfare of life on this earth. As a result I am in favor of limiting the amount of permits that are issued. I am especially against efforts to extract oil from shale and tar sands persuaded to believe it is an inefficient method to obtain the oil that we do extract. Thanks much. **#1])>**

OSTS2012D50040
Organization: Al Gillespie
Received: 3/15/2012 3:06:10 PM
Commenter1: Al Gillespie - Grand Junction, Colorado 81506 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/12/2012 12:00:00 AM
Attachments: OSTS2012D50040.htm (OSTS2012D50040-58251.htm Size = 1 KB)
Submission Text
<([#1 [*2.2.1*] I do support the development of oil shale. I am in complete agreement on the latest BLM proposal to scale back the acerage available for research and development in UT, CO, and WY. These companies need to have a viable process developed along with an analysis of the resources needed and the impact on the land and communities before a large scale (commercial) program is allowed to go forward. **#1])>**

OSTS2012D50041
Organization: Ingrid Griffee
Received: 3/15/2012 3:35:08 PM
Commenter1: Ingrid Griffee - Salt lake city, Utah 84124 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/16/2012 12:00:00 AM
Attachments: OSTS2012D50041.htm (OSTS2012D50041-58253.htm Size = 1 KB)
Submission Text
<([#1 [*10.6.1*] president Obama has spoken much about turning away from fossils fuels toward renewable sources. The BLM should set the example. If our public lands are to be used for any sort of energy exploration or production, then only for renewable, non-polluting projects such as wind and solar. Stop supporting fossil fuels and their air pollution and extravagant water usage. Give us clean energy - the feds should lead the way. Please! The last thing Utah needs is more fossil fuel mining or refinement. Talk to the EPA - our air quality already ranks among the worst in the nation. My kids need clean air! Please. **#1])>**

OSTS2012D50042
Organization:
Received: 3/15/2012 9:43:31 PM
Commenter1: - , (United States)
Organization1:

Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/12/2012 12:00:00 AM
Attachments: OSTS2012D50042.htm (OSTS2012D50042-58255.htm Size = 1 KB)
Submission Text
<([#1 [*12*] NO DRILLING IN UT, CO, AND WY **#1])>**

OSTS2012D50043
Organization: Carol Shablo
Received: 3/16/2012 10:04:34 AM
Commenter1: Carol Shablo - Bayfield, Colorado 81122 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/12/2012 12:00:00 AM
Attachments: OSTS2012D50043.htm (OSTS2012D50043-58257.htm Size = 1 KB)
Submission Text
<([#1 [*11*] I would really like to see the oil shale development and tar sands development take place in Colorado. America needs its own supply of oil and gas. why are we buying from other countries? Why are we buying from countries who are not really our friends and not buying from Canada who is our friend. I will vote this fall based on those issues and the issues of jobs in Colorado. **#1])>**

OSTS2012D50044
Organization: Peg
Received: 3/17/2012 3:46:02 PM
Commenter1: Peg - , Colorado (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/12/2012 12:00:00 AM
Attachments: OSTS2012D50044.htm (OSTS2012D50044-58259.htm Size = 1 KB)
Submission Text
<([#1 [*12*] Extraction requires high temperatures, enormous supplies of water and huge amounts of energy with not much bang for the buck. I agree that land use much be restricted especially

since the technology is questionable at best. If there is a spill (and there will be), tar sands oil sinks to the bottom of rivers/streams and cleanup is almost impossible. I want my public lands clean, my water clear and safe and my wildlife protected. Fracking and tar sands extraction are a dangerous mess with no proven method of clean-up or protection for those in its path. Finally, much of our current oil is sold to other countries. The US takes the risk and other countries and 'big oil' benefit. **#1])>**

OSTS2012D50045

Organization: Dorian Miller
Received: 3/18/2012 6:16:47 AM
Commenter1: Dorian Miller - Honolulu, Hawaii 96826 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/12/2012 12:00:00 AM
Attachments: OSTS2012D50045.htm (OSTS2012D50045-58261.htm Size = 1 KB)
Submission Text
<([#1 [*12*] Please stop the Oil Shale and Tar Sands extraction and spend the money on energy that won't hurt the planet. The United States should be the leader in environmentally safe energy. We should not be thinking of ways destroy the planet. We are the greatest country on earth, we need to act like it. **#1])>**

OSTS2012D50046

Organization: Douglas Vilnius
Received: 3/18/2012 11:21:09 AM
Commenter1: Douglas Vilnius - Park City, Utah 84098 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/16/2012 12:00:00 AM
Attachments: OSTS2012D50046.htm (OSTS2012D50046-58269.htm Size = 1 KB)
Submission Text
<([#2 [*10.6.1*] Please consider the cost-benefit of this enterprise.I only hope we would spend this much effort on solar and wind energy production. **#2])>**

OSTS2012D50047

Organization: Mark Hilberman
Received: 3/19/2012 6:17:00 PM
Commenter1: Mark Hilberman - Redstone, Colorado 816232506 (United States)

Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/1/2012 12:00:00 AM
Attachments: OSTS2012D50047.htm (OSTS2012D50047-58271.htm Size = 1 KB)
Comment_on_PEIS_for_western_Tar_sands_and_Oil_Shale_OSTS2012D50047.rtf (OSTS2012D50047-58270.rtf Size = 47 KB)
Submission Text
See Attachment.

March 19, 2012

Comments on the BLM's Programmed Environmental Impact Statement [PEIS] for Oil Shale and Tar Sands in Colorado, Utah and Wyoming,

March 19, 2012 Mark Hilberman

<([#1 [*3.1.2*] A group of worried ranchers attended the presentation of the draft document in western Colorado on March 12, 2012. None of the BLM maps in the PEIS show where and how existing land use will be disrupted by any of the proposed plans. Nevertheless, it is clear that fossil fuel extraction in these areas will disrupt existing ranching and recreational uses in these dry western lands. This arid portion of the country is projected to become dryer still. Furthermore, scars upon the land heal slowly: witness still evident 150 year old Pony Express and immigrant trails.
#1])>
<([#2 [*3.4.1*] Water consumption and potential contamination is of great concern: the Colorado River no longer drains into the ocean as existing human and agricultural usage already consumes all its water. **#2])> <([#3** [*10.6.1*] Moreover, DOE Secretary Chu's recent statement to Congress that our priority goal should be to develop alternative energy sources is correct.
#3])>
<([#4 [*2.2.1*] [*2.3.1*] With this in mind [land use change, water quality & quantity, and alternative energy goals] alternatives 2 or 3 make the most sense. Alternative 2b which requires and RD&D phase first is presently preferred by the BLM allows for the gathering of additional essential information for rational future decision making.

· However, there is no evidence in this document that the BLM intends to gather new information beyond simple technical extraction issues. A significant part of the BLM's responsibility to the American public is to determine the feasability, environmental cost and impacts of using these resources at this time. Therefore, this information should be obtained if RD&D leasing proceeds and such leasing should proceed slowly to facilitate the data gathering needed to decide upon more extensive commercial exploitation. **#4])>**

<([#5 [*3.5.1.1*] · In the past several decades the climate science community has become much more concerned about the future adverse impact of global warming:

"Finally, we are close to dead certain, from the Greenland ice cores and other climate records, that abrupt climate changes did actually occur during the Ice Age, . . . The existence of abrupt climate change is by now more of an observational fact than a theory. . . . [A furry stuffed toy snake hangs in the window of Broecker's office with a sign around its neck:] "I am the Climate Beast and I am Hungry."[1]

· In February of 2012 the USDA released it's reclassification of the climate zone of Aspen from Zone 3 to the significantly warmer Zone 5, based upon minimal winter temperature measurements – this after only 22 years since the prior 1990 classification. We have just had one of the warmest winters on record, an unusual early spring and unusually early and violent tornados in the Midwest. Increases in greenhouse gas concentrations which have risen more steeply since ~1960 and record rising temperatures suggest these are harbingers of climate change rather than simply weather phenomena. It is clear that global climate change issues must be considered in the RD&D analysis. Moreover, the potential cost of climate change dwarfs the cost of working fast to minimize and then reduce greenhouse gas production.
#5])>
<([#6 [*6.3.4*] · I asked George Richardson, a friend who knows energy business intimately to comment on my note. He referenced his group's website www.usenergypolicycoalition.org and stated:

"From my perspective, **the scarcity of water,** already an issue in the west, coupled with **the dramatic amount of energy needed to produce these resources** (EROEI, or energy return on energy invested) are enough to take them off the list of future energy choices without a viable method of CCS (Carbon Capture and Storage). From my 20 odd years in the oil and gas business, seldom did anyone ever deal with much more than "financial costs" and rates of return on a field or individual wells. . . . Oil shales, and tar sands, are "bottom of the barrel" choices in that they are heavier oils that are sticky bitumens that contain little or no of the high octane lighter hydrocarbons that combust at lower temperatures. . . . if one considers the true total "economic" cost per barrel, as compared to coal gasification or liquified natural gas, we will probably never develop these resources, especially if they are in competition with farmers who need lots of water to irrigate their crops. The normal game played by the petroleum industry is to try to garner subsidies that will help develop a profitable business model for oil shale development and then the subsidies never go away and the business flounders if the subsidies are withdrawn because the economics require perpetual subsidies by the government."
#6])>
<([#7 [*9.7*] · Given the land use, environmental, water, global climate, socioeconomic and other issues involved in progressing to full scale commercial development it is ***derelict*** for the BLM not to have specified an ongoing collaborative research endeavor in the PEIS. The high energy consuming forms of proposed fossil fuel extraction from rock and sand need to be evaluated critically and quantitatively in view of their apparent unnecessary and excessive contributions to climate change, compared to fluid oil and gas fossil fuels. Yet there is no clear statement of the goals and parameters to be evaluated by the government in the R&D phases of the project. **#7])>**

<([#8 [*10.4*] · Finally, I live around the corner from Coal Creek in Redstone, Colorado where the effluvia from an unrestored, abandoned coal mine site continues to pollute. Bonds may cover the RD&D phase, but once commercial exploitation is permitted a significant revenue stream, sufficient to cover worst case reclamation costs needs to be secured and set aside. If all the funds are not needed to reclaim the site from which they were derived they can be used to restore a multitude of sites such as Coal Creek and the abandoned Mid-Continent coal mine. **#8])>**

<([#9 [*9.3*] · p 62 [1-16]: The purely technical issues are likely to be solved an RD&D phase focused upon the technical feasibility of producing "commercial quantities of shale oil from the lease."

o On p 66, there is a provision for "site-specific analysis . . . prior to issuance of . . . leases, the environmental consequences to specific resource values and uses within areas . . . would be analyzed." This vague hand waving should be replaced by a clear definition of comprehensive research objectives and decisional parameters. These obvious data requirements are nowhere specified, indeed in some sections it sounds as if they will not be obtained [see appendix J 3.1.3]. **#9])>**

<([#10 [*9*] · pp77-78: There should be specific acknowledgement of the excess energy, water use and possible contamination issues related to fracking or similar technologies used for *in-situ* extraction of oil and gas from tar sands and shales. How will they be monitored during RD&D and or prevented or detected presuming leases are granted? **#10])>**

<([#11 [*9.3*] · p. 92. States BLM plan to do a NEPA analysis. At the risk of boring: what additional data will be collected prospectively upon which to base this decision? **#11])>**

<([#12 [*3.15*] · p 209 ff. A great deal of information about present, past and possible future uses of valuable fossil fuel deposits, recreational, farm and ranch use and other material. However, the maps presented completely fail to adequately depict present farm, ranch and recreational uses in the region. There is a great deal of land here that could be abused by little justified, poorly planned, overzealous use for poor grade fuel. **#12])>**

<([#13 [*9*] · Volume 2.

This volume reviews the multiple impacts of the proposed technologies in detail. There is no plan for adequate measurement of adverse impacts which occur during the RD&D or initial commercial exploitation phases, nor does it specificy how such measurement would be used in the final decision processes for proceeding with commercial exploitation of these valuable fossil fuel resources.
#13])>

- **<([#14** [*3.4.1*] The proposed explorations are in an arid part of the country. Therefore, it is essential that the BLM measure the effect of the oil and gas research and commercial use phases on river water and underground water quality, especially in the RD&D phase. **#14])> <([#15** [*6.2.3*] page 79 [4-55] It is a truism that localized GHG production will

have a minimal impact on global GHG production. Nevertheless, the extra GHG produced extracting oil and gas from shale and sand make these dirty sources of energy compared to the use of fluid oil or gas. This extra impact should be quantified by the BLM with the EPA and DOE. **#15])>**

<([#16 [*1*] · Volume 3.
The impacts are time broken down by the different proposed alternatives. **Review of the BLM proposals would be facilitated by combining volumes 2 and 3. #16])>**

· Volume 4:

<([#17 [*1*] Reviews the comments made after the initial public presentations. What is not clear is why issues were considered outside the scope of the PEIS. As an example, the BLM rejected baseline environmental studies as involving too great an area to be practical [J.3.1.3, pp J-19 ff, or V.4, 425 ff]. However, the BLM does not appear to contemplate an essential step for future decision making: conducting a relevant set of measurements in each of the RD&D lease areas. Absent this information it is difficult to understand how final decisions can be properly made. **#17])>**
<([#18 [*3.5.1.6*] The comment that green plants mitigate CO2 release [V4 - p423 (J-17), line 46] is a truism and false: – green plants have not been able to keep up with the Anthropocene's fossil fuel consumption and release of CO2 and this will not change. Available climate science data indicate that CO2 production needs to be slowed, then decreased and sooner rather than later. **#18])>**

[1] Broecker, WS and Kunzig, R: Fixing Climate: What past climate changes reveal about the current threat and how to counter it. Hill and Wang, 2008, pp129-130.

OSTS2012D50048
Organization: Corey Ballantyne
Received: 3/22/2012 9:57:21 PM
Commenter1: Corey Ballantyne - , California (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/12/2012 12:00:00 AM
Attachments: OSTS2012D50048.htm (OSTS2012D50048-58282.htm Size = 1 KB)
Submission Text
<([#1 [*12.3*] There should be NO extraction or "development" of fossil fuels on public lands. It is imperative for the safety of all people that we solve our energy crisis by rapidly ratcheting down our consumption of fossil fuels and rapidly ratcheting up development and utilization of carbon-neutral energy sources such as wind and solar energy. The use of public lands to pursue fossil fuels is a disgrace to our country and to humanity and makes me ashamed to be an American. We are tinkering with our climate, a system on which being alive depends. Our food

crops, including staples such as rice and wheat, cannot produce a sufficient yield in a hotter climate, to feed us. It is unthinkable and unconscionable to even so much as RISK a disastrously hotter climate, yet you would have us blithely stay on track to guarantee this ugly outcome. We, the public, know that you all take bribes from oil companies to allow this. SHAME on you for even considering using our public lands in this way. **#1])>**

OSTS2012D50049

Organization: Elizabeth Ickes
Received: 3/23/2012 8:14:12 AM
Commenter1: Elizabeth Ickes - Asheville, North Carolina 28803 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/12/2012 12:00:00 AM
Attachments: OSTS2012D50049.htm (OSTS2012D50049-58284.htm Size = 1 KB)
Submission Text
<([#1 [*12*] Considering the amount of energy and water necessary to extract oil which is then not commercially viable, is in my mind simply another boondoggle created to feather the nests of the already bloated, outlaw oil companies. I am totally against this plan for the rape of yet another huge acreage in the name of so called "oil security". A better idea would be to disallow any sales of domestic oil abroad. **#1])>**

OSTS2012D50050

Organization: Casey Blackburn
Received: 3/23/2012 2:55:51 PM
Commenter1: Casey Blackburn - Vernal, Utah 84078 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/12/2012 12:00:00 AM
Attachments: OSTS2012D50050.htm (OSTS2012D50050-58286.htm Size = 1 KB)
Submission Text
<([#1 [*11*] Please support responsible, multipurpose use of our public lands. Those of us that live work and play here have a vested interest in this, I seen the reclamation of land utilized for petroleum purposes and found the industry to be very responsible and comprehensive about maintaining our environment. Please don't let the special interest groups (SUWA, etc.) twist your arm on this issue. **#1])>**

OSTS2012D50051

Organization: Sherrill Futrell
Received: 3/23/2012 3:26:24 PM
Commenter1: Sherrill Futrell - Davis, California 956185421 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/12/2012 12:00:00 AM
Attachments: OSTS2012D50051.htm (OSTS2012D50051-58288.htm Size = 1 KB)
Submission Text
<([#1 [*2.3.1*] STOP THIS DESTRUCTIVE TAR SANDS DEVELOPMENT! Alternative 3 prohibits new oil shale leasing and most tar sands development. Under this alternative, only existing oil shale research, development, and design leases would remain on public lands. One commercial tar sands project just outside of Vernal could continue to undergo environmental reviews and permitting. That's it. **#1])>**

OSTS2012D50052
Organization: Connie Spears
Received: 3/23/2012 3:27:28 PM
Commenter1: Connie Spears - , California (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/12/2012 12:00:00 AM
Attachments: OSTS2012D50052.htm (OSTS2012D50052-58290.htm Size = 1 KB)
Submission Text
<([#1 [*2.3.1*] In the recently-released Draft PEIS, the BLM's preferred alternative (Alternative 2b) proposes to make 252,181 acres available for shale leasing in Utah and 91,045 acres available for tar sands leasing. This is still too much! For that reason we support a different alternative (Alternative 3) that would go even further toward shutting the door on this "unconventional" fuels nightmare. Alternative 3 prohibits new oil shale leasing and most tar sands development. Under this alternative, only existing oil shale research, development, and design leases would remain on public lands. One commercial tar sands project just outside of Vernal could continue to undergo environmental reviews and permitting. That's it. **#1])>**

OSTS2012D50053
Organization: Stacy Kline
Received: 3/23/2012 3:33:11 PM
Commenter1: Stacy Kline - , California (United States)
Organization1:

Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/12/2012 12:00:00 AM
Attachments: OSTS2012D50053.htm (OSTS2012D50053-58292.htm Size = 1 KB)
Submission Text
<([#1 [*2.3.1*] In the recently-released Draft PEIS, the alternative (Alternative 2b) proposes to make 252,181 acres available for shale leasing in Utah and 91,045 acres available for tar sands leasing, but this is still too much! For that reason I support a different alternative (Alternative 3) that would go even further toward shutting the door on this "unconventional" fuels nightmare. Alternative 3 prohibits new oil shale leasing and most tar sands development. Under this alternative, only existing oil shale research, development, and design leases would remain on public lands. **#1])>**

OSTS2012D50054
Organization: Yolanda Garcia
Received: 3/23/2012 3:42:54 PM
Commenter1: Yolanda Garcia - Peralta, New Mexico 87042 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/12/2012 12:00:00 AM
Attachments: OSTS2012D50054.htm (OSTS2012D50054-58294.htm Size = 1 KB)
Submission Text
<([#1 [*2.3.1*] There is still too much Tar Sands Leasing being proposed; dangerous and far-fetched oil shale or tar sands leasing and development. In the recently-released Draft PEIS, the BLM's preferred alternative (Alternative 2b) proposes to make 252,181 acres available for shale leasing in Utah and 91,045 acres available for tar sands leasing. This is still too much! I support support a different alternative (Alternative 3) that would go even further toward shutting the door on this "unconventional" fuels nightmare. Alternative 3 prohibits new oil shale leasing and most tar sands development. Under this alternative, only existing oil shale research, development, and design leases would remain on public lands. One commercial tar sands project just outside of Vernal could continue to undergo environmental reviews and permitting. **#1])>**

OSTS2012D50055
Organization: Southern Utah Wilderness Alliance (SUWA), Carolyn Straub
Received: 3/23/2012 3:43:27 PM
Commenter1: Carolyn Straub - San Jose, California 95111 (United States)
Organization1: Southern Utah Wilderness Alliance (SUWA)
Commenter Type: Affiliation Only

Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/12/2012 12:00:00 AM
Attachments: OSTS2012D50055.htm (OSTS2012D50055-58296.htm Size = 1 KB)
Submission Text
<([#1 [*2.3.1*] I agree with this, issued today, March 23, 2012, by Southern Utah Wilderness Alliance (SUWA): "We support a different alternative (Alternative 3) that would go even further toward shutting the door on this "unconventional" fuels nightmare. Alternative 3 prohibits new oil shale leasing and most tar sands development. Under this alternative, only existing oil shale research, development, and design leases would remain on public lands. One commercial tar sands project just outside of Vernal could continue to undergo environmental reviews and permitting. That's it." **#1])>**

OSTS2012D50056
Organization: Gail Richardson
Received: 3/23/2012 8:32:34 PM
Commenter1: Gail Richardson - Bozeman, Montana 59715 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/12/2012 12:00:00 AM
Attachments: OSTS2012D50056.htm (OSTS2012D50056-58298.htm Size = 1 KB)
Submission Text
<([#1 [*2.3.1*] I believe that oil shale and tar sands development on our precious public lands should be limited because of the destructive nature of these extractions. Our scenic landscapes, our water and air, and our wildlife resources all suffer greatly when these projects are allowed. Often time these developments are proposed in prime recreational areas that are totally unsuitable for industrial development. I support Alt. 3 because it prohibits new oil shale leasing and most tar sands projects. Only existing research, development and design leases will be allowed to continue on public lands. One tar sands project by Vernal will continue with environmental reviews and permitting. Tar sands is the most egregious type of oil extraction and will have an overwhelming effect on our climate should it continue. Alberta is literally destroying its own environment, and we will all pay for its intransigence. Please do the right thing and adopt Alt.3. Thanks for listening to people who care about our environment over corporations which obviously do not. **#1])>**

OSTS2012D50057
Organization: Sierra Club Wilderness Sub-Committee, cassie barr
Received: 3/23/2012 9:05:06 PM
Commenter1: cassie barr - Oakland, California 94619 (United States)

Organization1: Sierra Club Wilderness Sub-Committee
Commenter Type: Affiliation Only
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/16/2012 12:00:00 AM
Attachments: OSTS2012D50057.htm (OSTS2012D50057-58300.htm Size = 1 KB)
Submission Text
<([#1 [*10.6.1*] We need to put our efforts toward green energy and not effect Climate Change more by helping dirty Tar Sands Oil, an environmental disaster. **#1])>**

OSTS2012D50058
Organization: Adam Shaffer
Received: 3/23/2012 10:23:09 PM
Commenter1: Adam Shaffer - Burlington, Iowa 52601 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/12/2012 12:00:00 AM
Attachments: OSTS2012D50058.htm (OSTS2012D50058-58302.htm Size = 1 KB)
Submission Text
<([#1 [*2.3.1*] Please approve alternative 3 as a path forward for this PEIS. I have studied the boom and bust cycle that has already been experienced with oil shale. I believe that developing this source of energy is a mistake both for the beautiful wild areas that it would impact and for energy policy in this country. It would open the path to another boom and bust cycle that would mostly waste water resources with very little benefit. **#1])>**

OSTS2012D50059
Organization: Dean Webb
Received: 3/23/2012 11:29:57 PM
Commenter1: Dean Webb - Seattle, Washington 98199 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/12/2012 12:00:00 AM
Attachments: OSTS2012D50059.htm (OSTS2012D50059-58304.htm Size = 1 KB)
Submission Text

The BLM recently released its 2012 Oil Shale and Tar Sands Draft Programmatic Environmental Impact Statement (Draft PEIS), an effort by the BLM to determine what areas – if any – in Utah, Colorado, and Wyoming should be available for dangerous and far-fetched oil shale or tar sands leasing and development. **<([#1** [*2.3.1*] In the recently-released Draft PEIS, the BLM's preferred alternative (Alternative 2b) proposes to make 252,181 acres available for shale leasing in Utah and 91,045 acres available for tar sands leasing. This is still too much! For that reason I support a different alternative (Alternative 3) that would go even further toward shutting the door on this "unconventional" fuels nightmare. Alternative 3 prohibits new oil shale leasing and most tar sands development. Under this alternative, only existing oil shale research, development, and design leases would remain on public lands. One commercial tar sands project just outside of Vernal could continue to undergo environmental reviews and permitting. That's it. Please do the right thing and adopt Alternative 3.
#1])>

OSTS2012D50060
Organization: Thurston Thompson
Received: 3/24/2012 7:32:30 AM
Commenter1: Thurston Thompson - Summerfield, North Carolina 27358 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/12/2012 12:00:00 AM
Attachments: OSTS2012D50060.htm (OSTS2012D50060-58306.htm Size = 1 KB)
Submission Text
<([#1 [*12*] We are against any tar sands or oil shale mining in the US. As a citizen I own these public lands in Utah, Wyoming and Colorado. Oil Shale and Tar Sands extraction is too damaging to the land. Do not allow it on my property. Thanks you, TMT
#1])>

OSTS2012D50061
Organization: Ken Goldsmith
Received: 3/24/2012 8:08:34 AM
Commenter1: Ken Goldsmith - Woodstock, Connecticut 06281 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/12/2012 12:00:00 AM
Attachments: OSTS2012D50061.htm (OSTS2012D50061-58308.htm Size = 1 KB)
Submission Text

<([#1 [*2.3.1*] I strongly OPPOSE the BLM's preferred alternative (Alternative 2b) for the Draft PEIS. This alternative allows far too much public land to be made available for destructive oil shale or tar sands leasing and development. I urge you to adopt Alternative 3, allowing existing oil shale research, development, and design leases to remain on public lands. This is the only reasonable and prudent course of action until this technology is proven and the terrible environmental impacts are properly mitigated. **#1])>**

OSTS2012D50062

Organization: Dennis Roscetti
Received: 3/24/2012 12:47:04 PM
Commenter1: Dennis Roscetti - Wauwatosa, Wisconsin 53213 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/12/2012 12:00:00 AM
Attachments: OSTS2012D50062.htm (OSTS2012D50062-58310.htm Size = 1 KB)
Submission Text
<([#1 [*2.3.1*] I support Alternative 3, the most restrictive Alternative. I believe the recovery of usable amounts of fuels from oil shale or tar sands is not possible without a) massive amounts of water resources, which aren't available anywhere in the region; b) massive amounts of energy to mine the base material and extract the oil from it; and c) massive supporting infrastructure. If there is not an option to simply drop this moronic idea, then the extent must be limited until the boosters come to their senses. Thanks for your attention. **#1])>**

OSTS2012D50063

Organization: Carter Technologies Co, Ernie Carter
Received: 3/24/2012 3:39:37 PM
Commenter1: Ernie Carter - Sugar Land, Texas 77498 (United States)
Organization1: Carter Technologies Co
Commenter Type: Private Company
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/2/2012 12:00:00 AM
Attachments: OSTS2012D50063.htm (OSTS2012D50063-58312.htm Size = 4 KB)
Submission Text
<([#1 [*11*] We need energy and no one chooses to freeze in the dark rather than use available resources. Blocking technological development out of fear rather than guiding it brings only poverty and want and war. Hydraulic fracturing in deep shale has now given us a 100 year supply of natural gas but we still need to import oil. In-situ heating and production of oil shale can make us energy independent in oil for 100 years if we embrace it. Then we will no longer be

manipulated by other oil producing nations. If we let environmental fear dominate our thinking instead of innovation, then we will continue to offer tribute to foreign kings and tyrants begging their indulgence and compromising our ethical standards for foreign oil. The price of energy will continue to increase causing suffering for all the world's poor. **#1])> <([#2** [*9.2.6*] [*6*] Sound primary cementing techniques for wells and proper safe design and recycling of fracturing fluids are needed for safe shale gas production. So also we will need proper perimeter barriers such as wax sealant or grout walls and freeze walls to isolate the oil shale producing areas from groundwater. We need techniques to prevent pollution of water aquifers. The good news is that we can have anything we need if we place wise regulations and requirements in place instead of silly fear-based moratoriums and bans on a method rather than the outcome of a method. There is always some "environmental impact" but what we have to ask is "is it really significant compared to feeding the poor, preventing war, and improving the standard of living for all our people. Simply specify what is to be protected, define permissible impact and let the engineers do the rest. Show some leadership! Specify the recycling of the required water resources. Specify the levels of certainty and environmental foot print, place tax incentives on doing it better, and let private enterprise find the optimal solution without micro-managing it. New slot drilling techniques and underground electric heating allow efficient heating of subterranean areas to convert shale kerogen into liquid hydrocarbons in in-situ reservoirs a mile square. Vast quantities of oil and gas may be produced so that the world price of energy will be held in check. Depleted oil shale wells will make great carbon dioxide sequestration reservoirs if this is found significant to climate change. The rest of the world is going to produce oil shale whether we do or not. We have the chance right now to show them the most environmentally responsible way to do it. Or we can sit on our hands whining that "something may go wrong" and refuse to take responsibility for proper stewardship of the resources we are given. Throughout the world, children starve for lack of government economic leadership a thousand times more often than they are harmed by all kinds of energy production combined. **#2])> <([#3** [*11.2*] Like every other kind of energy, oil shale conversion takes energy and water to produce energy. We will always need liquid hydrocarbons for plastics and chemicals even if we could invent batteries good enough to run electric cars. You will never be able to collect energy from sun or wind as cheaply as exploiting a source of energy that has already been concentrated for you. If you want to be greener, just spend the money to design safer nuclear power systems instead of using 70 year old technology that was never intended to be a long term plan. In addition to safety issues these old reactors waste 90 percent of the energy into waste. Fifth generation nuclear reactor designs can remain inherently safe with automatic shutdown even if cracked open by an earthquake or a terrorist bomb. Newer designs could actually burn the spent fuel from old reactors. Thorium based reactors generate no radioactive waste at all and stop instantly when you shut off the neutron generator. They could be used to safely generate the heat to harvest the oil shale if the government would be responsible and spend the money to develop them. If global warming was really an important issue we would have already been doing this research. Ignorance and environmental fear have made it too expensive for private industry to develop the clean nuclear energy we need. If we are not careful and wise, fear will also rob us of the wonderful resource represented by oil shale.
#3])>

OSTS2012D50064
Organization: Carol Collins
Received: 3/24/2012 4:39:02 PM

Commenter1: Carol Collins - Dover, Delaware 19904 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/12/2012 12:00:00 AM
Attachments: OSTS2012D50064.htm (OSTS2012D50064-58314.htm Size = 1 KB)
Submission Text
<([#1 [*2.3.1*] Still Too Much Proposed Tar Sands Leasing! In the recently-released Draft PEIS, the BLM's preferred alternative (Alternative 2b) proposes to make 252,181 acres available for shale leasing in Utah and 91,045 acres available for tar sands leasing. This is still too much! For that reason I support a different alternative (Alternative 3) that would go even further toward shutting the door on this "unconventional" fuels nightmare. Alternative 3 prohibits new oil shale leasing and most tar sands development. Under this alternative, only existing oil shale research, development, and design leases would remain on public lands. One commercial tar sands project just outside of Vernal could continue to undergo environmental reviews and permitting. Thank you for taking my comments into consideration. **#1])>**

OSTS2012D50065
Organization:
Received: 3/24/2012 8:27:54 PM
Commenter1: - Atlanta, Georgia (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/12/2012 12:00:00 AM
Attachments: OSTS2012D50065.htm (OSTS2012D50065-58280.htm Size = 1 KB)
Submission Text
Dear Sir or Madam, Please consider these comments regarding the 2012 Oil Shale and Tar Sands Draft PEIS, which will determine what areas Utah, Colorado, and Wyoming should be available for oil shale or tar sands leasing and development. **<([#1** [*2.3.1*] I urge you to select Alternative 3. Alternative 3 allows only existing oil shale research, development, and design leases on public lands. The commercial tar sands project near Vernal could continue to undergo environmental reviews and permitting. Three barrels of water are required to extract one barrel of oil. Ninety percent of this polluted water is dumped into tailing ponds. The discharge water is polluted with heavy metals, cyanide and ammonia. Tar sands are the fastest growing source of global warming in Canada. Tar sands extraction destroyed large areas of Canadian boreal forest, polluted water and poisoned the air. As gasoline prices inch upwards, there is pressure to drill and extract more. I urge you to protect our American West from the short-sighted destruction we see in Canada. **#1])>**

OSTS2012D50066
Organization:
Received: 3/26/2012 2:07:30 PM
Commenter1: - , (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/12/2012 12:00:00 AM
Attachments: OSTS2012D50066.htm (OSTS2012D50066-58274.htm Size = 1 KB)
Submission Text
<([#1 [*2.3.1*] BLM's preferred alternative makes too much land available for shale leasing and sands leasing. I prefer Alternative 3 which prohibits new oil shale leasing and most tar sands development. Under this alternative, only existing oil shale research, development, and design leases would remain on public lands. One commercial tar sands project would continue to undergo environmental reviews and permitting. **#1])>**

OSTS2012D50067
Organization: Curtis Johnson
Received: 3/27/2012 3:20:10 PM
Commenter1: Curtis Johnson - Green River, Wyoming 82935 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/12/2012 12:00:00 AM
Attachments: OSTS2012D50067.htm (OSTS2012D50067-58276.htm Size = 1 KB)
Submission Text
<([#1 [*2.3.1*] I support Alternative 3. Limiting shale development in all areas. **#1])>**

OSTS2012D50068
Organization: Philip Stoker
Received: 3/27/2012 3:48:37 PM
Commenter1: Philip Stoker - Salt Lake City, Utah 84108 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:

Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/12/2012 12:00:00 AM
Attachments: OSTS2012D50068.htm (OSTS2012D50068-58278.htm Size = 1 KB)
Submission Text
<([#1 [*2.3.1*] In the recently-released Draft PEIS, the BLM's preferred alternative (Alternative 2b) proposes to make 252,181 acres available for shale leasing in Utah and 91,045 acres available for tar sands leasing. This is still too much! For that reason I support a different alternative (Alternative 3) that would go even further toward shutting the door on this "unconventional" fuels nightmare. Alternative 3 prohibits new oil shale leasing and most tar sands development. Let Canada ruin it's land! Let's keep ours! **#1])>**

OSTS2012D50069
Organization: Kimber Brady
Received: 3/29/2012 1:36:33 PM
Commenter1: Kimber Brady - , Utah 84310 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/13/2012 12:00:00 AM
Attachments: OSTS2012D50069.htm (OSTS2012D50069-58315.htm Size = 1 KB)
Submission Text
<([#1 [*12*] Zero Destruction Management Plan please or prepare for a million Tim DeChristophers at your doorstep. **#1])>**

OSTS2012D50070
Organization: William Ingalls
Received: 4/2/2012 9:12:33 PM
Commenter1: William Ingalls - Vernal, Utah 84078 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/16/2012 12:00:00 AM
Attachments: OSTS2012D50070.htm (OSTS2012D50070-58316.htm Size = 1 KB)
Submission Text
<([#1 [*3.1.1*] Shall we risk wilderness quality lands such as Fiddler Butte and White Canyon for this speculative and unconventional fuel boondoggle? Dust, noise, the risk of polluted aquifers and streams, wildlife fragmentation, carbon emissions for this wildly speculative industry? **#1])>**
<([#2 [*12.3*] I don't know what you could be thinking. These are not sacrificial lands for the gas and oil industry or wall street, they are our lands. This is the trust Americans have left in your hands, to protect and handle them responsibly. Why are you giving them away? **#2])> <([#3**

[*2.3.1*] It's ridiculous to assign 91,000 acres for tar sand experiments when there is already a tar sands project just south of Vernal, Utah doing nothing, 252,000 more acres for oil shale is even more stupidity. Continue environmental reviews and permitting for those projects already in operation. No additional land for further tar sands and oil shale research and development. **#3])>** **<([#4** [*10.6.1*] Try focusing your overly generous land giveaways onto the country's transition to alternate means of energy, ones with a small and clean footprint. Renewable Energys such as Solar, Wind and a Smart Grid Infrastructure. **#4])>** Thank you.....Bill

OSTS2012D50071

Organization: Colorado Department of Health/Environment - Air Qu, Jim DiLeo
Received: 4/4/2012 10:13:15 AM
Commenter1: Jim DiLeo - Denver, Colorado 80246 (United States)
Organization1: Colorado Department of Health/Environment - Air Qu
Commenter Type: State Government
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/13/2012 12:00:00 AM
Attachments: OSTS2012D50071.htm (OSTS2012D50071-58330.htm Size = 1 KB) TSP_Oil_shale-tar_sands_4-4-12_comments_OSTS2012D50071.docx (OSTS2012D50071-58329.docx Size = 19 KB)
Submission Text
See Attachment.

Colorado Department Of Public Health & Environment
Air Pollution Control Division
Technical Services Program
Modeling, Meteorology, and Emission Inventory Unit

Technical Memorandum

To: Jim Dileo
From: Kevin Briggs
CC: Chuck Machovec, Daniel Bon, Dale Wells
Date: April 4, 2012
Subject: Comments on : Draft Programmatic Environmental Impact Statement and Possible Land Use Plan Amendments for Allocation of Oil Shale and Tar Sands Resources on Lands Administered by the Bureau of Land Management in Colorado, Utah, and Wyoming- January 2012

<([#1 [*9.3*] [*3.5.4*] In Volume 2, Chapters 4 and 5, page 4-52, lines 32-38, the Draft PEIS states that

"It is not possible to predict site-specific air quality impacts until actual oil shale projects are proposed and designed. Once such a proposal is presented, impacts on these resources would be further considered in project-specific NEPA evaluations and through consultations with the BLM prior to actual development. As additional NEPA analysis is done for leasing and site specific development, it may be necessary as part of the air quality analysis to conduct air quality modeling. The types of modeling that may be performed, when warranted, include near-field modeling, far-field modeling, and photo-chemical grid modeling."

Comment:

As the RD&D projects are expanded from 160-acres to commercial leases, it is expected that local and cumulative air quality resources will be effected as stated throughout the documents. Prior to doing any NEPA analysis, an air quality modeling protocol needs to be submitted to reviewing agencies, including CDPHE, describing how near-field, far-field transport modeling and photochemical grid modeling will be performed for oil shale/tar sand development in order to reach an understanding of how the air quality impact analysis will be conducted.

In addition, given the uncertainty in actual oil shale projects that may be proposed, the magnitude of development and how those projects might be designed, it is imperative that base line air quality be determined through a robust monitoring network prior to construction. The monitoring network should be constructed in a way to provide year-round characterization of existing air quality levels, improve the accuracy of modeling, and to improve the ability of CDPHE to issue air quality advisories to the general public if warranted by monitored conditions. It is recommended that BLM work with the State of Colorado to establish an air quality monitoring fund (or another method) to expand the existing air quality monitoring networks as deemed appropriate by CDPHE to gather meteorological and air quality data at micro, local, and regional scales for these projects. Funding levels should be sufficient to include AQRV/visibility monitoring at potentially affected mandatory federal Class I areas such as the Rocky Mountain National Park and the Flat Tops Wilderness Area. Funding should also be sufficient in order to provide and establish long term air quality monitoring throughout the project's lifetime. CDPHE also recommends that such a funding source be flexible enough to allow for future monitoring to include HAPS (such as carbonyl compounds), speciated VOCs (especially BTEX) and greenhouse gases (especially methane). Monitoring of these types of emissions are notably absent in the oil and gas development areas of western Colorado. It is recommended that the private sector proponents of oil and gas development fund the regulatory monitoring network enhancements.
#1])>

OSTS2012D50072
Organization: Colorado Dept of Health/Environment - Air Quality Control DIvision, Jim DiLeo
Received: 4/4/2012 10:14:55 AM
Commenter1: Jim DiLeo - Denver, Colorado 80246 (United States)
Organization1: Colorado Dept of Health/Environment - Air Quality Control DIvision
Commenter Type: State Government
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form

Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/16/2012 12:00:00 AM
Attachments: OSTS2012D50072.htm (OSTS2012D50072-58333.htm Size = 1 KB)
OG_4-5-12_Team_Comments_on_Oil_Shale_PEIS_OSTS2012D50072.docx
(OSTS2012D50072-58332.docx Size = 13 KB)
Submission Text
See Attachment.

Comments on Draft Programmatic Environmental Impact Statement (PEIS) and Possible Land Use Plan Amendments for Allocation of Oil Shale and Tar Sands Resources on Lands Administered by the Bureau of Land Management in Colorado, Utah and Wyoming

<([#1 [*9.3*] General: There are very few conclusions reached in the PEIS and minimal technical data because of the speculative nature of this document. There are multiple references throughout the document to the effect that it is not possible to predict specific air quality impacts until actual oil shale projects are proposed and designed. Once a project is proposed, prior to a lease being approved a site-specific NEPA analysis must be submitted and approved. At this point, the Division's technical expertise will be best used. **#1])>**

Specific Comments:

<([#2 [*3.5.5*] **Chapter 3.5.2 Existing Emissions, lines 39-41of page 3-105** states that, "…annual emission inventory data for criteria pollutants and volatile organic compounds (VOC) for 2002 for counties within and around the study are in Colorado…"

Comment: There has been significant oil and gas expansion in the Piceance region, where the Oil Shale exploration will take place, since 2002. As a result the emission inventory is outdated. A more recent data set should be obtained and used. **#2])>**

<([#3 [*6.3*] **Chapter 4.1.3 In Situ Retort Projects, lines 12-14 of page 4-12** states that, "100% of combustible gases recovered from the formation would be dewatered, filtered of suspended solids, and consumed on site as supplemental fuel in external combustion sources."

Comment: During an APCD inspection of the Shell Mahogany project, gases recovered from the formation were flared, not used as supplemental fuel. Suggested revision is to include possibility of flaring gases. **#3])>**

<([#4 [*9.3*] **Chapter 4.6.1Common Impacts, lines 20-21 of page 4-53** states that, "Before oil shale development could occur, additional project-specific NEPA analyses would be performed, subject to public and agency review and comment."

Comment: Given the limited information provided in the PEIS, it's at this site- and project-specific level that the technical expertise of the O&G Team can be best used. **#4])>**

<([#5 [*3.5.3*] **Chapter 6.1.1.5 Air Quality (of Alternative 1), line 26 of page 6-11**

Chapter 6.1.2.5 Air Quality (of Alternative 2), line 1 of page 6-73

Chapter 6.1.4.5 Air Quality (of Alternative 4), line 21 of page 6-176 all chapters state that, "If development of oil shale requires expansion of capacity of existing electric power plants…"

Comment: It is believed that the development of shale *will* require additional power capacity. Suggested revision is to strengthen this language to reflect that commercial development will more than likely require additional power capacity. **#5])>**

<([#6 [*9.3*] **Chapter 6.1.5.5 Air Quality, lines 30-35 of page 6-229** states that, "…impacts would be considered in project-specific NEPA analyses that would be conducted at the lease (including conversion from any RD&D to a commercial lease) and development phases of projects."

Comment: It is unclear if BLM expects companies to halt production and expansion of a project from the RD&D phase to the commercial production phase or if this analysis will take place while a facility is expanding. Suggested revision: please clarify what is expected of a company and when the public and agencies have an opportunity to analyze additional impacts. **#6])>**

OSTS2012D50073
Organization:
Received: 4/4/2012 10:51:17 PM
Commenter1: - , (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/13/2012 12:00:00 AM
Attachments: OSTS2012D50073.htm (OSTS2012D50073-58318.htm Size = 1 KB)
Submission Text
<([#1 [*1.1*] [*2.2*] I am relieved to see BLM taking a more sound approach to development of oil shale and tar sands on our public lands, and hope the agency will continue to close inappropriate places to leasing based on information received during the public comment period. **#1])>**

OSTS2012D50074
Organization: National Oil Shale Association, Roy Vawter
Received: 4/5/2012 11:34:12 AM

Commenter1: Roy Vawter - GLENWOOD SPRINGS, Colorado 81602 (United States)
Organization1: National Oil Shale Association
Commenter Type: Oil & Gas Org
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/16/2012 12:00:00 AM
Attachments: OSTS2012D50074.htm (OSTS2012D50074-58336.htm Size = 1 KB)
NOSA_PEIS_Comments_final_OSTS2012D50074.docx (OSTS2012D50074-58335.docx Size = 24 KB)
Submission Text
Our comments are attached. **<([#1** [*1.1.1*] Recommend extending the comment period to 60-days after the draft Oil Shale Leasing Regulations are issued. Both are linked, and have to be reviewed together. **#1])>** See Attachment.

Comments on the
Draft Environmental Impact Statement and Possible Land Use Plan Amendments for Allocation of Oil Shale and Tar Sands Resources on Lands Administered by the Bureau of Land Management in Colorado, Utah and Wyoming January 2012 – Volumes 1 through 4 – DES 12-01
by
National Oil Shale Association – P.O. Box 3080, Glenwood Springs, CO 81602
natosa@comcast.net – www.oilshaleassoc.org
April 2012

• BLM has decided to redo the Oil Shale and Tar Sand Programmatic Environmental Impact Statement…. (PEIS) and Commercial Oil Shale Leasing Regulations (Regulations) completed in 2008. BLM's actions resulted from a settlement by the Department of Interior of law suits brought against the 2008 PEIS and Regulations. There is little, if any, new information to be considered, and the 2012 draft PEIS contains largely the same information as the 2008 final PEIS. However, the BLM has chosen a different preferred alternative 2(b) that significantly reduces the acreage available for oil shale leasing, eliminates the issuance of commercial leases, and restricts leasing to Research, Development and Demonstration (R,D&D) leases only.
<([#2 [*2.1*] • Alternative 1, Oil Shale No Action Alternative, in the new PEIS, preserves the actions taken in the 2008 PEIS, and is the alternative favored by NOSA.
• The 2008 PEIS was very professionally done, received thousands of comments, involved the public and resulted in a preferred alternative that provided a reasonable amount of acreage for potential commercial leasing, while still designating environmentally sensitive and other areas deemed unsuitable for leasing.
#2])> <([#3 [*9.6*] • BLM's preferred alternative (2b) in the new PEIS restricts leasing to R,D&D leases only and defers decisions on commercial leasing for years. This is a disincentive for companies that have access to technologies that are commercially viable. Going through the R,D&D process will delay bringing oil shale into production. Also, unknown lease terms for

future R,D&D leases is yet another disincentive for companies interested in producing shale oil (e.g. 2nd round R,D&D leases offered insufficient Preference Right acreage to support a commercial project in the opinion of many companies), and other terms of the leases are more restrictive than those in the 1st round R,D&D leases. Only three companies sought 2nd round R,D&D leases, whereas about 20 companies sought 1st round R,D&D leases).
#3])> <([#4 [*9.6*] • Eliminating commercial leasing closes the door to some companies that could responsibly develop the resource, provide jobs, and produce tax revenues to local communities. Leasing oil shale is only the first step towards a commercial project. The BLM, Federal, State and local government agencies require a developer to go through additional environmental reviews and permitting activities that include public oversight before a project can go into production. It is estimated that two or three Environmental Impact Statements would be required, in addition to this PEIS, before a developer could break ground on a commercial venture. This PEIS and the 2008 final PEIS, only designate where oil shale leasing may occur and directs BLM field offices to change their planning documents accordingly.
#4])> <([#5 [*1.1.1*] • The draft 2012 oil shale leasing regulations have not yet been issued. It is difficult to comment intelligently upon the PEIS since the two are integrally linked. The BLM should consider extending the deadline for the comment period beyond May 4, 2012 to allow time for BLM to issue the regulations.
#5])> <([#6 [*9.6.1*] • Under Federal mineral leasing laws industry is allowed to lease oil & gas and minerals from BLM without a prior demonstration of the technology to be used to recover the resource. BLM for some reason has a different standard for oil shale. Developers decide whether to risk the cost of leasing a resource. They pay bonus payments to the Federal Government (shared with local communities) to acquire the lease. And lease rental payments are made to keep the lease during the time the developer is deciding whether to pursue a commercial venture. During that period, jobs are created and local communities receive sales, and other tax revenues.
#6])> <([#7 [*2.2*] • PEIS Alternative 2 reduces the acreage available for leasing to a level that most tracts in Colorado are too small and too dispersed to support a commercial project. The situation in Utah is somewhat better. Wyoming is similar to Colorado.
#7])> <([#8 [*2.3*] • Alternative 3 restricts leasing to the current 1st and 2nd round R,D&D lessees.
#8])> <([#9 [*2.4*] • Alternative 4(a) is very similar in acreage to Alternative 1, the No Action Alternative, but Alternative 4 (b) restricts leasing to R,D&D first leases only.
#9])> <([#10 [*3.15*] • Maps are in error in all three states
1. The oil shale cut-off grade was not consistently applied across the three states (e.g. 15 gpt in Wyoming and 25 gpt in Utah and Colorado). Assumptions about mining are over generalized (e.g. 500 ft. maximum overburden for surface mining in Utah and Wyoming , no surface mining in Colorado, and no consideration of underground mining in Colorado); thus the Most Geologically Prospective Oil Shale Resource areas should be corrected in each state map.
2. Preference Right acreage for the 1st Round R,D&D leases is smaller than already agreed upon between BLM and lessees (Figures 2.3.3-4 and 2.3.3-5 show portions of Preference Right areas are not available for leasing). If maps are the legal description of the actions BLM plans to take, then the maps should be changed.
#10])> <([#11 [*9.6*] • The fact that 2,000,000 acres were made available for leasing in the 2008 PEIS does not mean that amount of land would be leased or developed. Generally, industry chooses the acreage that it believes can be profitably developed. In the new PEIS, BLM has

assumed industry's role by choosing the lands it believes should be leased. Whereas the mineral leasing laws provide for leases of 5, 120 acres BLM is limiting the acreage to be leased, and deciding upon technological strategies to be employed by restricting leasing to an R,D&D first approach. So it seems BLM is choosing winners and losers, a role usually left up to industry. BLM has the authority to control development after leases are issued through environmental analyses and approval of development plans.
#11])> <([#12 [*10.5*] • The current royalty rate for oil shale in the 2008 regulations is not a give-away. Oil shale is not oil and gas. Oil shale is more expensive to produce than conventional oil and gas. Thus the rates should be much lower initially during the pioneering phase of the industry.
#12])> <([#13 [*10.5*] • In Canada the royalty rates for oil sands were set low initially in recognition of the pioneering nature of the industry. The Canadian government recently raised the royalty rates because the industry matured and could afford to pay higher rates. Canadians benefited from that strategy, and, as it works out, so did we in the United States, because today over a million barrels per day of oil from Canadian oil sands comes to U.S. refineries.
#13])> <([#14 [*3.4.3*] [*6.3.2*] • Water used in oil shale processing is reasonable compared with many other energy sources (e.g. much lower than water consumed producing bio fuels from irrigated corn). There is a wealth of information on water usage and quality. A recent GAO report indicates there is enough water for a 500,000 b/d shale oil industry. The water consumption estimates used by GAO are conservative. They assumed the use of electric power generated from coal fired – water cooled power plants would be used to liberate shale oil via insitu heating. This approach does not reflect a consensus of industry thinking at this time. Low water usage has been recently publicized by developers of new and improved technologies (e.g. AMSO, Red Leaf and Enefit). Many companies have water rights to meet their long term needs.
#14])> <([#15 [*3.4.3*] • A recent independent study sponsored by the Colorado River Conservation District showed that 120,000 acre feet per year of water would be required for a 1.55 million barrel per day shale oil industry. This is about 2-3 % of the water that flows from the Colorado River into Lake Powell annually. This study also used some liberal water usage assumptions. Much more water flows from Western Colorado to Front Range cities to meet their growing water needs.
#15])> <([#16 [*6.3.2.1*] • Oil shale production produces more energy than it consumes. The range is 3:1 to 6:1. A huge drop in oil prices and political reasons caused oil shale development to stop in the 1980's. It had nothing to do with its energy content or energy recovery efficiency. A similar resource, the oil sands of Canada, proceeded after the drop in oil prices, because of industry-government cooperation. That industry is producing 1.6 million barrels per day of crude oil and sending over 1-million barrels per day of it to the U.S. The energy content of Canadian oil sands is less that the average Western U.S. oil shale.
#16])> <([#17 [*3.1.4*] • The Piceance and Uinta Basins – where most of the oil shale resource is concentrated - are not pristine primitive areas. The cultural, wildlife, environmental, and recreational assets can be managed along with oil shale development as has been demonstrated by existing oil and gas operations in the region. The BLM appropriately designated certain sensitive areas inappropriate for leasing in the 2008 EIS. For some reason the preferred alternative in the 2012 PEIS designates substantially more acreage unavailable for leasing while relying on the same data. It also leaves a great deal of discretion to the BLM field offices to designate more sensitive areas in the future.
#17])> <([#18 [*3.1.7*] • The concentrated nature of the oil shale resource (e.g. 1 to 1-1/2 million

barrels per acre in the middle of the Piceance Basin of Colorado) reduces the land use effects over similar energy recovery operations.
#18])> <([#19 [*9.8*] • Re-visiting the PEIS and leasing regulations is delaying the time oil shale can provide more jobs and economic development in the three-state region and nationwide.
#19])> <([#20 [*9.8*] • Western U.S. oil shale resources – now estimated by U.S.G.S. at 4-trillion barrels - are an important domestic energy asset that should be developed for the benefit of the American people. Re-visiting the PEIS and regulations completed in 2008 is delaying the development of the oil shale resource. The time required to develop an oil shale project is long, and the work should not be further delayed.
#20])>

OSTS2012D50076
Organization: 4degrees, Dillon Doyle
Received: 4/5/2012 2:33:50 PM
Commenter1: Dillon Doyle - Denver, Colorado 80203 (United States)
Organization1:4degrees
Commenter Type: Affiliation Only
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/16/2012 12:00:00 AM
Attachments: OSTS2012D50076.htm (OSTS2012D50076-58322.htm Size = 1 KB)
Submission Text
<([#1 [*3*] I am deeply concerned about the potential effects to our water, wildlife, communities and public lands if the BLM initiates a commercial leasing program. The two million acres in UT, WY and CO previously allocated for commercial leasing is a massive amount of public, taxpayer land that would be sacrificed for a singular use of the landscape. I recommend that you carefully consider the serious impacts of new energy required for oil shale production and the potential devastating impacts to our wildlife, water, air, and communities as you take another look at oil shale development.
#1])>

OSTS2012D50077
Organization: Jean Tabin
Received: 4/6/2012 2:39:44 PM
Commenter1: Jean Tabin - Park City, Utah 84098 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/16/2012 12:00:00 AM
Attachments: OSTS2012D50077.htm (OSTS2012D50077-58324.htm Size = 1 KB)

Submission Text
<([#1 [*2.3.1*] I would prefer that lands are only used for RDandD and that no commercial leasing be allowed until oil shale and tar sands technologies are made both safe to the environment and truly economical. I would prefer Alternative 3 (RDandD) although I realize it may not allow much RDandD for tar sands. Once we open up this land, it may truly be destroyed and may not go back to "public/wildlife" usage. Oil shale may be very harmful to our water supplies.This likely will effect rivers, outdoor recreation (economy) and wildlife. #1])> <([#2 [*10.6.1*] We should be putting our resources towards cleaner more sustainable energy sources,not opening up large areas of public lands/water to a potentially harmful and economically nonsustainable industry. #2])> Thank You

OSTS2012D50078
Organization: Eva Esparza
Received: 4/8/2012 11:10:42 PM
Commenter1: Eva Esparza - Austin, Texas 78723 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/16/2012 12:00:00 AM
Attachments: OSTS2012D50078.htm (OSTS2012D50078-58326.htm Size = 1 KB)
Submission Text
<([#1 [*12*] I would like to see a Zero Destruction Management Plan. #1])>

OSTS2012D50079
Organization: lori dombek
Received: 4/9/2012 5:27:08 PM
Commenter1: lori dombek - gorham, Maine 04038 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/16/2012 12:00:00 AM
Attachments: OSTS2012D50079.htm (OSTS2012D50079-58328.htm Size = 1 KB)
Submission Text
<([#1 [*12*] Oil shale and tar sands development is one of the filthiest ways to produce energy, and extracting oil from our public lands in this way would deal a disastrous blow to any hope of reducing atmospheric CO2 levels to below 350 parts per million — the level we need to reach soon to stabilize Earth's climate. Besides helping push us toward global warming catastrophe, oil shale and tar sands development would destroy species habitat, waste enormous volumes of

water, pollute air and water, and degrade and defile vast swaths of land. And since it's so wasteful, it's not even commercially viable yet. Don't do it. **#1])>**

OSTS2012D50080

Organization: Frances Mathews
Received: 4/10/2012 8:52:26 AM
Commenter1: Frances Mathews - Fullerton, California 92831 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/16/2012 12:00:00 AM
Attachments: OSTS2012D50080.htm (OSTS2012D50080-58341.htm Size = 1 KB)
Submission Text
<([#1 [*10.6.1*] [*12*] This energy can only be mined by generating huge amounts of CO2. Our climate is at stake; we should leave this energy in the ground and develop alternate energies. We should do everything possible to save energy by using it efficiently. This would include building insulation and efficient design, mileage standards for automobiles, alternative energies, etc. **#1])>**

OSTS2012D50081

Organization: Margaret Michaelis
Received: 4/10/2012 6:43:30 PM
Commenter1: Margaret Michaelis - Phoenix, Arizona 85013 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/16/2012 12:00:00 AM
Attachments: OSTS2012D50081.htm (OSTS2012D50081-58337.htm Size = 1 KB)
Submission Text
<([#1 [*10.6.1*] [*12*] It is immoral for corporations to harm others in their pursuit of economic gain. That is happening in the development of dirty tar sands oil--most odiously by using up precious water sources, creating voluminous amounts of contaminated waste water, emitting copious amounts of CO2, destroying pristine lands, and destroying habitats of people and wildlife. There are better alternatives for energy that do not destroy our earth and will secure a better future for our children and grandchildren. We must put this future above all else and put our energies and money into significant development of non-fossil fuel energy development. **#1])>**

OSTS2012D50082

Organization: Eco Birder, Karen Guise
Received: 4/10/2012 8:01:56 PM
Commenter1: Karen Guise - Middletown, Delaware 19709 (United States)
Organization1: Eco Birder
Commenter Type: Affiliation Only
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/16/2012 12:00:00 AM
Attachments: OSTS2012D50082.htm (OSTS2012D50082-58339.htm Size = 1 KB)
Submission Text
<([#1 [*12*] I oppose any and all shale oil/tar sands mining in the United States. **#1])>**

OSTS2012D50083
Organization: Jodie MacTavish
Received: 4/10/2012 8:43:01 PM
Commenter1: Jodie MacTavish - Grand Junction, Colorado 81502 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/16/2012 12:00:00 AM
Attachments: OSTS2012D50083.htm (OSTS2012D50083-58343.htm Size = 1 KB)
Submission Text
<([#1 [*12.1*] I am appalled that you are even considering tar stands development in the United States - this is the dirties most environmentally damaging scheme EVER. Just take a LOOK at what it has done to the Alberta, Canada land and water - DESTROYED - it will NEVER be the same. Polluted water, forests totally decimated- WHAT are you thinking - oh I forgot everything in the US is for sale without regard to the consequences. **#1])>**

OSTS2012D50084
Organization: Sandra Hultgren
Received: 4/10/2012 9:36:46 PM
Commenter1: Sandra Hultgren - Moab, Utah 84532 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/16/2012 12:00:00 AM

Attachments: OSTS2012D50084.htm (OSTS2012D50084-58345.htm Size = 1 KB)
Submission Text
<([#1 [*12*] We can not afford to have oil shale development in our country. All the water required is coming from where? Clean water sources. What about sensitive wildlife habitats? What about the few remaining horses that are wild? What about treasures such as ancient tribal lands? Ancient ruins? Beautiful rock art? What about recreational opportunities? If none of this matters to you, what about the fact that it takes just about equal amounts of energy to create the energy received? We're scraping the bottom of the barrel for this energy and once it's gone, then what? I say no to this whole idea. I do not live in an expendable area of the country. We treasure the beauty of everything we have here. **#1])>**

OSTS2012D50085
Organization: Barbara Cohn
Received: 4/10/2012 11:24:24 PM
Commenter1: Barbara Cohn - Carlsbad, California 92008 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/16/2012 12:00:00 AM
Attachments: OSTS2012D50085.htm (OSTS2012D50085-58347.htm Size = 1 KB)
Submission Text
<([#1 [*10.6.1*] We need to be working on forms of alternative renewable energy. **#1])> <([#2** [*12.1*] Tar Sands development not only uses excessive energy in the extraction and creates massive amounts of greenhouse gas, it uses precious water and destroys lands that cannot be reclaimed despite what the oil companies say. We cannot afford to keep destroying our planet in the name of greed and riches for a few.
#2])>

OSTS2012D50086
Organization: Bruce Favret
Received: 4/11/2012 8:24:46 AM
Commenter1: Bruce Favret - Cincinnati, Ohio 45208 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/16/2012 12:00:00 AM
Attachments: OSTS2012D50086.htm (OSTS2012D50086-58351.htm Size = 1 KB)
Patents_issued_to_VaryPetrochem_as_of_1-1-2012_OSTS2012D50086.pdf (OSTS2012D50086-58350.pdf Size = 126 KB)

Submission Text
<([#1 [*6.3*] You should be aware that there is an American company based in Cleveland, Ohio, VaryPetrochem, LLC that has developed and patented (several already issued)a environmental friendly process for extracting the bitumen from the Utah and Canadian tar sands WITHOUT the use of any solvents. It is totally water based and the chemistry is recyclable. Checkout its website. http://www.varypetrochem.com/ See Attachment. #1])>

OSTS2012D50087
Organization: Daub and Associates, Inc., Gerald Daub
Received: 4/11/2012 1:10:50 PM
Commenter1: Gerald Daub - Grand Junction, Colorado 81507 (United States)
Organization1: Daub and Associates, Inc.
Commenter Type: Misc. Organization
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/18/2012 12:00:00 AM
Attachments: OSTS2012D50087.htm (OSTS2012D50087-58354.htm Size = 1 KB)
DandA_comments-PEIS_OSTS2012D50087.doc (OSTS2012D50087-58353.doc Size = 46 KB)
Submission Text
See Attachment.

DAUB & ASSOCIATES, INC.

Daub & Associates, Inc.
Comments Regarding the US DOI-BLM
Draft Environmental Impact Statement and Possible Land Use Plan Amendments for Allocation of Oil Shale and Tar Sands Resources on Lands Administered by the Bureau of Land Management in Colorado, Utah and Wyoming

<([#1 [*9.8*] 1. Why has the Federal Government decided to take a "fresh look" at the land use plan allocation decisions made in the 2008 PEIS? The 2008 PEIS was and still is a good document that adequately considers the land use plan. #1])>

<([#2 [*9.8*] 2. Why does the Federal Government need to "reconsider" which lands should be open to future oil shale leasing when a perfectly good plan was already in place? #2])>

<([#3 [*9.8*] 3. Why did the Federal Government waste tax payers dollars on an unnecessary and expensive process to recreate yet another PEIS when the 2008 PEIS was acceptable? How much did this 2012 PEIS cost the American taxpayers? They have a right to know. #3])>

<([#4 [*1.3*] 4. Why did the Federal Government not directly solicit input and consideration from the County of Mesa and the City of Grand Junction, Colorado, the county and city with the largest population base in the region? #4])>

<([#5 [*2.2*] 5. Why has the Federal Government chosen a different preferred alternative (2(b)) that significantly reduces the acreage available for oil shale leasing, eliminates the issuance of commercial leases, and is far too restrictive? **#5])>**

<([#6 [*9.7*] 6. Why does the Federal Government want to restrict oil shale to Research, Development and Demonstration (RD&D) leases only? Industry will not be encouraged by these restrictions and is an open indication that the current administration does not want nor encourages oil shale development in a time when it could be developed and would help secure our energy independence. The bottom line is that, by developing an oil shale industry, the US could keep jobs here in the US, develop a road map to energy independence, help reduce our dependence upon unreliable foreign oil imports, reduce our trade deficit and potentially become a net oil exporter. Why does our Federal Government NOT want this to happen? **#6])>**

<([#7 [*2.1.1*] 7. We believe that alternative 1, Oil Shale No Action Alternative, in the 2012 PEIS, is similar to the actions taken in the 2008 PEIS, and is the alternative that should be implemented and would best promote the United States energy independence. **#7])>**

<([#8 [*6.1.1*] 8. Why and how can the Federal Government mandate what is a minable oil shale resource grade and thickness? This should be left for industry to determine because it is technology and resource dependent. **#8])>**

<([#9 [*3.10.3*] 9. The Federal Government continues to make it more difficult for industry to make oil shale commercially viable and as a result have lost good paying jobs and those companies have taken their technologies and oil shale interests to foreign countries. What does the Federal Government plan to do about this situation? The 2012 PEIS has promoted this ideology. **#9])>**

<([#10 [*2.2*] 10. BLM's preferred alternative (2b) in the 2012 PEIS is far too restrictive and allows for only scattered lands that are not contiguous in the Piceance Creek Basin to be considered for future RD&D oil shale leasing. Why is this the case when the Piceance Creek Basin in Northwestern Colorado has the world's richest and thickest oil shale deposits?
#10])>
<([#11 [*2.2*] 11. The fact that alternative 2b only allows for scattered, non-contiguous parcels for potential RD&D oil shale leasing in the Piceance Creek Basin is unattractive to industry, why does the Federal Government want to promote this nonsensical approach? **#11])>**

<([#12 [*10.3*] 12. When will the draft 2012 oil shale leasing regulations be available for public review and determine how they can be integrated with the 2012 PEIS? **#12])>**

<([#13 [*9.6.1*] 13. Why does the Federal Government have a double standard by allowing industry to lease oil, gas and minerals from BLM without a prior demonstration of the technology to be used to recover the resource, but require a governmental mandated RD&D effort for oil shale?
#13])>
<([#14 [*2.4*] 14. In the 2012 PEIS alternative 4(a) is very similar in acreage to Alternative 1, the No Action Alternative, but Alternative 4 (b) restricts leasing to the first round RD&D leases

only, why? **#14])>**

<([#15 [*9.6*] 15. The Piceance Creek and Uinta Basins, where most of the significant US oil shale resources are concentrated, are not pristine, environmentally sensitive or primitive areas. The fact that 2,000,000 acres were made available for leasing in the 2008 PEIS does not mean that amount of land would be leased or developed. The oil shale industry should decide where their technology and process is best suited for development of the oil shale resource, NOT the Federal Government. **#15])>**

<([#16 [*10.3*] 16. Why doesn't the Federal Government use other countries that have developed their oil shale resources (which are much less rich and thick) as examples and develop a similar US oil shale industry that will help the US economy? This 2012 PEIS does NOT do that. **#16])>**

<([#17 [*3.4.3*] 17. A recent GAO report noted the water requirements for a half a million barrel per day oil shale industry is available. Water is not the issue impeding oil shale development but is commonly used as a deterrent to the development of oil shale by people not knowledgeable about the subject. A recent independent study sponsored by the Colorado River Conservation District showed that 120,000 acre feet per year of water would be required for a 1.55 million barrel per day shale oil industry. This is about 2-3 % of the water that flows from the Colorado River into Lake Powell annually.
#17])>
<([#18 [*9.8*] 18. Colorado, Utah and Wyoming oil shale resources have recently been estimated by the USGS at four trillion barrels. This is the United States' most important domestic energy asset that should be developed for the benefit of the American people. Reconsidering the 2008 PEIS and regulations completed in 2008 is delaying the development of the oil shale resource. The lead-time required to develop an oil shale project is significant, and the work should not be further delayed or burdened by unnecessary rules, regulations or roadblocks.
#18])>

OSTS2012D50088
Organization: Sean Zigmund
Received: 4/12/2012 9:57:12 PM
Commenter1: Sean Zigmund - Livingston Manor, New York 12758 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/7/2012 12:00:00 AM
Attachments: OSTS2012D50088.htm (OSTS2012D50088-58349.htm Size = 1 KB)
Submission Text
<([#1 [*2.5*] I am thankful that the Draft is going to significantly reduce the amount of land set aside for research and development of tar sands and oil shale, but I am asking you to consider and even smaller number. Zero. **#1])> <([#2** [*10.6.1*] Our country, and the world, are changing rapidly in a dramatic way due to the ongoing release of hydrocarbons into the atmosphere and

rather than promoting fossil fuels, renewable energy projects should be invested in and promoted by the U.S. government, including the BLM. **#2])>** **<([#3** [*2.5*] Please consider removing all land from RandD and rewrite the Draft as such. I am a farmer, scientist, information technologist, family man and concerned citizen. **#3])>** Thank you.

OSTS2012D50089

Organization: Western Colorado Congress of Mesa County, Claudette Konola
Received: 4/17/2012 6:32:53 AM
Commenter1: Claudette Konola - Grand Junction, Colorado 81504 (United States)
Organization1: Western Colorado Congress of Mesa County
Commenter Type: Affiliation Only
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/25/2012 12:00:00 AM
Attachments: OSTS2012D50089.htm (OSTS2012D50089-58355.htm Size = 1 KB)
Submission Text
<([#1 [*2.3.1*] With the current price of natural gas, there will be no ivestors for oil shale in the near future. I support the alternatives that minimize the land available for commercial development until research and development can be completed on a smaller scale. Resources other than oil are present in oil shale, and long term recovery of those resources should also be a consideration. Please be advised that the resolution passed by Colorado's Mesa County Commissioners on April 16 does not represent the opinion of many citizens of Mesa County. There were far more people testifying against that resolution, which appears to have been crafted by the oil and gas industry at a meeting in Vernal, Utah. This was a closed door meeting, which is in violation of Colorado's Sunshine laws, and involved elected officials who are closely tied to the oil and gas industry. They don't represent me, nor do they represent most of the citizens of this valley. Please consider the genesis of these resolutions against any of the proposed options, and reject them in your deliberations. **#1])>**

OSTS2012D50090

Organization: American Shale Oil LLC, Alan Burnham, PhD
Received: 4/17/2012 11:59:56 AM
Commenter1: Alan Burnham, PhD - Rifle, Colorado 81650 (United States)
Organization1: American Shale Oil LLC
Commenter Type: OSTS Tech Company
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/30/2012 12:00:00 AM
Attachments: OSTS2012D50090.htm (OSTS2012D50090-58431.htm Size = 1 KB)
AMSO_Comments_on_Draft_PEIS_OSTS2012D50090.pdf (OSTS2012D50090-58430.pdf Size = 51 KB)

Submission Text
See Attachment.

1
American Shale Oil, LLC
110 East 3rd Street, Suite 201
P.O. Box 1470
Rifle, CO 81650
Phone: 970-625-4324
Fax: 970-625-4318
Comments on the Draft PEIS on Oil Shale and Tar Sands
#1. **<([#1** [*9.8*] The introductory letter states that the BLM has decided to take a fresh look at land use in the
2008 PEIS to reassess the appropriate mix of allowable uses with respect to oil shale and tar sands. On page 1-4, it is stated that the PEIS is a result of the settlement of a lawsuit. On what basis did the Department of the Interior decide such a settlement was in the best interest of the United States instead of taking the case to court? Was such a settlement merely a convenient excuse to change the PEIS for political purposes unrelated to any technical basis? What documents exist in the Department of the Interior that provide the basis for accepting this settlement? Since having land potentially available for leasing does not mean that the land must or will be leased, and since any activity will have to address any pertinent environmental issue currently identified or identified in the future, the relatively trivial new information that has come to light since 2008 is not a viable excuse for the massive change in the commercial leasing program. Is the Department of the Interior aware that there have been no directives from Congress to change that time period or reopen the PEIS process, and indeed there have been actions to the contrary, so that the Department of Interior is in violation of the spirit if not the letter of 2005 Energy Act?
#1])> #2. **<([#2** [*2*] An EIS is supposed to create the document facts and analyses that will enable an informed
decision. The current document does not satisfy all the required NEPA criteria. Consequently, we think any decision based on this EIS is flawed.
The only alternatives studied are various levels of leasing. The alternative of having no commercial leasing program is not considered. The adverse effects of not doing anything can include stunted economic growth due to a high balance-of-payments deficit, the need for a large military force to assure a safe source of petroleum, and periodic wars to enforce that security. Alternatively, it could compare shale oil to biofuels in terms of cost and water use. Or it could compare shale oil to the impacts of gasoline rationing. There are negative impacts to not developing oil shale. So the PEIS is not adequate to compare both the benefits of oil shale and the negative impacts of alternative.
#2])> <([#3 [*2.2*] The preferred alternative 2b purports to provide a leasing program in Colorado, but the
conditions are so onerous that it might effectively be considered a ban of commercial leasing in Colorado. Much of the land is on parcels too small or too gerrymandered to attract commercial interest. Industry comments about what would be needed have been ignored completely, so this alternative is effectively a no-leasing option, and therefore the implications of no one responding should be analyzed (see previous paragraph). The fact that best resource, in the center of the

Piceance basin, is almost absent from the leasing plan is neither rational nor in conformity with the required cost-benefit analysis.
#3])> 2
<([#4 [*3.10.3*] The EIS discusses possible adverse effects of oil shale development on low income people but
does not acknowledge the obvious and powerful advantages of oil shale development for low income people including job opportunities and a better standard of living. There are numerous statements about possible negative effects of oil shale development but essentially no discussion of the benefits. Consequently, the EIS fails to provide the information needed for an informed choice. **#4])>**
<([#5 [*3.10.3*] In the end, oil shale development, like many of the choices in life, is all about tradeoffs.
Agriculture is the biggest user of water and destroyer of natural habitat, and it creates a bigger dead zone every year in the Gulf of Mexico than the Macondo blowout. But we all like to eat, so agriculture exists. This PEIS describes virtually every negative environmental impact imaginable, but it does not discuss the potential economic and environmental benefits. So there can be no rationale balancing of benefits and interests as required by the NEPA.
Most egregiously, the PEIS does not acknowledge that the center of the Piceance Basin contains oil shale so rich in energy that the amount of energy produced per the amount of land disturbance per would rank it near the top of all energy sources. Nevertheless, this land has been all but taken out of the leasing program. Nor does it acknowledge that in any oil shale activity, the possibility exists to reconstruct the land in any desired manner to optimize habitat for desired species. **#5])>**
#3. **<([#6** [*9.1*] Page ES-1 states that the BLM intends to take a hard look at whether it is appropriate for
approximately 2,000,000 acres to remain available for potential development of oil shale. Why does this refer to the future? One could posit that the BLM made a decision on which alternative to pick without taking a hard look—facts are not important if the decision maker has a prejudicial commitment to a specific outcome. **#6])>**
#4. **<([#7** [*3.4.1*] Page ES-9 states that the BLM looks forward to gaining a clearer understanding of the
implications of developing oil shale. For water quality and quantity, for example, industry has provided much information on updated estimates of water needs for oil shale, and that information is used in Section 4. What else is needed? There are a variety of laws in existence that protect water quality, and any lessee would have to go through a NEPA process to demonstrate that their proposed activities will not violate existing laws and regulations. Further, if there is a compelling public need to limit water consumption by an oil shale company or industry to less than industry currently estimates, no further information is needed from industry—industry would simply be required to stay within that bound. That said, does the BLM have the position that water rights are not true property rights and can be revoked for political purposes? All industry analyses indicate that enough water rights are in place to support oil shale production in excess of 1 million barrels per day. **#7])>** **<([#8** [*4.2*] Or if the issue is CO2 emissions, they are
outside the proper consideration of the PEIS as stated on pages 1-13 and 2-78, and the BLM does not have the authority to generate regulations of such not authorized by Congress. Further, CO2 mitigation is primarily a financial issue, not a technology issue, and it can be addressed

straightforwardly if and when regulations are implemented, for example via sequestration or sale.
#8])> 3
#5. **<([#9** [*1.3*] On page 1-15, the PEIS lists governmental agencies that cooperated in the PEIS. What was
their position on the amount of acreage that should be available for development, and is the PEIS consistent with the desires of the local governments?
#9])> #6. **<([#10** [*6.3*] On page 1-17, the footnotes say that EGL has been renamed "since the preparation of this
PEIS". To what PEIS does "this" refer? EGL was renamed AMSO in early 2008, well before the start of the current draft PEIS. OSEC was changed to Enefit in 2011 prior to the issuance of the current draft PEIS.
#10])> #7. **<([#11** [*6.1.1*] On page 2-13, on what basis did the BLM decide that commercial viability requires 25 ft of
oil shale >25 gal/ton in Utah and Colorado but only 15 ft of 15 gal/ton in Wyoming? Economically recoverable depends on both depth and technology in a complicated way. The oil shale industry is in a much better position to decide what resource it can recover economically and where it will risk its capital. The BLM has is not in a position to make a similar calculations.
#11])> <([#12 [*9.6*] And just because an area is open for commercial lease applications does not mean that any
company will actually try to lease it if it does not see commercial viability. Concerns about land speculation are more appropriately addressed by performance clauses in the lease rather than taking them off the potentially leasable area.
#12])> #8. **<([#13** [*6.1*] There are technically incorrect statements about oil shale on page 2-15. Not all oil shale in
the Green River formation is a marlstone. The Garden Gulch member is clay rich and does not fall within the marlstone field. The temperature required to generate shale oil varies with time. For timescales of human activity, temperature for significant shale oil generation is as low as 500 oF, as that temperature for a few years will convert a substantial amount of kerogen. The processes being pursued by Shell and by AMSO will generate shale oil at temperatures primarily between 600 and 700 oF. While some people have recently misused the term "shale oil" to denote shale-hosted natural crude oil, the term "shale oil" has meant the product formed from destructive distillation of oil shale for hundreds of years.
#13])> #9. **<([#14** [*9.6*] On page 2-30, the statement is made that six existing RD&D leases have terms that could
allow commercial development on up to 5120 acres each. The most obvious interpretation of this statement is that even though the option 2 acreage largely excludes the preference right lease area from commercial leasing (see, for example, Table 2.3.2-2), it would be allowed for commercial leasing to the RD&D lease holder by virtue of an existing contract, and this interpretation is supported by words on page 2-54. However, if it is suitable for commercial leasing, it should be included in the area available for commercial leasing.
#14])> #10. **<([#15** [*9.6*] On page 2-26, the statement is made that if an RD&D lease holder relinquishes its lease,
the area may be leased to another operator with the decisions in the RMP at the time of application. Which application? The original RD&D lease application or a subsequent application after the original lease is terminated? Does that mean that if Alternative 2b is adopted, essentially all of that acreage would be removed from commercial leasing? What

would occur if the lease is transferred to another entity rather than terminated? Would the new entity be required to pursue the same process originally proposed, or could the entity modify the process consistent with the old or a new environmental assessment?
#15])> 4
#11. **<([#16** [*9.6*] The statement is made that MMTA would be excluded from oil shale leasing until
technology or other factors exist to develop oil shale without jeopardizing trona mines. Does that mean that if a company demonstrates that it is possible, the land would be available for leasing? If so, a lease stipulation would be a more appropriate way to enforce that requirement. Multi-mineral extraction requirements are already in force for nahcolite and oil shale.
#16])> #12. **<([#17** [*9.2.3*] The first paragraph mentions geologically prospective areas not being excluded for any
specific could be considered at a later time. Which areas are those, specifically, and for what reason did the Department of Interior not consider them at this time? This appears to be a violation of the intent of Congress in the 2005 Energy Act. The subsequent discussion on that page appears to describe the intent of the Department of the Interior to frustrate rather than facilitate oil shale development for the good of the American people, in direct violation of both the 2005 Energy Act and the Department's own charter.
#17])> #13. **<([#18** [*2.2*] It is stated on page 2-35, in effect, that Alternative 2b was not conceived until the PEIS was
in draft form and is not even properly discussed in the rest of the document. An obvious question, therefore, is what specific technical discoveries of the PEIS process motivated the creation of this alternative and its eventual adoption? If no technical discoveries were the cause, what specific meetings or actions precipitated the idea after the analysis of alternatives had been completed? It appears that the alternative was motivated by political forces completely separate from legitimate PEIS considerations and therefore with the spirit of the 2005 Energy Act.
#18])> #14. **<([#19** [*2.2*] Figure 2.3.3-1 on page 2-37 demonstrates that the preferred alternative directly contradicts
the BLM's stated rationale for the PEIS and leaves no doubt that this alternative was designed specifically to prevent commercial development of oil shale in Colorado in direct violation of the 2005 Energy Act.
Almost the entire Piceance Basin is excluded from commercial leasing applications even though it has not been identified as either Sage-Grouse Core or Priority Habitat or Lands with Wilderness Characteristics. Absurdly, part of the land proposed for commercial leasing applications is identified as Sage-Grouse critical! Finally, most of the land made available is in such small, isolated parcels that it would effectively prevent significant commercial development. **#19])>**
#15. **<([#20** [*2.4*] As much Figure 2.3.3-1 is a farce, Alternative 4 shows a lack of thought concerning the
definition of "moderate" in moderate development. Land proposed for commercial leasing includes Sage-Grouse critical habitat. Even though it is arguable that oil shale development could occur without adversely affecting the Sage Grouse and there is a paragraph outlining the responsibility of the field office in that regard, the amount of acreage so designated is so small that it could easily be eliminated without significant impact on the oil shale industry this century. The PEIS itself says the probability of leasing is low, so why not just take it off the table and save a lot of wasted effort? Similarly, there is a portion of the Cathedral Bluffs designated as

Lands With Wilderness Characteristics that could easily be eliminated from leases without adversely affecting the oil shale industry.
#20])> 5
#16.**<([#21** [*2.2*] In discussing a comment about limiting leases to those in process, the PEIS states that it is
not consistent with the Secretary's and Director's emphasis on developing and maintaining a robust RD&D process. The preferred alternative has so little land available in such isolated parcels that it is not conducive to either R&D or commercial activity. The clearest evidence for this is that the number of proposals dropped from 20 to 3 when the preference right lease area was dropped from 5120 to 640 acres. While it may be profitable to perform multi-mineral extraction on a 640 lease tract, oil shale production alone is probably not feasible on such a small plot given the 500-ft restriction of activity from the border of the lease, which potentially reduces the available resource by one third. Further it is clear that a significant portion of the land made available will not even support a 640-acre lease. There is no rational justification for dividing the available acreage into tiny tracts other than to block commercial development without overtly abrogating existing RD&D lease contracts.
#21])> #17. **<([#22** [*6.3.5*] The statement is made that "Despite the absence of a commercially viable processing
technology" is not intrinsically correct. Commercially viable depends on the market price for oil, so this statement presupposes some market price for crude oil. The assumptions circa 1980 were that the price would be $90/bbl by 1990 and increasing thereafter. If that price prediction was correct, the processes at the time would have been commercially viable, and the statement here would be demonstrated to be false. In fact, the price of crude oil dropped dramatically in the early 1980s and fell to historic lows in the 1990s (<20/bbl), so the failure of oil shale to take off was simply due to a glut of inexpensive conventional crude oil, driven by discoveries and production in Alaska and the North Sea, among others, and not a failure of the technology of the time. In fact, the process being proposed by Enefit today is very similar to that pursued by Chevron and ExxonMobil. Of course, automation has improved in the past 30 years, so the process now will take fewer people to operate, but it is basically the same. And the reason that it is commercially viable now is that the oil price is at the $100+ dollar per barrel range considered in economic analyses of the late 1970s. So the correct statement would be "Under the incorrect assumption of $90-$100/bbl oil late in the 20th century,"
#22])> #18. **<([#23** [*3.10.3*] The statement of adverse impact of the oil shale bust in the early 1980s is correct, but
reading it in the absence of other economic history would suggest it is unique in the history of the United States. It is not. Speculative house building in many locations around the country based on the assumption of continued price escalation and economic growth has resulted in the foreclosure of millions of homes as a result of the real estate bust of 2008. This is just one of hundreds of stories of boom and bust that are characteristic of economic development across industries. While prudent action can and should be taken to minimize the probability, no human endeavor is without risk, and the oil shale industry should not be paralyzed due to a lack of 100% certainty in the economic and energy predictions for the next century. If this tack were taken for all proposed economic activity, all investment would cease. In fact, most proposed oil shale growth would occur at a measured pace using fewer workers per unit of production. Establishing a sound and gradually growing industry in the absence of national energy panic is the best way to avoid the catastrophes of the past.

#23])> #19. **<([#24** [*3.10.3*] The discussion on pages 3-241 through 244 is incongruous. Statements are made about
rapid growth and employment due to the oil and gas industry and having to import skilled labor from afar, and statements are made that wages are increasing due to the oil and gas industry as if that is a bad thing. Now, the unemployment rates are about 10% in regions that would be affected by oil shale development, and foreclosures are common. Since it is doubtful that natural gas activities will reach the levels of 4 years ago in the coming decades due to established infrastructure and low natural gas prices, what is going to pull the economy of western Colorado out of its malaise?
#24])> #20. **<([#25** [*3.10.1*] [*3.10.3*] On pages 3.11.2.2.4, the PEIS states that rental housing in the Rifle area is all taken and
there are no hotels available. That may have been true 3 years ago, but it is not true now. Rental housing is easy to find, and rents are dropping. Hotel rooms are plentiful, and construction of one hotel was stopped a few years ago because of the drop in demand. Foreclosures on houses are common, just like other parts of the country. There are several partially built apartment units in foreclosure. If the PEIS is supposed to give a basis for economic status on which to make decisions about oil shale, it must be up to date. Otherwise, it is giving a completely mistaken view of why economic development, including oil shale, is needed to maintain a healthy economy in the Rifle area in the long run. In other words, if it was worth redoing the PEIS, it is worth doing it right and not using data that is 3 years old as if it were current. Again, the way to avoid booms and bust is to have steady growth, and waiting to develop oil shale during a national crisis is exactly opposite to what the country should do. It should have leasing policy that enables enough high-quality resource to be available for leasing so that the industry can learn, mature, and grow gradually over the next 20-30 years. Alternative 2b, on the other hand, will prevent commercial oil shale development entirely, except possibly for a few small operations.
#25])> #21. **<([#26** [*6.4*] The statement on page 4-6 that spent shale volume would increase by 30% over the volume
of raw shale introduced into the retort is incorrect. The 30% increase in volume occurs during mining, and the volume of shale is basically unchanged during the retorting process. It would be correct if the statement were that the spent shale volume increases by 30% over its volume in the earth before mining. The same is true of the overburden for surface mining operations.
#26])> #22. **<([#27** [*6.2.1*] On page 4-13, the BLM has projected that the new electricity capacity needed for in-situ oil
shale would be generated by coal as a worst case. That may be true if the electricity is generated in Utah and transmitted to Colorado, and of course, that changes the Colorado impact. If the electricity is generated nearer, it will probably be generated from a combination of co-produced gases and natural gas. This is an active choice that could be made to minimize impacts, and the PEIS ignores that possibility. In fact, no company is currently considering using coal-generated electricity as its preferred power source for major operations. The PEIS acknowledges that some proposed in-situ processes do not plan to use electrical heaters, but it does not reflect this in its subsequent analysis. It seems that it the PEIS would be better served by making a range of estimates of water usage, because the fact that this is a worst case will get lost in public discussions.
#27])> #23. **<([#28** [*6.3.2.1*] Section 4.5.1.2 grossly over-estimates water needs. Enefit claims lower water usage than
2.6-4.0 bbl water per bbl oil—their web site says 1-3 tonne per tonne of shale oil. Also, the

correct range for in-situ projects is zero to 3 bbls water/bbl of oil. Zero might come from working out of the aquifers (Garden Gulch member) and using the cleaned-up co-produced water for cooling needs. Also not mentioned is the possibility of using reverse osmosis or distillation of deep brackish water to supply the water needs for oil shale production. The economics appear tolerable, particularly if waste heat is used for a distillation method, but this has not been actively studied because of the availability of plentiful water at low cost—ironic due to the near hysteria about water availability. The point here is that shale oil production is such a high-value operation and its water needs sufficiently modest that it probably could get along with no significant draw on fresh-water supplies if the government insists upon confiscating current water rights—estimates are that more than a million barrels of oil per day could be produced with existing water rights.

#28])> #24. **<([#29** [*6.3.2.1*] It is likely that a 100,000 bbl/day oil shale industry would use less than 1% of the upper
Colorado Basin remaining available surface water. Tables 4.5.2-1 and 3.4.1-2 indicate a water surplus of about 300,000 ac-ft/yr, and a generous estimate of water consumption by an in-situ industry would be only 10,000 ac-ft/yr according to Table 4.5.2-1 if it did not use electrical heating. So why is the Department of Interior ignoring this in their analysis of water use vs. water availability?

#29])> #25. **<([#30** [*3.5.1.2*] On page 4-54, the PEIS employs the phrases "at best, professional judgment" and "at worst
would be speculation." The PEIS should not be using speculative numbers from non-experts in its consideration. There are numerous good professional judgment numbers in the literature that agree reasonably well that one does not have to use the derogatory qualifier "at best". The point here is that there will be a range of emission estimates for various candidate technologies, and establishment of regulations on CO2 emissions would affect the ultimate outcome. If the public has a compelling interest to establish a performance standard, and then it will be industry's responsibility to figure out how to meet it. We don't need national policy based on the "bring me another rock until I see one I like" principle.

#30])> #26. **<([#31** [*6.3.1*] [*3.8.3*] Figures 4.9.1-1 and 4.9.1-2 show pictures of a UMATAC industrial process. No one in the
United States is considering using this technology, so why show pictures of it? It would seem more reasonable to show pictures from the new Enefit plants in Estonia and even a Petrosix plant in Brazil, as the latter is similar to the Paraho process favored by several US companies.

#31])> #27. **<([#32** [*5*] Nowhere in the vicinity of page 4-154 did I see a discussion of the fact that the oil shale
activities in the 1980s generated a substantial experience on how to reclaim surface disturbance. It would seem to an uneducated reader that everything for the oil shale industry would have to be learned from scratch. In fact, photos of reclaimed areas would add more to the intelligent discussion of this issue than much of what is in the PEIS.

#32])> #28.**<([#33** [*3.4.3*] In the introductory sentence of 4.12.1.4, it is stated that "it is likely that oil shale
technologies will require large amounts of water." Compared to what? Has the BLM compared it to biofuels? In the arid west, typically 85-90% of the water is used for agriculture, and an oil shale industry will have only a minor effect on that number. So from one perspective, nothing but agriculture uses large quantities of water. Now if one uses a metric of economic value generated per unit of water consumption, how does oil shale compare to other industries. The

Department of Interior should not repeat common misstatements about water crippling agriculture—it should undertake an honest in-depth analysis, using the technologies currently being contemplated and not those last used in the 1970's. This is likely to lead to a conclusion that a significant oil shale industry would divert only a few percent of agricultural water, and that could easily be made up by more efficient use of water by agriculture.
#33])> #29. **<([#34** [*3.10.3*] The implicit attitude of section 4.13.1.3 is that the best thing we can do for poor people is
to leave them alone so they can continue to be poor. Grand Junction and Carbondale are so far away from the oil shale development that any direct impact is clearly a stretch. An equivalent statement is that the skiing industry is hurting the poor people in Carbondale because skiing is a rich-person's hobby and drives up real estate values, and therefore we should kill the ski industry. Instead, the oil shale industry will provide high-quality jobs and economic growth that will create many opportunities for people to escape poverty. The biggest threat to the health and well-being of poor people is an economy that cannot provide decent employment opportunities for all. A robust oil shale industry can help sustain long term economic growth in western Colorado. Early indications from ongoing RD&D activities fully support this conclusion.
#34])> #30. **<([#35** [*3.12.2*] It appears that the writer of this section [no section specified, but prior comment addresses section 4.13.1.3] was unaware of what all was discussed about oil shale and retorting in the preceding hundreds of pages. I recommend that the first two sentences
be stricken as redundant and useless.
#35])> #31. **<([#36** [*9.6*] The bottom paragraph on page 6-1 states that making land available for lease applications
has no impact on environmental or socioeconomic setting. It is the subsequent development work on the land that would have an impact, and it must be analyzed by the NEPA process. So what is the justification for removing essentially all the land in Colorado from the lease application process? It has been stated by many people many times that having land available for leases does not mean that it will be leased. If oil shale's detractors are correct, few or no leases will ever be pursued because oil shale is fool's gold and won't ever be developed. The real truth was stated by Utah Senator Bennett, "What are you afraid of?...You are afraid it might work." If the concern is merely companies tying up land on a speculation basis, as is sometimes said, that could easily be prevented by lease performance terms.
#36])> #32. **<([#37** [*6.3*] The information about AMSO LLC in section A.5.3.2 is extremely outdated. An
Addendum to the original Plan of Operations was submitted in July 2008 and approved by the BLM in October 2008, and a Plan of Operations was submitted in May 2009 and approved by the BLM in September 2009. The stated reason for the update of the PEIS is to incorporate more recent information, and here is a case where the BLM has not incorporated relevant information contained within its own regulatory approval process.
#37])>

OSTS2012D50091
Organization: ECCOS (Environmentally Conscious Consumers for Oil Shale), Brad McCloud
Received: 4/18/2012 11:56:44 AM
Commenter1: Brad McCloud - Grand Junction, Colorado 81501 (United States)
Organization1:ECCOS (Environmentally Conscious Consumers for Oil Shale)
Commenter Type: Misc. Organization
Classification:

Submission Category: Letter
Submitted As: Web Form and Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/20/2012 12:00:00 AM
Attachments: OSTS2012D50091.htm (OSTS2012D50091-58434.htm Size = 2 KB)
April_2012_ECCOS_Letter_of_request_for_extending_the_comment_period_on_the_PEIS_OSTS2012D50091.doc (OSTS2012D50091-58433.doc Size = 30 KB)
Submission Text
ECCOS Environmentally Conscious Consumers for Oil Shale
April 9, 2012
BLM Oil Shale and Tar Sands Draft Programmatic EIS
Argonne National Laboratory 9700 S. Cass Ave. Argonne IL 60439

Ken Salazar, Secretary
U.S. Department of the Interior 1849 C Street, N.W. Washington DC 20240

Bob Abbey, Director
Bureau of Land Management 1849 C Street, N.W., Room 5665 Washington DC 20240

RE: 2012 OSTS PEIS Comment Period

Dear Secretary Salazar, Director Abbey, et al:

<([#1 [*1.1.1*] Currently members of Environmentally Conscious Consumers for Oil Shale (ECCOS) are in the process of reviewing the extremely comprehensive 2012 OSTS PEIS in order to provide comments. However, it has come to our attention that the Draft BLM Oil Shale Regulation document is not expected to be published until May 15, 2012. The comment period on the 2012 OSTS PEIS closes on May 4, 2012 and obviously does not allow time for review of the Draft BLM Oil Shale Regulation document prior to submitting comments. It seems logical that these two documents are inevitably tied to one another. These two documents outline impacted areas and regulations on development. Having both documents to review simultaneously will behoove those wishing to make relevant comments and help to avoid comments that may tend to be inconsistent and confusing without all the information available. Therefore, ECCOS requests that the comment period on the 2012 OSTS PEIS be extended to no less than 90 days past the publication of the Draft BLM Oil Shale Regulations. **#1])>** Thank you for your time and consideration.

Respectfully,
Brad McCloud Executive Director Environmentally Conscious Consumers for Oil Shale (ECCOS)

See Attachment.

OSTS2012D50092
Organization: Norwest Corporation, Anna Dunn
Received: 4/18/2012 12:34:36 PM

Commenter1: Anna Dunn - Grand Junction, Colorado 81501 (United States)
Organization1: Norwest Corporation
Commenter Type: Affiliation Only
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/20/2012 12:00:00 AM
Attachments: OSTS2012D50092.htm (OSTS2012D50092-58426.htm Size = 1 KB)
Submission Text
<([#1 [*6.1*] The extensive deposits of Oil Shale located in the United States offer key advantages. The Oil Shale deposits located not only in the United States, but in Utah and Colorado are extensive, and very well defined. This would all but eliminate exploratory costs. The research field of Oil Shale is extensive and very active in local communities, universities and government facilities which would also eliminate the need for outside resources for development. **#1])> <([#2** [*10.3*] Producing the Oil Shale does raise many environmental concerns, but the environmental policies being enforced are too strict and are choking the productivity and profitability of this massive natural resource we have on our own soil. **#2])> <([#3** [*6.3.5*] Production is already close to the finished product market, and these markets are substantial enough to support development of the industry. **#3])> <([#4** [*10.6.3*] [*11*] The refining process, though different, is markedly less than crude oil that we rely upon from foreign sources. Successful development of oil shale can greatly enhance the energy supply, economy and security of this local area which has been hit hard by the decline of the oil and gas production - as well as that of the entire country. Lessening our dependency on foreign commodities and foreign companies is a valid concern we need to face, and the production of United States Oil Shale is a huge step and advantage we should utilize. **#4])>**

OSTS2012D50093
Organization: w
Received: 4/18/2012 9:27:35 PM
Commenter1: w - , Utah (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/20/2012 12:00:00 AM
Attachments: OSTS2012D50093.htm (OSTS2012D50093-58424.htm Size = 1 KB)
Submission Text
<([#1 [*12.1*] Tar Sands is bad for the environment, bad for Utah! Both the extraction and use of the product are hazardous to people. Therefore, I believe, 0 (zero) is the amount to be extracted. **#1])>**

OSTS2012D50094

Organization: Edward Hawley
Received: 4/19/2012 2:23:07 AM
Commenter1: Edward Hawley - Stuart, Florida 34996 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/20/2012 12:00:00 AM
Attachments: OSTS2012D50094.htm (OSTS2012D50094-58428.htm Size = 1 KB)
Oil_Shale_Development_Commitee_Comment_OSTS2012D50094.docx (OSTS2012D50094-58427.docx Size = 14 KB)
Submission Text
See attached. See Attachment.

Comments on the
Draft Environmental Impact Statement and Possible Land Use Plan Amendments for Allocation of Oil Shale and Tar Sands Resources on Lands Administered by the Bureau of Land Management in Colorado, Utah and Wyoming January 2012 – Volumes 1 through 4 – DES 12-01
By
Edward R. Hawley

<([#1 [*10.6.3*] As a Native American, (member of The Choctaw Tribe of Oklahoma), with significant European ancestry, I have a deep-seated respect for the environment. That said I also realize that there are situations that require individuals to remove their blinders, (political affiliations and/or personal agendas), and focus on what will provide the greatest benefits for America and Americans. It is the time to accept the reality that there is no substitute for oil. Not today or in the foreseeable future. Concerns as for what might be must be weighed with what is today's reality. America cannot afford to delay the development of any of its oil resources; specifically its 4 trillion barrels of oil contained in the oil shale regions of Colorado, Utah and Wyoming. America must end its reliance on other countries for the oil required to fuel its economy.

Oil's importance to modern society is comparable to the importance of the buffalo to early Native Americans. When the buffalo were virtually exterminated, America's Native American way of life vanished. The buffalo were more than a source of food. Shelter, clothing, weapons and many other necessities for Native Americans came from the buffalo. As with the buffalo, oil is more than just a source of energy. Oil is component of virtually every product important to modern society.

As an American, I strongly support America's free enterprise economy. But anyone that considers the oil industry as free enterprise is ignoring the reality of oil. America has gone to war to protect its oil supplies. America currently maintains a significant military presence in the oil

producing regions of the world. Is it necessary for America to continue to provide international security at such a tremendous financial drain on our nation? (As a Navy veteran, I cannot fail to also draw attention to the irreplaceable American lives lost in multiple wars protecting oil resources of other nations.) The answer is clear: America cannot continue to support the world. It's time for America's leaders to place the needs of America and Americans first.

What other country blessed with the natural resources that America has, would allow its people and economy to be held hostage by other, less than friendly oil producing countries? The answer is obvious: None! Not one! It is time for America to confront the reality of the fact that without an affordable, reliable and sustainable supply of oil, America's way of life will follow our predecessors, the early Native Americans, with the loss of the buffalo.
#1])>
<([#2 [*10.5*] Fossil fuels are a problem for the world's environment. The significance of oil's impact on the World's environment is debatable. But what is not debatable is the fact that America will continue to rely on oil as its primary transportation fuel regardless of advances in green, renewable energy technology. Why not develop America's oil resources contained within public regions and allocate a portion of the royalty and/or tax revenue to the development of cleaner energy technology? Environmentalists have achieved their objective and ingrained into American society the fundamental belief that Americans need to protect the environment for the benefit of future generations. But, it is important for America's leaders and environmentalists to accept the fact that America needs a secure, reliable and affordable supply of oil to survive the transition to cleaner, more environmentally friendly energy sources and technology.
#2])>
<([#3 [*11*] [*10.6.3*] The members of this BLM committee cannot undo the mistakes of the past. Without a doubt, there are obstacles that must be overcome to economically develop America's oil shale. But unless efforts to develop America's oil shale are not only allowed but encouraged, there is no chance that the challenges to the development of oil shale will ever be resolved. Rather than focus on ways to suppress the development of America's oil shale, this BLM committee, as well as America's leaders, need to be concentrating on how to maximize the economic benefits that could be derived from the development of America's oil shale.

I hope that the members of the BLM committee accept the seriousness of the task that they have been given. Decisions made by this committee will impact America's security and economy for generations to come. America needs oil. There is no substitute for oil.

Although the President and his administration make no secret as to their objectives, everyone needs set aside their political beliefs and personal agendas, (blinders), and do whatever is necessary to secure America's oil supplies for today and tomorrow. The decisions made by this BLM committee will determine the future of America far beyond the time of the current political regime. Americans cannot continue to allow the lifestyle that has been created by our parents and their parents to continue to deteriorate. America can no longer afford to ignore its enormous oil resources, specifically, America's oil shale.
#3])>
http://ostseis.anl.gov/involve/comments/index.cfm

OSTS2012D50095
Organization: Peggy Nagel
Received: 4/20/2012 8:44:36 PM
Commenter1: Peggy Nagel - Fruita, Colorado 81521 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/18/2012 12:00:00 AM
Attachments: OSTS2012D50095.htm (OSTS2012D50095-58490.htm Size = 1 KB)
Submission Text
Hi Everyone, **<([#1** [*2.2.1*] Just want you to know that I strongly support your decision to limit the number of public land acres available for oil shale and tar sands extraction. **#1])> <([#2** [*10.6.1*] I think more energy and money needs to be spent on renewable energy instead of relying upon such polluting sources as oil, shale, and tar sands, in spite of what Craig Meis says **#2])>** . Thank you.

OSTS2012D50096
Organization: Joan Sundeen
Received: 4/22/2012 8:53:40 PM
Commenter1: Joan Sundeen - Carbondale, Colorado 81623 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/25/2012 12:00:00 AM
Attachments: OSTS2012D50096.htm (OSTS2012D50096-58494.htm Size = 1 KB)
Environmental_Impact_Statement_Comments_OSTS2012D50096.doc (OSTS2012D50096-58493.doc Size = 33 KB)
Submission Text
Refer to attachment. See Attachment.

There are many points in this environmental impact statement that I find particularly disturbing and would like to comment on.

<([#1 [*3.7.4.1*] First, after reviewing the endangered species section in chapter three, I could not help but notice how many areas dedicated to endangered species overlap with the oil shale and tar sand proposals. All 227 species listed rely heavily on BLM land for their survival. I also found it interesting that four out of twelve native species of fish are endangered and will go extinct due to decreased stream flow and stream warming. **#1])> <([#2** [*3.4.1*] I would like to see what kind of research has been done to asses water sources with close proximity to the existing

oil shale and tar sand sites and what kind of health those streams are in. what effect does run off from oil leaks have on the streams and rivers? I would also like to see what chemicals exist in fracking fluid and what effect they have one rivers and streams. **#2])>**

<([#3 [*3.5.7*] Secondly, The section on air quality in chapter three had many tables that clearly showed that the emissions in oil shale and tar sand counties were higher, sometimes much higher, than counties with no sites. Garfield County, the county I grew up in, has most of the highest emissions numbers in the state and has a large number of oil shale sites. **#3])>**

<([#4 [*3.10.3*] Thirdly, it saddened me to read about peoples' relationships in towns disappearing due to transient oil field workers. On page 3-239 the Rifle Tribune was cited as saying **t**hat local relationships fizzled out with the influx of oil workers, as did the local economies that were replaced with goods preferable to the oil workers rather than the farmers and ranchers who are permanent residents of the area. It also said that the city found it increasingly difficult to find people to employ in public resource departments. Oil shale and tar sands might create thousands of jobs, but they are jobs given to migrant workers from out of state and those jobs are clearly detrimental to important community ties and employment. **#4])>**

<([#5 [*3.14*] Lastly, I would like to see a section on human health impacts. There was no evidence regarding if people living near the sites suffered from environment related health problems nor was there any remark as to whether that research had been done. I personally know people in my county who have suffered greatly since oil shale sites have moved onto their properties. Again I think that having access to a list of chemicals in fracking fluid would be appropriate. **#5])>**

Thank you for your time.

OSTS2012D50097

Organization: Robert Tobin
Received: 4/23/2012 11:06:58 AM
Commenter1: Robert Tobin - Meeker, Colorado 81641 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: 50099 Attachment
Submitted As: Web/E-mail/Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** klett
Attachments: OSTS2012D50097.htm (OSTS2012D50097-58497.htm Size = 1 KB)
B.TobinPEIS2_OSTS2012D50097.pdf (OSTS2012D50097-58496.pdf Size = 11 KB)
Submission Text
Please refer to attachment See Attachment.

Figure 1: Data from W & S 24th and Misc Wells, Diss. Solids

OSTS2012D50098

Organization: Robert Tobin
Received: 4/23/2012 11:10:40 AM
Commenter1: Robert Tobin - Meeker, Colorado 81641 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: 50099 Attachment
Submitted As: Web/E-mail/Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** klett
Attachments: OSTS2012D50098.htm (OSTS2012D50098-58500.htm Size = 1 KB)
B.TobinPEIS10_Attach_1_OSTS2012D50098.pdf (OSTS2012D50098-58499.pdf Size = 26 KB)
Submission Text
Please refer to enclosed attached file See Attachment.

Selected references

OSTS2012D50099
Organization: Robert Tobin
Received: 4/23/2012 12:50:56 PM
Commenter1: Robert Tobin - Meeker, Colorado 81641 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web/E-mail/Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/2/2012 12:00:00 AM
Attachments: OSTS2012D50099.htm (OSTS2012D50099-58503.htm Size = 1 KB)
B.TobinPEIS_1_OSTS2012D50099.pdf (OSTS2012D50099-58502.pdf Size = 40 KB)
Submission Text
the total of of my PEIS is 10 pgs... but was unable to send all pages in one form so it will be submitted i 10 This # 1 See Attachment.

Listed below, for your consideration, are several comments/concerns that apply to the hydrology assessment of the northern Piceance basin as presented in the SUBJECT REPORT.

<([#1 [*3.4.6*] 1. P3-12; Hydrographs of springflow show that several springs in the vicinity of the nuclear blasts in the
early 1970s were significantly impacted after detonation.
#1])>
<([#2 [*3.2*] 2. P3-43; Extreme valley floor erosion in the Yellow C basin has occurred during large runoff events. **#2])>**

<([#3 [*3.4.5*] 3. P3-76; Introduced in the Geologic setting, the hydrologic characteristics of the

Wasatch fm were not
included in the aquifer descriptions of the Teritary-Cretaceous rocks in Piceance basin. **#3])>**

<([#4 [*3.4.1*] 4. The near surface hydrology in the basin (streams, and the numerous springs that flow from the fractured Uinta fm and valley alluvia) is an important source of good quality water. Are comprehensive data assessments for this important source included in EA and EIS presentations for the basin? **#4])>**

<([#5 [*3.4.6*] 5. The concentration range for dissolved solids in the major groundwater aquifers presented in this report
is nebulous. A key USGS report (Welder and Saulnier, 1978), in which Saulnier describes the watercharacteristics in the two principal bedrock aquifers, is not referenced, and appears unused for evaluation purposes. Dissolved solids data from the Welder and Saulnier report and other wells are compiled and presented for your information in the attached figure 1. Similar data compiled from the USGS database for the basin are provided for streams (figs. 2-4) and springs (figs. 5-8). Water quality data for many of the the constituents sampled in the basin, when compiled and analyzed, are informative for determining both water source and movement, and would be useful for assessing general water conditions in the basin. [See figures in Comment #50097, 98, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109] **#5])>**

<([#6 [*3.4.5*] 6. Important supplemental data useful in the assessment of water quality along the White River mainstem
can be found in the USGS report, Tobin, 1993. Water quality characteristics and dissolved solids loads
in the White River are qualified and quantified for a period of 15 years that included record high and
low flow annual discharges. **#6])>**

In addition to the enclosed figures 1-8, selected references (attachment 1) are included.

OSTS2012D50101
Organization: Robert Tobin
Received: 4/23/2012 12:53:07 PM
Commenter1: Robert Tobin - Meeker, Colorado 81641 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: 50099 Attachment
Submitted As: Web/E-mail/Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** klett
Attachments: OSTS2012D50101.htm (OSTS2012D50101-58509.htm Size = 1 KB)
B.TobinPEIS3_OSTS2012D50101.pdf (OSTS2012D50101-58508.pdf Size = 19 KB)
Submission Text
this page 3 of my PEIS See Attachment.

Figure 2: Dissolved Solids, Piceance C Trib, 19794-1990

OSTS2012D50103
Organization: Robert Tobin
Received: 4/23/2012 12:55:31 PM
Commenter1: Robert Tobin - Meeker, Colorado 81641 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: 50099 Attachment
Submitted As: Web/E-mail/Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** klett
Attachments: OSTS2012D50103.htm (OSTS2012D50103-58515.htm Size = 1 KB)
B.TobinPEIS4_OSTS2012D50103.pdf (OSTS2012D50103-58514.pdf Size = 24 KB)
Submission Text
PAGE 4 OF MY peis See Attachment.

Figure 3: Dissolved Solids, Piceance C, 1965-2002

OSTS2012D50104
Organization: Robert Tobin
Received: 4/23/2012 12:56:28 PM
Commenter1: Robert Tobin - Meeker, Colorado 81641 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: 50099 Attachment
Submitted As: Web/E-mail/Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** klett
Attachments: OSTS2012D50104.htm (OSTS2012D50104-58518.htm Size = 1 KB)
B.TobinPEIS5_OSTS2012D50104.pdf (OSTS2012D50104-58517.pdf Size = 19 KB)
Submission Text
page 5 of my PEIS See Attachment.

Figure 4: Dissolved Solids, Yellow C Drainage, 1965-2002

OSTS2012D50105
Organization: Robert Tobin
Received: 4/23/2012 12:57:22 PM
Commenter1: Robert Tobin - Meeker, Colorado 81641 (United States)
Organization1:
Commenter Type: Member of the Public

Classification:
Submission Category: 50099 Attachment
Submitted As: Web/E-mail/Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** klett
Attachments: OSTS2012D50105.htm (OSTS2012D50105-58521.htm Size = 1 KB)
B.TobinPEIS6_OSTS2012D50105.pdf (OSTS2012D50105-58520.pdf Size = 17 KB)
Submission Text
PAGE 6 OF 10 PAGES OF MY PEIS See Attachment.

Figure 5: Sp. Cond/DS, Picenace Basin Springs in Tributaries to Piceance C, 1973-83

OSTS2012D50106
Organization: Robert Tobin
Received: 4/23/2012 12:58:14 PM
Commenter1: Robert Tobin - Meeker, Colorado 81641 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: 50099 Attachment
Submitted As: Web/E-mail/Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** klett
Attachments: OSTS2012D50106.htm (OSTS2012D50106-58524.htm Size = 1 KB)
B.TobinPEIS7_OSTS2012D50106.pdf (OSTS2012D50106-58523.pdf Size = 11 KB)
Submission Text
PAGE 7 OF 10 OF MY peis See Attachment.

Figure 6: Sp. Cond./TDS Piceance Basin Springs, 1973-83, Springs Along Piceance C

OSTS2012D50107
Organization: Robert Tobin
Received: 4/23/2012 12:59:34 PM
Commenter1: Robert Tobin - Meeker, Colorado 81641 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: 50099 Attachment
Submitted As: Web/E-mail/Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** klett
Attachments: OSTS2012D50107.htm (OSTS2012D50107-58527.htm Size = 1 KB)
B.TobinPEIS8_OSTS2012D50107.pdf (OSTS2012D50107-58526.pdf Size = 16 KB)
Submission Text

page 8 of 10 my PEIS See Attachment.

Figure 7: Spl Cond./DS, Sprs in Tribs to Piceance C and in Piceance C, 1973-83

OSTS2012D50108
Organization: Robert Tobin
Received: 4/23/2012 1:00:27 PM
Commenter1: Robert Tobin - Meeker, Colorado 81641 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: 50099 Attachment
Submitted As: Web/E-mail/Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** klett
Attachments: OSTS2012D50108.htm (OSTS2012D50108-58530.htm Size = 1 KB)
B.TobinPEIS09_OSTS2012D50108.pdf (OSTS2012D50108-58529.pdf Size = 9 KB)
Submission Text
PAGE 9 OF 10 OF MY PEIS See Attachment.

Figure 8: Sp. Cond/DS Piceance Basin Springs, 1973-83 in Tributaries to and in Yellow C

OSTS2012D50110
Organization: City of Rifle, Colorado - City Council, Mike Braaten
Received: 4/23/2012 1:28:40 PM
Commenter1: Mike Braaten - Rifle, Colorado 81650 (United States)
Organization1: City of Rifle, Colorado - City Council
Commenter Type: Cooperating Agency
Classification:
Submission Category: Standard Web Form
Submitted As: Web and E-mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/1/2012 12:00:00 AM
Attachments: OSTS2012D50110.htm (OSTS2012D50110-58492.htm Size = 4 KB)
Submission Text
<(|#1 [*3.10.2*] The City Council of the City of Rifle greatly appreciates the Department of the Interior, Bureau of Land Management's review of past decisions regarding oil shale leasing and development and offers the following comments: The City of Rifle, Colorado (population 9,500) sits at the base of the oil-shale rich Roan Plateau in the Piceance Basin. When commercial development of oil shale occurs, our community and region will again be the likely epicenter of oil shale development as it was in the late 1970s and early 1980s. Unfortunately, in 1982, our community was also the epicenter of the oil shale bust that resulted in an economic depression in our region that spanned close to two decades. In recent years our community and region was heavily impacted by natural gas exploration and production occurring in nearby private and public lands. Natural gas development brought significant growth to our community and placed

considerable demands upon our municipal infrastructure, resulted in a shortage of affordable housing and essential community workforce, caused material and labor costs to skyrocket and strained social services and law enforcement capacities. Full-blown commercial development of oil shale may have similar impacts to our community and region. Although we are supportive of the current Oil Shale research and development activities, given oil shale's history in our region, the City wants to ensure that we understand the impacts that may result from commercial production and from each company's technologies on our community and region. Such questions as: What will development mean for our economy – both positive and negative aspects? How much water will be used, for what, and how will local watersheds be affected? How will our infrastructure, community services and facilities be impacted, including roads, water, sewer, housing, law enforcement, etc.? How will production activities be powered? How will the environment and wildlife be affected? What will be the impacts relating to hunting, fishing and recreation in the oil shale development areas? Often we hear anecdotal responses to these questions, but like the industry, we need factual data on which to base our planning and infrastructure investment decisions.We want to ensure that communities expected to be impacted by commercial development of oil shale have the appropriate and necessary financial resources to address and cope with the effects of production. Our community has learned from past energy development "booms" that investment in community services, facilities, and infrastructure is needed many years in advance of commercial production and the associated tax revenue. Additionally, as municipalities and counties in Colorado have experienced in recent years, energy tax revenues that have historically flowed to local governments to respond to energy development impacts have been usurped by the State Legislature to balance their budget in this down economy. As in past comments on Oil Shale Development, the Rifle City Council strongly supports action by the federal government to develop an oil shale cumulative community impacts study for the anticipated commercial production regions and dedicate funding to address the identified local impacts prior to approval of commercial production. **#1])> <([#3** [*10.5*] Additionally, the federal government should develop an incentive program for oil shale companies to provide meaningful up-front and on-going investment in local communities and to local governments directly affected by oil shale development and production. **#3])> <([#4** [*2*] Instead of selecting one of the alternatives put forward by BLM, the Rifle City Council requests that whatever alternative selected requires RDandD first. Additionally, we implore Secretary Salazar, BLM officials and our Congressmen and Senators to address the above mentioned issues through the federal regulatory or legislative processes to ensure that our community and region are prepared and have the necessary assistance in place prior to the commercial development of oil shale. **#4])>** Thank you for your consideration of our concerns. Respectfully submitted on behalf of the City Council of the City of Rifle, Colorado.

OSTS2012D50111

Organization: Foundation for Deep Ecology, George Wuerthner
Received: 4/23/2012 3:28:50 PM
Commenter1: George Wuerthner - Eugene, Oregon 97403 (United States)
Organization1: Foundation for Deep Ecology
Commenter Type: Affiliation Only
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:

Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/25/2012 12:00:00 AM
Attachments: OSTS2012D50111.htm (OSTS2012D50111-58534.htm Size = 1 KB)
Submission Text
<([#1 [*2.3.1*] [*3.1.1*] I think exploration for oil shales should be excluded from all WSAs, ACECs, sage grouse habitat, and any other special lands. I would prefer no leasing to occur, but if leasing must occur than limiting it to the smallest area possible is my choice. Therefore I support Alternative 3 is the best alternative of those proposed. **#1])>**

OSTS2012D50112
Organization: Walt Speirs
Received: 4/23/2012 4:05:45 PM
Commenter1: Walt Speirs - Grand Junction, Colorado (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/1/2012 12:00:00 AM
Attachments: OSTS2012D50112.htm (OSTS2012D50112-58536.htm Size = 1 KB)
Submission Text
<([#1 [*2.3.1*] Would like to see the BLM minimize the amount of oil shale and tar sands development, until some good hard environmental data is obtained through Environmental Impact assessments. Very disappointed with our local Mesa County, Colorado decision on this topic which I feel does not represent the majority view here. **#1])>** Thanks, Walt Speirs

OSTS2012D50113
Organization: Mary Wolfe
Received: 4/23/2012 4:36:14 PM
Commenter1: Mary Wolfe - Durango , Colorado 81301 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/25/2012 12:00:00 AM
Attachments: OSTS2012D50113.htm (OSTS2012D50113-58538.htm Size = 1 KB)
Submission Text
<([#1 [*2.3.1*] [*12*] In regard to the development of tar sands and oil shale in this area, I ask that the BLM choose Alternative 1; the No Action Alternative [I believe commenter is confused and supports Alt 3]. Tar sands oil is one of the dirtiest and most corrosive forms of oil. The extraction process completely devastates land; removing the oil and leaving the land unusable. Production of tar sands oil "generates three times the global warming pollution of conventional crude

production". Extraction of tar sands oil is also very energy-intensive and costly and the refining process also uses obscene amounts of energy and water. Increasing the production of such dirty, energy inefficient oil would be outrageous. If the devastation that tar sands extraction will have on the environment isn't enough, the lack of knowledge that we have about oil shale should be reason not to pursue this request. We know very little about the environmental impacts of oil shale production. As this PEIS states repeatedly, there are still many fundamental questions about the environmental implications that remain unanswered. There is not enough information available about the impact that extraction will have on "water quality and quantity". Allowing this land to become available for leasing would not only have devastating, irreversible impacts on the land, but there is not enough known about oil shale production to reasonably allow this type of project. **#1])>**

OSTS2012D50114

Organization: Andy Mueller
Received: 4/23/2012 8:01:15 PM
Commenter1: Andy Mueller - Ogden, Utah 84401 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/25/2012 12:00:00 AM
Attachments: OSTS2012D50114.htm (OSTS2012D50114-58540.htm Size = 1 KB)
Submission Text
<([#1 [*12*] I am to ally against the development of Oil Shale and Tar Sands energy. It is a hopeless source of energy, that isn't viable, sustainable, or realistic. Please don't tear up our lands for this crazy scheme so the oil companies can line their pockets with dirty money. **#1])>**

OSTS2012D50115

Organization: Marilyn Mueller
Received: 4/23/2012 8:02:15 PM
Commenter1: Marilyn Mueller - Ogden, Utah 84401 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/25/2012 12:00:00 AM
Attachments: OSTS2012D50115.htm (OSTS2012D50115-58542.htm Size = 1 KB)
Submission Text
<([#1 [*12*] I am against the development of Oil Shale and Tar Sands. It is an all around BAD IDEA. **#1])>**

OSTS2012D50116
Organization: Carrizo Valley Ranch, sid goodloe
Received: 4/23/2012 10:18:05 PM
Commenter1: sid goodloe - Capitan, New Mexico 88316 (United States)
Organization1: Carrizo Valley Ranch
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/25/2012 12:00:00 AM
Attachments: OSTS2012D50116.htm (OSTS2012D50116-58544.htm Size = 1 KB)
Submission Text
<([#1 [*2.3.1*] The common sense way to go--in an environmentally sensetive way. **#1])>**

OSTS2012D50117
Organization: Kristen Child
Received: 4/24/2012 9:54:04 AM
Commenter1: Kristen Child - Salt Lake City, Utah 84103 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/25/2012 12:00:00 AM
Attachments: OSTS2012D50117.htm (OSTS2012D50117-58546.htm Size = 1 KB)
Submission Text
<([#1 [*3.10.3*] Ensuring our limited open spaces in the United States are utilized, we must take the time to study the land and the impact of what drilling would do to it. Is drilling really the best LONG TERM economical, environmental, energy producing option? Would it benefit our economy more than the current jobs in that area? If the answer to those questions is yes, then we should consider drilling. However, Utah has enough ghost mining towns as it is. Most mining is not sustainabe long term. It is a superficial way to bring money to a community. If we are going to completely disrupt the ecosystem and economy to a region, it is imperative we study the effects, using NON-BIAS, NON-POLITICAL methods and agencies. This is not the time for our government to use our land and our heritage to leave their legacy behind. It is the time for us as American citizens to use our God and country-given rights to ensure our lands, our history, and our futures are protected. **#1])>**

OSTS2012D50118
Organization: Colorado Department of Public Health and Environment, Roger Kuster
Received: 4/24/2012 10:06:58 AM
Commenter1: Roger Kuster - Denver , Colorado 802461530 (United States)
Organization1: Colorado Department of Public Health and Environment

Commenter Type: Coop Agency - State Govt
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/25/2012 12:00:00 AM
Attachments: OSTS2012D50118.htm (OSTS2012D50118-58548.htm Size = 3 KB)
Submission Text
<([#1 [*4.2*] [*3.4.1*] [*3.10.2*] The Water Quality Control Division (Division) of the Colorado Department of Public Health and Environment continues to be concerned that the Draft PEIS inadequately addresses the cumulative impacts of the development of the oil shale and tar sands on water quality in Colorado. Specifically, the Division is concerned with the socioeconomic impacts related to public water systems and wastewater systems with respect to increased populations that will occur with development of oil shale resources in Colorado. While the PEIS discusses water withdrawals that will occur from the extraction activities, it does not take into account the additional stress upon water and wastewater infrastructure in nearby communities from both population growth and potentially reduced surface water flows due to extraction activities. In order to address this issue, the Draft PEIS should incorporate the projected population growth due to the extractive industries in communities near the leases. **#1])> <([#2** [*3.4.5*] The water withdrawals discussed in the Draft PEIS do not take into account the effect that reduced instream water flow could have upon NPDES permits. For example, the PEIS does not address the potential impact to wastewater facilities from water withdrawals upstream of a wastewater facility and the concomitant reduction in NPDES permit limits that result. **#2])> <([#3** [*3.4.6*] In Section 3.4.1.2, the Draft PEIS focuses on salinity as the key parameter for potential water quality impairment in the Colorado River Basin. The Division agrees that salinity is a significant concern in the Colorado River Basin, but is concerned that the Draft PEIS does not significantly discuss the potential contribution of other contaminants to area waters from the proposed extraction activities. The Division is especially concerned about the potential of increased selenium loading to area waters from the proposed extraction activities. **#3])> <([#4** [*3.4.5*] In Section 3.4.1.3, the 303(d) list of impaired water bodies needs to be updated to the current 2012 303(d) List. The current 2012 303(d) List for Colorado can be found in the Water Quality Control Commission Regulation No. 93 (http://www.cdphe.state.co.us/regulations/wqccregs/93_2012(03).pdf). **#4])> <([#5** [*3.4.5*] In Section 4.5.1, the Draft PEIS indicates that runoff from surface disturbances related to oil shale operations would be non-point sources. In fact, disturbances of one acre or more during construction would require a point source stormwater permit. This error is repeated in section 4.5.1.1.
#5])>

OSTS2012D50119
Organization: Colorado Department of Public Health and Environment, Roger Kuster
Received: 4/24/2012 11:46:15 AM
Commenter1: Roger Kuster - Denver, Colorado 802461530 (United States)
Organization1: Colorado Department of Public Health and Environment
Commenter Type: Coop Agency - State Govt
Classification:

Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/2/2012 12:00:00 AM
Attachments: OSTS2012D50119.htm (OSTS2012D50119-58550.htm Size = 1 KB)
Submission Text
<([#1 [*3.10.2*] The Division of Environmental Health and Sustainabilty (previously the Consumer Protection Division)submits the following comments: Labor camp housing is only inspected on a complaint basis. The Labor Camp regulations are the authority used to address man camps.The Labor Camp regulations were adopted in 1968 and a revision may be needed to address issues relative to amn camps. **#1])>**

OSTS2012D50120
Organization:
Received: 4/24/2012 12:11:13 PM
Commenter1**:** - , (United States)
Organization1**:**
Commenter Type: Member of the Public
Classification:
Submission Category: 035a_Campaign
Submitted As: Web Form
Form Letter Category: Form Letter
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/25/2012 12:00:00 AM
Attachments: OSTS2012D50120.htm (OSTS2012D50120-58552.htm Size = 2 KB)
Submission Text
<([#1 [*3*] I am deeply concerned about the potential effects to our water, wildlife, communities and public lands if the BLM initiates a commercial oil shale leasing program. The two million acres in UT, WY and CO previously allocated for commercial leasing is a massive amount of public, taxpayer land that would be sacrificed for a singular use of the landscape. **#1])> <([#2** [*2.2*] [*12.3*] While the preferred alternative (Alternative 2) is a step in the right direction, BLM should consider an alternative that does not endorse giveaways of public lands to this unproven industry. **#2])> <([#3** [*3*] Oil shale is currently producing no jobs and no revenue. The Congressional Budget Office confirmed that it is not expected to produce significant revenues through 2022. This means we have time to thoroughly assess the impacts of development to our water, wildlife and communities, and should not rush now to give away public lands. **#3])> <([#4** [*3.10.4*] The land overlying oil shale resources in Utah, Colorado and Wyoming is some of the best wildlife habitat in the West. Outdoor recreation and tourism are huge economic drivers that depend on this habitat. The farming and ranching sectors require reliable access to water resources, which may be depleted by extensive commercial oil shale development. We must protect these jobs by making smart decisions about how we allow oil companies to move forward with oil shale speculation. **#4])> <([#5** [*3*] I recommend that you carefully consider the serious impacts of oil shale production to our wildlife, water, air, and communities as you take another look at oil shale development. **#5])>**

OSTS2012D50121

Organization:
Received: 4/24/2012 12:15:19 PM
Commenter1: - , (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: 035a_Campaign
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/25/2012 12:00:00 AM
Attachments: OSTS2012D50121.htm (OSTS2012D50121-58554.htm Size = 2 KB)
Submission Text
<([#1 [*3*] I am deeply concerned about the potential effects to our water, wildlife, communities and public lands if the BLM initiates a commercial oil shale leasing program. The two million acres in UT, WY and CO previously allocated for commercial leasing is a massive amount of public, taxpayer land that would be sacrificed for a singular use of the landscape. **#1])> <([#2** [*2.2*] [*12.3*] While the preferred alternative (Alternative 2) is a step in the right direction, BLM should consider an alternative that does not endorse giveaways of public lands to this unproven industry. **#2])> <([#3** [*3*] Oil shale is currently producing no jobs and no revenue. The Congressional Budget Office confirmed that it is not expected to produce significant revenues through 2022. This means we have time to thoroughly assess the impacts of development to our water, wildlife and communities, and should not rush now to give away public lands. **#3])> <([#4** [*3.10.4*] The land overlying oil shale resources in Utah, Colorado and Wyoming is some of the best wildlife habitat in the West. Outdoor recreation and tourism are huge economic drivers that depend on this habitat. The farming and ranching sectors require reliable access to water resources, which may be depleted by extensive commercial oil shale development. We must protect these jobs by making smart decisions about how we allow oil companies to move forward with oil shale speculation. **#4])> <([#5** [*3*] I recommend that you carefully consider the serious impacts of oil shale production to our wildlife, water, air, and communities as you take another look at oil shale development.
#5])>

OSTS2012D50122
Organization: Weston County Historic Preservation Board, Clara Varner
Received: 4/24/2012 4:29:05 PM
Commenter1: Clara Varner - Newcastle, Wyoming 82701 (United States)
Organization1: Weston County Historic Preservation Board
Commenter Type: Affiliation Only
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/25/2012 12:00:00 AM
Attachments: OSTS2012D50122.htm (OSTS2012D50122-58556.htm Size = 1 KB)
Submission Text

<([#1 [*2.2.1*] I strongly back the alternative 2B which will protect the most important historic elements from any commercial invasion. Please take note that many Wyoming residents are aware and deeply concerned about saving Wyoming's historic resources for the present and the future. **#1])>**

OSTS2012D50123

Organization: Lowell Wade
Received: 4/24/2012 4:46:39 PM
Commenter1: Lowell Wade - Wheatland, Wyoming 82201 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/25/2012 12:00:00 AM
Attachments: OSTS2012D50123.htm (OSTS2012D50123-58558.htm Size = 1 KB)
Submission Text

<([#1 [*2.2.1*] I agree with your approach to "go slow" with oil shale development, making industry reasonably develop and prove their technologies before allowing for commercial leasing. **#1])> <([#2** [*3.10.3*] [*3.10.5*] However, I am weary of opening thousands of acres to an industry that, in 100 years, has never created jobs nor produced revenue: why should this time be any different? We don't know if oil shale will ever create jobs for our communities. The barrier to oil shale is the same as it's been for 100 years, the rock itself. Yet the oil industry wants more of our precious public land and tax dollars for their speculation. Outdoor recreation, tourism, and agriculture are huge economic drivers in Wyoming. We must protect these jobs by making smart decisions about how we allow oil companies to move forward with oil shale speculation on our lands. **#2])> <([#3** [*3.4.1*] We already face chronic water shortages in the arid steppes of Wyoming. We have no clear answers from industry about what potential oil shale development would mean for our water. It is simply not worth gambling away our water and real jobs we have now in farming and ranching. The people of Wyoming deserve better than speculation and unavoidable environmental degradation. We deserve our open spaces, water, and agricultural heritage that we all value. **#3])>** Thanks for listening.

OSTS2012D50124

Organization: AHW, WOC, Thomas Bell
Received: 4/24/2012 5:28:15 PM
Commenter1: Thomas Bell - Lander, Wyoming 82520 (United States)
Organization1:AHW, WOC
Commenter Type: Affiliation Only
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/25/2012 12:00:00 AM

Attachments: OSTS2012D50124.htm (OSTS2012D50124-58560.htm Size = 1 KB)
Submission Text
<([#1 [*3.4.1*] I am very familiar with this whole area and it is too important to tear up for oil shale. Besides where will the project get its water. **#1])>**

OSTS2012D50125
Organization: Alliance for Historic Wyoming, Lesley Wischmann
Received: 4/24/2012 6:07:49 PM
Commenter1: Lesley Wischmann - Laramie, Wyoming 82070 (United States)
Organization1: Alliance for Historic Wyoming
Commenter Type: Historic / Cultural Resources Org
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/26/2012 12:00:00 AM
Attachments: OSTS2012D50125.htm (OSTS2012D50125-58592.htm Size = 1 KB)
PEIS_comments_OSTS2012D50125.doc (OSTS2012D50125-58591.doc Size = 273 KB)
Submission Text
See Attachment.

Lesley Wischmann
Alliance for Historic Wyoming
712 South Second Street
Laramie, WY 82070
307.742.5449
lesleywisch@wyoming.com
24 Apr 2012

Mr. Michael Nedd, BLM Assistant Director

Minerals, Realty and Resource Protection

1849 "C" Street NW

Washington, DC 20240

Dear Mr Nedd:

Thank you for this opportunity to comment on the Draft Programmatic Environmental Impact Statement for Oil Shale and Tar Sands Development in Wyoming. Please consider these the formal comments of the Alliance for Historic Wyoming (AHW), a statewide nonprofit organization dedicated to preserving our historic and cultural resources. We work with citizens around the state and across the country who are concerned about ensuring Wyoming's

irreplaceable historic resources exist for future generations.

<([#1 [*1.1*] [*3.9.2*] As this project goes forward, we ask that AHW be considered an interested party at every stage of this process for all consultations under Section 106 of the National Historic Preservation Act (NHPA) as amended, and implementing regulations 36 CFR 800.2(c)(5) and 800.3(f)(3). You may use the above listed address, phone number and email address to contact us as part of the Section 106 consultations. As you know, NHPA's Section 106 process recognizes that "the views of the public are essential to informed Federal decision making" and agencies are required to "seek and consider the views of the public in a manner that reflects the nature and complexity of the undertaking and its effects on historic properties, [and] the likely interest of the public in the effects on historic properties." 36 CFR § 800.2(d)(1) Likewise, the Historic Sites Act of 1935 states that: "It is a national policy to preserve for public use historic sites, buildings, and objects of national significance for their inspiration and benefit of the people of the United States." In the case of this project, we expect that interest could be especially high because of the nature of the potentially affected resources – the National Historic Trails, in particular – as well as the dramatically different nature of this potential undertaking from any that has previously been done in Wyoming. Therefore, we encourage you to reach out to the various nonprofit organizations dedicated to working on historic and prehistoric resources in this area, including the county historical societies, the certified local government organizations, TRACKS Across Wyoming, the Lincoln Highway Association and the local museums and tourism offices. Each of these groups will have valuable input to add to the Section 106 process.
#1])>
<([#2 [*1.2*] [*3.9.3*] We also want to encourage you to ensure that extensive and effective outreach be made to the affected tribes as early as possible in this process so that they might have the opportunity to do extensive on-the-ground surveys to identify landscape-wide cultural sites of importance to them. As you may be aware, it is often the case that the prehistoric and cultural features identified by SHPOs do not come close to being as inclusive as the sites identified by THPOs and tribal elders. Tribes often have not had the opportunity to do extensive ground surveys for decades or longer. Only through this kind of examination can they adequately contribute to the process of protecting their sacred sites in accordance with Executive Order 13007. We would also remind you that EO 13007 defines a "sacred site" as "any specific, discrete, narrowly delineated location" that is "identified by an Indian tribe, or **Indian individual determined to be an appropriately authoritative representative of an Indian religion**…." (emphasis added) This secondary requirement of seeking identification by authoritative Indian **individuals** places a heavy responsibility on federal agencies to cast a wide net among the affected tribes to ensure that all potential sacred sites are identified. While we understand and appreciate that this level of consultation can be time-consuming and complicated, we believe that the need to protect these irreplaceable resources makes this process more than worthwhile. **#2])>**

<([#3 [*1.1*] As a representative of the Alliance for Historic Wyoming, I did have the opportunity to speak with Sherri Thompson about this project and appreciated her sensitivity towards our concerns and her willingness to reach out and offer us additional consultation opportunities. It is clear that the BLM has taken a very cautious approach to the potential for oil shale/tar sands development and we very much appreciate this go slow attitude since none of us have ever

before dealt with an oil shale project and the technology itself remains experimental, with no proven track record of success. **#3])>**

<([#4 [*3.4.1*] Our concerns, in general, are concerns that I am sure you will hear from many others. In particular, the "dirty" nature of oil shale gives us great pause about this project. In addition, we are deeply concerned about how development of oil shale would affect the water resources in Wyoming, which I am sure you know is a high desert. Thanks to that high desert climate, we are blessed with the best remaining remnants of the historic emigrant trails – the Oregon, California, Mormon and Pony Express National Historic Trails. But the lack of water in our state is always a concern when development is proposed and with the changing climate patterns and our recent history of drought, it is doubtful that we can afford to use the quantities of water that would be necessary to make oil shale a viable commodity without seriously diminishing the water available for our communities. **#4])>**

<([#5 [*3.9.7*] Our specific cultural resource concerns center on the degradation of the historic trails and other cultural sites, including rock art and archaeology sites, which are being heavily impacted by the increasing industrialization of the I-80 corridor through southern WY. While many people look at this area and see only a heavily impacted transportation corridor, the Alliance for Historic Wyoming recognizes that this transportation corridor in fact tells the whole story of America's development into a nation "from sea to shining sea." It is along this corridor that one can experience the original historic emigrant trails, the shift in usage of the trails to a freighting operation (the Overland Trail), the connecting of the continent through the transcontinental railroad, the communications revolution that began with the Pony Express and continued with the telegraph lines, the first national roadway (the Lincoln Highway), the Eisenhower interstate road system and, more recently, the development of industrial wind energy. All of these advancements have helped to bind our nation together and southern Wyoming offers unique opportunities for interpretation and appreciation of these resources.

When you look at these areas and the historic and cultural resources in them, we strongly encourage you to take this broader view. In particular, we believe that the BLM has done a generally poor job of evaluating Wyoming's landscapes in terms of their potential for listing on the National Register of Historic Places as Rural Historic Landscapes or Traditional Cultural Properties. Very little consideration has also been given as to whether any of these areas might qualify as National Heritage Areas. Wyoming's most iconic cultural feature is its wide-open spaces. Unfortunately, however, these vistas and their importance to our communities are rarely considered by the BLM when looking at the impacts of these large-scale projects. In our experience, the Section 106 process as outlined by the National Historic Preservation Act is often incapable of addressing these concerns. The Section 106 process requires that the participants define an area of potential effect (APE) and then address the potential adverse effects within those boundaries. But when you are talking about open vistas, it is impossible to draw boundaries around the space.
#5])>
<([#6 [*4.1*] [*5*] [*3.9.1*] Additionally, we find the Section 106 approach increasingly inadequate when it comes to dealing with the National Historic Trails. The trails, by their very nature, are a single, contiguous resource that extends for hundreds of miles from their point of origin to their termination. When we are forced to confine our analyses to the impacts that occur within an

APE, we are artificially segmenting these trails and doing irreparable harm to them in the process. In our experience, the Section 106 process is simply incapable of adequately addressing these cumulative effects. As a result of this recognition, we are now requesting that a mechanism be established to provide off-site compensatory mitigation for cumulative effects through the NEPA process. This not only provides an opportunity to deal with these difficult to address cumulative effects but has the added bonus of making it possible to provide grants to organizations that, for any number of reasons, might not be able to take part in the Section 106 process, but which may well have new and innovative ideas about how to address the adverse effects. Should this project go forward, we hope that the NEPA documents will address this issue. **#6])>**

<([#7 [*3.10.4*] Our concerns about this project are not just limited to the environmental and cultural issues already addressed. We also recognize that cultural and historic resources are closely tied to recreational values and the socio-economic vitality of our small cities and towns. Wyomingites, by nature, are closely tied to their lands. We rely on our public lands for recreational opportunities. This extends very directly to the huge impact that tourism has on our state. As you may or may not know, tourism is Wyoming's second largest industry, right behind energy development. And the fastest growing sector of the tourism industry is heritage tourism. Wyoming is blessed with a robust heritage tourism sector. People come from all over the world to experience "the West" in Wyoming. They are looking not only for our open vistas but also our historic ranches, our ghost towns, our unique little museums, our abandoned railroad spurs, our isolated cemeteries, our historic trails, our rock art and tipi rings, our forts and battlefields, and our natural landmarks. If they arrive in Wyoming and do not feel transported to another time and place, if all they see around them are the signs of industrialization that they can find in any other state, they will quickly move on. To lose this source of income would be devastating to our small communities, especially. As a state, we have experienced and absorbed and survived untold cycles of the boom and bust energy economy. What brings us through is our pristine landscapes and cultural assets which bring in the tourists with their tourism dollars. If energy booms are allowed to wipe out those assets, it is highly uncertain how we would weather the bust.

Google some of our smaller towns along the I-80 corridor and you will see why we are concerned about giving the wandering heritage tourist the impression that there is little to see or do that cannot be found in a more densely populated and developed location. Take Superior, WY, for example. The website they maintain <superiorwyoming.net> explains their allure this way:

We invite you to enjoy a modern day voyage into yesteryear to a town forgotten by time. Superior remains a diamond in the rough for those seeking real adventure in authentic old west sightseeing. In its heyday, Superior was a bustling town of over 3,000, lured by underground coal mines. Today, only 336 hearty souls keep this isolated "Ghost Town" alive.

This is precisely the kind of description that calls the heritage tourist away from the interstate and invites them to explore. But if they are already discouraged by what they have seen while driving, they are likely to pass Superior by. Nearby Reliance, WY, depends on its historic tipple to create the same kind of draw. Built in 1936, the tipple was touted as being "the most modern all-steel tipple in the Union Pacific Coal Company's extensive coal holdings" with "a capacity of

500 tons of coal per hour." Without the heritage tourists who stop to learn about a tipple, Reliance would certainly suffer. I would encourage you to visit the TRACKS Across Wyoming <tracksacrosswyoming.com> website and see all the fascinating little pieces of history that continue to thrive because heritage tourism is alive and well along the I-80 corridor. No NEPA analysis would be complete or adequate for energy development in this area if it doesn't thoroughly examine the impacts such a project, especially a "dirty energy" project, would have on recreational tourism and the resulting potential for socio-economic loss.
#7])>
<([#8 [*3.9.5*] As I am sure you know, Congress declared in NHPA that "the historical and cultural foundations of the Nation should be preserved as a living part of our community life and development in order to give a sense of orientation to the American people; [and] the preservation of this irreplaceable heritage is in the public interest so that its vital legacy of cultural, educational, aesthetic, inspirational, economic, and energy benefits will be maintained and enriched for future generations of Americans." 16 U.S.C. 470(b)(2) and (b)(4) Moreover, NHPA states that: "It shall be the policy of the Federal Government...to foster conditions under which our modern society and our prehistoric and historic resources can exist in productive harmony and fulfill the social, economic, and other requirements of present and future generations; [and] encourage the public and private preservation and utilization of all usable elements of the Nation's historic built environment." 16 U.S.C. 470-1 (1) and (5) These findings place a high burden on our country's land management agencies to ensure that all possible steps be taken to ensure the protection of our historic and cultural resources for future generations. AHW believes that no NEPA analysis can be complete or adequate if it doesn't thoroughly examine the impacts that the proposed project, especially if it is a "dirty energy" project, would have on recreational opportunities, including the ability and desire to wander and discover the nation's historic roots, heritage tourism and the potential socio-economic loss if such opportunities are sacrificed.
#8])>
Thank you for your consideration of these comments. Should you have any questions about our concerns, please feel free to contact us. AHW looks forward to working with you as this project proceeds.
Sincerely,

Lesley Wischmann
Founding Board Member
Alliance for Historic Wyoming

OSTS2012D50126
Organization: Gabe Atiya
Received: 4/24/2012 6:10:14 PM
Commenter1: Gabe Atiya - salt lake city, Utah 84102 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:

Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/1/2012 12:00:00 AM
Attachments: OSTS2012D50126.htm (OSTS2012D50126-58562.htm Size = 1 KB)
Submission Text
<([#1 [*2.3.1*] I am writing to urge caution in moving forward with oil shale and tar sand development. Although I am tentatively in favor of almost all ways to improve and expand Utah's economy, I am concerned that this form of development is not the best way to use our lands and resources, nor the best way to improve the lives of our native citizens economically or otherwise. Although I am not an expert, cursory research suggests oil shale and tar sand development dubious propositions, which require a large quantity of water in an already dry region, and that long term environmental costs may not be worth the relatively short term benefits. I would favor continued research and development to immediately opening up lands for commercial exploitation. Contributing to my skepticism is also the unconvincing and overzealous rhetoric of the "drill baby drill" faction, who have yet to impress or sway me to their side. Until I can be given convincing evidence that this is a good idea, I certainly perceive the negatives to outweigh the positives of opening up vast scales of land to commercial shale and tar development. **#1])>**

OSTS2012D50127
Organization: Douglas McAndrews
Received: 4/24/2012 7:00:41 PM
Commenter1: Douglas McAndrews - , Colorado 80610 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/25/2012 12:00:00 AM
Attachments: OSTS2012D50127.htm (OSTS2012D50127-58564.htm Size = 1 KB)
Submission Text
<([#1 [*11.2*] Oil shale development must proceed responsibly. Of course it's a messy process, but harvesting anything is. Please proceed to allow responsible oil shale development. **#1])>**
Thank you!

OSTS2012D50128
Organization: Lakewood Fracktivists, Eleanor Jefferson
Received: 4/24/2012 7:27:23 PM
Commenter1: Eleanor Jefferson - Lakewood, Colorado 80226 (United States)
Organization1: Lakewood Fracktivists
Commenter Type: Affiliation Only
Classification:
Submission Category: Standard Web Form

Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/2/2012 12:00:00 AM
Attachments: OSTS2012D50128.htm (OSTS2012D50128-58566.htm Size = 2 KB)
Submission Text
To: BLM RE: Proposed Oil and Gas Leases **<([#1** [*3*] I am not a a geologist or scientist and I have never considered myself an environmentalist. Never the less, a few things have become painfully obvious to me. The current state of oil and gas exploration and the State of Colorado, are no longer a good match.I was recently in Paonia, visiting a friend, and attended a meeting at the local high school, down the road in Hotchkiss.What was presented at that meeting was so disturbing, I will never forget it.Towns large and small, across the country, have been so adversely effected by the practice of fracking, they will never recover. Air pollution compared to that of Los Angeles, tap water not only undrinkable,but flammable and livestock and wildlife dying in the fields and on the banks of streams and rivers.Grasslands once productive, now laid waste. The organic farming community in the North Fork Valley is facing extinction secondary to the proposed leasing of 30,00 acres of BLM, otherwise known as public lands, on the edge of fruit orchids and vegetable farms. The town of Erie, only 40 miles north of Denver, as the winds blow, facing air pollution so severe that the NOAA (Boulder) report, requested by that community, could not soften the facts in front of their City Council on 2/21/12. Rifle, and its environs a total gasland. Scenic beauty gone and air that made me cough even as we stopped to briefly stretch our legs.Have we learned nothing from N.Y.,Penn.,Ohio and Wy. to mention a few?Rural residents there, in need of money, and unaware that there could be any secondary effects from fracking, have learned a disheartening lesson for us all. Plagued by respiratory aliments, reproductive changes and neurologic symptoms, including previously healthy children suffering the effects of Asthma, have found no redress from the drilling companies or from the state government sworn to protect their welfare. Is this the fate we want for Colorado? **#1])>** **<([#2** [*12*] The EPA is currently undertaking an extensive study of fracking. At the very least, there should be a moratorium on all drilling and all leases to drill, until this study is made public in 2014. Only than, can an informed public decide the fate of the State of Colorado and its citizens. **#2])>** Respectfully, Eleanor J. Jefferson, Lakewood,CO.

OSTS2012D50129
Organization:
Received: 4/25/2012 6:22:27 AM
Commenter1: - , (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: 035a_Campaign
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/25/2012 12:00:00 AM
Attachments: OSTS2012D50129.htm (OSTS2012D50129-58568.htm Size = 2 KB)
Submission Text
<([#1 [*3*] I am deeply concerned about the potential effects to our water, wildlife, communities

and public lands if the BLM initiates a commercial oil shale leasing program. The two million acres in UT, WY and CO previously allocated for commercial leasing is a massive amount of public, taxpayer land that would be sacrificed for a singular use of the landscape. **#1])> <([#2** [*2.2*] [*12.3*] While the preferred alternative (Alternative 2) is a step in the right direction, BLM should consider an alternative that does not endorse giveaways of public lands to this unproven industry. **#2])> <([#3** [*3*] Oil shale is currently producing no jobs and no revenue. The Congressional Budget Office confirmed that it is not expected to produce significant revenues through 2022. This means we have time to thoroughly assess the impacts of development to our water, wildlife and communities, and should not rush now to give away public lands. **#3])> <([#4** [*3.10.3*] The land overlying oil shale resources in Utah, Colorado and Wyoming is some of the best wildlife habitat in the West. Outdoor recreation and tourism are huge economic drivers that depend on this habitat. The farming and ranching sectors require reliable access to water resources, which may be depleted by extensive commercial oil shale development. We must protect these jobs by making smart decisions about how we allow oil companies to move forward with oil shale speculation. **#4])> <([#5** [*3*] I recommend that you carefully consider the serious impacts of oil shale production to our wildlife, water, air, and communities as you take another look at oil shale development. **#5])>**

OSTS2012D50130

Organization:
Received: 4/25/2012 7:00:32 AM
Commenter1: - , (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: 035a_Campaign
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/25/2012 12:00:00 AM
Attachments: OSTS2012D50130.htm (OSTS2012D50130-58570.htm Size = 2 KB)

Submission Text

<([#1 [*3*] I am deeply concerned about the potential effects to our water, wildlife, communities and public lands if the BLM initiates a commercial oil shale leasing program. The two million acres in UT, WY and CO previously allocated for commercial leasing is a massive amount of public, taxpayer land that would be sacrificed for a singular use of the landscape. **#1])> <([#2** [*2.2*] [*12.3*] While the preferred alternative (Alternative 2) is a step in the right direction, BLM should consider an alternative that does not endorse giveaways of public lands to this unproven industry. **#2])> <([#3** [*3*] Oil shale is currently producing no jobs and no revenue. The Congressional Budget Office confirmed that it is not expected to produce significant revenues through 2022. This means we have time to thoroughly assess the impacts of development to our water, wildlife and communities, and should not rush now to give away public lands. **#3])> <([#4** [*3.10.3*] The land overlying oil shale resources in Utah, Colorado and Wyoming is some of the best wildlife habitat in the West. Outdoor recreation and tourism are huge economic drivers that depend on this habitat. The farming and ranching sectors require reliable access to water resources, which may be depleted by extensive commercial oil shale development. We must protect these jobs by making smart decisions about how we allow oil companies to move

forward with oil shale speculation. **#4])> <([#5** [*3*] I recommend that you carefully consider the serious impacts of oil shale production to our wildlife, water, air, and communities as you take another look at oil shale development. **#5])>**

OSTS2012D50131

Organization:
Received: 4/25/2012 7:13:06 AM
Commenter1: - , (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: 035a_Campaign
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/25/2012 12:00:00 AM
Attachments: OSTS2012D50131.htm (OSTS2012D50131-58572.htm Size = 2 KB)
Submission Text
<([#1 [*3*] I am deeply concerned about the potential effects to our water, wildlife, communities and public lands if the BLM initiates a commercial oil shale leasing program. The two million acres in UT, WY and CO previously allocated for commercial leasing is a massive amount of public, taxpayer land that would be sacrificed for a singular use of the landscape. **#1])> <([#2** [*2.2*] [*12.3*] While the preferred alternative (Alternative 2) is a step in the right direction, BLM should consider an alternative that does not endorse giveaways of public lands to this unproven industry. **#2])> <([#3** [*3*] Oil shale is currently producing no jobs and no revenue. The Congressional Budget Office confirmed that it is not expected to produce significant revenues through 2022. This means we have time to thoroughly assess the impacts of development to our water, wildlife and communities, and should not rush now to give away public lands. **#3])> <([#4** [*3.10.3*] The land overlying oil shale resources in Utah, Colorado and Wyoming is some of the best wildlife habitat in the West. Outdoor recreation and tourism are huge economic drivers that depend on this habitat. The farming and ranching sectors require reliable access to water resources, which may be depleted by extensive commercial oil shale development. We must protect these jobs by making smart decisions about how we allow oil companies to move forward with oil shale speculation. **#4])> <([#5** [*3*] I recommend that you carefully consider the serious impacts of oil shale production to our wildlife, water, air, and communities as you take another look at oil shale development. **#5])>**

OSTS2012D50132

Organization: April Wharram
Received: 4/25/2012 7:45:32 AM
Commenter1: April Wharram - Hightstown , New Jersey 08520 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: 035a_Campaign
Submitted As: Web Form
Form Letter Category:

Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/25/2012 12:00:00 AM
Attachments: OSTS2012D50132.htm (OSTS2012D50132-58574.htm Size = 2 KB)
Submission Text
<([#1 [*3*] I am deeply concerned about the potential effects to our water, wildlife, communities and public lands if the BLM initiates a commercial oil shale leasing program. The two million acres in UT, WY and CO previously allocated for commercial leasing is a massive amount of public, taxpayer land that would be sacrificed for a singular use of the landscape. **#1])> <([#2** [*2*] [*12.3*] While the preferred alternative (Alternative 2) is a step in the right direction, BLM should consider an alternative that does not endorse giveaways of public lands to this unproven industry. **#2])> <([#3** [*3*] Oil shale is currently producing no jobs and no revenue. The Congressional Budget Office confirmed that it is not expected to produce significant revenues through 2022. This means we have time to thoroughly assess the impacts of development to our water, wildlife and communities, and should not rush now to give away public lands. **#3])> <([#4** [*3.10.3*] The land overlying oil shale resources in Utah, Colorado and Wyoming is some of the best wildlife habitat in the West. Outdoor recreation and tourism are huge economic drivers that depend on this habitat. The farming and ranching sectors require reliable access to water resources, which may be depleted by extensive commercial oil shale development. We must protect these jobs by making smart decisions about how we allow oil companies to move forward with oil shale speculation. **#4])> <([#5** [*3*] I recommend that you carefully consider the serious impacts of oil shale production to our wildlife, water, air, and communities as you take another look at oil shale development. **#5])>**

OSTS2012D50133
Organization: Gregory Behm
Received: 4/25/2012 8:24:24 AM
Commenter1: Gregory Behm - , Colorado 80526 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: 035a_Campaign
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/25/2012 12:00:00 AM
Attachments: OSTS2012D50133.htm (OSTS2012D50133-58576.htm Size = 2 KB)
Submission Text
<([#1 [*3*] I am concerned about the effects to water, wildlife, communities and public lands if the BLM initiates a commercial oil shale leasing program. The two million acres in UT, WY and CO previously allocated for commercial leasing is a massive amount of public, taxpayer land that would be sacrificed for a singular use of the landscape. **#1])> <([#2** [*2.2*] [*12.3*] While the preferred alternative (Alternative 2) is a step in the right direction, BLM should consider an alternative that does not give away public lands to this unproven industry. **#2])> <([#3** [*3*] Oil shale is currently producing no jobs and no revenue. The Congressional Budget Office confirmed that it is not expected to produce significant revenues through 2022. This means we have time to thoroughly assess the impacts of development to our water, wildlife and communities, and should not rush now to give away public lands. **#3])> <([#4** [*3.10.3*] The land overlying oil shale

resources in Utah, Colorado and Wyoming is some of the best wildlife habitat in the West. Outdoor recreation and tourism are huge economic drivers that depend on this habitat. The farming and ranching sectors require reliable access to water resources, which may be depleted by extensive commercial oil shale development. We must protect these jobs by making smart decisions about how we allow oil companies to move forward with oil shale speculation. **#4])>** **<([#5** [*3*] I recommend that you carefully consider the serious impacts of oil shale production to our wildlife, water, air, and communities as you take another look at oil shale development. **#5])>**

OSTS2012D50134

Organization: Leslie Ford
Received: 4/25/2012 8:49:41 AM
Commenter1: Leslie Ford - , Rhode Island (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: 035a_Campaign
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/25/2012 12:00:00 AM
Attachments: OSTS2012D50134.htm (OSTS2012D50134-58578.htm Size = 2 KB)
Submission Text

<([#1 [*3*] I am deeply concerned about the potential effects to our water, wildlife, communities and public lands if the BLM initiates a commercial oil shale leasing program. The two million acres in UT, WY and CO previously allocated for commercial leasing is a massive amount of public, taxpayer land that would be sacrificed for a singular use of the landscape. **#1])> <([#2** [*2.2*] [*12.3*] While the preferred alternative (Alternative 2) is a step in the right direction, BLM should consider an alternative that does not endorse giveaways of public lands to this unproven industry. **#2])> <([#3** [*3*] Oil shale is currently producing no jobs and no revenue. The Congressional Budget Office confirmed that it is not expected to produce significant revenues through 2022. This means we have time to thoroughly assess the impacts of development to our water, wildlife and communities, and should not rush now to give away public lands. **#3])> <([#4** [*3.10.3*] The land overlying oil shale resources in Utah, Colorado and Wyoming is some of the best wildlife habitat in the West. Outdoor recreation and tourism are huge economic drivers that depend on this habitat. The farming and ranching sectors require reliable access to water resources, which may be depleted by extensive commercial oil shale development. We must protect these jobs by making smart decisions about how we allow oil companies to move forward with oil shale speculation. **#4])> <([#5** [*3*] I recommend that you carefully consider the serious impacts of oil shale production to our wildlife, water, air, and communities as you take another look at oil shale development. **#5])>**

OSTS2012D50135

Organization: Sam Todd
Received: 4/25/2012 8:57:46 AM
Commenter1: Sam Todd - , Colorado (United States)
Organization1:

Commenter Type: Member of the Public
Classification:
Submission Category: 035a_Campaign
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/25/2012 12:00:00 AM
Attachments: OSTS2012D50135.htm (OSTS2012D50135-58580.htm Size = 2 KB)
Submission Text
<([#1 [*3*] I am deeply concerned about the potential effects to our water, wildlife, communities and public lands if the BLM initiates a commercial oil shale leasing program. The two million acres in UT, WY and CO previously allocated for commercial leasing is a massive amount of public, taxpayer land that would be sacrificed for a singular use of the landscape. **#1])> <([#2** [*2.2*] [*12.3*] While the preferred alternative (Alternative 2) is a step in the right direction, BLM should consider an alternative that does not endorse giveaways of public lands to this unproven industry. **#2])> <([#3** [*3*] Oil shale is currently producing no jobs and no revenue. The Congressional Budget Office confirmed that it is not expected to produce significant revenues through 2022. This means we have time to thoroughly assess the impacts of development to our water, wildlife and communities, and should not rush now to give away public lands. **#3])> <([#4** [*3.10.3*] The land overlying oil shale resources in Utah, Colorado and Wyoming is some of the best wildlife habitat in the West. Outdoor recreation and tourism are huge economic drivers that depend on this habitat. The farming and ranching sectors require reliable access to water resources, which may be depleted by extensive commercial oil shale development. We must protect these jobs by making smart decisions about how we allow oil companies to move forward with oil shale speculation. **#4])> <([#5** [*3*] I recommend that you carefully consider the serious impacts of oil shale production to our wildlife, water, air, and communities as you take another look at oil shale development. **#5])>**

OSTS2012D50136
Organization: Hazel McCoy
Received: 4/25/2012 8:58:33 AM
Commenter1: Hazel McCoy - , Colorado (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: 035a_Campaign
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/25/2012 12:00:00 AM
Attachments: OSTS2012D50136.htm (OSTS2012D50136-58582.htm Size = 2 KB)
Submission Text
<([#1 [*3*] I am deeply concerned about the potential effects to our water, wildlife, communities and public lands if the BLM initiates a commercial oil shale leasing program. The two million acres in UT, WY and CO previously allocated for commercial leasing is a massive amount of public, taxpayer land that would be sacrificed for a singular use of the landscape. **#1])> <([#2** [*2.2*] [*12.3*] While the preferred alternative (Alternative 2) is a step in the right direction, BLM

should consider an alternative that does not endorse giveaways of public lands to this unproven industry. **#2])> <([#3** [*3*] Oil shale is currently producing no jobs and no revenue. The Congressional Budget Office confirmed that it is not expected to produce significant revenues through 2022. This means we have time to thoroughly assess the impacts of development to our water, wildlife and communities, and should not rush now to give away public lands. **#3])> <([#4** [*3.10.3*] The land overlying oil shale resources in Utah, Colorado and Wyoming is some of the best wildlife habitat in the West. Outdoor recreation and tourism are huge economic drivers that depend on this habitat. The farming and ranching sectors require reliable access to water resources, which may be depleted by extensive commercial oil shale development. We must protect these jobs by making smart decisions about how we allow oil companies to move forward with oil shale speculation. **#4])> <([#5** [*3*] I recommend that you carefully consider the serious impacts of oil shale production to our wildlife, water, air, and communities as you take another look at oil shale development. **#5])>**

OSTS2012D50137

Organization:
Received: 4/25/2012 9:07:18 AM
Commenter1: - , (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: 035a_Campaign
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/25/2012 12:00:00 AM
Attachments: OSTS2012D50137.htm (OSTS2012D50137-58584.htm Size = 2 KB)

Submission Text

Dear Bureau of Land Management, **<([#1** [*3*] I am deeply concerned about the potential effects to our water, wildlife, communities and public lands if the BLM initiates a commercial oil shale leasing program. The two million acres in UT, WY and CO previously allocated for commercial leasing is a massive amount of public, taxpayer land that would be sacrificed for a singular use of the landscape. **#1])> <([#2** [*2.2*] [*12.3*] While the preferred alternative (Alternative 2) is a step in the right direction, BLM should consider an alternative that does not endorse giveaways of public lands to this unproven industry. **#2])> <([#3** [*3*] Oil shale is currently producing no jobs and no revenue. The Congressional Budget Office confirmed that it is not expected to produce significant revenues through 2022. This means we have time to thoroughly assess the impacts of development to our water, wildlife and communities, and should not rush now to give away public lands. **#3])> <([#4** [*3.10.3*] The land overlying oil shale resources in Utah, Colorado and Wyoming is some of the best wildlife habitat in the West. Outdoor recreation and tourism are huge economic drivers that depend on this habitat. The farming and ranching sectors require reliable access to water resources, which may be depleted by extensive commercial oil shale development. We must protect these jobs by making smart decisions about how we allow oil companies to move forward with oil shale speculation. **#4])> <([#5** [*3*] I recommend that you carefully consider the serious impacts of oil shale production to our wildlife, water, air, and communities as you take another look at oil shale development. **#5])>** Sincerely, Heidi

OSTS2012D50138

Organization: Sonya Walters
Received: 4/25/2012 9:54:32 AM
Commenter1: Sonya Walters - San Rafael, California 94915 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: 035a_Campaign
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/25/2012 12:00:00 AM
Attachments: OSTS2012D50138.htm (OSTS2012D50138-58586.htm Size = 2 KB)
Submission Text

<([#1 [*3*] I am deeply concerned about the potential effects to our water, wildlife, communities and public lands if the BLM initiates a commercial oil shale leasing program. The two million acres in UT, WY and CO previously allocated for commercial leasing is a massive amount of public, taxpayer land that would be sacrificed for a singular use of the landscape. **#1])> <([#2** [*2.2*] [*12.3*] While the preferred alternative (Alternative 2) is a step in the right direction, BLM should consider an alternative that does not endorse giveaways of public lands to this unproven industry. **#2])> <([#3** [*3*] Oil shale is currently producing no jobs and no revenue. The Congressional Budget Office confirmed that it is not expected to produce significant revenues through 2022. This means we have time to thoroughly assess the impacts of development to our water, wildlife and communities, and should not rush now to give away public lands. **#3])> <([#4** [*3.10.3*] The land overlying oil shale resources in Utah, Colorado and Wyoming is some of the best wildlife habitat in the West. Outdoor recreation and tourism are huge economic drivers that depend on this habitat. The farming and ranching sectors require reliable access to water resources, which may be depleted by extensive commercial oil shale development. We must protect these jobs by making smart decisions about how we allow oil companies to move forward with oil shale speculation. **#4])> <([#5** [*3*] I recommend that you carefully consider the serious impacts of oil shale production to our wildlife, water, air, and communities as you take another look at oil shale development. **#5])>**

OSTS2012D50139

Organization: Angela Davis
Received: 4/25/2012 10:09:49 AM
Commenter1: Angela Davis - Sonoma, California 95476 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: 035a_Campaign_Plus
Submitted As: Web Form
Form Letter Category: Form Letter plus Text
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/25/2012 12:00:00 AM
Attachments: OSTS2012D50139.htm (OSTS2012D50139-58588.htm Size = 2 KB)
Submission Text

<([#1 [*12*] There are very few wilderness places left in the US with such beauty resonant with wildlife and and expansiveness. Some things should just be left alone....and this is one area. The land belongs to all of us, not the government, not commercial enterprises of this world.....but the people who share this land. To turn this land over to be pillaged is poor stewardship and has great potential to affect other necessary and natural resources of more value than oil.....water, not to mention the habitat that lives there and the millions of people who enjoy the wilderness. Please (if that word means anything to you) don't do this. I am part Native American Indian and watch, with deep sadness, the exploitation and raping of our land. Haven't we done enough? **#1])> <([#2** [*3*] I am deeply concerned about the potential effects to our water, wildlife, communities and public lands if the BLM initiates a commercial oil shale leasing program. The two million acres in UT, WY and CO previously allocated for commercial leasing is a massive amount of public, taxpayer land that would be sacrificed for a singular use of the landscape. **#2])> <([#3** [*2.2*] [*12.3*] While the preferred alternative (Alternative 2) is a step in the right direction, BLM should consider an alternative that does not endorse giveaways of public lands to this unproven industry. **#3])> <([#4** [*3*] Oil shale is currently producing no jobs and no revenue. The Congressional Budget Office confirmed that it is not expected to produce significant revenues through 2022. This means we have time to thoroughly assess the impacts of development to our water, wildlife and communities, and should not rush now to give away public lands. **#4])> <([#5** [*3.10.3*] The land overlying oil shale resources in Utah, Colorado and Wyoming is some of the best wildlife habitat in the West. Outdoor recreation and tourism are huge economic drivers that depend on this habitat. The farming and ranching sectors require reliable access to water resources, which may be depleted by extensive commercial oil shale development. We must protect these jobs by making smart decisions about how we allow oil companies to move forward with oil shale speculation. **#5])> <([#6** [*3*] I recommend that you carefully consider the serious impacts of oil shale production to our wildlife, water, air, and communities as you take another look at oil shale development.
#6])>

OSTS2012D50140
Organization: R C.
Received: 4/25/2012 10:34:20 AM
Commenter1: R C. - , Oregon 97520 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 4/25/2012 12:00:00 AM
Attachments: OSTS2012D50140.htm (OSTS2012D50140-58590.htm Size = 1 KB)
Submission Text
<([#1 [*12*] BLM, U.S. citizens trust you to make wise decisions, and to protect our land. Please do so in rejecting any mining, drilling for oil, fracking....any processes that would endanger, or destroy the health of our forests, of the land, lakes, streams, or wildlife. Remember, it is the peoples land...not the corporations, or those looking to profit at any cost to the environment, to the land, to wildlife. **#1])>** Sincerely, Rosina Cretney

OSTS2012D50141

Organization:
Received: 4/25/2012 10:42:04 AM
Commenter1: - , (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/18/2012 12:00:00 AM
Attachments: OSTS2012D50141.htm (OSTS2012D50141-58599.htm Size = 1 KB)
Submission Text
<([#1 [*12*] I thought the title of this organization spoke for itself. SHOW RESPECT for the land and all that live upon it. We should NOT pander to big oil or other large corporations. Do not sell the land out -- protect it. **#1])>**

OSTS2012D50142

Organization: Renee Reinhardt
Received: 4/25/2012 12:05:58 PM
Commenter1: Renee Reinhardt - Kalama, Washington 98625 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/18/2012 12:00:00 AM
Attachments: OSTS2012D50142.htm (OSTS2012D50142-58601.htm Size = 2 KB)
Submission Text
Dear Bureau of Land Management,
<([#1 [*3*] I am deeply concerned about the potential effects to our water, wildlife, communities and public lands if the BLM initiates a commercial oil shale leasing program. The two million acres in UT, WY and CO previously allocated for commercial leasing is a massive amount of public, taxpayer land that would be sacrificed for a singular use of the landscape. While the preferred alternative (Alternative 2) is a step in the right direction, BLM should consider an alternative that does not endorse giveaways of public lands to this unproven industry. **#1])>**
<([#2 [*3.10.3*] [*3.10.5*] Oil shale is currently producing no jobs and no revenue. The Congressional Budget Office confirmed that it is not expected to produce significant revenues through 2022. This means we have time to thoroughly assess the impacts of development to our water, wildlife and communities, and should not rush now to give away public lands. The land overlying oil shale resources in Utah, Colorado and Wyoming is some of the best wildlife habitat in the West. Outdoor recreation and tourism are huge economic drivers that depend on this habitat. The farming and ranching sectors require reliable access to water resources, which may be depleted by extensive commercial oil shale development. We must protect these jobs by

making smart decisions about how we allow oil companies to move forward with oil shale speculation. I recommend that you carefully consider the serious impacts of oil shale production to our wildlife, water, air, and communities as you take another look at oil shale development. **#2])>**

OSTS2012D50143
Organization: David Larsen
Received: 4/25/2012 12:10:07 PM
Commenter1: David Larsen - Layton, Utah 84040 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/18/2012 12:00:00 AM
Attachments: OSTS2012D50143.htm (OSTS2012D50143-58603.htm Size = 3 KB)
Submission Text
To Whom It may Concern,
I have seevral concerns about use of public lands for oil production from tar sands and oil shale. The concerns are expressed below.
<([#1 [*9.3*] 1) Modify the information on page 1-6 and justify the statement that oil production is "mature." Oil shale and tar sands oil has never been produced in these areas. NEPA before leaseing is needed. **#1])>**
<([#2 [*10.5*] 2) How much will the US taxpayer get for the leases? The lands should not be given away. Roylaties should be at least as high if not higher than for conventional. The US taxpayer should get at least 16%. The information about leasing and royalties on page 1-2 should be clarified. **#2])>**
<([#3 [*3.4.1*] 3)How will tar and shale oil development impact existing oil and other activies and water use in the Pariette area as shown in Figure 1.2-2. Newfield Oil is already using a significant amount of water for a water flood project in this area? Change page 1-10 as needed. **#3])>**
<([#4 [*3.1.1*] 4) Tar sand and oil shale should be off the table in areas adjacent to national parks and monuments. The reasons seem obvious (recreation, encrouchment, air pollution and water pollution, wildlife wandering etc.). **#4])>**
<([#5 [*3.5.7*] 5) Text indicates climate is a factor.. As you know the Uintah Basin is already a non-attainment area for air quality. It seems oil and tar oil development will make things worse. **#5])>**
<([#6 [*3.5.1.1*] 6) Text indicates climate change is not considered. The impacts to climate change from development of tar sands are well known, with very large amounts of C02 beign emitted. The same will be true of oil shale - if not worse. Climate change is a valid issue to consider in terms of this document and in terms of future water availability and should be added as an item to consider in planning land use. The Nasa climate scientist James Hansen has said full development of the tar sands would mean it was "game over" for the climate. **#6])>**
<([#7 [*3*] 7) Modify the text and add a section that descibes the environmental impacts from tar sands prodcution in Canada. This has lead to a very large environemntal problems and the same

problems would occur as a result of these activities in Utah, Wyo and Colorado. **#7])>**
<([#8 [*3.9.7*] 8) The beautiful lands on the south side of the Uintahs near Whiterocks will be highly impacted if tar sand is producded here. There are likely lots of archeoogical indian sites in this and other areas proposed for leasing or use that have not been idenified. How will these areas be protected?
#8])>
<([#9 [*3.3.1*] 9) Have all important fossil localities been identified in the proposed areas? **#9])>**
<([#10 [*3.10.3*] 10) Will the EU and other foreign governmens buy tar and shale oil? How will this impact production? It seems that production of oil from tar and shale will be a big gain for a few and huge loss for many Americans. It will also lead to large environmental problems and consume large amounts of water in the very dry (and getting drier) west. **#10])>**
Dave Larsen

OSTS2012D50144
Organization: Routt County, Douglas Monger
Received: 4/25/2012 12:41:00 PM
Commenter1: Douglas Monger - Steamboat Springs, Colorado 80477 (United States)
Organization1: Routt County
Commenter Type: Local Government
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/24/2012 12:00:00 AM
Attachments: OSTS2012D50144.htm (OSTS2012D50144-58636.htm Size = 1 KB)
2012_Oil_Shale_and_Tar_Sands_PEIS_-_Comments_OSTS2012D50144.pdf (OSTS2012D50144-58635.pdf Size = 91 KB)
Submission Text
See Attachment.

The Routt County Commissioners greatly appreciates the Department of the Interior, Bureau of Land Management's review of past decisions regarding oil shale leasing and development and offers the following comments:

<([#1 [*3.10.3*] Routt County, Colorado is a neighboring county of the oil-shale rich Roan Plateau in the Piceance Basin. When commercial development of oil shale occurs, our region will again be the likely epicenter of oil shale development as it was in the late 1970s and early 1980s.

In recent years our region was heavily impacted by natural gas exploration and production occurring in nearby private and public lands. Natural gas development brought siguificant growth to our region and placed considerable demands upon municipal infrastructure, resulted in a shortage of affordable housing and essential community workforce, caused material and labor costs to skyrocket and strained social services and law enforcement capacities. Full-blown commercial development of oil shale may have similar impacts to our region.

Although we are supportive of the current Oil Shale research and development activities, given oil shale's history in our region, the Routt County Commissioners want to ensure that we understand the impacts that may result from commercial production and from each company's technologies on our region. Such questions as: What will development mean for our economy- both positive and negative aspects? **#1])> <([#2** [*3.4.1*] How much water will be used, for what, and how will local watersheds
be affected? **#2])> <([#3** [*3.10.2*] How will our infrastructure, community services and facilities be
impacted, including roads, water, sewer, housing, law enforcement, etc.? **#3])> <([#4** [*6.2.1*] How
will production activities be powered? **#4])> <([#5** [*3*] How will the environment and wildlife be affected? **#5])> <([#6** [*3.1.2*] What will be the impacts relating to hunting, fishing and recreation in
the oil shale development areas? Often we hear anecdotal responses to these questions, but like the industry, we need factual data on which to base our planning and infrastructure investment decisions. **#6])>**

<([#7 [*3.10.2*] We want to ensure that communities expected to be impacted by commercial development of oil shale have the appropriate and necessary financial resources to address and cope with the effects of production. Our region has learned from past energy development "booms" that investment in community services, facilities, and infrastructure is needed many years in advance of commercial production and the associated tax revenue. Additionally, as governmental entities in Colorado have experienced increasing energy impacts in recent years, energy tax revenues that have historically flowed to local governments to respond to energy development impacts have been usurped by the State Legislature to balance their budget in this down economy.

Routt County strongly supports action by the federal government to develop an oil shale cumulative community impacts study for the anticipated commercial production regions and dedicate funding to address the identified local impacts prior to approval of commercial production. Additionally, the federal government should develop an incentive program for oil shale companies to provide meaningful up-front and on-going investment in local communities and to local governments directly affected by oil shale development and production.
#7])> <([#8 [*2*] Instead of selecting one of the alternatives put forward by BLM, the Routt County
Commissioners request that whatever alternative selected requires R&D first. Additionally, we implore Secretary Salazar, BLM officials and our Congressmen and Senators to address the above mentioned issues through the federal regulatory or legislative processes to ensure that our region is prepared and will have the necessary assistance in place prior to the commercial development of oil shale. **#8])>**

OSTS2012D50145

Organization:
Received: 4/25/2012 12:59:52 PM
Commenter1: - , (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/1/2012 12:00:00 AM
Attachments: OSTS2012D50145.htm (OSTS2012D50145-58605.htm Size = 1 KB)
Submission Text
<([#1 [*2.1.1*] We vote for alternative 1-allow commercial leases. You have enough rules and guidelines in place to assure protection of the environment, and to insure renewing the landscape. You can close off specific areas for protection. **#1])>**

OSTS2012D50146
Organization: Cynthia Cannon
Received: 4/25/2012 1:01:12 PM
Commenter1: Cynthia Cannon - , (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: 035a_Campaign
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/1/2012 12:00:00 AM
Attachments: OSTS2012D50146.htm (OSTS2012D50146-58607.htm Size = 2 KB)
Submission Text
<([#1 [*3*] I am deeply concerned about the potential effects to our water, wildlife, communities and public lands if the BLM initiates a commercial oil shale leasing program. The two million acres in UT, WY and CO previously allocated for commercial leasing is a massive amount of public, taxpayer land that would be sacrificed for a singular use of the landscape. **#1])> <([#2** [*2.2*] [*12.3*] While the preferred alternative (Alternative 2) is a step in the right direction, BLM should consider an alternative that does not endorse giveaways of public lands to this unproven industry. **#2])> <([#3** [*3*] Oil shale is currently producing no jobs and no revenue. The Congressional Budget Office confirmed that it is not expected to produce significant revenues through 2022. This means we have time to thoroughly assess the impacts of development to our water, wildlife and communities, and should not rush now to give away public lands. **#3])> <([#4** [*3.10.3*] The land overlying oil shale resources in Utah, Colorado and Wyoming is some of the best wildlife habitat in the West. Outdoor recreation and tourism are huge economic drivers that depend on this habitat. The farming and ranching sectors require reliable access to water resources, which may be depleted by extensive commercial oil shale development. We must protect these jobs by making smart decisions about how we allow oil companies to move forward with oil shale speculation. **#4])> <([#5** [*3*] I recommend that you carefully consider the

serious impacts of oil shale production to our wildlife, water, air, and communities as you take another look at oil shale development. **#5])>** Thank you.

OSTS2012D50147
Organization: Pitkin County, Michael Owsley
Received: 4/25/2012 4:33:56 PM
Commenter1: Michael Owsley - Aspen, Colorado 81611 (United States)
Organization1: Pitkin County
Commenter Type: Local Government
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form and Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/1/2012 12:00:00 AM
Attachments: OSTS2012D50147.htm (OSTS2012D50147-58628.htm Size = 1 KB)
BLM_Tar_Sands_4.25.12_OSTS2012D50147.pdf (OSTS2012D50147-58627.pdf Size = 694 KB)
Submission Text
Attached is a letter from the Pitkin County Board of Commissioners. See Attachment.

@//) (~~ --------~--~---·---,~--~ •
BOARD OF COUNTY COMMISSIONERS
April 25, 2012
Sherri Thompson
Oil Shale/Tar Sands PEIS Project Manager
Bureau of Land Management
Colorado State Office
2850 Youngfield Street
Lakewood, CO 80215
To Whom it May Concern,
530 E. Main Street, 3rd FlOor
Aspen, Colorado 8 1 6 11
phone (970) 920-5200
fox (970) 920-5198
<([#1 [*2.3.1*] Thank you for the opportunity to provide comments on the Draft Oil Shale and Tar Sands
Resources Programmatic EIS. Our comments are focused on oil shale development and research, as that is the resource that is predominantly present in Colorado.
Pitkin County appreciates the fact that the Draft EIS incorporates an Alternative that responds directly to scoping comments we submitted in June, 2011. Specifically, Alternative 3 reflects our recommendation that an alternative be developed that limits leasing of public lands to existing research leases until such time as functional technology has been developed to the extent that true impacts may be accurately assessed in a NEPA process.
The draft PEIS acknowledges that overall, "the current experimental state of the oil shale and tar SEtnds industries does not allow this PEIS to include sufficient specific information or cumulative

impact analysis to support future leasing decisions within these allocated lands." 1 We concur that more information must be obtained about the technological requirements for development of the oil shale resource, as well as associated environmental, cultural and economic implications, before committing any more public lands to broad scale commercial oil shale development. While we recognize that demand for fossil fuels is directly related to consumption, and that there is a need to produce oil and natural gas domestically as a matter of national security and the health of our economy, we don't believe that energy resourc.e development should be at the expense of irreplaceable natural resources like clean air, clean water and an adequate water supply. Furthermore, new and existing energy development must be considered and analyzed in the context of cumulative impacts to wildlife habitat, human health, local economies and social cost/benefit. Based on the nascent character of the technology for development of oil shale and lack of definitive research and conclusions regarding cumulative impacts associated with development, we strongly recommend that the BLM adopt Alternative 3 in the Final PEIS. Alternative 3 will help to ensure that commercial development will n9t be initiated until a full understanding and evaluation of impacts is completed to a specified standard.

1 2012 Draft PEIS for Allocation of Oil Shale & Tar Sands Resources, at 1-2
#1])> 1
<([#2 [*3.4.1*] Furthermore, we recommend that the Final PEIS provide direction that result in oil shale lessees
evaluating/addressing the following issues in subsequent NEP A analysis:
Water Quality and Quantity Oil shale production will likely utilize vast amounts of water from the Colorado River basin which is life-sustaining for all of the Colorado River Compact states; providing water for drinking by humans, livestock and wildlife, for irrigating agricultural lands and
for outdoor recreation; all of which are critical to a resort economy upon which Colorado and particularly rural mountain communities depend. To assess oil shale production impacts to water quality and quantity, the Final PEIS should require that subsequent NEPA analysis determine the following:
1. Quantity of water required for production annually;.and resulting impacts to the health and livelihood of other downstream and junior users; Impacts to fisheries (including Colorado River Cutthroat Trout fisheries), riparian and wetland areas and wildlife resulting from potential changes to stream and river flows;
2. Level of toxins including but not limited to hydrocarbons, salts, trace metals that may be released and/or leached into streams, fisheries and groundwater as a result of production; and resulting impacts to fisheries, riparian and wetland areas and wildlife; and whether technologies are presently available to prevent salt loading and the introduction of other contaminants inte-the-Golorado River;
3. Secondary impacts of large scale oil shale development (such as population growth; and use of power generation to extract oil from shale) on demand for limited water resources in the West;
4. Impacts to recharge of deep-water aquifers in the event that in-situ extraction techniques
. result in new areas of porous rock that function as shallow aquifers.
While we support BLM's coordinated work with the" U.S. Geologic Survey to analyze baseline water conditio'ns in areas where oil shale might be developed, we believe that it is premature to lease lands for such development before the impacts to water are determined. **#2])>**

<([#3 [*3.7.3.1*] [*4.2*] [*3.7.3.6*] Wildlife In addition to potential impacts to fisheries and streams that sustain all species of
wildlife, the roads, pipelines compressors, tanks, drill rigs and general infrastructure associated with oil shale extraction and production will most likely result in overall loss of habitat and fragmentation of contiguous wildlands necessary to sustain wildlife. The cumulative impact of resource development infrastructure on habitat and wildlands contiguity must be evaluated.
#3])>
<([#4 [*3.5.9*] [*3.5.3*] [*3.5.4*] Air Quality Evaluate the impacts associated with the following aspects of oil shale production
as it relates to air quality:
1. Health and climate change impacts of dust created as a result of surface mining and associated truck traffic on roads; impacts of dust on snow as it relates to resort economies that rely upon snow for recreation-based tourism;
2. Health and climate change impacts associated with power plant activity required for resource production; including but not limited to increases in ozone and nitrogen deposition;
3. Impaired visibility on a regional level; and resulting impacts to tourism as one consideration;
#4])> 2
<([#5 [*3.14*] Overall Human Health Impact Evaluate all health issues and potential mitigations. Incorporate
a health impact assessment which is a systematic, comprehensive methodology for assessing human health impacts.
#5])> <([#6 [*3.10.4*] [*3.10.2*] Local Economy As a headwater area, Pitkin County has been diligent at a local, regional
and State level, in protecting watersheds as a tneans of tnaintaining water quality and quantity to sustain wildlife, agriculture and our tourist econon1y. Rural resort communities such as ours and throughout the West are dependent upon the economic benefits of tourism, which is to a great extent reliant upon characteristics associated with clean water, clean air, healthy, intact ecosystems and vital wildlife populations on public lands. Additional NEP A analysis must weigh the impacts of oil shale development on rural and tourist-based economies against the economic benefits accrued to industry. **#6])>**
<([#7 [*6.2*] Social Cost/Benefit Finally, as a general matter in ultimately determining whether or not leases
for commercial production of oil shale is appropriate, BLM should consider whether the amount of energy spent in oil shale production, as it compares to the amount of energy produced, is worth the potential impact to public health and public lands in the form of air and water quality, the overall health of ecosystems and wildlife populations; and tourism dependent economies of rural western Colorado. **#7])> <([#8** [*10.6*] Also consider to what extent the production of oil shale will prolong our
·ability to use fossil fuels, and whether the impacts associated with the extended timeframe are at a reasonable cost. In the event that public lands in western Colorado are to be sacrificed to produce domestic fuels, it would be prudent to stipulat~ that such fuels be used domestically, rather than sold on the world-wide market. **#8])> <([#9** [*10.6.1*] Finally, as there is clearly a finite supply of fossil
fuels, it is critical to ensure that the use of public lands for domestic fossil fuel production be tied

to concurrent fuel consumption conservation measures - and that oil shale leasing, if found to be viable, is ultimately part of a long terril energy outlook and economy that also incorporates renewable energy resources.
#9])> <([#10 [*2.3.1*] In closing, we emphatically endorse Alternative 3, as this is the only Alternative that ensures that
no additional public land will be available for leasing of any kind until and unless technology for resource development and associated development impacts can be assessed and a determination made, that environmental impacts can be eliminated. Furthermore, we recommend that the Final PEIS require subsequent public review of standards that may be developed for commercial leasing as the direct result of data assessed from RD&D projects- prior to issuance of any commercial leases. We cannot stress enough our concern about potential impacts of oil shale · development ()ti air quality and implications for climate change, and ramifications of oil shale development on water availability that is already severely restricted in western states.
#10])> Tharik you again for the opportunity to provide comments. Please direct any questions to·Ellen
Sassano at 970-:-920-5098 or at ellens@co.pitkin.co.us
"
Sincerely,
PITKIN COUNTY RQ_ARD OF COUNTY COMMISSIONERS
Jhrp1JV! ;# , 8/dvv1
Michael M. Owsley, ChairmaY
3

OSTS2012D50148
Organization: .Irwin Stewart
Received: 4/25/2012 5:18:57 PM
Commenter1: .Irwin Stewart - GRAND JCT, Colorado 81506 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** klett
Attachments: OSTS2012D50148.htm (OSTS2012D50148-58631.htm Size = 1 KB)
Oilshale_Talk_OSTS2012D50148.ppt (OSTS2012D50148-58630.ppt Size = 11061 KB)
Submission Text
<([#1 [*6.3*] EIS should be based on Above Ground Retorting as well as Insitu Retorting. Insitu retorting needs vast quantities of water and electricity. **#1])> <([#2** [*9.8*] The EIS should be scrapped and a new more truthful one written. It is wrong to reduce the amount of land available for lease based on incomplete information. **#2])> <([#3** [*9*] Also, rules to protect the recourse from high grading should be incorporated. **#3])>** See Attachment - Powerpoint on Oil Shale.

OSTS2012D50149
Organization: K Terry
Received: 4/25/2012 8:13:36 PM

Commenter1: K Terry - , Illinois (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: 035a_Campaign
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/1/2012 12:00:00 AM
Attachments: OSTS2012D50149.htm (OSTS2012D50149-58609.htm Size = 2 KB)
Submission Text
<([#1 [*3*] I am deeply concerned about the potential effects to our water, wildlife, communities and public lands if the BLM initiates a commercial oil shale leasing program. The two million acres in UT, WY and CO previously allocated for commercial leasing is a massive amount of public, taxpayer land that would be sacrificed for a singular use of the landscape. **#1])> <([#2** [*2.2*] [*12.3*] While the preferred alternative (Alternative 2) is a step in the right direction, BLM should consider an alternative that does not endorse giveaways of public lands to this unproven industry. **#2])> <([#3** [*3*] Oil shale is currently producing no jobs and no revenue. The Congressional Budget Office confirmed that it is not expected to produce significant revenues through 2022. This means we have time to thoroughly assess the impacts of development to our water, wildlife and communities, and should not rush now to give away public lands. **#3])> <([#4** [*3.10.3*] The land overlying oil shale resources in Utah, Colorado and Wyoming is some of the best wildlife habitat in the West. Outdoor recreation and tourism are huge economic drivers that depend on this habitat. The farming and ranching sectors require reliable access to water resources, which may be depleted by extensive commercial oil shale development. We must protect these jobs by making smart decisions about how we allow oil companies to move forward with oil shale speculation. **#4])> <([#5** [*3*] I recommend that you carefully consider the serious impacts of oil shale production to our wildlife, water, air, and communities as you take another look at oil shale development.
#5])>

OSTS2012D50150
Organization: D. Staples
Received: 4/25/2012 9:05:52 PM
Commenter1: D. Staples - , (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: 035a_Campaign
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/1/2012 12:00:00 AM
Attachments: OSTS2012D50150.htm (OSTS2012D50150-58611.htm Size = 2 KB)
Submission Text
<([#1 [*3*] I am deeply concerned about the potential effects to our water, wildlife, communities and public lands if the BLM initiates a commercial oil shale leasing program. The two million

acres in UT, WY and CO previously allocated for commercial leasing is a massive amount of public, taxpayer land that would be sacrificed for a singular use of the landscape. **#1])> <([#2** [*2.2*] [*12.3*] While the preferred alternative (Alternative 2) is a step in the right direction, BLM should consider an alternative that does not endorse giveaways of public lands to this unproven industry. **#2])> <([#3** [*3*] Oil shale is currently producing no jobs and no revenue. The Congressional Budget Office confirmed that it is not expected to produce significant revenues through 2022. This means we have time to thoroughly assess the impacts of development to our water, wildlife and communities, and should not rush now to give away public lands. **#3])> <([#4** [*3.10.3*] The land overlying oil shale resources in Utah, Colorado and Wyoming is some of the best wildlife habitat in the West. Outdoor recreation and tourism are huge economic drivers that depend on this habitat. The farming and ranching sectors require reliable access to water resources, which may be depleted by extensive commercial oil shale development. We must protect these jobs by making smart decisions about how we allow oil companies to move forward with oil shale speculation. **#4])> <([#5** [*3*] I recommend that you carefully consider the serious impacts of oil shale production to our wildlife, water, air, and communities as you take another look at oil shale development. **#5])>**

OSTS2012D50151

Organization: Steve Latsch
Received: 4/25/2012 10:12:56 PM
Commenter1: Steve Latsch - Toledo, Ohio 43635 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: 035a_Campaign
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/1/2012 12:00:00 AM
Attachments: OSTS2012D50151.htm (OSTS2012D50151-58613.htm Size = 2 KB)

Submission Text

<([#1 [*3*] I am deeply concerned about the potential effects to our water, wildlife, communities and public lands if the BLM initiates a commercial oil shale leasing program. The two million acres in UT, WY and CO previously allocated for commercial leasing is a massive amount of public, taxpayer land that would be sacrificed for a singular use of the landscape. **#1])> <([#2** [*2.2*] [*12.3*] While the preferred alternative (Alternative 2) is a step in the right direction, BLM should consider an alternative that does not endorse giveaways of public lands to this unproven industry. **#2])> <([#3** [*3*] Oil shale is currently producing no jobs and no revenue. The Congressional Budget Office confirmed that it is not expected to produce significant revenues through 2022. This means we have time to thoroughly assess the impacts of development to our water, wildlife and communities, and should not rush now to give away public lands. **#3])> <([#4** [*3.10.3*] The land overlying oil shale resources in Utah, Colorado and Wyoming is some of the best wildlife habitat in the West. Outdoor recreation and tourism are huge economic drivers that depend on this habitat. The farming and ranching sectors require reliable access to water resources, which may be depleted by extensive commercial oil shale development. We must protect these jobs by making smart decisions about how we allow oil companies to move forward with oil shale speculation. **#4])> <([#5** [*3*] I recommend that you carefully consider the

serious impacts of oil shale production to our wildlife, water, air, and communities as you take another look at oil shale development. **#5])>**

OSTS2012D50152

Organization:
Received: 4/26/2012 9:48:11 AM
Commenter1: - , (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/1/2012 12:00:00 AM
Attachments: OSTS2012D50152.htm (OSTS2012D50152-58615.htm Size = 1 KB)
Submission Text
<([#1 [*2.1.1*] Please adopt Alternative 1. It is the only alternative that properly balances conservation and economic development. The restrictions and requirements in the other alternatives are unreasonable, and will unnecessarily block commercial development of a vital national resource. **#1])> <([#2** [*9.8*] In addition, it is shameful that this PEIS is being redone at taxpayers expense, so soon after the 2008 one, when there is no new information of any kind. **#2])> <([#3** [*1.1.1*] Finally, I ask the BLM to please extend the comment period by 30 days, to allow review of the new leasing regulations due for release on May 15th. **#3])>**

OSTS2012D50153

Organization:
Received: 4/26/2012 10:23:49 AM
Commenter1: - , (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/1/2012 12:00:00 AM
Attachments: OSTS2012D50153.htm (OSTS2012D50153-58617.htm Size = 1 KB)
Submission Text
<([#1 [*1.1*] That sounds like a threat when you say you are going to share personal information. What about free speech without threats? People should be able to share information without personal information being shared. You are the first site that I've heard do this! **#1])>**

OSTS2012D50154

Organization: City of Grand Junction, Tom Kenyon
Received: 4/26/2012 10:52:05 AM
Commenter1: Tom Kenyon - Grand Junction, Colorado 81501 (United States)

Organization1: City of Grand Junction
Commenter Type: Local Government
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form and Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/1/2012 12:00:00 AM
Attachments: OSTS2012D50154.htm (OSTS2012D50154-58634.htm Size = 1 KB)
SignedLTR-PEis_OSTS2012D50154.doc (OSTS2012D50154-58633.doc Size = 98 KB)
Submission Text
Please refer to the attached letter for comments. Thank you. See Attachment.

April 26, 2012

Argonne National Laboratory
9700 S. Cass Avenue
EVS/240
Argonne, IL 60439

Re: Draft 2012 Oil Shale and Tar Sand (OSTS) Programmatic Environmental Impact Statement (PEIS)

Via http://ostseis.anl.gov/involve/comments/index.cfm

Dear Comment Compiler,

The City of Grand Junction ("City") by and through the Mayor and City Council offers the following comments on the Department of Interior, Bureau of Land Management ("BLM") 2012 OSTS PEIS. Please incorporate these comments into the official record of decision on that matter.

<([#1 [*3.10.2*] Grand Junction and the Grand Valley of the Colorado River are filled with abundant natural beauty and natural resources. The City serves as the hub of commerce, social activity and health care for the Western slope of Colorado and Eastern Utah. We proudly serve, near and far, our sister communities and because of our regional importance we are both positively and negatively affected by the development in and around those communities and the greater region.

Recently the City has been both benefitted and burdened by the exploration for and development of natural gas in the Colorado and Gunnison River basins near us. The exploration for and development of gas, some oil and other mineral resources has been an important economic engine for our community but it has also caused impacts to roads, schools, social services and virtually all publicly funded endeavors. Additionally, the gas exploration and development

industry has created a shortage in housing and has strained already needy public programs and resources.

The City experienced an oil shale boom once before and the aftermath of those events was to say the least not good. Because of that historical experience and because of the more recent experiences we have had with the gas and oil industry, we implore those that are deciding among the OSTS PEIS alternatives to step back and remember as is stated in the preamble to the National Environmental Policy Act ("NEPA") that the purpose of an environmental review is:

"To declare national policy which will encourage productive and enjoyable harmony between man and his environment; to promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man; to enrich the understanding of the ecological systems and natural resources important to the Nation..."
2012 DRAFT OSTS PEIS – City of Grand Junction Comments

By our comments on the OSTS PEIS alternatives we hope to encourage productive and enjoyable harmony between man and his environment and to stimulate our collective health and welfare. **#1])>** To that end we state the following regarding the 2012 OSTS PEIS:

1)**<([#2** [*11*] We are supportive of oil shale and tar sand research, development and demonstration ("RD&D") projects. We conclude that additional RD&D is necessary and appropriate and that as a matter of Federal, State and local policy, public lands should be made available in
sufficient quantity and with a reasonable regulatory structure that recognizes the importance of and presents an opportunity for responsible growth of the industry. **#2])>**

2) **<([#3** [*2*] We recognize that reasonable alternatives are presented in the 2012 OSTS PEIS and that we do not possess the expertise to recommend one alternative over the other. What we are supportive of and would expect is that industry and the federal land administrators will come to a consensus position on an alternative that will allow the industry to grow but will not, absent a demonstration of the viability of the industry, to develop without regard to impacts and/or mitigation of those impacts. **#3])>**

3) **<([#4** [*9.3*] Which alternative is chosen is not as important to the City as the development of a policy (whether applied via lease stipulations or as a matter of amendments to the BLM Resource Management Plan(s)) that requires a cumulative, regional impact study of any and all commercial activity as a pre-condition to and as a result of OSTS exploration and/or production and/or development. **#4])>**

4) **<([#5** [*3.10.2*] A study(ies) must be performed before the impacts occur and must address the changes to the quality of life that will be/are visited on communities such as ours by the introduction of the commercialization of a new and valuable resource. From the silver and gold rush days to the first oil shale boom to the recent experience with gas exploration and development, the needs, the shortages and the aftermath of insufficient planning and more importantly the failure to invest before the full brunt of the impacts occur, is highly predictable. Because many of those impacts are predictable they are also preventable. We would ask that you

help to prevent or at a minimum reduce the impacts from exploration and development of oil shale and tar sand resources. **#5])>**

5) **<([#6** [*10.5*] The analysis and ultimate selection of an alternative must acknowledge that funding is crucial to the planning and mitigation of impacts. A pre-development, industry funded trust or other similar financing vehicle for the use and benefit of the communities ought to be advanced as a condition of all leasing. **#6])>**

6) **<([#7** [*10.6*] The City Council strongly urges that the BLM, Secretary Salazar and our legislative delegation build a national energy policy that recognizes the importance of developing our oil shale, coal and natural gas resources and in turn reducing dependence on foreign oil. Likewise we encourage solar, wind, geothermal and hydro electric power development. As important as development of a comprehensive policy is, it must be written and enforced in light of and with the understanding of the impacts on communities and the environment that are associated with large scale development of any resource. **#7])>**

<([#8 [*9*] Please work to meaningfully develop and implement protections for our community. **#8])>** Should you have any questions or if we may otherwise be of assistance to you as the matter proceeds to a record of decision, please let us know.

CITY OF GRAND JUNCTION
OFFICE OF THE CITY COUNCIL

by: _____
Tom Kenyon
Mayor

Pc: City Council
Rich Englehart, Acting City Manager
John P. Shaver, City Attorney

OSTS2012D50155
Organization: Anastasia Fiandaca
Received: 4/26/2012 12:15:40 PM
Commenter1: Anastasia Fiandaca - San Francisco, California 94131 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: 035a_Campaign
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/1/2012 12:00:00 AM
Attachments: OSTS2012D50155.htm (OSTS2012D50155-58619.htm Size = 2 KB)
Submission Text

<([#1 [*3*] I'm writing because I am deeply concerned about the potential effects to our water, wildlife, communities and public lands if the BLM initiates a commercial oil shale leasing program. The two million acres in UT, WY and CO previously allocated for commercial leasing is a massive amount of public, taxpayer land that would be sacrificed for a singular use of the landscape. **#1])> <([#2** [*2.2*] [*12.3*] While the preferred alternative (Alternative 2) is a step in the right direction, BLM should consider an alternative that does not endorse giveaways of public lands to this unproven industry. **#2])> <([#3** [*3*] Oil shale is currently producing no jobs and no revenue. The Congressional Budget Office confirmed that it is not expected to produce significant revenues through 2022. This means we have time to thoroughly assess the impacts of development to our water, wildlife and communities, and should not rush now to give away public lands. **#3])> <([#4** [*3.10.3*] The land overlying oil shale resources in Utah, Colorado and Wyoming is some of the best wildlife habitat in the West. Outdoor recreation and tourism are huge economic drivers that depend on this habitat. The farming and ranching sectors require reliable access to water resources, which may be depleted by extensive commercial oil shale development. We must protect these jobs by making smart decisions about how we allow oil companies to move forward with oil shale speculation. **#4])> <([#5** [*3*] I recommend that you carefully consider the serious impacts of oil shale production to our wildlife, water, air, and communities as you take another look at oil shale development.
#5])>

OSTS2012D50156
Organization:
Received: 4/26/2012 4:23:27 PM
Commenter1: - , (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/1/2012 12:00:00 AM
Attachments: OSTS2012D50156.htm (OSTS2012D50156-58620.htm Size = 1 KB)
Submission Text
<([#1 [*3.4.1*] wake up people shale oil is not what they are interested in it is control of the water a much more valuable than oil in the future **#1])>**

OSTS2012D50157
Organization:
Received: 4/26/2012 4:26:00 PM
Commenter1: - , (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:

Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/1/2012 12:00:00 AM
Attachments: OSTS2012D50157.htm (OSTS2012D50157-58622.htm Size = 3 KB)
Submission Text
<([#1 [*2.3.1*] As a supporter of Defenders of Wildlife and someone who cares about America's wildlife and wild places, I am writing today to urge the Bureau of Land Management to protect millions of acres of public lands from oil shale development by selecting "Alternative 3" in the oil shale Draft Environmental Impact Statement, the alternative most protective of our public lands. I am pleased that BLM is taking clear and measured steps to restore order to the federal oil shale and tar sands policy. While the agency's preferred alternative (2(b)) is a step in the right direction, a stronger approach is needed to protect our public lands. Alternative 3 in the Draft Environmental Impact Statement would not allow for commercial development of oil shale extraction until further research is done for a clearer understanding of its impacts on our public lands and the wildlife that live there. This alternative places important environmental and ecological areas off-limits to development and requires companies to prove their technologies and evaluate their impacts on communities, human health and the environment. The two million acres of land in Utah, Wyoming and Colorado being considered for oil shale development is a massive amount of America's public land to be sacrificed for the development of a destructive and unproven energy source. **#1])> <([#2** [*3.7.4.10*] These vast expanses of public lands are home to the iconic pronghorn, sage grouse, prairie dogs, golden eagles and other wildlife. They are also habitat that is key to the survival and recovery of the highly endangered black-footed ferret. **#2])> <([#3** [*3.10.5*] Oil shale production is a dirty business that is not economically viable. The BLM itself estimates that its development would consume large amounts of water, cause significant air pollution and destroy thousands of acres of wildlife habitat. Oil shale is currently producing no jobs and no revenue. The Congressional Budget Office confirmed that it is not expected to produce significant revenues through 2022. The industry already has access to thousands of acres of public and private lands for research and development. We shouldn't sacrifice even more western public lands for such a destructive and unproven energy source. **#3])> <([#4** [*3.10.4*] These millions of acres of western public lands are vital to economies that rely on tourism and wildlife-related recreation. In Colorado alone these activities generate $3 billion in economic activity. Protecting jobs and related revenue from these sustainable economies must be prioritized over the speculative investment in oil shale production on public lands. America's wildlife and wild places are too valuable to squander on the destructive and unproven practice of oil shale development. **#4])>** Thank you for the opportunity to comment on this matter.

OSTS2012D50158
Organization: Brenda Williamson
Received: 4/26/2012 9:38:19 PM
Commenter1: Brenda Williamson - , (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:

Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/1/2012 12:00:00 AM
Attachments: OSTS2012D50158.htm (OSTS2012D50158-58624.htm Size = 1 KB)
Submission Text
<([#1 [*12.3*] Please do NOT hand over public lands to a dirty industry that is a menace to the public health and the environment. These lands are public -- this means they should be held in careful stewardship for all future generations, not sold out from under them. **#1])>**

OSTS2012D50159
Organization:
Received: 4/26/2012 11:12:06 PM
Commenter1: - , (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: 035a_Campaign
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/1/2012 12:00:00 AM
Attachments: OSTS2012D50159.htm (OSTS2012D50159-58626.htm Size = 2 KB)
Submission Text
<([#1 [*3*] I am deeply concerned about the potential effects to our water, wildlife, communities and public lands if the BLM initiates a commercial oil shale leasing program. The two million acres in UT, WY and CO previously allocated for commercial leasing is a massive amount of public, taxpayer land that would be sacrificed for a singular use of the landscape. **#1])> <([#2** [*2.2*] [*12.3*] While the preferred alternative (Alternative 2) is a step in the right direction, BLM should consider an alternative that does not endorse giveaways of public lands to this unproven industry. **#2])> <([#3** [*3*] Oil shale is currently producing no jobs and no revenue. The Congressional Budget Office confirmed that it is not expected to produce significant revenues through 2022. This means we have time to thoroughly assess the impacts of development to our water, wildlife and communities, and should not rush now to give away public lands. **#3])> <([#4** [*3.10.3*] The land overlying oil shale resources in Utah, Colorado and Wyoming is some of the best wildlife habitat in the West. Outdoor recreation and tourism are huge economic drivers that depend on this habitat. The farming and ranching sectors require reliable access to water resources, which may be depleted by extensive commercial oil shale development. We must protect these jobs by making smart decisions about how we allow oil companies to move forward with oil shale speculation. **#4])> <([#5** [*3*] I recommend that you carefully consider the serious impacts of oil shale production to our wildlife, water, air, and communities as you take another look at oil shale development.
#5])>

OSTS2012D50160
Organization: Clark Mining Services, LLC, William Clark
Received: 4/27/2012 11:09:11 AM
Commenter1: William Clark - Centennial, Colorado 80111 (United States)
Organization1: Clark Mining Services, LLC
Commenter Type: Private Company

Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/2/2012 12:00:00 AM
Attachments: OSTS2012D50160.htm (OSTS2012D50160-58649.htm Size = 1 KB)
BLM_OSTS_Draft_PEIS_CMS_Comments_27Apr12_OSTS2012D50160.pdf
(OSTS2012D50160-58648.pdf Size = 137 KB)
Submission Text
See Attachment.

CMS
Clark Mining Services, LLC
Via Electronic Mail
April27, 2012
Comments Regarding:
BLM Oil Shale and Tar Sands Draft PEIS
<([#1 [*2.1.1*] The BLM should select Alternative 1 as their Preferred Alternative. Selecting Alternatives that reduce lands available for leasing (Alternative 2) or that require research, development and demonstration (RD&D) first (Alternatives 2b, 3 and 4) would likely eliminate the potential for sound development of certain projects. At this time, it is premature for the BLM to remove lands for potential leasing when teclmiques being developed or that may be developed are suited for specific geologic and/or surface conditions on lands removed from leasing. Further, requiring RD&D to be conducted on a specific lease first would preclude using a recovery technique proven acceptable and economical by one of the existing RD&D projects or by operations in another country. The fact that BLM administered lands would be available for potential leasing has no bearing on potential impacts from oil shale or tar sands development. More projects could lead to more impacts, but, as documented repeatedly in the Draft PEIS, each project would be subjected to rigorous reviews by local, state, and federal agencies. Potential impacts - in particular cumulative impacts -would be avoided, minimized, or mitigated and held below specific levels allowed by existing federal, state, and local regulations.
#1])> <([#2 [*1*] This Draft PEIS is comprehensive and thorough with disclosure of the existing environment and the potential impacts from oil shale development. **#2])>**
<([#3 [*9.2*] This Draft PEIS also discloses regulatory agencies and regulations that are in place to reduce or prevent environmental impacts (Section 2.2.1 and Appendix D). However, with few exceptions (perhaps for the sake of brevity), little discussion exists concerning the role that most of these agencies have in approving oil shale development projects and the prevention of environmental impacts. Many readers may not realize the permitting requirements that every oil shale project would undergo. The Final PEIS should elaborate on these requirements.
One of the exceptions can be found in a brief discussion beginning on page 4-52 that presents the state agencies that would regulate impacts to air quality and the reviews that each project would undergo. Impacts to air quality would be limited by these agencies.

No oil shale project could operate without a permit that restricts air pollution. Currently, some of the RD&D projects are limited in scope to prevent impacts to air quality. However, other regulatory agencies and their permitting approvals are not discussed . For example:

• The Colorado Division ofWater Resources (DWR) regulates the use of water in Colorado. Water rights, types ofuses, points of transfer, and points ofuse are all regulated by the DWR. Many of the decisions by the DWR, and by various water courts in Colorado, are open for public review. The regulation of water use in Colorado reduces the impact on all users of water in the state, and potential impacts to water from oil shale development would be mitigated by decisions of the DWR. However, the DWR is not mentioned in the Draft PEIS.

• The Colorado Division ofReclamation, Mining and Safety (DRMS) was mentioned, but their role in preventing impacts to land surface, habitat, and water resources was not presented. Before any operation can proceed in Colorado, full disclosure of the operation, the methods to prevent impacts, and also the specific measures to reclaim the mining disturbances must be approved through a permitting process with full public disclosure. Each project must also post a bond sufficient to insure that the state could reclaim the disturbances should the mining company not. The DRMS operates under the Colorado Mined Land Reclamation Act, which is mentioned under eight of the categories in Table D.l "Regulatory Citations and Statutory Authorities." It would seem that the role of an agency that regulates a significant portion of oil shale development activities and ensures no long term environmental impacts would be described in the Draft PEIS.

• County regulations are listed in Appendix D. However, the requirements those regulations place on development are not. For example, Rio Blanco County, Colorado, assesses an impact fee on new capital facilities in the county as part of their land use permit process. This fe~ is based on the size of the operation and lessens potential impact to county infrastructure. Thus, the county collects fees at project initiation to insure, for instance, road maintenance.

The concerned public should realize that any oil shale development will undergo exhaustive permitting at local, state, and federal levels; with most of the permit processes open to public input. The amount ofBLM administered land available for oil shale leasing has no bearing on the outcome of the permitting processes. However, restricting the amount of land open to leasing would likely eliminate the potential for sound projects and the refinement of recovery technologies. **#3])>**

Thank you for this opportunity to comment.

Sincerely,

/_<)~

W. Jack Clark
Manager
W. Jack Clark
6052 South Newport Street
Centennial CO 80111
voice/facsimile 303/221-6588
cellular 303/229-6030
wjackclark@comcast.net

OSTS2012D50161
Organization: Bonnie Worden
Received: 4/27/2012 11:18:41 AM
Commenter1: Bonnie Worden - , 49720 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: 035a_Campaign
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/1/2012 12:00:00 AM
Attachments: OSTS2012D50161.htm (OSTS2012D50161-58637.htm Size = 2 KB)
Submission Text
<([#1 [*3*] I think it is important to Protect Public Land From Oil Shale Development. I am deeply concerned about the potential effects to our water, wildlife, communities and public lands if the BLM initiates a commercial oil shale leasing program. The two million acres in UT, WY and CO previously allocated for commercial leasing is a massive amount of public, taxpayer land that would be sacrificed for a singular use of the landscape. **#1])> <([#2** [*2.2*] [*12.3*] While the preferred alternative (Alternative 2) is a step in the right direction, BLM should consider an alternative that does not endorse giveaways of public lands to this unproven industry. **#2])> <([#3** [*3*] Oil shale is currently producing no jobs and no revenue. The Congressional Budget Office confirmed that it is not expected to produce significant revenues through 2022. This means we have time to thoroughly assess the impacts of development to our water, wildlife and communities, and should not rush now to give away public lands. **#3])> <([#4** [*3.10.3*] The land overlying oil shale resources in Utah, Colorado and Wyoming is some of the best wildlife habitat in the West. Outdoor recreation and tourism are huge economic drivers that depend on this habitat. The farming and ranching sectors require reliable access to water resources, which may be depleted by extensive commercial oil shale development. We must protect these jobs by making smart decisions about how we allow oil companies to move forward with oil shale speculation. **#4])> <([#5** [*3*] I recommend that you carefully consider the serious impacts of oil shale production to our wildlife, water, air, and communities as you take another look at oil shale development. **#5])>**

OSTS2012D50162
Organization: Brad Klafehn
Received: 4/27/2012 1:04:01 PM
Commenter1: Brad Klafehn - Denver, Colorado 80236 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/7/2012 12:00:00 AM
Attachments: OSTS2012D50162.htm (OSTS2012D50162-58652.htm Size = 1 KB)

Klafehn_OSTSEIS_Comments_OSTS2012D50162.doc (OSTS2012D50162-58651.doc Size = 37 KB)

Submission Text

See Attachment.

Comments By Brad Klafehn, Denver, Colorado on 2012 Oil Shale and Tar Sands Programmatic EIS, April 27, 2012

Thank you for the opportunity to comment on the 2012 Oil Shale and Tar Sands Programmatic EIS. My name is Brad Klafehn from Denver, Colorado. I attended the May 4, 2011 Denver, Colorado Scoping Session on this EIS and testified publicly there. I am retired from the City and County of Denver Finance Office, and am the holder of a Master of Public Administration from the University of Colorado, with an emphasis on Policy Analysis. In the 1970's, I was active in the oil shale leasing and regulatory arena as a staff member of the Colorado Open Space Council Mining Workshop. As such, I and others brought suit against the Department of Interior and the oil company lessees over the Programmatic EIS which was then being prepared as being inadequate. I also testified before Congress regarding oil shale leasing and toured the Piceance Basin lease sites numerous times. I was not involved in the 2008 lawsuit which forced preparation of this revision to the Programmatic EIS.

<([#1 [*2.2*] While BLM is moving in the right direction by recommending that the over 2 million acres currently authorized for leasing be reduced, its preference for Alternative 2, making 830,000 acres available for commercial development, is still too aggressive for an industry which has shown little ability to produce oil from shale and when data from the current R&D leases are so scarce. 830,000 acres represents 1,300 square miles of land. This is an obscene amount of public land to be tied up for potential commercial leasing, with all the uncertainties this creates for local governments and land administrators. **#1])> <([#2** [*2.3.1*] It makes more sense from a public policy standpoint to adopt Alternative 3, restricting further leasing at this point to the areas surrounding the current six, and possibly nine, R&D tracts, if and when it can be shown that they can be developed profitably and environmentally. Alternative 3 would make available one-twenty-seventh of the land to be made available under Alternative 2. This is a sensible, precautionary alternative to Alternative 2, given that there is so little actual operating experience from the R&D tracts. Adopting Alternative 3 would let further leasing decisions be fully informed by the results of the R&D process, and would free the Bureau Field Offices from having to revise a bevy of land use plans for a commercial industry which may never occur. In the meantime, the industry owns sizeable quantities of private oil shale land which they can develop without federal leasing approvals.

For the last 35 years that I have been observing the industry, the constant drumbeat from potential oil shale producers has been to grab as much land as soon as possible while conjuring visions of an immanently mature industry which would be ready to spring into existence were it not for governmental interference and restriction in the leasing and regulatory areas, given that the environmental impacts of full-scale, commercial oil shale development are said to be acceptable and manageable. As I noted in my Scoping Comments, this is the fairyland version of events. In reality, none of these assertions have come to pass during the last four decades, and in many ways, the current debate rehashes the same issues in the same manner from 35 years ago.

#2])>

<([#3 [*1.5*] In my opinion, the Bureau has done a better job than previously in providing citations to the relevant literature, but the analysis of that research data is superficial, the document has not incorporated much of this data into the discussion, and it still fails to present essential, critical real-life data. For example, in Appendix A, BLM seeks to describe the current research tracts, their technology, and impacts. But an examination shows that the only information presented comes from the 2006-2007 EAs and from operator-submitted Operation Plans. NO operational data is presented! Absurdly, the EIS contains statements like this one:

"The next phase of the research was scheduled to occur in the spring of 2006 and was to involve a 30-day continuous operation of the retort using the Mahogany Ridge shale that is still at the research site. Over this period, additional data will be collected that will be essential for optimizing operating parameters for the retort, establishing reaction kinetics and thermodynamics to optimize yields, and more precisely evaluating the environmental impacts of the operation, including disposal of spent shale. (p. A-56, lines 8-13.)

One has to wonder when this statement was actually written. "The next phase of research was scheduled to occur" 6 years ago? There haven't been any developments since then that BLM can report to inform decision-making and the public? If this were a school paper, one would be tempted to give it an 'incomplete' and send it back for further work. If there have been no developments and no data generated in the last six years, then this speaks volumes about the unreadiness of operators to proceed in developing the resource, and thus, their lack of need for additional public land. If there have been developments since then, failure to present that further information is an indication of the failure of the EIS to present a reasonably accurate description of the known data and issues. In either case, the EIS's justification for leasing 830,000 additional acres fails.

However, the EIS indicates that this failure is a feature not a bug. Specifically, page J-6, in the analysis of Scoping Comments, states that the comment that "deferment of decisions [should be made] until RD&D results are available" is outside the scope of the PEIS. Surely, knowledge of specific impacts is exactly within the scope of the EIS and essential to a judgment on the desirability of proceeding with further leasing. By defining this issue away, BLM shows the bankruptcy of this process.

#3])>

<([#4 [*1.1*] Likewise, at the scoping meeting, I recommended the formation of a technical advisory committee, such as the one that BLM had in the 1970's, to keep the public and local governments involved and aware of technical developments. Speaking from personal experience, this was very useful in the past for me, as a member of the public, and others. However, here again, the Bureau has decided that this is 'outside the scope' of the EIS. This is ridiculous. BLM could easily commit to creating this group as part of the mitigation and stakeholder involvement processes, and it should do so as part of the final EIS.

#4])>

<([#5 [*4.1*] In general, BLM has avoided addressing most of the cumulative impacts of its leasing decision by saying they are outside the scope of the analysis. However, if they are not

addressed now as potentially setting an upper limit for development, when would they ever be addressed? What is a programmatic EIS for, if not for addressing programmatic impacts? **#5])>**

In what follows, I have specific comments on the impact analysis portion of the document.

<([#6 [*6.3.2*] - P. 4-4, line 45: The water uses listed – dust suppression and 'moisturizing' spent shale (does the spent shale have dry skin?) are obviously consumptive uses, not 'nonconsumptive,' as the water thus used will be lost to evaporation. This mistake repeats itself on p. 4-9, lines 32-35. **#6])>**

<([#7 [*6*] - P. 4-6, line 436ff: Does syncrude from oil shale have similar characteristics with the dilbit produced from oil sands in Canada, or Utah? What are the differences, as concerning viscosity and corrosivity? The Kalamazoo River pipeline leak seems to have been caused by corrosion due to dilbit. Will this be an issue for Colorado and Utah oil shale or tar sands transportation? **#7])>**

<([#8 [*3.4.1*] - P. 4-9, line 32-35: How much water is expected to be dewatered from underground mining operations? What are the exact water quality considerations and standards which must be met in order to apply this water in these ways? **#8])>**

<([#9 [*6*] - P. 4-12, lines 33-40: There is no analysis of pipelines required other than 'feeder' pipelines. If an attempt is not made to quantify these cumulative impacts now, when will they be quantified? **#9])>**

<([#10 [*3.2*] - P. 4-25, line 38: Pipeline breaks of any kind would affect water and soils – not just breaks due to 'flood events.' This is particularly true if the syncrude or dilbit is corrosive, a subject that the EIS does not address. **#10])>**

<([#11 [*3.2*] - P. 4-27, line 43: Toxic metals are subject to be being leached, as well. The text should be modified to reflect this. **#11])>**

<([#12 [*5*] - PP. 4-27 through 4-28, Mitigation Measures: This section should include a discussion of the BLM's and the States' requirements for reclamation performance bonds as one of the main mitigation measures for soil and geologic resources.
#12])>
<([#13 [*3.3.2*] - P. 4-29: The discussion of the protection of paleontological resources totally ignores the role of the SHPOs – the State Historic Preservation Officers. **#13])>**

<([#14 [*3.4.6*] - P. 4-34, lines 1-2: Merely saying that "water may be obtained from major streams, groundwater, or reservoirs" is a tautology with no definable content. This programmatic EIS should include a programmatic analysis of the possible sources of water for commercial oil shale operations on the 830,000 acres it proposes to make available for leasing and development. Is water availability a limiting factor for development on this scale or not? The EIS cannot just punt this question into the future, as it tries to do by again claiming that the analysis is 'outside the scope' of the EIS (P. J-20, lines 26-38). **#14])>**

<([#15 [*3.4.6*] - P. 4-38, line 2: The EIS should acknowledge that injection wells not only have the potential to degrade water quality, but also to cause earthquakes, as stated by the USGS at a panel entitled "Are Seismicity Rate Changes in the Midcontinent Natural or Manmade?" presented to the Seismological Society of America's 2012 Annual Meeting. **#15])>**

<([#16 [*1.5*] - P. A-61: This table needs to explain why 'simulated in situ retorts' are described, when actual data stemming from in situ retorting are available. For example, I have personally seen data from Anvil Points which indicated that in situ retort water contained arsenic in excess of 1,000 times the safe drinking water standard. This was obtained in our 1970's lawsuit against DOI, but the data was placed under seal by the Court, and thus unavailable to those who were not counsel of record. In my scoping comments, I asked BLM to dig out that data and present it as part of this EIS, as it obviously has great significance for this analysis. This has not been done, calling into question whether this document is truly a scientific study or merely a political statement. (A schedule for the EIS handed out at the scoping meeting in Denver showed a final decision on the EIS was timed to coincide with a possible exit from power by the Obama Administration in January 2013. This information is nowhere to be found in this Draft EIS. This decision on future leasing is too important for its schedule to be dictated by re-election politics. The changes required to be made to this EIS may well push the schedule out past what appears to be an arbitrary deadline selected for political purposes.)

In sum, this is a supposed programmatic EIS which resolutely refuses to conduct its analysis at a programmatic scale. BLM needs to re-examine its decisions as to which subjects are 'outside the scope' of the programmatic EIS and include them in the final EIS.

BLM also needs to identify and analyze real data from oil shale operations from all available sources, and incorporate them into its analysis.

Lacking this, this EIS will go down in the history books as so many have before it – as an effort to justify politically-motivated decisions without reaching the essential scientific and policy issues which must be addressed before undertaking a federal action of this magnitude. **#16])>**

OSTS2012D50163
Organization: Wyoming Office of State Lands and Investments, Susan Child
Received: 4/27/2012 5:29:52 PM
Commenter1: Susan Child - Cheyenne, Wyoming 82002 (United States)
Organization1: Wyoming Office of State Lands and Investments
Commenter Type: State Government
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/2/2012 12:00:00 AM

Attachments: OSTS2012D50163.htm (OSTS2012D50163-58655.htm Size = 1 KB)
2012-004_OSTS_DPEIS_OSTS2012D50163.pdf (OSTS2012D50163-58654.pdf Size = 59 KB)
Submission Text
See Attachment.

Office of State Lands and Investments
Funding Wyoming Public Education
122 West 251
h Street
Cheyenne, VVY 82002
Phone: (307) 777-7331
Fax: (307) 777-5400
s1finail@state.wy.us
SENT VIA EMAIL
BLM Oil Shale and Tar Sand PEIS
Argonne National Laboratory
EVS Division, Building 240
9700 Cass A venue
Argonne, Illinois 60439
April 25, 2012
Re: OSLI Project #2012-004
Matthew H. Mead
Governor
Ryan M. Lance
Director
Draft Resource Management Plan Amendments and Draft PEIS for
Allocation of Oil Shale and Tar Sands
To Whom It May Concern:
The staff of the Office of State Lands and Investments (OSLI) has reviewed the captioned document (PEIS) and offers the following comments relative to the proposed action insofar as it pertains to the mission of this office.
The Office of State Lands and Investments (OSLI) manages significant surface and mineral acreage within the proposed oil shale project areas located in Wyoming. The Wyoming Constitution and statutes mandate that OSLI and the Board ofLand Commissioners manage these trust assets for both short- and long-term returns to the public schools and other designated beneficiaries. Accordingly, we view cautiously all federal land use allocations and actions that could directly or indirectly impede our ability to protect the underlying value of, or derive revenue from, those trust assets. OSLI manages state trust assets for two key purposes consistent with traditional trust principles: (1) long term growth in value, and (2) optimum, sustainable revenue production. That said, we are quite interested in any actions of the Bureau of Land Management (BLM) that could impact state trust resources.
As stated in the document, the fact that commercial oil shale development technologies are still primarily in the research and development phase, and details regarding the specific technologies that may be used in a given area are unknown, it is difficult for us to provide the
BLM Oil Shale and Tar Sand PEIS
April25, 2012

Page 2
BLM with specific concerns relative to the direct/indirect impacts that our trust assets could encounter as a result of oil shale development and production. **<([#1** [*9.2*] Aside from NEP A and other
federal approvals, all oil shale project proponents are required to comply with the Rules and Regulations adopted by the Board of Land Commissioners in accordance with W.S. §36-2-1 07 and W. S. §36-9-118, in the event that development occurs on, or it is necessary to traverse, state trust lands.
#1])> **<([#2** [*9.2.4*] Although the BLM's management prescriptions for sage grouse core area protection are not
consistent with the provisions of the Governor's Executive Order 2011-5, the Board of Land Commissioners and OSLI will comply with all provisions of the Executive Order to ensure that all land use/management activities on lands under the jurisdiction of the Board of Land Commissioners provide for the maintenance and enhancement of sage grouse habitats and populations within the defmed core areas.
#2])> At this time, we would encourage the BLM to carefully and critically evaluate the nature and
extent ofthe proposed alternatives. My Office will look fotward to providing more substantive comments during the course of any project-specific NEPA analysis, at which time we will be better informed/prepared to determine how those projects will impact our ability to fulfill our fiduciary duty to our beneficiaries.
We appreciate this opportunity to comment. If we may be of further assistance, please do not hesitate to contact this office.
RL./sc

OSTS2012D50164
Organization: Sarah Waterson
Received: 4/27/2012 8:04:36 PM
Commenter1: Sarah Waterson - Fort Collins, Colorado 80521 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/1/2012 12:00:00 AM
Attachments: OSTS2012D50164.htm (OSTS2012D50164-58639.htm Size = 1 KB)
Submission Text
Hello, **<([#1** [*2.3.1*] I am writing to ask the BLM to support Alertnative 3 as the smartest option to ensure our public land and parks are protected while still offering an option to continue research and development on oil shale and tar sands as an energy resource. **#1])>** **<([#2** [*3.1.1*] I currently live in Northern Colorado and frequent our National Parks and Recreation Areas. They are national treasures. Though I understand our desire to access more fossil fuels, I worry tremendously about the short -sightedness in not protecting our parks for future generations.
#2])> **<([#3** [*3.4.1*] Perhaps even more worrisome is the amount of water needed for these

activities. Water in the West is scarce and one of our most precious resources. Let's use it as wisely as we can. **#3])>** Thank you for your consideration. Sincerely, Sarah Waterson

OSTS2012D50165
Organization: Christopher Lish
Received: 4/27/2012 10:47:49 PM
Commenter1: Christopher Lish - Olema, California (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/1/2012 12:00:00 AM
Attachments: OSTS2012D50165.htm (OSTS2012D50165-58658.htm Size = 1 KB) 120427_draft_oil-shale_tar-sands_peis_OSTS2012D50165.doc (OSTS2012D50165-58657.doc Size = 32 KB)
Submission Text
Please see attached comment. See Attachment.

Friday, April 27, 2012

Draft OSTS PEIS
Argonne National Laboratory
9700 S. Cass Ave.
EVS/240
Argonne, IL 60439

Subject: Please Choose Alternative 3: Don't Use Public Lands for Oil-Shale or Tar-Sand Development -- Draft Programmatic Environmental Impacts State for Oil Shale and Tar Sands Development

Dear Secretary Salazar,

Thank you for this opportunity to comment on the Bureau of Land Management's (BLM) 2012 Draft Programmatic Environmental Impacts Statement (PEIS) for Oil Shale and Tar Sands development on our nation's public lands. **<([#1** [*2.3.1*] As a citizen concerned about the increasing impacts of climate change on our nation's health and welfare, I am appalled by the notion of allowing oil companies to develop tar sands and oil shale projects on public lands. It would pollute our land, air, and water, and exacerbate climate change. Endemic, threatened, and endangered species would be lost. I urge you and your agency to select Alternative 3 in the Final EIS.

"Our duty to the whole, including to the unborn generations, bids us to restrain an unprincipled present-day minority from wasting the heritage of these unborn generations. The movement for the conservation of wildlife and the larger movement for the conservation of all our natural

resources are essentially democratic in spirit, purpose and method."
-- Theodore Roosevelt
#1])>
<([#2 [*9.8*] I thank the Obama administration for its work to roll back dangerous provisions enacted by the corrupt Bush administration that would have opened 670,558 acres of public land for oil shale leasing and 430,686 acres for tar sands leasing in Utah alone, including some of the state's most iconic wilderness-quality lands such as White Canyon and Fiddler Butte. **#2])>**
<([#3 [*2.2*] In the recently-released Draft PEIS, the BLM's preferred alternative (Alternative 2b) proposes to make 252,181 acres available for shale leasing in Utah and 91,045 acres available for tar sands leasing. This is still too much! The BLM's proposal would leave these lands open for speculative development that could foul public lands, air and water quality, and result in large quantities of greenhouse gasses.

"Our government is like a rich and foolish spendthrift who has inherited a magnificent estate in perfect order, and then has left his fields and meadows, forests and parks to be sold and plundered and wasted."
-- John Muir
#3])>
<([#4 [*12.3*] Between global warming, rampant extinction, and a quickly drying Colorado River—problems that oil-shale and tar-sand development would only worsen—it's hard to imagine a less prudent use of our public lands. I therefore oppose any action by the BLM to continue or to authorize any new oil-shale or tar-sand development on public land, or create or continue land-use allocations that would allow for such uses in the future. I am very disappointed that the Draft PEIS did not include an alternative that does not in any way endorse additional public-land use for this unproven industry.

"Wilderness is a resource that can shrink but not grow—the creation of new wilderness in the full sense of the word is impossible."
-- Aldo Leopold

The magnitude of potential impacts to the West's delicate public lands and shrinking water resources is simply too great to grant unfettered access to the oil industry in these areas. It is foolhardy and irresponsible to open up public lands to these industries—particularly before we even understand the magnitude their footprint. Public lands should be held in trust for American citizens, not for private profits.

"As we peer into society's future, we—you and I, and our government—must avoid the impulse to live only for today, plundering for our own ease and convenience the precious resources of tomorrow. We cannot mortgage the material assets of our grandchildren without risking the loss also of their political and spiritual heritage. We want democracy to survive for all generations to come, not to become the insolvent phantom of tomorrow."
-- Dwight D. Eisenhower
#4])>
<([#5 [*10.6.1*] At a time of record-breaking temperatures, debilitating droughts, devastating floods, and increasingly severe weather, we simply cannot afford to increase our reliance on higher-carbon fuels. Producing oil from both tar sands and oil shale generates significantly more

carbon pollution than production of conventional petroleum. Granting the oil industry access to our public lands to lock-in production of these types of fuels is simply incompatible with a sustainable energy future that will mitigate the impacts of climate change.

"I think America will have come to maturity when it will be possible to erect somewhere in the United States a great bronze marker which will read:
"'Beneath these lands which surround you there lies enormous mineral wealth. However, it is the judgment of the American people, who locked up this area, that these lands shall not be disturbed, because we wish posterity to know that somewhere in our country, in gratitude to nature, there was at least one material resource that we could let alone.'"
-- Freeman Tilden
#5])>
<([#6 [*3.5.7*] Large-scale development of oil shale and tar sands on our public lands would also come at a major cost to the West's land, wildlife, air quality, and water resources. Already subject to significant oil and gas developments, some of the areas assessed in the Draft PEIS suffer extremely poor air quality. **#6])> <([#7** [*6.3.2.2*] And although very little is known about the impacts of oil shale production, even the low-end of the estimates of how much water it would consume is significant: a 2010 study by the Government Accountability Office demonstrated the range of estimated water impacts from 5 to 25 barrels of water consumed for every barrel of oil produced—a toll the West simply cannot afford.

"Every man who appreciates the majesty and beauty of the wilderness and of wild life, should strike hands with the farsighted men who wish to preserve our material resources, in the effort to keep our forests and our game beasts, game-birds, and game-fish--indeed, all the living creatures of prairie and woodland and seashore--from wanton destruction. Above all, we should realize that the effort toward this end is essentially a democratic movement."
-- Theodore Roosevelt
#7])>
<([#8 [*3.7.3.12*] [*3.10.3*] [*3.10.5*] The federal public land overlying oil shale resources in Utah, Colorado, and Wyoming is also some of the best fish and wildlife habitat in the West, and outdoor recreation and tourism are huge economic drivers for the region, whereas oil shale is currently producing no jobs and no revenue, and the Congressional Budget Office confirmed that it is not expected to produce significant revenues through 2022. These federal public lands are also home to the largest remaining big game migration in the lower 48 states. It is the "mule deer factory." It provides important habitat for sage-grouse, a species that is on the brink. All of the proposed extraction methods for oil shale will have devastating impacts on wildlife and on other values of these public lands, including clean air and water. We must protect this sustainable economy by making smart decisions based on sound information.

"Then I say the Earth belongs to each generation during its course, fully and in its own right, no generation can contract debts greater than may be paid during the course of its own existence."
-- Thomas Jefferson **#8])>**

<([#9 [*12.3*] I ask that you carefully evaluate and fully disclose the serious impacts of all new energy required for oil-shale and tar-sand production and its potentially devastating impacts to our climate, as well as the threat it poses to wildlife, special-status, threatened, and endangered

species, and to our water, air, and communities. For all the reasons stated above, I am strongly opposed to opening up our public lands to oil shale or tar sands development.

"A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise."
-- Aldo Leopold
#9])>
Thank you for your consideration of my comments. Please do NOT add my name to your mailing list. I will learn about future developments on this issue from other sources.

Sincerely,
Christopher Lish
Olema, CA

OSTS2012D50166
Organization: Concerned Citizen
Received: 4/28/2012 12:33:20 PM
Commenter1: Concerned Citizen - , (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: 035a_Campaign
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/1/2012 12:00:00 AM
Attachments: OSTS2012D50166.htm (OSTS2012D50166-58641.htm Size = 2 KB)
Submission Text
<([#1 [*3*] I am deeply concerned about the potential effects to our water, wildlife, communities and public lands if the BLM initiates a commercial oil shale leasing program. The two million acres in UT, WY and CO previously allocated for commercial leasing is a massive amount of public, taxpayer land that would be sacrificed for a singular use of the landscape. **#1])> <([#2** [*2.2*] [*12.3*] While the preferred alternative (Alternative 2) is a step in the right direction, BLM should consider an alternative that does not endorse giveaways of public lands to this unproven industry. **#2])> <([#3** [*3*] Oil shale is currently producing no jobs and no revenue. The Congressional Budget Office confirmed that it is not expected to produce significant revenues through 2022. This means we have time to thoroughly assess the impacts of development to our water, wildlife and communities, and should not rush now to give away public lands. **#3])> <([#4** [*3.10.3*] The land overlying oil shale resources in Utah, Colorado and Wyoming is some of the best wildlife habitat in the West. Outdoor recreation and tourism are huge economic drivers that depend on this habitat. The farming and ranching sectors require reliable access to water resources, which may be depleted by extensive commercial oil shale development. We must protect these jobs by making smart decisions about how we allow oil companies to move forward with oil shale speculation. **#4])> <([#5** [*3*] I recommend that you carefully consider the serious impacts of oil shale production to our wildlife, water, air, and communities as you take another look at oil shale development.
#5])>

OSTS2012D50167
Organization: Bob Aegerter
Received: 4/28/2012 6:47:30 PM
Commenter1: Bob Aegerter - Bellingham, Washington 982297931 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/1/2012 12:00:00 AM
Attachments: OSTS2012D50167.htm (OSTS2012D50167-58643.htm Size = 1 KB)
Submission Text
<([#1 [*2.3.1*] Alternative 3 is the preferred alternative. **#1])> <([#2** [*3.4.1*] Water quality and water availability are critic unresolved issues. Smaller trial projects that prove the economic viability and the adequacy of environmental protections. **#2])> <([#3** [*3.10.4*] The existing economy centered around the National Parks and Monuments must be protected. Projects that destroy the experiences of visitors will have significant negative impacts. **#3])> <([#4** [*3.10.3*] In 1982 Exxon ended the Colony Shale Project resulting in a great deal of economic disruption. The industry has not proved that the technology works and is economically viable. **#4])>**

OSTS2012D50168
Organization: Lauren Jusek
Received: 4/28/2012 11:47:19 PM
Commenter1: Lauren Jusek - Garrettsville, Ohio 44231 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/1/2012 12:00:00 AM
Attachments: OSTS2012D50168.htm (OSTS2012D50168-58645.htm Size = 1 KB)
Submission Text
<([#1 [*3.10.2*] Not only do I not have a say in whether or not the oil companies drill all around my property, but it's only my neighbors with money and the oil companies who will profit. I want to know who will reimburse me for devaluing my property and potentially polluting my water. **#1])>**

OSTS2012D50169
Organization: NA, Lauren Florence
Received: 4/29/2012 9:53:23 AM
Commenter1: Lauren Florence - Salt Lake City, Utah 84109 (United States)
Organization1:NA
Commenter Type: Member of the Public

Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/1/2012 12:00:00 AM
Attachments: OSTS2012D50169.htm (OSTS2012D50169-58647.htm Size = 1 KB)
Submission Text
I live in Utah. As part of the general public, I am submitting input to help the BLM decide what public lands will and will not be available for oil shale and tar sand development in Utah, Colorado and Wyoming. In the Programmatic Environmental Impact Statement released by the BLM last month, **<([#1** [*2.3.1*] I support Alternative 3 making 30,000 acres available in Utah for research, demonstration and development. 30,000 acres should be enough to prove the economic viability of oil shale. If it is, then more land could be considered later. **#1])>**

OSTS2012D50170
Organization: 350.org in Laramie, Herald Keown
Received: 4/29/2012 1:42:18 PM
Commenter1: Herald Keown - Laramie, Wyoming 82070 (United States)
Organization1:350.org in Laramie
Commenter Type: Affiliation Only
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/1/2012 12:00:00 AM
Attachments: OSTS2012D50170.htm (OSTS2012D50170-58659.htm Size = 5 KB)
Submission Text
If You Build it They Will Come "If you build it, they will come," the adage from "Field of Dreams," has a parallel in the petroleum industry. "If we find it, they will buy it." The public seems unaware of the environmental cost and the finiteness of oil. Extraction continues on almost an exponential curve. The first oil was easy. The Drake well near a tar spring at Titusville, Pennsylvania in 1859 was seventy feet deep. The first exploration was just to find a tar seepage and drill. Near the La Brea Tar Pits, now within Los Angeles, a huge field came in. The first Wyoming well was near a tar pit south of Lander. Early on oil was near where it was used. A well in front of the Oklahoma state capitol is nicknamed "Petunia #1". Drilling began in the middle of a flowerbed. Where are the extremes today in keeping up with the demand? Two hundred miles off the coasts the largest companies build platforms that are the size of the Eiffel Tower, so large and expensive the major petroleum companies, the richest industrial organizations ever, must pool their funds. The platforms cost billions and the sub sea wells may be 7,000 feet just to the well hole. We know their danger. Operations bring billions in profits. With drill stems ready, the industry waits for an opening into the Artic National Wildlife Refuge. Tar sands come from beneath Canada's boreal forest and fragile ecosystems are devastated. Google "Sixty Minutes," "The Tar Sands of Alberta." In a land where the winter temperature sometimes zooms up to zero degrees, twenty-four hours a day monster trucks move across the artic transporting sands to be processed into crude and sent out in pipelines. The largest, the

Keystone XL, is intended to cross seven US states. Meanwhile, much of the public asks, Why not? What is the use of undeveloped Canada? **<([#1** [*6.2.3*] The ultimate extreme would be to bake oil from shale in the Colorado Plateau region of Colorado, Utah and Wyoming. The BLM is planning to assist oil shale production like Canada does in Alberta. It would require enormous amounts of energy to make energy. Jim Bridger Power Plant, Wyoming's largest, produces 2,000 megawatts. Each day it uses 15,000 tons of coal. In coal cars that extends a mile and a half on the railroad track. Colorado Plateau oil shale averages one barrel of oil per three tons of shale. A Rand Corporation study indicates that a commercial-scale industry of a million barrels daily, one twentieth of the nation's consumption of oil each day, would require ten 1,200 megawatts plants. Wyoming has eight main power plants. Ten plants would produce 100 million tons of greenhouse gasses annually. The requirement would be 60 million tons of shale for a single US day of oil. In 100-ton rail cars that much ore would reach across the US two times! **#1])> <([#2** [*3.5.1.6*] The most urgent threat by far, even beyond the use of precious, already appropriated water, will be harm to our atmosphere. Oil produced from oil shale will end up where the other fossil fuels end up, as carbon dioxide in the atmosphere. Nearly all organizations of scientists affirm the atmosphere and the earth's surface is warming and climate change is the result (http://en.wikipedia.org/wiki/Scientific_opinion_on_climate_change). A recent study conducted by the National Academy of Sciences (http://www.pnas.org/content/107/27/12107.full) polled 1,372 active atmospheric scientists. 97–98% of active climate researchers support the tenets of anthropogenic caused climate change outlined by the Intergovernmental Panel on Climate Change. The ongoing study by the IPCC is the most exhaustive study ever on climate change. With two thousand other scientists, in 2007, Dr. Gabor Vali and Dr. Jason Shogren of the University of Wyoming received the Nobel Peace Prize for their research with the IPCC. **#2])> <([#3** [*12*] Conservation gets smothered in Wyoming. Eighty percent of the employment is tied to production of fossil fuels. We're first in coal production among the states, second in natural gas, and seventh in oil. Wyoming produces more carbon to be released into the atmosphere as carbon dioxide than any of the U.S. states and most nations. In 1997 Wyoming was the first state to produce 200 million tons of coal in one year. It remains the only state to mine that much coal in one year. In 2008, a decade later, production more than doubled to 462 tons, more coal than the other three top coal-producing states, Pennsylvania, West Virginia and Kentucky, combined. **#3])>** Duane Keown, Professor Emeritus, Science Education, University of Wyoming (dkeown@uwyo.edu)

OSTS2012D50171

Organization: Douglas DeNio
Received: 4/29/2012 1:49:18 PM
Commenter1: Douglas DeNio - New Castle, Colorado 81647 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/1/2012 12:00:00 AM
Attachments: OSTS2012D50171.htm (OSTS2012D50171-58663.htm Size = 1 KB)
BLM_Oil_Shale_OSTS2012D50171.docx (OSTS2012D50171-58662.docx Size = 12 KB)

Submission Text
Please see Attachment See Attachment.

To: BLM 4/30/2012
Subject: 2012 Oil Shale and Tar Sands PEIS
I am a resident of Garfield County, Colorado. For many years I lived in Parachute, Colorado and am very familiar with the dubious oil shale legacy including the various pilot projects currently underway.
<([#1 [*9.8*] The 2008 PEIS was fundamentally flawed. The adverse impacts of dedicating nearly 2 million acres of our Public Lands for industrial use at bargain basement prices, without a proven extraction technology and without having scientific data to measure impacts on the water, soil, air, wildlife resources and public health and safety was egregious. I commend the BLM for conducting this second stage PEIS to increase transparency and scientific rigor on this most import project.
#1])> <([#2 [*2.2.1*] I support the BLM's Preferred Alternative of allocating 462,000 acres for potential oil shale and tar sands leases as a measured response to enable the oil shale industry to conduct robust RD & D activities to identify viable extraction processes including cost/ benefit ratio, energy requirements, water requirements, resource environmental impacts, impacts on wildlife, social-economic impacts, and health – life safety concerns.
As a registered professional engineer, I view the Preferred Alternative as a logical incremental progression in the decision matrix for oil shale development whereas the 2008 proposal was a political imperative to benefit the industry without transparency and scientific support. There are still groups (various County Commissions) with the misguided belief that the 2008 proposal is still preferred. The 2008 proposal was nothing more than an industry land grab that was not in the best interests for the citizens of the United States both economically and environmentally.
#2])> <([#3 [*3.10.2*] The citizens of Western Colorado have been through several oil shale busts over the past years; the latest being 30 years ago. Today, industry proponents tout that another oil shale bust is impossible now or in the future. In the early 2000's, the natural gas industry made similar claims that there "could never be an economic bust in natural gas like there was in oil shale". The current economically depressed natural gas industry disproves the bravado claimed in the early 2000's. **#3])>**
Thank you for the opportunity to comment.

Sincerely,

Douglas DeNio,PE.
25 Buckskin Circle
New Castle, CO 81647

OSTS2012D50172
Organization:
Received: 4/29/2012 2:02:17 PM
Commenter1: - , (United States)
Organization1:
Commenter Type: Member of the Public
Classification:

Submission Category: 035a_Campaign
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/1/2012 12:00:00 AM
Attachments: OSTS2012D50172.htm (OSTS2012D50172-58661.htm Size = 2 KB)
Submission Text
<([#1 [*3*] I am deeply concerned about the potential effects to our water, wildlife, communities and public lands if the BLM initiates a commercial oil shale leasing program. The two million acres in UT, WY and CO previously allocated for commercial leasing is a massive amount of public, taxpayer land that would be sacrificed for a singular use of the landscape. **#1])> <([#2** [*2.2*] [*12.3*] While the preferred alternative (Alternative 2) is a step in the right direction, BLM should consider an alternative that does not endorse giveaways of public lands to this unproven industry. **#2])> <([#3** [*3*] Oil shale is currently producing no jobs and no revenue. The Congressional Budget Office confirmed that it is not expected to produce significant revenues through 2022. This means we have time to thoroughly assess the impacts of development to our water, wildlife and communities, and should not rush now to give away public lands. **#3])> <([#4** [*3.10.3*] The land overlying oil shale resources in Utah, Colorado and Wyoming is some of the best wildlife habitat in the West. Outdoor recreation and tourism are huge economic drivers that depend on this habitat. The farming and ranching sectors require reliable access to water resources, which may be depleted by extensive commercial oil shale development. We must protect these jobs by making smart decisions about how we allow oil companies to move forward with oil shale speculation. **#4])> <([#5** [*3*] I recommend that you carefully consider the serious impacts of oil shale production to our wildlife, water, air, and communities as you take another look at oil shale development.
#5])>

OSTS2012D50173
Organization: RoseMarie Aridas
Received: 4/30/2012 8:19:05 AM
Commenter1: RoseMarie Aridas - Laramie, Wyoming 82072 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/1/2012 12:00:00 AM
Attachments: OSTS2012D50173.htm (OSTS2012D50173-58668.htm Size = 1 KB)
oilshale_OSTS2012D50173.doc (OSTS2012D50173-58667.doc Size = 28 KB)
Submission Text
See Attachment.
<([#1 [*12*] I will reiterate what I put in a letter to the editor in the Laramie "Boomerang" but I have attached it below. This is an unproven, so far unproductive process that will not affect our dependence on foreign oil (only we will!), will destroy the landscape, use too much water, pollute the air, endanger recreation- and tourism-related jobs, and disrupt wildlife. The damage

and any potential yield are absolutely not worth allowing exploration and drilling.

I recently read literature and a website's FAQs about oil shale. It reminded me of the commercial: "It's not nice to fool Mother Nature." Why? Because producing oil from oil shale involves using other natural resources and energy-consuming processes to convert fossilized organic matter embedded between layers of shale into conventional crude oil instead of letting Mother Nature do it for us!

Scientists and experts can always be found to defend or refute a theory or a prediction; all that proves to me is that if that happens, it's an issue serious enough to be thus debated.

But various sources tell me that a 2020 industry prediction of 59,500 barrels/day is 0.3% of our daily oil consumption so oil shale production won't reduce our foreign oil dependence; that up to 5 barrels of water are needed to produce each barrel of oil from oil shale; that conventional crude oil is twenty times more efficient; that all of the energy consumed to do Mother Nature's work will result in anywhere from 23%-75% more greenhouse gases.

Why care? No matter your position on climate change, we're experiencing drier, hotter weather and water-availability issues that affect tourism, recreation, agriculture and threaten associated "bird in the hand" jobs. Do we want to divert water to an unproven process that after 100 years hasn't yielded one commercially-produced barrel? BLM proposals involve approximately 175K to over 1M acres in Wyoming - mostly in the Green River Basin - plus more in Utah and Colorado; that's a whole lot of land to be given over to commercial leases without evidence of feasibility or an understanding of the impacts on wildlife, water, and people; Google the "Gillette Syndrome" to be reminded of what happens to small communities when temporary workers inundate a town, strain resources and infrastructure and change its life-style.

I will participate in the BLM's 90-day comment period on the oil shale - and tar sands - draft proposals opting probably for a restrictive alternative, but you should read more on oil shale; consult with experts; go to the BLM's Information Center at http;//ostseis.anl.gov and take a stand one way or the other. **#1])>**

RoseMarie Aridas

OSTS2012D50174
Organization: Judith McBride
Received: 4/30/2012 9:34:01 AM
Commenter1: Judith McBride - , Wyoming 82070 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:

Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/1/2012 12:00:00 AM
Attachments: OSTS2012D50174.htm (OSTS2012D50174-58664.htm Size = 1 KB)
Submission Text
<([#1 [*12*] WATER,,,,,,HAS / MUST be our most prized natural resource.....Why use it for a 100 year old search for a most speculative unsuccessful to date recovery of a product that only extends our selfish inability to find better ways for humans to care and grow on this planet. **#1])>**

OSTS2012D50175
Organization: Alliance for the Wild Rockies, Raymond Berry
Received: 4/30/2012 9:49:44 AM
Commenter1: Raymond Berry - Salt Lake City, Utah 84109 (United States)
Organization1: Alliance for the Wild Rockies
Commenter Type: Environmental Organization
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/1/2012 12:00:00 AM
Attachments: OSTS2012D50175.htm (OSTS2012D50175-58666.htm Size = 1 KB)
Submission Text
<([#1 [*12.3*] My comments are submitted on behalf of the Alliance for the Wild Rockies and on my own behalf, as a resident of Wayne County, Utah, the home of Capitol Reef National Park. Allowing tar sands or oil shade development in the public lands that surround Capitol Reef and the other Utah national parks would be a great travesty, and a betrayal of the tradition of federal land conservation in the West. The only organizations likely to benefit from such programs will be energy speculators who tout these technologies to the investment community. If at some future time realistic and practical technologies are developed, ones that would not utterly destroy the surrounding environment, this question can be revisited. Until then please do not permit the wild public lands of Utah to be turned into the sort of national wastelands visible in Alberta. **#1])>** Raymond S. Berry Board Member, Alliance for the Wild Rockies Resident, Torrey, Wayne County, Utah

OSTS2012D50176
Organization: Jonathan Wallace
Received: 4/30/2012 10:15:15 AM
Commenter1: Jonathan Wallace - Moab, Utah 84532 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/4/2012 12:00:00 AM
Attachments: OSTS2012D50176.htm (OSTS2012D50176-58678.htm Size = 1 KB)

Submission Text
<([#1 [*12*] I strongly oppose adding more lands for Oil Shale or Tar Sands extraction. I believe these destructive extraction methods are not truly proved safe and should only a last resort. What makes this proposal even worse is much of the land proposed for use is some of our most sensitive and beautiful land left in the country. Exploiting this land now to solve a short term problem is unjustified in my mind. #1])> Thanks for your time. Sincerely, Jonathan Wallace

OSTS2012D50177
Organization:
Received: 4/30/2012 11:07:19 AM
Commenter1: - , (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/4/2012 12:00:00 AM
Attachments: OSTS2012D50177.htm (OSTS2012D50177-58680.htm Size = 1 KB)
Submission Text
<([#1 [*12*] This is a terrible proposal. Developing these energy sources will lead to vast environmental destruction that may never be repaired. This is essentially giving away our public lands to massive corporations that have little regard for the health of our lands and will essentially destroy all recreation on them. Stop the development of all oil shale and tar sands in the United States. #1])>

OSTS2012D50178
Organization: USPS, Douglas Marsh
Received: 4/30/2012 1:40:20 PM
Commenter1: Douglas Marsh - Eagan, Minnesota 551231806 (United States)
Organization1:USPS
Commenter Type: Affiliation Only
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/4/2012 12:00:00 AM
Attachments: OSTS2012D50178.htm (OSTS2012D50178-58682.htm Size = 1 KB)
Submission Text
<([#1 [*12.1*] It's time to move on past dirty energy sources such as tar sands. #1])>

OSTS2012D50179
Organization: Jason Stevenson
Received: 4/30/2012 1:42:09 PM
Commenter1: Jason Stevenson - Salt Lake City, Utah 84105 (United States)

Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/4/2012 12:00:00 AM
Attachments: OSTS2012D50179.htm (OSTS2012D50179-58684.htm Size = 2 KB)
Submission Text
<([#1 [*3.1.2*] My name is Jason Stevenson. I am a resident of Salt Lake City, Utah. I am concerned that allowing oil shale and tar sands leases in the proposed areas would cause harm to nearby national parks and recreational areas. I enjoy hiking, car-camping, and driving in southern Utah with my family. We moved to Utah from Pennsylvania specifically because of the state's outdoor amenities. In fact, we are planning a car camping trip with friends this June to visit Canyonlands, Arches, Grand-Staircase, and Zion. My job as an outdoors writer is directly connected to the availability and preservation of Utah's world-famous recreation lands and activities. I worry that the untested and unknown technologies to extract oil shale and tar sands will harm the air quality, wildlife, roads, water quality and flow, and visitor experience at national parks and recreation lands in Utah where I live. Creating energy from oil shale and tar sands is the "cold fusion" of the petroleum industry. Maybe one day it will be possible, but we aren't there yet. **#1])> <([#2** [*2.3.1*] Oil shale and tar sands companies have been experimenting on state, private, and some public lands for decades--trying to figure out how to make oil shale and tar sands economical. After decades of hard work, they are closer to making it work, but they aren't to the point where they should be given hundreds of thousands of acres of public lands to continue their experiments. Therefore, I think the BLM should choose the research-only Alternative #3, which allows only research development, and demonstrate leases on existing parcels. I believe these leases will give companies enough public lands to demonstrate the feasibility of their projects. The other options that allow more leases could create another boom-to-bust energy grab, which would not only harm the public lands where the mining and processing takes place, but also whiplash the economy like it did on Black Sunday in May 1982. In summary, as a Utah resident, as someone whose livelihood depends on the preservation of this state's national parks and public lands, and as a father who wants his son to enjoy the same access and enjoyment from public lands that I had as a child, I urge the BLM to choose the research-only Alternative #3. Thank you for reading my comments. **#2])>** -Jason Stevenson

OSTS2012D50180
Organization: Colorado Parks and Wildlife
Received: 4/30/2012 3:36:53 PM
Commenter1: - Grand Junction, Colorado 81505 (United States)
Organization1: Colorado Parks and Wildlife
Commenter Type: State Government
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:

Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/16/2012 12:00:00 AM
Attachments: OSTS2012D50180.htm (OSTS2012D50180-58702.htm Size = 1 KB)
Final_Draft_Internal_OSTS_DEIS_Letter_Signed_OSTS2012D50180.pdf (OSTS2012D50180-58701.pdf Size = 63 KB)
Submission Text
See Attachment.

COLORADO PARKS & WILDLIFE
Northwest Regional Service Center
711 Independent Ave., Grand Junction, CO 81505
Phone (970)255-61 00 • FAX (970)255-6111
wildlife.state.co.us • parks.state.co.us
Sherri Thompson, Project Manager
Bureau of Land Management, Colorado State Office
2850 Y oungfield St.
Lakewood, CO 80215-7093
May4, 2012
RE: Colorado Parks and Wildlife Comments for the Draft Programmatic Environmental Impact Statement and Possible Land Use Plan Amendments for Allocation of Oil Shale and Tar Sands Resources on Lands Administered by the Bureau of Land Management in Colorado, Utah, and Wyoming (January 2012).
Dear Ms. Thompson:
Colorado Parks and Wildlife (CPW) appreciates the opportunity to work with BLM by providing comments and recommendations for the Draft Programmatic Environmental Impact Statement and Possible Land Use Plan Amendments for Allocation of Oil Shale and Tar Sands Resources on Lands Administered by the Bureau of Land Management in Colorado, Utah, and Wyoming (OSTS DPEIS). In December 2007 and May, 2008, Colorado Division of Wildlife, (now Colorado Parks and Wildlife) provided comments on the impacts to wildlife that would likely to occur as a result of land-use allocations and policy direction as presented in the BLMs Resource Management Plan Amendments for Oil Shale.
<([#1 [*3.7.3.1*] [*3.7.4.1*] CPW s concerns and recommendations expressed in the 2007 and 2008 OSTS PEIS
comment letters remain valid for this OSTS DPEIS. (See Attachments) CPW respectfully restates that the Piceance Basin is home to the largest migratory mule deer herd in North America, a large migratory elk population, one of only six greater sagegrouse populations in Colorado, conservation and core conservation populations of Colorado River cutthroat trout, and a host of other wildlife species. These resources are of statewide economic, ecological, recreational, and aesthetic importance. Impacts to these wildlife resources from oil shale development will have local, regional, statewide, and even national implications to sportsmen and other wildlife enthusiasts. **#1])>**

<([#2 [*3.7.3.1*] [*3.7.4.3*] CPWs primary concern for wildlife due to commercial oil shale development is the
overall loss and fragmentation of crucial wildlife habitat, the feasibility of reclamation of disturbed areas, and the damage that would accrue to wildlife populations. Due to the

lack of available information, the detail provided in the OSTS DPEIS is insufficient to allow for an accurate or complete assessment of the cumulative impacts to wildlife habitats and populations that will occur from oil shale development.

BLM identifies, generally, potential impacts to Colorado wildlife species, such as cutthroat trout and the greater sage-grouse; CPW recommends that the most current assessments, habitat maps, Resource Management Plans, or potential listing reviews be included for updates and assessments in the process as it moves forward. **#2])>**

<([#3 [*3.7.5.1*] Concurrent with the most recent mapping efforts, there is a heightened interest and sense
of urgency to define sufficient protective measures for greater sage-grouse at the state and national levels and methods for incorporating those measures in RMPs. For instance, CPW in cooperation with BLM has developed revised priority habitat maps that differ from maps previously outlined in the Colorado Greater Sage-grouse Conservation Plan (2008). Results of the greater sage-grouse EIS should be incorporated into this OSTS DPEIS. CPW expects that the BLM will manage greater sage-grouse and their habitats wherever they occur in a manner that avoids the need to list the species under the Endangered Species Act. CPW is unclear how the process and outcomes of this OSTS EIS, especially leasing, will be merged with BLMs parallel process under the National Sage-Grouse Strategy to protect the greater sage-grouse.
CPW points out that new (Spring 2012) greater sage-grouse habitat and population distribution information (map) is available and that this new information has the potential to influence the process and outcome of the OSTS DPEIS. **#3])>**

<([#4 [*3.7.3.8*] The BLM is offering four leasing alternatives with four sub alternatives (Alternative 2a,
2b, 4a, and 4b). Each of the alternatives designates a specified amount of acreage that would be made available for lease; acreage amounts range from 32,640 to over 2 million acres with numerous permutations for partial and full lease exclusions.

CPWs review of the leasing alternatives identified many crucial unknowns and variability in estimates concerning leasing scenarios, technologies that would be used, production output variability, and potential impacts to wildlife. The generalizations and lack of specific information presented in the document make it extremely difficult if not impossible to analyze the alternatives and provide meaning review and feedback with respect to impacts to wildlife and wildlife habitats as well as to provide strategies and methods for avoidance and minimization of those impacts. On page 2-83 BLM states that "The magnitude of these potential impacts cannot be quantified at this time because key information about the location of commercial projects, the technologies that maybe employed, the project size or production level, development time lines, and mitigation measures that would be applied, are unknown." CPW agrees.

Further, it appears that past and on-going RD&D projects have not produced substantive information to make informed decisions regarding impacts to wildlife resources that will result from oil shale development. Many of BLMs references to technologies refer to

2005 research and not on-going efforts or recent findings. CPW believes that it would be unwise to move forward with the aggressive leasing alternatives #1 and #4 which have the most potential to impact Colorado's wildlife. **#4])>**

<([#5 [*6.3.1*] CPW is intrigued by the Red Leaf R&D Resources EcoShale TM In-Capsule Technology
claims of being self-sufficient power wise, its anticipated energy return on investment of 10, and that it would not require Process Water. This approach appears to be the least intrusive to wildlife and reduces the negative effects of Oil Shale development. If these claims are proven to be true, this type of Oil Shale development technology should be required for oil shale leases across the region. **#5])>**

<([#6 [*2.3.1*] CPW firmly believes that until less detrimental methods for Oil Shale Development is
proven; leasing is premature other than the 6 existing R&D Pilot Plots plus the 3 pending R&D Pilot studies (totaling 32,640 acres of public land - 26,880 in Colorado). The existing and planned R&D studies should be allowed to run their course, derive meaningful results (real data that can be used to develop accurate impact assessments), and attempt to establish an environmentally friendly cost effective extraction process. When such technologies are found and proven, appropriate oil shale extraction and mitigation regulations can be developed and implemented for all proposed BLM land allocations and leasing opportunities. **#6])>**
Thank you for this opportunity to comment. CPW looks forward to working cooperatively with BLM to ensure that impacts to wildlife and habitats associated with oil shale development are addressed in a careful and protective manner.
Sincerely,
/?on_f). (/~
Ron D. Velarde
NW Regional Manager
cc. Jeff VerSteeg, Assistant Director for Wildlife Programs
Becky Mitchell, Water and Policy Issues Coordinator
Ginny Brannon, Assistant Director, Energy and Minerals
Dean Riggs, NW Assistant Regional Manager
Sherm Hebein, NW Senior Aquatic Biologist
Brad Petch, NW Senior Terrestrial Biologist
Bill deVergie, Area Wildlife Manager
Lyle Sidener, Area Wildlife Manager
JT Romatzke, Area Wildlife Manager
Jim Haskins, Area Wildlife Manager
Perry Will, Area Wildlife Manager
Michael Warren, NW Energy Liaison
file

OSTS2012D50181
Organization: Duchesne County, Utah, Duchesne County Commissioners
Received: 4/30/2012 3:56:57 PM
Commenter1: Duchesne County Commissioners - Duchesne, Utah 84021 (United States)

Organization1: Duchesne County, Utah
Commenter Type: Coop Agency - Local Govt
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/10/2012 12:00:00 AM
Attachments: OSTS2012D50181.htm (OSTS2012D50181-58791.htm Size = 1 KB) DPEIS_OSandTS_Comment_Letter_OSTS2012D50181.docx (OSTS2012D50181-58790.docx Size = 37 KB)
Submission Text
See attachment See Attachment.

April 30, 2012

BLM Oil Shale & Tar Sands PEIS

Argonne National Laboratory

EVS Division, Building 240

9700 South Cass Avenue

Argonne, IL 60439

RE: Comments on Draft BLM Oil Shale & Tar Sands PEIS

Dear Reader:

<([#1 [*9.8*] Duchesne County, Utah, a cooperating agency in this environmental review process, has summarized its comments in Resolution #12-08, attached hereto and incorporated herein. Rural counties in Utah, Wyoming and Colorado containing these vast and important energy resources will not stand idly by while the Obama Administration continues to wage war on energy production in the West.

This so-called "fresh look" at lands available for oil shale and tar sands leasing is a colossal waste of the taxpayer's dollars, which practice has become all too frequent during the Obama Administration. The 2008 PEIS, which Duchesne County spent significant staff hours reviewing and commenting on, as a cooperating agency, was consistent with the Energy Policy Act of 2005, the state and local land use plans in the region (such as the Uintah Basin Utah Energy Zone designation) and the multiple use mandate of FLPMA. The draft 2012 PEIS violates all of these and makes no attempt to explain why greater consistency cannot be achieved. A copy of the Uintah Basin Utah Energy Zone Resolution #12-06, approved by Duchesne County, is attached hereto and incorporated herein by reference. **#1])>**

<([#2 [*9.1*] [*9.2.1*] This DPEIS contains a flawed purpose and need statement based on the infamous Secretarial Order 3310, which Congress de-funded as stated in the Resolution enclosed. **#2])>** **<([#3** [*1.5*] The DPEIS, given the substantial numbers of errors and omissions therein, shows an obvious attempt to rush this PEIS to approval before the end of the Obama Administration. **#3])>**

<([#4 [*2.2*] The BLM preferred Alternative, Alternative 2b, is not adequately analyzed in the DPEIS. **#4])>** **<([#5** [*2.1.1*] Alternative 1 is the only alternative that can be legally justified. **#5])>**

<([#6 [*6.3*] [*9.2.5*] The DPEIS fails to deliver the promised "fresh look" as it relies on basically the same data as the 2008 PEIS and fails to incorporate new data that has become available since 2008; especially the important data associated with new oil shale and tar sands technologies being employed on non-federal lands in the region. This failure to utilize the best available data constitutes a violation of the Federal Data Quality Act. **#6])>**

<([#7 [*9.5*] Duchesne County, pursuant to our Cooperating Agency Memorandum of Understanding, Section V (E) hereby informs the BLM that we disagree on substantive elements of the DPEIS. These disagreements have not been resolved through the comment period to our satisfaction. We request, in accordance with the MOU, that the BLM describe the many substantial inconsistencies between its proposed action and the objectives of Duchesne County's land use plans and policies and include a summary of Duchesne County's views (as stated in this letter and in the enclosed Resolution) in the Final PEIS. **#7])>**

We have conducted a page-by-page review of the four-volume DPEIS and offer the following specific comments on the content of the document:

<([#8 [*1.5*] Page ES-1, Line 19 and Page 1-4, Line 7: If the BLM has decided to take a "fresh look" at the land allocations from the 2008 PEIS, why does the 2012 DPEIS fail to utilize new data that has become available since the 2008 effort? Some sample pages where BLM has failed to incorporate new data are: Pages 2-15, 3-28, 3-29, 3-34, 3-62, 3-83, 3-85, 3-246, 3-247, 3-262, 3-268 through 270, 3-272, 4-9, 4-198 through 199 and A-109 to name a few. **#8])>**

<([#9 [*2*] Page ES-5, Line 39: The lands identified as suitable for potential leasing under the 2008 PEIS are considered the most geologically prospective oil shale and tar sands areas. It makes absolutely no sense to remove 75% of these lands from potential leasing given the strides made in technology, as demonstrated on non-federal lands, since 2008. **#9])>**

<([#10 [*3.1.5*] Page ES-6, Footnote 3: It makes no sense to remove lands from consideration because they are within ACEC's that failed to warrant designation in BLM land use plans. **#10])>**

<([#11 [*6.3.2.1*] Page ES-9, Line 15: BLM has ignored the low water use technologies being employed by Red Leaf Resources (Oil Shale), Temple Mountain Energy (Tar Sands) and others despite requests by cooperating agencies that such new information must be incorporated in the DPEIS to debunk the water use myth promoted by radical environmental groups. **#11])>**

<([#12 [*6.5*] [*3.15*] Page 1-8, Figure 1.2-1, Page 2-14, Figure 2.3-1: These figures were not updated to reflect the latest findings from the USGS 2011 Assessment of In-Place Oil Shale Resources. **#12])>**

<([#13 [*13*] Page 1-20, Line 31: Reference is made to a text box; but it is not clear that this text box appears on Page 1-2. **#13])>**

<([#14 [*9.5*] Page 1-21, Lines 32-41: The BLM has failed to cooperate with state and local governments to promote consistency with their land use plans. The State of Utah and many counties containing oil shale and tar sands resources have established an Energy Zone that provides for energy development as the priority land use. The BLM has made no attempt in the DPEIS to explain why its preferred alternative cannot be more consistent with such local plans. **#14])>**

<([#15 [*6.3.5*] Page 2-1, Line 18: BLM fails to recognize that oil shale has already proven to be an economically viable resource. It has most recently been proven by Enefit American Oil, which recently hosted Uintah County, Utah officials at their operations in Estonia. Enefit operates economically on a three-foot thick seam of oil shale. Imagine how economically they could operate on a 25-foot or greater thickness of oil shale in NE Utah, if given the chance! Commercial production has also occurred in Scotland (see Page 4-200). **#15])>**

<([#16 [*2*] Page 2-1, Line 32: This description of the alternatives is poorly worded and could lead the reader to assume that the No Action Alternative does not allocate any lands for potential leasing. The alternatives could better be described as the No Action Alternative and three ***reduced*** land allocation alternatives.
#16])>
<([#17 [*6.3*] Page 2-15, Line 17: BLM has failed to recognize the plans for commercial oil shale development by TomCo Energy, a London-based energy company that plans to seek permits on SITLA lands. It's too bad that emerging companies are not able to access federal lands for their start-ups and must confine themselves to more progressive-minded state agencies and private land owners to prove the viability of their technology. **#17])>**

<([#18 [*13*] Page 2-16, Line 33…the BLM agreed to propose changes to the rule rather than purpose changes to the rule… **#18])>**

<([#19 [*2.2*] Page 2-35, Line 24: This paragraph demonstrates the lack of business sense by those currently in power in Washington D.C. No company is going to invest in costly oil shale technology on federal lands when such small acreages are made available under Alternative 2(b). It looks like the investments will continue on non-federal lands until the bureaucrats in Washington D.C. are replaced. **#19])>**

<([#20 [*2.2*] Page 2-35, Line 37: In this paragraph, the BLM admits that the preferred alternative, Alternative 2 (b), was "not noted elsewhere in the document but will be developed further in preparation of the Final PEIS. Duchesne County requests that the DPEIS be re-written and provided to us for at least a 30-day comment period after this alternative is more fully developed.

It is impossible for cooperators and the general public to adequately comment on an alternative until it is fully developed in the draft PEIS. **#20])>**

<([#21 [*13*] Page 2-48, Line 8: Two periods at the end of the sentence. Page 2-48, Line 44: Delete the word "as" after the word "acreage." **#21])>**

<([#22 [*13*] [*2.4*] Page 2-53, Tables 2.3.3-4 and 2.3.3-5, Page 2-75, Table 2.4.3-4, Page 2-76, Table 2.4.3-5: These tables needs to be re-designed to help the reader understand them. For example, in Table 2.3.3-4, the column entitled "Acres LWC and Sage Grouse needs to be moved to the right of the "Total" acreage column and then the data subtracted from that acreage to arrive at the acreage available for oil shale development after 75% of the lands with wilderness characteristics and sage grouse habitat are protected. Similar adjustments need to be made in the remaining tables. **#22])>**

<([#23 [*2.4*] Page 2-53, Line 14: This section is an analysis of Alternative 4. Why is Alternative 2 mentioned here? **#23])>**

<([#24 [*13*] Page 2-66, Line 7: This section is an analysis of tar sands leasing under alternative 2. Replace "oil shale" with "tar sands" in this sentence. **#24])>**
<([#25 [*3.15*] [*3.1.7*] Page 2-68, Figure 2.4.3-1: Along the Green River, in Uintah County, there is shown a "Colorado River Wildlife Management Area." We have not heard of this area before and cannot find reference to it on the internet. Being located along the Green River, we suspect that this map designation may be in error. **#25])>**

<([#26 [*13*] Page 2-71, Line 8 and footnote 22: The paragraph beginning on Line 8 and the footnote are repetitious. **#26])>**

<([#27 [*13*] Page 2-73, Line 45: Delete the word "follow" at the end of the sentence. **#27])>**

<([#28 [*2*] Page 2-76, Lines 32-38: The alternative mentioned here should be one of the alternatives analyzed in the DPEIS. Duchesne County requests that the DPEIS be re-written to include this alternative and that the DPEIS be made available for another 90-day comment period after such amendments are made. **#28])>**

<([#29 [*13*] Page 2-80, Lines 39-41 and Lines 44-47: These sentences are poorly worded, repetitive and redundant. **#29])>**

<([#30 [*2*] Pages 2-83 to 2-109, Table 2.6-1: For Alternative 1, why does this table refer only to the White River and Book Cliffs RMPs when the Vernal RMP and perhaps others include oil shale development areas? **#30])>**

<([#31 [*3.7.3.7*] Page 2-95, Table 2.6-1, Wildlife: We doubt that there are "106,092 acres of raptor nests" under Alternative 1 and "103,719 acres of raptor nests" under Alternative 4. **#31])>**

<([#32 [*13*] Page 2-100, Table 2.6-1, Visual Resources: The column for Alternative 4 erroneously contains a reference to Alternative 2. **#32])>**

<([#33 [*13*] Page 2-101, Table 2.6-1, Cultural Resources: There is an acreage discrepancy (1.9 million acres vs. 2,017,714) in the Alternative 1 column. **#33])>**

<([#34 [*3.10.3*] Page 2-104, Table 2.6-1 and Page 2-127, Table 2.6-2, Socioeconomics: The positive socioeconomic impacts are understated and the negative impacts are overstated here and throughout the DPEIS. **#34])>**

<([#35 [*3.12.2*] Page 2-105, Table 2.6-1 and Page 2-128, Table 2.6-2, Environmental Justice: The positive impacts of energy development on minority and low-income populations are understated and the negative impacts are overstated here and elsewhere in the document. **#35])>**

<([#36 [*3.12.1*] Page 2-106, Table 2.6-1 and Page 2-128, Table 2.6-2, Environmental Justice: Assumptions are made that energy development will have negative effects on air and water quality and decrease water available for agricultural use by low-income or minority populations. These assumptions are based on the myths perpetuated by radical environmental groups and do not take into account the technologies being employed on private and state lands by companies such as Red Leaf Resources. **#36])>**

<([#37 [*13*] Pages 2-111 through 2-130, Table 2.6-2: The acreage associated with tar sands leasing under Alternative 1 should be 430,686 rather than 2,017,714. The acreage associated with tar sands leasing under Alternative 2 should be 91,045 rather than 461,965. The acreage associated with tar sands leasing under Alternative 4 should be 425,790 rather than 1,963,414. See Page 2-121. Also, in this Table, the reference under Alternative 1 containing lands only within the White River and Book Cliffs RMPs appears to be erroneous. Lands within the Vernal RMP and perhaps others should be included. **#37])>**

<([#38 [*13*] Page 2-117, Table 2.6-2, Noise: The indication that there would be 1.9 million acres identified for potential tar sands leasing under this alternative is false. **#38])>**

<([#39 [*13*] Page 2-118, Table 2.6-2, Noise, (cont.): Reference is erroneously made to Alternative 2 in the Alternative 4 column. **#39])>**

<([#40 [*3.7.3.7*] Page 2-121, Table 2.6-2, Wildlife: We doubt that there are "7 acres of raptor nests" under Alternative 1 and "5 acres of raptor nests" under Alternative 4. **#40])>**

<([#41 [*13*] Page 3-4 and Figure 3.1.1-1: Section 3.1.1.1 notes that the Glenwood Springs BLM Field Office is now called the Colorado River Valley Field Office. However, Figure 3.1.1-1 (and several other figures throughout the document) still refer to this field office as Glenwood Springs. **#41])>**

<([#42 [*3.1.7*] Page 3-28, Line 6: The figure of 2,800 active oil and gas wells in the Vernal Field Office is out of date (2005). Data from the *Greater Uinta Basin Cumulative Impacts Technical Support Document, August 2011,* states that there are 9,036 productive wells in the region. *(http://www.blm.gov/pgdata/etc/medialib/blm/ut/vernal_fo.Par.57849.File.dat/GCW%20Cums%20TSD%2003-22-12%20final.pdf)* **#42])>**

<([#43 [*3.1.7*] Page 3-29, Line 15-20: This information regarding wild and scenic rivers is out of date (2005) and inconsistent with the ROD for the Vernal FO RMP (see Figure 14a of the Approved RMP). **#43])>**

<([#44 [*3.1.6*] Page 3-37, Line 22: What authority does the Wyoming Environmental Council have to designate an area as very rare or uncommon? **#44])>**

<([#45 [*3.1.8*] Page 3-40, Lines 16-18: The assertion is made that ACEC's, WSA's, SMA's, national historic trails and lands with wilderness characteristics support higher levels of recreation use than most BLM administered areas. The opposite is true. These areas restrict public access and types of activities allowed to the point that they actually support lower levels of recreation use or prohibit recreation use by the majority of citizens. **#45])>**

<([#46 [*3.2*] Page 3-44, Line 2: Erosion by wind is more likely due to the lack of natural vegetative cover than overgrazing. **#46])>**

<([#47 [*13*] Page 3-61, Line 25: Was this water data collected from 1906 **and** 1986 or from 1906 **to** 1986? **#47])>**

<([#48 [*3.4.5*] Page 3-62, Line 13-15: This section, if truly a "fresh look," should be updated to include what the BOR's Basin-wide Salinity Control Program has funded and accomplished since 2004. **#48])>**

<([#49 [*6.3.2.1*] Page 3-66, Section 3.4.1.4, Water Use: This entire section is flawed in that it fails to recognize modern oil shale technology being used by companies such as Red Leaf Resources, which use little to no water. **#49])>**

<([#50 [*3.4.5*] Page 3-78, Section 3.4.2.2, Surface Water Resources: This entire section is flawed in that it fails to recognize data available for the past six years; including 2011, which was a record water run-off year. **#50])>**

<([#51 [*3.4.4*] Page 3-83, Lines 38-44, Page 3-85, Lines 9-15: Again, old data (1941 to 1970) is being used when newer data is available and should be incorporated into the draft. **#51])>**

<([#52 [*3.5.1.8*] Pages 3-103 through 3-105: The climate change predictions on these pages are filled with contradictions; for example, there are dire predictions of both drought and increased precipitation attributed to climate change. **#52])>**

<([#53 [*3.5.5*] Pages 3-106 to 3-107, Table 3.5.2-1: The air emissions data in this table are from 2002. Newer data is available and should be incorporated into this table. Also, data from Duchesne County, Utah is not included in the table.
#53])>
<([#54 [*3.6*] Page 3-120, Line 1: Duchesne County actually limits construction and mining activities to 7 AM to 9:30 PM on weekdays, 8 AM to 9:30 PM on Saturdays and 9 AM to 9:30 PM on Sundays and holidays.

#54])>
<([#55 [*3.7.1.1*] Page 3-121, Line 38: A word is missing at the end of this sentence. The word could be "basin." **#55])>**

<([#56 [*3.7.5.1*] [*3.7.5.3*] Page 3-134, Line 3: …are present within in the Green River Basin… **#56])>**

<([#57 [*3.7.5.1*] [*3.7.5.3*] Page 3-197, Lines 31-32: One major threat to sage grouse populations (see Page 4-91) is West Nile Virus. This threat is left out in this section. **#57])>**

<([#58 [*3.10.1*] Page 3-238, Line 20: The 1989 Gulliford report is apparently flawed. If 700 new schools would be needed to support the oil shale industry in Garfield County, Colorado, with 3,000 teachers and staff, that calculates to about 4.3 teachers/staff members per school. Perhaps 70 new schools would be needed? **#58])>**

<([#59 [*3.10.1*] Page 3-243, Table 3.11.2-1: It appears that the cities of Blanding, Duchesne and Naples, within the Utah ROI, have been omitted from this table. **#59])>**

<([#60 [*3.10.1*] Page 3-245, Table 3.11.2-4: This table contains a mixture of data from 2004, 2007 and 2009, which makes the title of the table misleading and makes it difficult to draw conclusions from the data. Data from 2004 should be updated to 2009 data, if available. **#60])>**

<([#61 [*13*] Page 3-246, Lines 1-32: The employment data used in this section is from 2004. Updated employment data should be available in Utah from the Department of Workforce Services. **#61])>**

<([#62 [*13*] Page 3-251, Line 4, Page 3-254, Line 22, Page 3-255, Table 3.11.2-8, Page 3-261, Line 44: Duchesne is misspelled. **#62])>**

<([#63 [*3.10.1*] Page 3-262, Table 3.11.2-11: Much of the data used in developing this table is 6-8 years old and should be updated. **#63])>**

<([#64 [*3.10.1*] Pages 3-268 and 3-269, Tables 3.11.2-15 and 3.11.2-16: Much of the data used in developing these tables is 6-8 years old and should be updated. **#64])>**

<([#65 [*3.10.4*] Page 3-270 and 271: The value of recreation resources is unlikely to be underestimated as many agencies have been known to inflate their visitation counts to justify the budget they wish to obtain. Also, a recent study by Utah State University [*The Economic Costs of Wilderness, June, 2011*] finds that wilderness areas actually have a negative impact on the local economy rather than a positive impact. **#65])>**

<([#66 [*3.10.1*] Page 3-272, Table 3.11.3-1: The 2004 data used in this table should be updated. **#66])>**

<([#67 [*3.10.1*] Page 3-273, Lines 31 and 36: Out-of-date data is used here as well. **#67])>**

<([#68 [*3.10.1*] Page 3-276, Line 37: 2010 Census data should be available for use in Table 3.12-1 rather than 2000 Census data. **#68])>**

<([#69 [*6.3.2.1*] Pages 4-8 through 4-11, Page 4-33, Section 4.5.1.2, Page 4-43, Table 4.5.2-1, Page 4-47, Line 27, Page 4-48, Section 4.5.2.2: Water usage estimates are high given today's technologies being pioneered by companies such as Red Leaf Resources, which use very little, if any water. Some data used here [see Page 4-9, Line 11], is from 1973, which is ancient history. **#69])>**

<([#70 [*6.3*] Page 4-10, Lines 34-40, Page 4-69, Section 4.7.1.6: Upgrading may not be as extensive as depicted here under today's technologies being pioneered by companies such as Red Leaf Resources, **#70])>**

<([#71 [*3.4.5*] Page 4-48, Lines 41-43: The 2010 Western Resource Advocates water report is widely viewed to be a biased, flawed document that perpetuates the myths associated with water use in oil shale and tar sands development. Reference to this flawed report should be deleted from the document. Instead, the document should be updated to reflect more accurate information from companies working in the industry. **#71])>**

<([#72 [*6.5*] Page 4-13, Section 4.1.5. Workforce/Housing: The BLM should contact companies actively involved in oil shale production (such as Enefit and Red Leaf) for updated estimates. **#72])>**

<([#73 [*6.2.1*] Page 4-13, 4-14, Section 4.1.6, Page 4-43, Table 4.5.2-1, Electricity needs: This section fails to account for today's technologies being pioneered by companies such as Red Leaf Resources, which use synthetic natural gas to produce the energy needed for the process. New power plants may not be necessary. **#73])>**

<([#74 [*6.5*] Page 4-16, Section 4.1.8: The BLM should contact companies actively involved in oil shale production (such as Enefit and Red Leaf) for updated estimates. **#74])>**

<([#75 [*3.1.2*] Page 4-21, Section 4.2.1.4, Recreation use: The document should address how much land would actually be taken out of recreation use under the various alternatives. **#75])>**
<([#76 [*3.5.1.5*] Page 4-57, Section 4.6.1.1.2, GHG Emissions: This section fails to recognize today's technologies being pioneered by companies such as Red Leaf Resources, who claim that GHG emissions are reduced by 2/3rds compared to previous technology. **#76])>**

<([#77 [*3.5.1.5*] Page 4-61, Section 4.6.2, Mitigation Measures: The BLM should communicate with companies such as Red Leaf Resources to determine how their new technologies reduce GHG emissions. **#77])>**

<([#78 [*3.8.3*] Pages 4-143 and 4-144, Figures 4.9.1-1 and 4.9.1-2: Why doesn't the BLM obtain photos from companies that are actually operating or proposing to operate in Colorado and Utah (Enefit, Red Leaf Resources, etc…) instead of photos from Australia? **#78])>**

<([#79 [*3.8.4*] Page 4-154, Line 39: Please clarify what is meant by "fall-line cuts." **#79])>**

<([#80 [*13*] Page 4-159: The four bullet points should be formatted with italics as was done on Page 4-162. **#80])>**

<([#81 [*3.10.4*] Page 4-180, Lines 14-20: In reality, the important recreational areas are adequately separated from the oil shale and tar sands areas so that both activities can function without adversely impacting the other. Also, while the tourism and recreational sectors of the economy are important, they do not produce the family wage jobs that the energy industry does. **#81])>**

<([#82 [*3.13*] Page 4-191, Section 4.14.1.2 and Page 4-194, Section 4.14.1.4: These sections need to be updated to recognize today's technologies being pioneered by companies such as Red Leaf Resources and Enefit. **#82])>**

<([#83 [*6.5*] Chapter 5, beginning on Page 5-1: This entire section should be updated to incorporate new technologies, such as those used by Temple Mountain Energy [see www.templemountainenergy.com]. **#83])>**

<([#84 [*6.3.2.1*] Page 5-34, Section 5.5.2, Water Use: The water usage here is vastly overstated given today's technologies being pioneered by companies such as Temple Mountain Energy, where they re-use 93% of their water. **#84])>**

<([#85 [*3.5.1.5*] Page 5-45, Lines 1-2: Did the BLM contact Temple Mountain Energy, operating in the Asphalt Ridge area of Utah, to verify that their technology is not commercially viable? **#85])>**

<([#86 [*3.13*] Page 5-65, Lines 1-7: Temple Mountain Energy claims that their spent tar sands are benign and can be sold as "clean, high-quality sand for applications such as hydraulic fracturing, glass making and other industrial uses." Did the BLM contact this company to verify that not all spent tar sands are a pollutant?
#86])>
<([#87 [*3.8.3*] Page 5-109, Figures 5.9.1-1 and 5.9.1-2: Did the BLM attempt to obtain photos of local operations, such as Temple Mountain Energy on Asphalt Ridge, rather than rely on photos from Alberta, Canada? **#87])>**

<([#88 [*3.10.2*] [*3.12.1*] Page 5-128, Line 24, Page 5-134, Line 16: If companies such as Temple Mountain Energy are able to recycle 93% of their water, the impacts on agriculture and low-moderate income populations here are vastly overstated. **#88])>**

<([#89 [*3.13*] Page 5-139, Lines 12-14: Contrary to this statement, spent tar sands do have value [see www.templemountainenergy.com] and are not necessarily to be treated as solid waste.
#89])>
<([#90 [*1.5*] Page 6-2, Lines 15-17 and Lines 41-44, Page 6-10, Lines 28-32, Page 6-11, Lines 36-37, Page 6-12, Lines 26-28 and 40-41, Page 6-13, Lines 44-45, Page 6-17, Lines 23-24, Page 6-21, Lines32-33, Page 6-48, Lines 39-41, Page 6-51, Lines 40-41, Page 6-56, Lines 36-37, Page 6-57, Lines 32-33, Page 6-65, Lines 28-29, Page 6-66, Lines 23-24, Page 6-242, Lines 13-22,

Page 6-321, Lines 20-22, Page 6-325, Lines 16-17, Page 6-327, Lines 21-22, Page 6-329, Lines 30-31, Page 6-330, Lines 15-16, Page 6-331, Lines 5-6 and 19-20, Page 6-332, Lines 28-30, Page 6-334, Lines 36-37, Page 6-338, Lines 37-39, Page 6-349, Lines 34-35, Page 6-362, Line 14, Page 6-363, Lines 33-34, Page 6-365, Lines 19-20 and Page 6-366, Lines 14-15: If the BLM admits that there is no environmental impact associated with Alternative 1, then it makes absolutely no sense to have gone through this exercise and spent scarce taxpayer funds; except for the desires of the Obama Administration to pander to environmental groups rather than stand up for what is best for this country. **#90])>**

<([#91 [*3.1.7*] Page 6-7, Table 6.1.1-2: The acreage in the table does not match the acreage under Footnote c. **#91])>**

<([#92 [*3.1.7*] Page 6-53, Figure 6.1.1-7, Page 6-110, Figure 6.1.2-7, Page 6-160, Figure 6.1.3-6, Page 6-218, Figure 6.1.4-7, Page 6-355, Figure 6.2.1-6, Page 6-356, Figure 6.2.1-7, Page 6-395, Figure 6.2.2-6, Page 6-396, Figure 6.2.2-7 and Page 6-459, Figure 6.2.4-6: These maps are incorrect with respect to the location of designated wild and scenic rivers in the Vernal Field Office. Nine Mile Creek and the Middle Green River were not designated. Neither were the White River, Evacuation Creek and Bitter Creek (See Figure 14a of the Approved RMP). If certain alternatives would recognize these considered-but-not-designated streams; such should be noted in a footnote to the Figure. **#92])>**

<([#93 [*2.2*] Page 6-67, Section 6.1.2: There is no analysis in the document of the BLM preferred alternative 2(b). This analysis must be provided and re-published for review by the public and cooperating agencies before the process moves forward to a final PEIS.
#93])>
<([#94 [*3.10.2*] Page 6-114, Section 6.1.2.11: The loss of jobs, revenue and positive economic impacts associated with Alternative 2 are drastically understated here.
#94])>
<([#95 [*9.5*] Page 6-171, Section 6.1.4: Alternative 4, which is subject to acreage reductions associated with potential sage grouse core habitat and lands with wilderness character, is inconsistent with local plans and polices, including the Uintah Basin Utah Energy Zone designated by the 2012 Utah Legislature, Uintah County, Duchesne County and Daggett County.
#95])>

<([#96 [*3.1.7*] Page 6-173, Line 27: Is the reference to Alternative 1 here really supposed to say Alternative 4? **#96])>**

<([#97 [*13*] Page 6-178, Line 20: correct typo "t49" perennial streams. **#97])>**

<([#98 [*3.13*] Page 6-312, Lines 5-9: This paragraph contains a mixture of references to oil shale and tar sands development when the section is supposed to be devoted only to a discussion of oil shale. **#98])>**

<([#99 [*1.3*] Page 7-1, Line 42 and Page J-5, Line 14: Duchesne County, Utah was left out of the list of local government cooperating agencies that submitted comments during the scoping period and before the release of the draft to the public. Why are the scoping comments and BLM's

response to such comments not included at the end of Chapter 7? **#99])>**

<([#100 [*6.5*] Page A-9, Table A-1: This table utilizes 1967 data, which should be replaced by newer data from recent USGS estimates of the oil shale resource. **#100])>**

<([#101 [*6.5*] Page A-19, Section A.2.2: This section regarding Utah oil shale activity must be updated to include the activities of companies including Enefit American Oil, Red Leaf Resources and TomCo Energy.
#101])>
<([#102 [*6.5*] Page A-21 through A-48, Section A.3: This technology overview is out of date as it fails to address new technologies being pioneered by companies including Enefit American Oil, Red Leaf Resources and TomCo Energy. **#102])>**

<([#103 [*6.5*] Pages A-109 through A-115, Sections 6 and 7: The data in these sections is 2005-2007 vintage and should be easy to update with current data. **#103])>**

<([#104 [*2.1.1*] Page A-118, Lines 24, 37 and 43 and Page A-119, Lines 3-4 and 18-19: The document recognizes that we are experiencing "declines in supply from existing major importers," that "Alaska North Slope production has been in decline," the "world demand for crude oil is expected to increase by 47% by 2030." Because of these world supply issues, the document recognizes that "further international energy risk could provide additional incentive for utilization of domestic resources." The document also recognizes that "Section 369 of the Energy Policy Act directs the Secretary of Defense to procure fuel derived from coal, shale oil and tar sands." Based on these findings from the document, it makes absolutely no sense and is very short-sighted to select an alternative other than Alternative 1. Our national economy and our national security are at stake. Also, based on these findings, there is less likelihood of the boom and bust cycle occurring given the struggle of supply to keep up with demand. **#104])>**

<([#105 [*6.5*] Page B-4, Line 16: The document states that there are no commercial tar sands operations on public lands in Utah. Please check with the Utah State Institutional Trust Lands Administration to verify that this is correct. There is a company called Temple Mountain Energy that has been in operation on Asphalt Ridge, near Vernal, since 2006. We do not know if those lands are private or public. **#105])>**

<([#106 [*6.5*] Pages B-15 and B-16: Information regarding the Asphalt Ridge STSA is out-of-date. It does not include the operations of Temple Mountain Energy at this location from 2006 to the present. **#106])>**

<([#107 [*6.5*] Page B-17, Lines 5-7: This information from the Utah Division of Oil, Gas and Mining should be updated. This information also demonstrates that tar sands development is commercially viable and that companies are being forced to "move forward without the feds" because of the bureaucratic paralysis the federal government is mired in under the current administration. **#107])>**

<([#108 [*6.5*] Page B-19, Lines 24-34: This 1995 Speight report is outdated given today's tar sands technology. Information from the Temple Mountain Energy web site (2011) debunks many

of the myths contained in this 1995 report. **#108])>**

<([#109 [*6.3.2.1*] Page B-20, Table B-2: The water use data in this table is too high and is not based on today's technologies. For example, Temple Mountain Energy states that they re-use 93% of their water, which will cut these water use figures dramatically. **#109])>**

<([#110 [*6.5*] Page B-31, Section B-5: This entire section is out of date as it does not take into account technologies being used by companies such as Temple Mountain Energy, at Asphalt Ridge. **#110])>**

<([#111 [*6.3.5*] Page B-58, Conclusions: These conclusions demonstrate that commercial tar sands development is economically viable; debunking the myths perpetuated by environmental groups. **#111])>**

<([#112 [*2.4*] Pages C-10, C-11, C-13, C-15, Table C-1: The statement under Alternative 4 on these pages that "All lands within the most geologically prospective oil shale area that are not excluded from commercial leasing under Alternative 2 will also be excluded under Alternative 4" does not make sense as Alternative 4 would allow more lands to be leased than Alternative 2. **#112])>**

<([#113 [*6.3.2*] Page D-9, Table D-5: Duchesne County, Utah has a Drinking Water Source Protection Ordinance in Title 4, Chapter 6 of its County Code. **#113])>**

<([#114 [*3.13*] Page D-10, Table D-6: Duchesne County, Utah regulates hazardous materials in its Nuisance Ordinance, which is located in Title 3, Chapter 1 of the County Code. **#114])>**

<([#115 [*3.1.7*] Page D-12, Table D-8: Duchesne County, Utah requires a conditional use permit for mining activities only when located on private lands. **#115])>**

<([#116 [*3.6*] Page D-14, Table D-9: The correct reference to the Duchesne County Code for noise regulations is the Nuisance Ordinance, which is in Title 3, Chapter 1, Section 4(G) of the County Code. **#116])>**

<([#117 [*3.7.2*] Page D-15, Table D-10: The correct reference to the Duchesne County Code for weed regulations is Title 3, Chapter 5 of the County Code. **#117])>**

<([#118 [*3.13*] Page D-16, Table D-11: The correct reference to the Duchesne County Code for solid waste regulations is Title 3, Chapter 4 of the County Code. **#118])>**

<([#119 [*6.3.2*] Page D-17, Table D-12: The correct reference to the Duchesne County Code for source water protection regulations is Title 4, Chapter 6 of the County Code as well as the Duchesne County Drinking Water Source Protection Ordinance #09-273. **#119])>**

<([#120 [*3.4.5*] Page D-18, Table D-13: The correct reference to the Duchesne County Code for water bodies and wastewater is Title 3, Chapter 1 of the County Code. **#120])>**

<([#121 [*3.7.4.4*] Page F-18, Line 7: Requiring a 300 foot setback from a threatened or endangered plant to any surface disturbance associated with oil shale or tars sands development is far too great of a setback and could place substantial areas of land off-limits for production of these vital natural resources. **#121])>**

<([#122 [*3.10.1*] Pages G-3 through G-9, Socioeconomic analysis : The data in this entire section is out-of –date and needs to be updated with readily available data from state and federal agencies. **#122])>**

<([#123 [*3.10.1*] Appendix H: The interviews of community leaders and stakeholders should be updated given the developments that have occurred in the past 5 years since the interviews were done. **#123])>**

<([#124 [*3.10.3*] Page H-3, Lines 19-21: While the boom and bust cycle has occurred in the past, the facts of increasing demand and supply issues noted in Appendix A are likely to lessen the severity of such cycles. **#124])>**

<([#125 [*1.5*] In summary, this draft PEIS is not the "fresh look" that the BLM intended. It is filled with outdated information that could have been easily updated if the BLM weren't trying to rush this process to a conclusion before the end of the Obama Administration. Rather than fight for the family wage jobs and associated income that so many American citizens desperately need; rather than fight for responsible energy development that contributes to local, state and national economic health and security; the BLM has backed down to litigious environmental groups. **#125])>**

<([#126 [*9.5*] Again, the enclosed Resolution #12-08 summarizes our opposition to this process based on several points of law. The preferred alternative is inconsistent with state and local plans and policies, including the Uintah Basin Utah Energy Zone (see Resolution #12-06 enclosed). There has been no attempt, as required by FLPMA, to make the BLM Oil Shale and Tar Sands leasing effort as consistent with local plans as possible. If the Record of Decision adopts the BLM preferred alternative (2b), there will no doubt be legal ramifications. **#126])>**

Sincerely,

DUCHESNE COUNTY COMMISSIONERS

Michael A. Hyde, AICP

Community Development Director

Enclosures

Resolution #12-06 – Uintah Basin Utah Energy Zone

Resolution #12-08 – Opposition to the BLM's 2012 OSTS DPEIS

pc: Ken Salazar, Secretary, Dept. of the Interior, 1849 C St., N.W., Washington DC 20240

Bob Abbey, Director, BLM, 1849 C Street, N.W., Room 5665, Washington DC 20240

Sherri Thompson, BLM State Office, 2850 Youngfield Street, Lakewood, CO 80215

Juan Palma, BLM State Director, P.O. Box 45155, Salt Lake City, Utah 84145

Mark Ward, Utah Assoc. of Counties, 5397 So. Vine Street, Salt Lake City, UT 84107

Kathleen Clarke, PLPCO, 5110 St. Office Bldg., Box 141107, Salt Lake City, UT 84114

Governor Gary Herbert, State of Utah, PO Box 142220, Salt Lake City, Utah 84114-2220

Congressman Jim Matheson, 2434 Rayburn HOB, Washington, DC 20515

Congressman Rob Bishop, 123 Cannon Building, Washington, DC 20515

Congressman Jason Chaffetz, 1032 Longworth HOB, Washington, DC 20515

Senator Mike Lee, 316 Hart Senate Office Building, Washington, D.C. 20510

Senator Orin Hatch, 104 Hart Office Building, Washington, DC 20510

P:\Mike\Pluc\BLM Comments\DPEIS OS&TS Comment Letter.docx

OSTS2012D50182
Organization: Chris Bowman
Received: 4/30/2012 4:13:05 PM
Commenter1: Chris Bowman - , Rhode Island (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** aziech 5/15/2012 12:00:00 AM
Attachments: OSTS2012D50182.htm (OSTS2012D50182-58686.htm Size = 1 KB)
Submission Text
<([#1 [*12*] The BLM should strongly consider NOT opening the proposed area to potential oil shale and oil sands development. Such development puts several protected areas, their geological, and biological integrity at risk. Various forms of pollution- air, water, noise, and light to name a few- will inevitably ensue and risk compromising wildlife corridors and the public's ability to enjoy our beautiful parks. This proposal also highlights America's increasingly hazardous dependence on fossil fuels, the present trajectory of which will place this dependance before the preservation of our wild lands. In an area where water is scarce and sunlight is not, we

should not be wasting resources pursuing non-renewable energy sources.
#1])>

OSTS2012D50184
Organization: Duchesne County, Utah, Duchesne County Commissioners
Received: 4/30/2012 4:14:48 PM
Commenter1: Duchesne County Commissioners - Duchesne, Utah 84021 (United States)
Organization1: Duchesne County, Utah
Commenter Type: Coop Agency - Local Govt
Classification:
Submission Category: Resolution
Submitted As: Web Form and Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/10/2012 12:00:00 AM
Attachments: OSTS2012D50184.htm (OSTS2012D50184-58796.htm Size = 1 KB)
img-430123521_OSTS2012D50184.pdf (OSTS2012D50184-58795.pdf Size = 87 KB)
Submission Text
See attached See Attachment.

0 0
1 RESOLUTION # 12-06
2
3 A RESOLUTION AMENDING THE PUBLIC LANDS SECTION OF THE DUCHESNE
4 COUNTY GENERAL PLAN TO INCORPORATE THE UINTAH BASIN UTAH
5 ENERGY ZONE
6
7 W~~REAS, Duchesne. County has a general plan adopted pursuant to Utah Code containing
8 pohc1es for the appropnate use of private and public land within the county; and
9
10 WHEREAS, Duchesne County desires to amend its general plan to incorporate provisions
11 associated with the Uintah Basin Utah Energy Zone (Senate Bi1183) that was established by the
12 Utah Legislature in the 2012 General Session; and
13
14 WHEREAS, the Duchesne County Public Land Use Committee has reviewed and recommended
15 approval ofthese amendments as set forth herein; and
16
17 WHEREAS, the Duchesne County Planning Commission has conducted a public hearing to
18 review the proposed plan amendment and concurs with the recommendation of the Public Land
19 Use Committee that this Resolution should be passed;
20
21 NOW, THEREFORE, THE DUCHESNE COUNTY GENERAL PLAN IS AMENDED BY
22 INSERTING THE FOLLOWING AT THE END OF THE ENERGY AND MINERAL
23 RESOURCES SUBSECTION OF THE PUBLIC LANDS SECTION OF THE GENERAL

24 PLAN:
25
26 **<([#1** [*6.1*] SECTION 1. There is established, pursuant to Utah Code, the Uintah Basin Energy Zone in
27 Duchesne County for the purpose of maximizing efficient and responsible development of
28 energy and mineral resources. The land area and boundaries of the Uintah Basin Energy Zone in
29 Duchesne County consist offederal1ands within the Townships and Ranges described below and
30 as depicted on the map attached hereto as Exhibit A, which is incorporated herein by reference:
31
32 Uintah Special Base and Meridian:
33 Township 3N, Range 1 W; Township 3N, Range 2W; Township 3N, Range 3W; Township 3N,
34 Range 4W; Township 2N, Range 1 W; Township 2N, Range 2W; Township 2N, Range 3W;
35 Township 2N, Range 4W; Township 2N, Range SW; Township 2N, Range 6W; Township IN,
36 Range 6W; Township IN, Range 7W; Township IN, Range 8W; Township IN, Range 9W,
37 Township SS, Range 8W, Township 5S, Range 9W; Township 6S, Range 3W; Township 6S,
38 Ra~ge 4W; Township 6S, Range 5W; Township 6S, Range 6W; Township 6S, Range 7W;
39 Township 6S, Range 8W; Township 6S, Range 9W; Township 7S, Range 4W; Township 7S,
40 Range 5W; Township 7S, Range 6W; Township 7S, Range 7W; Township 7S, Range 8W;
41 Township 7S, Range 9W.
42
43 Salt Lake Meridian:
44 Township 8S, Range 15E; Township 8S Range 16E; Township 8S, Range 17E; Township 9S,
45 Range 15E; Township 9S, Range 16E; Township 9S, Range 17E; Township 1 OS, Range 14E,
46 Township lOS, Range 15E; Township lOS, Range 16E; Township lOS, Range 17E; Township
4 7 11 S, Range 1 OE; Township 11 S, Range 11 E; Township 11 S, Range 12E; Township 11 S, Range
48 13E; Township 11 S, Range 14E; Township 11 S, Range lSE; Township 11 S, Range 16E; and
49 Township 11 S, Range 17E.
50
51 SECTION 2. The county finds that the lands comprising the Uintah Basin Energy Zone contain
52 abundant world-class deposits of energy and mineral resources, including oil, natural gas, oil
53 shale, oil,sands, gilsonite, coal, phosphate, gold, uranium, and copper, as well as areas with high
54 wind and solar energy potential.
55
56 SECTION 3. The highest management priority for all1ands within the Uintah Basin Energ~
57 Zone is responsible management and development of existing energy and ~eral resources m
58 order to provide long-term domestic energy and supplies for Utah and the Umted States.

#1])> 59

.... u Resolution #12-06
General Plan Amendment
Uintah Basin Energy Zone
Page2
<([#2 [*11*] SECTION 4. The county supports:
(a) Efficient and responsible full development of all existing energy and mineral resources located within the Uintah Basin Energy Zone, including oil, oil shale, natural gas, oil sands, gilsonite, phosphate, gold, uranium, copper, solar, and wind resources; and **#2])>**
<([#3 [*1.3*] The county supports: (b) A cooperative management approach among federal agencies, state, and local
governments to achieve broadly supported management plans for the full development of all energy and mineral resources within the Uintah Basin Energy Zone. **#3])>**
<([#4 [*1.3*] SECTION 5. The county calls upon the federal agencies who administer lands within the
Uintah Basin Energy Zone to:
(a) Fully cooperate and coordinate with the county to develop, amend, and implement land and resource management plans and to implement management decisions that are consistent with the purposes, goals, and policies described in this section to the maximum extent allowed under federal law;
#4])> <([#5 [*9.5*] The county calls upon the federal agencies who administer lands within the Uintah Basin Energy Zone to: (b) Expedite the processing, granting, and streamlining of mineral and energy leases and
applications to drill, extract, and otherwise develop all existing energy and mineral resources located within the Uintah Basin Energy Zone, including oil, natural gas, oil shale, oil sands, gilsonite, phosphate, gold, uranium, copper, solar, and wind resources;
#5])> <([#6 [*9*] The county calls upon the federal agencies who administer lands within the Uintah Basin Energy Zone to: (c) Allow continued maintenance and increased development of roads, power lines, pipeline infrastructure, and other utilities necessary to achieve the goals, purposes, and policies
described in this section; **#6])>**
<([#7 [*9.5*] The county calls upon the federal agencies who administer lands within the Uintah Basin Energy Zone to: (d) Refrain from any planning decisions and management actions that will undermine,
restrict, or diminish the goals, purposes, and policies for the Uintah Basin Energy Zone as stated in this Resolution; and
(e) Refrain from implementing a policy that is contrary to the goals and purposes described within this Resolution. **#7])>**
<([#8 [*1.3*] SECTION 6. The county calls upon Congress to establish an intergovernmental standing
commission among federal, state, and local governments to guide and control planning decisions and management actions in the Uintah Basin Energy Zone in order to achieve and maintain the goals, purposes, and policies described in this Resolution. **#8])>**
NOW, THEREFORE, THE DUCHESNE COUNTY GENERAL PLAN IS AMENDED BY INSERTING THE FOLLOWING POLICY AS SUBSECTION (h) AT THE END OF THE

ENERGY AND MINERAL RESOURCES POLICIES IN THE PUBLIC LANDS SECTION OF THE GENERAL PLAN:
(h) For private lands within the County, the County supports the provisions of the Surface Owner Protection Act, which was enacted by the 2012 Utah Legislature to establish surface owner rights and responsibilities when working with energy development companies.
DATED this \ lJ,-/!&- day of Ll.pvi [2012.
ATTEST: DUCHESNE COUNTY
BOARD OF COMMISSIONERS
~'-~"~ Diane Freston
County Clerk/ Auditor

OSTS2012D50185
Organization: Duchesne County, Utah, Duchesne County Commissioners
Received: 4/30/2012 4:16:38 PM
Commenter1: Duchesne County Commissioners - Duchesne, Utah 84021 (United States)
Organization1: Duchesne County, Utah
Commenter Type: Coop Agency - Local Govt
Classification:
Submission Category: Attachment
Submitted As: Web Form and Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** klett
Attachments: OSTS2012D50185.htm (OSTS2012D50185-58799.htm Size = 1 KB)
img-430123531_OSTS2012D50185.pdf (OSTS2012D50185-58798.pdf Size = 127 KB)
Submission Text
See attachment See Attachment.

OSTS2012D50186
Organization: Duchesne County, Utah, Duchesne County Commissioners
Received: 4/30/2012 4:18:28 PM
Commenter1: Duchesne County Commissioners - Duchesne, Utah 84021 (United States)
Organization1: Duchesne County, Utah
Commenter Type: Coop Agency - Local Govt
Classification:
Submission Category: Resolution
Submitted As: Web Form and Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/9/2012 12:00:00 AM
Attachments: OSTS2012D50186.htm (OSTS2012D50186-58802.htm Size = 1 KB)
img-430111832_OSTS2012D50186.pdf (OSTS2012D50186-58801.pdf Size = 246 KB)
50186_Duchesne_Resolution_Cover_Letter.pdf (OSTS2012D50186-59142.pdf Size = 514 KB)
Submission Text
See attached See Attachment.

Cover Letter:

Dear Reader:
<([#28 [*1.1.1*] On April l6, 2012, Duchesne County, Utah passed a resolution opposing the BLM's 2012 Oil
Shale and Tar Sands Draft Programmatic Environmental Impact Statement (see enclosed). As a cooperating agency in this environmental review we respectfully request an extension to the comment period, currently set to expire May 4, 2012. It is our understanding that this request for an extension has also been made, by resolution, by eight other counties in Wyoming, Utah and Colorado, also acting under their cooperator status. Three distinct justifications necessitate this extension.

First, under the friendly-lawsuit settlement agreement with environmental groups, the BLM agreed to develop new oil shale regulations. We understand the draft regulations are due to be published on or about May 15, 2012. As a cooperator, it is impossible for us to make clear concise comments on the PDEIS until we have the opportunity to understand, at least in some detail, the scope of these new regulations. Indeed, cooperators run a substantial risk in proffering inconsistent and confusing responses to the DPEIS and any draft regulations; thus, undermining the integrity ofNEPA process. Consequently an extension ofthe OSTS DPEIS comment period should be granted for at least 30 days after publication of these new oil shale regulations.

Second, the sheer volume of the DPEIS necessitates a time consuming review. As a cooperator, Duchesne County requests additional time to vet and analyze the DPEIS. This need becomes even more prominent based on the anticipation of new draft regulations pending publication, for it is extremely difficult to adequately comment on a four-volume DPEIS if we do not have all relevant information.
Third, as detailed in the attached Resolution, Duchesne County and various other cooperating agencies have raised numerous legal challenges to the legally flawed process of the BLM taking a "fresh look" at lands available for oil shale and oil sands. Granting an extension will allow the BLM to thoughtfully consider the legal consequences of continuing down this tenuous road and give time for the BLM to make the correct decision to cease and desist all actions related to the DPEIS.
#28])> We look forward to your response to this request. If you have any questions regarding this letter,
please contact Mike Hyde at mhyde@duchesne.utah.gov or by phone at 435-738-1151.
Sincerely,

DUCHESNE COUNTY COMMISSION

RESOLUTION #12-08
DUCHESNE COUNTY, STATE OF UTAH
A RESOLUTION OPPOSING THE BLM'S 2012 OIL SHALE AND TAR SANDS DRAFT

PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT, BLM PROJECT# W0-300-1310-PP-OSHL (HEREAFTER 2012 OSTS DPEIS) FOR LANDS ADMINISTERED BY THE BLM IN COLORADO, UTAH AND WYOMING,
This Resolution is adopted in open public meeting after due opportunity for public comment, by the Board of Commissioners of Duchesne County, Utah in order to redress the many violations of law, regulation and policy by the BLM with respect to the BLM's 2012 OSTS DPEIS.
As background to this Resolution, Duchesne County recites the following grievances:
WHEREAS, On Aprill4, 2011, the BLM caused to be published in the Federal Register, Volume 76, No 72/Thursday, Aprill4, 2011, pages 21003-21005, a Notice oflntent to prepare the above-referenced 2012 OSTS DPEIS; and
<([#1 [*9.2.1*] [*3.1.3*] WHEREAS, the preliminary purpose and need statement in the notice of intent, states the PEIS
will analyze removing from oil shale and tar sands leasing "All areas that the BLM has identified or may identify as a result of inventories conducted during this planning process, as lands containing wilderness characteristics[.]" Id., at page 21004; and
WHEREAS, the notice of intent further states at page 21004:
Lands that the BLM identifies as having wilderness characteristics will be
considered during this planning initiative, as described above, and consistent with
Secretarial Order No. 3310, dated Dec. 22, 2010, and BLM Manuals 6301 and
6302. Future leasing oflands determined by the BLM to have wilderness
characteristics, if compatible with the allocation decisions stemming from this
initiative, will subsequently be assessed in accordance with BLM Manual6303,
as appropriate (i.e., where the BLM has not determined, consistent with BLM
Manual 63 02, whether the lands with wilderness characteristics at issue should be
receive a wild lands designation, BLM Manual6303 will apply); and
WHEREAS, this language above documents the BLM's intent to implement, administer and/or enforce Secretarial Order 3310 and one or more of the BLM guidance manuals promulgated under Order 331 0; and
WHEREAS, any attempt by the BLM to implement, administer and/or enforce Secretarial Order 3310, including any effort by the BLM to proceed further on the above-referenced Programmatic EIS violates the spending moratorium of Section 1769 of the April21, 2011 Congressional Continuing Resolution to Fund Fiscal Year 2011 through September 30, 2011, which states:
For the fiscal year ending September 30, 2011, none of the funds made available
by this division or any other Act may be used to implement, administer, or
enforce Secretarial Order No. 3310 issued by the Secretary of the Interior on
December 22, 2010; and
WHEREAS, this spending moratorium has been carried forward in all subsequent Congressional spending resolutions up to and including the current spending resolution; and
WHEREAS, the 2012 OSTS DPEIS, is an admitted attempt by the BLM to implement, administer and/or enforce Secretarial Order 3310 and its policies and objectives, all in violation of the Spending Moratorium of the 2011 Continuing Resolution; and
#1])> <([#2 [*9.8*] WHEREAS , the 2008 Oil Shale and Tar Sands Progrmmnatic EIS (2008 OSTS PEIS) w. as
required under Section 369 (d) (1) of the Energy Policy Act of2005 and was prepared m cooperation with 14 federal, state, and local governmental organizations; and
WHEREAS THE 2008 OSTS PEIS was 3 years in the making, and it honored the input of a task

force of Governors and other stakeholders as per the requirements of the 2005 Energy Policy Act;
WHEREAS, the Record of Decision (ROD) for the 2008 OSTS PEIS amended 10 land use plans m Colorado, Utah, and Wyoming to make approximately 2 million acres of public lands available for potential leasing and development of oil shale and approximately 430,000 acres available for tar sands leasing. Together with the regulations published in 2006 and 2008 for oil shale and tar sands resources, the 2008 OSTS PEIS and subsequent land use amendments constituted a reasonable and rational establishment of an oil shale and tar sands program as mandated by the Energy Policy Act of 2005; and
#2])> <([#3 [*6.1.2*] WHEREAS, the oil shale and tar sands program, to which the 2008 OSTS PEIS and related
regulations gave birth, was a reasonable response to the fact that the recoverable oil equivalent from oil shale and tar sands resources in Utah, Colorado and Wyoming exceeds 4 trillion banels per the latest USGS scientific estimate; and **#3])>**
<([#4 [*9.8*] WHEREAS, the prefened alternative in the draft 2012 OSTS DPEIS drastically shrinks,
diminishes and in many areas outright reverses virtually all of the lands made available for Oil Shale and Tar Sands development in 2008, and does so using the same data and science; and
WHEREAS, the OSTS DPEIS fails to analyze BLM's prefened Alternative 2b, and the BLM admits as much on page 2-35 of the DPEIS; and **#4])>**
<([#5 [*9.2.2*] WHEREAS, such a drastic reversal in lands available for Oil Shale and Tar Sands development
between the 2008 PEIS and the 2012 prefened alternative, violates regulatory Task Force requirements of certainty for industry and investors; and
WHEREAS such a drastic reversal oflands available for Oil Shale and Tar Sands development in 2008, constitutes a de facto, piece-meal revision of previous BLM Resource Management Plans, in violation of the Section 202 Planning Process under FLPMA;
WHEREAS, the prefened alternative in the draft 2012 OSTS PEIS entirely ignores the input of the task force, the cooperating agencies, and the other stakeholders which the 2005 Energy Policy Act directed the BLM to honor and follow; and moreover the draft 2012 OSTS DPEIS may well violate various memoranda of understanding (MOUs) with counties, cities and local government coalitions which require the BLM to (1) publish the written input of cooperators who have unresolved disagreements over the substantive elements of the ElS document, and (2) describe the objectives of the cooperators' land use plans and policies; and
WHEREAS the 2012 OSTS DPEIS prefened alternative greatly restricts the already meager acreage allotted in the 2008 PEIS for research and development leasing;
WHEREAS the 2012 OSTS DPEIS prefened alternative threatens to arbitrarily undermine all that was rationally and scientifically supported in the 2008 OSTS PEIS, and essentially dismantle a reasonable and rational oil shale and tar sands program in violation of Section 369 of the 2005 Energy Policy Act; and **#5])>**
<([#8 [*1.5*] WHEREAS, the 2012 OSTS DPEIS prefened alternative is the creature of a fi:iendly lawsuit
settlement agreement between the BLM and ideological opponents of oil shale development, and is therefore entirely pre-detennined and pre-decisional in violation ofNEPA, with no apparent rationale for revising the acreages approved in 2008; and
#8])> <([#9 [*2.2*] WHEREAS, the BLM has settled on a prefened alternative in the 2012 OSTS

DPEIS admittedly
without having first analyzed its impacts; BLM should be required to withdraw the prefened status of the alternative until it has performed this analysis; and
WHEREAS, the acreage approved for Oil Shale and Tar Sands development in the draft 2012 OSTS DPEIS prefened alternative bears no rational relationship to the stated purpose and need; **#9])>**
Resolution #12'.::"08
Duchesne County, Utah
April16, 2012
Page 3 of4
<([#11 [*1.5*] WHEREAS, the Department of Energy has basically abdicated the responsibility Congress
placed upon it to defend and uphold a viable oil shale energy program in America, leaving it mstead to the BLM encumbered by a host of anti-oil shale, pro-wilderness groups steering BLM's every move; **#11])>**
<([#29 [*9.5*] WHEREAS, the alternative adopted in the ROD of the 2008 OSTS PEIS is now the No Action
Alternative of the draft 2012 OSTS DPEIS; and
WHEREAS, the 2008 OSTS PEIS chosen alternative is consistent with the multiple use, sustained yield mandate of the Federal Land Policy Management Act (FLPMA); and
"WHEREAS, the 2008 OSTS PEIS chosen alternative is consistent with county general plans and policies which call for responsible development of available energy resources, but in stark contrast the 2012 OSTS PDEIS is plainly inconsistent with state and local plans and policies, plainly inconsistent with the Uintah Basin Energy Zone Legislation passed in the 2012 Utah Legislature (Senate Bill83- see Utah Code 63J-8-102 & 105.5), and it fails to adequately explain why consistency is not achievable; and
#29])> <([#14 [*6.3.4*] WHEREAS, the development and production of oil from oil shale has been proven beyond a
doubt to be teclmologically and economically feasible when market rates for oil are at least $65.00 per barrel, which is well below current market rates; and
#14])> <([#15 [*6.3.2.1*] WHEREAS, this same teclmology to extract oil from the oil shale rock is not only economically
feasible at $65.00 per barrel, but it requires little or no consumption of water, contrary to the myths which falsely claim that oil shale extraction requires large consumption of water resources; and **#15])>**
<([#16 [*6.2.2*] WHERAS, the energy captured in the extract of oil from shale (natural gas capture, etc.,) more
than makes up for energy consumed in that extraction process, thus dispelling the myth that the oil shale extraction process consumes more energy than it produces;
#16])> <([#17 [*3.10.3*] WHEREAS, the rising price of gasoline, coupled with ever increasing loss of family-wage jobs
due to the Obama Administration's policies against energy development on western public lands, result in increasing hardships for families and the local economy, to the point where some fear the window of opportunity is about to close for a civil, lawful and orderly response as citizens feel more and more pressured and desperate financially; and
#17])> <([#18 [*6.3.3.1*] WHEREAS, the 2012 OSTS DPEIS improperly limits technology testing

to strictly in-situ
efforts and does not allow for development of other technologies; and
#18])> <([#19 [*1.1.1*] WHEREAS, the BLM has left insufficient time for the public and cooperators to meaningfully
comment on the public draft 2012 OSTS DPEIS by the present comment deadline of May 4, 2012, because a highly relevant commercial oil shale BLM regulation is not due to be published until May 15, 2012 and the public should have the right to view that regulation first and then submit conunents on the draft 2012 OSTS DPEIS in light of that regulation; and
#19])> <([#20 [*9.5*] WHEREAS, the same problems with lack of consistency with local plans and policies and failure
to honor the input of cooperators and all stakeholders, also besets many public lands ElS projects, in addition to the 2012 OSTS DPEIS; and
#20])> <([#21 [*9.2.5*] WHEREAS, while the 2012 OSTS PDElS repeatedly asserted the supposed need to take a "fresh
look," the BLM arbitrarily failed to do so by refusing to update the document with fresh, new oil shale teclmological data made available since 2008 and fresh new oil shale technology that has emerged since 2008, which failures constitute a violation by the BLM of the Federal Data Quality Act;
#21])> NOW THEREFORE, BE IT RESOLVED BY DUCHESNE COUNTY, UTAH AS FOLLOWS:
Resolution #12-08
Duchesne County, Utah
Aprill6, 2012
Page 4 of4
<([#22 [*9.2.1*] I. Duchesne County declares the BLM's continuing to administer and carry out the 2012
OSTS DPEIS to be an open contempt and flaunting of the Congressional Spending Moratorium first imposed in the 2011 Continuing Resolution and carried forward in all subsequent Congressional spending resolutions up to and including the present;
2. Duchesne County calls upon the BLM to cease all further activities with respect to administering and carrying out the 2012 OSTS DPEIS, because doing so constitutes an open contempt and violation of the Congressional Spending Moratorium against implementing, administering and/or enforcing Secretarial Order 3310, which Spending Moratorium was first imposed in the 2011 Continuing Resolution and carried forward in all subsequent Congressional spending resolutions up to and including the present;
3. Duchesne County calls upon the BLM to innnediately cease and desist all activities related to the above-referenced 2012 OSTS DPEIS and immediately publish a revised notice in the Federal Register signifYing its cessation of all work on the Programmatic EIS in obedience to
the above-quoted Spending Moratorium. Otherwise, the BLM would be in contempt of Congress; **#22])>**
<([#25 [*2.1.1*] 4. Duchesne County finds that the only way the BLM could go forward with the 2012
OSTS DPEIS in light of the Congressional Spending Moratorium, would be if the BLM adopted the No-Action Alternative, which is identical to the Alternative chosen in the ROD of the 2008 OSTS PEIS;

#25])> <([#26 [*1.1.1*] 5. Duchesne County requests that the BLM should extend the May 4, 2012 deadline for
public comment on the draft 2012 OSTS DPEIS at least 30 days after publication of the expected oil shale regulation due to be published on or about May 15, 2012.
#26])> <([#27 [*1.3*] 6. Duchesne County requests that the BLM honor the input of cooperators, particularly if
they are local governments, as required by Section 202(c)(9) ofFLPMA and the relevant tenns ofBLM-Cooperator MOUs, in all matters, not just with respect to the 2012 OSTS PEIS.
#27])> DATEDthis~Udayof l1pv1·\ 2012.
ATTEST:
~~ .. ...". "~'-.. ~~ "'9".. ..=~~
Diane Freston
County Clerk/ Auditor
DUCHESNE COUNTY
BOARD OF COMMISSIONERS

OSTS2012D50187
Organization: Susan Benson
Received: 4/30/2012 5:56:18 PM
Commenter1: Susan Benson - Hampton Bays, New York 11946 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/4/2012 12:00:00 AM
Attachments: OSTS2012D50187.htm (OSTS2012D50187-58688.htm Size = 1 KB)
Submission Text
<([#1 [*12.3*] Please do not give our lands away. **#1])>**

OSTS2012D50188
Organization: Donald Clark
Received: 4/30/2012 8:26:25 PM
Commenter1: Donald Clark - Washington, 20036 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/4/2012 12:00:00 AM
Attachments: OSTS2012D50188.htm (OSTS2012D50188-58690.htm Size = 1 KB)
Submission Text
<([#1 [*12*] THANK YOU for hopefully overturning this short-term, short-sighted proposal to

mine for oil in a very destructive manner to a valued ecosystem, while using an equally -or even more precious- resource, water. Deny this ill-considered plan. Parks are more for NATURE PRESERVATION, not short-sighted resource digging. **#1])>**

OSTS2012D50189

Organization: Christopher Richards
Received: 4/30/2012 11:15:00 PM
Commenter1: Christopher Richards - Tucson, 85705 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/4/2012 12:00:00 AM
Attachments: OSTS2012D50189.htm (OSTS2012D50189-58692.htm Size = 1 KB)
Submission Text
<([#1 [*3*] As a long time outdoors person and professional photographer, I'd hate to see our irreplaceable national treasures damaged in a quest for cheap energy. Please protect our wild areas! **#1])>**

OSTS2012D50190

Organization: Nathaniel Hawkes
Received: 5/1/2012 1:42:22 AM
Commenter1: Nathaniel Hawkes - Oakland, California 94610 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh
Attachments: OSTS2012D50190.htm (OSTS2012D50190-58694.htm Size = 1 KB)
Submission Text
<([#1 [*12*] [*10.6.1*] I am deeply troubled to learn of the BLM's proposal to to open vast areas of Western wilderness to oil shale and tar sand exploitation. These activities will degrade our landscape on a scale that will significantly damage our national heritage. Our government should be applying its resources toward developing alternative sources of energy, not leasing our public land to corporations who will destroy the very face of our country to make a buck. We need leadership, not greed. This proposal is unacceptable and must be stopped. **#1])>**

OSTS2012D50191

Organization: Peter Weiblen
Received: 5/1/2012 4:55:30 AM
Commenter1: Peter Weiblen - Ada, Michigan 49301 (United States)

Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/4/2012 12:00:00 AM
Attachments: OSTS2012D50191.htm (OSTS2012D50191-58696.htm Size = 1 KB)
Submission Text
<([#1 [*12*] These wild, and natural places must be preserved. This country needs to move away from the use of fossil fuels ASAP to avoid further environmental degradation and global warming. Just say no. **#1])>**

OSTS2012D50192
Organization: Garry Gentry
Received: 5/1/2012 8:03:02 AM
Commenter1: Garry Gentry - Tifton, Georgia 31794 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/4/2012 12:00:00 AM
Attachments: OSTS2012D50192.htm (OSTS2012D50192-58698.htm Size = 1 KB)
Submission Text
<([#1 [*12.3*] I oppose opening up these public lands for many reasons but one of the main is environmental protection of these beautiful areas of our country. The other is that this OIL is for EXPORT and oil is a FINITE resource so there may come a day where we need to produce that oil for AMERICA and not global markets. We should hope by the time that day comes technology would allow much safer exploitation of these resources. **#1])>**

OSTS2012D50193
Organization: Nola Gentry
Received: 5/1/2012 8:03:42 AM
Commenter1: Nola Gentry - Tifton, Georgia 31794 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/4/2012 12:00:00 AM
Attachments: OSTS2012D50193.htm (OSTS2012D50193-58700.htm Size = 1 KB)

Submission Text
<([#1 [*12.3*] I oppose opening up these public lands for many reasons but one of the main is environmental protection of these beautiful areas of our country. The other is that this OIL is for EXPORT and oil is a FINITE resource so there may come a day where we need to produce that oil for AMERICA and not global markets. We should hope by the time that day comes technology would allow much safer exploitation of these resources. **#1])>**

OSTS2012D50194
Organization:
Received: 5/1/2012 8:51:16 AM
Commenter1: - , Maryland 20905 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/4/2012 12:00:00 AM
Attachments: OSTS2012D50194.htm (OSTS2012D50194-58730.htm Size = 1 KB)
Submission Text
<([#1 [*12.3*] I implore you to not open up western federal lands to increased oil and gas exploration. As an east-coast citizen who traveled through many western federal parks, lands, and forests after graduating from college, I believe developing these lands would fundamentally alter their character and ruin them for future generations. The negative impact on the lands far outweigh the benefit to taxpayers. Furthermore, oil and gas companies already make healthy profits. Opening up the nation's unspoilt areas to them is unnecessary.
#1])>

OSTS2012D50195
Organization: Fred Swanson
Received: 5/1/2012 9:02:20 AM
Commenter1: Fred Swanson - Salt Lake City, Utah (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/4/2012 12:00:00 AM
Attachments: OSTS2012D50195.htm (OSTS2012D50195-58732.htm Size = 1 KB)
Submission Text
<([#1 [*2.3.1*] While I'm pleased that the BLM is apparently backing away from the wholesale leasing of millions of acres of public lands for oil shale and tar sands, I much prefer Alternative 3 that would limit such development to existing RandD leases. At a time when our country needs to be a leader in moving away from the use of fossil fuels and adopting major conservation

practices to reduce CO2 emissions, any development of fossil hydrocarbons takes us farther from this goal. The surface disturbance and associated infrastructure and population growth required to commercially develop oil shale and tar sands would spell the end of western Colorado and eastern and central Utah as a refuge from rampant urbanization, congestion, and air pollution--not to mention the loss of this region's superb night skies. Sooner or later we will have to learn to unhook our society from limitless fossil fuel consumption. We can try to do so now, when we still have some clean air and water left, or we can do it fifty or a hundred years from now, when the noise and stink of industrialization covers the entire West. I have little faith that our government will have much foresight in this matter, but one can always hope. **#1])>** Fred Swanson Salt Lake City,Utah May 1, 2012

OSTS2012D50196

Organization: JAMIE HARDY
Received: 5/1/2012 9:39:32 AM
Commenter1: JAMIE HARDY - WINDSOR, Colorado 80550 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/4/2012 12:00:00 AM
Attachments: OSTS2012D50196.htm (OSTS2012D50196-58734.htm Size = 1 KB)
Submission Text
<([#1 [*11*] I genuinely believe that we should open this land up for oil drilling in an effort to help control energy costs for consumers. While I am an avid outdoorsman and love to camp, ski, and enjoy nature with my family, I still sense a unique interest in accessing this land for the mineral rights that are contained therein. Please help open these lands in a quest for energy independence. **#1])>** Regards, Jamie R Hardy Windsor CO

OSTS2012D50197

Organization: P-REX, MIT, Casey Brown
Received: 5/1/2012 10:23:33 AM
Commenter1: Casey Brown - , North Carolina 28721 (United States)
Organization1:P-REX, MIT
Commenter Type: Affiliation Only
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** aziech 5/15/2012 12:00:00 AM
Attachments: OSTS2012D50197.htm (OSTS2012D50197-58706.htm Size = 1 KB)
Submission Text
<([#1 [*2.5*] Alternative 2 is the clear winner, but modifications should be considered. 1-15-30% contingency of buffer around lands with wilderness attributes, given the largely unknown effects

of drill pads on wildlife. 2-Legally binding clawbacks that allow BLM to immediately cease operations in the event of wildlife/environmental harm. 3-Agency officials assigned to each major sector that are paid for by the leasing companies to ensure proper reporting of landscape impacts. Thank you for your considerations. Shepherding the public lands is of critical value for the future of the nation.
#1])>

OSTS2012D50198
Organization: Peaceful Uprising, Jake Hanson
Received: 5/1/2012 1:30:42 PM
Commenter1: Jake Hanson - Salt Lake City, Utah 841521011 (United States)
Organization1: Peaceful Uprising
Commenter Type: Affiliation Only
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** aziech 5/15/2012 12:00:00 AM
Attachments: OSTS2012D50198.htm (OSTS2012D50198-58708.htm Size = 1 KB)
Submission Text
<([#1 [*12*] Pursuing low-quality energy resources like oil shale and tar sands is short-sighted and misguided. Not only will these fuels exacerbate the climate crisis, but they also will have a detrimental effect on society at large by inhibiting the urgent transition to renewable energy and less consumptive lifestyles. **#1])> <([#2** [*10.6.1*] I urge a thorough analysis be taken on the ERoEI (Energy Return on Energy Invested) -- or net energy -- of these fuels, and compare them to the returns given from renewable sources. Understanding energy budgeting on a meta level should be expected for those making energy policy:
http://www.chrismartenson.com/crashcourse/chapter-17b-energy-budgeting
#2])>

OSTS2012D50199
Organization: Adam Stern
Received: 5/1/2012 1:36:36 PM
Commenter1: Adam Stern - Flemington, New Jersey 08822 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** aziech 5/15/2012 12:00:00 AM
Attachments: OSTS2012D50199.htm (OSTS2012D50199-58710.htm Size = 1 KB)
Submission Text
<([#1 [*2.3.1*] ALTERNATIVE THREE, PLEASE **#1])>**

OSTS2012D50200
Organization: CRISTA WORTHY
Received: 5/1/2012 1:37:23 PM
Commenter1: CRISTA WORTHY - BOISE, Idaho 83714 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: 50201_Campaign
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** aziech 5/15/2012 12:00:00 AM
Attachments: OSTS2012D50200.htm (OSTS2012D50200-58712.htm Size = 3 KB)
Submission Text
Dear Bureau of Land Management, I am writing to submit comments on the Oil Shale and Tar Sands Draft Programmatic Environmental Impact Statement (PEIS). **<([#1** [*2.3.1*] I have spent a lot of time exploring and hiking the Colorado Plateau, and studied its geology. I am convinced there is no other place like it in the world. I also believe that shale and tar sands are about the worst, most inefficient ways to develop energy. Put that together with the irreversible harm done to environments within the Colorado Plateau, and I conclude that this type of development is not worth it here, and should not be even considered. Since that Alternative doesn't seem available, I urge you to choose Alternative 3, Research Only, as the BLM's Preferred Alternative in the Final PEIS. This is essential to ensure that we have the best possible information before considering opening our natural open spaces and ecosystems to the development of oil shale and tar sand resources. **#1])>** Here are some of my specific concerns regarding the Draft PEIS: **<([#2** [*3.4.1*] * The Draft Programmatic EIS needs to ensure water quality will not be adversely effected by development of oil shale and tar sand resources. The water usage for oil shale production far outstrips the amount of oil produced, even prior to the refinement process. Water resources in the West are already overused and the effects of climate change and increased population will only add further strain to an already depleted system. **#2])> <([#3** [*3.4.1*] * The Draft Programmatic EIS should be conducted in such a way to address issues of dust, noise, and pollution in the affected areas. Heating oil shale in the ground can contaminate vital groundwater supplies. High salt concentrations in groundwater restricts water available to native plants and is harmful to agricultural production as well. The Colorado River Basin already spends millions of dollars annually on damages caused from high salinity. **#3])> <([#4** [*3.1.1*] * The Draft Programmatic EIS should address the potential encroachment on protected areas and National Parks such as Glen Canyon Recreation Area and Canyonlands National Park. This includes a thorough analysis of the damage to these priceless parks by oil shale and tar sands development. **#4])> <([#5** [*2.3.1*] This EIS should ensure that all alternatives seriously assess the issues outlined above. Considering the present lack of adequate information and the tremendous risks of misguided development, the only reasonable alternative at this point is Alternative 3, Research Only as outlined in the PEIS. **#5])>** Thank you for the opportunity to comment on the Draft Programmatic EIS. Sincerely, Crista Worthy 13015 N Shafer Way Boise, ID 83714

OSTS2012D50201
Organization: Robert Rutkowski
Received: 5/1/2012 1:41:23 PM

Commenter1: Robert Rutkowski - Topeka, Kansas 66605 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: 50201_Campaign
Submitted As: Web Form
Form Letter Category: Form Letter Master
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/4/2012 12:00:00 AM
Attachments: OSTS2012D50201.htm (OSTS2012D50201-58714.htm Size = 3 KB)
Submission Text
To: Bureau of Land Management, E: http://ostseis.anl.gov/involve/comments/index.cfm I am writing to submit comments on the Oil Shale and Tar Sands Draft Programmatic Environmental Impact Statement (PEIS). **<([#1** [*3*] I am very concerned about the possible impacts of oil shale development on Glen Canyon, Grand Canyon, and the Colorado River. I believe that we need more research on the potential impacts of oil shale and tar sand development before allowing leasing of our public lands for this use. Such development could have serious and irreversible impacts, including on water supplies and quality, air quality, native ecosystems and wildlife, and recreational uses. **#1])> <([#2** [*2.3.1*] I urge you to choose Alternative 3, Research Only, as the BLM's Preferred Alternative in the Final PEIS. This is essential to ensure that we have the best possible information before considering opening our natural open spaces and ecosystems to the development of oil shale and tar sand resources. **#2])> <([#3** [*3.4.1*] Here are some of my specific concerns regarding the Draft PEIS: * The Draft Programmatic EIS needs to ensure water quality will not be adversely effected by development of oil shale and tar sand resources. The water usage for oil shale production far outstrips the amount of oil produced, even prior to the refinement process. Water resources in the West are already overused and the effects of climate change and increased population will only add further strain to an already depleted system. **#3])> <([#4** [*3.4.1*] * The Draft Programmatic EIS should be conducted in such a way to address issues of dust, noise, and pollution in the affected areas. Heating oil shale in the ground can contaminate vital groundwater supplies. High salt concentrations in groundwater restricts water available to native plants and is harmful to agricultural production as well. The Colorado River Basin already spends millions of dollars annually on damages caused from high salinity. **#4])> <([#5** [*3.1.1*] * The Draft Programmatic EIS should address the potential encroachment on protected areas and National Parks such as Glen Canyon Recreation Area and Canyonlands National Park. This includes a thorough analysis of the damage to these priceless parks by oil shale and tar sands development. **#5])> <([#6** [*2.3.1*] This EIS should ensure that all alternatives seriously assess the issues outlined above. Considering the present lack of adequate information and the tremendous risks of misguided development, the only reasonable alternative at this point is Alternative 3, Research Only as outlined in the PEIS. **#6])>** Thank you for the opportunity to comment on the Draft Programmatic EIS. Sincerely, Robert E. Rutkowski 2527 Faxon Court Topeka, Kansas 66605-2086 P/F: 1 785 379-9671 E-mail: r_e_rutkowski@att.net

OSTS2012D50202
Organization: Joanne Harkins
Received: 5/1/2012 1:59:53 PM
Commenter1: Joanne Harkins - Venice, California 90291 (United States)
Organization1:

Commenter Type: Member of the Public
Classification:
Submission Category: 50201_Campaign
Submitted As: Web Form
Form Letter Category:
Form Letter Master: OSTS2012D50201- Master
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/4/2012 12:00:00 AM
Attachments: OSTS2012D50202.htm (OSTS2012D50202-58716.htm Size = 3 KB)
Submission Text
Dear Bureau of Land Management, I am writing to submit comments on the Oil Shale and Tar Sands Draft Programmatic Environmental Impact Statement (PEIS).**<([#1** [*3*] I am very concerned about the possible impacts of oil shale development on Glen Canyon, Grand Canyon, and the Colorado River. I believe that we need more research on the potential impacts of oil shale and tar sand development before allowing leasing of our public lands for this use. Such development could have serious and irreversible impacts, including on water supplies and quality, air quality, native ecosystems and wildlife, and recreational uses. **#1])> <([#2** [*2.3.1*] I urge you to choose Alternative 3, Research Only, as the BLM's Preferred Alternative in the Final PEIS. This is essential to ensure that we have the best possible information before considering opening our natural open spaces and ecosystems to the development of oil shale and tar sand resources. **#2])> <([#3** [*3.4.1*] Here are some of my specific concerns regarding the Draft PEIS: * The Draft Programmatic EIS needs to ensure water quality will not be adversely effected by development of oil shale and tar sand resources. The water usage for oil shale production far outstrips the amount of oil produced, even prior to the refinement process. Water resources in the West are already overused and the effects of climate change and increased population will only add further strain to an already depleted system. **#3])> <([#4** [*3.4.1*] * The Draft Programmatic EIS should be conducted in such a way to address issues of dust, noise, and pollution in the affected areas. Heating oil shale in the ground can contaminate vital groundwater supplies. High salt concentrations in groundwater restricts water available to native plants and is harmful to agricultural production as well. The Colorado River Basin already spends millions of dollars annually on damages caused from high salinity. **#4])> <([#5** [*3.1.1*] * The Draft Programmatic EIS should address the potential encroachment on protected areas and National Parks such as Glen Canyon Recreation Area and Canyonlands National Park. This includes a thorough analysis of the damage to these priceless parks by oil shale and tar sands development. **#5])> <([#6** [*2.3.1*] This EIS should ensure that all alternatives seriously assess the issues outlined above. Considering the present lack of adequate information and the tremendous risks of misguided development, the only reasonable alternative at this point is Alternative 3, Research Only as outlined in the PEIS. **#6])>** Thank you for the opportunity to comment on the Draft Programmatic EIS. Sincerely, Joanne Harkins 2339 Walnut Ave venice, CA 90291

OSTS2012D50203
Organization: Tim Ifill
Received: 5/1/2012 2:02:14 PM
Commenter1: Tim Ifill - Philadelphia, Pennsylvania 19146 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: 50201_Campaign

Submitted As: Web Form
Form Letter Category:
Form Letter Master: OSTS2012D50201- Master
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/4/2012 12:00:00 AM
Attachments: OSTS2012D50203.htm (OSTS2012D50203-58718.htm Size = 3 KB)
Submission Text
I am writing to submit comments on the Oil Shale and Tar Sands Draft Programmatic Environmental Impact Statement (PEIS). **<([#1** [*3*] I am very concerned about the possible impacts of oil shale development on Glen Canyon, Grand Canyon, and the Colorado River. I believe that we need more research on the potential impacts of oil shale and tar sand development before allowing leasing of our public lands for this use. Such development could have serious and irreversible impacts, including on water supplies and quality, air quality, native ecosystems and wildlife, and recreational uses. **#1])> <([#2** [*2.3.1*] I urge you to choose Alternative 3, Research Only, as the BLM's Preferred Alternative in the Final PEIS. This is essential to ensure that we have the best possible information before considering opening our natural open spaces and ecosystems to the development of oil shale and tar sand resources. **#2])> <([#3** [*3.4.1*] Here are some of my specific concerns regarding the Draft PEIS: * The Draft Programmatic EIS needs to ensure water quality will not be adversely effected by development of oil shale and tar sand resources. The water usage for oil shale production far outstrips the amount of oil produced, even prior to the refinement process. Water resources in the West are already overused and the effects of climate change and increased population will only add further strain to an already depleted system. **#3])> <([#4** [*3.4.1*] * The Draft Programmatic EIS should be conducted in such a way to address issues of dust, noise, and pollution in the affected areas. Heating oil shale in the ground can contaminate vital groundwater supplies. High salt concentrations in groundwater restricts water available to native plants and is harmful to agricultural production as well. The Colorado River Basin already spends millions of dollars annually on damages caused from high salinity. **#4])> <([#5** [*3.1.1*] * The Draft Programmatic EIS should address the potential encroachment on protected areas and National Parks such as Glen Canyon Recreation Area and Canyonlands National Park. This includes a thorough analysis of the damage to these priceless parks by oil shale and tar sands development. **#5])> <([#6** [*2.3.1*] This EIS should ensure that all alternatives seriously assess the issues outlined above. Considering the present lack of adequate information and the tremendous risks of misguided development, the only reasonable alternative at this point is Alternative 3, Research Only as outlined in the PEIS. **#6])>** Thank you for the opportunity to comment on the Draft Programmatic EIS. Sincerely, Tim Ifill Philadelphia, PA

OSTS2012D50204
Organization: Steve Masefield
Received: 5/1/2012 2:05:31 PM
Commenter1: Steve Masefield - Virgin, Utah 84779 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:

Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/4/2012 12:00:00 AM
Attachments: OSTS2012D50204.htm (OSTS2012D50204-58720.htm Size = 1 KB)
Submission Text
<([#1 [*2.3.1*] The oil sands/gas are not "going anywhere" - please consider further research so any decison is based on hard fact rather speculative assumptions - Option 3 would appear to be good course to follow. **#1])>**

OSTS2012D50205
Organization: Richard Johnson
Received: 5/1/2012 2:06:58 PM
Commenter1: Richard Johnson - Chiloquin, Oregon 97624 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/4/2012 12:00:00 AM
Attachments: OSTS2012D50205.htm (OSTS2012D50205-58722.htm Size = 1 KB)
Submission Text
<([#1 [*2.3.1*] Concerning the Oil Shale and Tar Sands draft PEIS. Alternative 3 is the only wise choice at this time! The experimental and potentially destructive nature of this kind of extraction calls for much further study. The economics of this kind of operation are nonsense and CONSERVATION is the only longterm answer for our nation, not exploitation. **#1])>** Richard Johnson

OSTS2012D50206
Organization: carla tuke
Received: 5/1/2012 2:10:48 PM
Commenter1: carla tuke - slc, Utah 841061822 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: 50201_Campaign
Submitted As: Web Form
Form Letter Category:
Form Letter Master: OSTS2012D50201- Master
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/4/2012 12:00:00 AM
Attachments: OSTS2012D50206.htm (OSTS2012D50206-58724.htm Size = 3 KB)
Submission Text
Dear Bureau of Land Management, I am writing to submit comments on the Oil Shale and Tar Sands Draft Programmatic Environmental Impact Statement (PEIS). **<([#1** [*3*] I am very concerned about the possible impacts of oil shale development on Glen Canyon, Grand Canyon, and the Colorado River. I believe that we need more research on the potential impacts of oil shale and tar sand development before allowing leasing of our public lands for this use. Such development could have serious and irreversible impacts, including on water supplies and

quality, air quality, native ecosystems and wildlife, and recreational uses. **#1])> <([#2** [*2.3.1*] I urge you to choose Alternative 3, Research Only, as the BLM's Preferred Alternative in the Final PEIS. This is essential to ensure that we have the best possible information before considering opening our natural open spaces and ecosystems to the development of oil shale and tar sand resources. **#2])> <([#3** [*3.4.1*] Here are some of my specific concerns regarding the Draft PEIS: * The Draft Programmatic EIS needs to ensure water quality will not be adversely effected by development of oil shale and tar sand resources. The water usage for oil shale production far outstrips the amount of oil produced, even prior to the refinement process. Water resources in the West are already overused and the effects of climate change and increased population will only add further strain to an already depleted system. **#3])> <([#4** [*3.4.1*] * The Draft Programmatic EIS should be conducted in such a way to address issues of dust, noise, and pollution in the affected areas. Heating oil shale in the ground can contaminate vital groundwater supplies. High salt concentrations in groundwater restricts water available to native plants and is harmful to agricultural production as well. The Colorado River Basin already spends millions of dollars annually on damages caused from high salinity. **#4])> <([#5** [*3.1.1*] * The Draft Programmatic EIS should address the potential encroachment on protected areas and National Parks such as Glen Canyon Recreation Area and Canyonlands National Park. This includes a thorough analysis of the damage to these priceless parks by oil shale and tar sands development. **#5])> <([#6** [*2.3.1*] This EIS should ensure that all alternatives seriously assess the issues outlined above. Considering the present lack of adequate information and the tremendous risks of misguided development, the only reasonable alternative at this point is Alternative 3, Research Only as outlined in the PEIS. **#6])>** Thank you for the opportunity to comment on the Draft Programmatic EIS.

OSTS2012D50207

Organization: Bruce Berger
Received: 5/1/2012 2:11:54 PM
Commenter1: Bruce Berger - Aspen, Colorado 81611 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/4/2012 12:00:00 AM
Attachments: OSTS2012D50207.htm (OSTS2012D50207-58726.htm Size = 1 KB)
Submission Text
<([#1 [*12*] The amount of energy needed to extract energy from oil shale or tar sands makes it a poor economic choice while the extent of its damage on the ground is intolerable. The amount of investment necessary for its development should be directed to better choices. **#1])>**

OSTS2012D50208

Organization: Glen Canyon Institute, Tyler Coles
Received: 5/1/2012 2:16:07 PM
Commenter1: Tyler Coles - Salt Lake City, Utah 84108 (United States)
Organization1: Glen Canyon Institute

Commenter Type: Affiliation Only
Classification:
Submission Category: 50201_Campaign
Submitted As: Web Form
Form Letter Category:
Form Letter Master: OSTS2012D50201- Master
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/4/2012 12:00:00 AM
Attachments: OSTS2012D50208.htm (OSTS2012D50208-58728.htm Size = 3 KB)
Submission Text
Dear Bureau of Land Management, I am writing to submit comments on the Oil Shale and Tar Sands Draft Programmatic Environmental Impact Statement (PEIS). **<([#1** [*3*] I am very concerned about the possible impacts of oil shale development on Glen Canyon, Grand Canyon, and the Colorado River. I believe that we need more research on the potential impacts of oil shale and tar sand development before allowing leasing of our public lands for this use. Such development could have serious and irreversible impacts, including on water supplies and quality, air quality, native ecosystems and wildlife, and recreational uses. **#1])> <([#2** [*2.3.1*] I urge you to choose Alternative 3, Research Only, as the BLM's Preferred Alternative in the Final PEIS. This is essential to ensure that we have the best possible information before considering opening our natural open spaces and ecosystems to the development of oil shale and tar sand resources. **#2])> <([#3** [*3.4.1*] Here are some of my specific concerns regarding the Draft PEIS: * The Draft Programmatic EIS needs to ensure water quality will not be adversely effected by development of oil shale and tar sand resources. The water usage for oil shale production far outstrips the amount of oil produced, even prior to the refinement process. Water resources in the West are already overused and the effects of climate change and increased population will only add further strain to an already depleted system. **#3])> <([#4** [*3.4.1*] * The Draft Programmatic EIS should be conducted in such a way to address issues of dust, noise, and pollution in the affected areas. Heating oil shale in the ground can contaminate vital groundwater supplies. High salt concentrations in groundwater restricts water available to native plants and is harmful to agricultural production as well. The Colorado River Basin already spends millions of dollars annually on damages caused from high salinity. **#4])> <([#5** [*3.1.1*] * The Draft Programmatic EIS should address the potential encroachment on protected areas and National Parks such as Glen Canyon Recreation Area and Canyonlands National Park. This includes a thorough analysis of the damage to these priceless parks by oil shale and tar sands development. **#5])> <([#6** [*2.3.1*] This EIS should ensure that all alternatives seriously assess the issues outlined above. Considering the present lack of adequate information and the tremendous risks of misguided development, the only reasonable alternative at this point is Alternative 3, Research Only as outlined in the PEIS. **#6])>** Thank you for the opportunity to comment on the Draft Programmatic EIS. Sincerely, Tyler Coles 2032 Emerson Ave Salt Lake City, UT 84108

OSTS2012D50209
Organization: rknetworking.net, Rich Holtzin
Received: 5/1/2012 2:26:32 PM
Commenter1: Rich Holtzin - Albuquerque, New Mexico 87104 (United States)
Organization1:rknetworking.net
Commenter Type: Affiliation Only
Classification:
Submission Category: Standard Web Form

Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/14/2012 12:00:00 AM
Attachments: OSTS2012D50209.htm (OSTS2012D50209-58735.htm Size = 1 KB)
Submission Text
<([#1 [*1.5*] Are you people out of your fuckings minds? I don't even have comment on this idiotic proposal, except if you idiots get this passed I am damn coming after you with a hoard of lawyers and protestors. Goddamn oil people in your pockets and you have the balls to even consider a proposal like this? What the fuck is wrong with you jerks. Pull your heads out. You're just inviting a lot of legal better minds than the corrupt people who are trying to buy you. We'll put you in court for the rest of your days. We can do this legally. You are not, NOT, going to get away with this latest debacle of permit granting. Idiots, all! That's you! **#1])>**

OSTS2012D50210
Organization: Steven Turley
Received: 5/1/2012 2:30:29 PM
Commenter1: Steven Turley - Longmont, Colorado 80501 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/4/2012 12:00:00 AM
Attachments: OSTS2012D50210.htm (OSTS2012D50210-58737.htm Size = 1 KB)
Submission Text
<([#1 [*2.3.1*] I am writing to submit comments on the Oil Shale and Tar Sands Draft Programmatic Environmental Impact Statement (PEIS). I am very concerned about the possible impacts of oil shale development on Glen Canyon, Grand Canyon, and the Colorado River. I believe that we need more research on the potential impacts of oil shale and tar sand development before allowing leasing of our public lands for this use. Such development could have serious and irreversible impacts, including on water supplies and quality, air quality, native ecosystems and wildlife, and recreational uses. I urge you to choose Alternative 3, Research Only, as the BLM's Preferred Alternative in the Final PEIS. This is essential to ensure that we have the best possible information before considering opening our natural open spaces and ecosystems to the development of oil shale and tar sand resources. **#1])>** Thank you for your time and service.

OSTS2012D50211
Organization: Deborah Masefield
Received: 5/1/2012 2:34:20 PM
Commenter1: Deborah Masefield - Virgin, Utah 84779 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:

Submission Category: 50201_Campaign
Submitted As: Web Form
Form Letter Category:
Form Letter Master: OSTS2012D50201- Master
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/4/2012 12:00:00 AM
Attachments: OSTS2012D50211.htm (OSTS2012D50211-58739.htm Size = 3 KB)
Submission Text
Land Management, I am writing to submit comments on the Oil Shale and Tar Sands Draft Programmatic Environmental Impact Statement (PEIS). **<([#1** [*3*] I am very concerned about the possible impacts of oil shale development on Glen Canyon, Grand Canyon, and the Colorado River. I believe that we need more research on the potential impacts of oil shale and tar sand development before allowing leasing of our public lands for this use. Such development could have serious and irreversible impacts, including on water supplies and quality, air quality, native ecosystems and wildlife, and recreational uses. **#1])> <([#2** [*2.3.1*] I urge you to choose Alternative 3, Research Only, as the BLM's Preferred Alternative in the Final PEIS. This is essential to ensure that we have the best possible information before considering opening our natural open spaces and ecosystems to the development of oil shale and tar sand resources. **#2])> <([#3** [*3.4.1*] Here are some of my specific concerns regarding the Draft PEIS: * The Draft Programmatic EIS needs to ensure water quality will not be adversely effected by development of oil shale and tar sand resources. The water usage for oil shale production far outstrips the amount of oil produced, even prior to the refinement process. Water resources in the West are already overused and the effects of climate change and increased population will only add further strain to an already depleted system. **#3])> <([#4** [*3.4.1*] * The Draft Programmatic EIS should be conducted in such a way to address issues of dust, noise, and pollution in the affected areas. Heating oil shale in the ground can contaminate vital groundwater supplies. High salt concentrations in groundwater restricts water available to native plants and is harmful to agricultural production as well. The Colorado River Basin already spends millions of dollars annually on damages caused from high salinity. **#4])> <([#5** [*3.1.1*] * The Draft Programmatic EIS should address the potential encroachment on protected areas and National Parks such as Glen Canyon Recreation Area and Canyonlands National Park. This includes a thorough analysis of the damage to these priceless parks by oil shale and tar sands development. **#5])> <([#6** [*2.3.1*] This EIS should ensure that all alternatives seriously assess the issues outlined above. Considering the present lack of adequate information and the tremendous risks of misguided development, the only reasonable alternative at this point is Alternative 3, Research Only as outlined in the PEIS. Thank you for the opportunity to comment on the Draft Programmatic EIS. **#6])>** Sincerely, Deborah Masefield 815 W 150 S Virgin UT 84779

OSTS2012D50212
Organization: JOHN LINDERMUTH
Received: 5/1/2012 2:43:42 PM
Commenter1: JOHN LINDERMUTH - CARLSBAD, California 920081559 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:

Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/4/2012 12:00:00 AM
Attachments: OSTS2012D50212.htm (OSTS2012D50212-58741.htm Size = 1 KB)
Submission Text
<([#1 [*12.3*] Please preserve and protect these vital lands that have been placed in your trust. **#1])>**

OSTS2012D50213
Organization: Michael Derr
Received: 5/1/2012 2:44:31 PM
Commenter1: Michael Derr - Salt Lake City, Utah 84105 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: 50201_Campaign
Submitted As: Web Form
Form Letter Category:
Form Letter Master: OSTS2012D50201- Master
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/4/2012 12:00:00 AM
Attachments: OSTS2012D50213.htm (OSTS2012D50213-58743.htm Size = 3 KB)
Submission Text
Dear Bureau of Land Management, I am writing to submit comments on the Oil Shale and Tar Sands Draft Programmatic Environmental Impact Statement (PEIS). **<([#1** [*3*] I am very concerned about the possible impacts of oil shale development on Glen Canyon, Grand Canyon, and the Colorado River. I believe that we need more research on the potential impacts of oil shale and tar sand development before allowing leasing of our public lands for this use. Such development could have serious and irreversible impacts, including on water supplies and quality, air quality, native ecosystems and wildlife, and recreational uses. **#1])> <([#2** [*2.3.1*] I urge you to choose Alternative 3, Research Only, as the BLM's Preferred Alternative in the Final PEIS. This is essential to ensure that we have the best possible information before considering opening our natural open spaces and ecosystems to the development of oil shale and tar sand resources. **#2])> <([#3** [*3.4.1*] Here are some of my specific concerns regarding the Draft PEIS: * The Draft Programmatic EIS needs to ensure water quality will not be adversely effected by development of oil shale and tar sand resources. The water usage for oil shale production far outstrips the amount of oil produced, even prior to the refinement process. Water resources in the West are already overused and the effects of climate change and increased population will only add further strain to an already depleted system. **#3])> <([#4** [*3.4.1*] * The Draft Programmatic EIS should be conducted in such a way to address issues of dust, noise, and pollution in the affected areas. Heating oil shale in the ground can contaminate vital groundwater supplies. High salt concentrations in groundwater restricts water available to native plants and is harmful to agricultural production as well. The Colorado River Basin already spends millions of dollars annually on damages caused from high salinity. **#4])> <([#5** [*3.1.1*] * The Draft Programmatic EIS should address the potential encroachment on protected areas and National Parks such as Glen Canyon Recreation Area and Canyonlands National Park. This includes a thorough analysis of the damage to these priceless parks by oil shale and tar sands development. **#5])> <([#6** [*2.3.1*] This EIS should ensure that all alternatives seriously assess the issues outlined above. Considering the present lack of adequate information and the tremendous risks of misguided

development, the only reasonable alternative at this point is Alternative 3, Research Only as outlined in the PEIS. **#6])>** Thank you for the opportunity to comment on the Draft Programmatic EIS. Sincerely, Mike Derr 1636 Laird Ave Salt Lake City, UT 84105

OSTS2012D50214

Organization: Merrill Bitter
Received: 5/1/2012 3:00:54 PM
Commenter1: Merrill Bitter - Salt Lake City, Utah 84106 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: 50201_Campaign
Submitted As: Web Form
Form Letter Category:
Form Letter Master: OSTS2012D50201- Master
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/4/2012 12:00:00 AM
Attachments: OSTS2012D50214.htm (OSTS2012D50214-58744.htm Size = 3 KB)

Submission Text

Dear Bureau of Land Management, I am writing to submit comments on the Oil Shale and Tar Sands Draft Programmatic Environmental Impact Statement (PEIS). **<([#1** [*3*] I am very concerned about the possible impacts of oil shale development on Glen Canyon, Grand Canyon, and the Colorado River. I believe that we need more research on the potential impacts of oil shale and tar sand development before allowing leasing of our public lands for this use. Such development could have serious and irreversible impacts, including on water supplies and quality, air quality, native ecosystems and wildlife, and recreational uses. **#1])> <([#2** [*2.3.1*] I urge you to choose Alternative 3, Research Only, as the BLM's Preferred Alternative in the Final PEIS. This is essential to ensure that we have the best possible information before considering opening our natural open spaces and ecosystems to the development of oil shale and tar sand resources. **#2])> <([#3** [*3.4.1*] Here are some of my specific concerns regarding the Draft PEIS: * The Draft Programmatic EIS needs to ensure water quality will not be adversely effected by development of oil shale and tar sand resources. The water usage for oil shale production far outstrips the amount of oil produced, even prior to the refinement process. Water resources in the West are already overused and the effects of climate change and increased population will only add further strain to an already depleted system. **#3])> <([#4** [*3.4.1*] * The Draft Programmatic EIS should be conducted in such a way to address issues of dust, noise, and pollution in the affected areas. Heating oil shale in the ground can contaminate vital groundwater supplies. High salt concentrations in groundwater restricts water available to native plants and is harmful to agricultural production as well. The Colorado River Basin already spends millions of dollars annually on damages caused from high salinity. **#4])> <([#5** [*3.1.1*] * The Draft Programmatic EIS should address the potential encroachment on protected areas and National Parks such as Glen Canyon Recreation Area and Canyonlands National Park. This includes a thorough analysis of the damage to these priceless parks by oil shale and tar sands development. **#5])> <([#6** [*2.3.1*] This EIS should ensure that all alternatives seriously assess the issues outlined above. Considering the present lack of adequate information and the tremendous risks of misguided development, the only reasonable alternative at this point is Alternative 3, Research Only as outlined in the PEIS. **#6])>** Thank you for the opportunity to comment on the Draft Programmatic EIS. Sincerely, Merrill Bitter

OSTS2012D50215

Organization: Sara Avery
Received: 5/1/2012 3:11:42 PM
Commenter1: Sara Avery - Lafayette, Colorado 80026 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: 50201_Campaign
Submitted As: Web Form
Form Letter Category:
Form Letter Master: OSTS2012D50201- Master
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/4/2012 12:00:00 AM
Attachments: OSTS2012D50215.htm (OSTS2012D50215-58746.htm Size = 3 KB)

Submission Text

I am writing to submit comments on the Oil Shale and Tar Sands Draft Programmatic Environmental Impact Statement (PEIS). **<([#1** [*3*] I am very concerned about the possible impacts of oil shale development on Glen Canyon, Grand Canyon, and the Colorado River. I believe that we need more research on the potential impacts of oil shale and tar sand development before allowing leasing of our public lands for this use. Such development could have serious and irreversible impacts, including on water supplies and quality, air quality, native ecosystems and wildlife, and recreational uses. **#1])> <([#2** [*2.3.1*] I urge you to choose Alternative 3, Research Only, as the BLM's Preferred Alternative in the Final PEIS. This is essential to ensure that we have the best possible information before considering opening our natural open spaces and ecosystems to the development of oil shale and tar sand resources. **#2])> <([#3** [*3.4.1*] Here are some of my specific concerns regarding the Draft PEIS: * The Draft Programmatic EIS needs to ensure water quality will not be adversely effected by development of oil shale and tar sand resources. The water usage for oil shale production far outstrips the amount of oil produced, even prior to the refinement process. Water resources in the West are already overused and the effects of climate change and increased population will only add further strain to an already depleted system. **#3])> <([#4** [*3.4.1*] * The Draft Programmatic EIS should be conducted in such a way to address issues of dust, noise, and pollution in the affected areas. Heating oil shale in the ground can contaminate vital groundwater supplies. High salt concentrations in groundwater restricts water available to native plants and is harmful to agricultural production as well. The Colorado River Basin already spends millions of dollars annually on damages caused from high salinity. **#4])> <([#5** [*3.1.1*] * The Draft Programmatic EIS should address the potential encroachment on protected areas and National Parks such as Glen Canyon Recreation Area and Canyonlands National Park. This includes a thorough analysis of the damage to these priceless parks by oil shale and tar sands development. **#5])> <([#6** [*2.3.1*] This EIS should ensure that all alternatives seriously assess the issues outlined above. Considering the present lack of adequate information and the tremendous risks of misguided development, the only reasonable alternative at this point is Alternative 3, Research Only as outlined in the PEIS. **#6])>** Thank you for the opportunity to comment. Sincerely, Sara Avery

OSTS2012D50216

Organization: Josephine Porter
Received: 5/1/2012 3:29:42 PM
Commenter1: Josephine Porter - Albuquerque, New Mexico 87122 (United States)

Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/14/2012 12:00:00 AM
Attachments: OSTS2012D50216.htm (OSTS2012D50216-58748.htm Size = 1 KB)
Submission Text
<([#1 [*2.3.1*] I lived in Wyoming and now live in New Mexico. I travel all over the West and have for the past 50 years. I am especially connected to Wyoming and the Canyon Country of Colorado, Utah and Arizona visiting as often as I can. Traveling to Rainbow Bridge by horseback in 1960 made a lasting impression that changed my life. I raft the Green and the Colorado. I hike the Escalante and the Wind Rivers. Our West holds so much value that can not be priced and it is up to you to protect. Alternative 3 is the only choice that will investigate true costs of this development. **#1])>**

OSTS2012D50217
Organization: greg adams
Received: 5/1/2012 3:32:27 PM
Commenter1: greg adams - , 92111 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/14/2012 12:00:00 AM
Attachments: OSTS2012D50217.htm (OSTS2012D50217-58750.htm Size = 1 KB)
Submission Text
<([#1 [*12*] Get off this ridicules hunt for oil and start coming up with viable alternatives..all the cheap gas and oil have already been exploited...water is the most valuable commodity on earth...protect it at all costs **#1])>**

OSTS2012D50218
Organization:
Received: 5/1/2012 3:35:07 PM
Commenter1: - , (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:

Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/14/2012 12:00:00 AM
Attachments: OSTS2012D50218.htm (OSTS2012D50218-58752.htm Size = 1 KB)
Submission Text
<([#1 [*3.1.1*] PLEASE PROTECT OUR PUBLIC LANDS, AND NATIONAL PARKS. **#1])>**

OSTS2012D50219
Organization: Wesley Wolf
Received: 5/1/2012 3:40:01 PM
Commenter1: Wesley Wolf - Barrington, Illinois 600103893 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: 50201_Campaign
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/16/2012 12:00:00 AM
Attachments: OSTS2012D50219.htm (OSTS2012D50219-58754.htm Size = 3 KB)
Submission Text
Dear Bureau of Land Management, **<([#1** [*2.3.1*] I am very concerned about the possible impacts of oil shale development on Glen Canyon, Grand Canyon, and the Colorado River. I believe that we need more research on the potential impacts of oil shale and tar sand development before allowing leasing of our public lands for this use. Such development could have serious and irreversible impacts, including on water supplies and quality, air quality, native ecosystems and wildlife, and recreational uses. I urge you to choose Alternative 3, Research Only, as the BLM's Preferred Alternative in the Final PEIS. This is essential to ensure that we have the best possible information before considering opening our natural open spaces and ecosystems to the development of oil shale and tar sand resources. **#1])>** Here are some of my specific concerns regarding the Draft PEIS: **<([#2** [*3.4.1*] * The Draft Programmatic EIS needs to ensure water quality will not be adversely effected by development of oil shale and tar sand resources. The water usage for oil shale production far outstrips the amount of oil produced, even prior to the refinement process. Water resources in the West are already overused and the effects of climate change and increased population will only add further strain to an already depleted system. **#2])>** **<([#3** [*3.4.1*] * The Draft Programmatic EIS should be conducted in such a way to address issues of dust, noise, and pollution in the affected areas. Heating oil shale in the ground can contaminate vital groundwater supplies. High salt concentrations in groundwater restricts water available to native plants and is harmful to agricultural production as well. The Colorado River Basin already spends millions of dollars annually on damages caused from high salinity. **#3])>** **<([#4** [*3.1.1*] * The Draft Programmatic EIS should address the potential encroachment on protected areas and National Parks such as Glen Canyon Recreation Area and Canyonlands National Park. This includes a thorough analysis of the damage to these priceless parks by oil shale and tar sands development. **#4])>** **<([#5** [*2.3.1*] This EIS should ensure that all alternatives seriously assess the issues outlined above. Considering the present lack of adequate information and the tremendous risks of misguided development, the only reasonable alternative at this point is Alternative 3, Research Only as outlined in the PEIS. **#5])>** Thank you for the opportunity to comment on the Draft Programmatic EIS. Sincerely, Wesley Wolf

OSTS2012D50220
Organization: Anne Jones
Received: 5/1/2012 3:44:04 PM
Commenter1: Anne Jones - Olivet, Michigan 49076 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/16/2012 12:00:00 AM
Attachments: OSTS2012D50220.htm (OSTS2012D50220-58756.htm Size = 1 KB)
Submission Text
<([#1 [*2.3.1*] For many years my salary was funded by the DOE. I am in favor of research for energy sources. Outside of MOAB is the DOE's biggest cleanup - Have we not learned our lessons? Please, no development of more things that potentially pollute until 100% of the research is needed to make sure the DOE is not cleaning up a mess, if it can, the next time. I favor Alternative 3 - more time, more studies. **#1])>**

OSTS2012D50221
Organization: lewis chapp
Received: 5/1/2012 3:57:15 PM
Commenter1: lewis chapp - somerville, New Jersey 08876 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/4/2012 12:00:00 AM
Attachments: OSTS2012D50221.htm (OSTS2012D50221-58758.htm Size = 1 KB)
Submission Text
<([#1 [*12*] Please don't risk ruining the land. **#1])>**

OSTS2012D50222
Organization: Fares Arguello
Received: 5/1/2012 4:05:59 PM
Commenter1: Fares Arguello - Salt Lake City, Utah 841082907 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:

Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/4/2012 12:00:00 AM
Attachments: OSTS2012D50222.htm (OSTS2012D50222-58760.htm Size = 1 KB)
Submission Text
<([#1 [*3.10.2*] In 2011 Utah's tourism industry generated $842 million in state and local tax revenue and directly supported 2,200 local jobs in Glen Canyon National Recreation Area plus sustained another 1,600 jobs in Arches National Park. All the while keeping a low carbon footprint. Utah had one of it's worst ski years in history and regardless of climate change denial, one wonders if continued decreases in yearly precipitation will not only negatively impact the ski industry but our water resource in general.Any further negative effect on our water resource with bad consequences for Utah and it's citizenry via shale and tar sand development is unncecessary and unwise. **#1])> <([#2** [*2.3.1*] BLM development alternative 3, research only, seems to be the one and only wise option. An option I strongly encourage and recommend. **#2])>** Fares Arguello, MD

OSTS2012D50223
Organization: Sherri Venezia
Received: 5/1/2012 4:08:58 PM
Commenter1: Sherri Venezia - Davis, California 95616 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/4/2012 12:00:00 AM
Attachments: OSTS2012D50223.htm (OSTS2012D50223-58762.htm Size = 1 KB)
Submission Text
<([#1 [*12.3*] I wish to register opposition to the proposed Oil Shale and Tar Sands project that may negatively impact the national parks in the Rocky Mountain regions. These parks are our links to the natural beauty of our country, to be preserved for posterity. Fracking, drilling and destroying habitat as the byproduct of attempting to remove oil deposits from tar sands and rock are short term ways of getting oil; we must reduce our dependency on this and look for alternative ways of fueling the economy. I oppose these practices near our national parks in the West. **#1])>**

OSTS2012D50224
Organization: Kathy Halbower
Received: 5/1/2012 5:09:37 PM
Commenter1: Kathy Halbower - New York, New York 10010 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:

Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/4/2012 12:00:00 AM
Attachments: OSTS2012D50224.htm (OSTS2012D50224-58764.htm Size = 1 KB)
Submission Text
<([#1 [*12.3*] please keep these designated areas wild and untainted for our children and for biological diversity. **#1])>**

OSTS2012D50225
Organization: Julie Ford
Received: 5/1/2012 6:17:58 PM
Commenter1: Julie Ford - Huntington Beach, California 926492244 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/4/2012 12:00:00 AM
Attachments: OSTS2012D50225.htm (OSTS2012D50225-58766.htm Size = 1 KB)
Submission Text
<([#1 [*2.3.1*] Please use Alternate 3. Oil shale operations have no place on public lands and should not even be considered. **#1])>**

OSTS2012D50226
Organization:
Received: 5/1/2012 6:19:33 PM
Commenter1: - , (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: 50201_Campaign
Submitted As: Web Form
Form Letter Category:
Form Letter Master: OSTS2012D50201- Master
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/4/2012 12:00:00 AM
Attachments: OSTS2012D50226.htm (OSTS2012D50226-58768.htm Size = 3 KB)
Submission Text
Dear Bureau of Land Management, I am writing to submit comments on the Oil Shale and Tar Sands Draft Programmatic Environmental Impact Statement (PEIS). **<([#1** [*3*] I am very concerned about the possible impacts of oil shale development on Glen Canyon, Grand Canyon, and the Colorado River. I believe that we need more research on the potential impacts of oil shale and tar sand development before allowing leasing of our public lands for this use. Such development could have serious and irreversible impacts, including on water supplies and quality, air quality, native ecosystems and wildlife, and recreational uses. **#1])> <([#2** [*2.3.1*] I urge you to choose Alternative 3, Research Only, as the BLM's Preferred Alternative in the Final PEIS. This is essential to ensure that we have the best possible information before considering opening our natural open spaces and ecosystems to the development of oil shale and tar sand

resources. **#2])> <([#3** [*3.4.1*] Here are some of my specific concerns regarding the Draft PEIS: * The Draft Programmatic EIS needs to ensure water quality will not be adversely effected by development of oil shale and tar sand resources. The water usage for oil shale production far outstrips the amount of oil produced, even prior to the refinement process. Water resources in the West are already overused and the effects of climate change and increased population will only add further strain to an already depleted system. **#3])> <([#4** [*3.4.1*] * The Draft Programmatic EIS should be conducted in such a way to address issues of dust, noise, and pollution in the affected areas. Heating oil shale in the ground can contaminate vital groundwater supplies. High salt concentrations in groundwater restricts water available to native plants and is harmful to agricultural production as well. The Colorado River Basin already spends millions of dollars annually on damages caused from high salinity. **#4])> <([#5** [*3.1.1*] * The Draft Programmatic EIS should address the potential encroachment on protected areas and National Parks such as Glen Canyon Recreation Area and Canyonlands National Park. This includes a thorough analysis of the damage to these priceless parks by oil shale and tar sands development. **#5])> <([#6** [*2.3.1*] This EIS should ensure that all alternatives seriously assess the issues outlined above. Considering the present lack of adequate information and the tremendous risks of misguided development, the only reasonable alternative at this point is Alternative 3, Research Only as outlined in the PEIS. **#6])>** Thank you for the opportunity to comment on the Draft Programmatic EIS. Sincerely, Richard A. Harm 454 Purrington Road Petaluma, CA 94952

OSTS2012D50227

Organization: CLUB 20, Bonnie Petersen
Received: 5/1/2012 6:25:31 PM
Commenter1: Bonnie Petersen - Grand Junction, Colorado 81502 (United States)
Organization1:CLUB 20
Commenter Type: Misc. Organization
Classification:
Submission Category: Letter & Resolution
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** aziech 5/15/2012 12:00:00 AM
Attachments: OSTS2012D50227.htm (OSTS2012D50227-58788.htm Size = 1 KB) 2012_OSTS_PEIS_comments,_5-1-2012_OSTS2012D50227.pdf (OSTS2012D50227-58787.pdf Size = 463 KB)

Submission Text

See Attachment.

May 1, 2012
BLM Oil Shale and Tar Sands Draft Programmatic EIS Argonne National Laboratory 9700 S. Cass Ave. Argonne IL 60439
Ken Salazar, Secretary
U.S. Department of the Interior 1849 C Street, N.W. Washington DC 20240 Sent this date via email: exsec@ios.doi.gov
Robert Abbey, Director
Bureau of Land Management 1849 C Street, N.W., Room 5665 Washington DC 20240 Sent this date via email: Director@blm.gov

(These comments also submitted electronically via the OSTSEIS website.)
RE: CLUB 20 comments regarding 2012 Oil Shale & Tar Sands Programmatic EIS
To whom it may concern:
Thank you for the opportunity to submit comments regarding the BLM's 2012 Oil Shale & Tar Sands Draft Programmatic EIS. CLUB 20 is a 59 year old membership organization representing individuals and businesses throughout Western Colorado's 22-county region.
We have attached a copy of CLUB 20's Oil Shale Policy Statement supporting a "prudently-paced commercial scale leasing program". CLUB 20 recognizes that the U.S. Department of Energy estimates that as much as 1 trillion barrels of recoverable oil may exist within the oil shale deposits of the Green River Formation in Northwest Colorado, Southwest Wyoming, and Northeast Utah (the bulk of which is located in Northwestern CO) and this is the largest known deposit of oil shale in the world. Given our growing national dependence on foreign oil supplies and the increasing instability in most of these supplier regions, we believe it is prudent and necessary that we work to develop our domestic energy reserves to their full potential, while respecting the other environmental and cultural values that define our region's quality of life.
We believe that it is important for our country to be proactive and purposeful about preparing a well-conceived plan for the thoughtful development of this important
resource in order to avoid getting pushed into a crisis-oriented, commercial-scale oil shale program as was the case in the late 1970's and early 1980's. A well thought out PEIS is an important part of that deliberate effort as is a well-designed energy plan as was required be developed under Section 369 of the Federal Energy Policy Act of 2005.
<([#1 [*9.8*] CLUB 20 concerns regarding the "purpose and need" for a lengthy, costly PEIS in 2011-2012.
The preliminary purpose and need statement reflected in the notice of intent published in the Federal Register on April 14, 2011, indicates that this effort is engaged to implement Secretarial Order No. 3310, dated December 22, 2010. Further, one week after this stated purpose and need was published in the Federal Register, the Congressional Continuing Resolution to Fund Fiscal Year 2011 specifically stated that 2011 funds were not to be used to implement, administer and/or enforce Secretarial Order No. 3310. In light of these circumstances, CLUB 20 questions the validity of repeating a costly PEIS at this time.
The 2008 OSTS PEIS has been considered by numerous parties, including CLUB 20, to have been a reasonable, cautious and acceptable approach to the development of oil shale. The document supported the research, development, and demonstration (R,D&D) program, and in doing so, the BLM provided an opportunity to ensure that oil shale technologies can operate at economic and environmentally acceptable levels before the authorization of full-scale commercial leasing on public lands. CLUB 20 strongly supported this R,D&D approach to oil shale development and urged additional opportunities for such leases; we continue to do so.
Unfortunately, the 2012 OSTS PEIS serves to seriously restrict opportunities for R,D&D leases and ultimately restricts the research of oil shale development technologies to only those few where current leases are in place. The current lessees are exploring in situ technologies. This is a short sighted view eliminating the possibility of research using other technologies that may allow for development of this resource at even more economic and environmentally acceptable levels.
Additionally, current R,D&D leaseholders are more uncertain of the future just as their research efforts are beginning to answer the questions about the feasibility of developing this resource because of the lack of continuity in Federal policies regarding oil shale development.
The investment private companies will make in oil shale research and development is sure to

decline given the uncertainty and inadequacy of the BLM preferred alternative in the 2012 OSTS PEIS. The unknown terms for future R,D&D leases is part of the disincentive for companies interested in pursuing oil shale research on Federal oil shale lands. The recent 2nd round BLM R,D&D leases offered insufficient Preference Right acreage to support a commercial project, and other terms of the leases are more restrictive than those in the 1st round R,D&D leases. The reduction or preclusion of that investmentwill represent billions of dollars in lost opportunity, not to mention the potential jobs such an investment would create. **#1])>**
<([#2 [*2.1.1*] CLUB 20 continues to support the 2008 OSTS PEIS preferred Alternative
CLUB 20 supported Alternative B in the 2008 OSTS PEIS, which became the alternative implemented in the Record of Decision (ROD), "because it would make the largest amount of potential oil resources available for application for leasing while still providing for an environmentally sound program and would provide the greatest flexibility in locating future development." We continue to support this concept; the Alternative in the 2012 OSTS PEIS that most closely reflects the ROD for the 2008 PEIS is the No Action Alternative. This alternative is consistent with the multiple use, sustained yield tenets of the Federal Land Policy Management Act (FLPMA) and is consistent with policies that call for responsible development of available energy resources. **#2])>**
<([#3 [*2.2*] Much of the 2012 OSTS PEIS document is exactly the same as the 2008 OSTS PEIS yet the BLM's preferred alternative is significantly more restrictive. The BLM's 2012 PEIS preferred alternative has not been analyzed for its impacts as is required by NEPA. **#3])> <([#4** [*1.3*] Further, the 2012 OSTS PEIS is remiss and disingenuous in relation to cooperating agencies. BLM must coordinate closely with the local governments where oil shale is located, as required in FLPMA, 43 USC 1712(c)(9). The BLM's refusal to consider the alternative preferred by most of the local governments – the No Action Alternative – is a clear failure to meet that obligation. State and local governments have jurisdiction to the extent that they regulate land use on private and state land and there is a consistency obligation for federal land. Once cooperating agencies have provided technical and material comments, the federal agency must address those comments; saying it 'disagrees' is not sufficient. **#4])>**
<([#5 [*9.3*] BLM lands are public lands and are required to be managed for multiple-use. As such, we believe it is appropriate to designate these lands as suitable for development consideration subject to additional NEPA analyses to be conducted prior to the issuance of commercial leases and site-specific NEPA analyses to be conducted during evaluation and approval of plans of development during the project development phase in order to identify potential project-specific impacts and define appropriate lease stipulations and required mitigation measures. **#5])>**
<([#6 [*2.2*] We believe that Alternative 2A is too limiting to be considered a legitimate alternative for developing oil shale resources.
While we appreciate the BLM's efforts to offer multiple development scenarios, and we recognize that the intent of Alternative 2A is to provide for more limited development, we are concerned about the economic feasibility of developing any of the oil shale resource on the lands identified within the alternative. Under the BLM preferred alternative, the lands proposed to be available for leasing are composed of relatively
small, isolated tracts, most of which are currently leased. Because of this fact, we believe that the BLM preferred alternative does not provide for large enough contiguous parcels to warrant the substantial investment necessary to demonstrate the viability of producing commercial quantities of oil from these oil shale reserves. Alternative 2A is essentially economically unfeasible as

proposed. **#6])>**
<([#7 [*6.3.2.1*] Development of oil shale and tar sands is becoming much more technical feasible.
Oil production from oil shale has been proven to be technologically and economically feasible and production from the Green River Formation is expected to begin in some locations before the end of 2012. The technology to be used in this domestic oil production from oil shale is not only economically feasible, but it will require minimal water consumption. Worldwide, technically and economically feasible oil production from oil shale has proven to use little to no water; another reason to continue encouraging research into new technologies in the development of this resource rather than limiting opportunities for research.
The Green River Formation is the best laboratory available for developing new technologies related to oil shale development. Private industry will invest billions of dollars to determine the best way to produce oil from oil shale given a consistent and reliable set of rules by which to operate. Billions of investment dollars will translate into jobs for families in a region that has suffered tremendously as a result of the recent recession. **#7])>**
<([#8 [*3.10.3*] Socio-economic impacts are not adequately addressed in the 2012 OSTS PEIS. We are concerned about the socio-economic impacts to the local communities with regard to the development, as well as the non-development of the oil shale resource. When the 2008 OSTS PEIS was conducted, natural gas development in Western Colorado was robust and contributed to a number of socio-economic challenges throughout the communities in Garfield, Rio Blanco and Mesa Counties. The situation is nearly opposite that now, with these counties facing widespread unemployment. While the PEIS reflects interviews and concerns, it does not provide specific socio-economic data that demonstrates potential beneficial or detrimental economic impacts for these areas. As was anticipated in the 2008 OSTS PEIS, "rapid increases in population in-migration in parts of each region of influence could impact quality of life, in particular requiring a transition from traditional rural, to more urban lifestyles, and potentially cause large social disruption impacts." It is anticipated, however, that by using the R,D&D model, negative impacts could be more easily identified and addressed in a more reasonable timeframe. Indeed, economic activity associated with oil shale development would be an economic benefit to many Western Colorado communities and residents at this time. **#8])>**
<([#9 [*10.5*] We believe that as technology continues to prove technically feasible, economic and environmentally acceptable, government and industry need to make appropriate and substantial UP-FRONT investments in the infrastructure of each local affected community in order to enable these communities to grow their services to meet the demands associated with oil shale development. While we fully recognize that we DO have a collective responsibility to develop our domestic energy reserves in the interest of national security, we believe that we have an equal responsibility – as a nation – to ensure that the burden of this energy development isn't borne disproportionately on the backs of local host communities. Specifically,
We believe that the states' traditional 50% share of the Federal Mineral Lease (FML) revenue MUST be restored with specific dedication of the vast majority of those funds to be used to mitigate the impacts of energy development on local communities.
We believe that the BLM should encourage industry to make UP-FRONT investments in local community infrastructure by granting a pre-payment credit against their FML liability for any such investments. Without such up-front

investments, local communities are continually chasing their tail trying to catch up with impact needs as they wait for months to receive the lease revenues associated with those impacts. Such up-front investments by industry will allow communities to invest ahead of the impacts, thus both facilitating the development of the resource while minimizing the disruptive impact on the community.
Funding infrastructure needs during oil and gas development can put local jurisdictions under enormous financial pressure since tax revenues intended to mitigate impacts of energy development are not available largely until AFTER the impacts have occurred. Although the PEIS made a passing reference to impacts on community infrastructure, there was no effort to quantify how large this impact may actually be. We believe the PEIS should attempt to identify the types of physical infrastructure investments (if not an estimate of the costs associated with those investments) that local governments will be required to make in order to meet the demands associated with commercial oil shale development.
#9])> Thank you again for this opportunity to comment on the Draft Oil Shale & Tar Sands Programmatic PEIS.
Sincerely,
Bonnie Petersen
Executive Director
CLUB 20

Oil Shale, Development and Implementation of a National Strategy
WHEREAS the U.S. Department of Energy estimates that as much as 1 trillion barrels of recoverable oil may exist within the oil shale deposits of the Green River Formation in Northwest Colorado, Southwest Wyoming and Northeast Utah (the bulk of which is located in Northwest CO), and this is the largest known deposit of oil shale in the world and one of the largest untapped hydrocarbon resources available for development; and
WHEREAS CLUB 20 recognizes the potential value of this oil shale resource, and we also recognize the need to realize this value while sustaining the other existing social, economic and environmental values that comprise the overall quality of life in western Colorado; and
WHEREAS oil shale development is important for our country's national security to supplement our nation's growing energy demand; and
WHEREAS without a well-conceived strategic plan for oil shale development, Colorado, Utah and Wyoming may someday be faced with another crisis-driven, commercial-scale oil shale program;
WHEREAS the U.S. Department of the Interior continues to evaluate the environmental impacts, socioeconomic consequences, technical feasibility and economic viability of activities proposed for and being conducted on Research Development and Demonstration (RD&D) leases for oil shale resources of Western Colorado and Utah; and
WHEREAS section 369(e) of the Energy Policy Act of 2005 (EPA05) requires that after consultation with affected States, local governments and other stakeholders, if the Secretary of the Interior finds sufficient support and interest exists in a State, the Secretary may conduct a lease sale in that State under commercial leasing regulations; and
WHEREAS section 369(h)&(i) of the EPA05 requires the U.S. Department of Energy and the U.S.
Department of the Interior to take certain actions to prepare for commercial oil shale

development;
<([#12 [*11*] THEREFORE BE IT RESOLVED that CLUB 20 supports research and development efforts leading to an environmentally sound, socially responsible, timely and economically viable oil shale program that will result in the efficient recovery of the resource;
#12])> and
<([#13 [*11*] BE IT FURTHER RESOLVED that CLUB 20 supports section 369 of the Energy Policy Act of 2005 which directs the U.S. Departments of Energy, Interior and Defense, in cooperation with
State and Local governments, to continue to develop and implement an oil shale strategy and urges that this strategy include the following:
1. Implement a prudently-paced and timely commercial leasing program to allow available technologies to be put into commercial production;
#13])> <([#14 [*1.3*] BE IT FURTHER RESOLVED that CLUB 20 supports section 369 of the Energy Policy Act of 2005 which directs the U.S. Departments of Energy, Interior and Defense, in cooperation with
State and Local governments, to continue to develop and implement an oil shale strategy and urges that this strategy include the following:
2. Utilize the existing NEPA process to provide an opportunity for ongoing participation of directly impacted state and local governments as well as "Cooperating Agencies" and the public on the development of oil shale;
#14])> <([#15 [*1.3*] BE IT FURTHER RESOLVED that CLUB 20 supports section 369 of the Energy Policy Act of 2005 which directs the U.S. Departments of Energy, Interior and Defense, in cooperation with
State and Local governments, to continue to develop and implement an oil shale strategy and urges that this strategy include the following:
3. Federal decisions should reflect the consensus of "Cooperating Agencies" in a meaningful manner;
#15])> <([#16 [*9.5*] BE IT FURTHER RESOLVED that CLUB 20 supports section 369 of the Energy Policy Act of 2005 which directs the U.S. Departments of Energy, Interior and Defense, in cooperation with
State and Local governments, to continue to develop and implement an oil shale strategy and urges that this strategy include the following:
4. Utilize the Joint-Review Process to facilitate and coordinate the federal, state and local permit process;
#16])> <([#17 [*10.5*] BE IT FURTHER RESOLVED that CLUB 20 supports section 369 of the Energy Policy Act of 2005 which directs the U.S. Departments of Energy, Interior and Defense, in cooperation with
State and Local governments, to continue to develop and implement an oil shale strategy and urges that this strategy include the following:
5. Support of the existing Bureau of Land Management (BLM) RD&D oil shale leasing program and Encourage fair tax & royalty structures which incentivize ongoing research and commercial development while providing for infrastructure development and impact mitigation;
#17])> <([#18 [*10.5*] BE IT FURTHER RESOLVED that CLUB 20 supports section 369 of the Energy Policy Act of 2005 which directs the U.S. Departments of Energy, Interior and Defense, in cooperation with
State and Local governments, to continue to develop and implement an oil shale strategy and

urges that this strategy include the following:
6. Provide for appropriate study of and mechanisms for the timely mitigation of impacts from development, including incentives for "up front" industry contributions to state agencies and local governments through establishment of a federal royalty credit for these contributions;
#18])> <([#19 [*9.6*] BE IT FURTHER RESOLVED that CLUB 20 supports section 369 of the Energy Policy Act of 2005 which directs the U.S. Departments of Energy, Interior and Defense, in cooperation with
State and Local governments, to continue to develop and implement an oil shale strategy and urges that this strategy include the following:
7. Issue commercial leases when the Secretary of the Interior has found that the applicant has demonstrated the capability of proceeding with a technically feasible, commercially viable and environmentally sound technology, and the federal, state and local governments have proper mechanisms in place (regulations, permitting program, NEPA review) to ensure prudent and responsible development;
#19])> <([#20 [*9.7*] BE IT FURTHER RESOLVED that CLUB 20 supports section 369 of the Energy Policy Act of 2005 which directs the U.S. Departments of Energy, Interior and Defense, in cooperation with
State and Local governments, to continue to develop and implement an oil shale strategy and urges that this strategy include the following:
8. Concurrent with the commercial leasing program, the BLM should continue to make RD&D leases available to provide interested companies the opportunity to develop and demonstrate viable technology; **#20])>** and
<([#21 [*9.2.2*] BE IT FURTHER RESOLVED that CLUB 20 supports section 369 of the Energy Policy Act of 2005 which directs the U.S. Departments of Energy, Interior and Defense, in cooperation with
State and Local governments, to continue to develop and implement an oil shale strategy and urges that this strategy include the following:
9. Urge the U.S. Departments of Energy, Interior and Defense to fulfill their mandates under section 369 of the EPA05.
#21])> Adopted 4/1/05
Amended 3/31/06
Amended 9/8/06
Renewed April 1, 2011
Amended March 30, 2012

OSTS2012D50228
Organization: Robert Amador
Received: 5/1/2012 6:49:49 PM
Commenter1: Robert Amador - Napa, California 94558 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: 50201_Campaign_plus
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/16/2012 12:00:00 AM

Attachments: OSTS2012D50228.htm (OSTS2012D50228-58770.htm Size = 3 KB)
Submission Text
<([#1 [*2.3.1*] To concerned representatives at the Bureau of Land Management, I am writing in regards to the Oil Shale and Tar Sands Draft Programmatic Environmental Impact Statement (PEIS). As a renewable energy scholar, with qualifications from the University of California, Irvine, and Cambridge University in the United Kingdom, I feel that my education and experience in the field provides me with the requisite perspective and knowledge base to comment on the Draft PEIS. In brief, I am very concerned about the environmental impacts of oil shale development along the entire length of the Colorado River (Grand/Glen Canyons included). Though the accepted body of research is not 'complete', there is a preponderance of evidence to support the position that oil shale and tar sand development has a detrimental and - in the short term - irreversible impact on the local and global environment. The Colorado River ecosystem is particularly vulnerable to the impacts of oil shale and tar sand development, as increased water harvesting - and subsequent increases in siltation - have created an increasingly acidic riparian environment. Globally, tar sand development is a particularly intensive form of energy development, one that is as detrimental to the environment/climate as it is energy intensive. I concur with the Glen Canyon Institute's recommendation that the BLM choose Alternative 3, Research Only, as the the Preferred Alternative in the Final PEIS. This is essential to ensure that we have the best possible information before considering opening our natural open spaces and ecosystems to the development of oil shale and tar sand resources. **#1])> <([#2** [*3.4.1*] Further, I concur with all of the GCI's specific concerns/recommendations for the Draft PEIS, which follow in their entirety below. * The Draft Programmatic EIS needs to ensure water quality will not be adversely effected by development of oil shale and tar sand resources. The water usage for oil shale production far outstrips the amount of oil produced, even prior to the refinement process. Water resources in the West are already overused and the effects of climate change and increased population will only add further strain to an already depleted system. **#2])> <([#3** [*3.4.1*] * The Draft Programmatic EIS should be conducted in such a way to address issues of dust, noise, and pollution in the affected areas. Heating oil shale in the ground can contaminate vital groundwater supplies. High salt concentrations in groundwater restricts water available to native plants and is harmful to agricultural production as well. The Colorado River Basin already spends millions of dollars annually on damages caused from high salinity. **#3])> <([#4** [*3.1.1*] * The Draft Programmatic EIS should address the potential encroachment on protected areas and National Parks such as Glen Canyon Recreation Area and Canyonlands National Park. This includes a thorough analysis of the damage to these priceless parks by oil shale and tar sands development. **#4])>** I appreciate your thoughtful consideration and best efforts. Kind regards, Robert Amador Sustainability Research Group Centre for Climate Change Mitigation Research Cambridge University (Currently based in Napa, California 94558) T.310 497 1559

OSTS2012D50229
Organization: Alison Godlewski
Received: 5/1/2012 6:57:13 PM
Commenter1: Alison Godlewski - Park City, Utah 84098 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form

Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/4/2012 12:00:00 AM
Attachments: OSTS2012D50229.htm (OSTS2012D50229-58772.htm Size = 1 KB)
Submission Text
<([#1 [*3.10.3*] Not worth it! Too little return for too much expense and sacrifice. Put your money into alternative transportation. THank you for listening. No response necessary. **#1])>**

OSTS2012D50230
Organization: Steve Lewis
Received: 5/1/2012 7:01:02 PM
Commenter1: Steve Lewis - Steamboat Springs, Colorado 80477 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/4/2012 12:00:00 AM
Attachments: OSTS2012D50230.htm (OSTS2012D50230-58774.htm Size = 1 KB)
Submission Text
<([#1 [*12.3*] It is my understanding that these public lands belong to all of us. Is it possible that we would allow a wholesale degradation of them that runs against the will of the American people? Please say no to extraction on any large scale. Use one tenth for us and save the rest for our children. Please reserve these lands and these resources for the coming generations to count on. We should leave a worthy legacy for our children. **#1])>** Sincerely, Steve Lewis

OSTS2012D50231
Organization: Becky Johnston
Received: 5/1/2012 7:04:14 PM
Commenter1: Becky Johnston - Albuquerque, New Mexico 87114 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: 50201_Campaign
Submitted As: Web Form
Form Letter Category:
Form Letter Master: OSTS2012D50201- Master
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/4/2012 12:00:00 AM
Attachments: OSTS2012D50231.htm (OSTS2012D50231-58776.htm Size = 3 KB)
Submission Text
Dear Bureau of Land Management, I am writing to submit comments on the Oil Shale and Tar Sands Draft Programmatic Environmental Impact Statement (PEIS). **<([#1** [*3*] I am very concerned about the possible impacts of oil shale development on Glen Canyon, Grand Canyon, and the Colorado River. I believe that we need more research on the potential impacts of oil

shale and tar sand development before allowing leasing of our public lands for this use. Such development could have serious and irreversible impacts, including on water supplies and quality, air quality, native ecosystems and wildlife, and recreational uses. **#1])> <([#2** [*2.3.1*] I urge you to choose Alternative 3, Research Only, as the BLM's Preferred Alternative in the Final PEIS. This is essential to ensure that we have the best possible information before considering opening our natural open spaces and ecosystems to the development of oil shale and tar sand resources. **#2])> <([#3** [*3.4.1*] Here are some of my specific concerns regarding the Draft PEIS: * The Draft Programmatic EIS needs to ensure water quality will not be adversely effected by development of oil shale and tar sand resources. The water usage for oil shale production far outstrips the amount of oil produced, even prior to the refinement process. Water resources in the West are already overused and the effects of climate change and increased population will only add further strain to an already depleted system. **#3])> <([#4** [*3.4.1*] * The Draft Programmatic EIS should be conducted in such a way to address issues of dust, noise, and pollution in the affected areas. Heating oil shale in the ground can contaminate vital groundwater supplies. High salt concentrations in groundwater restricts water available to native plants and is harmful to agricultural production as well. The Colorado River Basin already spends millions of dollars annually on damages caused from high salinity. **#4])> <([#5** [*3.1.1*] * The Draft Programmatic EIS should address the potential encroachment on protected areas and National Parks such as Glen Canyon Recreation Area and Canyonlands National Park. This includes a thorough analysis of the damage to these priceless parks by oil shale and tar sands development. **#5])> <([#6** [*2.3.1*] This EIS should ensure that all alternatives seriously assess the issues outlined above. Considering the present lack of adequate information and the tremendous risks of misguided development, the only reasonable alternative at this point is Alternative 3, Research Only as outlined in the PEIS. **#6])>** Thank you for the opportunity to comment on the Draft Programmatic EIS. Sincerely, Becky Johnston 4964 Quail Ridge Dr NW Albuquerque, NM 87114

OSTS2012D50232

Organization:
Received: 5/1/2012 7:45:40 PM
Commenter1: - , (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/4/2012 12:00:00 AM
Attachments: OSTS2012D50232.htm (OSTS2012D50232-58778.htm Size = 1 KB)
Submission Text
<([#1 [*12*] This is a sacrifice of our environment in both the near and long term and these oil sands and shale should not be exploited.
#1])>

OSTS2012D50233

Organization: Jack Miller
Received: 5/1/2012 10:12:41 PM
Commenter1: Jack Miller - Petaluma, California 94952 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/4/2012 12:00:00 AM
Attachments: OSTS2012D50233.htm (OSTS2012D50233-58780.htm Size = 1 KB)
Submission Text
<([#1 [*2.3.1*] I am writing regarding the Oil Shale and Tar Sands PEIS.I urge that you decide on alternative #3. The threat to water quality in an arid area like this is just too great a risk. Our country is now exporting gasoline and will soon be energy independant. Perhaps someday the technology will exist to extract this resource safely and without threatening an entire ecosystem. That day is not today. Please choose alternative #3. **#1])>**

OSTS2012D50234
Organization: Gene Romanski
Received: 5/1/2012 11:35:43 PM
Commenter1: Gene Romanski - Reno, Nevada 89509 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: 50201_Campaign
Submitted As: Web Form
Form Letter Category:
Form Letter Master: OSTS2012D50201- Master
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/4/2012 12:00:00 AM
Attachments: OSTS2012D50234.htm (OSTS2012D50234-58782.htm Size = 3 KB)
Submission Text
Dear Bureau of Land Management, I am writing to submit comments on the Oil Shale and Tar Sands Draft Programmatic Environmental Impact Statement (PEIS). **<([#1** [*3*] I am very concerned about the possible impacts of oil shale development on Glen Canyon, Grand Canyon, and the Colorado River. I believe that we need more research on the potential impacts of oil shale and tar sand development before allowing leasing of our public lands for this use. Such development could have serious and irreversible impacts, including on water supplies and quality, air quality, native ecosystems and wildlife, and recreational uses. **#1])> <([#2** [*2.3.1*] I urge you to choose Alternative 3, Research Only, as the BLM's Preferred Alternative in the Final PEIS. This is essential to ensure that we have the best possible information before considering opening our natural open spaces and ecosystems to the development of oil shale and tar sand resources. **#2])> <([#3** [*3.4.1*] Here are some of my specific concerns regarding the Draft PEIS: * The Draft Programmatic EIS needs to ensure water quality will not be adversely effected by development of oil shale and tar sand resources. The water usage for oil shale production far outstrips the amount of oil produced, even prior to the refinement process. Water resources in the

West are already overused and the effects of climate change and increased population will only add further strain to an already depleted system. **#3])> <([#4** [*3.4.1*] * The Draft Programmatic EIS should be conducted in such a way to address issues of dust, noise, and pollution in the affected areas. Heating oil shale in the ground can contaminate vital groundwater supplies. High salt concentrations in groundwater restricts water available to native plants and is harmful to agricultural production as well. The Colorado River Basin already spends millions of dollars annually on damages caused from high salinity. **#4])> <([#5** [*3.1.1*] * The Draft Programmatic EIS should address the potential encroachment on protected areas and National Parks such as Glen Canyon Recreation Area and Canyonlands National Park. This includes a thorough analysis of the damage to these priceless parks by oil shale and tar sands development. **#5])> <([#6** [*2.3.1*] This EIS should ensure that all alternatives seriously assess the issues outlined above. Considering the present lack of adequate information and the tremendous risks of misguided development, the only reasonable alternative at this point is Alternative 3, Research Only as outlined in the PEIS. **#6])>** Thank you for the opportunity to comment on the Draft Programmatic EIS. Sincerely, Gene Romanski 462 Glenmanor Dr Reno, NV 89509

OSTS2012D50235

Organization: Tom Wright
Received: 5/2/2012 12:10:19 AM
Commenter1: Tom Wright - Tempe, Arizona 85282 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/4/2012 12:00:00 AM
Attachments: OSTS2012D50235.htm (OSTS2012D50235-58784.htm Size = 1 KB)
Submission Text
<([#1 [*2.3.1*] I support Alternative 3, Research Only. The potential impacts of this type of large-scale energy development are poorly understood and they must be considered in a broader context of land use decisions, wise use of natural resources, energy sustainability, and preservation of traditional Western values including open space, outdoor recreation, hunting, wildlife habitat, historic and prehistoric archaeological sites, Native American concerns, and the quality of our air and water. We must make decisions very carfeully, and draw upon the best information possible, because whatever we do we will be living with the consequences from now on. **#1])> <([#2** [*3*] The draft EIS is particularly deficient in addressing issues related to water consumption, conservation, and quality; noise and dust control; air quality control; impacts to adjacent public lands (including but not limited to revenue-generating National Parks and other scenic and recreational areas); and impacts to Native American cultural properties and religious practices that are closely tied to specific elements of the landscape. **#2])> <([#3** [*2.3.1*] Alternative 3 is a “look before you leap” option that is badly needed in advance of such big decisions.
#3])>

OSTS2012D50236

Organization: Kathryn Sachs
Received: 5/2/2012 2:06:28 AM
Commenter1: Kathryn Sachs - Denver , Colorado 80209 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/4/2012 12:00:00 AM
Attachments: OSTS2012D50236.htm (OSTS2012D50236-58786.htm Size = 2 KB)
Submission Text
<([#1 [*3.4.1*] I have serious concerns about opening areas of Northwestern Colorado and Utah to Tar Sand and Oil Shale development. As a Colorado resident who enjoys spending time in those regions and someone employed in the oil and gas business, I recognize the need to balance the interests of resource development with resource conservation and protection. In the case of opening these regions to such intensive resource extraction. My reasons for this are many. These industries are highly water intensive - these regions are water poor. Allocating water rights to companies extracting oil seems to be a misuse of an important regional resource. While I also realize that this development may mean jobs for a region that also suffers economically, firmly believe that regional economic drivers should NOT supercede that national interests in protecting unique natural resources that are federally protected for the ongoing use of U.S. citizens. **#1])>**
<([#2 [*12*] I have spent time in Capital Reef, Arches, and Dinosaur National Monument. These are unique and beatiful landscapes. I also work in oil and gas development and I know that even the best intentions often are not realized. In a rush to develop, the companies often take shortcuts that prove harmful to the natural environment. These companies do NOT have long term interests in the region - and as someone who does, I request that you do not open these regions to Tar Sand and Oil Shale Development.
#2])>

OSTS2012D50237
Organization: Timothy McRoberts
Received: 5/2/2012 7:12:53 AM
Commenter1: Timothy McRoberts - Atlanta, Illinois 61723 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/4/2012 12:00:00 AM
Attachments: OSTS2012D50237.htm (OSTS2012D50237-58789.htm Size = 1 KB)
Submission Text
<([#1 [*12*] What is already there is worth more than could ever be taken from it. **#1])>**

OSTS2012D50238

Organization: Richard Warnick
Received: 5/2/2012 8:26:20 AM
Commenter1: Richard Warnick - Draper, Utah 84020 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: 50201_Campaign
Submitted As: Web Form
Form Letter Category:
Form Letter Master: OSTS2012D50201- Master
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/4/2012 12:00:00 AM
Attachments: OSTS2012D50238.htm (OSTS2012D50238-58805.htm Size = 2 KB)
Submission Text

Dear Bureau of Land Management, I am writing to submit comments on the Oil Shale and Tar Sands Draft Programmatic Environmental Impact Statement (PEIS). **<([#1** [*3*] I am alarmed about the potential impacts on our public lands. Oil shale and tar sand development have serious and irreversible impacts, including on water supplies and quality, air quality, native ecosystems and wildlife, and recreational uses. Because of the massive, irreversible environmental damage, leasing our public lands for oil shale and tar sands would violate the FLPM prohibition of "undue and unnecessary degradation." **#1])> <([#2** [*2.3.1*] I urge you to choose Alternative 3, Research Only, as the BLM's Preferred Alternative in the Final PEIS. **#2])> <([#3** [*3.4.1*] Here are some of my specific concerns regarding the Draft PEIS: * The Draft Programmatic EIS needs to ensure water quality will not be adversely effected by development of oil shale and tar sand resources. The water usage for oil shale production far outstrips the amount of oil produced, even prior to the refinement process. Water resources in the West are already overused and the effects of climate change and increased population will only add further strain to an already depleted system. **#3])> <([#4** [*3.4.1*] * The Draft Programmatic EIS should be conducted in such a way to address issues of dust, noise, and pollution in the affected areas. Heating oil shale in the ground can contaminate vital groundwater supplies. High salt concentrations in groundwater restricts water available to native plants and is harmful to agricultural production as well. The Colorado River Basin already spends millions of dollars annually on damages caused from high salinity. **#4])> <([#5** [*3.1.1*] * The Draft Programmatic EIS should address the potential encroachment on protected areas and National Parks such as Glen Canyon Recreation Area and Canyonlands National Park. This includes a thorough analysis of the damage to these priceless parks by oil shale and tar sands development. **#5])> <([#6** [*2.3.1*] This EIS should ensure that all alternatives seriously assess the issues outlined above. Considering the present lack of adequate information and the tremendous risks of misguided development, the only reasonable alternative at this point is Alternative 3, Research Only as outlined in the PEIS. **#6])>** Thank you for the opportunity to comment on the Draft Programmatic EIS. Sincerely, Richard M. Warnick 14012 Timber Ridge Dr. Draper, UT 84020

OSTS2012D50239

Organization: charlene estes
Received: 5/2/2012 8:33:30 AM
Commenter1: charlene estes - Columbia, Missouri 65201 (United States)
Organization1:

Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/4/2012 12:00:00 AM
Attachments: OSTS2012D50239.htm (OSTS2012D50239-58807.htm Size = 1 KB)
Submission Text
<([#1 [*12*] Please think about this before you take the wrong steps on tar sand recovery. It is wrong for the enviromnent and wrong for the direction this country needs to take to get away from gas and oil. Burning fossil fuel has done so much damage and we don't need to destroy any more of the natural beauty of the west for it. **#1])>**

OSTS2012D50240
Organization:
Received: 5/2/2012 10:27:00 AM
Commenter1: - , Virginia 22902 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/4/2012 12:00:00 AM
Attachments: OSTS2012D50240.htm (OSTS2012D50240-58809.htm Size = 1 KB)
Submission Text
<([#1 [*12*] Oil shale and tar sands should NOT be a source of petroleum. The concomitant environmental costs are too great to do so. Direct damage to ecosystems is too great; the amount of carbon dioxide released to the atmosphere is too great to use these resources. **#1])> <([#2** [*2.3.1*] If any of the alternatives must be used, use Alternative 3 which is the most restrictive. **#2])>**

OSTS2012D50241
Organization: Wendy Raymond
Received: 5/2/2012 10:47:48 AM
Commenter1: Wendy Raymond - Monrovia, California 91016 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/4/2012 12:00:00 AM
Attachments: OSTS2012D50241.htm (OSTS2012D50241-58811.htm Size = 1 KB)

Submission Text
<([#1 [*3.4.1*] We are already having battles over water usage - who gets how much, who must make do with less. There currently is not enough water to go where it's needed, so exactly where do intend to get the Huge amount of water necessary for your proposed drilling? And what will be done with the waste water? We have polluted thousands of acres of land. We have poisoned countless species habitats including obviously our own. I feel we can not afford to irretrievably decimate further public land. It's akin to fouling our own nest, of which we have become masters. We can not continue with "business as usual". **#1])>** Thank you.

OSTS2012D50242
Organization: RICHARD HILLS
Received: 5/2/2012 11:53:34 AM
Commenter1: RICHARD HILLS - CENTERVILLE, Utah 840142303 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: 50201_Campaign
Submitted As: Web Form
Form Letter Category:
Form Letter Master: OSTS2012D50201- Master
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/4/2012 12:00:00 AM
Attachments: OSTS2012D50242.htm (OSTS2012D50242-58813.htm Size = 3 KB)
Submission Text
Dear Bureau of Land Management, This is to submit comments on the Oil Shale and Tar Sands Draft Programmatic Environmental Impact Statement (PEIS). **<([#1** [*3*] Mining shale and tar sands will have very distructive impacts on Glen Canyon, Grand Canyon, and the Colorado River. I believe that we need more research on the potential impacts of oil shale and tar sand development before allowing leasing of our public lands for this use. Such development could have serious and irreversible impacts, including on water supplies and quality, air quality, native ecosystems and wildlife, and recreational uses. **#1])> <([#2** [*2.3.1*] I urge you to choose Alternative 3, Research Only, as the BLM's Preferred Alternative in the Final PEIS. This is essential to ensure that we have the best possible information before considering opening our natural open spaces and ecosystems to the development of oil shale and tar sand resources. **#2])> <([#3** [*3.4.1*] Here are some of my specific concerns regarding the Draft PEIS: 1. The Draft Programmatic EIS needs to ensure water quality will not be adversely effected by development of oil shale and tar sand resources. The water usage for oil shale production far outstrips the amount of oil produced, even prior to the refinement process. Water resources in the West are already overused and the effects of climate change and increased population will only add further strain to an already depleted system. **#3])>** 2. **<([#4** [*3.4.1*] The Draft Programmatic EIS should be conducted in such a way to address issues of dust, noise, and pollution in the affected areas. Heating oil shale in the ground can contaminate vital groundwater supplies. High salt concentrations in groundwater restricts water available to native plants and is harmful to agricultural production as well. The Colorado River Basin already spends millions of dollars annually on damages caused from high salinity. **#4])>** 3. **<([#5** [*3.1.1*] The Draft Programmatic EIS should address the potential encroachment on protected areas and National Parks such as Glen Canyon Recreation Area and Canyonlands National Park. This includes a thorough analysis of the damage to these priceless parks by oil shale and tar sands development. **#5])> <([#6**

[*2.3.1*] This EIS should ensure that all alternatives seriously assess the issues outlined above. Considering the present lack of adequate information and the tremendous risks of misguided development, the only reasonable alternative at this point is Alternative 3, Research Only as outlined in the PEIS. **#6])>** Thank you for the opportunity to comment on the Draft Programmatic EIS. Sincerely, RICHARD G HILLS 787 E CENTER ST CENTERVILLE, UT 84014-2303 801-292-3744

OSTS2012D50243

Organization: Cheryl Willis
Received: 5/2/2012 1:43:02 PM
Commenter1: Cheryl Willis - San Francisco, California 94131 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/4/2012 12:00:00 AM
Attachments: OSTS2012D50243.htm (OSTS2012D50243-58815.htm Size = 1 KB)
Submission Text
<([#1 [*3.4.1*] [*3.13*] I am against oil shale production because of the caustic chemicals and great amounts of water inserted into the underground, possibly contaminating underground water sources, plus the residue which will have to be contained somewhere, otherwise it will lead to above-ground additional contamination. **#1])>**

OSTS2012D50244

Organization: Dave Werschky
Received: 5/2/2012 2:20:26 PM
Commenter1: Dave Werschky - Moab, Utah (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/4/2012 12:00:00 AM
Attachments: OSTS2012D50244.htm (OSTS2012D50244-58817.htm Size = 1 KB)
Submission Text
<([#1 [*3.4.1*] As a resident of the great state of Utah, and an avid outdoors enthusiast, I feel that this proposal is leading towards a slippery slope of opening public land for these destructive purposes. Additionally the water requirement will undoubtedly cause strain to the already fragile conditions of southeastern Utah and southwestern Colorado. The nuclear power plant proposal near Green River already stated that there may be times the river would not be able to satisfy the needs of the plant, so why is there a proposal to put even more usage on the river? It is nonsensical, ineffective (mis)use of a water source and a threat to the beauty of the landscape

that earned recognition as some of the most beautiful national parks in the west. **#1])> <([#2** [*12*] As a tax paying, law abiding, active voting citizen I am absolutely against this proposal. **#2])>**

OSTS2012D50245

Organization: Ben Pattison
Received: 5/2/2012 2:26:07 PM
Commenter1: Ben Pattison - Lawrenceville, Georgia 30045 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/4/2012 12:00:00 AM
Attachments: OSTS2012D50245.htm (OSTS2012D50245-58819.htm Size = 1 KB)
Submission Text
<([#1 [*3.10.4*] I wish to express my strong opposition to the federal proposal to allow oil shale and oil sands development in parts of Wyoming, Colorado, and Utah as they would be a major threat to the national parks in those states. In addition to providing those states with Billions of dollars of tourist and sales revenue, the proposed plan will negatively effect a quarter of a million jobs. In this unstable and fragile economy it would be utterly foolish to take on such a risk. **#1])> <([#2** [*6.3.2.2*] Additionally the proposed development would cause immeasurable environmental damage. It takes up to 210 gallons of water to extract every gallon of othat's his means that the infrastructure required to divert that much water could require up to 122 billion gallons of water a year — equal to 1.5 times the annual consumption of Denver Water's 1.3 million customers. **#2])> <([#3** [*12*] This plan would then not only negatively effect the outdoor industries of those states, but also the surrounding citizens thanks to the enormous amount of water consumption. I cannot urge you strongly enough to NOT approve these plans. **#3])>**

OSTS2012D50246

Organization: Kyle Klain
Received: 5/2/2012 2:40:46 PM
Commenter1: Kyle Klain - Santa Fe, New Mexico (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/4/2012 12:00:00 AM
Attachments: OSTS2012D50246.htm (OSTS2012D50246-58821.htm Size = 1 KB)
Submission Text
<([#1 [*3.8.1*] As a visitor to the National Parks of the Great American Desert, I feel deeply

troubled that we are considering these short-term profits over the long term environmental impact they may have on OUR parks. The new sites along the edges of Canyonlands and into the Lasals have already altered the vistas both day and night in that area. **#1])> <([#2** [*3.4.1*] Beauty aside, the water in the area is so precious, I couldn't imagine what gain could be made that could so alter the risk involved in drilling near or into aquifers that have provided water for thousands of years. Please, have some foresight. **#2])>**

OSTS2012D50247

Organization: Neil and Jennifer Miller
Received: 5/2/2012 4:09:41 PM
Commenter1: Neil and Jennifer Miller - Basin, Wyoming 82410 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/4/2012 12:00:00 AM
Attachments: OSTS2012D50247.htm (OSTS2012D50247-58823.htm Size = 1 KB)
Submission Text
<([#1 [*10.6.1*] We are very concerned about using so much of our public lands for an experiment to produce more oil/fossil fuels which contribute to global warming which is one of the greatest threats facing earth. How can we offset the carbon that will be produced from this venture? That should be a major question addressed. Putting our efforts in renewable energy resources should be the focus of our efforts. We support an alternative that would make sure that commericail development would not happen until a full understanding of the impacts on the water quality resources as well as the quantity of scarce western water needed to produce this shale oil, impacts on air quality and health related issues for our residents, impacts on land use including tourism, and impacts on wildlife especially on sage grouse, sage sparrows, sage thrashers, mountain plovers and other sage dependent species. Specific standards must be set based on science. We say nix the whole project-go renewable. **#1])>**

OSTS2012D50248

Organization: Neil Christensen
Received: 5/2/2012 4:21:37 PM
Commenter1: Neil Christensen - Salt Lake City, Utah 84106 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/4/2012 12:00:00 AM
Attachments: OSTS2012D50248.htm (OSTS2012D50248-58825.htm Size = 1 KB)
Submission Text

<([#1 [*3.1.1*] Please preserve our national parks! I've been going to them since I was a little kid and I plan to take my unborn children to them as well. **#1])>**

OSTS2012D50249
Organization: Town of New Castle, Melody Harrison
Received: 5/2/2012 4:37:28 PM
Commenter1: Melody Harrison - New Castle, Colorado 81647 (United States)
Organization1: Town of New Castle
Commenter Type: Local Government
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/4/2012 12:00:00 AM
Attachments: OSTS2012D50249.htm (OSTS2012D50249-58863.htm Size = 1 KB)
PEIS_Comments_2012_OSTS2012D50249.doc (OSTS2012D50249-58862.doc Size = 134 KB)
Submission Text
See Attached send on behalf of the New Castle Town Council See Attachment.

Adopted by the New Castle Town Council at their regular meeting on May 1, 2012

Re: Town of New Castle, Colorado
2012 Oil Shale & Tar Sands PEIS - COMMENTS
To be submitted via: http://ostseis.anl.gov/involve/comments/index.cfm

The Town Council of the Town of New Castle appreciates the Bureau of Land Management's review of past decisions regarding oil shale leasing and development and offers the following comments:

<([#1 [*3.10.2*] The Town of New Castle, Colorado (population 4,500) sits at the western edge of the Rocky Mountains, just east of the oil-shale rich Piceance Basin. When commercial development of oil shale finally occurs, our community and region will be impacted by an economic boom just as it was in the late 1970s and early 1980s. Unfortunately, in 1982, our community was also the impacted by the oil shale bust that resulted in an economic depression in our region that spanned close to two decades.

In recent years our community and region has been heavily impacted by natural gas exploration and production occurring in nearby private and public lands. Natural gas development has brought significant growth to our community and placed considerable demands upon our municipal infrastructure, resulted in a shortage of affordable housing and essential community workforce, caused material and labor costs to skyrocket and strained social services and law enforcement capacities. Full-blown commercial development of oil shale will likely have similar

and greater impacts on our community and region. **#1])>**

<([#2 [*3.4.1*] Furthermore, the Town of New Castle jealously guards our water supply, clean air, open space and nearby BLM land. We will seek assurance that whatever technology is developed for oil shale extraction includes safeguards for the resources we value. In particular we fear the loss of scarce water supplies. The Town returns a large percentage of the water we withdraw for consumption back into the Colorado River. We are concerned that oil shale extraction technologies might consume water that cannot be returned to the ecosystem. We believe that more research is needed to develop technologies that have smaller impact on Western Slope water supplies. **#2])>**

<([#3 [*3.10.4*] Finally, in our attempt to avoid another oil/gas industry boom and bust, New Castle is working hard to diversify our economy. A major part of that diversification is to encourage recreational tourism, exploiting the Town's easy access to the Flat Top Range and the hunting, fishing, hiking, camping and other recreational opportunities provided by the rich environment of our public lands. We oppose any industrialization which might harm this environment. **#3])>**

<([#4 [*2.2.1*] [*2.3.1*] While the Town has maintained a good relationship with the oil and gas industry and is supportive of well-regulated extraction, we urge the BLM to insist that research and development of oil shale technologies be completed and the impacts analyzed before moving forward with a commercial leasing program. Such analysis must include study of the economic, social and environmental impacts on affected communities.

At this time it makes sense to endorse Alternative 3, limiting commercial development to the existing lease areas. We could also support Alternative 2(b), since it requires research before commercial licenses are issued. The final plan should reflect a common sense approach that protects the prosperity of our region. **#4])>**

OSTS2012D50250
Organization: Mike Sharp
Received: 5/2/2012 11:05:18 PM
Commenter1: Mike Sharp - Denver, Colorado 80206 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/4/2012 12:00:00 AM
Attachments: OSTS2012D50250.htm (OSTS2012D50250-58827.htm Size = 1 KB)
Submission Text
<([#1 [*12.3*] I am wholly opposed to open our National Parks to the oil industry or any other industry that seeks to profit from the extraction of resources. One of the greatest assets we have,

not only this country, but especially here in Colorado and surrounding areas are our National Parks. Allowing 'Big Oil' access to our lands sets an unbelievably dangerous precedent for the future. I believe it would be a disgusting betrayal of the people that place as much value on these lands as I do. **#1])>**

OSTS2012D50251
Organization: Timothy Moss
Received: 5/2/2012 11:05:38 PM
Commenter1: Timothy Moss - Portland, Oregon 97206 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/4/2012 12:00:00 AM
Attachments: OSTS2012D50251.htm (OSTS2012D50251-58829.htm Size = 1 KB)
Submission Text
<([#1 [*12.3*] Please reconsider this invasion in such close proximity to a National Park Area that is so vital in terms of aesthetic beauty, environmental importance and fiscal stability for residents and visitors alike. We can find other ways! **#1])>** Thank you, Tim Moss

OSTS2012D50252
Organization: Chris Butcher
Received: 5/3/2012 6:17:37 AM
Commenter1: Chris Butcher - Cambridge, Massachusetts 12345 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/4/2012 12:00:00 AM
Attachments: OSTS2012D50252.htm (OSTS2012D50252-58831.htm Size = 1 KB)
Submission Text
<([#1 [*12*] I oppose the opening up of the 2.3 million acres to drilling for oil and gas. The potential return does not outweigh the risks.
#1])>

OSTS2012D50253
Organization: National Parks Conservation Association, Erika Pollard
Received: 5/3/2012 7:03:01 AM
Commenter1: Erika Pollard - Salt Lake City, Utah 84101 (United States)
Organization1: National Parks Conservation Association
Commenter Type: Misc. Organization

Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/16/2012 12:00:00 AM
Attachments: OSTS2012D50253.htm (OSTS2012D50253-58866.htm Size = 1 KB) NPCA_OSTS_PEIS_CommentsFINAL_OSTS2012D50253.pdf (OSTS2012D50253-58865.pdf Size = 167 KB)
Submission Text
Please see attached comments. See Attachment.

Southwest Region Office
307 West 200 South Suite 5000
Salt Lake City, UT 84101
May 3, 2012
Draft OSTS PEIS Argonne National Laboratory 9700 S. Cass Avenue EVS/240 Argonne, IL 60439
To Whom It May Concern,
Please accept these comments from the National Parks Conservation Association regarding the Bureau of Land Management's (BLM) draft Oil Shale and Tar Sands Leasing Programmatic Environmental Impact Statement (PEIS). Please note that we have signed onto more lengthy and detailed comments submitted by Western Resource Advocates, but would also like to include these additional comments relating specifically to the potential impacts to National Park Service managed lands within the PEIS planning area.
The mission of the National Parks Conservation Association (NPCA) is to "protect and enhance America's National Park System for present and future generations." Founded in 1919, NPCA has become the leading private voice for the parks. It is a national non-profit headquartered in Washington, DC, with 23 regional and field offices. NPCA represents 600,000 members and supporters who care deeply about America's shared natural and cultural heritage preserved by the National Park System.
<([#1 [*2.3.1*] NPCA believes the BLM is heading in the right direction with the current preferred alternative 2(b) in the PEIS. This alternative drastically reduces the amount of land available for oil shale and tar sands leasing from the previous 2008 decision. However, we also concur with the National Park Service that oil shale and tar sands companies need to prove their technology works, is economically viable, and is environmentally compatible with surrounding land, water, and recreational needs. No lands should be allocated for commercial development until completion of research, including but not limited to federal research, design and demonstration (RD&D) leases, and an analysis of the impacts. For that reason, we urge the BLM to adopt Alternative 3 in the Final PEIS. If, following completion of research activities, the BLM concludes that lands should be open to application for commercial development, the BLM can then amend resource management plans and make land available.
#1])> <([#2 [*3.1.1*] The National Park Service itself has identified eight national park units within Wyoming, Colorado and Utah that would be directly impacted by large-scale, commercial leasing of oil shale and tar sands: Fossil Butte National Monument in Wyoming, Black Canyon National Park and Dinosaur and Colorado National Monuments in Colorado, Canyonlands,

Arches, and Capitol Reef National Parks and Glen Canyon National Recreation Area in Utah. And, in fact, many more units would be indirectly impacted if such development were to occur using current technology.

If commercial leasing were to proceed on the approximately 2 million acres identified in Alternative 1 of the BLM's PEIS for oil shale development and 430,000 acres of tar sands leasing and development, profound impacts would occur not only on the natural and cultural resources contained within iconic national park boundaries, but on the economic benefit they bring to local communities. The proximity of this proposed energy development to national park lands could have major impacts on the experience of tourists who visit to enjoy nature, solitude, starry night skies, clean air and water, and recreation.

#2])> The following comments outline the specific issues relating to national parks that NPCA believes Alternative 3 would mitigate within the PEIS planning area:

<([#3 [*3.5.4*] Air Quality

One of the major concerns of large scale development of oil shale and tar sands near our national parks is the impact on air quality and the ability to meet long term goals for clear air in our Class I air-sheds. The energy requirements for oil shale and tar sands processing is expected to be substantial. The increased need for power will likely come from coal-powered plants, which produce significant emissions of greenhouse gases and particulates. The two different production methods of oil shale, mining and surface retorting and in-situ retorting, will also produce greenhouse gas emissions and particulate pollution. In fact, it has been estimated that oil shale would emit 25-75% more greenhouse gases than conventional liquid fuels from crude oil feedstocks1. The cumulative impact of new emissions from oil shale and tar sands production is particularly worrisome when added to emissions from existing oil and gas development in the potential leasing area. It is, therefore, important for the BLM to ensure that air quality will not deteriorate more than allowed by the Clean Air Act and that the National Ambient Air Quality Standards (NAAQS) will not be exceeded by oil shale/tar sands development.

1 Adam R. Brandt "Converting Oil Shale to Liquid Fuels with the Alberta Taciuk Processor: Energy inputs and Greenhouse Gas Emissions," Energy Fuels 23, no.12 (2009) 6253-6258, doi: 10:1021/ef900678d, http://pubs.ascs.org/doi/abs/10,1021/ef900678d. **#3])>**

<([#4 [*3.4.1*] Water Quality and Quantity

Intensive use of water and potential impacts to water quality from oil shale and tar sands development using existing technologies are major concerns for our national parks, which rely on surface and groundwater for ecological health as well as recreational opportunities. It has been estimated by both the GAO and the RAND Corporation that producing one barrel of oil from shale or tar sands using current technology requires one to five barrels of water (42-210 gallons). This substantial water requirement on top of existing and projected water needs for Colorado and Utah will have broad implications for water availability, particularly from the Colorado River. Surface and groundwater quality may also be severely impacted by chemicals and organic material produced during the retort process and by leaching of spent shale by-products into surface and groundwater supplies.

Management of the Colorado River has a direct impact on the protection of resources within 5 of the 8 parks identified above: Dinosaur National Monument, Black Canyon, Canyonlands, and Arches National Parks, and Glen Canyon National Recreation Area. A change in river management to meet drastic increases in water demand from commercial oil shale and tar sands development, and subsequent water contamination from mining waste, could lead to the loss of

aquatic and terrestrial habitat for native fish and wildlife, invasion of non-native vegetation, loss of archaeological sites and cultural resources, and erosion of river sandbars. In addition, recreational use of water within these national park units could be significantly impacted with reduced flows, poor water quality, and altered river management. **#4])>**
<([#5 [*3.8.1*] [*3.1.2*] Viewshed
Large-scale commercial leasing near and adjacent to our national parks would severely mar the landscape and diminish the scenic qualities that draw visitors to our national parks. Specifically, tar sands development adjacent to Canyonlands National Park and Glen Canyon National Recreation Area would diminish the recreational quality of these remote, protected landscapes within the Colorado Plateau. Alternative 3 significantly reduces the impact on viewsheds of our national parks.
#5])> <([#6 [*3.6*] Soundscapes
Many people visit our national parks specifically to escape the sounds of urban life and to experience solitude. Noise can also affect wildlife behavior and communication. Sound management is therefore an important component of National Park Service management plans. Large-scale commercial development of oil shale and tar sands on lands adjacent to and near national parks would increase the noise levels on the landscape and potentially disturb the visitor experience of natural soundscapes within the parks. Again, Alternative 3 in the PEIS significantly reduces impacts to national parks from external noise created from oil shale and tar sands development.
#6])> <([#7 [*3.8.1*] Night Skies
Protecting dark night skies has become recognized as an important cultural, natural, and scientific resource by the National Park Service. Many visitors go to national parks just to experience the dark, starry skies, which in turn brings economic benefit to the parks and surrounding communities. In addition, wildlife species depend on natural patterns of light and dark for navigation, to cue behaviors, or hide from predators. Managing natural lightscapes and artificial light pollution is therefore a priority for the National Park Service from both a recreational and ecological perspective. Large-scale commercial development of oil shale and tar sands would likely include a significant increase in light pollution from drilling and mining activities.
#7])> <([#8 [*3.10.4*] Economic Implications
There is a serious risk that large-scale commercial development of oil shale and tar sands will destroy the very qualities that draw visitors to Colorado, Wyoming and Utah national parks, thus deterring visitors and negatively impacting the local tourism-based economies in these states. Public lands like national parks, national monuments, and recreation areas are major economic drivers in the West. They also create jobs. According to statistics from the National Park Service, Glen Canyon NRA directly supports 2,200 local jobs and Arches National Park sustains 1,600 jobs. Together, the eight Park Service sites most endangered by large-scale oil shale and tar sands development support over 5,500 jobs in Utah, Wyoming, and Colorado.
The western recreation economy extends beyond park borders to include companies like Petzl (Clearfield, UT), Black Diamond (Salt Lake City, UT), Osprey Packs (Cortez, CO), and NOLS (Lander, WY). These companies support thousands of diverse, well-paying jobs in manufacturing, design, transportation, and education that cross multiple sectors. According to the Outdoor Industry Association, the recreation economy supports 65,000 jobs in Utah, and pumps $5.8 billion into the state's economy. In Wyoming, it generates $4.4 billion of economic spending, sustains 52,000 jobs and represents 17% of all the retail sales and services produced in

the state. Meanwhile, Colorado racks up $10 billion in benefits from its recreational economy, and over 100,000 jobs.
Visitor spending is strong as well. In 2010, national park visitation generated $612 million in local spending in Utah, $610 million in Wyoming, and almost $300 million in Colorado, according to NPS statistics. The four business sectors most directly affected by visitor spending are lodging, food, retail, and amusements. **#8])>**
Conclusion
<([#9 [*2.3.1*] We appreciate the BLM's effort to take a second look at their 2008 decision to open nearly 2.5 million acres of public lands to oil shale and tar sands development in Wyoming, Colorado, and Utah. We also appreciate that the National Park Service has been a cooperating agency throughout this current process and that many of their concerns have been incorporated into the Draft PEIS. However, we also believe that it is important to plan for smart energy development in the Western United States by taking a landscape scale approach and taking all of the potential environmental and socioeconomic impacts into consideration. We are not convinced that the energy companies have proven their technology and therefore believe that leasing should be limited to the RD&D leases existing at the time of the Record of Decision for the 2012 PEIS (Alternative 3). With so much at stake, we can't afford to gamble with the health of our national parks, surrounding public lands, and tourism-dependent communities.
#9])> Sincerely,
Erika Pollard
Southwest Program Manager

OSTS2012D50254
Organization: Attila Kovats
Received: 5/3/2012 9:33:43 AM
Commenter1: Attila Kovats - Stevensville, Montana 59870 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/4/2012 12:00:00 AM
Attachments: OSTS2012D50254.htm (OSTS2012D50254-58833.htm Size = 1 KB)
Submission Text
<([#1 [*10.6.1*] Let's not let greed and short sightedness ruin this planet for future generations to enjoy. It's time to concentrate our efforts towards sustainable, renewable energy sources. **#1])>**

OSTS2012D50255
Organization: Sweetwater County, Wyoming
Received: 5/3/2012 9:55:38 AM
Commenter1: - Green River, Wyoming 82901 (United States)
Organization1: Sweetwater County, Wyoming
Commenter Type: Coop Agency - Local Govt
Classification:
Submission Category: Letter & Resolution

Submitted As: Web/E-mail/Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/16/2012 12:00:00 AM
Attachments: OSTS2012D50255.htm (OSTS2012D50255-58869.htm Size = 1 KB)
Sweetwater_County_Wy_2012_Oil_Shale_and_Tar_Sands_Draft_PEIS_Comments_5-3-2012_OSTS2012D50255.pdf (OSTS2012D50255-58868.pdf Size = 2067 KB)
Submission Text
See Attachment.

BOARD OF COUNTY COMMISSIONERS
o WALLY J. JOHNSON, CHAIRMAN
o JOHN K. KOLB, COMMISSIONER
o GARY BAILIFF, COMMISSIONER
o REID 0 . WEST, COMMISSIONER
o DON VANMATRE, COMMISSIONER
Thursday, May 3, 201 2
Sherri Thompson, Project Manager
Bureau of Land Management - Colorado State Office
2850 Youngfield Street
Denver, CO 80215
80 WEST FLAMING GORGE WAY, SUITE 109
GREEN RIVER, WY 82935
PHONE: (307)872-3890
FAX:(307) 872-3992
RE: Sweetvvater County's comments regarding the Draft Programmatic Environmenta l Impact Statement and Possible Land Use Plan Amendments for Allocation of Oil Sha le and Tar Sands Resources on Lands Administered by the Bureau of Land Management in Colorado, Utah and Wyoming.
Dear Ms. Thompson:
Sweetwater County would like to thank you for the oppottunity to comment on the Draft Programmatic
EIS for Allocation of Oil Shale and Tar Sands Resources on lands administered by the Bureau of Land
Management (BLM) in Colorado, Utah and Wyoming (20 12 OSTS DPEIS).
<([#1 [*2.5*] After attending the BLM's open house held in Rock Springs, Wyoming, on Thursday, March 15, 2012,
and after reviewing the 2012 OSTS DPEIS, Sweetwater County recommends that the BLM adopt either
ofthe following courses of action in regards to the 201 2 OSTS DPEIS:
1. The BLM com pi ies with established laws and ceases all further activities related to the 20 J 2 OSTS DPEIS and maintains its decision made in the 2008 OSTS PEIS; or
#1])> <([#2 [*2.1*] Sweetwater County recommends that the BLM adopt either
ofthe following courses of action in regards to the 201 2 OSTS DPEIS:
2. The BLM selects in its ROD the 2012 OSTS DPEIS "No Action Alternative" that maintains 1,000,453 acres of lands with in Wyoming open to consideration for oil shale leasing.

#2])> <([#3 [*9.2*] Sweetwater County recommends these options for the following reasons:
1. Sweetwater County's rationale for recommendation one is based on its approva l of Sweetwater County Resolution 12-04-CC-02 (see attached). Sweet\Vater County, Wyoming has joined several other counties within Wyoming, Colorado and Utah in opposing the 201 2 OSTS DPEIS. The reasons of this opposition are outlined be low:
a. The creation of the 201 2 OSTS DPEIS was completed in open contempt and in vio lation of the spending moratorium of Section 1769 of the Apri I 21, 20 II Congressional Continuing Resolution to Fund Fiscal Year 2011 through September 30, 20 11 .
#3])> Page 1 of3
<([#4 [*1.5*] b. The 2012 OSTS DPEIS preferred altemative is the creation of a fr iendly lawsuit settlement agreement betvveen the BLM and ideological opponents to oil shale development and. therefore, this preferred alternative is entirely pre-detennined and predecis ional in violation ofNEPA. **#4])>**
<([#5 [*1.3*] c. The creation ofthe 20 12 OSTS DPEIS preferred alternative entirely ignores the input
into the 2008 OSTS PEIS provided multiple cooperators including a Task Force of Governors, state and county govemments and other stakeholders, which was requi red by the Energy Policy Act of2005. **#5])>**
<([#6 [*3.10.3*] d. lf the 20 12 OSTS DPEIS preferred a ltemative is adopted in the Record of Decision the
vast oil shale and tar resources of Wyoming, Colorado and Utah will be off limits to development, which would result in a loss of 8 trill ion barrels of oil from our nation ·s economy. **#6])>**
<([#7 [*3.10.3*] 2. Sweetwater County's rationale for recommendation two is based on the following:
a. Mineral development provides seventy percent of Sweetwater County's ad valorem tax revenues and provides the economic base that supports the maj ority of the industries, businesses, jobs and housing within the County. Any reduction in mineral value or supply creates a major economic hardship for Sweet\.vater County and the State of Wyoming .
To prevent this economic hardship, it is essential that the County and the State strive to maintain the highest market value for its mineral resources and to cont inue to explore and research the development of new minerals such as oil shale. If current research on developing ef fective oil shale extraction technologies is successful, it is li kely that the production of oil fi·om oi l sha le will play a major role supp01t ing our local, state and national economies. To take advantage of the promising economic benefits of this research, it is imperative that Sweet\vater County and the State of Wyoming supp01t the "No Action Altern ative" which will preserve the potent ial for over one million acres within Wyoming to be available for oil shale leasing. Without the availability of these acres for potential oil sha le development, we wi ll miss an impmtant opportunity to enhance our future economic base.
#7])> <([#8 [*10.6.3*] b. The United States is currently in a growing economic crisis partially caused by an expmt
I impmt cycle in which our Country exports its wealth to the Middle East and other regions of the world in exchange for oil imports to meet our Country's energy needs.
This export I import cycle not only transfers the wealth of our nation to other countr ies, it

transfers opportunities for bus iness growth, j ob creation and quality of life for the c itizens within our own borders.
To break this export I import cycle and to keep our nation's wealth within its borders, our Country must develop its own mineral energy resources including oil, gas, coal, uranium and oil shale. By developing these resources, our nation will be creating wealth and jobs for its own citizens rather than for the c itizens of foreign countries. Through the use of proper environmental review and proven technologies, our nation's energy resources can be developed in a manner that not only sustains our nation's economy, but also protects our nation's environment.
If we continue down the path of developing other nation's energy resource before we develop the energy resources within United States, we will only deepen our Nation's economic crisis. This is not the path that Sweetwater County believes our nation should fo llow, and therefore, Sweetwater County supports developing our nation's vast oil shale reserves, which are being considered in this Draft PEIS.
#8])> In summary and based on the above comments, in regards to Sweetwater County's recommendations on the 201 2 OSTS DPEIS, the County recommends e ither of the fo llowing tvvo
options:
1. The BLM complies with existing laws and cease all further activities related to the 2012 OSTS DPEIS and maintain the Record of Decision it made in the 2008 OSTS PEIS, or
2. The BLM selects the "No Action Alternative" in the 201 2 OSTS DPEIS, which maintains 1,000,453 acres of lands within Wyoming open to consideration for oil shale leasing.
If you have any questions concerning Sweetwater County's above comments, please contact me a 307-
872-3897.
Sincerely,
Enclosure: Sweetvvater County Reso lution 12-04-CC-02
cc Governor Matt Mead
Jerim iah Rieman, Governor's Natural Resource Policy Advisor
Wyoming's Congressional Delegation
John Ruhs, BLM High Desert District Manager
Lance Porter, BLM Rock Springs Field Office Manager
Sweeh,vater County Board of County Commissioners
Temple Stoel linger, WCCA Natu ral Resource Attorney
Kent Conne lly, President - Coalition of Local Governments
Ma1y Thoman, President - Sweetwater County Conservation District
Eric Bingham, Sweenvater County Land Use Director
Page 3 of3
RESOLUTlON 12-04-CC-02
SWEETWATER COUNTY, STATE OF \t\!YOMING.
OPPOSING THE BLM'S 2012 OIL SHALE AND TAR SANDS PRO<iRAMMATIC ENVlRONMENTAL IMPACT STATEMENT, BLM PROJECT# W0-300-1310-PP-OSHL
(HEREAFTER. 2011 OSTS PEIS)
fOR LANDS ADMINISTERED BY THE BUil IN COLORADO, UTAH AND VlYOM.IN6,

This Resolution is adopted in open meeting after due opportunity for public comment, by the Board of Commissioners of Sweetwater County, in order to redress the many violations of lm:v, regulation, and policy by the BLM with respect to the BLM's 2012 OSTS PEIS.
BACKGROUND
As background to this Resolution, Sweetwater County recites the following grievances:
WHEREAS, On April 14, 2011, the BLM caused to be published in the Federal Register, Volume 76, No 72/Thursday, April 14,2011, pages 21003-21005, a notice of intent to prepare the above-referenced 2012 OSTS PEIS; and
<([#9 [*9.2.1*] [*3.1.3*] WHEREAS, the preliminary pmpose and need statement in the notice of intent, states the PEIS
will analyze removing from oil shale and tar sands leasing "All areas that the BLM has identified or may identify as a result of inventories conducted during this planning process, as lands containing wildemess characteristics[.]" Id., at page 21004; and
WHEREAS, the notice of intent further states at page 21004:
Lands that the BLM identifies as having wildemess characteristics will be
considered during this planning initiative, as described above, and consistent with
Secretarial Order No. 3310, dated Dec. 22, 20 10, and BLM Manuals 6301 and
6302. Future leasing of lands determined by the BLM to have '-Vildemess
characteristics, if compatible with the allocation decisions stemming from this
initiative, ·will subsequently be assessed in accordance with BLM Manual 6303,
as appropriate (i.e., 'where the BLM has not determined, consistent with BLM
Manual 6302, whether the lands with wilderness characteristics at issue should be
receive a wild lands designation, BLM Manual 6303 will apply); and
WHEREAS, this language documents the BLM's intent to implement, administer and/or enforce Secretarial Order 3310 and one or more of the BLM guidance manuals promulgated under Order 3310; and
WHEREAS, any attempt by the BLM to implement, administer and/or enforce Secretarial Order 3310, including any effort by the BLM to proceed further on the above~referenced Programmatic
EIS, violates the spending moratorium of Section 1769 of the April 21, 2011 Congressional Continuing Resolution to Fund Fiscal Year 2011 tlll'ough September 30, 2011, which states:
For the fi seal year ending September 30, 2011, none of the funds made avai !able
by this division or any other Act may be used to implement, administer, or
enforce Secreta1ial Order No. 3310 issued by the Secretary of the Interior on
December 22, 2010; and
WHEREAS, this spending moratorium has been carried forward in all subsequent Congressional spending resolutions up to and including the current spending resolution; and
WHEREAS, the 2012 OSTS PEIS, is an admitted attempt by the BLM to implement, administer and/or enforce Secretarial Order 3310 and its policies and objectives, all in violation of the Spending Moratorium of the 201 1 Continuing Resolution; and **#9])>**
<([#10 [*9.8*] WHEREAS, the 2008 Oil Shale and Tar Sands Programmatic EIS (2008 OSTS PEIS) was
required under Section 369 (d) (I) of the Energy Policy Act of2005 and was prepared in cooperation Viith 14 federal , state, and local govermnental organizations; and
WHEREAS THE 2008 OSTS PEIS was 3 years in the making, and it honored the input of a task force of Governors and other stakeholders as per requirement of the 2005 Energy Policy Act;

WHEREAS, the Record of Decision (ROD) for the 2008 OSTS PEIS amended 10 land use plans in Colorado, Utah, and Wyoming to make approximately 2 million acres of public lands available for potential leasing and development of oil shale and approximately 430,000 acres available for tar sands leasing. Together with the regulations published in 2006 and 2008 for oil shale and tar sands resources, the 2008 OSTS PEIS and subsequent land use amendments constituted a reasonable and rational establishment of an oil shale and tar sands program as mandated in the Energy Policy Act of 2005; and
#10])> <([#11 [*6.1.2*] WHEREAS, the oil shale and tar sands program to which the 2008 OSTS PEIS and related
regulations gave birth, was a reasonable response to the fact that oil shale and tar sands resources in the Green River Formation located in northeastern Utah, northwestern Colorado and southwestern Wyoming may reach 8 trillion barrels of oil; and
#11])> <([#12 [*9.8*] WHEREAS, the preferred altemative in the draft 2012 OSTS PEIS drastically slu·inks,
diminishes and in many areas outright reverses viitually all of the lands made available for Oil Shale and Tar Sands development in 2008, and does so using the same data and science; and
#12])> <([#13 [*9.2.2*] WHEREAS, such a drastic reversal in lands available for Oil Shale and Tar Sands development
between the 2008 PEIS and the 2012 prefened alternative, violates regulatory ran Task Force requirements of certainty for industry and investors; and
WHEREAS such a drastic reversal of lands available for Oil Shale and Tar Sands development in 2008, constitutes a de facto, piece-meal revision of previous BLM Resource Management Plans, in violation of the Section 202 Planning Process tmder FLPMA;
WHEREAS, the preferred alternative in the draft 2012 OSTS PEIS entirely ignores the input of the task force and stakeholders which the 2005 Energy Policy Act directed the BLM to honor and fo llow; and moreover the draft 2012 OSTS PEIS may well violate various memoranda of understanding (MOUs) with counties which require the BLM to publish the written input of cooperators who disagree with the preferred altemative;
WHEREAS the draft 2012 OSTS PEIS preferred alternative signiticantly restricts the acreage allotted in the 2008 PEIS for research and development leasing;
\VHEREAS the draft 2012 OSTS PEIS preferred alternative threatens to arbitrarily undermine the process and the work utilized in creation of the 2008 OSTS PEIS, and essentially dismantle a reasonable and rational oil shale and tar sands program in violation of Section 369 of the 2005 Energy Policy Act; and **#13])>**
<([#14 [*1.5*] WHEREAS, the 2012 OSTS PEIS prefened alternative is the creature of a friendly lawsuit
settlement agreement between the BLM and ideological opponents to oil shale development, and is therefore entirely pre-detem1ined and pre-decisional in violation ofNEPA, with no apparent rationale for revising the acreages approved in 2008; and **#14])>**
<([#15 [*2.2*] WHEREAS, the BLM has settled on a preferred altemative in the 2012 OSTS PEIS admittedly
without having first analyzed its impacts; BLM should be required to withdraw the preferred status of the alternative unti l it has performed this analysis; and
WHEREAS, the acreage approved for Oil Shale and Tar Sands development in the draft 2012 OSTS PEIS prefen·ed altemative bears no rational relationship to the stated purpose and need;
#15])> <([#16 [*1.5*] WHEREAS, the Department of Energy has basically abdicated the

responsibility Congress
placed upon it to defend and uphold a viable oil shale energy program in AmeLica, leaving it instead to the BLM encumbered by a host of anti-oil shale pro-wi lderness groups steering BLM's
every move; **#16])>**
<([#17 [*9.5*] WHEREAS, the alternative adopted in the ROD of the 2008 OSTS PEIS is now the No Action
Alternative of the draft 2012 OSTS PEIS; and
WHEREAS, the 2008 OSTS PEIS chosen alternative is consistent with the multiple use, sustained yield of the Federal Land Policy Management Act (FLPMA); and
WHEREAS, the 2008 OSTS PEIS chosen alternative is consistent with county general plans and policies which call for responsible development of available energy resources; and
#17])> <([#18 [*6.3.4*] WHEREAS, the development and production of oil from oil shale has been proven beyond a
doubt to be technologically and economically feasible; and **#18])>**
<([#19 [*6.3.2.1*] WHEREAS, this same teclmology to extract oil from the oil shale rock is not only economically
feasible, but it requires little to no consumption of water, contrary to the myths which falsely claim that oil shale extraction requires large consumption of water resources; and
#19])> <([#20 [*6.2.2*] WHERAS, the energy captured in the extract of oil from shale (natural gas capture, etc.,) more
than makes up for energy consumed in that extraction process, thus dispelling the myth that the oil shale extraction process consumes more energy than it produces;
#20])> <([#21 [*3.10.3*] WHEREAS, the rising price of gasoline, coupled ·with ever increasing loss of good paying jobs
due to the Administration's policies against energy development on ""'estern public lands, result in increasing hardships for families and the local economy, to the point where some fear the window of opportunity is about to close for a civil, lawfl!l and orderly response as citizens feel more and more pressured and desperate financially; and
#21])> <([#22 [*6.3.3.1*] WHEREAS, the 2012 OSTS PEIS improperly limits teclmology testing to strictly in situ efforts
and does not allow for development of other teclmologies; and
#22])> <([#23 [*1.1.1*] WHEREAS, the BLM has left insufficient time for the public and cooperators to meaningfully
comment on the public draf12012 OSTS PEIS by the present comment deadline of May 4, 2012, because a highly relevant commercial oil shale BLM regulation is not due to be published until May 15,2012 and the public should have the right to view that regulation first and then submit conm1ents on the draft 2012 OSTS PEIS in light of that regulation; and
#23])> <([#24 [*2.1.1*] WHEREAS, the same problems with lack of consistency with local plans and policies and failure
to honor the input of cooperators and all stakeholders, also besets many public lands EIS
proj ects, in addition to the 2012 OSTS PEIS . The cooperators from Utah and Wyoming have already unanimously requested for the No-Action alternative in the draft 2012 OSTS PEIS become the preferred altemalive. **#24])>**
<([#25 [*9.2.1*] RESOLUTION
NOW THEREFORE, BE IT RESOLVED BY SWEETWATER COUNTY, STATE OF

WYOMING AS FOLLOWS:
1 . Sweetwater County declares the B LM' s continuing to administer and carry out the 2012 OSTS PEIS to be an open contempt and flaunting of the Congressional Spending Moratorium first imposed in the 2011 Continuing Resolution and canied fonvard in all subsequent Congressional spending resolutions up to and including the present;
2. Sweetwater County calls upon the BLM to cease all further activities with respect to administering and carrying out the 2012 OSTS PEIS, because doing so constitutes an open contempt and violation of the Congressional Spending Moratorium against implementing, administering and/or enforcing Secretarial Order 3310, which Spending fv1oratorium was first imposed in the 2011 Continuing Resolution and can·ied forward in all subsequent Congressional spending resolutions up to and including the present;
3. Sweetwater Count calls upon the BLM to immediately cease and desist all activities related to the above-referenced 2012 OSTS PEIS and immediately publish a revised notice in the Federal Register signifying its cessation of all work on the Programmatic EIS in obedience to the above-quoted Spending Moratmium. Otherwise, the BLM would be in contempt of Congress;
#25])> <([#26 [*2.1.1*] 4. Should BLM continue to go fol\vard with the 2012 OSTS PEIS regardless of these
grievances, the only legally, viable alternative would be if the BLM adopted the No-Action Altemative, v·:hich is identical to the Alternative chosen in the ROD of the 2008 OSTS PEIS;
#26])> <([#27 [*1.1.1*] 5. The BLM should extend the May 4, 2012 deadline for public comment on the draft 2012
OSTS PEIS at least 30 days after publication ofthe expected oil shale regulation due to be published on or around May 15,2012.
#27])> <([#28 [*1.3*] 6. The BLM should honor the input of cooperators, particularly if they are local
govemments, as required by Section 202(c)(9) ofFLPMA, in all matters, not just with respect to the 2012 OSTS PEIS.
#28])> Adopted at the regularly scheduled meeting of the Sweetwater County Board of County Commissioners, held on the 1 i 11 day of April 2012.
BOARD OF COUNTY COMMISSIONERS
~- (/ Jolm \ · . Kolb, Commissioner
. - (../_ "-wi~~-~--
Don Van Matre, Commissioner
~ (J. ~l-J»r.l'--
Reid West, Commissioner
ATTESTED TO:

OSTS2012D50256
Organization: Bryan Lence
Received: 5/3/2012 10:06:30 AM
Commenter1: Bryan Lence - , Utah (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:

Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/4/2012 12:00:00 AM
Attachments: OSTS2012D50256.htm (OSTS2012D50256-58835.htm Size = 1 KB)
Submission Text
<([#1 [*3.1.1*] As a resident of Utah, I am very concerned about the proposed oil and gas activity near Arches National Park and Capitol Reef. Utah's National Parks account for 65,000 jobs and $5.8 billion in revenue. They also provide millions of visitors the chance relax, spend time with families and friends away from a television, and get exercise, which we all desperately need. **#1])> <([#2** [*12*] I understand the importance of a comprehensive energy policy but allowing gas development, a process that will almost certainly blight the surrounding landscape, poison groundwater and put stable revenue and jobs at risk is the wrong decision. **#2])>**

OSTS2012D50257
Organization: Denise Hudson
Received: 5/3/2012 10:07:56 AM
Commenter1: Denise Hudson - Flagstaff, Arizona 86004 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/4/2012 12:00:00 AM
Attachments: OSTS2012D50257.htm (OSTS2012D50257-58837.htm Size = 1 KB)
Submission Text
<([#1 [*2.3.1*] I urge you to adopt Alternative 3, research only! Thank you. **#1])>**

OSTS2012D50258
Organization: Backcountry Hunters and Anglers/Utah , Ken Theis
Received: 5/3/2012 10:20:52 AM
Commenter1: Ken Theis - Smithfield, Utah 84335 (United States)
Organization1: Backcountry Hunters and Anglers/Utah
Commenter Type: Environmental Organization
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/7/2012 12:00:00 AM
Attachments: OSTS2012D50258.htm (OSTS2012D50258-58872.htm Size = 3 KB)
BHA_urges_cautious_approach_to_oil_shale_OSTS2012D50258.doc (OSTS2012D50258-58871.doc Size = 34 KB)
Submission Text
On behalf of the Backcountry Hunters and Anglers, a national conservation organization with a state chapter in Utah, I would like to submit the following comments regarding the proposed oil shale/tar sands Programmatic EIS: **<([#1** [*9.8*] We commend the BLM for reconsidering the

extent of land in Utah, Colorado, and Wyoming to be considered for leasing for oil shale and tar sands development. The PEIS represents a considerable effort and thought on the part of the BLM. **#1])> <([#2** [*2.2*] While we appreciate the significant reduction in the amount of land to be made available for leasing under Alternative 2B (BLM's preferred alternative), the potential for speculative lease acquisition along with the extensive area to be made available for RDandD, makes this alternative unsupportable. **#2])> <([#3** [*2.3*] As a starting point, and to ensure the viability of oil shale extraction technology prior to issuing large scale leases, Alternative 3 offers a measured and cautious approach to allowing an oil shale/tar sands RDandD program to move forward (see attached commentary published in the Salt Lake Tribune, April 30, 2012.) **#3])> <([#4** [*2.5*] A new alternative that focuses on protecting high value wildlife habitat, watershed, and recreation values should be formulated during the BLM's decision-making process that results in a reduction in acreage than is now proposed for leasing under Alternative 2B. **#4])> <([#5** [*10.4*] An adaptive management approach to OS/TS development should, above all, be made part of any alternative selected for implementation: rehabilitation of individual RDandD sites must be completed before allowing an individual company to open up new sites. **#5])> <([#6** [*10.4*] In addition to establishing the viability of oil shale/tar sands as a practical energy source, the feasibility of rehabilitating landscapes disturbed by any and all activities associated with oil shale development should be required before additional leases are permitted to individual development companies. This would help determine the potential for disturbed lands to be rehabilitated and would minimize wholesale displacement of wildlife populations in and adjacent to areas leased and developed for oil shale/tar sands extraction. Such an approach would enable other, potentially innovative approaches to oil shale extraction, development, and land rehabilitation than would occur under Alternative 3, since additional energy companies could demonstrate various technologies. **#6])> <([#7** [*9.2.6*] Expansive road networks to multiple RDandD sites represent a highly disruptive potential impact to wildlife populations, not only by disturbances to habitat, but as a result of potential harassment and poaching. Road development should be allowed only to active extraction areas, not to be constructed to multiple sites in advance. Access roads to active RDandD sites should be closed and rehabilitated prior allowing new roads to be constructed. **#7])> <([#8** [*10.4*] Participating energy companies should be held financially accountable and responsible for rehabilitating all areas disturbed by their individual RDandD activities , to the point of re-establishing functioning ecosystems, regardless if oil shale development proves viable or not. Taxpayers and sportsmen should not bear the financial and ecological liability of the potential impacts that oil shale and tar sands development represents. **#8])>** See Attachment.

OSTS2012D50259

Organization: Krystal Powell
Received: 5/3/2012 10:31:37 AM
Commenter1: Krystal Powell - Salt Lake City, Utah 84106 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/4/2012 12:00:00 AM

Attachments: OSTS2012D50259.htm (OSTS2012D50259-58839.htm Size = 1 KB)
Submission Text
<([#1 [*12*] I do not think that it is worth destroying millions of acres of natural beauty to meet a fleeting need. I implore you to take into account the cost of the damage to the natural surroundings which may not be able to be undone after the temporary endeavor of gathering oil resources is done. My hope is that we as a nation focus more on developing a long term solution to our oil dependence instead of destroying the very thing that gives us life, enjoyment and sustainability to solve for an issue that is short term. Trading our environmental stability for an increase in oil production is not good decision for our future. Please consider the external effects of this decision. There is more at stake here then not being able to fuel our cars. **#1])>**

OSTS2012D50260
Organization: Scott Richardson
Received: 5/3/2012 11:07:04 AM
Commenter1: Scott Richardson - , Utah 84101 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/4/2012 12:00:00 AM
Attachments: OSTS2012D50260.htm (OSTS2012D50260-58841.htm Size = 1 KB)
Submission Text
<([#1 [*3.10.4*] This simply does not make any sense. The economic cost of this is not being holistically evaluated and the loss of jobs from outdoor recreation and tourism far outweighs this small bump in oil production. **#1])> <([#2** [*3.4.1*] Additionally in our already severely severely water-starved west: diverting this inconceivable amount of water just for the extraction of oil is completely out of the question. There is absolutely no way this is sustainable or healthy for the western US population, environment or economy.
#2])>

OSTS2012D50261
Organization: Cindy King
Received: 5/3/2012 11:15:00 AM
Commenter1: Cindy King - Salt Lake City, Utah 84109 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/4/2012 12:00:00 AM
Attachments: OSTS2012D50261.htm (OSTS2012D50261-58843.htm Size = 1 KB)
Submission Text

<([#1 [*2.3.1*] I would like to propose Alternative #3, the closing of oil shale except for the six current RDandD leases. Develop a RDandD program and a similar one for commercial leasing that addresses: proof of viable technologies; water usage; air emissions including hazardous and criteria; wildlife habitat; restoration of areas; benefit of renewable sustainable energy sources to that of non-renewable using actual costs. For example: the actual cost of materials needed to produce the energy and transport to energy source use (i.e. communities, industries); liability issues if there is a malfunction, upset condition, or cleanup; balanced plan for measuring impacts of oil shale development. **#1])>**

OSTS2012D50262

Organization: Lance Oswald
Received: 5/3/2012 1:31:47 PM
Commenter1: Lance Oswald - Grand Junction, Colorado 81503 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/4/2012 12:00:00 AM
Attachments: OSTS2012D50262.htm (OSTS2012D50262-58845.htm Size = 3 KB)
Submission Text

Common Sense Oilshale Development 05/02/12 By Lance Oswald **<([#1** [*2.3.1*] I agree with The National Parks Conservation Association that the Bush-era plan be revised, and that the BLM's preferred alternative allows far too many impacts. We should adopt a different alternative, one that would allow research only, and limit it to 34,740 acres in the Piceance and Uintah basins. This "requires oil shale and tar sands companies to prove their technology works, is economically viable, and is environmentally compatible with land, water and recreational needs." I believe in a staged approach where commercial leasing will not take place until after successful technologies have been developed and proven. **#1])> <([#2** [*10.4*] These also must Contain reclamation standards and ensure that companies post adequate bonds for long-term protection of resources. **#2])> <([#3** [*6.3.4*] I disagree with the Mesa County commissioners who argued production of oil from oil shale is technically and economically possible, and the plan would "essentially dismantle a reasonable and rational oil shale and tar sands program." Why do some county politicians make bloated resolutions claiming 8 trillion barrels of oil in the shale, more than six times the 1.5 trillion barrels, that other Congressional agencies and the BLM estimate? Political rhetoric in county courthouses or the halls of Congress won't trump science and the marketplace. Historic "Black Sunday" reminds us we must prepare for much larger impacts of potential oil shale development than politicians acknowledge. **#3])> <([#4** [*10.5*] Why should a giant corporation like Shell Oil with $7.2 billion in worldwide profits in just the third quarter of 2011 and with a history of investing millions of dollars over decades of effort in still-incomplete oil shale research, need reduced royalty rates or speculative leasing to move forward before acquiring rights to any federal land? Suddenly with surging oil prices, Oil Shale is being touted as a way for the U.S. to achieve energy independence But why should a nation seeking energy self sufficiency have among its largest exports "Finished Petroleum Products" to sell to other countries? It doesn't make sense to me? Unless--- they want to turn our own citizens public

oil reserves into gold bullion by the $Billions in their own banks: though political government subsidies. **#4])>** Sincerely Yours, Lance Oswald 196 27Road Grand Junction CO 81503

OSTS2012D50263

Organization: Christine Guldi
Received: 5/3/2012 1:51:36 PM
Commenter1: Christine Guldi - Dallas, Texas 75248 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/4/2012 12:00:00 AM
Attachments: OSTS2012D50263.htm (OSTS2012D50263-58847.htm Size = 1 KB)
Submission Text
<([#1 [*6.1*] The definition in the glossary of crude oil is somewhat helpful, but I think it could be clarified more. As I understand it, "crude oil" may refer to bitumen and similar highly viscous products that require dilution, high pressure and heating to move through pipelines. EIA reports list only crude oil, not dilbit or tar sand oil or oil sand oil or oil shale oil, as if all crude oils are very similar. To say that crude oil is liquid is true but misleading to a lay person if one considers, as some do, unprocessed bitumen to be liquid. What are the limits as to how viscous it can be or how much sand or other materials it may include and still be called crude oil? **#1])>**

OSTS2012D50264

Organization: Backcountry Hunters and Anglers, John Pollard
Received: 5/3/2012 1:54:04 PM
Commenter1: John Pollard - Park City, Utah 84060 (United States)
Organization1: Backcountry Hunters and Anglers
Commenter Type: Affiliation Only
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/4/2012 12:00:00 AM
Attachments: OSTS2012D50264.htm (OSTS2012D50264-58849.htm Size = 1 KB)
Submission Text
<([#1 [*12*] Before you do ANY approvals of any kind someone from BLM has to visit the country in Eastern Europe where this is being done. I advise you to take a representative from an environmental org. It is shocking to me that nobody from BLM has been on site in Eastern Europe and asked the populace in the local area about their actual impacts. You do not have to reinvent the wheel. Please....do your job!! Investigate on the ground in the first person.
#1])>

OSTS2012D50265

Organization: Mary Sachs
Received: 5/3/2012 3:36:13 PM
Commenter1: Mary Sachs - Denver, Colorado 80218 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/4/2012 12:00:00 AM
Attachments: OSTS2012D50265.htm (OSTS2012D50265-58851.htm Size = 1 KB)
Submission Text
<([#1 [*12*] I believe this beautiful area should stay preserved. **#1])>**

OSTS2012D50266
Organization: Stephen Burns
Received: 5/3/2012 3:45:24 PM
Commenter1: Stephen Burns - Ocean City, New Jersey 08226 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: 50201_Campaign
Submitted As: Web Form
Form Letter Category:
Form Letter Master: OSTS2012D50201- Master
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/4/2012 12:00:00 AM
Attachments: OSTS2012D50266.htm (OSTS2012D50266-58853.htm Size = 3 KB)
Submission Text
I am writing to submit comments on the Oil Shale and Tar Sands Draft Programmatic Environmental Impact Statement (PEIS). **<([#1** [*3*] I am very concerned about the possible impacts of oil shale development on Glen Canyon, Grand Canyon, and the Colorado River. I believe that we need more research on the potential impacts of oil shale and tar sand development before allowing leasing of our public lands for this use. Such development could have serious and irreversible impacts, including on water supplies and quality, air quality, native ecosystems and wildlife, and recreational uses. **#1])> <([#2** [*2.3.1*] I urge you to choose Alternative 3, Research Only, as the BLM's Preferred Alternative in the Final PEIS. This is essential to ensure that we have the best possible information before considering opening our natural open spaces and ecosystems to the development of oil shale and tar sand resources. **#2])> <([#3** [*3.4.1*] Here are some of my specific concerns regarding the Draft PEIS: * The Draft Programmatic EIS needs to ensure water quality will not be adversely effected by development of oil shale and tar sand resources. The water usage for oil shale production far outstrips the amount of oil produced, even prior to the refinement process. Water resources in the West are already overused and the effects of climate change and increased population will only add further strain to an already depleted system. **#3])> <([#4** [*3.4.1*] * The Draft Programmatic EIS should be conducted in such a way to address issues of dust, noise, and pollution in the affected areas. Heating oil shale in the ground can contaminate vital groundwater supplies. High salt

concentrations in groundwater restricts water available to native plants and is harmful to agricultural production as well. The Colorado River Basin already spends millions of dollars annually on damages caused from high salinity. **#4])> <([#5** [*3.1.1*] * The Draft Programmatic EIS should address the potential encroachment on protected areas and National Parks such as Glen Canyon Recreation Area and Canyonlands National Park. This includes a thorough analysis of the damage to these priceless parks by oil shale and tar sands development. **#5])> <([#6** [*2.3.1*] This EIS should ensure that all alternatives seriously assess the issues outlined above. Considering the present lack of adequate information and the tremendous risks of misguided development, the only reasonable alternative at this point is Alternative 3, Research Only as outlined in the PEIS. **#6])>** Thank you for the opportunity to comment on the Draft Programmatic EIS. Sincerely, Stephen A. Burns 905 Saint James Pl Ocean City, NJ 08226

OSTS2012D50267

Organization: William Eckerle
Received: 5/3/2012 3:52:17 PM
Commenter1: William Eckerle - Salt Lake City, Utah 84152 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/7/2012 12:00:00 AM
Attachments: OSTS2012D50267.htm (OSTS2012D50267-58855.htm Size = 2 KB)
Submission Text
I am a big game hunter and I would like to submit the following comments regarding the proposed oil shale/tar sands programmatic EIS: **<([#1** [*2.2*] Alternative 2B (BLM's preferred alternative), opens the door to speculative lease acquisition. It also provides for extensive area to be made available for RDandD, making this alternative unsupportable to me. **#1])> <([#2** [*2.3*] Alternative 3 offers a better (measured and cautious) approach to allowing an oil shale/tar sands RDandD program to move forward. **#2])> <([#3** [*2.5*] Preferably, a new alternative that focuses on protecting high value wildlife habitat, watershed, and recreation values should be formulated during the BLM's decision-making process that results in a reduction in acreage than Alternative 2B. **#3])> <([#4** [*10.4*] In addition I am concerned that landscapes disturbed by any and all activities associated with oil shale development should be rehabilitated BEFORE additional leases are permitted to individual development companies. Road development should be allowed only to active extraction areas, not to be constructed to multiple sites in advance. Roads constructed for geological studies should be reclaimed as soon as these studies are complete. Access roads to active RDandD sites should be closed and rehabilitated prior allowing new roads to be constructed. Participating energy companies should be held financially accountable and responsible for re-establishing functioning ecosystems on all areas disturbed by their individual RDandD activities. Taxpayers should not bear the financial and ecological liability of the potential impacts that oil shale and tar sands development represents.
#4])>

OSTS2012D50268

Organization: Enefit American Oil, Allen Freemyer
Received: 5/3/2012 5:02:46 PM
Commenter1: Allen Freemyer - Washington, 20037 (United States)
Organization1: Enefit American Oil
Commenter Type: OSTS Tech Company
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form and Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/9/2012 12:00:00 AM
Attachments: OSTS2012D50268.htm (OSTS2012D50268-58875.htm Size = 1 KB)
Oil_Shale_Comments_OSTS2012D50268.pdf (OSTS2012D50268-58874.pdf Size = 13951 KB)
Submission Text
See Attachment.

Enefit
BLM Oil Shale and Tar Sands PEIS
Argonne National Laboratory
EVS Division, Building 240
9700 S. CassAve.
Argonne, IL 60439
Submitted online at: http://ostseis.anl.gov/involve/comments/index.cfm
RE: Comments on Draft Programmatic Environmental Impact
Statement (PEIS) and Possible Land Use Plan Amendments for
Allocation of Oil Shale and Tar Sands Resources on Lands
Administered by the Bureau of Land Management in Colorado,
Utah, and Wyoming
Dear Sir or Madam:
On January 27, 2012, the Bureau of Land Management ("BLM") issued a Draft PEIS that examines alternatives for modifying ten land use plans in Colorado, Utah, and Wyoming, to make lands available or not available for application for commercial leasing for oil shale and tar sands development. As the holder of an existing oil shale Research, Development and Demonstration ("RD&D") lease in Uintah County in northeastern Utah within the BLM's Vernal Field Office jurisdiction, Enefit American Oil ("Enefit") has a strong interest in BLM's management of federal lands for the development of oil shale resources. Enefit submits these comments pursuant to 40 C.F.R. §§ 1503.1(a)(3) and 1506.6(d), and requests that this letter and all its attachments be included in the administrative record for this matter.
I. INTRODUCTION
<([#1 [*6.3.5*] A. Enefit Has a Long History of Successful Commercial Oil Shale Production
Enefit was founded in 1939 and is the world's largest oil shale to energy company. Enefit owns and operates oil shale mines producing up to 18 million tons of oil shale per year and owns and operates the world's largest oil shale fired power plants with a total capacity of 2,380 MW. Estonia has also commercially produced oil from oil

shale for almost 100 years. In total, Enefit has mined 1 billion tons of oil shale, produced 550 TWh of power, and produced more than 200 million barrels of oil. Enefit employs approximately 7,000 people.

Enefit's industrial oil production experience is unique in the world and is drawn from Enefit's more than 30-year history of commercially operating its patented technology. After decades of research, development, and operations, Enefit has designed and is in the process of building the most efficient oil shale production technology available anywhere in the world. This is an advanced, new generation technology, based on Enefit's commercially proven technology which has been operating in Estonia for more than 30 years. Enefit's newest generation oil shale plant will go into production in Estonia this year and will more than double Enefit's current oil production capacity in that country. Enefit desires to bring this same, new generation technology to the Uintah Basin in Utah to help America meet its domestic energy needs.

Enefit owns extensive private oil shale resources in eastern Utah, holds State leases, and is the holder of the White River Mine federal RD&D lease. Enefit plans to make substantial capital investments, without government financing, and provide approximately 2000 direct jobs to the State of Utah. Enefit plans to produce hundreds of millions of barrels of oil over the life of its Utah project. Decades of experience in the mining and development of oil shale resources in Estonia provide Enefit with the knowledge, technology, and expertise to responsibly develop oil shale resources in the United States in an environmentally safe manner that will meet or exceed all current federal and state environmental standards. **#1])>**

<([#2 [*6.3.5*] B. Enefit's Has a Proven Oil Shale Development Technology

Enefit's commercially proven technology allows oil extraction from fine oil shale particles. The base technology, developed by Estonian scientists and patented in 2005, has operated continuously in Estonia for more than 30 years. In 2009, Enefit and Outotec formed a joint venture to undertake co-development of a new generation Enefit technology. The new Enefit technology combines Eesti Energia's improved solid heat carrier process and Outotec's Circulating Fluidized Bed technology, increasing efficiency and decreasing air emissions. The key benefits of Enefit's technology are the following:

> Only operational fines technology available. More than 50 years of experience developing the solid heat carrier process and 30 years of operational experience in Estonia.

> The process is energy self-sufficient and no external fuel is required.

> Gas combustion and the use of excess heat provide more power than the process requires. Energy left in the spent shale is used to generate heat for the process.

> Heat from ash and stack gases is extracted for power generation.

> Retort gas with a high calorific value that is released in processing can be used for power generation.

> No organic residual is left in the ash, which can be used as a raw material in the construction industry.

> The oil extraction process is water free.

The modular design is essential to allow easy maintenance, process optimization, and streamlined adaptability to the individual characteristics of different oil shale

deposits.
#2])> <([#3 [*9.8*] C. The Draft PEIS Undermines BLM's Promising 2008 Blueprint for Domestic Oil Shale Development
The Draft PEIS marks a drastic and unwarranted departure from BLM's 2008 resource management plan amendments ("2008 RMP Amendments"). The 2008 Amendments, together with the 2008 commercial oil shale regulation ("2008 OS Rule") fairly implemented Congress' directive that BLM establish a viable and sustainable program to encourage commercial oil shale development in the United States.1 BLM's 2008 RMP Amendments offered a balanced approach for oil shale development and resource management: (1) protect known, sensitive environmental areas that warrant protection under existing laws and established BLM management directives, (2) designate areas of sufficient size and contiguity that may be allocated for future commercial oil shale development, and (3) incorporate adaptive management procedures to address particular, site-specific resource issues at later stages in the commercial leasing process when more is known about the relevant development techniques and the impacted resources.
In contrast, the Draft PEIS sets forth a preferred alternative that severely restricts the amount of BLM lands available for future oil shale development without providing any substantive legal, policy, or ecological justification. BLM's preferred alternative, if implemented, would cast a shadow over America's domestic oil shale industry by undermining that regulatory certainty that is essential to investment in large-scale energy projects. BLM's revised RMP proposal would undermine America's oil shale program at a time of acute geo-political tensions in the Middle East and escalating gasoline prices at home. This approach is both arbitrary and capricious. Enefit recommends that BLM reverse its ill-advised proposal to severely restrict the acreage available for commercial oil shale development and stay the course by approving BLM's "no action" alternative (Alternative 1) that would allow BLM's recently-implemented 2008 RMP Amendments to guide oil shale development.

1 Enefit focuses its comments in this letter on the portions of the proposed RMP Amendments that
address oil shale leasing and development.
#3])> <([#4 [*9.1*] II. THE PURPOSE AND NEED STATEMENT IS NOT CLEARLY DEFINED
AND IS INCONSISTENT WITH THE 2005 EPACT
The Council on Environmental Quality's ("CEQ") National Environmental Policy Act ("NEPA") implementing regulations require that an EIS "shall briefly specify the underlying purpose and need to which the agency is responding in proposing alternatives including the proposed action." 40 C.F.R. § 1502.13 (emphasis added).
A project's purpose and need statement forms the reference point for determining what constitutes a reasonable alternative. See Citizens Against Burlington, Inc. v. Busey, 938 F.2d 190, 194-95 (D.C. Cir. 1991) (citing Vermont Yankee Nuclear Power Corp. v. Natural Res. Defense Council, 435 U.S. 519, 551 (1978)). See a/so City of Carmel-By-The-Sea v. United States Dep't of Transp., 123 F.3d 1142, 1155 (9th Cir. 1997). Courts have held that "[alternatives that do not accomplish the purpose of an action are not reasonable and need not be studied in detail by the

agency." Citizens Comm. to Save our Canyons v. U.S. Forest Service, 297 F.3d 1012, 1031 (10th Cir. 2002).

Because the purpose and need statement articulates the basis for the agency's action, and in turn circumscribes the appropriate range of alternatives and scope of analysis, it must be defined in a manner that is both clear and defensible. Most importantly, the purpose and need statement must be consistent with any legal mandate(s) the agency has been given by Congress.

The purpose and need statement in the Draft PEIS fails to satisfy these well established principles.

A. BLM's Purpose and Need Statement Is Not Clearly Defined

BLM offers the following rationale in Sec. 1.1, the "Purpose and Need" section of the Draft PEIS, for altering the recently implemented 2008 RMP Amendments:

> The purpose and need for this proposed planning action is to reassess the appropriate mix of allowable uses with respect to oil shale and tar sands leasing and potential development. Specifically, the BLM will consider amending the applicable RMPs to specify whether any areas in Colorado, Utah, and Wyoming currently open for application for future leasing and development of oil shale or tar sands should not be available for such application and leasing development.

Draft PEIS at 1-4. Although BLM description explains in very general terms "what" the agency proposes to do, it does not explain "why". This vague statement cannot form the legal basis for revising BLM's existing RMPs.

BLM comes closer to explaining its real reason for upending its newly-minted RMPs in the Introduction section to the Draft PEIS: "As part of the settlement entered into by the United States to resolve the lawsuit and in light of new information that has emerged since the 2008 OSTS PEIS was prepared, the BLM has decided to take a fresh look at the land allocations analyzed in the 2008 OSTS PEIS and to consider excluding certain lands from future leasing of oil shale and tar sands resources." Id., at 1-4. Contrary to BLM's representations, neither BLM's settlement agreement nor the alleged discovery of "new information" can establish the purpose and need for BLM's proposal to dramatically revise its recently adopted RMPs.

#4])> <([#5 [*9.1*] B. The Purpose and Need Statement Is Inconsistent with the 2005 EPAct

Oil shale deposits in the United States are estimated to contain roughly six trillion barrels of oil in place, with some 2 trillion barrels located in the tri-state region of Utah, Colorado, and Wyoming. Congress declared in Section 369(b) of the Energy Policy Act of 2005 ("2005 EPAct") that such deposits are "strategically important resources that should be developed to reduce the United States' growing dependence on politically unstable sources of foreign oil" and mandated that the development of oil shale should occur, with an emphasis on sustainability, to benefit the United States. 42 U.S.C. §15927(b)(1) & (3).

Congress further directed BLM to:

> [C]omplete a programmatic environmental impact statement for a commercial leasing program for oil shale and tar sands resources on public lands, with an emphasis on the most geologically prospective lands within each of the States of Colorado, Utah, and Wyoming.

Id., at §15927(d)(1) (emphasis added). Any purpose and need statement for revisions to the RMPs in this tri-state area must implement this congressional directive and offer alternatives that provide for leasing on the "most geologically prospective lands" within those states. The purpose and need statement in the Draft PEIS entirely fails to account for the clear direction Congress gave the agency in 2005 EPAct. Instead, BLM arbitrarily assumes that it may amend the RMPs in any manner it chooses, and without considering the unambiguous congressional directive. Such an approach is arbitrary and capricious and cannot pass muster under the Administrative Procedure Act, 5 U.S.C. §§551-706. See also Atchison, Topeka & Santa Fe. Ry. Co. v. Witchita Bd. of Trade, 412 U.S. 800, 806 (1973) (agency's course "must be consistent with its mandate from Congress.") **#5])>**
<([#6 [*9.1*] C. The Purpose and Need Statement Is Inconsistent with the Need for Domestic Production of Unconventional Fuels
The importance of developing America's oil shale reserves has only increased since the 2005 EPAct was enacted. The global demand for oil that exceeds conventional supplies makes a strong case for development of the U.S.'s oil shale resources. If not quickly addressed, these deteriorating global market conditions, could, and likely will, result in even higher oil prices and reduced availability of oil resources.
The importance of energy-related projects has been recognized in Executive Order 13212, which states that the "increased production and transmission of energy in a safe and environmentally sound manner is essential to the well-being of the American people." Further, the Executive Order establishes the policy that "agencies shall take appropriate actions, to the extent consistent with applicable law, to expedite projects that will increase the production, transmission, or conservation of energy." Id. This policy forms the backdrop against which BLM should consider access to oil shale as a key energy resource.
America's rich and concentrated oil shale resources, if developed in a timely and economically efficient manner, offer the potential to help offset the anticipated global production declines of conventional oil, reduce oil imports and their economic costs, stimulate domestic employment and economic activity, and provide a reliable domestic source of liquid transportation fuels. Oil shale development can also play a vital strategic role in providing the United States military with long-term, secure access to domestic fuels. These fundamental energy policy needs must be incorporated into BLM's purpose and need statement and must govern BLM's proposed range of alternatives, and its selection of a preferred alternative. **#6])>**
<([#7 [*9.1*] III. BLM IMPROPERLY PREJUDGED PURPOSE AND NEED, IMPERMISSIBLY NARROWED THE RANGE OF ALTERNATIVES, AND VIOLATED FEDERAL LAW BY IMPLEMENTING DOI'S "WILD LANDS" POLICY
A. BLM Improperly Predetermined the Outcome of Its NEPA Analysis
BLM has improperly prejudged the purpose and need for the instant planning effort. On February 15, 2011, BLM entered into two separate settlement agreements with a group of oil shale opponents. Long before the court had ever ruled on plaintiffs' legal challenge to the 2008 RMP Amendments, and indeed before BLM ever filed an Answer in the case, BLM entered into a gratuitous settlement in which the agency committed to propose a number of substantive changes to the recently-revised

RMPs,2 See Exhibit A, 2008 RMP Settlement.
In particular, BLM committed to prepare a new programmatic EIS and to propose at least two action alternatives that reduced the acreage allowable for commercial oil shale leasing. Id,, at 1J 2. The first of these required alternatives was the plaintiffs' anti-development alternative that excluded from available leasing and development large geographic areas that corresponded with plaintiffs' anti-development "wish list." See id., at U 2(a). This alternative is being proposed in the Draft PEIS as Alternative 2. See Draft PEIS, at 2-34 to 2-36. The settlement also requires BLM to offer a second anti-development alternative that removes some, but not all, of the lands on plaintiffs' wish list. 2008 RMP Settlement, at 2(b). This alternative corresponds with BLM's alternative 4 in the Draft PEIS. See Draft PEIS, at 2-43 to 2-48.
Not only did BLM commit to propose RMP alternatives that drastically reduce the acreage available for commercial oil shale development, but it also agreed to prepare a purpose and need statement that would allow the agency to select either one of the plaintiffs' anti-development alternatives. Under the settlement, BLM agreed that 'Ttlhe purpose and need statement in the NEPA analysis supporting the RMP amendment process or processes shall be defined in such a manner that it can be met by any and all of the alternatives described in Paragraph 2(a) and 2(b) above [i.e., the two anti-development alternatives championed by plaintiffs]." 2008 RMP Settlement Agreement at U 2 (emphasis added). Curiously, BLM did not commit to construct a purpose and need statement that would also allow BLM to select the current planning regime that is represented by Alternative 1 (no action alternative) in the Draft PEIS. In other words, BLM impermissibly ruled out the no action alternative of leaving the 2008 RMPs in place.
BLM has turned the NEPA process on its head. BLM should have first identified a concrete legal and/or policy rationale that would justify revising its newly established RMP revisions. After identifying and explaining this "purpose and need" for its action, BLM should then have selected and analyzed a range of alternatives that could satisfy this purpose and need. Instead, BLM (1) committed to analyze at least two anti-development alternatives in the context of settling a friendly lawsuit, (2) committed to prepare a purpose and need statement that could be satisfied by the two anti-development alternatives, and then (3) fabricated an unsupported purpose and need statement under the pretense that there were "changed circumstances" that justified revisions to BLM's newly-minted RMPs.
BLM is required to provide the public with a coherent, and legally supportable, reason for why it has elected to revise its RMPs at this time. In contrast, BLM's course to date runs afoul of CEQ's direction that "[a]gencies shall not commit resources prejudicing the selection of alternatives before making a final decision." 40 C.F.R. § 1502.2(f). BLM's commitments in the 2008 RMP Settlement as implemented in the Draft PEIS violate the principle of administrative law that forbids federal agencies from predetermining the final outcome of their environmental analysis. See Daws v. Mineta, 302 F. 3d 1104, 1112-23 (10th Cir. 2002) (Court enjoined agency's proposed project which was the product of predetermined environmental analysis); see also Metcalf v. Daley, 214 F.3d 1135, 1142-45 (9th Cir. 2000) (invalidating agency's predetermined environmental decision that resulted from contractual commitment to support Indian Tribe's preferred action).

2 While BLM cites the 2008 RMP Settlement as one of the reasons for revisiting the 2008 RMP Amendments, BLM fails to explain why the agency settled the legal challenge to the 2008 RMP Amendments in the first place. In other words, does BLM believe the 2008 RMP Amendments were legally deficient? If so, why? The settlement of a lawsuit in and of itself provides no explanation for why BLM felt compelled to undergo a comprehensive revision to ten RMPs in a three-state area, especially since no commercial oil shale leasing has yet taken place within the geographic area made available for such leasing in the 2008 RMP Amendments.
#7])>
<([#8 [*9.2.1*] [*3.1.3*] B. BLM's Analysis Contravenes the Congressional Prohibition on the Implementation of the Department of Interior's Wild Lands Policy
BLM's analytical method of excluding lands with wilderness characteristics from prospective oil shale development is a clear violation of federal law. By way of example, when BLM published its notice of intent to prepare the oil shale PEIS, BLM explained:
Lands that the BLM identifies as having wilderness characteristics will be considered during this planning initiative, as described above, and consistent with Secretarial Order No. 3310, dated Dec. 22, 2010, and BLM's Manuals 6301 and 6302.
76 Fed. Reg. 21003, 21004 (April 14, 2011). Secretarial Order No. 3310 provided:
BLM shall maintain a current inventory of land under its jurisdiction and identify within that inventory lands with wilderness characteristics that are outside of Wilderness Study Areas and that are pending before Congress or units of the National Wilderness Preservation System. The BLM shall describe such inventoried lands as "Lands With Wilderness Characteristics." share this information with the public, and integrate this information into its land management decisions. All BLM offices shall protect these inventoried wilderness characteristics when undertaking land use planning and when making project-specific decisions . . . .
Id. at 2 (emphasis added). From the outset of the current PEIS process, BLM made clear that one of the key reasons for revising its RMPs was to implement Secretary Salazar's "Wild Lands Policy" as articulated in Secretarial Order No. 3310. However, on April 15, 2011, the President signed into law Pub. Law 112-10, the Department of Defense and Full-Year Continuing Appropriations Act of 2011 ("2011 C.R."). Section 1769 of the 2011 C.R. provided
For the fiscal year ending September 30, 2011. none of the funds made available by this division or any other Act may be used to implement, administer, or enforce Secretarial Order No. 3310 issued by the Secretary of the Interior on December 22. 2010.
Id. (emphasis added). This spending moratorium was continued with subsequent spending bills and remains in force today.
Notwithstanding this clear congressional moratorium, the Draft PEIS sets forth as its preferred alternative an alternative that excludes from future commercial oil shale leasing "[a]ll areas that the BLM has identified or may identify as a result of

inventories conducted during this planning process as LWC [lands with wilderness characteristics].” Draft PEIS, at 2-34. Although BLM in the Draft PEIS no longer cites to the Secretarial Order No. 3310 as the basis for excluding lands with wilderness characteristics, the resulting resource management proposal is unmistakable: BLM is attempting to preclude from future commercial oil shale leasing a broad category of lands based on a management directive (Secretarial Order No. 3310) that BLM is legally barred from implementing, administering, or enforcing.

#8])> 8

<([#9 [*9.8*] IV. THERE IS NO NEW INFORMATION THAT JUSTIFIES BLM’S PROPOSAL TO DRAMATICALLY REVISE ITS RMPs

BLM also suggests that “new information not available in 2008” justifies a change in the agency’s available acreage for commercial oil shale development. Draft PEIS, 1-4 & 1-5. According to BLM, there are three sources of new information: (1) a 2011 assessment by the U.S. Geological Survey (“USGS”) regarding the oil shale and nacholite resources in Colorado, Utah, and Wyoming, (2) a 2010 decision by the U.S. Fish and Wildlife Service (“FWS”) concluding that listing the Greater Sage Grouse as threatened under the federal Endangered Species Act was warranted, but precluded by higher priority species, and (3) BLM’s revised inventory of lands with wilderness characteristics in the three-state region. Draft PEIS at 1-5. None of these events justify unraveling the 2008 RMP Amendments.

A. There Is No New Information About the Geologically Prospective Areas for Oil Shale Development That Justifies BLM’s Proposal to Overhaul Its Current RMPs

BLM never explains why the 2011 USGS study justifies a major re-calibration of permissible commercial leasing areas. In fact, the PEIS never cites the study as one of the sources relied on by BLM to ascertain the “most geologically prospective oil shale resources.” See Draft PEIS at 1-10, n. 4 (citing the technical resources used by BLM to ascertain the most prospective oil shale resource areas). Tellingly, not one of the sources relied on by BLM to make its assessment of prospective oil shale areas post-dated the 2008 RMP Amendments. Id.

In fact, later in its PEIS, BLM admits that Alternative 1 contains the lands with the most geologically prospective oil shale deposits:

> The lands available for lease under the 2008 land use plan amendment would remain available for future leasing consideration under the No-Action Alternative [i.e., Alternative 1]. These public lands comprise the most geologically prospective oil shale and tar sands areas administered by the BLM. including lands that are exempted by statute, regulation, or [Executive Orders]. . .

Draft PEIS at 2-21 (emphasis added). BLM offers no new information that would justify a reduction in the acreage available for commercial oil shale leasing based on a reassessment of which lands contain the most geologically prospective deposits of oil shale.

#9])> <([#10 [*9.2.4*] B. There is No New Information About the Sage Grouse That Warrants Dramatic Changes the RMPs At This Time

Contrary to BLM’s representations in the Draft PEIS, the 2010 FWS1 decision on the

Greater sage grouse cannot support a substantial restriction of the allowable oil shale lease acreage since the FWS has declined to add the species to the list of federally protected species at this time. 75 Fed. Reg. 13910 (Mar. 23, 2010). While Enefit understands the need to strategically manage the sage grouse in order to protect the species and prevent it from being listed on the federal endangered species list, the fact is that the species is not currently regulated under the Endangered Species Act ("ESA") and BLM's effort to eliminate large areas from oil shale leasing at this time is unwarranted and is not supported by accurate scientific data.

1. BLM Cannot Lawfully Designate Sensitive Sage Grouse Habitat at this Time

States such as Utah have not even completed their own processes for determining which areas should be protected as core or priority areas, and indeed, it does not appear that BLM has sufficient data to identify which areas should be protected under the various classifications. BLM even acknowledges that "BLM is currently working with the Utah DWR [Department of Wildlife Resources] to refine the delineation of priority habitats in the State of Utah." Draft PEIS, at 3-197. This process, which represents a joint planning effort between the Division of Wildlife Resources, the Utah Governor's office, and a number of other state and federal agencies, is not scheduled to be completed until the summer of 2012—after the close of the comment period for the Draft PEIS.

According to recent press accounts, it is not even clear at this point whether the State of Utah will follow the model adopted by the State of Wyoming where certain areas are designated as "core areas," within which mineral and other development is restricted to protect known sage grouse populations. According to Bob Budd—the range management specialist who helped develop the Wyoming sage grouse plan and is helping the State of Utah develop its plan—it remains an "open question" whether Utah will follow the "core area" approach. See April 30, 2012 article: "Saving the Sage Grouse," KUER Local News.3

Moreover, Utah DWR has recognized that rigorous development of new information is needed to explain how sage-grouse survival and productivity are affected by habitat loss or alteration from a variety of factors. Factors unrelated to energydevelopment include hunting mortality, West Nile virus, extreme weather conditions, non-native invasive plants (especially cheatgrass, which dramatically increases wildfire frequency, as well as severity), the proliferation of avian and mammalian predators, and other factors. See DWR, Utah's Plan for Sage-Grouse and Development (Updated Jan. 24, 2010). The initial surveys have not even identified leks or sage grouse in some of the areas that the Draft PEIS broadly defines as core or priority habitat. As importantly, even after the general sage grouse planning activities are completed, determining the particular risks associated with oil shale development will require further rigorous evaluation even if the planning effort concludes that sage grouse numbers have been observed in or around the project area.

The BLM is also in the early stage of its approach to address sage grouse in the context of the agency's wider land use planning effort. On December 9, 2011, BLM and the United States Forest Service ("FS") initiated a scoping process for a series

of ElSes in order to assist the agency in "incorporate[ing] consistent objectives and conservation measures for the protection of greater sage-grouse and its habitat into relevant RMPs and LMPs by September 2014 in order to avoid a listing under the Endangered Species Act." 76 Fed. Reg. 77008, 09. This wide-ranging NEPA process, which is part of BLM's overall sage grouse conservation program, has only just begun and will not be completed until September of 2014.

As significantly, the BLM and FS have committed to "coordinate and communicate with State, local, and tribal governments to ensure that the BLM and FS consider provisions of pertinent plans, seek to resolve inconsistencies between State, local, and tribal plans, and provide ample opportunities for State, local, and tribal governments to comment on the development of amendments or revisions." Id., at 77011. BLM's stated commitment to collaboration and cooperation with State, local, and tribal governments in the larger sage grouse planning effort stands in stark contrast to BLM's actions in the Draft PEIS where BLM is proposing to exclude significant areas from future oil shale leasing before the State of Utah has even completed its own planning effort, and without any apparent coordination with the county governments.

In sum, it is impossible for BLM to know at this point either (a) what areas the State of Utah will designate as core or priority habitat for sage grouse (or even whether Utah will follow the core/priority framework)4 (b) how local BLM field offices will implement those state designations as they impact BLM lands subject to BLM's multiple use mandate under the Federal Land Policy and Management Act ("FLPMA"), 43 U.S.C. §§ 1701-1787.

BLM improperly discusses the sage grouse core and priority areas in the Draft PEIS as if these areas were already established, and implemented, by the BLM and the State of Utah. For example, BLM states:

Although the current oil shale RD&D lease areas are excluded from greater sage-grouse core and priority habitats, a portion of the Enefit PRLA in Utah occurs within greater sage-grouse priority habitat (approximately 2.338 acres).

Draft PEIS, at 6-140 (emphasis added); see a/so Figure 6.1.3-5 (showing roughly half of Enefit's PRLA as covered by priority sage grouse habitat). Given its stated intent to work with the State of Utah to cooperatively manage sensitive sage grouse habitat, BLM cannot know what areas will be designated as core or priority sage grouse habitat at this stage in the process. BLM should wait for Utah to complete its sage grouse conservation process (a process which involves the participation of both the BLM and the U.S. Fish and Wildlife Service) before jumping to conclusions about the location of sensitive sage grouse habitat in the context of BLM's resource management plan revisions for oil shale.

Moreover, even if these new designated sage grouse habitat withdrawal areas do not prevent Enefit from developing its existing RD&D areas (including the preference right lease area), they nonetheless create unnecessary uncertainty around Enefit's existing lease and PRLA. The "one size fits all" approach also fails to give the local BLM filed offices the discretion to weigh the potential impacts of site specific plans in the context of reviewing particular oil shale development proposals. BLM's 2008 PEIS and ROD understood this need for field office flexibility and provided an

adaptive management process whereby the impacts to sensitive resources such as sage grouse habitat could be addressed at the time when BLM was revising a concrete development plan. BLM itself acknowledges that it will likely have to undergo at least two more NEPA analyses before any commercial development proposals are approved: one before approving any specific commercial lease, and another before commercial oil shale development operations are approved. The local BLM field office is best suited to assess the risks of a particular leasing or development proposal on sensitive sage grouse areas at the time when those impacts are better identified and understood.

Any reliance on purported "new information" concerning the sage grouse to withdraw or impose restrictions on lands suitable for oil shale development is premature, arbitrary and capricious, and would constitute an abuse of BLM's discretion. 5 U.S.C. § 706. So too, BLM's proposal to exclude sage grouse habitat areas based on speculation runs afoul of CEQ's regulatory mandate that "[ajgencies shall insure the professional integrity, including scientific integrity, of the discussions and analysis in environmental impact statements." 40 C.F.R. § 1502.24.

3 Available at http://www.pubticbroadcasting.net/kuer/ne\vs.ncwsmain/article/l/0/l925029/KUER.Local.News/Savi ng.the.Satze.Grouse. (Last visited April 30, 2012).

4 The Draft PEIS in many places appears to use the terms "core" and "priority" areas interchangeably. However, this only adds to the contusion about the current state of the various federal and state sage grouse planning efforts. For example, the BLM has recently discussed sage grouse conservation efforts in terms of "priority" and "general"1 areas, whereas states such as Wyoming have developed state-conservation strategies using "core areas." Cp. BLM Instruction Memorandum No. 2012-044, BLM National Greater Sage-Grouse Land Use Planning Strategy, December 27, 2011 (available at http://www.blm.gov/wo/st/en/info/regulations/Instruction_Memos_and_Bulletins/national instruction /2012/1M_2012-044.html) with Wyoming Governor Mead's June 2, 2011 Executive Order 2011-5, Greater Sage Grouse Core Area Protection, (available at http://gf.state.wy.us/web201 l/Departments/Wildlife/pdfs/SAGEGROUSE_EO COREPROTECTION 0000651 .pdf). BLM has an obligation to clearly define the terms it uses, and the context for those terms, when proposing wide-ranging revisions to its resource management plans. **#10])>**

12

<([#11 [*9.2.4*] 2. BLM's Current RMPs Have Already Addressed Sage Grouse

BLM's "new information" justification ignores the fact that BLM already considered the potential of oil shale leasing on sage grouse under its existing RMPs and made

clear that further plan amendments may be appropriate at the commercial leasing stage (as opposed to the present land use allocation stage). In fact, BLM itself acknowledges that Alternative 1 and 4 provide for the flexibility to address specific sage grouse areas at the commercial leasing stage once more information becomes known:

> Depending on what the applicable RMP provides with respect to LWC [lands with wilderness characteristics] and core and priority sagegrouse habitat, it may be necessary to initiate a plan amendment at the leasing and/or development stage to make allocation decisions on an individual RMP basis regarding management of these lands with respect to oil shale and tar sands resources. The reason for qualifying the amount of acreage available for lease under this alternative is that while areas of core and priority sage grouse and areas of LWC are left open for potential future leasing and development of oil shale and tar sands resource, the likelihood of all this acreage as being available for further oil shale and tar sands resources leasing and development is low. National and state-specific guidance related to sage-grouse management and protection of core and priority habitat will likely result in substantially less acreage being available, as will field office management decisions related to the protection of LWC.

Draft PEIS, at 2-48, 2-52 (emphasis added). Thus, BLM's current RMPs (represented as Alternative 1 in the Draft PEIS) already provide a mechanism to address protection of key sage grouse habitat areas once that information becomes known., and as a process for protecting that habitat has been established through a cooperative federal-state process.

BLM further explains the rationale for waiting until the leasing or development stages to make RMP modifications related to sage grouse habitat areas:

> It is difficult to establish disturbance amounts at the programmatic level, before more is known regarding the specifics of leasehold location and technology to be used. Tables 2.3.3-4 and 2.3.4-5 show what this might look like under different protective scenarios. The scenarios are only provided to illustrate this idea, but the decisions to protect these amounts are not being made at this time as part of this land use plan amendment initiative. These decisions would be made at the field office level as part of the NEPA and/or planning analyses completed for leasing and site specific development.

Id., at 2-52. BLM admits that (1) lands available under the existing RMPs may need to be modified in the future to account for lands that are later identified as sensitive Sage Grouse habitat, but (2) those decisions are difficult to make at the land use allocation stage before the agency knows the specific needs of the species in each geographic areas and before knowing the particular oil shale technology may be used at that location. Far from being "new information," the need to manage sensitive Sage Grouse habitat was known in 2008 when BLM established the existing RMPs. At that time, BLM incorporated an adaptive management strategy into the existing planning process to strategically protect sensitive habitat once it was

identified. That approach was, and is, the most sensible approach to minimizing the impact of oil shale development on sensitive sage grouse habitat. **#11])>**
<([#12 [*3.1.3*] C. There is No New Information About Wilderness Characteristics That Justifies Re-Upending Current RMPs
Contrary to BLM's assertions in the Draft PEIS, there is no new information about areas with wilderness characteristics that justify revisions the RMPs. As BLM properly recognized, the current RMPs already protect those lands of known environmental sensitivity that BLM has concluded should be protected under existing law:
[T]he BLM has determined that certain lands within the most geologically prospective oil shale resource areas must be excluded from commercial leasing, under all alternatives, to comply with existing laws and regulations . . . . As a result, commercial leasing is excluded from all designated Wilderness Areas, WSAs, and other areas that are part of the NLCS lands administered by the BLM (e.g., National Monuments, NCAs, WSRs, National Historic Landmarks, and National Historic and Scenic Trails), existing ACECs that are currently closed to mineral development, and lands within incorporated town and city limits.
Draft PEIS, at 2-30. Even under the status quo, sizeable portions of lands that are geologically promising for oil shale development have been excluded from available development due to the need to preserve known areas of environmental sensitivity. Unlike Alternatives 2 and 3, however, the current RMPs do not unnecessarily restrict development on lands where mineral development is not precluded under current law, and for which other means might be used to protect potentially sensitive resources at the oil shale leasing and development stages.
Moreover, the current RMPs empower individual BLM field offices to address particular lands with wilderness characteristics on a site-specific basis at the appropriate stage in the leasing process:

fTIhe decision as to how to manage LWCs [lands with wilderness characteristics! was left to the discretion of the individual BLM field offices, which would determine the management of such areas through additional planning and NEPA processes. . . .
Draft PEIS at 2-21 (emphasis added). BLM acknowledges that specific resource concerns may be addressed through future planning and environmental review processes. This is the only approach that makes sense when so much is unknown about the nature and impact of specific oil shale development technologies on particular areas that potentially contain wilderness characteristics.
#12])> <([#13 [*9.6*] V. BLM MUST CLARIFY THE LEGAL RIGHTS OF EXISTING RD&D LESSEES
Throughout the Draft PEIS, BLM represents that the existing RD&D leases will be governed by their lease terms and will not be subject to BLM's proposed land use allocations. For example, BLM explains:
The scope and analysis for this PEIS does not include review of the decisions by the Secretary of the Interior to issue RD&D leases

described in Section 1.4.1. Those leases authorize activities on six 160-acre parcels located in Colorado and Utah (see Figure 2.3.2 of this PEIS) and also identify conditions under which commercial development could occur on 4.970 acres of preference right lease areas (PRLAs) included in the leases. A total of 30,720 acres may be developed under the terms of these leases. . . . The RD&D leases are prior existing rights and are not the subject of decisions within the PEIS. with the exception that all alternatives address the subsequent availability of the lands contained in these leases should the initial leaseholder relinquish the existing leases.

Draft PEIS at 1-12 (emphasis added). Similar representations about the status of the RD&D leases are found throughout the Draft PEIS. See, e.g., id., at 1-17 ("These RD&D leases and the conversion right to commercial operations on preference acreage represent a prior existing right that may be exercised upon compliance with the terms of the lease.") (emphasis added); Id., at 2-30 ("In all three allocation alternatives, the BLM recognized that the six existing RD&D leases contain terms and conditions that could allow commercial development of the original leases and associated PRLAs totaling 30,720 acres."). BLM's representations fail to clarify the status of the existing RD&D leases.

#13])> <([#14 [*9.6*] A. BLM Must Commit to Honor All RD&D Lease Terms

BLM needs to revise the Draft PEIS to specify which provisions BLM considers to be included in the "terms of the lease" for each of the RD&D leases. For example, in section 1.4.1—the section which specifically addresses the relationship of the proposed action to the existing RD&D leases—lists a series of 'terms" according to which BLM offered the RD&D leases in its initial Federal Register solicitation. Draft PEIS at 1-16. In chapter 2, BLM states that "a summary of the key lease terms and conditions regarding the PRLAs is provided in Section 1.4.1." Draft PEIS at 2-30. However, nowhere in the Draft PEIS does BLM list the actual terms and conditions from the RD&D leases themselves, nor does BLM mention whether it intends to honor all these terms and conditions.

In particular, the Draft PEIS fails to disclose whether BLM intends to honor all the terms and conditions of the June 27, 2007 RD&D lease that BLM issued to Enefit's predecessor in interest, Oil Shale Exploration Company, L.L.C. See BLM Lease No. UTU-84087 ("Enefit RD&D lease"). Enefit's RD&D lease includes an Addendum No. 1 ("Lease Addendum") that was executed and added to the lease in January 2009. Among the terms of the lease addendum is a provision that allows Enefit to elect to have the conversion of its RD&D lease governed by BLM's 2008 OS Rule "in lieu of any subsequent regulation or amendments to regulations in effect" at the time Enefit desires to make the lease conversion. Lease Addendum, Sec. 2(a).

The elective conversion option in the Lease Addendum is of considerable importance to Enefit since it provides Enefit with contractual certainty that its commercial development plans will be governed by an established regulatory framework rather than a new regulatory regime that is presently unknown and which may include provisions that undermine Enefit's investment-backed development expectations. In short, Enefit is entitled to know whether BLM intends to honor its contract. To that end, BLM should include a clear and concise statement about the

legal rights of the existing RD&D lessees. This statement must contain an unambiguous confirmation that the BLM intends to honor all of the terms in the existing RD& **#14])>** D leases, including the terms and conditions contained in the Lease Addendum.

<([#15 [*3.15*] B. BLM NEEDS TO REVISE MAPS TO DEPICT APPROPRIATE DEVELOPMENT AREAS FOR RD&D LEASES

BLM should revise its maps to make clear that even under Alternative 2, the RD&D lessees are entitled to convert their RD&D leases into commercial leases. For example, although BLM acknowledges Enefit's right to develop its RD&D lease according to the terms of its existing RD&D lease, (Draft PEIS at 2-30), these areas are not reflected correctly on the relevant map depicting Alternative 2's coverage in Utah at page 2-41 of the PEIS. This map should be corrected to make clear that Enefit's PRLA is exempt from any of the new development restrictions included in Alternative 2.

BLM needs to provide one consolidated map that clearly depicts both (1) the existing RD&D leases and PRLAs, and (2) the specific areas which BLM proposes to exclude from development by resource type (e.g., sage grouse habitat, lands with wilderness characteristics, waters with wild & scenic river characteristics, etc.). BLM's current maps that show the lands that are excluded from leasing under Alternative 2 do not identify the existing RD&D leases or PRLAs. See, e.g, Figure 2.3.3-2, Draft PEIS at 2-38 (showing lands withdrawn from leasing under Alternative 2, but failing to identify exiting RD&D lease areas). BLM also needs to clarify, both in the text of the Final PEIS and in associated maps, the precise relationship between any new development restrictions under Alternative 2 and the existing RD&D lessees' PRLAs.

#15])> <([#16 [*2*] VI. ALTERNATIVE 2 MIRRORS AN ALTERNATIVE THAT BLM HAS ALREADY REJECTED5

In contrast to Alternative 1, each of the action alternatives in the Draft PEIS unnecessarily restricts lands that would be available for future commercial oil shale leasing based on arbitrary land use policy judgments and speculation about future resource impacts that are presently unknown and unknowable.6 None of these alternatives satisfies the Congressional directive in the 2005 EPAct that oil shale and tar sands are "strategically important domestic resources that should be developed to reduce the growing dependence of the United States on politically and economically unstable sources of foreign oil imports." 42 U.S.C. § 15927(b).

5 Unless specified, Enefit's discussion of "Alternative 2" applies to both oil shale sub-alternatives:
Alternative 2(a) and 2(b). Both sub-alternatives would drastically reduce the acreage available for
commercial oil shale leasing, while Alternative 2(b) suffers from the additional defects as discussed in
Section VII below.

6 While Enefit focuses most of its discussion on Alternative 2 since that is the alternative BLM has
put forward as its preferred alternative, Enefit also opposes alternatives 3 and 4 of the Draft PEIS.

Alternative 4 contains some, and Alternative 3 contains all, of the Alternative 2's infirmities identified
in this section. Alternative 3 flaunts the clear direction of Congress to establish a commercial oi! shale leasing program since it would limit leasing to the existing RD&D leases. Alternative 4, for its
part, would prematurely and unnecessarily restrict the acreage that is available for commercial oil
shale leasing.
#16])> <([#17 [*2.2*] [*9.2.3*] A. Alternative 2 Fails to Satisfy the Congressional Mandate to Make the Most Geologically Prospective Areas Available for
Commercial Leasing
Alternative 2, which is essentially a restatement of Alternative C from the 2008 Oil Shale and Tar Sands PEIS, would designate only 461,965 acres for application for commercial oil shale leasing, with only 252,181 acres available for commercial leasing in Utah. See Table 2.3.2-2; Draft PEIS, at 2-27. This represents more than a 75% reduction in available leasing acreage from the status quo. Id. (Alternative 1 makes 2,017,741 acres available for application for commercial leasing overall, and 670,558 acres in Utah). See also id., at 6-67 (describing reduction in available leasing acreage under Alternative 2). As such, Alternative 2 is essentially a nondevelopment alternative that would make sustainable commercial oil shale leasing
extremely difficult.

Alternative 2 is inconsistent with the Congressional mandate of the 2005 EPAct. BLM itself admitted this fact in 2008 when it rejected an alternative (Alternative C) that largely mirrors the current Alternative 2:
Alternative C was not selected as the Proposed Plan amendment
because the alternative would not make "the most geologically
prospective lands in Colorado, Utah, and Wyoming" as available for
application for leasing. Thus it is not fully consistent with the mandate
of the Energy Policy Act of 2005. Much of the most geologically
prospective acreage would be excluded under Alternative C; in
particular areas which are in close proximity to three of the six RD&D
leases would be excluded.
2008 OS ROD, at 22 (emphasis added). BLM properly rejected this alternative in 2008 because it was not consistent with Congress' mandate to BLM, and BLM has provided no justification for ignoring Congress' mandate in the Draft PEIS.
By ignoring Congress' mandate and dramatically reducing the surface acreage available for commercial leasing, Alternative 2 would result in correspondingly severe reduction in the potential recovery of the underlying oil shale resource. By way of illustration, Mr. Michael Vanden Berg, Project Geologist with the Utah Geological Survey, estimates that Alternative 2 would result in a 63% reduction in the recoverable oil shale resource from the No Action Alternative (69 billion barrels to 25.7 billion barrels of in place oil). See Exhibit B, April 18, 2012 Memorandum from Michael Vanden Berg: Oil shale resource on U.S. BLM land proposed for leasing in Utah under 2012 PEIS Alternative 2b.
Mr. Vanden Berg also estimates that Alternative 2(b) would result in a 53.5%

reduction of recoverable oil shale resource on Enefit's RD&D preference lease (848.4 million barrels to 394.8 million barrels) from the No Action Alternative based on surface development constraints outlined in the Draft PEIS. See Exhibit C, April 18, 2012 Memorandum from Michael Vanden Berg: Oil resource (at 25 gpt) on Enefit American Oil's preferential BLM RD&D lease. While the Draft PEIS represents that Enefit's right to develop its existing RD&D lease will be governed by the terms of the RD&D lease rather than the proposed revisions the RMPs, (Draft PEIS at 1-12)7, Mr. Vanden Berg's resource estimates illustrate the highly deleterious character of the BLM's preferred alternative (Alternative 2(b)) in the Draft PEIS.

1 See Section V above. **#17])>**

<([#18 [*2.2*] B. Alternative 2 Undermines Commercial Development by Relegating Commercial Oil Shale Leasing to Fragmented Lease Parcels

Alternative 2 would limit commercial oil shale leasing and development to small, noncontiguous parcels. To illustrate, Alternative 2 drastically reduces the amount of acreage available for oil shale development in Utah from 670,358 acres in Alternative 1 to 252,181 acres in Alternative 2. Table 2.3.2-2; Draft PEIS at 2-27. The area made available for leasing under Alternative 2 is insufficient to justify commercial oil shale development.

To take oil shale technology to the level of a commercial facility requires access to a relatively consolidated area of land so that power inputs, surface equipment, pipelines, roads, and other facilities can be located efficiently. Alternative 2 provides little contiguous acreage deemed suitable for oil shale leasing. Given the reduction of available surface area and available resources, Alternative 2 is overly restrictive and unnecessarily confines potential oil shale development opportunities.

This "fragmentation" is another reason BUM rejected a comparable alternative during its last round of RMP revisions:

[Alternative C1 unreasonably fragments the area that would be available for application, resulting in parcels that are unlikely to be explored, leased, or developed. This could be an impediment to sound and rational development of the resource and can reduce the economic return to the public. If oil shale resources are by-passed because of the exclusions of Alternative C, that could also limit the benefits to the nation from exploitation of a domestic unconventional energy source.

2008 OS ROD, at 22 (emphasis added).

Further, the total area that will actually be developed will likely be even smaller and more fragmented than the area potentially available for leasing under the current Alternative 2 because regulatory and land management factors that will reduce the acreage will be applied in the future. For example, the pre-leasing NEPA process will provide BLM an opportunity to exclude areas that are environmentally sensitive and cannot be reasonably mitigated to protect resource values. In addition, areas may be restricted (even after leasing) by Endangered Species Act ("ESA") requirements, National Historic Preservation Act requirements, and the effect of various BLM stipulations.

The consideration and analysis of effects of post-leasing factors, like those on public

lands available for natural gas, is illustrative. See National Petroleum Council, Balancing Natural Gas Policy, Vol. IV, p. 6-7 (2003) (finding that 17 percent of areas open to natural gas leasing in the Uintah-Piceance Basin were, nevertheless, undevelopable because they were subject to "prohibitive conditions of approval"). Thus, a significant percentage of acreage that is actually leased may never be developed.

It is reasonable to assume that commercial project economics must be based on large-scale operations to support the initial development of project infrastructure. Section 369 of the 2005 EPAct recognizes this fact since it defined an oil shale lease as up to 5,760 acres. In general, Alternative 2 would allow development on generally small, fragmented parcels that are unlikely to be explored or developed because of the impracticality of operating in noncontiguous areas.

Finally, there are a variety of business factors that, as a practical matter, restrict the acreage that would be developed. Once a company acquires a lease, it must learn more about the tract's environmental factors, subsurface geology and hydrology. Different oil shale recovery technologies may operate better in one type of geology than in another, and in-depth analysis may reveal that there are geologic or hydrologic factors that affect the choice of technology, which may also modify proposed project plans. There may be economic or environmental benefits to locating facilities in one location rather than another, which could at least affect the sequence in which areas would be developed, as well as the siting of facilities or the proposed project plot plan. These, and other factors, will tend to restrict the amount of development that actually occurs, even if a large amount of land is potentially available as under Alternative 1.

#18])> <([#19 [*8*] C. Alternative 2 Impermissibly Restricts BLM's Discretion to Manage Lands According to FLPMA's Multiple Use Mandate

Alternative 2 appears to be defined by a premise that oil shale cannot be developed in a multiple land-use scenario. Alternative 2 automatically excludes major portions of federal lands at a very early stage without considering whether BLM can accommodate multiple use development at a future time. Because an additional site-specific NEPA analysis will be conducted before any commercial leases are issued, and a second site-specific NEPA analysis will be completed before BLM approves any commercial plan of development, BLM may decide on a case-by-case basis at a later stage whether an area should be open to commercial leasing and development and, if so, which protective measures and restrictions should be instituted to protect sensitive areas.

BLM specifically considered, and rejected, a comparable and overly restrictive alternative as incompatible with its multiple use mandate under FLPMA:

> Selection of alternative C precipitously limits or restricts the decisionmaker's discretion to balance oil shale use and the protection of resources or resource values, in accordance with FLPMA's principal of 'multiple use.' . . . It would be premature to eliminate areas prior to site-specific analysis based on factors that are not known now, but that would be known at the leasing or operation permitting stages, such as location, timing and type of oil shale technology, that may show that these resources could be adequately protected through mitigation.

2008 OS ROD, at 22 (emphasis added). These reasons apply with equal force to Alternative 2 in the Draft PEIS.

Likewise, Alternative 2 fails to recognize the role of adaptive management in protecting sensitive resources at the appropriate stage in the oil shale leasing and development process. Section 202(c) of FLPMA, 43 U.S.C. § 1712, provides that BLM should use a multiple-use approach in its land use plans. This means that BLM must grapple with how to balance its many important surface resources with providing the energy America needs. Here, a massive oil shale resource—the largest in the world—is found in a relatively small area, and this nationally important resource should be given significant weight.

Adaptive management can and should be used to guide BLM's commercial oil shale program. The commercial leasing process envisioned in the Draft PEIS would require environmental analysis at the pre-leasing stage and at the plan-ofdevelopment stage. Both of these stages would precede any significant landdisturbing activities and, thus, provide an opportunity to evaluate environmental protection measures based on information then available to BLM. The technology for efficiently producing oil shale is likely to progress over time, and the body of knowledge concerning oil shale production impacts will increase as well. As new information becomes available, BLM will be have an increasingly clear basis for making decisions that are currently veiled by uncertainty.

This adaptive management-based leasing process provides a clear basis for making Alternative 1 the most desirable alternative. Alternative 1 allows the broadest range for future decision-making and potential resource development. Nevertheless, it fully protects environmental resources because no resources can be disturbed without further environmental analysis and administrative action. Alternative 2, in contrast, inappropriately prejudges whether vast tracts containing vast energy resources are suitable without any site-specific analysis. **#19])>**

<([#20 [*1.5*] VII. Alternative 2(b) Would Undermine Commercial Oil Shale Development

BLM's has selected Alternative 2(b) as its preferred alternative for commercial oil shale leasing. Draft PEIS at 2-76. This alternative combines Alternative 2(a), which drastically reduces the acreage currently available for commercial oil shale leasing BLM's existing RMP regime, with a "RD&D First" requirement. Under the RD&D First requirement, BLM could issue a commercial oil shale lease only after an applicant (1) applied for and obtained an RD&D lease, and (2) satisfied the conditions of its RD&D lease, including the requirements related to converting that lease to a commercial lease. Draft PEIS at 2-35. This alternative would undermine commercial oil shale leasing and development.

A. The Draft PEIS Fails to Properly Analyze Alternative 2(b)

Although BLM selects Alternative 2(b) as its preferred alternative, the agency offers almost no analysis of this alternative. BLM simply asserts: "As the Draft PEIS was being developed, the idea for this alternative emerged. It is presented here in brief. This alternative is not noted elsewhere in the document but will be developed further in preparation of the Final PEIS." Draft PEIS at 2-35. BLM admits that it is proposing to select an alternative that the agency itself has not thought through and for which the stakeholders have received very little information. This approach is

fraught with problems.8
BLM is legally obligated to provide the public with an opportunity to review and comment on any material change to the current oil shale leasing regime. The agency has not done so. Given the systemic problems with Alternative 2(b), BLM should abandon it as the preferred alternative in the final PEIS. If, however, BLM persists in pursuing this alternative in the final PEIS, the agency must provide the public another opportunity to review and comment on this approach once the details are known and revealed, and before the agency amends the affected RMPs.
B. BLM Misrepresents How and Why the Agency Decided to
Consider Alternative 2(b)
BLM's claim that the idea for this alternative emerged "as the Draft PEIS was being developed" is disingenuous. In fact, BLM committed to propose to amend its oil shale commercial leasing regulations in a manner that would only allow BLM to issue a commercial lease (1) as part of a conversion of an RD&D lease, or (2) after BLM issues a call for expression of leasing interest. 2008 Rule Settlement, at fl 3(c). Contrary to BLM's representations, the RD&D First proposal was not a recently discovered development option, but is rather an alternative that BLM has known about, and contractually committed to pursue, for over a year. BLM has an obligation to disclose to the public the true reason the agency has selected Alternative 2(b) as its preferred alternative.

8 Enefit focuses its discussion in this letter on Alternative 2(b) because BLM has identified this as the
agency's preferred alternative. However, because Alternative 4(b) suffers from the same infirmities
as those discussed in this section, Enefit also opposes Alternative 4(b).
#20])> <([#21 [*9.6*] C. BLM Fails to Explain How Alternative 2(b) Would Impact a
Company That Has Already Demonstrated The Ability to
Commercially Develop Oil Shale
BLM fails to explain how the RD&D first alternative would be applied to a company which has already demonstrated the ability to proceed to commercial oil shale development. This approach would be highly prejudicial to a company like Enefit which has a long and demonstrated history of developing oil shale on a commercial scale outside the United States. It would also unfairly penalize existing RD&D lessees which are able to demonstrate commercial development of oil shale resources.
BLM must address how this alternative would impact three different development scenarios: (1) where a company successfully demonstrates commercial oil shale development technology on an existing federal RD&D lease, (2) where a company successfully develops commercial oil shale development technology on private or state lands in the United States, and (3) where a company has demonstrated the ability to commercially develop oil shale in other parts of the world.
For example, would a company such as Enefit be permitted to apply for a new commercial lease once it converts its existing RD&D lease to commercial production, or would Enefit be required to apply for yet another RD&D lease if it wanted to acquire additional lease acreage over and above its current preference right lease

acreage?
Similarly, would Enefit be allowed to apply for a commercial lease based on a successful oil shale project located on private lands in Utah or elsewhere in the United States? Finally, will a company like Enefit with a long history of successful oil shale development projects in other countries such as Estonia and Jordan be allowed to apply for a commercial oil shale lease on BLM lands without first going through the RD&D process on BLM lands? Enefit and the other stakeholders are entitled to answers for each of these threshold questions.
Enefit has been working diligently toward developing the RD&D lease that its predecessor-tn-interest acquired in 2007. As a company with a demonstrated ability to produce oil from oil shale on a commercial scale, Enefit stands ready and able to help America meet its domestic energy needs. Any proposal that requires Enefit to obtain and prove up yet another RD&D lease even after it has demonstrated its commercial development technology through its existing RD&D lease or activities on private lands would stifle commercial oil shale production and undermine Congress' direction to BLM to establish sustainable domestic oil shale program. See EPAct, 42 U.S.C. §16927(b)(3).
#21])> <([#22 [*1.1.1*] [*10.3*] VIM. BLM MUST PROVIDE STAKEHOLDERS AN OPPORTUNITY TO
RESPOND TO PROPOSED RMP REVISIONS AND REGULATORY CHANGES IN A COORDINATED AND INFORMED MANNER
BLM has indicated that the public comment period for the Draft PEIS will end on May 4, 2012.9 Although BLM mentioned in passing that it "will be proposing some amendments to [the 2008 OS Rule] in a separate rulemaking proceeding," Draft PEIS at 2-7, BLM does not disclose (a) when it plans to issue the draft revised commercial oil shale leasing regulation, (b) what changes those draft regulations might contain, or (3) how any such changes might impact prospective commercial oil shale developers, including existing RD&D lessees. Instead, BLM discounts the impact of regulatory changes on the RMP amendment process:
While the BLM is in the process of considering amendments to this [2008 OS Rule], this PEIS does not depend on any particular provision of the rule but anticipates that decisions regarding leasing and approval of plans of development will be informed by appropriate analysis documents as required by NEPA and other applicable authorities.
Draft PEIS at 2-33. BLM's approach of asking the public to analyze and comment on the proposed changes to the RMP Amendments with no knowledge of the changes BLM plans to propose to the commercial leasing regulation is not only bad policy, but it places Enefit and the other stakeholders in the impossible position of trying to speculate on BLM's proposed regulatory changes when they are commenting on BLM's RMP revisions.
BLM's staggered approach is even more troubling in light of commitments BLM has made in its settlement agreement involving the 2008 Rule. See Exhibit D, 2008 Rule Settlement. As part of this settlement agreement between BLM and a consortium of oil shale opponents, BLM committed to "publish a notice of proposed rulemaking ("NPR") in which BLM will propose amendments to the [2008 OS Regulation] to address the royalty rate and environmental protection requirements applicable to oil

shale commercial leasing." BLM has committed to publish its notice of proposed rulemaking by May 15, 2012 (fifteen months after the settlement agreement was executed) and to publish a final regulation by November 18, 2012. See 2008 Rule Settlement, at Iffl 1, 5. Under the current schedule, BLM must publish its proposal to amend the commercial oil shale regulation within two weeks following the close of the comment period for the Draft PEIS.

This approach makes no sense from a public policy or legal standpoint and appears to be designed to keep the public and existing oil shale lessees in the dark about material changes to the regulatory structure for commercial leasing at the same time those parties are expected to review and comment on BLM's proposed RMP Amendments. While BLM mentions the 2008 Rule Settlement in the Draft PEIS, (e.g., Draft PEIS at 2-16), the agency does not alert the public to key commitments BLM made in that agreement. For example, BLM committed in the settlement agreement to (a) remove the current royalty rate for oil shale production, (b) change the conditions under which a RD&D lease may be converted to a commercial lease, and (c) amend the standard used by BLM for approving a commercial lessee's plan of development. See 2008 Rule Settlement, at ffl| 2-4. These changes—the specifics of which will not be known until BLM publishes its rulemaking proposal—could radically alter the regulatory landscape for domestic oil shale production.

For example, BLM's current regulations currently set the royalty rate at 5% on products from oil shale for the first five years of commercial production. This rate will increase by 1% per year starting with the sixth year of commercial production until it reaches a maximum royalty rate of 12.5%. 43 C.F.R. § 3903.52 (b). Given the substantial capital investment required for a lessee to get to the commercial oil shale development stage, an increase in this royalty rate could well make commercial oil shale development uneconomical on federal lands in the United States. Other changes contemplated under the settlement could also undermine the viability of domestic oil shale production, and yet BLM has not even disclosed these proposed changes. BLM should extend the public comment period for the Draft PEIS by a minimum of 90 days to allow Enefit and other stakeholders to respond to all of BLM's changes to its oil shale program in an informed and coordinated fashion.

9 See BLM Issues Draft Programmatic Environmental Impact Statement for Oil Shale and Tar Sands,
available at http://www.blm.gov/wo/st/en/intb/newsroom/2QI2/februarv/NR 02 03 2012.html.
There seems to be some disagreement between BLM and the Environmental Protection Agency on
exactly when the comment period ends. In its February 3, 2012 Notice of Availability ("NOA") of
the Draft PEIS, EPA indicated that the comment period closes on May 2, 2012- 90 days after the official publication of EPA'sNOA. See 77 Fed. Reg. 5513 (Feb. 3, 2012), available at http://www.gDo.gov/fdsvs/pkg/FR-2012-02-03/pdf/2012-2435.pdf.

#22])> <([#23 [*3.1.7*] IX. BLM SHOULD CLARIFY THAT EVACUATION CREEK DOES NOT
CONTAIN WILD AND SCENIC RIVER CHARACTERISTICS

The Draft PEIS reflects confusion about the status of Evacuation Creek and its

impact on Enefit's right to develop its existing RD&D lease. The Final PEIS should be revised to clarify two key features of this intermittent stream. First, under the terms of its RD&D lease, Enefit is permitted to develop lands adjacent to Evacuation Creek subject to existing lease stipulations. BLM recognized this fact in its 2008 OS ROD:

Under the terms of the existing RD&D leases, the Federal government has a commitment to grant the RD&D leases [ ] for commercial development within the original 160-acre lease, as well as its PRLA, provided the terms and conditions of the leases are met. As a result, all lands within the PRLAs would be available for issuance of commercial leases to the current RD&D lessees, subject to lease requirements.

2008 OS ROD, at 16. Thus, regardless of whether portions of Evacuation Creek are determined to contain potentially eligible wild and scenic river characteristics, Enefit's ability to develop areas in and around Evacuation Creek will be governed by the terms of Enefit's lease instead of either the 2008 RMP Amendments or any subsequent RMP revisions.

Second, the Draft PEIS mischaracterizes the current state of Evacuation Creek. By way of example, BLM suggests that:

For Alternative 3, as is the case for Alternative 1, for the Enefit RD&D project in Utah, the same portion of the area that is not identified as available for lease also is not available for application for commercial leasing under Alternative 3 because of the presence of a potentially eligible WSR, Evacuation Creek (see discussion of this in Section 2.3.3.1).10

Draft PEIS, at 2-43. See a/so Figure 6.1.3-6, Draft PEIS, at 6-160 (mistakenly identifying Evacuation Creek as a Wild and Scenic River). This is not accurate. Although the 2008 RMP PEIS had identified portions of Evacuation Creek as potentially eligible for WSR designations, the BLM Vernal field office subsequently concluded that these segments were not eligible. See 2008 OS ROD, at 16 ("Subsequent to the publication of the PRMP/FEIS, the 2008 Vernal Field Office ROD determined that the river segments of Evacuation Creek were not eligible for inclusion."). BLM should clarify in the Final PEIS that Evacuation Creek is no longer eligible for designation as a WSR and revise its maps in the Final PEIS accordingly.

10 Notwithstanding BLM's representation, the Draft PEIS provides no discussion of Evacuation Creek in Section 2.3.3.1.

#23])> <([#24 [*6.3*] X. APPENDIX A SHOULD BE REVISED TO DESCRIBE DEVELOPMENTS IN ENEFIT'S RD&D PLAN AND SELECTED TECHNOLOGY

Appendix A of the Draft PEIS provides a summary of the various oil shale technologies that are proposed for the existing RD&D leases. BLM's description of Enefit's technology as explained on pages A-75 to A-83, should be revised to incorporate the following summary of Enefit's RD&D technology.

Enefit American Oil (EAO) is a wholly owned subsidiary of Enefit (known as Eesti

Energia for activities in Estonia). The Utah project was previously owned and operated by Oil Shale Exploration Company (OSEC). In March 2011, Enefit acquired 100 percent of OSEC's shares and assumed full ownership and control of the project and all of OSEC's assets. Enefit renamed OSEC as Enefit American Oil and has continued development of the project with several key modifications to the business plan and the RD&D plan put forward by OSEC and outlined in Appendix A of the PEIS. These modifications are currently under discussion and pending approval of BLM's Vernal Field Office. As such, they are outlined only briefly below.
The Utah Oil Shale Project, located in the Uinta Basin of eastern Utah, is designed to develop a green field oil shale mining and shale oil production complex producing approximately 30 million tons of oil shale rock per year and 50,000 barrels per day of premium quality refinery ready shale oil from the Green River Formation. Shale oil will be produced from multiple new generation Enefit Technology surface retorts with onsite upgrading of the raw oil. The proposed facility will be located in the Uinta Basin, approximately twelve miles southeast of Bonanza in Uintah County, Utah.
The RD&D Development Phase is broken up into 2 sub-phases which build on the test work and progress of the previous sub-phase. The second sub-phase will include completion of the Enefit Pilot testing and PreFEED (Preliminary Front End Engineering Design) and completion of the application for conversion of the lease. New or unexpected information in an earlier phase may impact the timing or activities in a following phase. The RD&D Development Phase activities will be carried out on both the BLM RD&D lease property and EAO's adjacent private Skyline property, as well as offsite at Enefit's R&D center in Frankfurt Germany. As Enefit has a proven technology operating industrially in Estonia and is not developing a new technology, the RD&D phases' goal will be to prove the technology of, and optimize the design for, this specific resource in Utah.
#24|)> XI. INCORPORATION OF OTHER COMMENTS
In order to avoid unnecessary duplication, and to the extent not inconsistent with these comments, Enefit hereby incorporates by reference the comment letters from the following entities:
> State of Utah
> American Petroleum Institute
> National Oil Shale Association
> Utah Association of Counties
> Utah Mining Association
<([#25 [*9.1*] X. CONCLUSION AND SPECIFIC RECOMMENDATIONS
BLM's PEIS proposes changes to BLM's existing RMPs that would discourage domestic oil shale development, vitiate Congressional intent to encourage domestic oil shale development, and run afoul of the Congressional prohibition against the implementation of DOf's Wild Lands Policy. Enefit recommends that BLM make the following changes in the Final PEIS:
> Clarify that the purpose and need of the present RMP revision process is controlled by the 2005 EPAct's directive that oil shale and tar sands deposits are "strategically important domestic resources that should be developed to reduce the growing dependence of the United States on politically and economically unstable sources of foreign oil imports";

> Eliminate from further consideration any alternative—such as
Alternatives 2, 3 or 4—that violate the 2005 EPAct's directive;
#25])> > **<([#26** [*2.1.1*] Select Alternative 1 as the proposed alternative; **#26])>**
<([#27 [*9.6*] Confirm that development of the current RD&D leases is governed by all the terms and conditions of those leases, including the Lease Addendum; **#27])>**
<([#28 [*9.6*] Confirm that a company which has demonstrated the ability to produce oil shale at a commercial scale may apply for a commercial lease on BLM lands without first going through the RD&D leasing process;
#28])> > **<([#29** [*9.2.1*] [*3.1.3*] Cease the illegal implementation of DOI's "Wild Lands Policy"; **#29])>**
<([#30 [*9.3*] Recognize that site-specific resource impacts, including those related to sage grouse and lands with wilderness characteristics, can be addressed at later stages in the leasing process when more is known
about the particular resource and the attendant oil shale development
technology; **#30])>**
>**<([#31** [*3.1.7*] Explain that Evacuation Creek is no longer considered by BLM to be
eligible for listing as a wild and scenic river; **#31])> <([#32** [*6.3*] Revise the summary of Enefit's development technology in Appendix A as discussed in Section X above; **#32])>**
<([#33 [*1.1.1*] Finally, Enefit requests that BLM extend the comment period of the Draft PEIS by at
least 60 days to provide Enefit and other stakeholders an opportunity to respond to
any proposed revisions to the RMPs and any proposed changes to the 2008 OS
Rule, in an informed and coordinated fashion. **#33])>**
Rikki Lauren Hrenko
CEO
Enefit American Oil
28
Case 1:09-cv-00085-JLK Document 63-1 Filed 02/15/11 USDC Colorado Page 1 of 10
IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLORADO
Civil Action No. 09-cv-00085-JLK
COLORADO ENVIRONMENTAL COALITION,
WESTERN COLORADO CONGRESS,
WILDERNESS WORKSHOP,
BIODIVERSITY CONSERVATION ALLIANCE,
SOUTHERN UTAH WILDERNESS ALLIANCE,
RED ROCK FORESTS,
WESTERN RESOURCE ADVOCATES.
NATIONAL WILDLIFE FEDERATION.
CENTER FOR BIOLOGICAL DIVERSITY,
THE WILDERNESS SOCIETY,
NATURAL RESOURCES DEFENSE COUNCIL,
DEFENDERS OF WILDLIFE, and
SIERRA CLUB,
Plaintiff,
v.

KE”N SALAZAR, Secretary of the Interior,
in his official capacity;
WILMA LEWIS, Assistant Secretary, Land and Minerals
Management, in her official capacity;
BOB ABBEY, Director, Bureau of Land Management, in his official capacity; and
THE UNITED STATES DEPARTMENT OF THE INTERIOR and
THE BUREAU OF LAND MANAGEMENT, federal agencies.
Defendants, and
SHELL FRONTIER OIL & GAS INC.,
Intcrvenor Defendant.
SETTLEMENT AGREEMENT
Page 1 of 10
Case 1:09-cv-00085-JLK Document 63-1 Filed 02/15/11 USDC Colorado Page 2 of 10
WIIEREAS, on November 17, 2008, the U.S. Bureau of Land Management issued an Approved Resource Management Plan Amendments / Record of Decision for Oil Shale and Tar Sands Resources to Address Land Use Allocations in Colorado, Utah, and Wyoming and Final Programmatic Environmental Impact Statement (‘‘2008 OSTS ROD”);
WHEREAS, the 2008 OSTS ROD amended the decisions specific to oil shale and tar sands resources in twelve land use plans: Glenwood Springs Resource Management Plan (“RMP”), Grand Junction RMP, and White River RMP in Colorado; Book Cliffs RMP, Diamond Mountain RMP, San Rafael Resource Area RMP, Price River Resource Area Management Framework Plan (“MFP”), Henry Mountain MFP, and San Juan Resource Area RMP in Utah; and Great Divide RMP, Green River RMP, and Kcmmerer RMP in Wyoming;
WHEREAS, on January 16, 2009, Plaintiffs Colorado Environmental Coalition. Western Colorado Congress, Wilderness Workshop, Biodiversity Conservation Alliance, Southern Utah Wilderness Alliance, Red Rock Forests, Western Resource Advocates, National Wildlife Federation, Center for Biological Diversity, The Wilderness Society, Natural Resources Defense Council, Defenders of Wildlife, and Sierra Club (collectively “Plaintiffs”) filed a Complaint for declaratory and injunctive relief against Ken Salazar, in his official capacity as Secretary of the Department of the Interior, Wilma Lewis, in her official capacity as Assistant Secretary for Land and Minerals of the U.S. Department of the Interior, the U.S. Department of the Interior, Bob Abbey, in his official capacity as Director of the U.S. Bureau of Land Management,1 and the U.S. Bureau of Land Management (“BLM”) (collectively “Defendants”), and filed a First Amended Complaint on June 15, 2009;
WHEREAS, Plaintiffs allege that the issuance of the 2008 OSTS ROD violated BLM regulations, the Administrative Procedure Act (“APA”). the Federal Land Policy and Management Act (“FLPMA”), the National Environmental Policy Act (“NEPA”), and the Endangered Species Act (“ESA”);
WHEREAS, on May 11, 2009, Shell Frontier Oil & Gas Inc. was granted status as Intervenor in this action; and
1 Pursuant to Fed. R. Civ. P. 25(d), current agency officials have been substituted for their predecessors in office.
Page 2 of 10
Case1:09-cv-00085-JLK Document 63-1 Filed 02/15/11 USDC Colorado Page 3 of 10
WHEREAS, Defendants and Plaintiffs (the “Settling Parties”), through their authorized representatives, and without any admission or final adjudication of the issues of fact or law with

respect to Plaintiffs' claims, have reached a settlement in this action;
NOW, THEREFORE, Tl IE SETTLING PARTIES HEREBY STIPULATE AND AGREE AS FOLLOWS:
I . No later than 120 days after this Settlement Agreement becomes effective. Defendants will publish a notice of intent ("NOT") to consider amending each of the land use planning decisions made by the 2008 OSTS ROD. Such notice shall initiate scoping under NEPA in coordination with the RMP amendment process pursuant to 43 C.F.R. § 1610.2(c), which may be carried out on a programmatic or individual planning area basis. The NOI will propose to analyze the environmental effects of an alternative or alternatives in a NEPA analysis that would exclude from commercial oil shale or tar sands leasing:
a. All areas that Defendants have identified, or may identify as a result of inventories conducted during this planning process, as lands containing wilderness characteristics;
b. The whole of the Adobe Town ''Very Rare or Uncommon" area, as designated by the Wyoming Environmental Quality Council on April 10, 2008;
c. Core or priority sage grouse habitat, as defined by such guidance as Defendants may issue;
d. All areas of critical environmental concern (**ACEC") located within the areas analyzed in the September 2008 Oil Shale and Tar Sands Resources Leasing Final Programmatic Environmental Impact Statement O'OSTS PEIS"); and
e. All areas identified as excluded from commercial oil shale and tar sands leasing in Alternative C of the September 2008 OSTS PEIS.
2. As part of the NEPA analysis initialed by the publication of the NOI, Defendants will analyze the environmental effects of at least the following three alternatives:
a. An alternative or alternatives removing all of the lands described above in Paragraph 1 from applications for oil shale or tar sands leasing;
Page 3 of 10
Case 1:09-cv-00085-JLK Document 63-1 Filed 02/15/11 USDC Colorado Page 4 of 10
b. At least one alternative that removes some, but not all, of the lands described above in Paragraph I from applications for oil shale or tar sands leasing; and
c. The 4ino action" alternative.
The purpose and need statement in the NEPA analysis supporting the RMP amendment process or processes shall be defined in such a manner that it can be met by any and all of the alternatives described in Paragraph 2(a) and 2(b) above. Nothing in this section shall limit Defendants from analy/.ing additional alternatives or from selecting an alternative that best meets Defendants' objectives,
3. In conjunction with the RMP amendment process or processes and supporting NEPA analysis, Defendants will provide a public protest period, pursuant to 43 C.F.R. §§ 1610.2 and 1610.5-2, and provide for state consistency review, pursuant to 43 U.S.C. § I7l2(c)(9) and 43 C.F.R. § 1610.3-2(e).
4. During the RMP amendment process or processes and supporting NEPA process. BLM will consider information timely provided by Plaintiffs and other interested parties during scoping and other public comment opportunities.

5. Subject to available appropriations and staffing and subject to compliance with applicable laws and regulations. Defendants will use best efforts to issue a final decision or decisions regarding amendments for each of the planning decisions made by the 2008 OSTS ROD no later than December 31, 2012. Pursuant to 43 C.F.R. § 1610.5-1 and 43 C.F.R. § 1610.5-2, such final decision or decisions may not be issued until after the resolution of any protests. When Defendants issue such final decision or decisions. Plaintiffs may challenge such decision or decisions in a new action brought under applicable federal law. Defendants do not waive any defenses they might have against such a challenge.
6. Defendants acknowledge that under the terms of the 2008 OSTS ROD, prior to the approval of an application to convert an oil shale Research, Development & Demonstration ("RD&D") lease to a commercial lease, Defendants must conduct an analysis of the proposed conversion under NEPA in addition to the final OSTS PEIS supporting the 2008 OSTS ROD. If Defendants approve such an application, Plaintiffs may challenge the approval only in a new action brought under applicable federal law. Defendants do not waive any defenses they might have against such a challenge.
Page 4 of 10
Case 1:09-cv-00085-JLK Document63-1 Filed 02/15/11 USDC Colorado PageSoMO
7. Prior to the publ icaiion of a new decision or decisions regarding amendments for each of the planning decisions made by the 2008 OSTS ROD, or January 15. 2013, whichever occurs first, Defendants will not issue a call for expression of leasing interest for commercial oil shale leases pursuant to 43 C.F.R. § 3921.30. In the event that Defendants conduct the new planning processes agreed to in this Settlement Agreement by addressing individual plans rather than by using a programmatic approach, Defendants will only issue a call for expression of leasing interest for commercial oil shale leases in planning areas subject to a new decision regarding plan amendments, as described in Paragraph 5. Nothing in this Settlement Agreement prohibits Defendants from soliciting the nomination of parcels to be leased for RD&D of oil shale recovery technologies in the Stales of Colorado, Utah, and Wyoming. If Defendants approve the issuance of an RD&D lease prior to the publication of a new decision regarding amendments for the applicable planning decision made by the 2008 OSTS ROD as set forth in Paragraph 5, Plaintiffs may challenge such a decision in a new action brought under applicable federal law. If Plaintiffs bring such a challenge to an RD&D lease issued prior to the publication of a new decision regarding amendments for the applicable planning decision made by the 2008 OSTS ROD as set forth in Paragraph 5, they may not bring any claims that were raised or could have been raised in the above-caplioncd civil action with respect to the 2008 OSTS ROD. Defendants do not waive any defenses they might have against such a challenge.
8. Prior to the publication of a new decision or decisions regarding amendments for each of the planning decisions made by the 2008 OSTS ROD, or January 15, 2013, whichever occurs first, Defendants will not, on their own initiative, offer lands for competitive tar sands leasing, or accept expressions of interest in tracts for competitive tar sands leasing pursuant to 43 C.F.R. § 3141.6-1 through 43 C.F.R. § 3141.7. The commitment in the preceding sentence, however, does not apply to the Defendants' ongoing consideration of the expression of commercial leasing interest for tar sands in the Asphalt Ridge Special Tar Sands Area near Vernal, Utah, submitted by Jones Leasing Service on behalf of Ocean Enterprise Group on November 16, 2009, or to the possible sale or issuance of a lease for some or all of the parcels identified in that expression of leasing interest. Plaintiffs may protest or challenge such potential actions as provided by law, but shall not raise any claim that was or could have been raised in the

above-captioned civil action. In the event that Defendants conduct the new planning processes agreed to in this Settlement Agreement by addressing individual plans rather than by using a
Page 5 of 10
Case1:09-cv-00085-JLK Document 63-1 Filed 02/15/11 USDC Colorado Page 6 of 10
programmatic approach. Defendants will only offer lands for competitive tar sands leasing, or accept expressions of interest in tracts for competitive tar sands leasing, in planning areas subject to a new decision regarding plan amendments, as described in Paragraph 5.
9. Those acting with actual authority of Plaintiffs shall not authorize Plaintiffs to fund any other entity or person not a party to this Settlement Agreement specifically to commence or maintain a legal challenge against Defendants regarding the agency actions at issue in the above-captioned civil action. Defendants may terminate this Settlement Agreement upon notice to Plaintiffs of any violation of this paragraph, subject to the dispute resolution provisions of Paragraph 13.
10. In consideration of Defendants' agreement, as described above, to initiate a newplanning process addressing the land use planning decisions made by the 2008 OSTS ROD, Plaintiffs waive and release all claims against Defendants arising from the issuance of the 2008 OSTS ROD. Nothing in this Settlement Agreement waives or limits in any way any legal claim Plaintiffs may pursue: (a) against any final decision or decisions regarding amendments for each of the planning decisions made by the 2008 OSTS ROD as set forth in Paragraph 5; (b) against any agency action that tiers to, relies upon, or incorporates any such final decision or decisions; (c) against any agency action that tiers to, relies upon, or incorporates by reference the 2008 OSTS PHIS, except for any decision concerning an RD&D lease issued prior to the publication of a final decision regarding amendments for the applicable planning decision(s) made by the 2008 OSTS ROD as set forth in Paragraph 5; or (d) against any agency action that tiers to, relies upon, or incorporates by reference BLM's determination of "no effect1" pursuant to ESA Section
7 concerning the 2008 OSTS RMP amendments, except for any decision concerning an RD&D lease issued prior to the publication of a final decision regarding amendments for the applicable planning decision made by the 2008 OSTS ROD as set forth in Paragraph 5.
11. The Settling Parties agree to jointly move to administratively close this action pursuant to D. C. Colo. L. Civ. R. 41.2 as set forth in the attached joint motion and proposed order, which is hereby made a part of this Settlement Agreement. The terms of this Settlement Agreement shall become effective upon entry of an order by the Court administratively closing the action as set forth in the proposed order. Upon issuance of a new decision or decisions regarding amendments for each of the planning decisions made by the 2008 OSTS ROD, the
Page 6 of 10
Case 1:09-cv-00085-JLK Document 63-1 Filed 02/15/11 USDC Colorado Page 7 of 10
Settling Parties shall promptly file a motion to voluntarily dismiss Plaintiffs' claims with prejudice pursuant to Fed. R. Civ. P. 4l(a)(l)(A)(ii).
12. Defendants" issuance of a new decision or decisions regarding amendments for each of the planning decisions made by the 2008 OSTS ROD discharges all of Defendants' obligations under this Settlement Agreement. If Defendants fail to fulfill any obligation required by this Settlement Agreement. Plaintiffs' sole remedy will be to move the Court to reopen this lawsuit, subject to compliance with D. C. Colo. L. Civ. R. 41.2 and Paragraph 13. Plaintiffs shall be permitted to move to reopen this action only on the following grounds: (a) Defendants fail to publish a notice of intent ("NOT') by 120 days after the effective date of this Settlement

Agreement to consider amending each of the land use planning decisions made by the 2008 OSTS ROD, in violation of Paragraph 1; (b) Defendants issue a notice of intent proposing plan amendments that does not propose excluding from commercial oil shale or tar sands leasing one or more of the areas identified in Paragraph 1; (c) Defendants issue a NHPA document that does not analyze one or more of the alternatives identified in Paragraph 2; (d) Defendants fail to provide a public protest period pursuant to 43 C.F.R. §§ 1610.2 and 1610.5-2 or fail to provide for state consistency review pursuant to 43 U.S.C. § 17l2(c)(9) and 43 C.F.R. § 16l03-2(e) in violation of Paragraph 3; (e) Defendants fail to issue a new planning decision or decisions by December 31, 2012 as provided in Paragraph 5; (0 Defendants approve an application to convert an RD&D lease to a commercial lease before conducting additional NEPA analysis in violation of Paragraph 6; (g) prior to January 15, 2013, Defendants issue a call for expression of leasing interest for oil shale before issuing a new planning decision applicable to the area of the proposed leases in violation of Paragraph 7; or (h) prior to January 15, 2013, Defendants offer lands for competitive tar sands leasing, or accept expressions of interest in tracts for competitive tar sands leasing before issuing a new planning decision applicable to the area of the proposed leases in violation of Paragraph 8. This Settlement Agreement shall not be enforceable through a motion to enforce this Settlement Agreement or a proceeding for contempt of court.

13. If there is a dispute over compliance with any term or provision of this Settlement Agreement, the disputing Settling Party will notify the other Settling Party in writing of the dispute. The Settling Parties shall meet and confer orally in an attempt to resolve the dispute. The Settling Parties shall attempt to negotiate a resolution of the dispute within 30 days of the written notification of the dispute. If the Settling Parties do not reach a resolution during the 30-

day period, the disputing Settling Party may move to reopen this lawsuit based upon one of the grounds specified in Paragraphs 9 or 12. This Settlement Agreement shall terminate if the Court reopens this lawsuit.

14. No provision of this Settlement Agreement shall be interpreted as, or constitute, a commitment or requirement that Defendants take action in contravention of the APA, BLM regulations, FLPMA, NRPA, the ESA, or any other law or regulation, either substantive or procedural. Nothing in this Settlement Agreement shall be construed to limit or modify the discretion accorded to Defendants by the APA, BLM regulations, FLPMA, NEPA, the ESA, or general principles of administrative law with respect to the procedures to be followed in making any determination required herein, or as to the substance of any final determination.

15. Nothing in this Settlement Agreement shall be interpreted as, or shall constitute, a requirement that Defendants arc obligated to pay any funds exceeding those available, or take any action in contravention of the Anti-Deficiency Act, 31 U.S.C. § 1341, or any other applicable appropriations law,

16. This Settlement Agreement was negotiated to avoid further litigation only. This Settlement Agreement has no precedential value and does not represent an admission or waiver by any Settling Party to any fact, claim, or defense relating to any issue in this lawsuit and may not be used as evidence of such fact, claim, or defense in any litigation.

17. Rach Settling Party shall bear its own attorneys' fees and costs.

18. The undersigned representatives of each Settling Party certify that they arc fully authori/ed by the Settling Party or Parties they represent to agree to the Court's entry of the terms and conditions of this Settlement Agreement and do hereby agree to the terms herein.

19. This Settlement Agreement may only be supplemented, modified, or amended by written agreement of the Settling Parties.
20. This Settlement Agreement represents the entirety of the Settling Parties' commitment with regard to settlement.
21. Counsel for Plaintiffs have reviewed this Settlement Agreement and have authorized Defendants' counsel to file this Settlement Agreement on behalf of the Settling Parties.
IT IS HEREBY AGREED.
Page 8 of 10
Case1:09-cv-00085-JLK Document 63-1 Filed 02/15/11 USDC Colorado Page 9 of 10
Dated: February 15,2011 1GMACIA S. MORENO,
Assistant Atlorney General
/si Luke Hajek
LUTHER L. HAJEK
Trial Attorney
U.S. Department of Justice
Environmental & Natural Resources Division
Natural Resources Section
Ben Franklin Station, P.O. Box 663
Washington, D.C. 20044-0663
Tel: (202) 305-0492
Uil<c.hiijck (/ iisdoi.gov
A/ John H. Martin
JOHN H. MARTIN
Trial Attorney
U.S. Department of Justice
Environmental & Natural Resources Division
Wildlife & Marine Resources Section
999 18th Street, South Terrace Suite 370
Denver, CO 80202
Tel: (303) 844-1383
j o I in J i. n i a nji v irn.i sd QJ4LQV
Attorneys for Federal Defendants/Respondents
Dated: February 15,2011 A/ Edward B. Zukoski
EDWARD B. ZUKOSKI
Barthjustice
1400 Glenarm Place, Suite 300
Denver, CO 80202
Tel: (303) 996-9622
l/ukoski'Y/carlhiuslii'o.om
Attorney Tor Plaintiffs
Joro Walker
Western Resource Advocates
150 South 600 East, Ste. 2A
Salt Lake City, UT 84102
Tel: (801) 487-9911

jyva I k e r^M\xj stern rcsourccs.org
Attorney for Western Resource Advocates
Page 9 of 10
Case1:09-cv-00085-JLK Document 63-1 Filed 02/15/11 USDC Colorado PagelOoMO
Brendan R. Cummings
Center for Biological Diversity
351 California Street, Ste. 600
San Francisco, CA 941 04
Tel: (41 5) 436-9682, cxt. 314
b c u m m i n s f / b i o i o i c a k i i v c r s i t .
Attorney for Biodiversity Conservation Alliance.,
Center for Biological Diversity,
Colorado Environmental Coalition, Defenders
of Wildlife, Natural Resources Defense Council,
Red Rock Forests, Sierra Club, Southern Utah
Wilderness Alliance, Western Colorado
Congress, Western Resources Advocates,
The Wilderness Society, and Wilderness
Workshop
Eric E. Huber
Sierra Club
1650 38th St. Ste. 102W
Boulder. CO 80301
(303) 449-5595 ext.101
(303) 449-6520 (fax)
e r i ic . I HI be i" f'rsic rraclub.org
Attorney for Plaintiff Sierra Club
Page 10 of 10
GARY R. HERBERT
Governor
GREG BEl.l,
Lieutenant Governor
State of Utah
DEPARTMENT OF NATURAL RESOURCES
MICHAEL R. STVI.ER
Kxec-utive Din-it or
Utah Geological Survey
RICHARD C. ALLIS
Stale Geologist/Division Director
April 18,2012
Memorandum to file
Subject: Oil shale resource on U.S. BLM land proposed for leasing in Utah under the 2012 PEIS Alternative 2b
Prepared by: Michael D. Vanden Berg, Project Geologist, Utah Geological Survey
In 2008, the Utah Geological Survey calculated the available oil shale resource within a continuous zone averaging 25 gallons of oil per ton of rock (gpt) for lands proposed by the U.S.

BLM for commercial oil shale leasing within the 2008 PEIS. The estimated oil shale resource for the 2008 preferred alternative totaled 69.0 billion barrels (UGS Special Study 128). In 2012, the BLM revised the oil shale/tar sand PEIS and developed a new preferred alternative, which reduced the amount of available land for oil shale leasing (Alternative 2b). Using the same methods applied in Special Study 128, UGS calculated the total oil shale resource at 25 gpt on lands available for commercial oil shale leasing under the 2012 PEIS Alternative 2b as 25.7 billion barrels.

These resource estimations reflect the total in-place oil within a continuous interval averaging 25 gpt. These estimations do not take into account any environmental, land-use, or economic constraints (besides a minimum grade of 25 gpt).

UGS geologists believe that the quality of Utah lands available for commercial oil shale leasing is more important than the quantity and have worked hard to identify the areas of BLM land with the most potential for commercial development.

1594 West North Temple, Suite 31 ID, PO Box 146100, Salt Lake City, UT 84114-6100
telephone (801) 537-3300 . facsimile (801) 537-3400 - TTY (801) 538-7458 •geology.utah.gov
GEOLOGICALSUKVEV
DUCHESNE CO. UINTAH CO.
BLM lands available for application for
t>NR commercial oil shale leasing in Utah
under the proposed 2012 PEIS preferred
alternative 2b
Lands available for leasing Thickness - 25 Gallons
under alternative 2b Per Ton (GPTI Interval*
Oil Shale Resource
25 GPT Zone
Mahogany zone outcrop
Overburden contour
(top of 25 apt zone) Total Within BLM
Lease Area
j County boundary
Township/Range
UGS disclaimer- Although this producl represents the work ol professional scientists
the Utah Departmeni of Natural K.-simu.es. Utah Geological Survey, makes no
warranty, eiptesseil or implied, regarding its suitably for a paiticular use. The Utah
Department of Natural Resources. Utah Geological Sutvey. shaH not be Uable under
ilri mages with lesp^cTIo daims by users or Ihi5 product.
from UGS Spews/ Sfufly 128 tVancien Beta. 2008,
GARY R. HERBERT
Governor
GREG BELL
Lteutenanl davemor
State of Utah
DEPARTMENT OF NATURAL RESOURCES
MICHAEL R.STYLER
Kxeculiw Director
Utah Geological Survey

RICHARD G. ALLIS
Stale Geologist/Division Director
April 18,2012
Memorandum to file
Subject: Oil shale resource (at 25 gpt) on Enefit American Oil's preferential BLM RD&D lease
Prepared by: Michael D. Vanden Berg, Project Geologist, Utah Geological Survey
In 2012, the BLM revised the oil shale/tar sand PEIS and developed a new preferred alternative, which reduced the amount of available land for oil shale leasing (Alternative 2b) from the previous 2008 PEIS process. A portion of Enefit American Oil's BLM RD&D preference lease was excluded from the lands available for oil shale leasing under this new preferred alternative.
The UGS calculated the oil shale resource within a continuous interval averaging 25 gallons of oil per ton of rock (gpt) on Enefit's entire preference lease area as well as the preference lease area excluded as part of Alternative 2b. The methods used in calculating these resource estimations were the same as within UGS Special Study 128.
Oil shale resource on Enefit's entire BLM RD&D preference lease at 25 gpt = 848.4 million bbh.
Oil shale resource on Enefit's RD&D preference lease at 25 gpt excluded within the 2012 PEIS Alternative 2b = 394.8 million bbls.
These resource estimations reflect the total in-place oil within a continuous interval averaging 25 gpt. These estimations do not take into account any environmental, land-use, or economic constraints (besides a minimum grade of 25 gpt).
1594 West North Temple. Suite 31 !0, PO Box 146100. Salt Lake City, UT 84114-6100
telephone (801) 537-3300 . facsimile (801) 537-3400 . 'ITY (801) 538-7458 . geology.utah.gov
GEOLOGICAL 5UKVCY
Case1:09-cv-00091-JLK Document 80-1 Filed 02/15/11 USDC Colorado Page 1 of 9
IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLORADO
Civil Action No. 09-cv-00091-JLK
COLORADO ENVIRONMENTAL COALITION,
WESTERN COLORADO CONGRESS,
WILDERNESS WORKSHOP,
BIODIVERSITY CONSERVATION ALLIANCE,
SOUTHERN UTAH WILDERNESS ALLIANCE,
RED ROCK FORESTS,
WESTERN RESOURCE ADVOCATES,
NATIONAL WILDLIFE FEDERATION,
CENTER FOR BIOLOGICAL DIVERSITY,
THE WILDERNESS SOCIETY,
NATURAL RESOURCES DEFENSE COUNCIL,
DEFENDERS OF WILDLIFE, and
SIERRA CLUB,
Plaintiffs,
v.
KEN SALAZAR, Secretary of the Interior,
in his official capacity;
WILMA LEWIS, Assistant Secretary, Land and
Minerals Management, in her official capacity;

BOB ABBEY, Director, Bureau of Land Management
in his official capacity; and
THE UNITED STATES DEPARTMENT OF THE INTERIOR and
THE BUREAU OF LAND MANAGEMENT, federal agencies.
Defendants, and
AMERICAN PETROLEUM INSTITUTE and
SHELL FRONTIER OIL & GAS INC.,
Intervcnor Defendants.
SETTLEMENT AGREEMENT
Page 1 of 9
Case 1:09-cv-00091-JLK Document 80-1 Fiied02/15/11 USDC Colorado Page2of9
WHEREAS, on November 18, 2008, the U.S. Bureau of Land Management issued a
Kinal Rule regarding Oil Shale Management, 73 Fed. Reg. 69,414 (Nov. 18, 2008) ("Oil Shale Final Rule");
WHEREAS, the Oil Shale Final Rule amends regulations governing the leasing of"federal lands for purposes of developing oil shale resources and are set forth at 43 C.F.R. Parts 3900 - 3936;
WHEREAS, on January 16, 2009, Plaintiffs Colorado Environmental Coalition, Western Colorado Congress, Wilderness Workshop, Biodiversity Conservation Alliance, Southern Utah Wilderness Alliance, Red Rock Forests. Western Resource Advocates, National Wildlife Federation. Center for Biological Diversity, The Wilderness Society. Natural Resources Defense Council, Defenders of Wildlife, and Sierra Club (collectively "Plaintiffs") filed a Complaint for declaratory and injunclive relief against Ken Sala/ar, in his official capacity as Secretary of the Department of the Interior, Wilma Lewis, In her official capacity as Assistant Secretary for Land and Minerals of the U.S. Department of the Interior, the U.S. Department of the Interior, Bob Abbey, in his official capacity as Director of the U.S. Bureau of Land Management,1 and the U.S. Bureau of Land Management ("BLM") (collectively "Defendants1"), and filed a First Amended Complaint on June 15, 2009;
WHEREAS, Plaintiffs allege that the issuance of the Oil Shale Final Rule violated the Administrative Procedure Act O'APA"), the Federal Land Policy and Management Act ("FLPMA"), the Energy Policy Act ("EP Act"), the National Environmental Policy Act ("NEPA"), and the Endangered Species Act ("ESA");
WIIEREAS, on May 11, 2009, Shell Frontier Oil & Gas Inc. and the American
Petroleum Institute were granted status as Intervenors in this action; and
WHEREAS, Defendants and Plaintiffs (the "^Settling Parties'"), through their authorized representatives, and without any admission or final adjudication of the issues of fact or law with respect to Plaintiffs" claims, have reached a settlement in this action;
NOW, THEREFORE, THE SETTLING PARTIES HEREBY STIPULATE AND
AGRKE AS FOLLOWS:
1 Pursuant to Fed. R. Civ. P. 25(d), current agency officials have been substituted for their predecessors in office.
Page 2 of 9
Case 1:09-cv-00091-JLK Document 80-1 Filed 02/15/11 USDC Colorado Page 3 of 9
t . No later than 15 months after this Settlement Agreement becomes effective.
Defendants will publish a notice of proposed rulemaking ("NPR") in which BLM will propose amendments to the Oil Shale Final Rule to address the royalty rate and environmental protection

requirements applicable to oil shale commercial leasing. The proposed amendments shall be within the discretion of the Secretary of the Interior and shall include, but not be limited to, the proposed amendments set forth below.
2. The NPR will propose to remove the royalty rate for oil shale production, codified in the current regulation at 43 C.F.R. § 3903.52.
3. The NPR will propose the following changes to the environmental protection requirements applicable to oil shale commercial leasing, codified at 43 C.F.R. Parts 3900 - 3936:
a. Expressly stating that BLM may, in its discretion, deny an application to convert an oil shale Research, Development & Demonstration ("RD&D") lease to a commercial lease based on environmental or other resource considerations.
b. Expressly stating that BLM may, in its discretion, reject an oil shale commercial lessee's proposed plan of development based on environmental or other resource considerations.
c. Expressly stating that BLM will consider issuing a commercial oil shale lease only upon application of an RD&D lessee to convert its RD&D lease to a commercial lease, or after BLM issues a call for expression of leasing interest.
d. Providing that BLM will not issue an oil shale commercial lease, will reject any proposal to convert an oil shale RD&D lease to a commercial lease, and will not approve any plan of development for an oil shale commercial lease unless it is shown that the operations can occur without unacceptable environmental risk.
c. Providing that plans of development for oil shale commercial leases are required to include watershed and groundwater protection plans, airshed reviews, integrated waste management plans, and environmental protection and mitigation plans. The NPR will also propose to define the requirements of such plans and reviews.
Page 3 of 9
Case 1:09-cv-00091-JLK Document 80-1 Filed 02/15/11 USDC Colorado Page4of9
4. During the rulemaking process, BLM will consider information timely submitted by the Plaintiffs and other interested parties during public comment opportunities.
5. Subject to available appropriations and staffing and subject to compliance with applicable laws and regulations, Defendants will use best efforts to publish a final decision in the rulemaking process regarding oil shale management no later than November 18, 2012. When Defendants publish such a new final decision in the rulemaking process, Plaintiffs may challenge such new final decision in the rulemaking process in a new action brought under applicable federal law. Defendants do not waive any defenses they might have against such a challenge.
6. Defendants acknowledge that, prior to the approval of an application to convert an oil shale RD&D lease to a commercial lease. Defendants must conduct an analysis of the conversion under NEPA in addition to the Oil Shale and Tar Sands Final Programmatic Environmental Impact Statement published in September 2008. If Defendants approve such an application, Plaintiffs may challenge the approval only in a new action brought under applicable federal law. Defendants do not waive any defenses they might have against such a challenge.
7. Prior to the publication of a final decision in the rulemaking process regarding oil shale management, or January 15, 2013, whichever occurs first, Defendants will not issue a call

for expression of leasing interest for commercial oil shale leases pursuant to 43 C.F.R. § 3921.30. Nothing in this Settlement Agreement prohibits Defendants from soliciting the nomination of parcels to be leased for RD&D of oil shale recovery technologies in the States of Colorado, Utah, and Wyoming. If Defendants approve the issuance of an RD&D lease prior to the publication of a final decision in the rulemaking process regarding oil shale management. Plaintiffs may challenge such a decision in a new action brought under applicable federal law. If Plaintiffs bring such a challenge to an RD&D lease issued prior to the publication of a final decision in the rulemaking process regarding oil shale management, they may not bring any claims that were raised or could have been raised in the above-captioned civil action with respect to the Oil Shale Final Rule. Defendants do not waive any defenses they might have against such a challenge.

8. Those acting with actual authority of Plaintiffs shall not authorize Plaintiffs to fund any other entity or person not a party to this Settlement Agreement specifically to commence or maintain a legal challenge against Defendants regarding the agency actions at issue in the above-caplioncd civil action. Defendants may terminate this Settlement Agreement upon

notice to Plaintiffs of any violation of this paragraph, subject to the dispute resolution provisions of Paragraph 12.

9. In consideration of Defendants' agreement, as described above, to initiate a new rulernaking process regarding oil shale management, Plaintiffs waive and release all claims against Defendants arising from the promulgation of the Oil Shale Final Rule. Nothing in this Settlement Agreement waives or limits in any way any legal claim Plaintiffs may pursue: (a) against any final decision in the rulcmaking process regarding oil shale as set forth in Paragraph 5; (b) against any agency action that tiers to, relies upon, or incorporates any such final decision in the rulcmaking process; (c) against any agency action lhat tiers to, relies upon, or incorporates by reference the 2008 environmental assessment on the 2008 Oil Shale Final Rule, except for any decision concerning an RD&D lease issued prior to the publication of a final decision in the rulernaking process as set forth in Paragraph 5; or (d) against any agency action that tiers to, relies upon, or incorporates by reference BLM's determination of "'no effect" pursuant to the RSA Section 7 concerning the 2008 Oil Shale Final Rule, except for any decision concerning an RD&D lease issued prior to the publication of a final decision in the rulemaking process as set forth in Paragraph 5.

10. The Settling Parties agree to jointly move to administratively close this action pursuant to D.C. Colo. L. Civ. R. 41.2 as set forth in the attached joint motion and proposed order, which is hereby made a part of this Settlement Agreement The terms of this Settlement Agreement shall become effective upon entry of an order by the Court administratively closing this action as set forth in the proposed order. Upon issuance of a final decision in the rulemaking process regarding oil shale management, the Settling Parties shall promptly file a motion to voluntarily dismiss Plaintiffs' claims with prejudice pursuant to Fed. R. Civ. P.

1 1 . Defendants' promulgation of a final decision in the rulcmaking process regarding oil shale management discharges all of Defendants1 obligations under this Settlement Agreement. If Defendants fail to fulfill any obligation required by this Settlement Agreement, Plaintiffs" sole remedy will be to move the Court to reopen this lawsuit, subject to compliance with D. C. Colo. L. Civ. R. 41.2 and Paragraph 12. Plaintiffs shall be permitted to move to reopen this action only on the following grounds: (a) Defendants fail to publish a Notice of

Proposed Rulemaking ("NPR") by 15 months after this Settlement Agreement becomes

effective, proposing amendments to the 2008 Oil Shale Final Rule to address the royalty rate and environmental protection requirements applicable to oil shale commercial leasing, in violation of Paragraph I; (b) Defendants issue a notice of proposed rulemaking that does not propose to remove the royalty rate for oil shale production from the existing oil shale regulations in violation of Paragraph 2; (c) Defendants issue a notice of proposed rulemaking that does not propose one or more of the provisions identified in Paragraph 3; (d) Defendants fail to publish a final decision in the rulemaking process regarding oil shale management by November 18, 2012 as provided in Paragraph 5; (e) Defendants approve an application to convert an RD&D lease to a commercial lease before conducting additional NRPA analysis in violation of Paragraph 6; or (f) prior to January 15, 2013, Defendants issue a call for expression of leasing interest for oil shale resources before issuing a final decision in the rulemaking process regarding oil shale management in violation of Paragraph 7. This Settlement Agreement shall not be enforceable through a motion to enforce this Settlement Agreement or a proceeding for contempt of court.
12. If there is a dispute over compliance with any term or provision of this Settlement Agreement, the disputing Settling Party will notify the other Settling Party in writing of the dispute. The Settling Parties shall meet and confer orally in an attempt to resolve the dispute. The Settling Parties shall attempt to negotiate a resolution of the dispute within 30 days of the written notification of the dispute. If the Settling Parties do not reach a resolution during the 30-day period, the disputing Settling Party may move to reopen this lawsuit based upon one of the grounds specified in Paragraphs 8 or 11. This Settlement Agreement shall terminate if the Court reopens this lawsuit.
13. No provision of this Settlement Agreement shall be interpreted as, or constitute, a commitment or requirement that Defendants lake action in contravention of the APA, BLM regulations. FUPMA, NRPA, the ESA, or any other law or regulation, either substantive or procedural. Nothing in this Settlement Agreement shall be construed to limit or modify the discretion accorded to Defendants by the APA, BKM regulations, FLPMA, NRPA, the HSA, or general principles of administrative law with respect to the procedures to be followed in making any determination required herein, or as to the substance of any final determination,
14. Nothing in this Settlement Agreement shall be interpreted as, or shall constitute,
a requirement that Defendants are obligated to pay any funds exceeding those available, or take

any action in contravention of the Anti-Deficiency Act, 31 U.S.C. § 1341, or any other applicable appropriations law.
15. This Settlement Agreement was negotiated to avoid further litigation only. This Settlement Agreement has no precedential value and does not represent an admission or waiver by any Settling Parly to any fact, claim, or defense relating to any issue in this lawsuit and may not be used as evidence of such fact, claim, or defense in any litigation.
16. Each Settling Party shall bear its own attorneys' fees and costs.
17. The undersigned representatives of each Settling Party certify that they are fully authorized by the Settling Party or Parties they represent to agree to the Court's entry of the terms and conditions of this Settlement Agreement and do hereby agree to the terms herein.
18. This Settlement Agreement may only be supplemented, modified, or amended by

written agreement of the Settling Parties.
19. This Settlement Agreement represents the entirety of the Settling Parties" commitment with regard to settlement.
20. Counsel for Plaintiffs have reviewed this Settlement Agreement and have authorized Defendants' counsel to file this Settlement Agreement on behalf of the Settling Parties.
IT IS HEREBY AGREED.
Dated: February 15, 201 1 1GNACIA S. MORENO,
Assistant Attorney General
/?/ Luke Hajck
LUTHER L. HAJEK
Trial Attorney
U.S. Department of Justice
Environmental & Natural Resources Division
Natural Resources Section
Ben Franklin Station, P.O. Box 663
Washington, D.C. 20044-0663
Tel: (202) 305-0492
lukc.luijek
Is/ 'John H. Martin
JOHN H. MARTIN
Page 7 of 9
Case 1:09-cv-00091-JLK Document 80-1 Filed 02/15/11 USDC Colorado Page 8 of 9
Trial Attorney
U.S. Department of Justice
Environmental & Natural Resources Division
Wildlife & Marine Resources Section
999 18th Street, South Terrace Suite 370
Denver, CO 80202
Tel: (303) 844-1383
iiilllLJl-1" a rtiiVfrusdoj.uov
Attorneys for Federal Defendants/Respondents
Dated: February 15. 201 1 Is/ Echvard B. Zukoski
EDWARD B. ZUKOSKI
Earthju slice
1400 Glenarm Place, Suite 300
Denver, CO 80202
Tel: (303) 996-9622
t/ukoskifr/'carthjiisiici'.orLji
Attorney for Plaintiffs
Joro Walker
Western Resource Advocates
1 50 South 600 East, Ste. 2A
Salt Lake City, UT 84102
Tel: (801) 487-9911
Attorney for Western Resource Advocates

Brendan R. Cummings
Center for Biological Diversity
351 California Street, Ste. 600
San Francisco, CA 94104
Tel: (415) 436-9682, ext. 314
hcumniin
Attorney for Biodiversity Conservation Alliance,
Center for Biological Diversity,
Colorado Environmental Coalition. Defenders
of Wildlife, Natural Resources Defense Council,
Red Rock Forests, Sierra Club, Southern Utah
Wilderness Alliance, Western Colorado
Congress, Western Resources Advocates,
The Wilderness Society, and Wilderness
Page 8 of 9
Case 1:09-cv-00091-JLK Document80-1 Filed02/15/11 USDC Colorado Page9of9
Workshop
Eric E. Huber
Sierra Club
1 65038th St. Ste. 102W
Boulder, CO 80301
(303) 449-5595 exl.101
(303) 449-6520 (fax)
Attorney for Plaintiff Sierra Club
Page 9 of 9

OSTS2012D50269
Organization: Ouray County, Colorado, Lynn Padgett
Received: 5/3/2012 5:35:13 PM
Commenter1: Lynn Padgett - Ridgway, Colorado 81432 (United States)
Organization1: Ouray County, Colorado
Commenter Type: Local Government
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/7/2012 12:00:00 AM
Attachments: OSTS2012D50269.htm (OSTS2012D50269-58878.htm Size = 1 KB)
Lynn_M_Padgett_letter_supporting_oil_shale_impact_assessment_approach_OSTS2012D50269 .pdf (OSTS2012D50269-58877.pdf Size = 87 KB)
Submission Text
Please see the attached letter (pdf). Thank you, Lynn Padgett Commissioner, District 1 Ouray County, Colorado See Attachment.

Lynn M Padgett, Ouray County Commissioner, District 1
PO Box 2058 Ridgway, CO 81432 • 970-258-0836 • lpadgett@ouraycountyco.gov

May 3, 2012
2012 Oil Shale & Tar Sands PEIS - COMMENTS
To be submitted via:
http://ostseis.anl.gov/involve/comments/index.cfm
Comments in support of conducting extensive research on environmental, socioeconomic, and other impacts to local and regional economies are required research before issuing commercial licenses.
To whom it may concern:
<([#1 [*3.10.2*] Whether the promises of energy independence from oil shale industry proponents could be
truthful is not yet knowable. Before we rush into leasing, and allow research and development on vast tracks of arid western lands within the Piceance Basin and portions of Colorado, Utah, Wyoming, westerners and local governments need to be assured that the development plan addresses the full impacts of oil shale development. History of past oil shale and energy industry booms and busts show that the extensive needs for transportation, housing, schools, utilities (water, electric, telecommunications, broadband), and other health, safety and welfare services are immediate while financial help from fees or revenues lag years to decades behind these needs. It is impossible for a small community or county with less than 5,000 or even 60,000 people create the infrastructure and deliver services for large numbers of temporary or permanent workers that come virtually overnight.
Communities within the Colorado River Watershed that are working hard to ensure they have a healthy and diversified economy through agriculture, tourism, outdoor recreation, hunting, industry, and mining need to know if they will be subject to water calls from oil shale research or development activities downstream; and if they could suffer brown outs because the existing grid or telecommunications infrastructure is inadequate for the influx of workers or the demands that will come from extracting and processing the oil shale.
Ouray County, Colorado is a rural county within the headwaters of the Uncompahgre River watershed which is within the Gunnison and Colorado River basins. There are no reservoirs or water storage facilities other than Mother Nature's snowpack above us. Approximately 50% of our land is public land, mostly federal lands. Our valleys are green with working ranch lands.

Our rural character and scenic beauty along with our mining, ranching and railroad heritage is essential to our collective livelihoods -- for Ouray County to survive we need to make sure we can continue our land use practices and have power and telecommunications that work when our residents, visitors, and businesses need it. We need to make sure that visitors continue to find our county and region an attractive place to visit. We need to make sure that our economy is not sacrificed for another's.
Currently, our telecommunications infrastructure is such that a music festival bringing 10,000 people to a neighboring county can render most cell-phones unable to place outgoing calls for hours or days, because our current infrastructure is operating very close to capacity under "normal" conditions.
#1])> <([#2 [*5*] The oil shale leasing and development plan must include a thorough vetting and deep
understanding of potential impacts. Effective mitigation measures must be based on accurate data and be built into the plan, prior to leasing or activities, in order to ensure that if research and development of oil shale moves forward, it will not cause the demise of the long-existing

communities connected over long-distances from the lease areas by hydrology or infrastructure.
#2])> <([#3 [*3.4.1*] We need to be thorough and have a full understanding of potential impacts to the environment
and our communities before we take steps toward large-scale commercial leasing or development of oil shale. The water needed to develop oil shale could be a game changer, transforming western Colorado's agricultural heritage and precluding other options for its economy. We will continue to work with the Interior Department and are thankful for their partnership."
#3])> <([#4 [*3.10.2*] Some of the topics that must be detailed in the plan include at a minimum:
- Ability of Local Governments to provide health, safety, welfare prior to any revenues or impact fees being generated or compounded;
- Ability of existing transportation, education, health care, housing, local services, telecommunications and broadband, electricity, and other infrastructure to provide services that will be immediately demanded by oil shale leasing, research and development;
#4])> <([#5 [*3.4.1*] - Potential impacts to water rights, not just in the immediate area, but hundreds of miles
away where they may be impacts from a call, especially on the Colorado River system. Could areas with no positive revenue sources from oil-shale be dried up or subject to electrical or telecommunications brown outs? What if oil shale needs more water than is currently being discussed? Who will the winners and losers be?
#5])> <([#6 [*6.2*] - Will power needs by the oil shale industry exceed the fuel to be gained by exploiting
oil shale? The potentially affected area is much more vast than the areas currently proposed for leasing. We need to be assured that the range of influence of oil shale activities is properly assessed and that no community is significantly impacted unexpectedly. Local governments in Colorado such as Ouray County operate on very tight budgets. So do local cooperative utilities that distribute or provide our water and power. **#6])>**
<([#7 [*3.10.4*] - What will be the impacts to national parks, outdoor recreation, hunting, fishing, and
tourism. Tourism in the rural mountain west is interconnected. Visitors may stay in one area only a few days to a week, but it is part of a longer and more diverse vacation itinerary that makes the trip worth the time and expense of getting to a rural and rugged region. Most visitors enjoy a blended vacation of outdoor recreation, heritage tourism, agricultural tourism, and arts events. If activities one or more of these categories does that diminish the tourism experience so much that that visitors forgo coming altogether? **#7])>**
<([#8 [*3.10.2*] We want to ensure that communities expected to be impacted by commercial development of
oil shale have the appropriate and necessary financial resources to address and cope with the effects of production. We must have detailed scientific data in order to know how we can accommodate this industry, still provide basic health, safety and welfare services, and have livable communities with diversified and healthy economies. The range of influence extends far beyond the counties containing lease parcels. **#8])>**
<([#9 [*2.2.1*] It appears that Alternative 2(b) of the 2012 Oil Shale and Tar Sands Draft

Programmatic
Environmental Impact Statement that at least requires R&D prior to development with a conservation emphasis is on the right track. Please consider if Alternative 2 fully scopes my comments in ensuring that impacts to outlying communities will be investigated and mitigated effectively prior to conducting any activities. **#9])>**
Sincerely,
Lynn Padgett
5/3/2012
Page 4
Ouray County Commissioner, District 1
Bin C, Ouray, CO 81427
970-258-0836

OSTS2012D50270
Organization: Town of Carbondale
Received: 5/3/2012 5:37:02 PM
Commenter1: - Carbondale, Colorado 81623 (United States)
Organization1: Town of Carbondale
Commenter Type: Local Government
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/16/2012 12:00:00 AM
Attachments: OSTS2012D50270.htm (OSTS2012D50270-58881.htm Size = 1 KB)
DOC041_OSTS2012D50270.pdf (OSTS2012D50270-58880.pdf Size = 41 KB)
Submission Text
To Whom it may concern: Please find attached a letter from the Carbondale Town Board concerning the Draft 2012 Oil Shale and Tar Sand (OSTS) Programmatic Environmental Impact Statement (PEIS). Sincerely, Jay Harrington Town of Carbondale See Attachment.

TOWN OF CARBONDALE
May 3, 2012
Sherri Thompson
Oil Shale/Tar Sands PEIS Project Manager
Bureau of Land Management
Argonne National Laboratory
9700 S. Cass Avenue
EVS/240
Argonne, IL 60439
511 Colorado Avenue
Carbondale, CO 81623
www.carbondalegov.org
(970) 963-2733 Fax: (970) 963-9140
Re: Draft 2012 Oil Shale and Tar Sand (OSTS} Programmatic EnviranmentallmpactStatement (PEIS}

Via http://ostseis.anl .gov/ involve/ comments/ index.cfm
Dear BLM Manager:
<([#1 [*9.8*] I am writing this letter on behalf of the Town of Carbondale Board of Trustees. The Board would
like to express our support for the PEIS process that is currently under way in Colorado, Utah, and
Wyoming concerning land use plan amendments for allocation of oil shale and tar sands resources
on lands administered by the Bureau of Land Management
The Town of Carbondale fully supports the review process the BLM has engaged in since publication of a Notice of Intent on April14, 2011 in the Federal Register, and we urge the BLM to
continue the process and make appropriate amendments to the land use plans under review.
#1])> <([#2 [*1.1*] It is
noteworthy that the BLM held seven seeping meetings and that 4,663 individuals, organizations and governmental agencies commented or made suggestions about the scope of the PEIS that is part of the land use plan amendment process.
As elected officials in Western Colorado, we believe it is essential that the final plan allows the BLM and affected communities to present key questions to be answered about the environmental impacts on water, air and land before opening millions of acres of public land to commercial energy development. **#2])> <([#3** [*9.7*] We also support the BLM's plan to require that the research and
development of oil shale and tar sands technologies be completed and the impacts analyzed before moving forward with a commercial leasing program. The final result from the amendment process would ideally allow for oil shale and tar sands research and development in appropriate areas while protecting other important values that make public lands an important part of our economy.
#3])> <([#4 [*3.10.4*] Our modern economy is largely dependent on tourism and outdoor recreation services and to a
certain extent agriculture. These economic drivers rely on a healthy environment, clean air and water, and access to the backcountry. Our ranchers rely on grazing permits on USFS and BLM lands to support their businesses. Our retailers and guides rely on trout fishing, big game hunting, mountain and road biking and climbing, hiking and Nordic skiing. Our restaurants are supported by a mix of carbondale's cultural and natural attributes to help draw diners. In short, this community's economic prosperity is closely tied to the public lands that surround it, and thus has a considerable stake in how public lands in Northwest Colorado are managed and developed.
#4])>

<([#5 [*3.4.1*] The community of Carbondale wants to ensure that the BLM and local communities understand
the impacts that may result from the various technologies that would be employed in commercial production. To gain the appropriate understanding we, like other elected officials in the region, believe there are a number of threshold questions that need to be answered before opening up vast portions of our public lands to oil shale commercial development.
o How much water will be used, for what, and how will local watersheds be affected? **#5])>**
<([#6 [*3.10.2*] o How will our infrastructure, community services and facilities be impacted,

including
roads, water, sewer, housing, law enforcement, etc.? **#6])>**
<([#7 [*6.2.1*] o How will production activities be powered? **#7])>**
<([#8 [*3.7.3.12*] l) How will the environment and wildlife be affected? **#8])>**
<([#9 [*3.1.2*] o What will be the impacts relating to hunting, fishing and recreation in the oil shale
development areas? **#9])>**
<([#10 [*3.10.2*] o How will local economies be affected, both positively and negatively? **#10])>**
We trust that the established process will address these issues.
Thank you for the opportunity to comment.
Sincerely,
~~vl
Stacey Bernot
Mayor Town of Carbondale
CC: Representative Scott Tipton
Senator Michael Bennet
Senator Mark Udall

OSTS2012D50271
Organization: Jeremy Boak
Received: 5/3/2012 5:47:04 PM
Commenter1: Jeremy Boak - Littleton, Colorado 80127 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** aziech 5/15/2012 12:00:00 AM
Attachments: OSTS2012D50271.htm (OSTS2012D50271-58884.htm Size = 1 KB)
BLM_PEIS_comments_050212_OSTS2012D50271.docx (OSTS2012D50271-58883.docx Size = 405 KB)
Submission Text
See Attachment.

I want to congratulate the Bureau of Land Management on the preparation of its Draft Programmatic Environmental Impact Statement. The BLM has defined alter-natives that definitely represent the range of options available to the Government in fulfilling its mandate to offer for lease Federal lands underlain by oil shale. How-ever, **<([#1** [*2.2*] I believe that the preferred alternative reflects a drastic and unnecessary re-duction in the lands available for companies to investigate and eventually produce shale oil. **#1])>** **<([#2** [*2.4*] I would argue that Alternative 4 (and possibly even the No Action Alterna¬tive) could accomplish the Administration's stated goal of ensuring careful develop¬ment of oil shale with reasonable environmental impacts. **#2])>** I highlight a number of areas of concern below.

1) **<([#3** [*3.1.4*] Removing 85% of the Colorado lands available in the previous PEIS serves little

purpose for environmental protection. I note that the lands of the Roan Plateau that provide the best opportunities for recreation to the Colorado portion of the oil shale area of interest are already removed in every alternative, even the No Action Alter¬native. For me the argument that critical habitat and scenic land were being offered up ignores this critical removal, and the likely impact on such recreational resources is already minimized by that withdrawal. **#3])>**

2) **<([#4** [*9.7*] [*6.3*] I am aware of in situ processes still under development (and not yet patent pro-tected) that might be best applied in areas not part the current preferred alternative acreage in Colorado. The developers of those processes might find it exceedingly difficult to proceed even to the Research Development and Demonstration (RD&D) level of investigation under the preferred alternative. They need the thick, very rich resource of the Piceance Basin Green River Formation, and the very limited area of¬fered there cannot be assured to be geologically favorable for these methods. Most of the area available is already taken up by leases and lease preference areas of ex¬isting leases.
#4])>
3) **<([#5** [*9.2.6*] It is clear that the Bureau has adequate authority to manage a carefully staged development program even with a much larger land area covered by the PEIS. The Bureau states that, even if Alternative 4 were selected, parts of the land would not be available under current guidelines. BLM could assure the protection of Federal lands from speculators, technically unsound processes or environmentally destruc¬tive plans simply by stipulating that any application for a commercial lease would require documentation of:
a. the commercial process that the applicant intends to apply to the lease, with suf¬ficient detail for the BLM to validate the technical and commercial viabil-ity of the process
b. a water use plan that clearly defines the requirements for the commercial de¬velopment
c. other environmental stipulations based upon existing law and regulations.
This would avoid hasty or destructive development and allow BLM to estimate the water requirements before awarding any leases. As a reviewer on the previous RD&D lease technical review team, it is clear to me that BLM has wide discretion to require adequate input from lease applicants to ensure that the Bureau can carry out its stewardship responsibilities.
#5])>
4) **<([#6** [*6.3.2.1*] Much has been made about the need to have better estimates of water use, for example. There is an implication that current estimates are inadequate. However, the current best estimates of water use - <3 barrel of water per barrel of produced oil - have been agreed to by most of the industry. My own wider range of estimates for a process like Shell's have been cited extensively, and the suggestion has been made by the Government Accountability Office that this work was supported by industry spon¬sors. This is inaccurate. The work was part of a Department of Energy project on water resources. The values reported were based upon data for the configuration of a very small test plot. Scaling up of these data to a more reasonable size (based in part upon the parallel work on carbon emissions by Adam Brandt of Stanford) give preliminary results very much in line with industry's estimate.

Given these results, further evaluation of the water use would be wasteful until BLM has offered a technically sound rationale for saying that the current range is unac¬ceptable. This, to my knowledge, has not been done.

Estimates of water efficiency for various conventional and unconventional fuels are shown in the

figure below. It is clear that water efficiency for oil shale production is well within the range for various alternatives, and greatly less that that for, for ex¬ample, biofuels for which irrigated crops are the feedstock.

In addition, water use for oil shale development has been compared to home water use in municipalities like Denver. However, comparing home water use ignores the very large water use required to provide the goods and services required by these populations. The second figure shows a comparison of the water use for one barrel of oil from oil shale to the water use to prepare one 2-liter bottle of a sweetened soft drink. Given that current U. S. soft drink consumption appears to be in the vicinity of 1 million barrels per day, this is not a negligible quantity, and should be consid¬ered in any evaluation of whether water consumption is too high for oil shale devel¬opment. Much has been made of the transfer of water rights from agricultural to industrial uses for the oil industry, but the relative values created by those water uses has received far less attention.
#6])>
5) **<([#7** [*6.1*] The preferred option is most restrictive in Colorado, where more than 85% of the area originally planned for leasing has been removed. This is the richest part of the resource, and hence the area most attractive for leasing. The third figure summa¬rizes data on oil shale resources from the U. S. Geological Survey's recent estimates for Colorado and Wyoming. It is clear that while the total resources are roughly com¬parable, the Piceance Basin of Colorado holds greatly larger resources of the richest material, that likely to be produced first. **#7])>**
6) **<([#8** [*10.3*] Setting a precedent for opening only 35,000 acres may lead to the need for numer¬ous future PEIS iterations, needlessly delaying development of oil shale resources, whereas a single PEIS for as much of the land as possible would give a clear signal that the Bureau sought to encourage oil shale development without relinquishing its stewardship role.
#8])>

7) **<([#9** [*2.4.1*] [*2.1.1*] I urge the BLM to reconsider its highly restrictive choice of the preferred alternative, and instead choose either Alternative 4 or the No Action alternative, opening the wid¬est possible area, but making it clear that important requirements will need to be met to receive commercial leases. Especially in Colorado, the lands made availa¬ble in this Alternative are not so environmentally sensitive that they cannot be pro¬tected by appropriate elements of the leasing process. If there are significantly sen¬sitive areas in here, then perhaps there needs to be an additional more moderate option that provides a middle ground between the highly restrictive preferred alter¬native and the more open availability of the No Action alternative and Alternative 4.
#9])>
8) **<([#10** [*9.6*] Restricting leasing now to only RD&D fails to recognize that two compa¬nies are already proceeding with commercial development on private land in Utah. Neither of these is at the research stage of development. Other companies with plans for surface processing are working on available stockpiles, and do not neces¬sarily need RD&D leases when they are satisfied their process works. I urge the BLM not to restrict leasing, but rather to make it clear that lease applicants, whether for RD&D leases or for commercial leases must provide appropriate documentation of the present development stage of their technology to receive a lease. **#10])>**

<([#11 [*9.6*] The PEIS process for leasing is not the place to impose these restrictions, and to make choices better left to industry about which acreage is the most attractive for either research and development or ultimately for commercial development. The lease process can be defined to adequately control the pace of development without removing any but the most environmentally sensitive lands from availability. Plac¬ing such heavy limitations on land availability needlessly restricts the flexibility of companies with an interest and a right to apply for leasing of the lands that contain this potentially vital national resource. The law of the land clearly indicates that they should encouraged to, not discouraged from, doing so. **#11])>**

Jeremy Boak
11438 West Fremont Drive
Littleton CO
303-384-2235
jerryboak@comcast.net

OSTS2012D50272
Organization: ECCOS (Environmentally Conscious Consumers for Oil, Brad McCloud
Received: 5/3/2012 6:07:06 PM
Commenter1: Brad McCloud - Grand Junction, Colorado 81501 (United States)
Organization1:ECCOS (Environmentally Conscious Consumers for Oil
Commenter Type: Oil & Gas Org
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** aziech 5/17/2012 12:00:00 AM
Attachments: OSTS2012D50272.htm (OSTS2012D50272-58887.htm Size = 10 KB)
May_2012_ECCOS_Letter_of_comments_on_the_Draft_PEIS_from_Jan_2012_vols_1-4_OSTS2012D50272.doc (OSTS2012D50272-58886.doc Size = 41 KB)
Submission Text
RE: ECCOS comments on the BLM's Draft 2012 Oil Shale and Tar Sands OSTS PEIS

To whom it may concern:

Thank you for your consideration of these comments as they are submitted in relation to the *Draft Programmatic Environmental Impact Statement and Possible Land Use Plan Amendments for Allocations of Oil Shale and Tar Sands Resources on Lands Administered by the Bureau of Land Management in Colorado, Utah and Wyoming* published in January by the Department of Interior (DOI) and Bureau of Land Management (BLM).

<([#1 [*2.1.1*] ECCOS is a grassroots, nonprofit group based in Grand Junction, Colorado. We have members in Colorado and Utah with plans to expand to Wyoming in the coming year. Our mission is to help educate people about oil shale and energy issues. We are not an advocacy group. However, we would like to see research into oil shale development continue.

It is currently recognized by the Department of Energy that the equivalent of approximately 1 trillion barrels of recoverable oils exist in oil shale deposits located in the Green River Formation located in Northwest Colorado, North Eastern Utah and Southwest Wyoming. These are also believed to be the largest and richest reserves of oil shale deposits in the world (most of which are located in Colorado).

According to the U.S. Energy Information Administration (USEIA) the U.S will be dependent on oil and carbon based fuels sources for decades to come (93% of our vehicles will still run on oil in 2035, and world oil consumption is anticipated to increase 30% by 2035). For this reason ECCOS supports the ingenuity of American intellect and industry to deliver technologies and best practices that will allow for the development of oil shale in a socio-economic an environmentally responsible and sustainable manner.

It is due to this information and the list of additional concerns with the 2012 PEIS that ECCOS supports the Alternative 1 "OIL SHALE NO ACTION ALTERNATIVE," of the recent PEIS, and the previously BLM preferred alternative in the 2008 PEIS. **#1])>**

<([#2 [*9.8*] The following are additional concerns and comments by ECCOS on/in the *Draft Programmatic Environmental Impact Statement and Possible Land Use Plan Amendments for Allocations of Oil Shale and Tar Sands Resources on Lands Administered by the Bureau of Land Management in Colorado, Utah and Wyoming:*

- The U.S. Congress recognized the critical need for development of domestic energy resources as a part of the Energy Policy Act of 2005 (EPAct 2005) when it enacted the Oil Shale, Tar Sands and Other Strategic Unconventional Fuels Act of 2005. In fact, Congress declared that *"…it is the policy of the United States that…oil shale, tar sands, and other unconventional fuels are strategically important domestic resources that should be developed to reduce the growing dependence of the United States on politically and economically unstable sources of foreign oil imports."* (EPAct Section 369(b); Public Law 109-58)

- ECCOS finds that there is little, if any, new information in the 2012 PEIS to be considered in comparison to the findings of the 2008 PEIS. Therefore, we have confidence in the preferred alternative that the BLM selected in 2008.

#2])>
<([#4 [*2.2*]

- Currently, the BLM has stated that Alternative 2B is the current preference of the agency.

- It is also a concern that the BLM's preferred alternative is in contradiction to 100% of the 14 cooperating agencies that participated in the 2012 PEIS.

#4])>
<([#5 [*3.10.1*] [*3.10.3*]

- ECCOS finds that statements in the PEIS in relation to socioeconomic impacts to be speculative and while focusing on perceived potential negative impacts the potential benefits are not represented effectively. In addition, the facts stated around available housing, rental availability and hotels is outdated and unrepresentative of the current environment.

#5])> <([#6 [*6.2.1*]

- It is also perceived that it is outdated to quote environmental impacts based on the use of coal fired power plants to generate power in the in-situ process are not representative of current developments by industry. Several in the industry are considering capturing and reusing natural gas to provide on-site power production. **#6])>**

<([#10 [*6.3.2.1*] Water usage and overall need of water in the oil shale development process appear to be greatly exaggerated.

It is commonly recognized that companies in the industry already own the necessary water rights to support production needs.

A recent independent study by the Colorado River Conservations District claims that 120,000 acre feet per year of water would be required for a 1.55 million barrel per day oil shale industry, which is roughly 2-3% of the water that flows from the Colorado River into Lake Powell annually. **#10])>**
<([#7 [*9.2.1*]

- One week after the notice of intent to conduct a new PEIS was published in the Federal Register on April 14, 2011 the Congressional Continuing Resolution to Fund Fiscal Year 2011 explicitly stated 2011 funds were not to be used to implement, administer and/or enforce Secretarial order No 33103310.
    - Therefore ECCOS questions the 2012 PEIS and its findings to potentially all be in violation of the Spending Moratorium of the 2011 Continuing Resolution.

#7])> <([#8 [*1.1.1*]

- Lastly, the Draft BLM Oil Shale Regulation document is not expected to be published until May 15, 2012. The comment period on the 2012 OSTS PEIS closes on May 4, 2012 and obviously does not allow time for review of the Draft BLM Oil Shale Regulation document prior to submitting comments. It seems logical that these two documents are inevitably tied to one another.
    - These two documents outline impacted areas and regulations on development. Having both documents to review simultaneously will behoove those wishing to make relevant comments and help to avoid comments that may tend to be inconsistent and confusing without all the information available.
    - Therefore, ECCOS reiterates its request that the comment period on the 2012 OSTS PEIS be extended to no less than 90 days past the publication of the Draft BLM Oil Shale Regulations.

#8])>
<([#9 [*2.1.1*] For these reasons ECCOS once again states its support of the thoughtful and proactive preferred alternative of the BLM's 2008 PEIS and the current Alternative 1 "OIL SHALE NO ACTION ALTERNATIVE" of the 2012 PEIS.

Furthermore, ECCOS requests that the BLM change course and support the Alternative 1 "OIL SHALE NO ACTION ALTERNATIVE" as well.

#9])>
Thank you for your time and consideration.

Respectfully,

Brad McCloud

Executive Director

OSTS2012D50273
Organization: Angela Wetzel
Received: 5/3/2012 6:41:21 PM
Commenter1: Angela Wetzel - , (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/4/2012 12:00:00 AM
Attachments: OSTS2012D50273.htm (OSTS2012D50273-58857.htm Size = 1 KB)
Submission Text
<([#1 [*10.6.3*] Opening up BLM land to drilling for oil shale will help the US become more independent when it comes to oil and gas production. We currently rely on overseas companies for the majority of our oil and gas and I think bringing these resources available would help the US stand on it's own feet. **#1])> <([#2** [*3.10.3*] Also, allowing companies to drill will create jobs, which are badly needed especially in Colorado. Creating jobs leads to people spending money which will bring our economy back to where it needs to be. Drilling on our own soil will also bring gas prices down which means people will spend money on things other than gas, which makes our economy more stable. **#2])> <([#3** [*11*] Please consider opening these lands for drilling for a more economically stable Colorado.
#3])>

OSTS2012D50274
Organization: Caylee Gabbott
Received: 5/3/2012 9:12:28 PM
Commenter1: Caylee Gabbott - Bountiful, Utah 84010 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form

Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/4/2012 12:00:00 AM
Attachments: OSTS2012D50274.htm (OSTS2012D50274-58859.htm Size = 1 KB)
Submission Text
<([#1 [*10.6.1*] Uintas are my favorite place to camp. They are worth way more than the short term relationship we will have with tar sands. Lets develop other solutions to reduce our carbon footprint and energy use **#1])>**

OSTS2012D50275
Organization: Gwen Garcelon
Received: 5/4/2012 12:14:47 AM
Commenter1: Gwen Garcelon - Carbondale, Colorado 816232111 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/4/2012 12:00:00 AM
Attachments: OSTS2012D50275.htm (OSTS2012D50275-58861.htm Size = 1 KB)
Submission Text
<([#1 [*12.2*] With the climate crisis intensifying it is unfathomable that we are even discussing further oil shale development. With even modest increases in conservation we can easily make up what we would gain from this destructive energy source. I categorically oppose further oil shale exploration and development. We are cooking our own goose and enough is enough. **#1])>**

OSTS2012D50276
Organization: Melanie Martin
Received: 5/4/2012 1:21:14 AM
Commenter1: Melanie Martin - Salt Lake City, Utah 84102 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/7/2012 12:00:00 AM
Attachments: OSTS2012D50276.htm (OSTS2012D50276-58890.htm Size = 1 KB)
Comments_for_BLM,_Tar_Sands_OSTS2012D50276.docx (OSTS2012D50276-58889.docx Size = 17 KB)
Submission Text
See Attachment.

Dear BLM Review Committee:

<([#1 [*12*] I have a number of grave concerns about tar sands and oil shale mining in Utah, Colorado, and Wyoming. In light of these concerns, which cannot be mitigated in any substantial way, I believe bringing these destructive mining and refining processes to the U.S. would be entirely unethical. **#1])>**
<([#2 [*3.14*] First, although U.S. Oil Sands claims the citrus solvent it uses to mine oil from tar sands is safer than methods used in Alberta, this solvent poses a grave environmental hazard. Dr. William Johnson, a geophysicist at the University of Utah, has spoken out about the danger of this solvent. The solvent makes carcinogenic compounds in tar sands mobile, he says, releasing these toxins into the ecosystem. Aquifers and waterways then become poisoned with carcinogens, which poison humans and ecosystems.
In Canada, this scenario has led to tumors and mutations in animals as well as increased rates of rare cancers in humans. Often those who suffer most are Indigenous peoples. In Utah, proposed tar sands and oil shale mining areas overlap the Uintah/Ouray reservation, posing a serious threat to the people who live there. **#2])>**
<([#3 [*3.4.1*] Oil shale poses a severe threat for similar reasons. The Utah Physicians for a Healthy Environment say: "Oil shale beds often serve as the floor for aquifers. Heating the oil shale in place heats the aquifer. That causes the groundwater to become contaminated with elements like arsenic and fluoride, creating a groundwater nightmare. Because the Green River formation lies within the greater Colorado River drainage basin, any surface or groundwater contamination will not only affect the local population but will likely have a significant impact on water quality for the millions of downstream users." **#3])>**
<([#4 [*3.4.2*] The huge demand for water imposed by tar sands and oil shale mining also demonstrates how unsustainable these practices are. Although companies claim that tar sands mining in the U.S. will require less water than in Alberta, the Bureau of Land Management and Argonne National Laboratory assert that water use will total at least several barrels of water per barrel of oil produced. This water must come from somewhere—from farming, from aquifers used for human consumption, from the ecosystem. I stand firmly against privileging industry by giving an oil company the water rights of a farmer, or the water rights of a tribe, or the water that should be fueling our tourism industry through pursuits such as rafting, before it makes its way downstream to other states and communities that need it. We cannot give away the water rights of other human beings, or allow ecosystems to dry up, so companies can profit from oil.
As Western Resource Advocates points out about companies that wish to mine Utah tar sands, "they promise lower-water use techniques, but refuse to open their books to allow the community to understand how these methods would work and what the resulting broad resource needs and impacts would be." The public needs to understand the true impacts of water uses through a transparent and independent processes, not through companies' claims that they've tested. **#4])>**
<([#5 [*3.13*] Furthermore, this water, once used, cannot simply be released into the ecosystem, because it carries toxic pollutants. In the BLM's environmental impact statement for tar sands and oil shale mining, the BLM states that enormous amounts of waste will be created from these mining practices. This waste cannot be easily contained. In Canada, it has become dispersed through waterways and ecosystems, directly affecting human health and harming wildlife. Even when companies claim to be following proper safety precautions, waste seeps out of the vast tailings dumps. Of course, the companies don't plan for this to happen. BP didn't plan for its oil spill in the Gulf. But when mining oil on a grand scale, disasters happens. Salt Lake experienced its own oil disaster not so long ago. With tar sands and oil shale mining, the devastation would

be even more difficult to contain because of the vast amounts of toxic waste that would be produced—according to the BLM's own environmental impact statement and the U.S. Government Accountability Office. **#5])>**
<([#6 [*3.7.3.1*] Habitat destruction poses another grave concern. Although companies have been vague about the specific mining processes they will use, tar sands mining has never been anything but abominably destructive to ecosystems. A diagram in a fact sheet of U.S. Oil Sands shows the mining process beginning with an extracted pile of rocks, and ending with the same. Vital wildlife habitat and some of our country's most beautiful places would be torn up to allow toxic mining, destroying the habitat of endangered and threatened species like the bald eagle and boreal toad. Fragmentation of habitats would result. Infrastructure such as roads, pipelines, and pump stations would chase away wildlife, making the land inhospitable even if it weren't on its way to becoming a toxic wasteland. **#6])>**
<([#7 [*3.5.1.6*] Furthermore, tar sands and oil shale mining and processing require tremendous amounts of energy. This would produce four to six times the greenhouse gases of petroleum, as Utah Physicians for a Healthy Environment says. And that's not considering the greenhouse gases produced when burning fuel produced from tar sands or oil shale itself. **#7])>**
<([#8 [*3.10.3*] Finally, producing dirty oil won't significantly bring jobs to Utah. Conversely, greener technologies would boost employment, and keeping Utah's wilderness beautiful would boost tourism, which is by far the most important industry in some Utah counties. Cornell University explains, "For every $1 million invested in renewable and clean energy, 16.7 jobs are created. By contrast, $1 million invested in fossil fuels generates 5.3 jobs." We need to think sustainably in terms of our economy, investing in jobs that will better society and remain viable for more than a few years rather than degrading human health and the environment. **#8])>**
<([#9 [*10.6.1*] I believe these points demonstrate the urgent need for relinquishing the pipe dream of allowing the destructive practices of tar sands and oil shale mining. We have far better options—solar and wind, for example, preferably within and around cities—and the technology to pursue them. Tar sands and oil shale technology itself is just evolving, and Utah, Wyoming, and Colorado would become glorified laboratories for the proprietary methods of industry. It's time to move forward into a clean energy future, not take a giant step backward into a toxic nightmare. **#9])>**
Sincerely,

Melanie J. Martin

References
Cornell University, Global Labor Institute
http://www.ilr.cornell.edu/globallaborinstitute/research/upload/Impact-of-Tar-Sands-Spills-on-Employment-and-the-Economy-summary.pdf
Oil Shale and Tar Sands Programmatic EIS, Overview of the tar sands extraction process
http://ostseis.anl.gov/guide/tarsands/index.cfm
Physicians for a Healthy Environment
http://www.energy.utah.gov/government/strategic_plan/docs/publiccomments/uphe10152010.pdf
U.S. GAO
http://www.gao.gov/products/GAO-11-35
University of Utah Institute for Clean and Secure Water

http://www.netl.doe.gov/technologies/oil-gas/publications/EPreports/FE0001243_TOR_23110_4.pdf
Western Resource Advocates
http://www.westernresourceadvocates.org/land/utosts/tarsands.php

OSTS2012D50277
Organization: BLM, Utah State Office, Roger Bankert
Received: 5/4/2012 8:54:54 AM
Commenter1: Roger Bankert - Salt Lake city, Utah 841450155 (United States)
Organization1:BLM, Utah State Office
Commenter Type: BLM
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/15/2012 12:00:00 AM
Attachments: OSTS2012D50277.htm (OSTS2012D50277-58909.htm Size = 1 KB)
Utah_BLM_comments_OSTS2012D50277.docx (OSTS2012D50277-58908.docx Size = 24 KB)
Submission Text
See Attachment.

BLM Utah State Office
DEIS Comments
May 4, 2012

<([#1 [*3.1.3*] Page: ES-6 Line 19 Text in document: 1. All lands that the BLM has identified or may identify as a result of inventories conducted during this planning process, as lands having wilderness characteristics (LWC);
Comment: Does this mean even though the lands are LWC and the BLM has chosen not to manage them for wilderness through the RMP process they are still unavailable for leasing? It appears you are singling out oil shale and tar sands as not being able to use the lands while other resources are allowed to use the lands because of the determination that they will not be managed for wilderness. **#1])>**
<([#2 [*2.2*] Page: ES-9 Line 8 Text in document: ES.7 PREFERRED ALTERNATIVE
Comment: Does this includes or excludes the existing pending tar sand lease at Asphalt Ridge? **#2])>**

<([#3 [*9.1*] Page: 1-12 Line 15 Text in document: The scope of the analysis for this PEIS does not include review of the decisions by the Secretary to issue the RD&D leases
Comment: Does this mean the current RD&D leases along with their preference right acreage are not bound or affected by the decisions resulting from this EIS? **#3])>**

<([#4 [*13*] [*3.1.7*] Page: 1-18 Line 18 Text in document: there are only 5 CHL's from the mid 1980's still in existence

Comment: In the mid 1990's the BLM had another lease sale and there are 13 still in existence. They are also in the Pariette and PR Spring STSA's. **#4])>**

<([#5 [*3.1.7*] Page: 1-18 Line: 19-20 "or tar sand claims"
Comment: remove the phrase.
Note: there are 11 conversion applications that include 102 oil and gas leases. One of the applications is located within the Tar Sand Triangle STSA and also lies within the boundary of the Glenn Canyon National Recreation Area. **#5])>**

<([#6 [*3.1.7*] Page: 1-38 Comment: The portion of this line should read, "leasing in STSAs within NPS units". **#6])>**

<([#7 [*6*] Figure 2.3-2
Comment: There should be some consideration in placing holdings of Enefit American Oil Company and Redleaf as stated on Page 2-15 to give more of a complete picture. **#7])>**

<([#8 [*3.15*] Page: 2-22 Comment: FIGURE 2.3.2-1, 2.3.2-2, 2.3.2-3 (Alternative 1). The maps are too vague. They need Townships so they are useful. **#8])>**

<([#9 [*9.6*] Page: 2-23 Comment: This shows that a portion of the OSEC preference area to be un available for leasing. This contradicts the lease and the lease grants a superior right. This should be changed. **#9])>**

<([#10 [*9.6*] Page: 2-35 Line: 9 Text in document: RD&D First requirement
Comment: If a company proves up on a RD&D lease and their preference right acreage how will they be able to lease other lands in the future? THE PEIS states a RD&D lease is formed first for any leased lands. Need to address how a company with technology showed to be commercial on a RD&D lease can lease additional acreage in the future without having to prove up an additional RD&D process. **#10])>**

<([#11 [*3.15*] Page: 2-37 Comment: FIGURE 2.3.3-1, 2.3.3-2, 2.3.3-3. The maps are too vague. They need townships so they are useful. **#11])>**

<([#12 [*3.15*] [*2.2*] Page: 2-38 Figure 2.3.3.2 Comment: All maps show OSECs (Enefits) oil shale preference right lease acreage split with a no leasing zone because of evacuation creek. It is impossible for the company to develop their lease in this situation. The map should show the RD&D lease with the Preference Right Area. The references to the Tar Sands should be removed. A similar map should be available for the Tar Sands. This map should show the 500 foot contour for strip mining and maybe a 3000 foot overburden line for showing the extent of conventional underground mining. (This should most likely be a constraint). **#12])>**

<([#13 [*3.15*] Page: 2-41 Comment: An interesting comparison would be to show the resources that would be equal to or greater than 25 gal/ton at 25 feet thick with this map. It appears that the

oil shale resource has not been taken into account. The amount of estimated resources should be shown that would remain or removed. **#13])>**

<([#14 [*3.15*] Page: 2-41 Comment: The OSEC and AuraSource areas need to be enlarged in a special view. Township lines should be placed on them and the number should be on the outside margin of the map. The Tar Sand information should be removed. The land status should be shown. The field offices should be identified as field offices and not just "Price" or "Moab". The White River should be identified. Remove the White River Field Office in Colorado on this map. The State oil shale leases should be shown. **#14])>**

<([#15 [*3.1.7*] Page: 2-43 Line: 20 Text in document: Alternative 3 because of the presence of a potentially eligible WSR, Evacuation Creek (see discussion on this in Section 2.3.3.1).
Comment: It has already been determined in the 2008 RMP that Evacuation Creek is not eligible. Also this is not discussed in section 2.3.3.1 **#15])>**

<([#16 [*3.1.7*] Page: 2-53 Line 21 Text in document: Alternative 4 because of the presence of a potentially eligible WSR, Evacuation Creek (see discussion on this in Section 2.3.3.1).
Comment: It has already been determined in the 2008 RMP that Evacuation Creek is not eligible. Also this is not discussed in section 2.3.3.1 **#16])>**

<([#17 [*9.6*] Page: 2-76 Line: 12 Text in document: 2.4.4
Comment: If a company proves up on a RD&D lease and their preference right acreage how will they be able to lease other lands in the future? THE PEIS states a RD&D lease is formed first for any leased lands. Need to address how a company with technology showed to be commercial on a RD&D lease can lease additional acreage in the future without having to prove up an additional RD&D process. **#17])>**

<([#18 [*6.1.1*] Page: 2-78 Line 5 Text in document: For the purpose of…
Comment: This is flawed thinking if it is acceptable to evaluate 15 gal/tn and 15 ft in one state, it should be acceptable to use the same criteria in other states. This is obviously, what the parties in the settlement agreement told the BLM to do. **#18])>**

<([#19 [*3.1.7*] Page: 3-13 Line 30 Text in document: 18 federal coal
Comment: All the leases are gone. They were bought out years ago by the BLM **#19])>**

<([#20 [*3.1.7*] Page: 3-28 Line: 14 Text in document: The West Tavaputs Plateau West Tavaputs, Sunnyside, etc are in the Price Field Office not the Vernal Field Office **#20])>**

<([#21 [*3.5.1.6*] Page: 3-98 Line 21 Text in document: 3.5.1.2 Global Climate Change
Comment: There is a lot of contradictory information about global climate change especially since the scandal of falsifying information. I do not think anything should be said is true fact about global climate change unless both sides are presented. **#21])>**

<([#22 [*3.14*] Page: 4-9 Line 20 Text in document: The statement " Some mines would be "gassy";
Comment: The statement " Some mines would be "gassy"; both H2S and CH4 would be present,

placing additional demands on the ventilation system for worker safety and introducing additional controls for the use of explosives. " is confusing. The terms gassy and non-gassy were classification terms that were used pre 1987 when MSHA used these classifications for non-coal mines. The term gassy means mines that require fresh air to keep methane (CH4) levels below the explosive limit. Gassy mines have nothing to do with H2S. After October 27, 1987 the classification of gassy was no longer used to classify mines but the word is still used in the MSHA regulations as a general term. Since October 27, 1987 all non-coal mines are classified under 30 CFR part 57 subpart T. Both the Colony and Long Ridge oil shale mines in Colorado were classified as non-gassy because they were close to the oil shale outcrop and contained no methane or no concentrations to make the mine classification as gassy.

In short, if the mine is gassy, then there are gasses or contaminants that need to be removed to ensure miner health and safety. Larger ventilation systems would be required, which normally is not an issue. "The combination of CH4 liberated from the fragmentation of the blasted shale, the background CH4 emissions continuously released from the developed headings, and the fine-sized dust generated in localized high concentration clouds at the face would pose a potential localized ignition hazard during some underground oil shale mining operations." (DOI, 1995, p. 21) **#22])>**

<([#23 [*3.14*] Page: 4-204 Line: 20 Comment: the statement, The greatest concern for chemical hazards associated with underground mining centers on potential inhalation of airborne dusts (including silica dusts), inorganic gases (e.g., CO and H2S), and organic gases (e.g., CH4) by workers. Chronic inhalation of irritants such as mineral or metal particles causes pneumoconiosis or miner's lung, a condition characterized by nodular fibrotic lung tissue changes. Prolonged inhalation of silica dusts causes a form of pneumoconiosis termed silicosis, which is a severe fibrosis of the lungs that results in shortness of breath. Both conditions can be fatal. Underground mining activities also present potential inhalation hazards from exhaust fumes from diesel-powered equipment, including diesel fuel vapors and criteria pollutants." appears to project that these will happen.
In fact the Mine Safety Health Administration applies the following standard, To evaluate the hazard of exposure to mineral dusts, the content of quartz or other crystalline form of free silica is first considered. The permissible exposure limit or threshold limit value (TLV), for mineral dust containing crystalline free silica is determined by analysis of a sample of respirable dust. Under current regulations, the TLV will vary depending on the percentage of free silica in the dust. For the great majority of respirable mineral dusts, the TLV will be in the range of 0.1-3.3 milligrams per cubic meter of air (mg/m³). When the percentage of free silica is higher, the TLV will be lower. This means that the amount of silica-bearing dust that a miner can be exposed to will also be lower. Source:
http://www.msha.gov/illness_prevention/healthtopics/HHICM06.HTM).
30 CFR part 57.5001 states that any air borne contaminant will be controlled "using threshold limit values adopted by the American Conference of Governmental Industrial Hygienists, as set forth and explained in the 1973 edition of the Conference's publication, entitled "TLV's Threshold Limit Values for Chemical Substances in Workroom Air Adopted by ACGIH for 1973," pages 1 through 54…", Diesel particulate standards are also put into place in order to protect the employee underground. This is found in 30 CFR part 57.5060 which states, "After May 19, 2006, any mine operator covered by this part must limit the concentration of diesel

particulate matter to which miners are exposed in underground areas of a mine by restricting the average eight-hour equivalent full shift airborne concentration of total carbon, where miners normally work or travel, to 160 micrograms per cubic meter of air (160TC µg/m3)."
As can be seen from the above references, great measures by MSHA are taken to eliminate the effects from these contaminates in mining and if they are followed there would be no affects. **#23])>**

<([#24 [*3.14*] Page: 4-204 Line 31 Comment: The statement ,"Experimental mine and laboratory tests have shown that, given the proper pre dispersed concentrations, particle size, and kerogen or sulfur content, oil shale and sulfide ore dust can be ignited and cause an explosion (DOI 1995), is very misleading. The actual quote from the referenced abstract is "Laboratory and experimental mine test have shown that oil shale and sulfide ore dusts can be ignited given the prosper pre dispersed dust concentrations, particle size, and kerogen or sulfur content." Later in the report on page 5 it states "When fine particles of a combustible dust (Oil shale, sulfide ore, coal etc.) are suspended in an atmosphere that contains sufficient oxygen to support combustion, a dust explosion can occur. In underground mining, the energy required to ignite this dust cloud is supplied by the explosives used in the development and production blasting." **#24])>**

<([#25 [*13*] Page: 4-204 Line: 40 Text in document: "one of the most hazardous occupations" Comment:The statement should read "one of the more hazardous occupations". **#25])>**

<([#26 [*3.4.6*] Page: 6-9 Line 3 Text in document: "The following is a summary of these generic impacts:" This is a true statement for in-situ mining of the oil shale but there is much information that covers retorting of oil shale on the surface which is discussed in the earlier portion of the PEIS. This should be disclosed. **#26])>**

<([#27 [*3.4.6*] Page: 6-10 Line 13 Text in document: "and other sensitive water resources in Utah"
Comment The phrase "and other sensitive water resources in Utah" should be enumerated. There is no such thing as a sensitive water resource. **#27])>**

<([#28 [*3.5.3*] [*3.5.8*] Page: 6-11 Line 27
Comment: The phrase "Table 6.1.6-3 presents a summary of the emissions from coal-fired electric power plants." It is un-necessary in an oil shale analysis. This type of analysis presumes that this will take place. Even if new power generation is required not all would be tied to the project. If new power generation requirements were necessary they may be handled with natural gas, geothermal, nuclear or other forms of electrical energy which has not been disclosed. By concentrating on coal emissions this makes the development of the shale appear worse than it really is. Again the PEIS has failed in supplying information on the surface retorting facilities. There are many in use throughout the world. The information on the air quality or air emissions should be made available in this process. **#28])>**

<([#29 [*3.6*] Page: 6-12 Line 8
Comment: The phrase, "Construction-related noise levels could exceed EPA guidelines and/or Colorado regulations (there are currently no state guidelines/regulations for Utah or Wyoming)." has no basis. There should be justification to use a statement like this. Noise needs to have

receptors (such as people) to determine the applicability of noise standards. Most of the areas involved have few inhabitants. **#29])>**

<([#30 [*3.7.2*] [*3.7.3.7*] Page: 6-16 Line 5 Comment: The phrase, "Some impacts (e.g., habitat loss) could continue beyond the termination of shale oil production." is unsupported and unfounded in the PEIS. **#30])>**

<([#31 [*3.15*] Page: 6-78-Line: 79 These maps are almost impossible to read. There should be 3 separate maps for this effort so it would be possible to understand what is being portrayed. **#31])>**

<([#32 [*3.4.5*] Page: 6-125 Line 38-42 Comment: This makes some major assumptions that are not necessarily true. There has been no plan approved so there cannot be any assumptions made. Yes, there is a retention dam that was to protect the White River in case of a catastrophic event was to take place. Without discharge permits in place these sentences are a guess and are not fact. They should be removed. **#32])>**

<([#33 [*3.7.1.2*] Page: 6-130 Line: 38 Comment: There is no scientific basis for the 2 miles. Why not 1 mile or 5 miles? A reason should be stated for the basis. **#33])>**

<([#34 [*3.7.1.2*] Page: 6-131 Line 4 Comment:The in-situ projects in Colorado are substantially different than the project in Utah. The broad statements made for the in-situ projects in many cases do not apply to the Utah project. There should be a distinction between the in-situ retorting and the surface retorting. Impacts of the surface retorting are known because there are many retorts worldwide. This should be acknowledged and disclosed. It is true that the in-situ retorting, the environmental impacts are largely unknown. The ground water and the aquifers at the White River Oil Shale site have been documented in reports as late as 2002. **#34])>**

<([#35 [*3.7.2*] Page: 6-133 Line: 33 Comment: The phrase "The establishment and long-term survival of these species on reclaimed land may be difficult", has no basis. There should be a reason given for this statement like past experience at the XXX site has shown that …. **#35])>**

OSTS2012D50278

Organization: solar, steve
Received: 5/4/2012 9:43:52 AM
Commenter1: steve - carbondale,, Colorado 81623 (United States)
Organization1:solar
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/14/2012 12:00:00 AM
Attachments: OSTS2012D50278.htm (OSTS2012D50278-58891.htm Size = 1 KB)
Submission Text

<([#1 [*11.2*] Please do not lease any oil shale. The energy it takes to get oil out of oil shale is a losing proposition for humans and the climate. **#1])> <([#2** [*10.6.1*] Please reallocate the time and resources that the BLM and the Government are putting towards oil shale, and look at renewable energy. The energy payback is a lot quicker with a much lower carbon footprint. **#2])>**

OSTS2012D50279

Organization: Kathryn Albury
Received: 5/4/2012 9:45:57 AM
Commenter1: Kathryn Albury - Salt Lake City, Utah 84104 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/16/2012 12:00:00 AM
Attachments: OSTS2012D50279.htm (OSTS2012D50279-58893.htm Size = 3 KB)

Submission Text

<([#1 [*9.8*] I thank you for re-opening this PEIS and reducing the amount of BLM land under consideration. **#1])> <([#2** [*3.4.1*] While it is claimed that mining in Utah will use less water than the Canadian Tar Sands, there is a need for a significant amount of water in this, a desert-like area. This area straddles the Green River, the largest tributary of the Colorado River which serves millions of people, to say nothing of the agricultural lands and wild life downstream. In drought years, how do we assure that critical water will not be diverted to oil production when it is critically needed downstream? **#2])> <([#3** [*3.4.1*] In case of a spill/leak/truck accident—if the product leaving the mining area gets into the Green River, or any other waterway, have studies been done on how this type of petroleum product affects waterways? Does this product float or sink? How would a spill be contained in low river situations? In a raging flood? In a blizzard? Who is responsible for a potential clean-up? Are resources available for a timely response? The same questions need to be answered with regards to the "citrus solvent" which will need to be moved to the processing site in tremendous quantities. **#3])> <([#4** [*3.5.1.6*] While the BLM is not an air quality agency, the quality of the air does impact the human and wild life population. What is the increase in greenhouse gas emission for this whole process—from the original disturbance of the land, transportation of equipment and supplies to the site(s). the processing of the tar sands onsite, transportation of the processed product to the petroleum refineries, refining the product, and, especially, included the final combustion of the finished product? **#4])> <([#5** [*3.13*] Please examine the "citrus solvent." It is hardly a benign substance. Is it attractive to wild life (citrus peels are in cattle feed)? Once the treated sands are replaced, are there traces of the solvent left? How does this affect the restoration of the area—will the same plants and animals be able to live there? **#5])> <([#6** [*3.13*] The disturbance of the land will be massive and will inevitable produce heavy metals and other toxins. Are there provisions for testing for these products and plans for safely using or disposing of them? **#6])> <([#7** [*1*] Please spare no effort or expense in determining the current state of any area to be mined—air quality, water quality, noise levels, soil testing, flora and fauna. There should be no opportunity for a developer to

claim that they haven't made anything worse than it was. **#7])>** Thank you for considering my comments.

OSTS2012D50280
Organization: Unconventional Fuels Congressional Task Force, Bill Johnson
Received: 5/4/2012 10:15:57 AM
Commenter1: Bill Johnson - Vernal, Utah 84078 (United States)
Organization1: Unconventional Fuels Congressional Task Force
Commenter Type: Affiliation Only
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/17/2012 12:00:00 AM
Attachments: OSTS2012D50280.htm (OSTS2012D50280-58912.htm Size = 4 KB) BLM_PEIS_Comments_OSTS2012D50280.docx (OSTS2012D50280-58911.docx Size = 14 KB)
Submission Text
May 2, 2012 BLM Oil Shale and Tar Sands Draft Programmatic EIS Argonne National Laboratory 9700 S. Cass Ave. Argonne IL 60439 Ken Salazar, Secretary U.S. Department of the Interior 1849 C Street, N.W. Washington DC 20240 Sent this date via email: exsec@ios.doi.gov Robert Abbey, Director Bureau of Land Management 1849 C Street, N.W., Room 5665 Washington DC 20240 Sent this date via email: Director@blm.gov (These comments also submitted electronically via the OSTSEIS website.) RE: Comments regarding 2012 Oil Shale and Tar Sands Programmatic EIS

Greetings: **<([#1** [*1.5*] I appreciate this opportunity to provide comments on the new Draft PEIS for oil shale development. My background and experience comes from my position on the Unconventional Fuels Task Force that was created in Section 369 of the Energy Policy Act of 2005, Vice Chairman of ECCOS and as a local citizen with above average understanding of the oil shale and tar sands resource and the potential industry it holds. Because of this knowledge of local economics, energy and business development, demographics and business finance, I was appointed to represent the communities of affect within the State of Utah by Secretary Bodman. This Task Force was an unbiased collaborative effort among the States of Colorado, Utah, Wyoming, Mississippi and Kentucky, their communities and the Secretaries of Defense, Energy and Interior. Since 2005, countless hours of work and research has been put forth by this group to offer many of the answers that Congress and the energy markets are looking for in relation to commercial development of unconventional fuels, oil shale being a large part of that group. Very comprehensive volumes of our findings, annual reports, and other pertinent data can be found through the parties themselves, their web site www.unconventionalfuels.org or the SPR office of the Department of Energy. I bring these items to point as I do not believe that this PEIS has consulted with those documents properly especially in the area of business economics, economies of scale and return on investment for those that enter into this unique fuel development. There must be a financial advantage for a return on investment and the opportunity for a large scale industry. The lack of this insight on behalf of this PEIS has discouraged rather than encouraged more endeavors. Should we also question if DOI and the BLM are truly

following the original scope of the law as passed in Section 369 of EPACT 2005? **#1])> <([#2** [*9.8*] [*2.1.1*] A complete and acceptable PEIS was completed in 2008 at great expense to the taxpayers and small rural communities only to be thrown out to appease a very small contingent of obstructionists. In that event we have spent millions more to rebuild the "better mousetrap"! We have done this as our Nation's economic future is in harm's way with lower credit ratings, multi-trillion dollar budget deficits, near record unemployment and home foreclosures while we continue to pay high energy prices dictated to us by unstable and even hostile countries. Have we totally lost our minds here folks? This entire process is, as President Reagan paraphrased, the problem not the solution. We can no longer expect the majority of the United States to suffer at the hands of the special interest groups that wish to stop any and all development of the rich natural resources we have available. This PEIS is totally ludicrous and the only sensible solution at this point is Alternative 1-No Action along with a business friendly attitude to encourage responsible development of resources right here in our back yard. **#2])>** Sincerely, Bill Johnson, Utah Member US Congressional Task Force on Unconventional Fuels 483 E 700 N Vernal, UT 84078 435-650-5572 See Attachment.

OSTS2012D50281

Organization: Cori Redstone
Received: 5/4/2012 10:46:39 AM
Commenter1: Cori Redstone - Salt Lake City, Utah (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/14/2012 12:00:00 AM
Attachments: OSTS2012D50281.htm (OSTS2012D50281-58895.htm Size = 1 KB)
Submission Text
<([#1 [*12*] Tar sands and oil shale will cause so much permanent damage to the land that the the cost of allowing private industry to mine oil on the land cannot ever be recuperated. Never mind the poisons, toxins, the morality of allowing this generation to permanently destroy land for following generations. Their development plans are not economically viable. The companies are lying to make a profit. The land will be permanently ruined. Oppose all tar sands, oil shale, oil sand etc. **#1])>**

OSTS2012D50282

Organization: Bonnie Christiansen
Received: 5/4/2012 10:48:57 AM
Commenter1: Bonnie Christiansen - Salt Lake City, Utah 84115 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:

Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/14/2012 12:00:00 AM
Attachments: OSTS2012D50282.htm (OSTS2012D50282-58897.htm Size = 1 KB)
Submission Text
<([#1 [*3.4.1*] It is my understanding developing tar sands has the potential to contaminate water supplies. Contaminated water makes life for humans, livestock, wildlife and plants challenging if not fatal. There should be less than a .01% chance of water contamination occurring over a 100 year period (from an insurance policy perspective) in order for the benefits of this resource to outweigh the risks. **#1])> <([#2** [*3.5.1.1*] It should also be shown that development of this resource will not add to green house gas emissions, as according to the vast majority of climate scientists continued green house gas emissions will increase destructive weather phenomenon. **#2])>**

OSTS2012D50283
Organization: Western Business Roundtable, Holly Propst
Received: 5/4/2012 10:57:39 AM
Commenter1: Holly Propst - Lakewood, Colorado 80401 (United States)
Organization1: Western Business Roundtable
Commenter Type: Misc. Organization
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/16/2012 12:00:00 AM
Attachments: OSTS2012D50283.htm (OSTS2012D50283-58915.htm Size = 1 KB)
WBRT_Comments_BLMOilShalePEIS_Revisit_FINAL_OSTS2012D50283.pdf (OSTS2012D50283-58914.pdf Size = 39 KB)
Submission Text
The Western Business Roundtable appreciates the opportunity to comment. See our submission attached. See Attachment.

Western Business Roundtable | 200 Union Boulevard, Suite 105| Lakewood, CO 80228 | 303-384-9911
info@westernroundtable.com | www.westernroundtable.com
The opinions expressed in this letter represent the views of a majority of Roundtable Members, but not necessarily all of our members.
May 4, 2012
Oil Shale and Tar Sands Resources
Draft Programmatic EIS
Argonne National Laboratory
9700 South Cass Avenue
EVS/240
Argonne, Illinois 60439
Re: Draft PEIS for Allocation of Oil Shale and Tar Sands Resources on BLM Lands in Colorado, Utah and Wyoming
Dear Sir/Madam:

On behalf of the Western Business Roundtable ("Roundtable"), I am writing to provide our input regarding the Bureau of Land Management's (BLM) decision to revisit the 2008 Programmatic Environmental Impact Statement (PEIS) which has governed federal research-development-commercialization efforts for Western oil shale and tar sands resources.1
As BLM notes, the planning area for the oil shale resource is the Piceance Basin in Colorado, the Uintah Basin in Utah and the Green River and Washakie Basins in Wyoming. For the tar sands resources, the planning area is within the Colorado Plateau in Utah. Given the West-centric concentration of these resources, the federal approach to oil shale/tar sands development has long been of interest to the Roundtable.
The Roundtable is a broad-based coalition of companies doing business in the Western United States. Our members are engaged in a wide array of enterprises including: engineering, construction, communications, manufacturing, retail sales, refining, iron and steel, mining, electric power generation, and oil and gas exploration, development and distribution. We work to defend the interests of the West and support policies that encourage economic growth and opportunity, freedom of enterprise and a sound approach to conservation and environmental preservation.

1 77 FR 5833, February 6, 2012
<([#1 [*11*] We participated in the public input process for the BLM's 2008 PEIS for oil shale development. In that context, we discussed the key elements important for implementing a viable long-term federal commercial oil shale leasing program. We have linked our 2008 comments below and ask that they be incorporated, by reference, in our comments here.2

The Roundtable enthusiastically supported the goals of the Energy Policy Act of 2005 ("EPAct05") to establish a viable commercial leasing structure for oil shale on federal lands. The Roundtable believes that a responsible federal energy policy must include the environmentally-sensitive development and utilization of all the domestic energy resources we have available to us. We believed then, and we do now, that Western oil shale resources offer significant potential as a longer-term solution to the United State's growing energy needs.

2 Roundtable Comments: 2008 BLM Oil Shale and Tar Sands Draft PEIS:
http://www.westernroundtable.com/Portals/0/Docs/energy/2012/WBRT_Comments_OilShale_Rule2008_FINAL.pdf and
http://www.westernroundtable.com/Portals/0/Docs/energy/2008/WBRT_Comments_OilShale_PEIS_FILED.pdf
#1])> <([#2 [*6.1.2*] The oil shale resources of the West offer tremendous potential because the region is home to the world's largest deposits of the resource. The Green River Formation in Colorado, Utah and Wyoming contains an estimated 1.5 to 1.8 trillion barrels of oil. Even by conservative estimates, there are 800 billion barrels of recoverable oil from oil shale in the area – that is three times greater than the proven oil reserves of Saudi Arabia. Seventy percent of these reserves are under the control of the federal government. **#2])>**
<([#3 [*10.6.3*] Tapping these extraordinary energy resources will lessen our reliance on hostile, foreign sources of energy, strengthen our domestic energy independence, help bolster the West's economy and contribute greatly to the long-term prosperity of our nation. **#3])>**
<([#4 [*9*] The challenge of developing oil shale lies in identifying an economically efficient and environmentally responsible way to develop these vast resources. It is important for the BLM to

recognize the capital investment and associated business risk that comes with developing the technology to produce this energy. BLM can best respond to these realities by:
-Making a strong commitment to a commercial oil shale leasing program;
-Providing greater certainty to the leasing process at every stage;
-Developing a regulatory structure that makes allowances for the intensive investment that businesses must make to produce this domestic energy resource.
Unfortunately, BLM's "fresh look" appears more focused on hobbling commercial leasing than on encouraging development. We believe this approach is fundamentally wrong.
Ironically, delay is hindering the development of the very technology many of the proponents of more delay are requesting. It certainly delays the objective of becoming a more energy-independent country in an unstable world, and it diminishes the economic opportunities for jobs in our Western communities. Perhaps most importantly, delay takes out of the mix a source of fuel that has the ability, in the future, to substantially mitigate the price volatility for fuels that has so battered American consumers in recent years.
Absent a reliable structure for leasing over 70 percent of the potential resource, companies cannot accurately evaluate the risk versus the reward of pursing oil shale development. If BLM can provide greater certainty, both through a solid commitment to implement a commercial leasing program and through institution of reasonable leasing terms and requirements, businesses will respond to the opportunity. In that case, our nation will reap the benefits of a vast domestic energy resource. On the other hand, the uncertainty that persists – in the absence of a viable, appropriately-scaled commercial leasing regulatory structure -- will eventually smother the innovation needed to tap the West's tremendous domestic oil shale resources. **#4])>**
CONCLUSION
Thank you for your consideration of these comments.
Holly Propst Executive Director / General Counsel Western Business Roundtable 14405 West Colfax Avenue, #159 Lakewood, CO 80401 1-800-410-1050

OSTS2012D50284
Organization: Kevin Uno
Received: 5/4/2012 10:58:14 AM
Commenter1: Kevin Uno - Salt Lake City, Utah 84103 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/14/2012 12:00:00 AM
Attachments: OSTS2012D50284.htm (OSTS2012D50284-58899.htm Size = 1 KB)
Submission Text
<([#1 [*12*] I oppose oil shale and tar sand extraction, especially in Utah. The long-term environmental consequences far outweigh the short-term gain of fossil fuel. **#1])> <([#2** [*10.6.1*] I encourage Utah's elected officials and business community to be leaders in developing clean energy alternatives. **#2])>**

OSTS2012D50285

Organization: tarsandsutah.blueskyinstitute.org, Lionel Trepanier
Received: 5/4/2012 11:01:34 AM
Commenter1: Lionel Trepanier - Salt Lake City, Utah 84102 (United States)
Organization1:tarsandsutah.blueskyinstitute.org
Commenter Type: Affiliation Only
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/16/2012 12:00:00 AM
Attachments: OSTS2012D50285.htm (OSTS2012D50285-58918.htm Size = 3 KB)
Please_have_these_comments_on_your_proposal_to_lease_federal_Lands_for_tar_sands_OSTS 2012D50285.pdf (OSTS2012D50285-58917.pdf Size = 13 KB)

Submission Text

Please have these comments on your proposal to lease federal Lands for tar sands/oil shale mining in Utah/Colorado/Wyoming. **<([#1** [*1.1*] You need to hold a proper and sufficient public hearing in Salt Lake City. The hearing I attended on Wednesday, March 14, 2012 at the Grand America Hotel in Salt Lake City, was no public opportunity at all. The room did not fit. It was way way to small. Even though you must have known it was too small given the attendance at earlier presentations. Your presenters refused to answer questions and instead played musical chairs with the little room forcing most of the public to leave without answers. We want a public hearing and not the dog and pony show you presented! **#1])> <([#2** [*12*] Further, I suggest, even demand, that you NOT expand the land available for tar sands/oil shale mining in Utah/Colorado/Wyoming. I understand there are several relatively small plots currently under lease for experimental tar sands/oil shale mining in Utah/Colorado/Wyoming. These sites should be promptly remediated and NOT expanded. No additional acres should be allocated to this loser project. In short hand: Several Problems with Tar Sands and Oil Shale Mining are: It requires huge amounts of energy to produce, leading to high greenhouse gas emissions. It releases toxic substances into the environments, including carcinogens. It uses massive amounts of water and will pollute ground water and surface waters now used for other purposes. It destroys habitat. It produces dirty energy that pollutes the environment. **#2])>** Specifically consider: **<([#3** [*6.3*] The PEIS is deficient because you cannot determine the programmatic environmental impact of committing so many acres to this project when the technology intended to be used for the project is quite unknown and unproven. **#3])> <([#4** [*4.2*] [*3.14*] Further we do know that toxic waste/citric solvent would be released during the project including carcinogens into the environment and the cumulative impact has not been disclosed in the PEIS. **#4])> <([#5** [*3.4.1*] Also, recent research indicates that Oil shale beds often serve as the floor for aquifers and heating the oil shale in place will heat the aquifer. That will likely causes the groundwater to become contaminated with elements like arsenic and fluoride, creating a groundwater nightmare. Because the Green River formation lies within the greater Colorado River drainage basin, any surface or groundwater contamination will not only affect the local population but will likely have a significant impact on water quality for the millions of downstream users. **#5])> <([#6** [*3.4.1*] Water use. While the details remain unclear, the implication is unmistakable – unconventional fuel development will increase demand for water in an arid region where demand for water often exceeds supply. Not all who seek water will be able to satisfy their thirst at a

palatable cost, and non-consumptive uses will be pitted against powerful economic interests. **#6])> <([#7** [*1.5*] This PEIS is fatally deficient. Best to rescind, research and reissue. **#7])>** Sincerely, ____/ Lionel Trepanier____ Lionel Trepanier 411 s 800 e Salt Lake City UT 84102 LionelTrepanier@gmail.com 801-487-2295 See Attachment.

OSTS2012D50286

Organization: Wyoming Game and Fish Department, John Emmerich
Received: 5/4/2012 11:13:33 AM
Commenter1: John Emmerich - Cheyenne, Wyoming 82006 (United States)
Organization1: Wyoming Game and Fish Department
Commenter Type: State Government
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form and Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/14/2012 12:00:00 AM
Attachments: OSTS2012D50286.htm (OSTS2012D50286-58921.htm Size = 1 KB) wer11311.00f_signed_letter_OSTS2012D50286.pdf (OSTS2012D50286-58920.pdf Size = 1995 KB)

Submission Text

See Attachment.

May 4, 2012
WER 11311
WYOMING GAME AND FISH DEPARTMENT
5400 Bishop Blvd. Cheyenne, WY 82006
Phone: (307) 777-4600 Fax: (307) 777-4699
Web site: http://wgfd.wyo.gov
Department of the Interior
Bureau of Land Management
Notice of Availability ofthe
Draft Programmatic Environmental Impact Statement for
Allocation of Oil Shale and Tar Sands Resources on
Lands Administered by Bureau of Land Management
in Colorado, Utah and Wyoming
Oil Shale and Tar Sands Resources
Draft Programmatic EIS
Argonne National Laboratory,
9700 South Cass Avenue-EVS/240
Argonne, Illinois 60439
Dear Sir/Madam:
GOVERNOR
MATIHEW H. MEAD
DIRECTOR
SCOTITALBOTI
COMMISSIONERS

AARON CLARK- President
MIKE HEALY- Vice President
RICHARD KLOUDA
FRED LINDZEY
T. CARRIE UTILE
EDMIGNERY
CHARLES PRICE
The staff of the Wyoming Game and Fish Department has reviewed the Draft Programmatic Environmental Impact Statement for Allocation of Oil Shale and Tar Sands Resources on Lands Administered by Bureau of Land Management in Colorado, Utah and Wyoming. We offer the following comments regarding the four alternatives for your consideration.
<([#1 [*2.1*] [*3.7.3.1*] Alternative 1- No Action
This alternative would provide no additional protection for wildlife or habitat in Wyoming, but could have a number of potential negative effects on the state's wildlife and habitat resources. Although there are no anticipated impacts from the allocation of leases in the Kemmerer, Rock Springs, and Rawlins Field Offices, Alternative 1 leaves an estimated 1,000,574 acres open for future commercial oil shale leasing in southwest Wyoming, including approximately 248,000 acres available for surface mining operations. Given the amount of surface disturbance involved in all three methods of oil shale extraction - surface mining (5,760 acres), underground mining (1 ,650 acres), and in-situ process (5,760 acres) - the Department would anticipate the potential for negative impacts on wildlife and habitat resources related to habitat loss, fragmentation, and degradation, among other things. Project and site-specific NEP A would reveal those potential impacts, and is required for all future oil shale leasing.

Although the allocation of leases in Alternative 1 does not necessarily mean that + 1 million acres
of land in the Green River and Washakie Basins will be leased for commercial oil shale production, Alternative 1 would allow for the possibility of oil shale leasing on approximately 31,000 acres of identified floodplains, wetlands, and riparian areas and could impact 228.7 miles of stream (includes a 2 mile buffer as described in the PEIS) on 18 different streams in these basins. Additionally, the leasing area proposed in Alternative 1 overlaps a number of sensitive, critical, and crucial habitats, including Areas of Critical Environmental Concern (ACECs) open to mineral development. As described in the PEIS, oil shale development and commercial production in these areas would have many short-term, long-term, direct, and indirect impacts on the state's wildlife and habitat resources and would likely increase the difficulty of managing for healthy species populations in southwest Wyoming due to increasingly disturbed and fragmented habitat conditions.

Specifically, the leasing area proposed in Alternative 1 overlaps 22 aquatic, terrestrial, and combination priority areas (i.e., crucial habitat) and enhancement areas that are defined in the Department's Strategic Habitat Plan (SHP). The SHP was developed to help guide the Department in meeting the challenges of habitat conservation in the face of forces like energy development, climate change, invasive species, and drought. Future leasing and commercial oil shale development in these identified areas would necessarily create more complexity in managing for healthy wildl ife and habitat. The leasing area proposed in Alternative 1 overlaps thousands of acres of big game crucial winter range, including important winter habitats for

pronghorn, mule deer, and elk. The disturbance, fragmentation, and long-term loss of crucial winter habitats is detrimental to the ability of these species survive difficult winter months and maintain good body condition, and so also impacting reproductive success. In addition to crucial winter range, the leasing area overlaps pronghorn, mule deer, and moose winter range, as well as elk calving areas. The Alternative 1 proposed leasing area overlaps both riparian and terrestrial key non-game wildlife areas in southwest Wyoming. Although some of these habitats may be protected by timing stipulations during the development phase, few protections would exist once commercial oil shale production begins. Moreover, timing stipulations do not mitigate the loss or fragmentation ofhabitat. It is unclear whether or not oil shale extraction would be treated like oil and gas activities and the leases would have resource protecting stipulations attached, or whether it is treated as a mining activity with very little restriction under existing mining laws. **#1])>**
The leasing area proposed in Alternative 1 overlaps thousands of acres of greater sage-grouse habitat, including areas designated as core population areas by the State of Wyoming Greater Sage-Grouse Core Area Protection Executive Order 20 11-5 (E.O. 2011-5). In June 2011 , Governor Mead signed E.O. 20 11-5 to replace E.O. 2010-4 signed by former Governor Freudenthal in August 2010, which replaced E.O. 2008-2, also signed by Governor Freudenthal, in August 2008. Wyoming's "Core Population Area" strategy is a statewide conservation strategy developed in response to declining sage-grouse populations and the potential federal listing by the U.S. Fish and Wildlife Service (Service) ofthe greater sage-grouse as threatened or endangered. In March 2010, the Service rendered a status finding for the greater sage-grouse of wananted for listing but precluded. The Service will repeat its assessment and make a determination either to list the bird under the Endangered Species Act of 1973 or find that a listing is not wananted by September 2015 for the majority of the bird's range (including Colorado, Utah, and Wyoming).

<([#2 [*3.7.5.1*] Wyoming's greater sage-grouse core area strategy defines priority conservation areas within the
state and sets forth a permitting process and stipulations for development within those defined core areas. The strategy also has established two connectivity areas in northern Wyoming with stipulations for development. As noted in previous comments on the PEIS (see 5/16/ 11 letter), the area made available for application for oil shale leasing in Alternative 1 in Wyoming overlaps the Greater South Pass, Seedskadee, Uinta, Blacks Fork, and Salt Wells core areas. Per E.O. 201 1-5, each application for development in core area would require the use of the Density and Disturbance Calculation Tool (DDCT) as part of the permitting process and the application of stipulations for development, which, among other things, includes limits on surface disturbance and density of anthropogenic disturbances within core area. The Department has been on the front lines of implementing this statewide conservation strategy, and to date, some of the biggest baiTiers to its success are valid and existing lease and development rights on BLM lands. Given the extent to which oil shale operations disturb the surface - surface mining (5,760 acres), underground mining (1 ,650 acres), and in-situ process (5,760 acres) - allowing for the allocation of oil shale leasing in Wyoming's sage-grouse core areas has the potential to undermine E.O. 2011-5 and the core population area strategy by adding additional rights to lease and develop, that are not likely to be denied, in core sage-grouse habitat. Surface disturbance levels exceeding 5% in an area defined by the E.O. 2011 -5 DDCT process, and oil and gas and mining disturbance density levels that exceed an average of 1 per 640 acres are projected to cause declines in local sage-grouse populations in these areas. The declines would necessarily

contribute to a future listing decision by the Service. **#2])>**
<([#3 [*3.1.2*] In addition to directly impacting various species and their habitats, the Department anticipates
that commercial oil shale leasing could impact recreational hunting and angling opportunities in southwest Wyoming. **#3])>**
<([#4 [*2.2*] [*3.7.3.8*] Alternative 2 - Conservation Focus (2a), and with RD&D First Requirement (2b,
Preferred)
Of the four alternatives, this alternative offers the most protection to Wyoming's wildlife and habitat, aside from no allocation of oil shale leases in Wyoming as described in Alternative 3. Alternative 2 reduces the amount of area available for future commercial oil shale leasing by approximately 826,000 acres, and Alternative 2a further restricts the issuance of commercial leases until an initial Research Development and Demonstration (RD&D) lease demonstrates both the technical and economic feasibility of the extractive technology, which is limited to a 160 acre area. If the RD&D program requirements are met, the lease may be converted to a commercial production lease, which could include up to an additional 4,960 acres of contiguous area.

Although there are no anticipated impacts from the allocation of leases in the Kemmerer, Rock Springs, and Rawlins Field Offices, Alternative 2 leaves an estimated 174,476 acres open for future commercial oil shale leasing in southwest Wyoming. Given the amount of surface distmbance involved in all three methods of oil shale extraction - surface mining (5,760 acres), underground mining (1 ,650 acres), and in-situ process (5,760 acres) - the Department would anticipate the potential for negative impacts on wildlife and habitat resources related to habitat loss, fragmentation, and degradation, among other things. Project and site-specific NEPA would reveal those potential impacts, and is required for all future commercial and RD&D oil shale leasing.

With regard to this alternative, the Department would anticipate fewer (2a and 2b) and smaller scale (2b) impacts than the no action alternative. Both Alternative 2a and 2b exclude many critical and sensitive habitats in Wyoming from future oil shale leasing. Exclusions include: Lands with wilderness characteristics; Adobe Town; sage-grouse core areas; ACECs; land identified as having steep slopes and/or fragile, highly erosive soils; and identified, protected wetlands, riparian habitats, and floodplains. An estimated 79.6mi of stream (includes a 2 mile buffer as described in the PEIS) on 12 different streams in the Green River and Washakie Basins has the potential to be impacted by oil shale development under this alternative, which is ~ 150 fewer miles than the no action alternative. A majority of big game crucial winter habitats in Wyoming are avoided, as well. **#4])>**

<([#5 [*2.2*] In addition to fewer and smaller scale impacts, Alternative 2b would allow existing technology
to continue to advance and possibly become more efficient and a less disturbing and disruptive activity than it is at present. Also, the issuance of RD&D leases prior to conversion to commercial leases would allow operators to work with state and federal agencies early on in the planning and siting processes, as well as in developing resource mitigation plans in advance of commercial development. **#5])>**

<([#6 [*2.3*] [*3.7.3.8*] Alternative 3 - Research Lands Focus
Alternative 3 allows for additional RD&D leasing in existing oil shale development areas in Colorado, and therefore no RD&D or commercial leases would be available in Wyoming. The Department would not anticipate any terrestrial or aquatic wildlife and habitat impacts in southwest Wyoming resulting from this alternative. However, similar to Alternative 2b, this alternative would allow existing technology to continue to advance and possibly become more efficient and a less disturbing and disruptive activity than it is at present. Also, the issuance of RD&D leases prior to conversion to commercial leases would allow operators to work with state and federal agencies early on in the planning and siting processes, as well as in developing resource mitigation plans in advance of commercial development. **#6])>**

<([#7 [*2.4*] [*3.7.5.1*] Alternative 4 - Moderate Development (4a), and with RD&D First Requirement (4b)
The potential impacts on Wyoming's wildlife and habitat resources as a result of Alternative 4 would be similar to those described under Alternative 1. Although there are no anticipated impacts from the allocation of leases in the Kemmerer, Rock Springs, and Rawlins Field Offices this alternative leaves an estimated 967,446 acres open to future commercial leasing (a 33, 128 acre reduction from Alternative 1). Given the amount of surface disturbance involved in all three methods of oil shale extraction - surface mining (5 ,760 acres), underground mining (1 ,650 acres), and in-situ process (5 ,760 acres) - the Department would anticipate the potential for negative impacts on wildlife and habitat resources related to habitat loss, fragmentation, and degradation, among other things. Project and site-specific NEPA would reveal those potential impacts, and is required for all future oil shale leasing.

Although the allocation of leases in Alternative 4 does not necessarily mean that - 1 million acres of land in the Green River and Washakie Basins will be leased for commercial oil shale production, Alternative 4 would allow for the possibility of oil shale leasing on identified floodplains, wetlands, and riparian areas and could impact 217.3 miles of stream (includes a 2 mile buffer as described in the PEIS) on 18 different streams in these basins. Additionally, the leasing area proposed in Alternative 4 overlaps a number of sensitive, critical, and crucial habitats, excluding only Adobe Town and ACECs. Lands allocated for leasing in this alternative overlap thousands of acres of big game crucial winter habitat; sage-grouse habitat, including defined core areas; Department-identified priority and enhancement areas; and key non-game wildlife areas as described under Alternative 1. Although some of these habitats may be protected by timing stipulations during the development phase, few protections would exist once commercial oil shale production begins. Moreover, timing stipulations do not mitigate the loss or fragmentation of habitat. **#7])>**

<([#8 [*3.7.5.1*] As with Alternative 1, the Department would have the same concerns about allocating oil shale
leases in sage-grouse core area. Although Alternative 4 is a moderate development alternative when compared to the no action altemative, given the extent to which oil shale operations disturb the surface - surface mining (5,760 acres), underground mining (1,650 acres), and in-situ process (5,760 acres) - allowing for the allocation of oil shale leasing in Wyoming's sage-grouse core areas has the potential to undermine E.O. 201 1-5 and the core population area strategy by adding

additional rights to lease and develop, that are not likely to be denied, in core sage-grouse habitat. Surface disturbance levels exceeding 5% in an area defined by the E.O. 2011-5 DDCT process, and oil and gas and mining disturbance density levels that exceed an average of 1 per 640 acres are projected to cause declines in local sage-grouse populations in these areas. The declines would necessarily contribute to a future listing decision by the Service. **#8])>**

<([#9 [*3.1.2*] Similar to Altemative 1, in addition to directly impacting various species and their habitats, the
Department anticipates that commercial oil shale leasing could impact recreational hunting and angling opportunities in southwest Wyoming. **#9])>**

<([#10 [*2.4*] Under Alternative 4b, the Department would initially anticipate fewer and smaller scale impacts
than alternative 4a or the no action alternative. In addition to fewer and smaller scale impacts, Alternative 4b would allow existing technology to continue to advance and possibly become more efficient and a Jess disturbing and disruptive activity than it is at present. Also, the issuance of RD&D leases prior to conversion to commercial leases would allow operators to work with state and federal agencies early on in the planning and siting processes, as well as in developing resource mitigation plans in advance of commercial development.
#10])> Thank you for the opportunity to comment. If you have any questions or concerns, please contact
Amanda Losch, Staff Biologist, at (307) 4 73-3436.
Sincerely,
~ John Emmerich
Deputy Director
JE/mflgb
cc: USFWS
Colin McKee - Office of Governor Mead
Scott Smith-WGFD, Pinedale
Hilda Sexauer- WGFD, Pinedale
Jill Randall - WGFD, Pinedale
Floyd Roadifer- WGFD, Pinedale
Mark Zornes - WGFD, Green River
Robb Keith - WGFD, Green River
Ben Wise- WGFD, Green River
Kevin Spence-WGFD, Green River
Zack Walker - WGFD, Casper
Bob Oakleaf- WGFD, Lander

OSTS2012D50287
Organization: ExxonMobil Exploration Company, Thomas Yelverton
Received: 5/4/2012 11:36:39 AM
Commenter1: Thomas Yelverton - Houston, Texas 77060 (United States)
Organization1: ExxonMobil Exploration Company
Commenter Type: Gas / Oil Company
Classification:
Submission Category: Standard Web Form

Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/10/2012 12:00:00 AM
Attachments: OSTS2012D50287.htm (OSTS2012D50287-58924.htm Size = 1 KB)
EMEC_BLM_OSTS_DPEIS_RESPONSE_5_4_12_FINAL-2._OSTS2012D50287.pdf (OSTS2012D50287-58923.pdf Size = 932 KB)
Submission Text
Submitting on behalf of James V. White, ExxonMobil Exploration Comapny Attachment See Attachment.

ExxonMobil Exploration Company
Post Office Box 4778
Houston, Texas 77210-4778
May 4, 2012
Oil Shale and Tar Resources Draft Programmatic EIS
Argonne National Laboratory
9700 South Cass A venue - EVS/240
Argonne, Illinois 60439
EJf(onMobil
Exploration
RE: Notice of Availability of the Draft Programmatic Environmental Impact Statement for Allocation of Oil Shale and Tar Sands Resources on Lands Administered by the Bureau of Land Management in Colorado, Utah and Wyoming, 77 Fed. Reg. 5833 (Feb. 6, 2012)
Dear BLM Manager:
ExxonMobil Exploration Company ("ExxonMobil") appreciates the opportunity to comment on the Bureau of Land Management's ("BLM's") Oil Shale and Tar Sands Resources draft Programmatic Environmental Impact Statement ("2012 Draft PEIS"). **<([#1** [*10.6.3*] The company
believes a commercial oil shale and tar sands leasing program is in the best interest of the nation in helping to meet the country's energy needs. BLM lands in Colorado, Utah and Wyoming present strategically important long-term domestic energy resource potential. ExxonMobil urges the BLM to take a similarly long term view of land use policy that may ultimately allow development of oil shale and tar sand resources in an environmentally sound manner, pursuant to The Energy Policy Act of 2005 ("EP Act"). **#1])> <([#2** [*9.7*] Premature and precautionary removal of access to
the vast majority of land with this resource potential will put the viability of continued research and development at risk by making commerciality of development far less likely. ExxonMobil is currently pursuing a Research, Development and Demonstration ("RD&D") lease in Colorado to continue to develop and assess the feasibility of in-situ oil shale and nahcolite recovery. The proposed removal of90 percent oflands in Colorado and three-quarters of currently available land in the three-state area will discourage our and others' continued RD&D expenditure by drastically shrinking the size of and introducing huge discontinuity for potential resource recovery. This action would have serious economic and national security implications and should not be taken before the viability, means and need for recovery of this resource are known.

#2])> <([#3 [*2*] ExxonMobil is concerned that the alternatives analyzed, and the preferred alternative
identified, in the 2012 Draft PEIS are overly restrictive and contrary to the purposes of the EP Act. BLM has already analyzed the potential environmental effects and identified lands that may be available for development of oil shale and tar sands resources in a 2008 Programmatic Environmental Impact Statement ("2008 PEIS"). In that document and the subsequent Record of Decision ("2008 ROD"), BLM correctly concluded that specific environmental impacts, and therefore appropriate mitigation, could not be adequately analyzed until the leasing or project approval phase. Notwithstanding, the 2012 Draft PEIS reverses this decision and purports to reanalyze the environmental impacts associated with amending ten land use plans in Colorado, Utah and Wyoming in order "to reassess the appropriate mix of allowable uses with respect to oil shale and tar sands leasing and potential development."1 BLM's Notice of Availability states that, while the 2012 Draft PEIS assesses various mitigation measures, "[n]o decision regarding the adoption of such measures is being made as part of this planning initiative; such measures may be applied, if appropriate, at the discretion of the decision-maker, at the time these resources are leased and/or developed."2 This position is contrary to the preferred alternatives listed in the 2012 PEIS.

1 77 Fed. Reg. 5833, 5834 (Feb. 6, 2012)
2 Id. at 5835 **#3])> <([#4** [*9*] The U.S. oil shale industry needs consistency in federal policy and regulation to provide
the confidence needed for industry to make long-term investments in technology and research demonstration projects. This important resource development must carefully balance other priorities with respect to the use of Federal lands, including environmental protection and the need for paced, sustainable development that is required to progress technology and infrastructure over a multiple-year horizon. **#4])> <([#5** [*10.6.3*] While renewable or alternative energy supplies will
make an important contribution to our energy mix, fossil fuels still supply the great majority of energy in the U.S. and will continue to do so for the foreseeable future. As Congress recognized in Section 369 of the EPAct, access to the oil shales of Colorado, Utah, and Wyoming is therefore critically important to sustain our country's energy security.
#5])> <([#6 [*2.1.1*] ExxonMobil continues to support the BLM in its efforts to develop a commercial leasing
program to make Federal lands available for commercial oil shale and tar sands leasing. We strongly urge BLM to select the "no action alternative" and leave the current allocation decisions from the 2008 ROD in place. We believe that access to oil shale resources as outlined in BLM's 2008 PEIS and ROD could significantly increase domestic sources of energy supply in the years to come. The in-place oil shale resource for the Green River formation in the three-state area has been estimated at 1.5 to 1.8 trillion barrels. The size of the resource supports its strategic importance and the economic impact that its development would have. We believe that there would be significant economic benefits locally, statewide, and nationally as a result of oil shale development in the form of jobs and economic growth.

Of the Alternatives presented, Alternative 1 (No Change to 2008 ROD) is the most consistent with the EPAct and the only reasonable alternative at this stage of the NEPA process. "The lands available for lease under the 2008 land use plan amendment decisions would remain

available for future leasing consideration under the No Action Alternative. These lands comprise the most geologically prospective oil shale and tar sands areas administered by the BLM . . . but excluding lands that are exempted by statute, regulation, or Executive Order."3 ExxonMobil supports the BLM's 2008 amendment of land use plans to guide future management of geologically prospective areas where oil shale and tar sands resources are present. We believe a commercial oil shale and tar sands leasing program is in the best interest of the nation with respect to meeting the country's energy needs. Thus, ExxonMobil strongly favors Alternative 1, the No Action Alternative, which would leave the current allocation decisions from the 2008 ROD in place, and best meets the requirements of the EPAct.

There is no compelling reason to change BLM's well researched and considered oil shale and tar sands leasing decisions made in 2008. The process took several years, was thorough and involved broad public participation from all stakeholders. We believe the 2008 BLM ruling provides appropriate acreage for potential commercial leasing, while preserving the adequate measures for environmental and socioeconomic protection. We strongly believe that viable economic development can only be sustained if performed in a safe, environmentally sound way. The "no action alternative" would support a long-term approach that favors resource access, and regulatory and fiscal stability with a level of certainty that supports the significant research investments required to develop technologies to unlock these vast oil and gas resources.

3 2012 Draft PEIS at ES-5 **#6])>**
<([#7 [*9.2.4*] Contrary to BLM's conclusion in its 2008 PEIS and ROD, and without any explanation
for its change in position, the 2012 Draft PEIS's Preferred Alternative (Alternative 2) would impose mandatory mitigation measures for greater sage grouse by excluding "core or priority sage grouse habitat" from development. As an initial matter, neither "core" nor "priority" sage grouse habitat has yet been defined by BLM, even though the Preferred Alternative purports to incorporate restrictions on development in these areas. As a result, interested parties cannot meaningfully comment on these restrictions at this time, because BLM has not defined the relevant terms.

Moreover, approval of this Alternative would still allow incorporation of mitigation measures identified as part of the ongoing efforts to increase the protections of sage grouse habitat, as BLM concedes additional NEPA analyses are required before any leases could be issued or developed. Thus, it is not the case here that BLM is ignoring its current policy on sage grouse management, rather BLM is presuming what such future guidance may entail and impermissibly imposing that guidance as mandatory mitigation at the programmatic stage. In fact, the total area actually developed even under Alternative 1 is certain to be smaller than outlined, precisely because regulatory and land management factors analyzed at the leasing and project approval phases have not yet been considered and will undoubtedly come into play. Indeed, as discussed further in the attached, BLM has recognized that the environmental impacts cannot be fully assessed at the programmatic level, but must be done at the leasing or project approval stage. Indeed, this would allow BLM to consider not only the resources that may be affected and whether any "core" or "priority" habitat are in the area, but also the actual technology being used and additional efforts by industry to reduce the impacts on sage grouse

habitat.
#7])> <([#8 [*2.4*] Although ExxonMobil strongly supports Alternative 1 in the 2012 Draft PEIS, we note
that Alternative 4 (moderate development alternative) may also be consistent with the EPAct, unlike Alternatives 2 and 3. Alternative 4 is similar to Alternative 1 except that it would exclude from oil shale and tar sands leasing the whole of the Adobe Town "Very Rare or Uncommon" area, as designated by the Wyoming Environment Quality Council on April 10, 2008, and 76,666 acres in existing Areas of Critical Environmental Concerns (ACEC) in the 2008 PEIS plus an additional ACEC acreages as a result of Colorado, Utah, and Wyoming planning efforts recently completed.4 This less restrictive Alternative (Alternative 4) was also found to be consistent with the BLM's 2011 settlement agreement with the Colorado Environmental Coalition, et al.5 It would manage sage-grouse habitat the same as under Alternative 1 but with individual field offices determining the management of such areas through additional NEP A and planning processes.fi As discussed further in the attached, BLM is undergoing a separate process to develop national management considerations, which would also apply to Alternatives 1 and 4.

4 See 2012 Draft PEIS at ES-8 to ES-9
5 Id. at ES-9 **#8])>** Additional detailed comments ofExxonMobil are provided in the attached document.
Again, we appreciate the opportunity to comment on the 2012 Draft PEIS. Please do not hesitate to contact us with any questions.
Thank you for the opportunity to comment.
11 ld. at 2-48 to 2-54
Sincerely,
U.S. New Opportunity Manager
ExxonMobil Exploration Company
4
DETAILED COMMENTS OF EXXONMOBIL EXPLORATION COMPANY
ON THE DRAFT PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT
FOR ALLOCATION OF OIL SHALE AND TAR SANDS RESOURCES ON
LANDS ADMINISTERED BY THE BUREAU OF LAND MANAGEMENT IN
COLORADO, UTAH, AND WYOMING
77 Fed. Reg. 5833 (Feb. 6, 2012)
OUTLINE
I. Background
A. Energy Access Perspective
II. BLM Has Not Adequately Explained its Change in Position from the 2008 ROD and its Decision to Issue a New PEIS.
A. The 2012 Draft PEIS does not identify any new information to support exclusion of undefined "core or priority sage grouse habitat" from any oil shale or tar sands development.
B. BLM does not explain its change of position to exclude all of Adobe Town, contrary to its decision in 2008.
C. BLM's voluntary settlement does not justify its change in position.
III. The Preferred Alternative (Alternative 2) is Counter to the United States' Energy Policy as Identified in the Energy Policy Act, Which Defines the Purpose and Need for the BLM

Action Here.
A. An RD&D-first component is inconsistent with the EPAct.
B. The 2012 Draft PEIS is inconsistent with the EPAct and with FLPMA and BLM policy.
C. The EPAct defines the Purpose and Need for this action, and BLM should return to the Purpose and Need statement in the 2008 PEIS and ROD.
IV. As BLM Found in the 2008 ROD, Decisions Regarding Sage Grouse Mitigation Should be Considered at Later Planning Stages.
V. Any Exclusion of Potential Oil and Gas Leasing on "To Be Defined" Sage Grouse Habitat may be viewed as Arbitrary and Capricious.
A. Protection for the sage grouse should be deferred to the environmental reviews of leasing or project-specific actions.
B BLM cannot impose mandatory limitations based on future "guidance."
C. BLM has failed to take a "hard look" at the potential impacts of the alternatives in the 2012 Draft PEIS.
D. Basing a decision prior to defining the precise parameters of the agency action is arbitrary and capricious.
VI. BLM Should Await Completion of its Ongoing Review of Sage Grouse Management on Public Lands.
VII. Other Technical Comments
A. Oil Shale development and water usage
B. Multi-Mineral Leasing
Comments of ExxonMobil Exploration Company
Oil Shale and Tar Sands Draft PEIS
May 4, 2012
Page 2
I. Background
<([#9 [*9*] A. Energy Access Perspective
Increased access to U.S. energy supplies will strengthen energy security, create jobs, stimulate economic growth, and generate tremendous revenues to federal and local governments. In order to increase U.S. energy supplies, expanded access is needed to both areas that are currently off-limits to the oil and gas industry and to areas with large unconventional oil and natural gas resources. Decisions and regulatory frameworks governing the development of these resources need to be efficient and transparent. They should also recognize current scientific, technological and economic realities of oil and natural gas exploration and production.
The oil and gas industry currently faces significant regulatory challenges that are limiting development of our national resources. The business and national energy security implications of ever-growing barriers and regulatory requirements are significant and add uncertainty, time, and expense to the leasing and permitting process at all levels, making it more difficult, expensive, time-consuming and even possible to secure leases and to translate them into actual drilling permits, new drilling activity, and eventual production.
U.S. energy policy should provide for responsible development of oil and gas resources to help meet the nation's long term energy needs. Policies should provide for both conventional and unconventional oil and natural gas resources and must require that exploration and development be done in an environmentally and socially responsible manner. Recent studies project global energy demand will be about 30 percent higher in 2040 than in 2010, even with

substantial gains in efficiency across all regions of the world. Meeting this demand will require all energy sources and must include development of new oil and natural gas supplies. One important resource that will help us meet this demand is oil shale.
ExxonMobil supports development and use of high-quality scientific and technical knowledge bases to inform science-based regulation, leasing, and permitting decision making. Industry and the federal government should also continue to conduct and support research in key safety, health, and environment related areas associated with exploration.
#9])> <([#10 [*9.2.2*] [*2.2*] II. BLM Has Not Adequately Explained its Change in Position from the 2008 ROD and
its Decision to Issue a New PEIS.

EPAct Section 369(d) required BLM to prepare a PEIS for a commercial leasing program for oil shale and tar sands resources, emphasizing "the most geologically prospective lands within each of the States of Colorado, Utah, and Wyoming." Pub. L. No. 109-58, § 369(d)(1). Congress imposed stringent timelines to ensure that a leasing program would be in place by February 2008. Additional provisions in the EPAct evidences Congress' intention to provide for diligent development of these resources. Id. § 369(d), (e), (f). BLM issued a Final PEIS in September 2008 and the Approved Resource Management Plan Amendments/Record of Decision (ROD) for Oil Shale and Tar Sands Resources to Address Land Use Allocations in Colorado, Utah, and Wyoming and Final Programmatic Environmental Impact Statement in November 2008. The 2008 ROD amended ten RMPs to open nearly two million acres of federal lands for potential oil shale and tar sands leasing.

In the 2008 ROD, BLM rejected those alternatives that would not make the "most geologically prospective lands . . . available for application for leasing." 2008 ROD at 22 (oil shale), 35 (tar sands). As BLM recognized, certain alternatives excluded much of the most geologically prospective acreage and unreasonably fragmented the area that would be available for application, resulting in parcels that are unlikely to be explored, leased, or developed. Id. at 22, 35-36. BLM also recognized that the allocation decision was only a first step in the process to establish a commercial oil shale and tar sands program, and that prior to the leasing and development additional analyses under the National Environmental Policy Act ("NEPA") would be required. Id. at 38. BLM concluded, "[i]t would be premature to eliminate areas prior to sitespecific
analysis based on factors that are not known now, but that would be known at the leasing or operation permitting stages, such as location, timing and type of oil shale technology, that may show that these resources could be adequately protected through mitigation." Id. 22; see also id. at 36.

Yet, Alternative 2 of the Oil Shale and Tar Sands Resources draft Programmatic Environmental Impact Statement ("2012 Draft PEIS"), which BLM has preliminarily selected as its Preferred Alternative, would "exclude from commercial oil shale leasing" numerous categories of public lands "and/or their resource value that may warrant protection from potential oil shale leasing and development." 2012 Draft PEIS at ES-6 (emphasis added). This alternative would, among other things, exclude "[c]ore or priority sage-grouse habitat, as defined by such guidance as the BLM or the DOI may issue."7 Id. "As a result, the acreage made available for application for commercial lease under Alternative 2 (461,965 acres) would be less than a

quarter of that available under Alternative 1."8 Id. at 6-114. BLM provides no rationale and cites no authority to support such blanket exclusions at this stage of the planning process. The Preferred Alternative would provide significantly less than the 830,297 acres that would have been available for oil shale leasing under a similar alternative rejected in 2008.9 In now identifying Alternative 2 as the "Preferred Alternative" in the 2012 Draft PEIS, BLM has taken the opposite approach than it took in 2008 by excluding lands from allocation even before a full environmental impact analysis can be completed.10 BLM has failed to adequately explain or support this change in position.

7 This alternative would also exclude "[a]ll areas that the BLM has identified or may identify as a result of
inventories conducted during this planning process, as lands having wilderness characteristics" and "[t]he whole of
the Adobe Town 'Very Rare or Uncommon' area, as designated by the Wyoming Environmental Quality Council on
April 10, 2008." 2012 Draft PEIS at ES-6 (emphasis added). As noted further below, ExxonMobil questions the
basis for these exclusions, including the procedural process by which BLM is purporting to exclude them from
potential leasing. See, infra §II.B. and n.11.
8 The Preferred Alternative would make an additional estimated 91,045 acres available for application for
commercial tar sands leasing.
9 This Alternative in the 2008 PEIS would have identified a total of 229,038 acres available for application for
commercial tar sands leasing.
#10])> <([#11 [*9.2.4*] A. The 2012 Draft PEIS does not identify any new information to support exclusion of undefined "core or priority sage grouse habitat" from any oil
shale or tar sands development.
As with the 2008 PEIS, the 2012 Draft PEIS "is limited to an allocation decision." 2012 Draft PEIS at 1-5. BLM concedes further analysis will be required at the leasing and project stages "when more specific information is known about the specific technologies being proposed and associated environmental consequences in the locations being proposed." Id. The 2012 Draft PEIS also recognizes that oil shale and tar sands development remains relatively new, and there is simply not sufficient information at this time to assess the environmental impacts. Id.; see also id. at 1-14, 1-20. Notwithstanding, BLM now proposes to exclude a significant portion of lands from any further consideration, contrary to its decision in 2008 and without adequate explanation. As the Supreme Court has found, "a reasoned explanation is needed for disregarding facts and circumstances that underlay or were engendered by the prior policy." FCC v. Fox Television Stations, Inc., 129 S. Ct. 1800, 1811 (2009). BLM provides no explanation for its change in position.
In 2008, BLM rejected alternatives that would unduly restrict the lands that may be available for oil shale and tar sands leasing.
Unlike Alternative C,11 which excludes lands based on existing management decisions for oil and gas development, Alternative B12 provides the decisionmaker with the discretion to balance the oil shale use and protection of

resources on the public lands during subsequent site-specific NEPA analysis. This balanced approach is consistent with the Federal Land Policy and Management Act (FLPMA) principles of "multiple use," and "sustained yield." The requirement to perform future NEPA analyses and to comply with other environmental laws allows the decisionmaker to optimize the recovery of energy resources, to establish appropriate lease stipulations to mitigate anticipated impacts, or to fully protect a resource or resource value by choosing not to offer an area for lease at any particular time. Even if some technologies may not allow mining of some tracts to proceed without unacceptable impacts to other resource values, Alternative B would allow the agency the opportunity to choose to offer leases when a technology is proposed that can be used compatibly with the resource values in question. This is consistent with the comments that supported a viable and sustainable commercial oil shale leasing program, while ensuring that any impacts to sensitive resources or resource values are mitigated to any commercial development. It is also consistent with the planning decisions for other mineral resources for these parcels which authorize leasing subject to restrictive conditions, rather than preclude leasing altogether.

2008 PEIS at 16-17. Alternative 2, on the other hand, would amend the RMPs to designate less than the 830,000 acres opened under Alternative C in the 2008 PEIS as available for future commercial oil shale leasing, estimating only 461,965 acres would be available for oil shale leasing. BLM provides no explanation for abandoning this determination in the 2012 Draft PEIS.

BLM contends it "decided to take a fresh look at land use allocations made in the 2008 ROD," because of new information not available in 2008. 2012 Draft PEIS at 1-5, 2-7. BLM purported such new information to be "nationwide and state-specific guidance recommending the consideration of certain management practices to address the appropriate management of sage-grouse habitat in the context of land use actions." Id. at 2-21 (referencing a text box in Section 4.1.1 of the 2012 Draft PEIS). However, the information provided in the 2012 Draft PEIS concerning alleged impacts of oil shale leasing on greater sage grouse is taken practically verbatim from the same discussion of the impacts considered in 2008. Id. at 4-124 to 4-126. In fact, the only "new" information identified was that "BLM is in the process of updating its guidance regarding protection of sage-grouse habitat," and that BLM is working with Utah to refine the delineation of preliminary priority sage grouse habitats. Id. at 4-126. BLM further states that "[i]t is anticipated that protection measures will be essentially as described." Id. But again, the mitigation measures identified in the 2012 Draft PEIS are the same as those identified in the 2008 PEIS, and neither contains an outright prohibition on development in undefined "core or priority" sage grouse habitat. Id. See also 2012 Draft PEIS, App. F, at F-19.13 The fact that BLM may issue at some point in the future new sage grouse management policies does not justify closing off these areas from development entirely at this time, particularly when those policies must be adhered to in any subsequent leasing or project approval action.14 Indeed, the 2012 Draft PEIS states that "[c]urrent BLM guidance on similar actions (e.g., fluid mineral resources) requires that the least restrictive stipulation that effectively accomplishes the resource objectives or resource uses for a given alternative should be used while remaining in compliance with the ESA." 2012 Draft PEIS at 4-131.

10 Throughout its analysis of the alleged impacts of the alternatives analyzed, as it did in the

2008 PEIS, BLM
recognized that "there is no environmental impact associated with amending land use plans to make lands available
or not available for application for commercial leasing in the three-state study area, but there may be impacts on
land values." See, e.g., 2012 Draft PEIS at 6-68 (discussion of Alternative 2). "In general, potential impacts of
future commercial development on specific resources located within the 461,965 acres cannot be quantified at this
time, because key information about the location of projects, the technologies employed, the project size or
production level, and development time lines are unknown." Id. at 6-68 to 6-69.
11 Alternative C was the conservation alternative in the 2008 PEIS and ROD and would have excluded lands that
are identified as requiring special management or resource protection in existing land use plans (which included,
among other things, sage grouse leks and nesting habitat). 2008 PEIS at ES-5 to ES-6.
12 Alternative B is the alternative that formed the basis of the 2008 RMP amendments and ROD.
13 Without any support, therefore, BLM then states as possible mitigation "[a]void leasing and/or development in
sage-grouse habitats." 2012 Draft PEIS at 4-133. BLM, however, does not explain what "sage-grouse habitats" are
being referenced here, or how this proposed mitigation differs from the current stipulations with respect to avoiding
disturbances to leks or winter habitats.
14 As BLM recognizes, the proposed amendments to the RMPs would themselves have "no effect" on species. See
2012 Draft PEIS at 4-131 ("The conservation measures developed in initial consultation with the USFWS, then, will
not necessarily be applied, unless warranted by the results of the consultation that will take place at the time the
BLM prepares to issue leases."). **#11])>**
<([#12 [*3.1.5*] B. BLM does not explain its change of position to exclude all of Adobe Town, contrary to its decision in 2008.
Alternative 2 would also exclude "[t]he whole of the Adobe Town 'Very Rare or Uncommon' area, as designated by the Wyoming Environmental Quality Council on April 10, 2008." 2012 Draft PEIS at ES-6. The Alternatives considered in the 2008 PEIS included the designated Wilderness Study Areas within Adobe Town, but the "remaining fringe area was not." 2008 ROD at 41.15 In 2008, BLM further stated:

> During the subsequent NEPA analysis, if an oil shale application is received for a parcel in the fringe area around the Abode Town WSA or the Monument Valley Management Area, when specific technical and environmental information is available for analysis at that time, any potential conflicts with the Wyoming Environmental Quality Council's designation can be addressed. The appropriate BLM Field Office will consider all available information and a range of alternative actions to mitigate or eliminate impacts to resource values present.

This is consistent with the intent of the "Very Rare or Uncommon" designation to provide a higher level of scrutiny when it comes to non-coal mine permits.
Id. at 41-42. The 2012 Draft PEIS notes that "[d]uring the process of developing the Rawlins RMP, the BLM chose not to carry the analysis of wilderness characteristics into the Proposed RMP/Final EIS because valid existing lease rights prohibit management actions to protect the identified wilderness characteristics." 2012 Draft PEIS at 3-34. BLM, however, provides no explanation for its decision now to exclude the broader area from potential leasing or of its assessment that the "whole" of Adobe Town should now be restricted in use, merely referencing Wyoming Environmental Quality Council's designation of the area. Id.
#12])> <([#13 [*9.1*] C. BLM's voluntary settlement does not justify its change in position.
In support of BLM's change in position from the 2008 PEIS and ROD with respect to closing significant new areas from even the potential for leasing, BLM cannot rely on a settlement agreement with Colorado Environmental Coalition, et al. ("2011 Settlement"), to determine a purpose and need and to identify alternatives that are contrary to the EPAct.16

Although BLM agreed as part of that settlement to consider alternatives that would exclude oil shale and tar sands leasing from various categories of lands, the plaintiffs conceded the settlement could not "prejudice the outcome of the RMP review process," and did not irretrievably commit resources prior to the environmental review being conducted. Opp'n to Mot. to Reopen, Colorado Envtl. Coalition, No. 09-cv-0085, at 37 (citations omitted) [Docket No. 68]; see also Metcalf v. Daley, 214 F.3d 1135, 1142-45 (9th Cir. 2000) (government officials predetermined and prejudiced NEPA outcome when, prior to NEPA compliance, the officials signed a contract with an Indian tribe that required officials to support and help implement tribe's proposal to resume whaling). As explained further below, infra § III.C., this settlement agreement conflicts with NEPA by mandating the analysis of certain alternatives, and requiring BLM to define the "Purpose and Need" so as to encompass the mandated alternatives. NEPA, on the other hand, requires an agency to first define the Purpose and Need for an action, and then develop a reasonable range of alternatives that meet the Purpose and Need. The 2011 Settlement flips NEPA's requirements on its head, and preordains the outcome. Moreover, BLM's implementation of a voluntary settlement agreement cannot override statutory requirements and cannot replace Congress' clear policy decisions. See 43 C.F.R. § 1610.4-7.

15 The description of the Wilderness Study Areas within Adobe Town appear somewhat inconsistent and should be
clarified. Compare 2008 ROD at 41 with 2012 Draft PEIS at 3-34.
16 In 2009, a coalition of environmental groups filed a lawsuit challenging the 2008 PEIS and ROD. Colorado
Envtl. Coalition v. Salazar, No. 09-cv-0085 (D. Colo. filed Jan. 16. 2009). The parties entered into a settlement
agreement in February of 2011, in which, citing to no authority, BLM agreed to analyze the environmental effects of
an alternative or alternatives in a NEPA analysis that would exclude all of certain identified areas, including "core or
priority sage grouse habitat, as defined by such guidance as Defendants may issue," from commercial oil shale or tar
sands leasing. At the time of the settlement, Secretary of the Interior Ken Salazar nonetheless

recognized the need
to encourage further exploration of oil shale and tar sands resources: "For more than a century, and through many
busts, we in the West have been trying to unlock oil shale resources to help power our country. … If we are to
succeed this time, we must continue to encourage RD&D, determine whether the technologies would be viable on a
commercial scale, and find a way to develop the resources in a way that protects water supplies in the arid West.
With commercial oil shale technologies still years away, now is the time to ensure that our rules and plans reflect the
latest information and will deliver a fair return to the American taxpayer." DOI Press Release, Salazar: Technology,
Water Supplies, and Fair Return Must Guide Nation's Oil Shale Program (Feb. 15, 2011),
http://www.blm.gov/wo/st/en/info/newsroom/2011/february/NR_02_15_2011.html. The 2012 Draft PEIS does not
explain how Alternative 2 can meet these goals. **#13])>**
<([#14 [*2.2*] III. The Preferred Alternative (Alternative 2) is Counter to the United States' Energy
Policy as Identified in the Energy Policy Act, Which Defines the Purpose and Need
for the BLM Action Here.
EPAct Section 369 highlights the critical role of energy supplies for the United States and
expressly "declares that . . . oil shale [and] tar sands . . . are strategically important domestic
resources that should be developed to reduce the growing dependence of the United States on
politically and economically unstable sources of foreign oil imports." Pub. L. No. 109-58,
§ 369(b). While recognizing that such development should be conducted in an environmentally
sound manner, Congress found that "development of those strategic unconventional fuels should
occur, with an emphasis on sustainability, to benefit the United States while taking into account
affected States and communities." Id.; see also 43 U.S.C. § 1701(a)(12) (noting policy of United
States to manage public lands "in a manner which recognizes the Nation's need for domestic
sources of minerals …"); 30 U.S.C. § 21a. Alternative 2, however, would "exclude from
commercial oil shale leasing" numerous categories of public lands "and/or their resource value
that may warrant protection from potential oil shale leasing and development." 2012 Draft PEIS
at ES-6 (emphasis added). This alternative would, among other things, exclude "[c]ore or
priority sage-grouse habitat, as defined by such guidance as the BLM or the DOI may issue." Id.
Although these core or priority habitat are not yet defined, BLM estimates that this Alternative
would allow only 461,965 acres for oil shale resources to be "made available for application for
commercial lease," including only 6,612 acres of the 30,720 acres in existing RD&D leases.17
Id. at 2-27. Exclusion of these areas at the programmatic stage of the NEPA analysis is
unwarranted and counter to the EPAct.

17 This alternative would also exclude "[a]ll areas that the BLM has identified or may identify as a result of
inventories conducted during this planning process, as lands having wilderness characteristics." 2012 Draft PEIS at
ES-6 (emphasis added). BLM cannot designate areas with wilderness characteristics, without

complying with the
requirements under the Federal Land Policy and Management Act ("FLPMA") and its own regulations for
modifying RMPs. 43 U.S.C. §§ 1711(a), 1712. As BLM has recognized, the inventory does not "of itself change or
prevent change of the management or use of the lands." BLM California, Other BLM Lands with Wilderness
Characteristics, http://www.blm.gov/ca/st/en/prog/wilderness/other_blm_lands_with.html (last updated Sept. 12,
2011). Exclusion of areas from oil shale leasing that the BLM has identified or may identify as a result of
inventories conducted during this planning process, as lands having wilderness characteristics combined with the
unclear definition of what constitutes "core or priority sage-grouse habitat" make it virtually impossible for industry
to either identify the excluded acreage or understand any associated restrictions.
#14])> <([#15 [*9.6*] A. An RD&D-first component is inconsistent with the EPAct.
The 2012 Draft PEIS Preferred Alternative for oil shale (Alternative 2.b.), which makes significantly less acreage available for potential oil shale leasing than what BLM found in 2008 was necessary to make leasing feasible, appears to be in direct conflict with the goals of the EPAct. All policy and regulatory decisions made by the BLM with regard to development of oil shale on federal lands must comply with EPAct Section 369, which provides for a competitive commercial leasing program that is separate and distinct from the RD&D program.18 Under Preferred Alternative 2.b. for oil shale, it seems that the BLM decision to issue a commercial lease can only occur once a lessee satisfies the conditions of its RD&D lease. BLM's new "contingency requirement" appears inconsistent with the EPAct. Moreover, in a separate settlement agreement, BLM agreed to issue a notice of proposed rulemaking in which it will propose amendments to its oil shale regulations19 to address the royalty rate and environmental protection requirements applicable to oil shale commercial leasing. See Attachment to Joint Motion for Order to Administratively Close the Case, Colorado Envtl. Coalition v. Salazar, No. 09-cv-0091 (D. Colo. filed Feb. 15. 2011) [Docket No. 80-1]. Under the settlement agreement, the notice of proposed rulemaking is due by May 15, 2012. To the extent BLM determines that oil shale development should be done in two phases -- RD&D and then commercial development -- BLM can address such requirements in its proposed rule and should not select Alternative 2.b. as beyond the scope of this action, which is merely intended to allocate lands potentially available for oil shale and tar sands leasing. For these same reasons, Alternatives 3 and 4.b. must be rejected.

18 With respect to RD&D leasing and the information developed therefrom, ExxonMobil also has concerns
regarding the use of proprietary information obtained from such leasing. While we support appropriate
environmental reviews and permitting processes, we feel that the current NEPA analysis presents a challenge for
BLM and companies that invest a significant amount of dollars and resources to develop proprietary technologies.

The review process must keep proprietary information confidential while providing the government agencies with
all the necessary information for thorough environmental analysis.
19 The challenged regulations were published at 73 Fed. Reg. 69,414 (Nov. 18, 2008). **#15])>**

<([#16 [*9.2.3*] B. The 2012 Draft PEIS is inconsistent with the EPAct and with FLPMA and BLM policy.
Even if an RD&D first component within an alternative is appropriate to consider, none of the iterations of Alternative 2 is consistent with the EPAct. As noted above, in the 2008 ROD, BLM rejected those alternatives that would not be consistent with EPAct's mandate. BLM recognized that certain alternatives would "unreasonably fragment[] the area that would be available for application, resulting in parcels that are unlikely to be explored, leased, or developed." 2008 ROD at 22, 35-36. BLM found that "[t]his could be an impediment to sound and rational development of the resource and can reduce the economic return to the public." Id. at 22, 36. Resources are likely to be by-passed because of the exclusions, limiting the benefits to the nation from exploitation of a domestic unconventional energy source. Id. at 22, 36. "Selection of Alternative C precipitously limits or restricts the decisionmaker's discretion to balance [oil shale or] tar sands use and the protection of resources or resource values, in accordance with FLPMA's principal of 'multiple use.'" Id. at 22, 36; see also id. ("Alternative C does not give the decisionmaker the necessary discretion to optimize the recovery of energy resources, establish appropriate lease stipulations to mitigate anticipated impacts, or to fully protect a resource or resource value by choosing not to offer an area for lease.").
Notwithstanding BLM's conclusions in 2008 that the fragmented nature of lands under Alternative C would preclude development of the resources, Alternative 2 of the 2012 Draft PEIS would impose even more significant restrictions than the Alternative C rejected in the 2008 ROD. Indeed, all of the versions of Alternatives 2 and 3 would make significantly less acreage available for potential oil shale and tar sands leasing than would have been made potentially available under Alternative C in the 2008 PEIS and ROD. Yet, the 2012 Draft PEIS fails to adequately explain how Alternative 2 can fulfill the requirements of the EPAct, given BLM's prior determination that this approach would preclude development. BLM provides no reasoned explanation for the dramatic change in its assessment of appropriate areas for potential leasing.20
As reflected in Figures 2.3.3-1 and 2.3.3-4 (Colorado), 2.3.3-2 and 2.3.3-5 (Utah), and 2.3.3-3 and 2.3.3-6 (Wyoming) of the 2012 Draft PEIS, areas that would be excluded from development under Alternative 2 render the lands available for oil shale and tar sands leasing to be limited and widely scattered, despite BLM's finding of these to be important areas of oil shale resources in the United States. Unduly restricting areas within this important resource would severely limit resource access, because the fragmented areas reduce operational efficiency and increase infrastructure impacts. It is BLM's policy to optimize the potential for oil and gas development to secure the maximum return to the public in revenue and energy production, prevent avoidable waste of the public's resources, honor the rights of lessees, and mitigate environmental impacts. See 2012 Draft PEIS at 2-13. Alternative 2 fails to comply with this policy. It would prematurely exclude areas, limiting the availability of continuous acreage to support a commercial operation that would justify the investments necessary to engage in such operations.
Further, excluding lands in the manner proposed under Alternative 2 is inconsistent with the multiple use management mandate of FLPMA, as it may preclude any significant

development of oil shale resources. The 2012 Draft PEIS goes against the mandate in the EPAct to promote the responsible development of this important energy resource. The primary difference between the new 2012 Draft PEIS and the 2008 PEIS is that the current document contains several alternatives that would dramatically reduce the acreage of BLM administered land where applications for oil shale and tar sands leases could be submitted. Yet, BLM has chosen Alternative 2.b. as its Preferred Alternative for oil shale, even though it previously found this approach would severely restrict the potential for oil shale development.
This approach is counter to the EPAct and this nation's energy policy, which governs BLM's decisionmaking process. Indeed, the EPAct recognized the need for large, contiguous areas, expanding the size of potential oil shale leases under the Minerals Leasing Act. Pub. L. No. 109-58, § 369(i). Alternative 2 also unduly limits the land available for land exchanges, again contrary to the EPAct, which requires consideration of land use exchanges to consolidate land ownership and mineral leases into management areas "[t]o facilitate the recovery of oil shale and tar sands." Id. § 369(n). On public lands within the Green River, Piceance Creek, Uintah, and Washakie geologic basins, BLM is to give priority to implementing land exchanges within those basins to determine the optimum size of lands to be consolidated. Id. The 2012 Draft PEIS does not even consider possible locations for such land use exchanges. 2012 Draft PEIS at 1-12. Thus, Alternative 2 places restrictions on such exchanges and size of leases that was not intended by the EPAct, and unnecessarily constrains potential oil shale development opportunities before the full impacts of any potential development can be explored.

20 Concerns regarding the limitations to development under Alternative C in the 2008 PEIS were raised in the public
comments during the scoping process of the current PEIS. 2012 Draft PEIS, App. J. at J-39. BLM's response was
simply that such comments were "not relevant to the scope of the current analysis." Id. **#16])>**
<([#17 [*2.2*] Further, given BLM's policy to promote use of resources to the benefit of the public,
BLM has not adequately analyzed the alternatives in the 2012 Draft PEIS. It wholly fails to explain how Alternative 2 may affect the ability to feasibly develop oil shale and tar sands resources, including development of valid existing rights on private lands. It also fails to assess state initiatives regarding the sage grouse, noting only that states are taking action. 2012 Draft PEIS at 3-197. Thus, it is unclear whether Alternative 2 appropriately applies a balanced approach, as it appears to be designed solely to significantly limit the ability to explore and develop any oil shale or tar sands resources. **#17])>**
<([#18 [*9.1*] C. The EPAct defines the Purpose and Need for this action, and BLM should return to the Purpose and Need statement in the 2008 PEIS and ROD.

The Purpose and Need for BLM's action here is to implement the requirements of Section 369 of the EPAct. Pursuant to NEPA, BLM must properly identify and reject alternatives based on the purpose and need of the proposed action as outlined in the EPAct, as it did in the 2008 PEIS. See Hells Canyon Alliance v. U.S. Forest Serv., 227 F.3d 1170, 1181 (9th Cir. 2000) (finding agency "had no obligation to consider an alternative unlikely to be implemented and inconsistent with basic policy objectives for managing the area") (citations omitted); Headwaters, Inc. v. BLM, Medford Dist., 914 F.2d 1174, 1180 (9th Cir. 1990) ("Nor must an agency consider alternatives which are infeasible, ineffective, or inconsistent with the

basic policy objectives for the management of the area.") (citation omitted).

In this case, Congress mandated that the purpose and need include the need to develop domestic oil shale and tar sands resources. Citizens' Comm. To Save Our Canyons v. U.S. Forest Serv., 297 F.3d 1012, 1030 (10th Cir. 2002); see also Citizens Against Burlington, Inc. v. Busey, 938 F.2d 190, 196 (D.C. Cir. 1991) ("Perhaps more importantly, an agency should always consider the views of Congress, expressed, to the extent that the agency can determine them, in the agency's statutory authorization to act, as well as in other congressional directives.") (citations omitted). In the 2008 PEIS, BLM identified the purpose and need to "describe the most geologically prospective areas managed by the BLM . . . and to decide which portions of those areas will be open to application for commercial leasing, exploration, and development." 2008 PEIS at 1-2. The 2008 PEIS was drafted "to meet the requirements of the Energy Policy Act of 2005." Id. at 1-3. This stands in stark contrast with the purpose and need in the 2012 Draft PEIS, which BLM structures to address the commitments it made in its voluntary settlement agreement.

BLM is not required to craft a statement so broad that it requires consideration of alternatives that are inconsistent with the overarching purpose of the proposal. Northwest Ecosystem Alliance v. Rey, 380 F. Supp. 2d 1175, 1186 (W.D. Wash. 2005) (citation omitted). Moreover, NEPA is a procedural statute, and does not require an agency to choose environmental concerns over other policy choices. See Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 350 (1989); Biodiversity Conservation Alliance v. BLM, 404 F. Supp. 2d 212, 216 (D.D.C. 2005). Here, Congress made the policy decision that "development of those strategic unconventional fuels should occur, with an emphasis on sustainability, to benefit the United States while taking into account affected States and communities."

BLM cannot rely on the 2011 Settlement to avoid its statutory directives. Paragraph 2(a) and (b) of the 2011 Settlement required that BLM consider "[a]n alternative or alternatives removing all of the lands described . . . from applications for oil shale or tar sands leasing" and "[a]t least one alternative that removes some, but not all, of the lands described . . . from applications for oil shale or tar sands leasing."21 Attachment to Joint Motion for Order to Administratively Close the Case, Colorado Envtl. Coalition, No. 09-cv-0085, at 3-4 [Docket No. 63-1]. It further provided that "[t]he purpose and need statement in the NEPA analysis supporting the RMP amendment process or processes shall be defined in such a manner that it can be met by any and all of the alternatives described in Paragraph 2(a) and 2(b) above." Id. at 4 (emphasis added). In the 2012 Draft PEIS, BLM merely states it seeks to "reassess" the allocations from the 2008 ROD. 2012 Draft PEIS at 1-4.

The "purpose statement is an obvious place for the court to start when analyzing the adequacy of an environmental impact statement or an environmental assessment. It is from this statement that the agency, public, and, ultimately, the court may begin to judge whether the agency has fully analyzed the possible impacts of the action and reviewed a reasonable range of alternatives to that action." Soda Mt. Wilderness Council v. Norton, 424 F. Supp. 2d 1241, 1261 (E.D. Cal. 2006). "In sum, NEPA forces agencies to explain what it is they seek to do, why they seek to do it, what the environmental impacts may be of their proposed action, and what alternatives might be available to the agency that might lessen environmental impact. Without a

clear 'what and why' statement, the public is kept in the dark." Id. at 1262. Thus, when an agency evaluates alternatives to a proposed action in an impact statement, it "must answer three questions in order. First, what is the purpose of the proposed project? Second, given that purpose, what are the reasonable alternatives to the project? And third, to what extent should the agency explore each particular alternative?" Habitat Educ. Ctr., Inc. v. U.S. Forest Serv., 593 F. Supp. 2d 1019, 1026-27 (E.D. Wis. 2009), aff'd 609 F.3d 897 (7th Cir. 2010) (citing Simmons v. U.S. Army Corps of Eng'rs, 120 F.3d 664, 668 (7th Cir.1997)). In other words, the purpose of the action is to determine the "reasonable range of alternatives" to be considered. However, the 2011 Settlement required BLM to identify the alternatives and then define the purpose and need. This turns NEPA on its head and must be rejected.22

21 The lands described are those that are listed under Alternative 2.
22 We are not aware that BLM provided notice or sought public comment on the 2011 Settlement. Rather, the
settlement was submitted to the Court only as an exhibit to a "Joint Motion for Order to Administratively Close the
Case," Colorado Envtl. Coalition, No. 09-cv-0085 [Docket No. 63]. Although Intervenors in the case identified
potential NEPA violations with certain terms within the settlement agreement, BLM nonetheless chose to enter the
settlement agreement. This flawed NEPA process is evidence that the federal government should invite more open
discussion and seek public input to settlements that purport to address environmental protection concerns, including
obtaining and considering the comments of industry who face unreasonable access barriers or permit restrictions as a
result of the terms or conditions within the settlement agreement. In a very real sense, energy policy in the U.S. is
increasingly driven by NGOs and not by Congress. EPA, DOI, NOAA and other federal agencies have settled
environmental NGO lawsuits that have imposed new arbitrary barriers to oil and gas access under regulations
pursuant to the Clean Air Act, ESA, Clean Water Act, Marine Mammal Protection Act, NEPA, Clean Water Act and
other laws. **#18])> <([#19** [*9.3*] [*9.2.4*] IV. As BLM Found in the 2008 ROD, Decisions Regarding Sage Grouse Mitigation
Should be Considered at Later Planning Stages.
Alternative 2 would eliminate significant lands from allocation even for potential consideration of leasing. It is premature to make this type of decision within the context of a PEIS, particularly on the bases of protection of a resource that has not yet even been defined. Exclusion of environmentally sensitive lands that may be impacted is a decision that is more appropriate to review and determine when a leasing or project-specific analysis is conducted. BLM should make more lands available at the PEIS stage and allow site-specific analyses to assess the local resources and appropriate measures.
Amendment of the land use plans, along with the supporting PEIS, is the first step in a commercial oil shale and tar sands leasing program that includes federally mandated further

reviews. Separate NEPA analyses, including compliance with the Endangered Species Act ("ESA"), would be required before leasing or site development activities could occur. As such, any commercial oil shale lease sales will undergo multiple site-specific environmental analyses and project-specific NEPA reviews prior to approval of any proposed projects on the oil shale leases. These subsequent environmental analyses for oil shale/tar sands leases will be the focal point of resolution for site-specific concerns (e.g., groundwater protection, historic and cultural resources, and threatened and endangered species). These analyses will allow for informed evaluation of the environmental impacts of proposed technologies and development plans at a time when those technologies are more mature and better understood.

Leveraging the existing process is the most effective way to continuously evaluate land use. Conducting periodic revisions of the PEIS before specific operations are proposed and projecting speculative impacts from undetermined methods is not an effective or efficient way to proceed. The 2102 Draft PEIS fails to properly account for and utilize these subsequent NEPA reviews because they prematurely remove large areas of potential oil shale and oil sands leasing without allowing proper site-specific environmental reviews.

Finally, the environmental reviews should take place after the access to the lands is granted to avoid large pre-investments required to gather the necessary environmental information. We must remember that assignment within a phased permit approach precludes operations until all permits and requirements are in place. Therefore, granting such a lease will not, in itself, allow or cause environmental impacts because no activities are authorized by the actual lease terms. Project development activities will continue to be subject to a project-specific NEPA analysis, which will require project development plans, as well as the required mitigation activities to meet local, state, federal regulatory requirements, and conformity of the lease to the applicable RMP.

Indeed, this is the approach BLM took in the 2008 ROD. BLM found that the initial RMP amendments to address oil shale and tar sands resource development "serves as the first step in the process to establish a commercial oil shale and tar sands program that meets the intent of Congress while taking advantage of information and practices to minimize future impacts and ensure that states, local communities, and the public have the opportunity to be involved at future NEPA steps in the oil shale and tar sands program." 2008 ROD at 38. "The allocation decision essentially removes an administrative barrier present today that prevents the BLM from accepting and considering applications to lease oil shale or tar sands without first amending the respective land use plan. Prior to the leasing and development phases additional NEPA analysis will be required." Id. BLM correctly concluded at the time, "[i]t would be premature to eliminate areas prior to site-specific analysis based on factors that are not known now, but that would be known at the leasing or operation permitting stages, such as location, timing and type of tar sands technology, that may show that these resources could be adequately protected through mitigation." Id. at 36.

In particular, in 2008, BLM recognized that subsequent project or site specific NEPA documents will be prepared to evaluate specific occurrences of sage grouse. 2008 PEIS, Vol. 4, at 509, 5485-5486 (Sept. 2008). Mitigation measures would also include recommendations from BLM's national sage grouse habitat conservation strategy, as well as those contained in statewide and regional sage grouse conservation strategies that have been prepared by state agencies. Id. BLM recognized that site-specific review can more adequately map sage grouse habitat in relation to potential oil shale and tar sands development. Id. at 515. As BLM conceded, identifying lands for potential leasing "does not imply a commitment to leasing that is too large

to be sustainable or that would threaten the existence of species." Id. at 780. The agency retains discretion to decide which particular tracts to offer for leasing and the stipulations on such leases. Id. In any event, BLM must comply with the ESA in approving specific leases or projects and in the development of those areas. BLM correctly determined in 2008 that the initial allocation decision is not, however, the appropriate time to limit its ability to do so.

The decision on viability and compatibility of oil shale commercial development with other alternative uses or preservation priorities on the land should be based on proposed techniques and specific plans of operations. Exclusion of lands without clearly understanding the technologies to be employed to develop the oil shale resource is therefore premature. Experience with onshore conventional and unconventional oil and gas operations indicates that it is possible to recover the mineral potential without adversely impacting the protected surface uses on lands that currently have stipulations for no surface disturbance or seasonal limitations. We can achieve the multi-use purpose intended for these lands through careful planning, management, mitigation and reclamation.

There is no information BLM can point to support its 180-degree change of position. Subsequent project and site-specific NEPA analyses will still be required. Identification of sensitive resources, including sage grouse habitats, and appropriate mitigation measures, including those identified in BLM and state sage grouse conservation strategies, still must occur. BLM still retains the discretion to determine which specific tracts to offer for leasing and what stipulations will be imposed. BLM still must comply with the ESA, as well as all applicable laws. The only new information is BLM's decision to settle litigation challenging its 2008 ROD, but that alone is inadequate justification for BLM's abandoning its prior position. **#19])>**

<([#20 [*9.2.4*] V. Any Exclusion of Potential Oil and Gas Leasing on "To Be Defined" Sage Grouse

Habitat may be viewed as Arbitrary and Capricious.

A. Protection for the sage grouse should be deferred to the environmental reviews of leasing or project-specific actions.

In any event, existing BLM and state recommendations concerning management of sage grouse habitat would not prohibit all development. Moreover, even without having defined these terms, it is clear Alternative 2 could eliminate any production of oil shale or tar sands resources due to the fragmented nature of the lands that BLM may open under this alternative. As BLM correctly concluded in its 2008 PEIS and ROD, such fragmentation would undermine the purposes of the EPAct. Again, BLM has not provided an adequate justification for its change of position excluding "core or priority sage-grouse habitat" from potential leasing. Moreover, it is important to recognize that the 2012 Draft PEIS is only intended to identify lands that may be "available for application for leasing." 2012 Draft PEIS at ES-1 (emphasis added). As BLM recognized in 2008, the protections for the sage grouse, including identification of any areas where development may appropriately be limited, should be deferred to the environmental reviews of leasing or project-specific actions, by which time BLM can have defined the "core" and "priority" habitat areas to be protected. Consequently, BLM should choose Alternative 1 (No Action) in the Final PEIS, affirming its 2008 decision.

BLM is currently undergoing an assessment of its sage grouse conservation policies in the context of a separate NEPA process. Until that process is complete, each of the relevant States here has its own sage grouse conservation program that includes mitigation measures aimed at protecting the sage grouse, which can be used in the interim by BLM when considering leasing applications and specific projects. These measures are more appropriate than an outright

prohibition on development of oil shale and tar sands resources in certain as-of-yet undefined sage grouse habitats. BLM should abandon its piecemeal approach, and determine the appropriate sage grouse conservation measures for all ground disturbing activities in the context of the on-going Sage Grouse Conservation NEPA process, the purpose of which is to develop BLM's sage grouse conservation strategy.

#20])> <([#21 [*9.2.4*] B. BLM cannot impose mandatory limitations based on future "guidance."

FLPMA requires public lands to be managed "in accordance with the land use plans developed." 43 U.S.C. § 1732(a). Alternative 2 would exclude from the potential for leasing "core or priority sage-grouse habitat, as defined by such guidance as the BLM or the DOI may issue." Subsequent BLM action, then, would be bound by some future guidance, which is subject to revision and change. This again, is a reversal from its position in the 2008 PEIS and ROD where the only lands excluded were those based on "existing laws and regulations, executive orders and other administrative designations or withdrawal." 2008 ROD at 17. Even assuming BLM could explain its change from the 2008 ROD and that Alternative 2 meets the purpose and need identified in the EPAct, BLM cannot adopt in a ROD an alternative that relies on some future guidance to define its terms.

First, reliance on such guidance violates the public participation requirements of NEPA and FLPMA. NEPA requires an analysis of alternatives that "sharply" defines the issues and provides a clear basis for choice among options by the decisionmaker and the public. 40 C.F.R. § 1502.14. The EIS must also provide the scientific and analytic basis for the comparisons under Section 1502.14. Id. § 1502.16. "Accurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA." Id. § 1500.1(b). FLPMA also requires an opportunity for public involvement in the formulation of RMPs. 43 U.S.C. § 1712(a), (f); see also 43 C.F.R. § 1610.2 ("The public shall be provided opportunities to meaningfully participate in and comment on the preparation of plans, amendments and related guidance and be given early notice of planning activities.") (emphasis added).

BLM failed to meet these obligations. The 2012 Draft PEIS does not clearly define Alternative 2, BLM's Preferred Alternative, because it incorporates as one of its principal elements some future guidance. Although the 2012 Draft PEIS includes maps and estimates of acreage of lands to be made available for allocation, BLM has made clear that its guidance is as yet to be developed and, moreover, applicable guidance can include any guidance developed by the Department of the Interior.23 The public, therefore, does not have an adequate opportunity to comment, because the lands to be excluded are not anywhere clearly defined. See Grand Canyon Air Tour Coal. v. FAA, 154 F.3d 455, 468 (D.C. Cir. 1998) ("An agency is required to provide a meaningful opportunity for comments, which means that the agency's mind must be open to considering them.") (citing McLouth Steel Products Corp. v. Thomas, 838 F.2d 1317, 1323 (D.C. Cir. 1988)).

BLM must manage its lands consistent with applicable laws and regulations and development of BLM lands must be consistent with the applicable RMP, which can only be amended after notice and an opportunity to comment. By committing now to prohibit development in areas defined by future guidance, BLM is impermissibly elevating the status of the future guidance to have the force and effect of law. The issuance of subsequent "guidance," even if the public is allowed to comment on it, is insufficient to satisfy the public's right to notice and comment before BLM makes binding decisions concerning development of BLM lands. See Kennecott Corp. v. EPA, 684 F.2d 1007, 1019 (D.C. Cir. 1982) (finding "[t]hat EPA allowed petitions for reconsideration is not an adequate substitute for an opportunity for notice

and comment prior to promulgation") (citation omitted); PPG Indus., Inc. v. Costle, 659 F.2d 1239, 1250 (D.C. Cir. 1981) (finding subsequent publication of guidelines related to "new measurement technique" insufficient to meet notice requirement of Administrative Procedure Act).

Second, reliance on subsequent guidance to define what lands will be excluded from leasing, a clear term of the amended RMPs, is insufficient to meet the requirements of FLPMA. A formal plan amendment is required whenever a proposed action changes a term, condition or decision of a RMP. Douglas Timber Operators v. Salazar, 774 F. Supp. 2d 245, 256-57 (D.D.C. 2011) (citing Klamath Siskiyou Wildlands Ctr. v. Boody, 468 F.3d 549, 556-57 (9th Cir. 2006); Seattle Audubon Soc'y v. Robertson, 1991 WL 180099, at *9 (W.D. Wash. 1991)), appeal dismissed, No. 11-5137, 2011 WL 2618209 (D.C. Cir. June 24, 2011). "An amendment shall be initiated by the need to consider monitoring and evaluation findings, new data, new or revised policy, a change in circumstances or a proposed action that may result in a change in the scope of resource uses or a change in the terms, conditions and decisions of the approved plan." 43 C.F.R. § 1610.5-5. It is clear that, under Alternative 2, the substance of the future guidance would be "new or revised policy," "a change in circumstances," or a "change in terms." BLM has regulations governing the requirements for amending a RMP, 43 C.F.R. Part 1610, which cannot be met through issuance of guidance. Thus, imposing a requirement to comply with future guidance does not meet FLPMA's requirement to amend the RMP.

Indeed, it is clear that BLM intends for this future guidance to have binding legal effect on parties. "A 'legislative rule' is one the agency has duly promulgated in compliance with the procedures laid down in the statute or in the Administrative Procedure Act." Appalachian Power Co. v. EPA, 208 F.3d 1015, 1021 (D.C. Cir. 2000); see also General Elec. Co. v. EPA, 290 F.3d 377 (D.C. Cir. 2002). Here the guidance would not merely give substance to clarify vague or ambiguous language, it would embody the requirements in the RMP, requirements that the public cannot adequately assess based on the 2012 Draft PEIS. Because subsequent agency action must comply with the applicable RMP, under Alternative 2 such "guidance" would have a legally binding effect and must be promulgated appropriately. Simply stating that future guidance would be binding on subsequent development clearly does not meet FLPMA's requirements for amending an RMP or the requirements of the Administrative Procedure Act for promulgation of rules.

23 Although the greater sage grouse has been identified as a candidate for listing, it has not yet been listed under the
ESA. As a result, no critical habitat has been designated. **#21])>**

<([#22 [*1.5*] C. BLM has failed to take a "hard look" at the potential impacts of the alternatives in the 2012 Draft PEIS.

An EIS serves two purposes: (1) "[i]t ensures that the agency, in reaching its decision, will have available, and will carefully consider, detailed information concerning significant environmental impacts"; and (2) "it 'guarantees that the relevant information will be made available to the larger audience that may also play a role in both the decisionmaking process and the implementation of that decision.'" Dep't of Transp. v. Public Citizen, 541 U.S. 752, 768 (2004) (quoting Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 349 (1989)). "The EIS must show that agency officials have '[thought] through the consequences of-and alternatives to-their contemplated acts,' and must ensure that 'citizens get a chance to hear and consider the rationales the officials offer.'" Habitat Educ. Ctr., Inc., 593 F. Supp. 2d at 1025

(quoting Simmons, 120 F.3d at 666). BLM must demonstrate that it "has taken a 'hard look' at environmental consequences." Kleppe v. Sierra Club, 427 U.S. 390, 410 n.21 (1976). It is unclear how BLM can purport to have taken a "hard look" at the potential environmental impacts as NEPA requires without having identified the lands that will, in fact, be defined as "core" or "priority" sage grouse habitat and therefore subject to the restrictions on allocation. By failing to define these lands, BLM has not engaged in "informed decision-making" or, as described above, has not provided for "informed public participation." Habitat Educ. Ctr., Inc., 593 F. Supp. 2d at 1025 (citation omitted).

Alternative 2 is defined to exclude as of yet undefined "core or priority" sage grouse habitat that is to be based on as of yet issued guidance.24 Yet, BLM estimates the amount of acreage that would be available under this Alternative (and others)25 and, in so doing, it purports to identify various resources that will be impacted by future development. See, e.g., 2012 Draft PEIS at 6-71 ("Of the acreage designated under Alternative 2, a total of 423,292 acres (about 92% of the 461,965 acres that would remain available under Alternative 2) have been identified as overlying geologic formations having a high potential to contain important paleontological resources (Murphey and Daitch 2007)."); 6-74 to 6-75 ("Under Alternative 2, 14 perennial streams and about 41 mi of perennial stream habitat within the Piceance, Uinta, and Washakie Basins are directly overlain by areas that would be potentially available for oil shale development. There are no perennial streams in the Green River Basin that are directly overlain by areas that would be potentially available for oil shale development."). BLM fails to explain how it identifies these resources, providing only a map of purported "core or priority" sage grouse habitat.26 See, e.g., id. at 6-108 (Figure 6.1.2-5).27 The cumulative impacts analysis similarly makes only mere conclusory statements regarding habitat fragmentation, but provides no analysis of the cumulative impacts with respect to each alternative. Id. at 6-302. More important, the public cannot identify these lands nor can it fully understand the potential impacts of the alternative.28

Further, BLM states it cannot quantify the impacts without project specific information, but it wholly fails to explain how the more limited amount of land available may affect the type of development or technology required to develop and, thereby, the differences in potential environmental impacts. For land use impacts for Alternative 2 (tar sands), for example, the 2012 Draft PEIS merely states that the land use impacts "would be essentially the same as those listed for Alternative 1 in Section 6.2.1.1, with the following exceptions: … Core or priority sagegrouse habitat, current and recommended ACECs, and about 86,000 acres of land identified as potential ACECs under Alternative C of the 2008 OSTS PEIS would be removed from application for commercial tar sands leasing." 2012 Draft PEIS at 6-368 to 6-369. While BLM may not be able to identify site-specific impacts at this point, it must define the lands it is excluding and must clearly identify the differences in each. The key distinction among the new alternatives of alleged impacts appears to be the estimated lands that may be disturbed, but merely providing an estimated amount of land, without clearly explaining the data behind it, does not provide the decisionmaker, or the public, with the type of information required under NEPA.

Moreover, BLM fails to take a hard look at the mitigation measures under each alternative with respect to sage grouse, noting only "[f]or Alternatives 1, 3, and 4, however, existing BLM policies regarding protection of sage grouse habitat would be implemented." 2012 Draft PEIS at 6-237. The Draft PEIS further recognizes that "Local sage grouse working groups have been formed across the region to support activities that support sage grouse population

recovery. Executive Order (E.O.) 2011-5 for the State of Wyoming (Wyoming Governor's Office 2011) outlined the identification and protection of 'core population areas' for the greater sage-grouse within the State of Wyoming. . . . Similarly, the State of Utah maintains a database of priority habitat areas for the greater sage-grouse. These priority areas were determined by Utah DWR field biologists in 2010. BLM is currently working with the Utah DWR to refine the delineation of priority habitats in the State of Utah."29 Id. at 3-197 (citation omitted). The 2012 Draft PEIS does not provide an assessment of these state programs in comparison to a prohibition on development in any "core" or "priority" sage grouse habitat as would be provided under Alternative 2. Indeed, as further explained below, BLM is undergoing a separate process that is seeking to make such an assessment, and BLM should not predetermine the outcome of that process.

24 Similarly, Alternative 4 would remove "an undetermined percentage of the LWC and sage-grouse core habitat
area." 2012 Draft PEIS at 6-225.
25 See 2012 Draft PEIS at 6-236.
26 Nor is it easy to decipher how to compare this map with the other, various figures purporting to identify "Greater
Sage-Grouse Core Habitat." Compare 2012 Draft PEIS at 6-50 (Figure 6.1.1-5 - Alternative 1), with 6-215 (Figure
6.1.4-5 - Alternative 4).
27 Chapter 6 of the 2012 Draft PEIS states that, under Alternative 2, "oil shale development would be excluded from
core or priority habitats for the greater sage-grouse (Centrocercus urophasianus) as defined by the guidance set forth
in the BLM's sage-grouse interim policy (BLM 2005i)." 2012 Draft PEIS at 6-80. But, the reference used for this
interim policy is: "BLM, 2005i, Draft Vegetation Treatments Using Herbicides on Bureau of Land Management
Lands in 17 Western States Programmatic Environmental Impact Statement, DES 05-56, U.S. Department of the
Interior, Reno, Nev., Nov." This appears to be an error, and, in any event, BLM cannot rely on a draft document as
an "interim policy." To the extent BLM intended to refer to its interim conservation policies and procedures for
sage grouse, it addresses "Preliminary Priority Habitat." In any event, these are only "interim," and BLM should
await the outcome of its ongoing process to assess management of sage grouse prior to making any amendments to
RMPs that would unduly close off areas to leasing.
28 This map appears different from the map in the 2008 PEIS regarding overlap of lands made available under the
rejected Alternative C "with the Known Distribution of the Greater Sage-Grouse." 2008 PEIS at 6-101. In that
map, leks, brood areas and winter ranges were identified. This can be contrasted with leks and the undefined

"Greater Sage-Grouse Core Habitats" in Figure 6.1.2-5 in the 2012 Draft PEIS. "The potential impacts on
threatened, endangered, and sensitive species (and their habitats) by commercial oil shale development are directly
related to the amount of land disturbance that could occur with a commercial project (including ancillary facilities
such as power plants and utility and pipeline ROWs), the duration and timing of construction and operation periods,
and the habitats affected by development (i.e., the location of the project)." 2012 Draft PEIS at 6-82.
29 On February 10, 2012, BLM issued Instruction Memorandum No. WY-2012-019, entitled "Greater Sage-Grouse
Habitat Management Policy on Wyoming Bureau of Land Management (BLM) Administered Public Lands
Including the Federal Mineral Estate," which purports to be consistent with the State Executive Order. **#22])>**
<([#23 [*9.2.4*] D. Basing a decision prior to defining the precise parameters of the agency action is arbitrary and capricious.
Without fully understanding the parameters of the sage grouse management decisions currently ongoing, any determination by BLM regarding excluding as yet undefined areas would be arbitrary and capricious. "Reasoned decisionmaking requires an agency to 'examine the relevant data and articulate a satisfactory explanation for its action[s].'" Portland Cement Ass'n v. EPA, 665 F.3d 177, 187 (D.C. Cir. 2011) (quoting Motor Vehicles Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 43 (1983)). In an analogous situation, the D.C. Circuit found EPA was arbitrary and capricious in setting a standard based on data that was affected by a separate, parallel rulemaking, before the subsequent rulemaking was completed. Id. In Portland Cement Ass'n v. EPA, EPA set a standard for Portland cement kilns, while at the same time undergoing a separate rulemaking to define the sources subject to those standards. Although a number of sources considered in setting the standard may not be covered by the standard, EPA considered them in setting the Portland cement kiln standard "because EPA had not yet decided the precise parameters of its definition." Id. at 186-87. The court found this to be arbitrary and capricious. "The impending definition of an undeniably related source category is clearly a 'relevant factor[]' or an 'important aspect of the problem' that must be considered." Id. at 187 (quoting Motor Vehicles Mfrs. Ass'n, 463 U.S. at 43). The D.C. Circuit found it was inappropriate for EPA to ignore the separate, ongoing rulemaking -- "an eventuality over which EPA had full control." Id. "It is not absurd to require that an agency's right hand take account of what its left hand is doing." Id. Similarly here, BLM has "put the cart before the horse." Id. at 188. BLM has full control over the timing of its actions with respect to adequately assessing appropriate sage grouse management on public lands. It is arbitrary and capricious to make a decision excluding areas for which BLM "had not yet decided the precise parameters." **#23])>**
<([#24 [*9.2.4*] VI. BLM Should Await Completion of its Ongoing Review of Sage Grouse Management
on Public Lands.

Nothing in the 2012 Draft PEIS explains why BLM has identified exclusion of sage grouse "core or priority" habitat from even being considered for leasing. Nor does BLM explain

why existing protections and mitigation measures are insufficient. Moreover, BLM utterly fails to explain why it would exclude lands based on guidance that is not yet even completed, when BLM is undergoing an entirely separate process to assess sage grouse management issues.

In December of 2011, BLM and the U.S. Forest Service issued a notice of intent to prepare environmental impact statements and supplemental environmental impact statements to incorporate greater sage-grouse conservation measures into RMPs and land management plans ("LMPs"). 76 Fed. Reg. 77,008 (Dec. 9, 2011). Based on measures identified and assessed by the U.S. Fish & Wildlife service, the BLM and Forest Service propose to incorporate consistent objectives and conservation measures for the protection of greater sage-grouse and its habitat into relevant RMPs and LMPs by September 2014, in order to avoid a potential listing under the ESA. These conservation measures would be incorporated into RMPs and LMPs through the plan amendment and revision processes of the respective agencies. In this notice, BLM identified most of the same RMPs as potentially being amended as in the 2012 Draft PEIS. Under this process, BLM and the Forest Service intend to evaluate the adequacy of sage-grouse conservation measures in RMPs and selected LMPs. BLM Wyoming has already begun a programmatic EIS that will analyze amendments to all of the State's RMPs not currently being amended or revised to address needed changes to the management and conservation of greater sage-grouse habitats.

BLM should await the completion of this NEPA process, the sole purpose of which is to develop appropriate sage grouse conservation measures, before impermissibly imposing restrictions relating only to oil shale and tar sands.30 There is no reason for BLM to pre-judge the outcome of the sage grouse conservation NEPA process in the context of the PEIS. Experience with conventional oil and gas operations indicates that there are lands that currently have stipulations for no surface disturbance or seasonal limitations that can be leased and developed to recover the mineral potential without adversely affecting protected surface uses. This includes sage grouse habitat. BLM does not identify any different impacts on sage grouse resulting from oil shale or tar sands development to justify exclusion of large areas from consideration for leasing. Moreover, because as BLM concedes additional NEPA analyses will be required before any oil shale or tar sands resources can be developed, there is adequate time to complete the sage grouse conservation process and no need to impermissibly foreclose areas for potential development before that occurs.

Thus, withdrawing lands from potential oil shale leasing due to sage grouse habitat protection appears to be premature given that no specific federal regulatory or administrative actions have occurred with respect to managing core or priority sage-grouse habitat. ExxonMobil supports development of multi-stakeholder conservation plans to protect and restore threatened and endangered species rather than simply instituting avoidance areas. In addition, the use of suggested management practices may make it possible to site future oil shale and oil sands projects without causing unacceptable impacts to the greater sage-grouse. ExxonMobil believes that there are compatible opportunities to further develop oil shale energy resources while simultaneously protecting the greater sage-grouse. As such, ExxonMobil believes that broad scale greater sage-grouse habitat mapping should not be the basis for eliminating large areas of important energy resources from future consideration. Adhering to the project-specific NEPA process where the scale of the evaluation is more granular with site-specific greater

wildlife data is the best means to evaluate potential impacts and develop proper mitigation measures.

Again, this would not leave sage grouse unprotected. As BLM recognizes, there are already numerous existing stipulations and state policies aimed at avoiding the listing of greater sage grouse. Each of the three states has established and implemented a greater sage grouse management plan in coordination with the U.S. Fish & Wildlife Service, which include conservation measures for the sage grouse. These policies can be utilized to develop leasing or project specific mitigation measures until BLM has completed its review.31

30 Indeed, BLM's "fresh look" is limited to the potential use of lands for oil shale and tar sands development. Other potential uses of the same lands could cause conflicts for eventual oil shale and tar sands developments. Applying restrictions to the lands available for potential oil shale and tar sands leasing favors other land uses without considering the overall benefit to society that multiple uses could generate.

31 BLM has issued two instruction memoranda regarding interim conservation policies and consideration of the recommendations of the Sage Grouse National Technical Team ("NTT"). Under this interim policy, the conservation measures developed by the NTT must be considered and analyzed, as appropriate, through the land use planning process by all BLM State and Field Offices that contain occupied greater sage grouse habitat. BLM is to "refine" the habitat data through the land use planning process. It does not appear that BLM followed even this interim policy in identifying conservation measures or priority habitat. Nonetheless, these are "interim" policies that are only intended to guide action until the BLM and Forest Service review is completed. **#24])>**

<([#25 [*3.4.1*] VII. Other Technical Comments

A. Oil Shale development and water usage

Any leasing or project development would be subject to existing laws, including state water appropriation laws. ExxonMobil, therefore, expects no significant adverse impacts from oil shale development, as water usage in these areas is already regulated and any usage must be consistent with those requirements.

In any event, ExxonMobil believes that responsible, low-impact, and sustainable water usage is both technically and economically feasible for the oil shale industry. We are committing significant capital and research toward developing technologies and processes to reduce energy usage in our project while protecting ground and surface water resources. We are also seeking an RD&D lease to successfully verify that our technology is viable, environmentally acceptable, and sustainable in order to proceed to commercial scale implementation. Although some uncertainty remains regarding the potential water use requirements for oil shale development technology, continued research and technology development will validate the environmental and economic viability prior to proceeding to commercial application. Water use requirements will continue to be evaluated in subsequent NEPA reviews where potential impacts

will be assessed on a site and project-specific basis. These future detailed reviews will provide project, technology, and site-specific information on water use to BLM decision makers. **#25])>**
<([#26 [*8.3*] B. Multi-Mineral Leasing
Oil shale development can be compatible with the development of other mineral resources, especially conventional oil and gas and nahcolite resources, on the same lands. Industry is currently developing technology to enhance this type of multimineral development, and we encourage the BLM to develop leasing programs that accommodate multimineral leasing. The use of such compatible technologies can be considered during site-specific analyses.
#26])>

OSTS2012D50288
Organization:
Received: 5/4/2012 11:51:33 AM
Commenter1: - murray, Utah (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/16/2012 12:00:00 AM
Attachments: OSTS2012D50288.htm (OSTS2012D50288-58901.htm Size = 1 KB)
Submission Text
<([#1 [*12*] WE need to start planning not just for OUR SELVES or for the NEXT GENERATION of PEOPLE, but for the GENERATIONS TO COME of all LIVING CREATURES and we must plan for OUR ETERNAL MOTHER, MOTHER EARTH!I am thirteen years old and I desperatly want to not only SEE OTHERS CREATING A DIFFERENCE, but I want to BE THE ONE to MAKE THAT DIFFERENCE. This is one way that I am helping and I can only HOPE that others will STAND UP not just behind me, but all around me, all over the world! **#1])>**

OSTS2012D50289
Organization: Rolland Grote
Received: 5/4/2012 12:07:28 PM
Commenter1: Rolland Grote - Hawley, Pennsylvania 18428 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/14/2012 12:00:00 AM
Attachments: OSTS2012D50289.htm (OSTS2012D50289-58903.htm Size = 1 KB)
Submission Text
<([#1 [*12*] Oil shale and tar sands are two of the filthiest forms of energy on our planet. The US

can, and must, get out of fosil fuels for the health of the planet and for future generations of Americans. Global climate change is REAL, and getting worse. Do we need another disaster to wake us up? **#1])> <([#2** [*10.6.1*] STOP DRILLING AND START INVESTING IN ALTERNATIVE, NON-POLLUTING ENERGY SOURCES. **#2])>**

OSTS2012D50290

Organization: Carbon County, Rex Sacco
Received: 5/4/2012 12:13:36 PM
Commenter1: Rex Sacco - Price, Utah 84501 (United States)
Organization1: Carbon County
Commenter Type: Coop Agency - Local Govt
Classification:
Submission Category: Letter & Resolution
Submitted As: Web Form and Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** aziech 5/18/2012 12:00:00 AM
Attachments: OSTS2012D50290.htm (OSTS2012D50290-58927.htm Size = 1 KB)
BLM_Oil_Shale_Tar_Sands_PEIS_Comments_050112_OSTS2012D50290.pdf (OSTS2012D50290-58926.pdf Size = 9068 KB)

Submission Text

To Whom It May Concern,
The Board of Commissioners ofCarbon County, Utah appreciates the opportunity to work with the Bureau of Land Management (BLM) as a Cooperating Agency in the preparation of the Draft PEIS for the Allocation of Oil Shale and Tar Sands Resources on Lands in Colorado, Utah, and Wyoming. Carbon County expects that our comments will be used for creating a plan to support and further the multiple use mandates of the BLM and the utilization of our natural resources in the best interest of the American public. We expect these comments to be included as a part of the administrative record for the action and given due consideration. We also strongly support the comments rendered by the State ofUtah and those from our adjoining counties (Duchesne and Uintah counties) who are also involved in this endeavor.
<([#1 [*9.8*] As you know Carbon County worked with BLM along with State agencies and counties from Utah. Colorado and Wyoming as well as various other agencies of the Federal Government hoping to help development a reasonable draft to management for exploration and extraction of Oil Shale and Tar Sands in an region containing the largest volume of oil in the world. At the end of a very rapid and whimsical experience that lasted almost four months BLM felt they could substitute this effort for the existing Oil Shale and Tar Sands program that took the previous administration three years of cooperative agency review between public comments to finalize. At the end of reviews of sometimes as much as 1000 or more pages of information with a 2-week deadline the Cooperators were asked to consider an alternative they could support as the, "Agency Preferred Alternative." The Cooperators not directly under the control of the Federal Administration were mostly unanimous in their position to make the No Action Alternative, (The Alternative that would

leave the existing OS&TS program in tact) as their agency preferred alternative.
Some time after that and before this PEIS was released for public comment decisions were made at the highest level of the Department of Interior to add two sub-alternatives to the four alternatives for oil shale and made the, Agency Preferred Alternative. Their reasoning for ignoring
our recommendation after asked and replacing it with an option that we as cooperators were not asked to consider or support was stated as, thus far, technological and economic conditions have not
combined to support a sustained commercial oil shale industry in the United States, and tar sands is
not at present a proven commercially-viable energy source, the DOI/BLM is adding these oil shale
alternatives in support of the BLM and the Department's emphasis on a robust RD&D program.
Although many of the cooperators informed BLM of many countries using technology to extract Oil Shale and Tar Sands and in one case Uintah County, Utah provided a slide presentation
of the Commissioners visiting a site in Estonia that has been economically producing oil from Tar
Sands for many years, the BLM chose to ignore the facts and go with the spin.
#1])> <([#2 [*2.2*] The new Preferred Alternative; Alternative 2 known as the Conservation Focus Alternative is analyzes removing from possible oil shale and tar sands leasing the following kinds of areas:
1. All areas that the BLM has identified or may identify as a result of inventories conducted during this planning process, as lands containing wilderness characteristics (preliminary information may be found in chapters 2 and 3 of the 2008 Programmatic EIS;
2. The whole of the Adobe Town "Very Rare or Uncommon" area, as designated by the Wyoming Environment Quality Council on April 10, 2008;
3. Core or priority sage grouse habitat, as defined by such guidance as the BLM or the Department of the Interior may issue;
4. All areas of critical environmental concern (ACEC) located within the areas analyzed in the September 2008 Oil Shale and Tar Sands Resources Leasing Final EIS; and
5. All areas identified as excluded from commercial oil shale and tar sands leasing in Alternative C of the September 2008 OSTS Programmatic EIS.
Also, under this Alternative lands open for future leasing consideration would be the same as those in Alternative 2(a), but only for oil shale Research, Development, and Demonstration (RD&D) leases. The BLM would issue a commercial lease only when a lessee satisfies the conditions of its RD&D lease and the regulations at 43 C.F.R. subpart 3926 for conversion to a commercial lease. The preference right acreage, if any, which would be included in the converted
lease, would be specified in the RD&D lease.
The Record of Decision (ROD) for the 2008 OSTS PEIS amended 10 land use plans in Colorado, Utah, and Wyoming to make approximately 2 million acres of public lands available for
potential leasing and development of oil shale and approximately 430,000 acres available for tar sands leasing. Together with the regulations published in 2006 and 2008 for oil shale and tar sands

resources, the 2008 OSTS PEIS and subsequent land use amendments constituted a reasonable and
rational establishment of an oil shale and tar sands program as mandated in the Energy Policy Act of
2005, which was approved and passed by Congress. The oil shale and tar sands program from
which the 2008 OSTS PEIS and related regulations came was a reasonable response to the fact that
the recoverable oil equivalent from oil shale and tar sands resources in northeastern Utah,
northwestern Colorado and southwestern Wyoming exceeds 4 trillion barrels per the latest USGS
scientific estimate would been available to the American public for extraction and use.
The preferred alternative in the 2012 OSTS PEIS drastically shrinks, diminishes and in many
areas outright reverses virtually all of the lands made available for Oil Shale and Tar Sands
development in 2008, and does so using the same data and science. Such a drastic reversal in lands
available for Oil Shale and Tar Sands development between the 2008 PEIS and the 2012 preferred
alternative, violates the regulatory standards from the Task Force requirements of certainty for
industry and investors; and would probably also violate the Data Quality Act of 2000.
Regarding the preliminary purpose and need statement in the notice of intent, which states
the PEIS will analyze removing from oil shale and tar sands leasing "All areas that the BLM has
identified or may identify as a result of inventories conducted during this planning process. as lands
containing wilderness characteristics. **#2])>**
<([#3 [*9.2.1*] On April 14, 2011, the BLM caused to be published in the Federal Register,
Volume 76, No 72/Thursday, April 14,2011 pages 21003-21005, a notice of intent to prepare the
above-referenced 2012 OSTS PEIS. The notice of intent further states at page 21004:
Lands that the BLM identifies as having wilderness characteristics will be considered
during this planning initiative, as described above, and consistent with Secretarial
Order No. 3310, dated Dec. 22, 2010, and BLM Manuals 6301 and 6302. Future
leasing of lands determined by the BLM to have wilderness characteristics, if
compatible with the allocation decisions stemming from this initiative, will
subsequently be assessed in accordance with BLM Manual6303, as appropriate (i .e.,
where the BLM has not determined, consistent with BLM Manual 6302, whether the
lands with wilderness characteristics at issue should be receive a wild lands
designation, BLM Manual 6303 will apply.)
This language documents the BLM's intent to implement, administer and/or enforce
Secretarial Order 3310 and one or more ofthe BLM guidance manuals promulgated under Order
3310. Carbon County and others have reminded BLM that any attempt by the BLM to implement,
administer and/ or enforce Secretarial Order 3310, including any effort by the BLM to proceed
further on the above-referenced Programmatic EIS, violates the spending moratorium of Section
1769 of the April 21 , 2011 Congressional Continuing Resolution to Fund Fiscal Year 2011 through
September 30, 2011, which states:
For the fiscal year ending September 30, 2011 , none of the funds made available by this
division or any other Act may be used to implement, administer, or enforce Secretarial Order No.

3310 issued by the Secretary of the Interior on December 22,2010. The spending moratorium has been carried forward in all subsequent Congressional spending resolutions up to and including the
current spending resolution and the 2012 OSTS PEIS, is an admitted attempt by the BLM to implement, administer and/or enforce Secretarial Order 331 0 and its policies and objectives, all in
violation ofthe Spending Moratorium of the 2011 Continuing Resolution. BLM in no way can distance this PEIS from Order 3310. Truly, no excuse rendered will avail. All one has to do is look
at the provisions of the PEIS in light of the February 2011 court settlement agreement, to realize that
the center-piece of this effort is to repeal oil shale and tar sands development on lands with so-called
wilderness characteristics, which have just about everything to do with the now defunct Order 3310
Wildlands Policy. It is brazen disregard of the CR, for the BLM to now pretend that this PEIS hostile
as it is to oil shale and tar sands development on "wilderness characteristics'' lands,
suddenly has nothing to do with the now defunct and Congressionally barred Wildlands Order.
BLM apparently is too blatant to even bother amending the April l4th NOI, which expressly ties this
PEIS to the CR barred Order 3310 Wildlands Policy. It is either sheer brazenness, or bureaucratic
inability to alter BLM's pro-stance of Order 3310 allowing its continued direction to move along on
the same illegal course despite the moratorium of the CR. At this point even though through the
review process ofthis PEIS the references to Secretarial Order 3310 might be removed; it will never
legitimatize this project. It underscores this administration's motivation to stop all domestic sources
of energy from being explored and extracted.
#3])> <([#4 [*3.1.3*] BLM stated that they have recently completed updating its inventory of lands with
wilderness characteristics in each of the three states for the planning area, and the status of several
areas originally proposed to be Areas of Critical Environmental Concern (ACECs) in Utah has
changed since the preparation ofthe 2008 PEIS. In light of the combined weight of these several
developments, as well as other policy considerations, the BLM has decided to take another look at
the land use plan allocations made in the 2008 ROD
That is an incorrect statement for the RMPs in Utah. The only legitimate inventorying of
lands with wilderness characteristics in Utah was completed as part of the process to revise the six
Resource Management Plans (RMPs) in Utah (Price, Vernal, Moab, Monticello, Richfield and
Kanab). Out of that process the Price BLM Field Office identified 97,100 acres of wilderness
characteristics lands suitable for wilderness characteristics management. Additionally, the lands

looked at for Wilderness Characteristics through the RMP on the West Tavaputs where this PEIS would apply in Carbon County was found as having a higher value for oil and gas production. Map
R-11 ofthe Price RMP/ROD states, "Non-WSA Lands with Wilderness Characteristics not Carried
Forward into the Approved Plan." Therefore. in our view. any attempt to augment wilderness characteristics inventory already completed in Utah would be invalid, because it was done under the
auspices of now defunct Secretarial Order 3310, which is barred by the moratorium (see discussion
above). Moreover, no attempt has been made to amend any of the Utah RMP determinations of wilderness characteristics lands worthy of wilderness characteristics management. Therefore, any
attempt to try to prop up the supposed necessity of the present PEIS with notions of so-called 'recently completed' wilderness characteristics inventories is invalid and merely *belies* further the
illegitimate agenda-driven nature of this PEIS.
Further, while the updated inventory of lands with wilderness characteristics has been considered in the development of the alternatives and will be considered in the analysis of environmental consequences of possible future leasing and development, BLM noted in the April 14, 2011, NOI, "because this is a targeted planning process focusing on allocation of oil shale and
tar sands resources, this planning initiative will not consider designating Wild Lands." further exposes the invalid, circular nature ofBLM's concerted effort with the wilderness advocacy group
lawsuit plaintiffs to manufacture a de facto wilderness allocation without legitimately amending an
existing RMP and without complying with the 2003 Utah-Norton Wilderness Settlement Agreement. The updated inventory oflands (illegitimate as it is) appears to be a step toward ultimate designation of the implementation of Secretarial Order 3310. That is a transparent · assertion, especially when considered in light of the April 14, 2011 NOI which clearly parked this
whole effort under the Wildlands Order. This is all about an agenda to ratchet down a previously legitimate allocation of oil shale and tar sands lands to conform to the lawsuit plaintiffs' own vision
of wilderness designation, plain and simple. **#4])>**
<([#5 [*1.3*] Since BLM has categorically given the involved State and Counties an open door treatment
in allowing us to join them as a cooperating agency and the thrown out our comments and recommendations, violated the Energy Policy Act, The Data quality Act and the Congressional moratorium on Wildlands secretarial order 3310 and then placed into the draft an Agency preferred
alternative that was never commented on by the cooperators and in place before the public comment
process took place, Carbon County believes that this entire process should be thrown out and the existing Oil Shale and Tar Sands regulations be implemented without any need to amend RMP's

that considered and planned for it during the RMP process.
#5])> Included with these comments is our Resolution No. 2012-02 that we want incorporated as part of the comments. It had been pleasure to comment again with the hope some of this information will be used or at least considered on this go-round. But judging by our past experience
we will tend not to expect much from this agency to support the security of this nation to allow domestic extraction and production of its own natural resources.
Very truly yours,
CARBON COUNTY BOARD OF COMMISSIONERS
Michael S. Milovich
Commission Chairman

RESOLUTION NO. 2012-02
RESOLUTION OF CARBON COUNTY
STATE OF UTAH
OPPOSING THE BLM'S 2012 OIL SHALE AND TAR SANDS PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT, BLM PROJECT# W0-300-13 1 0-PP-OSI IL (HEREAFTER 2011 OSTS PEIS)
FOR LANDS ADMINISTERED BY THE BLM fN COLORADO. UTAH AND WYOMING,
This Resolution is adopted in open meeting by the Board of Commissioners of Carbon County. Utah in order to redress the many violations oflaw, regulation, and policy by the BLM with respect to the BLM's 2012 OSTS PEIS.
BACKGROUND
As background to this Resolution, Carbon County, Utah recites the following grievances:
WHEREAS. On April 14. 2011, the BLM caused to be published in the Federal Register, Volume 76. No 72ffhursday, April 14.2011, pages 21003-21005. a notice of intent to prepare the above-referenced 2012 OSTS PEIS; and
WHEREAS, the preliminary purpose and need statement in the notice of intent, states the PEIS will analyze removing from oil shale and tar sands leasing ''All areas that the l3LM has identified
or may identify as a result of inventories conducted during this planning process, as lands containing wilderness characteristics[.)" */d..* at page 2 1004; and
WHEREAS. the notice of intent further states at page 21004:
Lands that the BLM identifies as having wilderness characteristics will be
considered during this planning initiative, as described above, and consistent with
Secretarial Order No. 3310, dated Dec. 22, 2010, and BLM Manuals 630 I and
6302. Future leasing of lands determined by the BLM to have wilderness
characteristics, if compatible with the allocation decisions stemming from this
initiative. will subsequently be assessed in accordance with BLM Manual 6303.
as appropriate (i.e., where the BLM has not determined, consistent v.ith BLM
Manual 6302, v. hether the lands with wilderness characteristics at issue should be
receive a wild lands designation. BLM Manual 6303 v..ill apply); and
WHEREAS, this language documents the BLM's intent to implement, administer and/or enforce Secretarial Order 3310 and one or more of the BLM guidance manuals promulgated under Order 3310;and
WHEREAS, any attempt by the BLM to implement, administer and/or enforce Secretarial Order

3310. including any effort by the BLM to proceed further on the above-referenced Programmatic EIS. violates the spending moratorium of Section 1769 of the April 21. 2011 Congressional Continuing Resolution to Fund Fiscal Year 2011 through September 30.201 L \\hich states:
For the fiscal year ending September 30.2011, none of the funds made available
b) this division or any other Act rna) be used to implement. administer. or
enforce Secretarial Order No. 33 10 issued b)' the Secretary of the Interior on
December 22. 20 I 0; and
WHERFAS. this spending moratorium has been carried forward in all subsequent Congressional spending resolutions up to and including the current spending resolution: and
WHEREAS. the 2012 OSTS PEIS. is an admitted attempt *by* the BLM to implement. administer and/or enforce Secretarial Order 3310 and its policies and objectives. all in violation of the Spending Moratorium ofthe 2011 Continuing Resolution; and
WHEREAS, the 2008 Oil Shale and Tar Sands Programmatic EIS (2008 OSTS PEIS) was required under Section 369 (d) (l) of the Energ:y Policy Act of 2005 and was prepared in cooperation with 14 federal, state. and local governmental organizations: and
WHEREAS THE 2008 OSlS PEIS was 3 years in the making. and it honored the input of a task force of Governors and other stakeholders as per requirement of the 2005 Energy Policy Act:
WHEREAS, the Record ofDecision (ROD) for the 2008 OSTS PEIS amended 10 land use plans in Colorado. Utah. and Wyoming to make approximately 2 million acres of public lands available for potential leasing and development of oil shale and approximately *430.000* acres available for tar sands leasing. Together with the regulations published in 2006 and 2008 for oil shale and tar sands resources. the 2008 OSTS PEIS and subsequent land use amendments constituted a reasonable and rational establishment of an oil shale and tar sands program as mandated in the Energ: Policy Act of 2005: and
WHEREAS, the oil shale and tar sands program to which the 2008 OSTS PEIS and related regulations gave birth. \~.:as a reasonable response to the fact that oil shale and tar sands resources in the Green River Formation located in northeastern Utah. nortlnvestem Colorado and southwestern Wyoming may reach 8 trillion barrels of oil: and
WHEREAS. the preferred alternative in the draft 2012 OSTS PEIS drasticallv shrinks. diminishes and in man) areas outright reverses virtually all of the lands made available for Oil Shale and Tar Sands development in 2008. and does so using the same data and science: and
WHEREAS. such a drastic reversal in lands available for Oil Shale and 1 ar Sands development between the 2008 PEIS and the 2012 preferred alternative. violates regulatory ran Task Force requirements of certainty for industry and investors: and
WHEREAS such a drastic reversal of lands available for Oil Shale and Tar Sands development in 2008. constitutes a de facto. piece-meal revision of previous BLM Resource Management Plans. in violation of the Section 202 Planning Process under FLPMA;
WHEREAS, the preferred alternath e in the draft 2012 OSTS PEIS entirely ignor~s the input of the task force and stakeholders which the 2005 Energy Policy Act directed the BLM to honor and folio~: and moreo\ er the draft 2012 OSTS PEIS may well 'iolate various memoranda of understanding (\.10Us) with counties v,hich require the BLM to publish the written input of cooperators \\ho disagree with the preferred alternative:
WHEREAS the draft 2012 OSTS PI::.IS preferred altematiYe significant!} restricts the acreage allotted in the 2008 Pr IS for research and deYelopment leasing:
WHEREAS the draft 2012 OSTS PUS preferred alternative threatens to arbitrarily undermine the process and the work utilized in creation of the 2008 OS IS PEIS. and essentially dismantle a

reasonable and rational oil shale and tar sands program in \ iolation of Section 369 of the 2005 Energ~ Policy Act: and
WHEREAS, the 2012 OSTS PEIS preferred alternative is the creature of a friendly law.;uit settlement agret:!ment betv,:een the BI *M* and ideological opponents to oil shale de\elopment. and
is therefore entirely pre-determined and pre-decisional in violation ofNEPA. ‘‘ ith no apparent rationale for rc,ising the acreages approved in 2008: and
WHEREAS. the BL~1 has settled on a preferred altemati\e in the 2012 OS IS PEIS admittedly without ha\ ing tirst analyzed its impacts: BLM should be required to withdra’’ the preferred status ofthc alternative until it has performed this analysis; and
WHEREAS, the acreage approved for Oil Shale and Tar Sands de\elopment in the dran 2012 OSTS PFIS preferred altemath e bears no rational relationship to the stated purpose and need:
\VI IEREAS. the Department of Energy has basically abdicated the responsibiltty Congress placed upon it to defend and uphold a\ iable oil shale energ~ program in America. lea\ ing it instead to the BLM encumbered b~ a host of anti-oil shale prO-\\ilderness groups steering BL.\.1”s
e\ery mo\e:
WHEREAS, the altematn e adopted in the ROD of the 2008 OSTS PEIS is nO\\ the “‘-Jo Action Altemati’ e of the draft 2012 OSTS PEIS; and
WHEREAS. the 2008 OSTS PEIS chosen alternative is consistent with the multiple use. sustained yield of the Federal Land Policy Management Act (FLP~1A): and
WHEREAS. the 2008 OSTS PEIS chosen alternative is consistent with county general plans and policies which call for responsible development of available energy resources: and
WHEREAS. the de,elopment and production of oil from oil shale has been pro\en beyond a doubt to be technologicall~ and economical!} feasible; and
WHEREAS. this same technolog) to cxtract oil from the oil shale rock is not only economically feasible. *hw it requires liule to no consumption o[waTer.* cotmar) to the myths which false)~ claim that oil shale extraction requires large consumption of water resources; and
WHERAS. the energy captured in the extract of oil from shale (natural gas capture. etc ..) more than makes up for energy consumed in that extraction process, thus dispelling the myth that the oil shale extraction process consumes more energ)’ than it produces:
WHEREAS. the rising price of gasoline. coupled with ever increasing Joss of good paying jobs due to the Administration’s policies against energy development on western public lands, result in increasing hardships for fami lies and the local economy. to the point where some fear the ‘“indO\\ of oppm1unit) is about to close for a civil. lawful and order!)’ response as citizens feel more and more pressured and desperate financially; and
WHl:.REAS. the 2012 OSTS PEIS improperly limits technology testing to stricti) in situ efforts and does not allow tor development of other technologies; and
WHEREAS, the BLM has left insufficient time for the public and cooperators to meaningfully comment on the public draft 2012 OSTS PETS by the present comment deadline of May 4. 2012. because a highly relevant commercial oil shale BLM regulation is not due to be published until May 15. 2012 and the public should have the right to view that regulation first and then submit comments on the draft 20 I 2 OSTS PEIS in light of that regulation; and
WHEREAS. the same problems with lack of consistency with local plans and policies and failure to honor the input of cooperators and all stakeholders. also besets many public lands EIS projects. in addition to the 2012 OSTS PEIS. The cooperators from Utah and Wyoming have

alread) unanimously requested for the No-Action alternative in the draft 2012 OSTS PEIS become the preferred alternative.

RESOLUTION

NOW THEREFORE. BE IT RESOLVED BY CARBO~ COUNTY, STATE OF UTAH AS FOLLOWS:

<([#6 [*9.2.1*] 1. Carbon County. Utah declares the BLM's continuing to administer and carry out the 2012
OSTS PEIS to be an open contempt and flaunting of the Congressional Spending \1oratorium first imposed in the 2011 Continuing Resolution and carried forward in all subsequent Congressional spending resolutions up to and including the present;
2. Carbon Count) calls upon the BLM to cease all further activities with respect to administering and carrying out the 20 12 OSTS PETS, because doing so constitutes an open contempt and/or enforcing of the Congressional Spending Moratorium against implementing. administering and/or enforcing Secretarial Order 3310. Which Spending Moratorium was first imposed in the 2011 Continuing Resolution and carried forward in all subsequent Congressional spending resolutions up to and including the present:
3. Carbon County calls upon the BLM to immediately cease and desist all activities related to the above-referenced 2012 OSTS PEIS and immediately publish a revised notice in the Federal Register signifying its cessation of all work on the Programmatic EIS in obedience to the above quoted Spending Moratorium. Otherwise. the BLM would be in contempt of Congress:
#6])> <([#7 [*2.1.1*] 4. Should BLM continue to go forward with the 2012 OS1S PEIS regardless of these Grievances, the only legally viable alternative would be if the BLM adopted the "No-Action
Alterative, which is identical to the Alternative chosen in the ROD of the 2008 OSTS PEIS:
#7])> <([#8 [*1.1.1*] 5. The BLM should extend the May 4, 2012 deadline for public comment on the draft 2012 OSTS PHS at least 30 days after publication of the expected oil shale regulation due to be
published on or around May 15, 2012.
#8])> <([#9 [*1.3*] 6. The BLM should honor the input of cooperators. particularly if they are local governments. as required by Section 202(c)(9) of FLPMA. in all matters. not just with respect to the 2012 OSTS PEIS. **#9])>**

OSTS2012D50291

Organization: Laurel Armstrong
Received: 5/4/2012 12:28:34 PM
Commenter1: Laurel Armstrong - Laramie, Wyoming 82072 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/14/2012 12:00:00 AM
Attachments: OSTS2012D50291.htm (OSTS2012D50291-58905.htm Size = 1 KB)

Submission Text

<([#1 [*2.3.1*] Regarding the follow up PEIS detailing land use plans and for the future

development of oil shale and tar sands resources in Colorado, Utah, and Wyoming, I would encourage the adoption of Alternative 3 which releases no land in Wyoming; only 30,000 acres in Utah and Colorado for research purposes only . The chronic water shortages that exist in Wyoming make it a poor choice for oil shale extraction. **#1])>** Thanks you.

OSTS2012D50293
Organization: richard crowe
Received: 5/4/2012 12:40:27 PM
Commenter1: richard crowe - okatie, South Carolina 29909 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/14/2012 12:00:00 AM
Attachments: OSTS2012D50293.htm (OSTS2012D50293-58907.htm Size = 1 KB)
Submission Text
<([#1 [*11*] stop the b.s. and drill baby drill **#1])>**

OSTS2012D50295
Organization: HawkWatch International, Kylan Frye
Received: 5/4/2012 12:49:18 PM
Commenter1: Kylan Frye - Salt Lake City, Utah 84106 (United States)
Organization1: HawkWatch International
Commenter Type: Environmental Organization
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/16/2012 12:00:00 AM
Attachments: OSTS2012D50295.htm (OSTS2012D50295-59001.htm Size = 1 KB)
HWI_OSTS_PEIS_OSTS2012D50295.pdf (OSTS2012D50295-59000.pdf Size = 186 KB)
Submission Text
Please see attached document for our comments. Thank you for the opportunity to submit our suggestions. See Attachment.

HAWKWATCH INTERNATIONAL
2240 S. 900 E. ? Salt Lake City, UT 84106 ? 801-484-6808 ? 800-726-HAWK ? Fax 801-484-6810
PO Box 35706 ? Albuquerque, NM 87176 ? 505-255-7622
WWW.HAWKWATCH.ORG
2 May 2012
To Whom It May Concern:
Thank you for the opportunity to provide comments on the Oil Shale and Tar Sands (OSTS)

Programmatic EIS. We at HawkWatch International, a non-profit conservation science organization that specializes in birds of prey and with specific knowledge related to the proposed areas for potential OSTS development, wish to offer our input at this juncture in the planning process. **<([#1** [*2.3.1*] We recognize that we live in an era of decreasing fossil fuel resources, and the need for alternative sources of energy, both renewable and otherwise, is becoming increasingly necessary. We also recognize that our dependence on these resources is strong and that there exists a need for increased domestic production of fossil fuels. However, due to the fact that these resources contribute to climate change and the extraction of such resources has the potential to alter landscapes such that they will no longer be able to support the wildlife and human communities that depend on them, it is absolutely imperative that novel methods of extraction be completely vetted before public resources are allowed to be leased. These technologies are as yet unproven at a commercial scale, both financially and environmentally, within the United States, and require a large number of already-scarce energy and water resources in the process of extraction. As such, we are in support of Alternative 3 – Research Lands Focus, and are strongly opposed to any leasing options that do not include a strong research and development focus prior to resource extraction. **#1])>**
<([#2 [*3.7.3.6*] [*3.7.3.9*] Wildlife Impacts with regards to raptors:
We recommend that the PEIS consider the likely cumulative landscape impacts on wildlife and habitats of existing and reasonable foreseeable conventional oil and gas development when evaluating whether this landscape can support oil shale and tar sands. BLM should encourage the least surface disturbing forms of development. We also recommend that surface disturbance limits be set for all forms of resource extraction that, when reached, would require reclamation before further development could occur (e.g., see the ROD for the Roan Plateau). We suggest appropriate spatial and temporal buffers be applied to protect all known raptor nests. For example, refer to "Utah Supplemental Planning Guidance: Raptor Best Management Practices" published by the Utah State Office of BLM. Additionally, we urge the BLM to recognize the potential value of pinyon-juniper habitats in the Piceance Basin as nesting habitat for Accipiters (i.e., Northern Goshawks, Cooper's Hawks, and Sharp-shinned Hawks; refer to BLM Technical Note 435: http://www.blm.gov/nstc/library/pdf/TN435.pdf).
#2])> HAWKWATCH INTERNATIONAL
2240 S. 900 E. ? Salt Lake City, UT 84106 ? 801-484-6808 ? 800-726-HAWK ? Fax 801-484-6810
PO Box 35706 ? Albuquerque, NM 87176 ? 505-255-7622
WWW.HAWKWATCH.ORG
<([#3 [*3.7.3.1*] [*3.7.3.5*] We do not agree that vegetation loss will only comprise a moderate impact to raptors, and instead argue that it presents a potentially large impact. Loss of vegetation, especially shrubs and trees, can lead to loss of important habitat for tree nesting and roosting birds and the loss of foraging habitat and prey base species in historical raptor territories, therefore making it difficult to support a nesting population in the area. Additionally, removal of vegetation and increased surface disturbance has the potential to completely eliminate Burrowing Owl habitat, a fossorial diurnal owl native to these areas that is listed as a species of concern in all three states within the OSTS area. Furthermore, increased fire potential does not present a small impact to raptors. More likely, fire has a moderate to large impact on raptors. Research in the western part of Utah has shown drastic declines in Golden Eagle nesting success, nest starts and productivity following intense fire years and loss of critical shrub cover for prey species, such as jackrabbits.

#3])> <([#4 [*3.7.3.9*] [*3.7.4.4*] Given the potential raptor foraging habitat destruction associated with the proposed activities, we also suggest that the BLM use a larger buffer around nest sites and high value raptor areas than the 1-mile buffer BLM currently suggested for Golden Eagles. The current BLM spatial buffer was designed to prevent disturbance to birds on nests (e.g., from point-source activities, such as oil and gas drilling); they were not intended to protect foraging habitat surrounding nests. The Golden Eagle literature suggests that birds breeding in the western U.S. exploit home ranges averaging 20–33 km² in size (equivalent to a 1.6–2.0-mile-radius), depending on the study area (reviewed in Kochert et al. [2002]), but they can be as large as 83 km² (3.2-mile radius) in southwestern Idaho (Marzluff et al. 1997). Therefore, we suggest a minimum 2-mile buffer around Golden Eagle territories. In contrast, Ferruginous Hawks forage over average home ranges of 6.0–7.6 km² in size (equivalent to a 0.8–1.0-mile radius; Smith and Murphy 1973, McAnnis 1990), so the existing 1-mile disturbance buffer may also be a sufficient buffer for this species.
#4])> <([#5 [*3.7.4.4*] State-specific issues:
Utah and Colorado
HawkWatch International has done extensive work with the BLM offices in Eastern Utah and Western Colorado involving raptor responses to oil and gas development (see BLM Technical Notes 432-436; http://www.blm.gov/nstc/library/techno2.htm). From the data compiled under these efforts, we are able to compile basic information on the number of historical raptor nests within the area that may be affected by OSTS development for all alternatives for both states (Table 1 and 2). Please note that these datasets are historic and are not comprehensive for the regions of interest and have not been updated since 2006 or 2007. We urge BLM to refer to any additional data collected by their representative Field Offices and the various environmental consultants contracted by oil and gas companies in the intervening years.
Table 1. Historical nests potential affected by OSTS development in Eastern Utah. Mexican Spotted Owl and Burrowing Owl Nests were not included in this analysis. GOEA – Golden Eagle. FEHA – Ferruginous Hawk.
[SEE TABLE]

Table 2. Historical nests potentially affected by OSTS development in Western Colorado. Mexican Spotted Owl and Burrowing Owl Nests not included in this analysis. NOGO is Northern Goshawk, a state species of concern.
[SEE TABLE]

Alternatives 1 and 4 have the potential to affect a huge number of raptor nests in both states, even when considering the conservation measures set forth in this document. With such high numbers of potential disturbance, it is absolutely imperative that mining technology be thoroughly researched to avoid unwanted environmental risk. Alternative 3 presents the least amount of risk to raptor nests of the four alternatives, and allows for adequate testing of the technology prior to commercial **#5])>**
<([#6 [*3.7.3.10*] Wyoming
South-central Wyoming supports a large number of raptors, including one of the largest known breeding populations of Ferruginous Hawks (Olendorff 1993), a recognized BLM species of concern, and Golden Eagles, a species of increasing conservation concern for the USFWS and states within the region. Our communications with Rock Spring BLM FO staff suggests there is also substantial raptor data available for this area that should be consulted. **#6])>**

<([#7 [*3.7.3.10*] [*3.7.4.1*] Overall KRAs:
This document makes little mention of a number of "Key Raptor Areas" (KRAs) that have been previously identified within the region considered for OSTS development. Through BLM co-authorship and signing of Raptor Research Report #8 (see Olendorff et al. [1989]), BLM signaled a commitment to "protect and manage raptor habitats on public lands to the best of its ability within the multiple-use mandate provided by the Federal Land Policy and Management Act (FLPMA). In preparing the report, individual BLM field offices identified a total of 223 KRAs with the intention of providing guidance to future planning and management efforts, such as this one. KRAs were defined as areas with unusually high raptor nesting, migration, or wintering concentrations that deserved special consideration during decision making (Olendorff et al. 1989). Table 3 outlines the XX KRAs that occur adjacent or in potential OSTS areas.

Table 3. Key Raptor Areas within Alternative 1 for OSTS development
[SEE TABLE] **#7])>**

<([#8 [*3.7.3.9*] [*3.7.4.4*] Proposed conservation measures Bald and Golden Eagles and Mexican Spotted Owls
We fully support all of the proposed conservation measures detailed in Appendix F, and implore the BLM to extend conservation measures to other state-listed species of concern that potentially occur within the areas of proposed OSTS leasing (See table 4). We suggest also increasing the survey radius from 1 mile to 2 miles for nesting and roosting Bald and Golden Eagles, given that their home range size can be anywhere from 1.6 to 2.0 miles in radius. Because this home range size is one of the largest for raptors, we feel confident that this radius would safely include all other species of concern within the OSTS leasing areas. We also support the need for increased effort in under-surveyed areas within potential Mexican Spotted Owl habitat in the OSTS leasing areas.

Table 4. State species of concern for OSTS leasing areas. [SEE TABLE]

The proposed conservation measures mention restoration of activities of wetlands, and we further want to stress the need to include restoration measures for habitat structure in areas of shrublands and pinyon-juniper woodlands, given their importance to raptor prey base and nesting habitat. **#8])>**
Thank you for your consideration,
Kylan W. Frye, M.E.M
Conservation Biologist
HawkWatch International, Inc.
kfrye@hawkatch.org
Steven J. Slater, Ph.D.
Conservation Director
HawkWatch International, Inc.
801-484-6808 Ext 108
sslater@hawkwatch.org
LITERATURE CITED
Kochert, M. N., K. Steenhof, C. L. Mcintyre, and E. H. Craig. 2002. Golden Eagle (Aquila chrysaetos). No. 684 in A. Poole and F. Gill (Editors), The Birds of North America. The Birds of

North America, Inc., Philadelphia, PA.
Marzluff, J. M., S. T. Knick, M. S. Vekasy, L. S. Schueck, and T. J. Zarriello. 1997. Spatial use and habitat selection of Golden Eagles in southwestern Idaho. Auk 114:673–687.
McAnnis, D. M. 1990. Home range, activity budgets, and habitat use of Ferruginous Hawks (Buteo regalis) breeding in southwest Idaho. M.S. Thesis, Boise State University, Boise, ID.
Olendorff, R.R., Bibles, D.D., Dean, M.T., and Haugh, J.R., and Kochert, M.N. 1989. Raptor habitat and management under the U.S. BLM multiple-use mandate. Raptor Research Report 8:1-80.
Olendorff, R. R. 1993. Status, biology, and management of Ferruginous Hawks: a review. Raptor USDI Bureau of Land Management, Research and Technical Assistance Center, Boise, Idaho.
Smith, D. G., and J. R. Murphy. 1973. Breeding ecology of raptors in the eastern Great Basin of Utah. Brigham Young University Science Bulletin, Biological Series 18:1–76.

OSTS2012D50296

Organization: 678-993-9375, Ted DePooter
Received: 5/4/2012 12:51:16 PM
Commenter1: Ted DePooter - Kennesaw, Georgia 30144 (United States)
Organization1:678-993-9375
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/16/2012 12:00:00 AM
Attachments: OSTS2012D50296.htm (OSTS2012D50296-58937.htm Size = 1 KB)
Submission Text
<([#1 [*1.1*] My first comment is that a telephone number is required, but you do not provide a box to enter it,. Is this an oversight, or a means of reducing the protests? (2) The protest shall contain: (i) The name, mailing address, telephone number and interest of the person filing the protest; **#1])> <([#2** [*3.10.3*] Comment - you must lease in large blocks, for long terms, and in locations where there is both access to transportation, and housing for the workers, or you will place the program at a significant economic dissadavantage. We need to expand our energy resources, and this is one way we can start. The sooner it starts, and the more transparent the leasing program, the sooner we will see results. Deciding where to lease now will also help the general population decide where they want to live, since they seen to not live near this potential energy source. the longer the delay on deciding where these sites are, the more not in my back yard people move in.
#2])>

OSTS2012D50297

Organization: CryoRain Inc., Denyse DuBrucq
Received: 5/4/2012 12:57:08 PM
Commenter1: Denyse DuBrucq - Dayton, Ohio 454041136 (United States)
Organization1: CryoRain Inc.
Commenter Type: Private Company

Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** aziech 5/17/2012 12:00:00 AM
Attachments: OSTS2012D50297.htm (OSTS2012D50297-59004.htm Size = 1 KB) Thermistry_for_the_Oil_and_Gas_industry_OSTS2012D50297.pdf (OSTS2012D50297-59003.pdf Size = 29 KB)
Submission Text
<([#1 [*6.3.1*] CryoRain Inc. offers several environmental fixes to current practices used in oil shale fuel extraction: 1. Fracking is done with cold using Liquid Nitrogen sourced Nitrogen gas. Rock conductivity allows rapid space cooling. 2. With ground and contained water frozen, the 10% expansion of water frozen vibrated by dissonant tones will crush the rock sufficiently to allow evaporated fuel release. 3. Carrying the fuel from the ground with Nitrogen gas while raising the temperature in the center of the frozen zone will force fuel to surface for condensing by liquefication temperature. 4. Water components are separated out and fresh water used in agriculture. 5. Technique covered in applied US patent 12/217,915. Advantages include - no water used, no harsh chemicals added to ground, no moving parts in extraction system which is thermally powered. Diagram of system attached. All tar sands and oil shale vehicles should carry Liquid Nitrogen fire extinguisher to end a fire flareup, catch and spilled fuel, and stop leaking situation.

Attachment:

A New Technology Births a New Science - Thermistry This Presentation is Directed to the Oil & Gas Industry
With seven years experience and now an issued patent, USP 7,631,506, on the discovery that Liquid Nitrogen, when rained through a perforated pan or trough produces pure, inert, cryogenically cold Nitrogen gas which opens a world of capabilities from ending fires and crises to extracting fuel and polluting compounds from the earth. It is; Green, mean and clean since Nitrogen is already 78% of the atmosphere, it not only is available everywhere and mixes back in with no mess, no damage, no change. A fire burning flooded with pure Nitrogen just isn't burning any more.
The new science, Thermistry, is the study of or related to using temperature difference to drive change or motion using an inert material - here Nitrogen, N2, molecules – the fourth coldest liquid in the world - creating action without chemical reaction. Chemical reaction is prevented both by having reactive materials surrounded by inert Nitrogen gas which eliminates the reactive Oxygen and even Hydrogen from interacting, and, second, by taking the ambient temperature of the materials below their temperature window of reaction.
Thermical techniques start cryogenically using Liquid Nitrogen rained through a spaced-hole sieve descend in drops through warmer air causing the drops to evaporate into pure Nitrogen gas. Nitrogen's wrapped-tight molecule prefers to neighbor itself and in the evaporation process will force other air components out

of the cloud of Nitrogen giving pure Nitrogen gas, an inert gas cloud at cryogenic temperature. On evaporating the Liquid Nitrogen drops in a calm environment, one can see the size of the pure gas cloud because its rim is clouded with condensed water vapor. A burning match placed in the clear air stops burning.
Factors included in Thermistry using Liquid Nitrogen sourced Nitrogen gas:
1. transferring temperature. It will cool things down rapidly, passing the cryogenic Nitrogen gas through pipes, it freeze things. It also will solidify spilled liquids for easy pick up and even gaseous toxins keeping them in the canister or aerosol they are in preventing their dissemination. Used in oil shale extraction, the cold will crack the kerogen that contains the fuel components. Working with unexploded ordnance, the freezing will prevent able power function and then at lower temperature, prevent the chemical reaction that causes the explosion. In controlling coal mine fires, it counters the inferno in the surface burns and rapidly reduces the underground temperature that would re-ignite methane gas and coal burning. To cool the last Chinese coal mine fire, it took three years
2. enabling Oxygen-free transport of flammable materials as fuels and reactive mixtures. Extracting fuel with Nitrogen as the carrier of the fuel to the surface, one can reach the needed 375oC. temperature to carry all the heating oil and nothing will burn. It is offered to cool down the Fukushima Nuclear facility fuel rods to prevent meltdown. They report temperatures of 322oC in the reactors and spent fuel rod storage, but that is below our heating oil extraction temperature and way above water boiling so as to insure a dry environment which brings danger of Oxidizing the fuel rod chemicals.
3. ending fuel fires by bathing the burn in Nitrogen gas evaporated from Liquid Nitrogen relates to energy safety from coal mines and petroleum facilities to chemical plants and even particle fires as lint, dust in silos and shipboard with grain shipments, sugar production and the like.
4. freezing the containment of fuels as in oil shale and landfill seams where stored water freezes expanding its 10% microscopically fracturing the material containing the fuel components which allows release of contained fuels upon heating later in the process. In the fuel extraction, the locked in fuels in sedimentary situations is opened by the expanding water in the materials. With oil shale it let heating the rock after Liquid Nitrogen / cryogenic Nitrogen treating give off light, sweet fuels and water and then, as the heating continued, the gasoline, kerosene and heating oil. Without the Nitrogen treatment, it gave off sulfur compounds.
5. saturating the ground, the Nitrogen eliminates the Oxygen so high temperature extraction can be done without ignition of the fuel bringing even Methane safely to the surface and capturing it by condensation, and providing means to end subterranean coal mine, peat and other embedded fires. This again is for fuel extraction and coal mine fire control as well as other embedded fires that burn long now since, other than this new Nitrogen technology, there is no means to end them. This also relates to remediation as fuel leaked from storage tanks which is

extracted from the ground in the same way we pull fuel from oil shale reserves and landfill seams.
6. penetrating the ground with Nitrogen gas in the pure state to control embedded fires stop the smoke and toxin releases by cooling the ground to below ignition temperature, and as mentioned in #5, suffocates the burn.
7. flooding the fire draft with Nitrogen, a gaseous fire suppressant, see NFPA Code 2001, ends the burning and counters infernos which pull the Nitrogen cloud into the fire going to whatever level of the structure or of forest the most active burn is happening. The fire brings the fire suppressant to itself ending the burn. In contrast, water and foams drop fall through the fire, and puddle on the ground, and in the case of oil fires, it splatters the fire giving new areas of burning. Extending this further, when a cloud of Nitrogen is drawn into a fire, it can be pulled into and be effective in ending a series of fires because it stays as a gas and has no chemical change. If it does mix in the fire it is flooded with Carbon dioxide which, as you know, is also a fire extinguishing agent.
8. using the cryogenic temperature of just evaporated Nitrogen in condensing tubes in a coal smoke environment freezes out the water on the walls of the tubes causing soot to drop out of the air. Further cooling can condense Carbon dioxide (CO2), into dry ice, or like the Dutch practice, pass CO2 through greenhouses to enhance plant growth. This gas stack scrubber method eliminates the smoke rather than disseminating it into the air off the top of a tall chimney and applies the smoke components to enhancing plant growth. This scrubbing can be done with heavy oil burning furnaces as well.
9. SAFETY FACTOR - breathing pure Nitrogen or Argon, Neon or Helium air by man or beast causes fainting, because the level of CO2 in the lungs ends with no Oxygen exchange. The diaphragm action stops and the brain sleeps inducing fainting. In this state, fires and their smoke do not damage or destroy the lungs of those caught in a fire and, if resuscitated within six minutes, they will survive without mental or physical damage. Also flooding a Methamphetamine Lab situation both controls the occupants and prevents explosions making it safer for first responders. First responders with extra SCUBA equipment must be in the fire area to quickly restrain suspects and resuscitate anyone caught in the fire and walk them out. The non-lethal weapon use also ends hostage situations and robbery attempt at banks or convenience stores or airliner hijackers. Presently half the fire deaths in the USA have been from smoke inhalation only. A fire being fought with Nitrogen will put those caught in the crises in Coma saving their lungs. Breathing the CO**2** of the fire floods the lungs with smoke so N**2** atmosphere is preferred. First responders with SCUBA gear will have the IPV units in the building before the Nitrogen is released for fire fighting so they can resuscitate those caught, even handling a crowd of people in time.
10. realizing this Nitrogen gas is invisible to the eye, unidentifiable to the

nose, not tasted by the tongue and silent to the ear – knowledge of its effects and actions to remedy a situation will protect the population in the environment of its use. Using this Nitrogen gas sourced from Liquid Nitrogen was suggested to the US military as a favored means to do urban warfare in Iraq in that both persons and property are protected and undamaged, yet the terrorists can be easily separated and interrogated. They say money is the issue and then choose the most expensive means – drone bombs which are costly as is recovery from the explosion to say nothing of unnecessarily loss of lives.
11. fighting fires with Nitrogen leaves no water damage and no electrical arcing making this technology optimal for handling vehicle fires with the ever increasing number of electric and hybrid automobiles on the road mixing with the fossil fuel powered vehicles. It leaves homes which have had fires more quickly recoverable since only what burned away, warped, melted, or was scorched needs replacing. It still smells so bring on the Fabreeze™.
12. winter fire fighting using Nitrogen does not cause ice build up as using water does, damaging the structure and coating the ground with ice endangering those walking, working and driving in the area.
13. measuring Nitrogen gas volume from one gallon of Liquid Nitrogen, one gets 230 gallons super cold (30.7 cubic feet) – the volume of a twin bed with matress; at room temperature, 250 gallons (33.4 cubic feet); and at inferno temperatures, over 600 gallons (80+ cubic feet). A truckload of 3,000 gallons of Liquid Nitrogen floods 92,240 cubic feet with super cold and 100,260 cubic feet with room temperature Nitrogen. It is not consumed in the fire so can end burns over a large tract. When having heated in countering inferno temperatures, it will rise in the atmosphere flooding 240,000 cubic feet of treetop infernos. With a sheering 5 MPH wind, it becomes part of the atmospheric gases being normally 78% Nitrogen. Once polluted like this, it mixes easily with the air.
14. determining Nitrogen molecular reactivity with its diatomic structure, it shares three electrons putting its reactivity between Oxygen (O2) and diamond structure of Carbon (C4). It takes legumes – peas, peanuts, beans of all sorts - to split the Nitrogen atom pairs with their rhizome bacteria. These bacteria create nodules on the roots which when left in the field will fertilize the ground for several years of growing other crops.
15. preventing flooding by freezing water and gravel in sandbagging and levees and freezing temporary patches in dams and dikes. This was offered to protect the just rebuilt New Orleans against Category #5 hurricane flooding and river flooding using sandbagging for towns threatened in general river flooding. The patches were offered to stop the flow of radioactive water from the Fukushima Nuclear Facility. Since the New Orleans oil storage and refining is now being flooded with the Mississippi River bulging its banks and covering lands unbothered in recent history, this should be included in handling troubles in oil industry.
16. reducing pollution, nuclear or toxic, by freezing out the water containing

the irritant and transporting it to a place safe to dispose or degrade it.
Here again was a solution to a Fukushima difficulty where radioactive water was gushing from a reactor flooded to cool it. Also, when crude is harvested, a large component of the material shipped to the refinery is water. A freezing process can strip the water components in condensing sequence and then liquid separation can take out more from the light gasoline component of the raw petroleum.
These sixteen factors alone can influence our decisions on fire and crises handling, oil and gas industry needs, remediation of organics from the soil and ground to prevent further contamination of aquifers, implement fuel extraction from fossil fuel deposits of all but solid carbon materials - diamond, slate, and anthracite coal, and freezing levee cores, sandbagging and breach repair to prevent flooding. Many problems cannot be handled by current technology except for this cryogenic means and others are poorly or expensively handled, either economically or environmentally as the dispersing detergent to counter the BP Oil Crisis in the Gulf. Using this technology, CryoRain offered to end the flow of crude from the wellstem which would have cut the polluting of the Gulf of Mexico by two months, but someone put as the first reason to reject a proposal that "Freezing is not Feasible." Our triple pack offer there was to end the flow from the well, freeze the crude on the surface of the water and freeze the crude on the shores and take collected crude to area refineries to convert to fuel.
Chefs on television of late have been pouring Liquid Nitrogen into their mix for the best ice creams….no after taste in Nitrogen. Having Nitrogen in the kitchen can end a kitchen fire is a flash and not destroy the meal(s) in preparation. This practice should be part of every oil rig and oil transport vessel galley.
Enjoy discovery of applications remembering I have a eight year advantage and an array of patents pending and proposals implementing those I found useful. If the administering scientists in our crises centers would have the courage of great chefs, this technology would have been in the field years ago. Let us work together to get this logical choice for countering fires and crises into use from fire departments to fixed systems like replacing water sprinkler systems to the nondamaging Liquid Nitrogen sourced Nitrogen gas which do not expand the damage beyond that caused by the fire and ending the fire more quickly even reduces the damage the fire might have caused if fought with water, foams or chemicals. Communities should convert their crises fighting to our most abundant gas and save money, property, and, most importantly, lives.
Sincerely,

Denyse DuBrucq EdD, **#1])>**

OSTS2012D50298
Organization: Jeff Meyer
Received: 5/4/2012 12:58:57 PM
Commenter1: Jeff Meyer - Preston, Washington (United States)
Organization1:
Commenter Type: Member of the Public
Classification:

Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/14/2012 12:00:00 AM
Attachments: OSTS2012D50298.htm (OSTS2012D50298-58939.htm Size = 1 KB)
Submission Text
<([#1 [*3.4.1*] Do not dewater or contaminate the naturally occurring water falls, or their watershed, flowing into Roan Creek canyon. **#1])>**

OSTS2012D50299
Organization: Carole Maclure
Received: 5/4/2012 1:22:03 PM
Commenter1: Carole Maclure - Olney, Maryland 20832 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/14/2012 12:00:00 AM
Attachments: OSTS2012D50299.htm (OSTS2012D50299-58941.htm Size = 1 KB)
Submission Text
<([#1 [*12.3*] Do not give over public lands to shale oil production. Unproven technology, no markets for shale oil on any levels that would justify destroying our western public lands. The BLM shoud protect the land, wildlife, air and water from the by products of this destructive process. While this may be good for the short term for oil companies it is a long term loser for the American public. JUST SAY NO.... **#1])>**

OSTS2012D50300
Organization: Dan and Janet Blair
Received: 5/4/2012 1:26:05 PM
Commenter1: Dan and Janet Blair - Joseph, Oregon 978460330 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/16/2012 12:00:00 AM
Attachments: OSTS2012D50300.htm (OSTS2012D50300-58943.htm Size = 4 KB)
Submission Text
<([#1 [*2.5*] We submit this letter regarding the BLM's "draft programmatic environmental impact statement" (Draft PEIS) for oil-shale and tar-sand development in Colorado, Utah and Wyoming (our former home state). We are deeply concerned about the potential environmental

effects to water, wildlife, communities and public lands if the BLM initiates a commercial leasing program. The two million acres in Utah, Wyoming and Colorado previously allocated for commercial leasing is a massive amount of public taxpayer land that would be sacrificed for a single use of the landscape. Between global climate change, extinctions occurring at a rapid pace, and a quickly-drying Colorado River -- problems that oil-shale and tar-sand development would only exacerbate -- it's hard to imagine a less prudent use of our public lands. We have appreciated BLM's "go slow" approach that is requiring industry to reasonably develop and prove the technologies prior to allowing commercial leasing, and Alternative 2 of the Draft PEIS is a step in the right direction. However, the Draft PEIS should have included an alternative that does not in any way endorse the use of additional public lands with which this unproven industry can speculate. **#1])> <([#2** [*3.10.4*] [*3.10.5*] Oil shale is currently producing no jobs and no revenue; the Congressional Budget Office confirmed that it is not expected to produce significant revenues through 2022. So we have the luxury of time in which to carefully assess the impacts of development on our water, wildlife, and communities. No one knows if oil shale will ever create jobs for our communities, since the barrier to oil shale is the rock itself. Leasing our public lands and providing our tax dollars for oil industry speculation is simply wrong. And meanwhile, the land overlying oil-shale resources in Utah, Colorado and Wyoming is some of the best wildlife habitat in the West; outdoor recreation and tourism are huge economic drivers for the region. It is imperative that we protect this sustainable economy by making smart decisions based on sound information. **#2])> <([#3** [*3.4.1*] Moreover, speaking as former residents of Wyoming, we know that state is already facing chronic water shortages in its arid steppes. With no clear answer from the oil industry about what potential oil shale development would mean for the water needed by Wyoming's farmers and ranchers, who are already providing real jobs, commercial leasing is a gamble the region should not be required to take. The hard-working people of Wyoming deserve better than the unavoidable environmental degradation that will result from this speculation. Wyoming folks value their open spaces, water, and hard-won agricultural heritage, and deserve to retain it rather than being treated as chess pieces in a massive and speculative oil industry game. **#3])> <([#4** [*12*] We oppose any action by the BLM to continue or to authorize any new oil-shale or tar-sand development on public land, or to create or continue land-use allocations that would allow for such uses in the future. Take another long look at oil shale development. Evaluate carefully, and disclose fully, the serious impacts of all new energy required for oil-shale and tar-sand production, including its potentially devastating impacts to our climate and the threat it poses to wildlife, special-status, threatened and endangered species, and to our water, air and communities. **#4])>** Thank you for giving our concerns your most serious and thoughtful consideration.

OSTS2012D50301

Organization: Foothills Sustainability Institute, Karl Hanzel
Received: 5/4/2012 1:31:09 PM
Commenter1: Karl Hanzel - Boulder, Colorado 80302 (United States)
Organization1: Foothills Sustainability Institute
Commenter Type: Misc. Organization
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:

Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/14/2012 12:00:00 AM
Attachments: OSTS2012D50301.htm (OSTS2012D50301-58945.htm Size = 1 KB)
Submission Text
<([#1 [*12*] {If i haven't said so already...} Tar Sands and Oil Shales should be left in the ground. The EROEI is too poor, and the planet is already teetering on the brink of global disaster. Leave it buried in the ground. Let's move on to renewables and sustainability with all due haste. **#1])>** Sincerely, Karl *----->

OSTS2012D50302
Organization: CryoRain Inc., Denyse DuBrucq
Received: 5/4/2012 1:37:19 PM
Commenter1: Denyse DuBrucq - Dayton, Ohio 454041136 (United States)
Organization1: CryoRain Inc.
Commenter Type: Private Company
Classification:
Submission Category: Attachment
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** aziech 5/17/2012 12:00:00 AM
Attachments: OSTS2012D50302.htm (OSTS2012D50302-59006.htm Size = 1 KB) BLM_RDandD_1-4-10_Lease_application_OSTS2012D50302.pdf (OSTS2012D50302-59005.pdf Size = 8413 KB)
Submission Text
<([#1 [*6.3.1*] Please find our 2009, January 4, application for experimental use of lands in Colorado to extract fuel with our patent technique. This should be tested to determine whether this is not preferred for its clean, cool method in contrast to current practices of harsh chemical fracking and water displacement to bring fuel to the surface. SEE ATTACHMENT for content (BLM RDandD 1-4-10 Lease Application) **#1])>**

OSTS2012D50303
Organization: Charles Forsberg
Received: 5/4/2012 1:44:33 PM
Commenter1: Charles Forsberg - Cambridge, Massachusetts 021394307 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** aziech 5/17/2012 12:00:00 AM
Attachments: OSTS2012D50303.htm (OSTS2012D50303-59009.htm Size = 1 KB) ICAPP12_Nuclear_Shale_Forsberg_Paper_12006_Final_OSTS2012D50303.pdf (OSTS2012D50303-59008.pdf Size = 235 KB)
Submission Text
<([#1 [*6.3.1*] [*11.2*] Recent research on hybrid energy systems that combine shale oil, nuclear

energy, and renewables indicate that future shale oil may have the lowest environmental impact of any fossil fuel source of gasoline and diesel. The greenhouse gas releases per vehicle mile may be half those of vehicles consuming gasoline and diesel from crude oil. The attached paper "A Nuclear Wind Oil-Shale System for Variable Electricity and Liquid Fuels Production" by Charles Forsberg to be given at ICAPP'12 in Chicago (June 24-28) provides the details. It changes shale oil from what was once considered a fossil fuel with one of the larger environmental impacts into the fossil fuel with the lowest environmental impact per gallon of gasoline or diesel fuel. Because of the shale-oil resource base, it is an option that eliminate U.S. dependence on foreign oil. Because of the benefits of reducing greenhouse gas emissions and getting off foreign oil, the decisions should be made to allow very wide use of shale oil where it can be shown such benefits exist. SEE ATTACHMENT for content (Nuclear Shale Forsberg paper) **#1|)>**

OSTS2012D50304

Organization: Taylor Energy, Donald Taylor
Received: 5/4/2012 1:50:36 PM
Commenter1: Donald Taylor - El Dorado Hills, California 95762 (United States)
Organization1: Taylor Energy
Commenter Type: Private Company
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/16/2012 12:00:00 AM
Attachments: OSTS2012D50304.htm (OSTS2012D50304-58947.htm Size = 2 KB)
Submission Text
<(|#1 [*6.3*] I am an expert in thermal chemical processing of solid feedstocks for the production of gases and liquids. Oil shale is fantastic resource that has been held in reserve these many years due largely to economic constraints, and in part due to technology limitations. With oil at $100 per barrel the economics are now attractive. The situation that has changed even more during the past decade has been the broad base of technologies that focus on bio-fuels production. So may of the thermal processing methods that are being developed for biomass conversion into liquids are directly applicable to oil shale. However, this fact is not widely known. There is a technology revolution in progress relative to synthetic fuels and biofuels. How many billons are being spent on biofuels development, most of which is directly applicable to oil shale. My comment; the technology has changed significantly since the last time the major oil companies took a run at oil shale. In my opinion, the business is not ideally suited for the oil companies. But it is ideal for all the medium size companies that are pursuing biofuels. Make it easy to test now technology; provide the up-side incentives for the winners; the private sector will bring products to market, without harming the environment, and without using scarce water resources. For example, who ever said you need to use water to process shale? That is just not necessarily the case. **#1|)>**
Regards, DGT

OSTS2012D50305

Organization: GeoX Consulting Inc, Steven Schamel
Received: 5/4/2012 2:03:46 PM

Commenter1: Steven Schamel - Salt Lake City, Utah 84105 (United States)
Organization1: GeoX Consulting Inc
Commenter Type: Private Company
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/16/2012 12:00:00 AM
Attachments: OSTS2012D50305.htm (OSTS2012D50305-58949.htm Size = 2 KB)
Submission Text
<([#1 [*2.5*] [*12.3*] As a Utah-based oil and gas consultant who has done client studies in tar sands and the Green River Formation I am very strongly opposed to opening large tracks of public lands to speculation in tar sand and oil shale leases. The present action being followed by the BLM of granting small research and development leaseholds to serious operators is the correct one to follow. These are as yet energy resources with no clear development path. Until commercially viable and environmentally sustainable methods of exploitation are found, the public lands should remain in reserve and off-limits to speculators interesting only in "flipping" leases and their unproven development concepts. I have seen in my practice numerious examples of serious energy investors being closed out of commercial development by energy lease speculators holding out for a still better price. This is not in the public interest and it does not promote national energy independence. The "no change" option is not a viable option for the long-term rational development of the region's heavy oil and oil shale resources. The BLM should hold back the public lands with these potential resources until such time that proven commercial processes are available for thier rational development. Steven Schamel, PhD For reference, I am a former Research Professor in Chemical Engineering at the University of Utah, former President of the AAPG-Rocky Mountain Section and Past-President of the Utah Geological Association. I am currently founding President of GeoX Consulting Inc. **#1])>**

OSTS2012D50306
Organization: History Colorado; SHPO, Mark tobias
Received: 5/4/2012 2:04:43 PM
Commenter1: Mark tobias - Denver, Colorado 80203 (United States)
Organization1: History Colorado; SHPO
Commenter Type: Cultural Resources
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form and Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/14/2012 12:00:00 AM
Attachments: OSTS2012D50306.htm (OSTS2012D50306-59012.htm Size = 1 KB)
PEIS_Oil_Shale_Colorado_SHPO_Response_OSTS2012D50306.pdf (OSTS2012D50306-59011.pdf Size = 45 KB)
Submission Text
See Attachment.

14:~
HISTORY~
May4, 2012
BLM Oil Shale and Tar Sands PEIS
Argonne National Laboratory
EVS Division
Building 240
9700 South Cass Avenue
Argonne, Illinois 60439
Re: Draft Programmatic Environmental Impact Statement (PEIS) and Possible Land Use Plan Amendments for
Allocation of Oil Shale and Tar Sands Resources on Lands Administered by the BLM in Colorado, Utah, and
Wyoming (CHS #48519)
To Whom it May Concern:
<([#1 [*1.4*] [*3.9.7*] Thank you for your correspondence dated January 25, 2012 (received by our office on February 6, 2012) and
for the opportunity to discuss this project with both Dan Haas and Sherri Thompson on April11, 2012.
Their formal presentation of possible oil shale development within the Piceance Basin study area in Colorado
certainly helped us understand the nature of this undertaking.
We recognize that BLM is currently in the initial Oand use planning) stage of what is described as a three-step
process. Currently the commercial viability and development for this new technology is unknown, but is
actively being studied through ongoing research, development, and demonstration (RD&D) lease analysis.
We anticipate that additional Section 106 consultation will occur with our office for each of these subsequent
steps including BLM lease review and the consideration of site-specific development plans.
Under the process established for the protection of cultural resources as required by Section 106 of the National
Historic Preservation Act (Section 106) and implemented through 36 CPR 800, it is the statutory requirement
of the Federal agency to fulfill the procedural obligation of Section 106 and to ensure that an agency official
with jurisdiction over an undertaking takes legal and financial responsibility for Section 106 compliance (36 CPR
800.2). The lead agency official remains legally responsible for all required findings and determinations if the
services of a consultant have been utilized for the purpose of obtaining recommendations regarding National
Register-eligibility and project effect (36 CPR 800.2(a)(3)) or if an applicant for Federal assistance has been
authorized by the lead agency to initiate consultation with the State Historic Preservation Officer

(36 CPR
800.2(c)(4)).
The findings from the Section 106 studies can inform the National Environmental Policy Act (NEPA)
studies, such as including mitigation measures identified under Section 106 into the NEPA decision
document. Once we receive the Section 106 studies, we will be able to fully complete our reviews under both
NHPA and NEPA.
As such, we recommend that a cultural resources survey be completed for the individual site-specific
development plans prior to mineral extraction to document all the historic properties within the project area and
to determine the potential effects to these resources as a result of the proposed undertaking.
#1])> WWW.H I STORYCO LO RADO.ORG
HISTORY COLORADO CENTER 1200 BROADWAY DENVER COLORADO 80203
Thank you for the opportunity to comment. If we may be of further assistance please contact Mark Tobias,
Section 106 Compliance Manager, at (303) 866-4674 or at mark.tobias@state.co.us.
.fl ~;;_Jcfr~ Edward C. Nichols
State Historic Preservation Officer
ECN/MAT
2

OSTS2012D50307
Organization: Sarah Jilka
Received: 5/4/2012 2:15:56 PM
Commenter1: Sarah Jilka - Glade Park, Colorado 81523 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/14/2012 12:00:00 AM
Attachments: OSTS2012D50307.htm (OSTS2012D50307-58951.htm Size = 1 KB)
Submission Text
<([#1 [*12*] NO on this inefficient, unproven, water-wasting method of extracting oil. **#1])>**

OSTS2012D50308
Organization: Center for Regulatory Effectiveness, Jim Tozzi
Received: 5/4/2012 2:21:40 PM
Commenter1: Jim Tozzi - Washington, 20009 (United States)
Organization1: Center for Regulatory Effectiveness
Commenter Type: Misc. Organization
Classification:

Submission Category: Standard Web Form
Submitted As: Web Form and Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** klett
Attachments: OSTS2012D50308.htm (OSTS2012D50308-59015.htm Size = 1 KB)
CRE__-_Oil_Shale_PEIS_Comments_May_3_OSTS2012D50308.pdf (OSTS2012D50308-59014.pdf Size = 366 KB)
Submission Text
These comments are included on an Interactive Public Docket http://www.thecre.com/oil/ The Center for Regulatory Effectiveness (CRE) encourages public comments on CRE work products See Attachment.

May 3, 2012
SUBMITTED ELECTRONICALLY
Oil Shale and Tar Sands Resources Draft
Programmatic EIS
Argonne National Laboratory, EVS/240
9700 South Cass Avenue
Argonne, Illinois 60439
Re: WO–300–1310–PP–OSHL — Notice of Availability of the Draft
Programmatic Environmental Impact Statement for Allocation of Oil Shale and Tar Sands Resources on Lands Administered by the Bureau of Land Management in Colorado, Utah, and Wyoming, 77 FR 5833 (February 6, 2012).
<([#1 [*2.1.1*] Dear Sir or Madam:
The Center for Regulatory Effectiveness (CRE) is pleased to submit these comments to the Bureau of Land Management (BLM) regarding the 2012 Draft Oil Shale and Tar Sands Programmatic Environmental Impact Statement (hereinafter "2012 PEIS"),1 that proposes to amend land use plans relating to oil shale and has the potential to substantially reduce existing allocations of land already available for oil shale and tar sands development. CRE recommends that BLM take no action as prescribed by Alternative 1, which would leave the current allocation decision from the 2008 Programmatic EIS and Record of Decision (ROD) in place.

BLM should not amend the eight land use plans—as modified by the 2008 ROD—which allocated public lands for leasing and development of oil shale resources. BLM's decision that it is necessary for it to take a "hard look" at whether the lands should be designated for the development of oil shale is based on the premature determination that oil shale development is "not at present a proven commercially-viable energy source."2 BLM has not provided developers with ample opportunity to develop oil shale commercially. As the Federal Register notice states, "The BLM will decide whether any changes should be made to the existing land use allocation decisions, in light of the nascent character of technology for developing oil shale and tar sands resources."3 Until the testing and development of oil shale extraction technologies have been completed, any modification to the allocated land use for oil shale would be hasty and conflict with the intent of Congress that "It is the policy of the United States that— (1) United States oil shale, tar sands, and other unconventional fuels are strategically important domestic resources that should be developed."4

1 BLM, Draft Programmatic Environmental Impact Statement and Possible Land Use Plan Amendments for Allocation of Oil Shale and Tar Sands Resources on Lands Administered by the Bureau of Land Management in Colorado, Utah, and Wyoming, (2012) available at http://ostseis.anl.gov/documents/peis2012/index.cfmhttp://ostseis.anl.gov/documents/peis2012/index.cfm [hereinafter "2012 PEIS"].
2 77 FR 5833, February 6, 2012.
3 Id. at 5834
4 Energy Policy Act of 2005, P.L. 109–58, § 369 **#1])>**

<([#2 [*6.1.2*] CRE offers the following recommendations to BLM in order for it to fulfill the mandates of the Energy Policy Act of 2005 and to remain committed to pursuing the development of oil shale.

I. BLM's Preferred Alternative is Not a Viable Alternative
A. The United States Oil Shale Reserves Are Five Times Greater Than Saudi Arabian Oil Reserves
A report by the Government Accountability Office states, "The U.S. Geological Survey (USGS) estimates that the Green River Formation contains about 3 trillion barrels of oil, and about half of this may be recoverable, depending on available technology and economic conditions. This is an amount about equal to the entire world's proven oil reserves."5 According to the Department of Energy, the United States could potentially have over 6 trillion barrels of in-place oil shale.6 The Department of Energy's Office of Naval Petroleum and Oil Shale Reserves estimates that the United States has 1.38 trillion barrels of oil shale that are recoverable.7 The Rand Corporation offers a more conservative estimate of 800 billion barrels of recoverable oil shale.8

At current US demand for oil, the "800 billion barrels of recoverable resources would last for more than 400 years."9 And this is the most conservative estimate. Furthermore, since BLM has published the final Programmatic EIS in 2008, the United States Geological Survey (USGS) has upgraded its in-place assessment of oil shale reserves by 50 percent in the Green River Formation in the Piceance Basin of Western Colorado.10
BLM's own estimates state the US oil shale reserves are nearly five times greater than the known oil reserves in Saudi Arabia.11 Given these estimates, BLM needs an extremely compelling justification to scrap oil shale development as it seeks to do so under the Preferred Alternative.

5 Government Accountability Office, ENERGY-WATER NEXUS A Better and Coordinated Understanding of Water Resources Could Help Mitigate the Impacts of Potential Oil Shale Development, page 1 (October 2010) available at http://www.gao.gov/assets/320/311896.pdf (emphasis added).
6 U.S. Department of Energy, Office of Petroleum Reserves, Fact Sheet: U.S. Oil Shale Resources, available at http://www.fossil.energy.gov/programs/reserves/npr/Oil_Shale_Resource_Fact_Sheet.pdf
7 U.S. Department of Energy, Office of Naval Petroleum and Oil Shale, National Strategic Unconventional Resource Model: A Decision Support System¸ April 2006, available at http://fossil.energy.gov/programs/reserves/npr/NSURM_Documentation.pdf
8 James T. Bartis et al., Oil Shale Development in the United States: Prospects and Policy Issues,

Rand Corporation, page IX (2005).
9 Id.
10 U.S. Geological Survey, An Assessment of In-Place Oil Shale Resources in the Green River Formation, Piceance Basin, Colorado, page 1, August 2010, available at http://pubs.usgs.gov/dds/dds-069/dds-069-y/REPORTS/69_Y_CH_1.pdf
11 BLM, Oil Shale Resources on Public Lands, available at http://www.blm.gov/wo/st/en/prog/energy/oilshale_2/background.html. **#2])>**

<([#3 [*2.2*] B. The Preferred Alternative Will Eliminate Oil Shale Development in the United States
In the 2012 PEIS,12 BLM's preferred alternative for oil shale, Alternative 2b, would reduce the amount of land available for oil shale leasing from over 2,017,741 acres to 461,965 acres—greater than a seventy-five percent (75%) reduction in the land available. Specifically, in Colorado, the preferred alternative would reduce available acreage from the current allocation of 360,000 acres to only 35,000 acres—over a ninety percent (90%) reduction.13
One of the effects of the reduced acreage for oil shale is that the Preferred Alternative would create a patchwork of isolated plots of land. Accordingly, these isolated plots of lands will either be too small to commercially develop oil shale or will be inaccessible. Thus, this substantial reduction in the amount of land available for commercial oil shale leasing would effectively eliminate commercial oil shale development.

12 BLM, Draft Programmatic Environmental Impact Statement and Possible Land Use Plan Amendments for Allocation of Oil Shale and Tar Sands Resources on Lands Administered by the Bureau of Land Management in Colorado, Utah, and Wyoming, (2012) available at http://ostseis.anl.gov/documents/peis2012/index.cfm
13 BLM, Draft Programmatic Environmental Impact Statement and Possible Land Use Plan Amendments for Allocation of Oil Shale and Tar Sands Resources on Lands Administered by the Bureau of Land Management in Colorado, Utah, and Wyoming, p 2-27 (2012), available at http://ostseis.anl.gov/documents/peis2012/index.cfm **#3])>**

<([#4 [*9.8*] C. There is No Compelling Basis for the 2012 EIS
The alternatives under consideration in the 2012 PEIS, specifically the Preferred Alternative and the No Action Alterative, have already been fully considered in the 2008 PEIS. For instance, the Preferred Alternative in the 2012 PEIS (Alternative 2(b)) was considered as Alternative C in the 2008 PEIS. Nonetheless, after extensive analysis in the 2008 PEIS, BLM determined that the land use plans that are currently in effect were the most appropriate (the No Action Alternative for the 2012 PEIS).

Importantly, BLM conducted a more thorough analysis in the 2008 PEIS than it has in the 2012 PEIS by working closely with other agencies. For instance, in Section 1.1.1 of the 2008 PEIS, BLM states:
As part of the development of the PEIS, the BLM circulated an internal draft of the PEIS to its cooperating agencies for review and comment that included a commercial lease development scenario. Most of the cooperating agencies commented that the BLM's analysis did not contain enough information for the specific environmental, cultural, and socioeconomic effects of such development, and that it would be too speculative at this point to support a decision to issue any

commercial leases. Therefore, consideration was given whether specific information was lacking on the effects of oil shale and tar sands leasing and development relevant to making an allocation decision.14

In addition to circulating internal drafts to cooperating agencies, during the 2008 PEIS "BLM held many informal meetings and discussions with the cooperating agencies." Notably, the cooperating agencies played a substantial part in reaching the final determinations made by BLM in the 2008 PEIS.15 As provided in the 2008 PEIS, "the BLM worked collaboratively with its cooperating agencies throughout the process to create a balanced commercial leasing program, consistent with the intent of Congress."16

14 BLM, Propose Oil Shale and Tar Sands Resource Management Plan Amendments to Address Land Use Allocation in Colorado, Utah, and Wyoming and Final Programmatic Environmental Impact Statement" (2008) p 1-3 available at http://ostseis.anl.gov/documents/fpeis/volumes/OSTS_FPEIS_Vol_1.pdf [hereinafter "2008 PEIS].
15 Id. at 7-11, Comment by the Department of Agriculture, ("In conclusion, based on the programmatic nature of this analysis we believe the documents are thorough and provided sufficient information for the decision being made. It will also provide an excellent document to tier to or reference during subsequent analyses should lease applications be received.")
16 Id at ES-3. **#4])>**
<([#5 [*9.8*] BLM justifies its choice to reevaluate the land use plans with the 2012 PEIS by stating, "As part of a settlement agreement entered into by the United States to resolve the lawsuit and in light of new information that has emerged since the 2008 OSTS PEIS was prepared, the BLM has decided to take a fresh look at the land allocations analyzed in the 2008 OSTS PEIS and to consider excluding certain lands from future leasing of oil shale and tar sands resources." As discussed below in Section II, the new information and reasons stated by BLM to "Take a Fresh Look" do not justify amending the 2008 land use plans. Moreover, after a thorough NEPA analysis in 2008, BLM concluded:

This PEIS discloses, under the Proposed Plan Amendment (Alternative B) [the current land use plans that BLM is seeking to change], that the allocation decisions opening areas to future leasing do nothing more than to remove the
administrative barrier to BLM considering any application to lease. The amendment of the land use plans does not authorize any ground-disturbing activities and is not an irreversible or irretrievable commitment of resources under NEPA. Therefore, the action alternatives presented would not result in any impacts on the environment or socioeconomic setting of the area under consideration. These decisions analyzed in the PEIS serve as the first step in the process to establish a commercial oil shale and tar sands program that meets the intent of Congress while taking advantage of the best available information and practices.17

As BLM admits, the current land use plans do not pose any threat to the environment or the socioeconomic composition of the affected areas, and only removes the "administrative barrier" to the development of oil shale. Therefore, amending the land use plans without justification would result in the agency action being arbitrary and capricious.

17 2008 PEIS, p ES-6 (emphasis added) **#5])>**
<([#6 [*9.3*] D. Oil Shale Development Will Have Minimal Effects and the No Action Alternative Will Produce No Negative Impacts
As BLM concluded in the 2008 PEIS, the current land use plans do nothing more than "remove the administrative barrier to BLM considering any application to lease."18 It is impossible for the mere consideration of a lease to have any detrimental impact on the environment. Importantly, under the current land use plans, BLM still has further NEPA analysis to undertake during the site-specific leasing stage and the approval of the detailed plans of project development required before an oil shale project can be approved. Importantly, "it is at this final [project development] stage, when the particulars of a project are known, that the BLM requires the most detailed analyses and may condition approval on specific requirements to avoid, minimize, or mitigate adverse impacts on various resources."19
BLM specifically intended to have this phased approach to its NEPA analysis. Recognizing that it was working with limited information on oil shale development, BLM decided to defer decisions regarding specific leases to later stages of NEPA analysis.20 This provided BLM with the opportunity to take a "phased approach—proceeding from this allocation decision [2008 EIS] to a leasing decision and then to an operational permit approval. This allocation decision essentially removes an administrative barrier preventing the BLM from accepting and considering applications to lease oil shale acreage," while still requiring additional NEPA analysis before any actual leasing or development.

Furthermore, BLM admits that the current land use plans do "not authorize any ground-disturbing activities…[and] would not result in any impacts on the environment or socioeconomic setting of the area under consideration."21

Thus, whereas BLM has already concluded that the 2008 land use plans do not pose any threat to the environment or socioeconomic setting of the affected areas, BLM is not justified to select any alternative other than the No Action Alternative.

18 2008 PEIS, p ES-6 (emphasis added)
19 BLM, Draft Programmatic Environmental Impact Statement and Possible Land Use Plan Amendments for Allocation of Oil Shale and Tar Sands Resources on Lands Administered by the Bureau of Land Management in Colorado, Utah, and Wyoming, page 1-2 (2012), available at http://ostseis.anl.gov/documents/peis2012/index.cfm
20 Id. **#6])>**
<([#7 [*9.8*] E. BLM Is Hindering Oil Shale Development
Despite BLM's clear intention in the 2008 PEIS to "remove the administrative barrier to BLM considering any application to lease," BLM's actions under the 2012 PEIS serve no purpose other than to restore that very same "administrative barrier."22

BLM's arbitrary change in oil shale policy as proposed by the Preferred Alternative stands as a substantial impediment to the development of oil shale. One of the largest challenges for the development of oil shale is volatility in the oil markets.23 While BLM cannot reduce volatility in the oil markets, it can reduce volatility in the regulatory landscape. Regulatory certainty is necessary to motivate oil shale developers to make the massive investments required to bring production of oil shale to commercial levels. BLM has failed to provide oil shale developers with

this certainty.
Not even four years after publishing the 2008 PEIS, BLM is now seeking to "take a hard look" at whether it was appropriate to make the land in Colorado, Utah, and Wyoming available for oil shale development. BLM has not provided oil shale developers with ample time to demonstrate whether oil shale is commercially viable. It is only half way through the term for the 10-year leases to conduct research, development, and demonstration; and BLM has precipitously declared that oil shale is not commercially viable by removing blocks of prospective acreage from consideration for oil shale development. Oil shale may not continue to receive the necessary investments unless developers are provided with the regulatory certainty to justify the investments.

21 2008 PEIS, p ES-6
22 2008 PEIS, p ES-6.
23 The Congressional Research Service reports, "The recent spike in crude oil price has once again stirred interest in oil shale. As in the past, however, the rapid runup in prices (to a high of $145/barrel) was soon followed by a rapid precipitous drop in prices [to levels as low as $60/barrel]…such volatility discourages the investment in contingent resources such as oil shale." CRS concluded, "While OPEC cuts oil output to prop up prices, the major and super major oil companies continue to use an oil price of $32/barrel for their business planning. In this climate, the development of oil shale seems difficult indeed." CRS Report RL 34748, Developments in Oil Shale, at 29, November 17, 2008 **#7])>**

<([#8 [*9.2.3*] The mandates in the Energy Policy Act of 2005 require BLM to continue to pursue and support the development of oil shale. In order to do so, BLM should choose the No Action Alternative, Alternative 1. The Preferred Alternative in the EIS will in effect eliminate oil shale development. **#8])>**

<([#9 [*9.8*] II. The Reasons Stated by BLM to "Take a Fresh Look" Do Not Justify Amending the Land Use Plans
The Bureau of Land Management (BLM) states that the "purpose and need for this proposed planning action is to reassess the appropriate mix of allowable uses with respect to oil and shale and tar sands leasing and potential development." BLM further justifies "tak[ing] a fresh look" for the reasons stated in the April 14, 2011 Notice of intent, 24 further specifying "Chief among these was new information available in 2008, including:
1. A recently completed U.S. Geological Survey (USGS) in-place assessment of oil shale and nahcolite resources in Colorado, Utah, and Wyoming,
2. A March 2010 U.S. Fish and Wildlife Service (USFWS) Notice of Petition Findings, Endangered Wildlife and Plants, 12-month Findings to List the Greater Sage-Grouse as Threatened or Endangered.
3. BLM's updated inventory of lands having wilderness characteristics (LWC) and Areas of Critical Environmental Concern (ACECs)." 25
As described in greater detail below, not one of three justifications by BLM for "taking a hard look" at the land use plans finalized in the 2008 EIS, justify amending the land use plans.

24 The reasons stated in the April 14, 2011 Notice of Intent mirror the reasons outlined above (which are contained in the 2012 PEIS). Notably, BLM does not cite water issues as being a

justification for "taking a hard look" or a "fresh look" at the land use plans finalized in the 2008 PEIS.
25 2012 PEIS at 1-5. **#9])>**

<([#10 [*6.1.2*] A. USGS In-Place Assessment Of Oil Shale Resources In Colorado, Utah, And Wyoming
Although USGS has completed its in-place assessment of oil shale since the 2008 PEIS, the findings in the report do not justify amending the 2008 land use plans. In fact, the USGS report does just the opposite and actually justifies devoting additional resources to developing oil shale resources. Specifically, in the report, USGS concluded that there is 1.525 trillion barrels of oil alone in just the Piceance Basin of western Colorado—an upward increase of nearly 50% from the 1989 USGS assessment of 1 trillion barrels of oil.26

26 USGS in place assessment Fact sheet available at
http://pubs.usgs.gov/fs/2009/3012/pdf/FS09-3012.pdf **#10])>**

<([#11 [*9.2.4*] B. 2010 U.S. Fish and Wildlife and Plants, 12 month Findings to List the Greater-Sage Grouse as Threatened or Endangered
The USFWS did release a finding in 2010 on the Greater-Sage Grouse, but importantly USFWS decided not to list the Greater Sage-Grouse as a threatened or endangered species, because there were "higher priority listings."27 Moreover, the 2008 EIS thoroughly analyzed the impact of oil shale development on the Greater Sage-Grouse,28 for which the analysis is nearly identical as that listed in the 2012 Draft PEIS.29 Thus, absent any new findings or analyses concerning the impact of oil shale development on the Greater Sage-Grouse, BLM is not justified in amending the 2008 land use plans based on the Greater Sage-Grouse.

27 U.S. Fish and Wildlife Service (USFWS) Notice of Petition Findings, Endangered Wildlife and Plants, 12-month Findings to List the Greater Sage-Grouse as Threatened or Endangered.
28 2008 Final Oil Shale and Tar Sands Programmatic Environmental Impact Statement, pages 3-148 – 3-149; 4-78 – 4-80, available at
http://ostseis.anl.gov/documents/fpeis/volumes/OSTS_FPEIS_Vol_1.pdf
29 2012 Draft Oil Shale and Tar Sands Programmatic Environmental Impact Statement, pages 4-124 – 4-126; available at http://ostseis.anl.gov/documents/peis2012/vol/OSTS_VOLUME_2.pdf **#11])>**

<([#12 [*9.2.1*] [*3.1.3*] C. BLM's updated inventory of lands having wilderness characteristics (LWC) and Areas of Critical Environmental Concern (ACECs).
Lands having wilderness characteristics is a designation that takes place during the land use planning process, which is required pursuant to a Secretary Order from December 2010.30 Clearly, BLM does not intend to amend all existing land use plans as a result of Secretary Order 3310. Nor should Secretary Order 3310 now serve as a basis for amending the land use plans established in the 2008 EIS.

30 Department of the Interior, Secretary Order 3310: Protecting Wilderness Characteristics on Lands Managed by the Bureau of Land Management, available at
http://elips.doi.gov/elips/0/doc/172/Page1.aspx **#12])>**

<([#13 [*3.1.5*] Likewise, ACECs only account for a small proportion of land coincident with land that is designated for oil shale development. Specifically, ACECs comprised only 76,666 acres of the 2,017,714 acres of land available for oil shale leasing. The environmental integrity of the ACECs can be preserved with the additional required NEPA analysis for the leasing and project development phases. **#13])>**
<([#14 [*1.1*] [*9.2.5*] III. BLM Is Defying President Obama's Open Government Directive; Agency Spending Questioned
Government should be transparent. Transparency promotes accountability and provides information for citizens about what their Government is doing. Information maintained by the Federal Government is a national asset. My Administration will take appropriate action, consistent with law and policy, to disclose information rapidly in forms that the public can readily find and use.
-- President Barak Obama, Memorandum to Heads of Executive
Departments and Agencies

On January 18, 2011, the President issued Executive Order 13563, in which he directed regulatory agencies to base regulations on an "open exchange of information and perspectives" and to promote public participation in Federal rulemaking. The President identified Regulations.gov as the centralized portal for timely public access to regulatory content online.
-- Cass Sunstein, White House Blog, February 21, 2012.

President Obama has made Open Government a hallmark of his Administration. BLM apparently disagrees.
- BLM has not released the public comments submitted on their 2011 Notice of Intent Notice of To Prepare a Programmatic Environmental Impact Statement (EIS); and
- BLM has made no provision for release of comments received in response to their Notice of Availability of the Draft Programmatic Environmental Impact Statement for oil shale which bypasses the Regulations.gov comment portal.

Public access to public comments on a public proceeding is a basic prerequisite of open government.

For decades, federal agencies have made public comments available to the public, first through docket rooms and then, as the internet developed, through online systems developed by each agency. Agency-specific solutions to providing public access to public comments were superseded by Regulations.gov. President Obama has emphasized the importance of the public comment portal and has enhanced its operation.

Despite the Administration's emphasis on use of Regulations.gov to promote public participation and collaboration in agency proceedings, BLM has chosen to bypass the open process in favor of their own comment processing system, a system which excludes the public from reading public comments.

It should be noted that agency-prepared comment summaries are no substitute for the original, unabridged documents. Moreover, public access to the full text of the comments submitted is essential for assessing agency compliance with the third-party provisions of the Data Quality Act

(DQA). Although DQA issues are discussed in more detail in the DQA section of these comments, it is noted here that BLM may not rely on any data submitted to the agency which does not comply with the quality requirements established by OMB and BLM.

The public needs access to the full text of the documents the agency uses and relies on in order to exercise their statutory due process rights under the DQA to "seek and obtain" correction of non-compliant information by filing Requests for Correction against third-party data.

Unless BLM makes public comments public, the agency will not have established an administrative record valid for decision-making purposes since the documents in the record which inform BLM's decisions would not be available to the public for inspection and correction.

A. Privacy Concerns Addressed in Federal Register Notice
It has been suggested that concern over protected personal information (PPI) could justify an agency withholding public comments from public inspection. Such an assertion is contrary to:
1. Federal policy to make public comments public, e.g., Regulations.gov; and
2. BLM's own Federal Register notice statement for draft PEIS. Specifically, BLM stated:
Before including your address, phone number, email address, or other personal identifying information in your comment, you should be aware that your entire comment—including your personal identifying information—may be made publicly available at any time. 77 Fed Reg 5835, col. 3

B. FOIA Is Not a Substitute for Making Comments Public: It Creates Privileged Access for the 1%

It has been suggested that anyone who wants to see public comments could obtain them through a Freedom of Information Act (FOIA) request. FOIA requests can take months or years to process – preventing the comments from being evaluated by stakeholders contemporaneously with the BLM proceedings.

Moreover, given the large volume of comments that BLM is likely to receive in response to the draft PEIS, the expense of a FOIA request may run in the tens of thousands of dollars. Actual costs of a given request would vary based on how many comments a person seeks and whether individuals seeking public access to the public comments know the subtleties of the FOIA process well enough to request what they want and exclude extraneous materials.

If BLM requires the public to use FOIA to access the PEIS comments, the agency would be creating a two-tiered system of public participation in federal proceedings. Unless BLM releases the full text of the comments to everyone, the agency would be granting privileged access to the full text of public comments to only those persons and organizations who have the resources to make effective use of FOIA while everyone else would have access to only BLM summaries of the material – a situation that is separate and not equal.

C. Regulations.gov Is Used for EIS Comments
Although the PEIS is not in a rulemaking process, the Regulations.gov website is one appropriate

mechanism (among others) for collecting and providing public access to comments on Environmental Impact Statements. Federal agencies already use Regulations.gov to process and provide public access to comments received on draft Environmental Impact Statements and other non-rulemaking proceedings. Examples of agencies using Regulations.gov to solicit – and disseminate – public comments on environmental impact statements include:
- NOAA requesting comments on a notice of Intent to Prepare a Draft Environmental Assessment or Environmental Impact Statement, http://www.regulations.gov/#!documentDetail;D=NOAA-NOS-2012-0061-0002.
- The Forest Service requesting comments on a Notice of intent to prepare an environmental impact statement, http://www.regulations.gov/#!documentDetail;D=FS_FRDOC_0001-1291.
- The Coast Guard requesting comments on a Notice of Availability of Final Environmental Impact Statement, http://www.regulations.gov/#!documentDetail;D=USCG-2009-0097-0087.
- BLM's sister agency, the Bureau of Ocean Energy Management, soliciting comments on a Notice of the Availability of an Environmental Assessment, http://www.regulations.gov/#!documentDetail;D=BOEM-2012-0011-0001.
- BLM itself, jointly with a Department of Energy component, requesting comments on a Notice of Intent To Prepare an Environmental Impact Statement, http://www.regulations.gov/#!documentDetail;D=WAPA_FRDOC_0001-0167.

D. The White House Example of Open Government
There are a few informal proceedings in which public comments are not legally required that agencies may choose not to use Regulations.gov. Even in these cases, however, agencies use online dockets to provide public access to public comments with the White House leading by example.

When the White House sought public comments on President Obama's National Policy for the Stewardship of the Ocean, Our Coasts, and the Great Lakes, they created an online docket to speed public access to public comments, http://www.whitehouse.gov/administration/eop/oceans/comments.

E. The Department of Commerce Example of Open Government
Other agencies have followed the White House's leadership in providing public access to public comments, even in those circumstances when no solicitation of comments is required. For example, when a Department of Commerce Internet Policy Task Force prepared a working paper on cyber security, the NIST established an online docket to ensure public access to the full text of the submitted comments, http://www.nist.gov/itl/greenpapercomments.cfm. **#14])>**

<([#15 [*9.2.5*] IV. The Data Quality Lens for Evaluating the Draft Shale PEIS: OMB's Data Quality Guidelines Receive Chevron Deference
The Data (Information) Quality Act (DQA) 44 U.S.C § 3516, note, sets standards for the quality of virtually all information disseminated by federal agencies. Under the law, OMB developed binding, government-wide quality standards and processes for ensuring data quality. OMB's DQA guidelines implementing the Act may be found here, Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by Federal Agencies.31

In addition to the overall guidelines, OMB has also issued specialized data quality guidance implementing the law including the White House's Final Information Quality Bulletin for Peer Review.32
Based on OMB's DQA implementation instructions, Departments and agencies developed their own organization-specific implementing documents that were consistent with OMB's directive. The Department of Interior's DQA guidelines may be found here, Interior – Information Quality Guidelines Pursuant to Section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001.33 BLM's agency-specific guidelines are found here, Guidelines for Ensuring and Maximizing the Quality, Objectivity, Utility, and Integrity of Information Disseminated by the Bureau of Land Management.34

Additional background information about the DQA may be found here, A Decade of the Data Quality Act35 and here, 'Data Quality' Law is Nemesis of Regulation.36
A. The Request for Corrections Process: Empowering Citizen Watchdogs to "Seek and Obtain" Correction of Agency Data
Unusual among federal statutes, the DQA created an administrative process "allowing affected persons to seek and obtain correction of information maintained and disseminated by the agency that does not comply with the guidelines." In short, the DQA empowers citizens and non-citizens to "seek and obtain" correction of data used and maintained by the agency which does not comply with OMB and agency quality standards.
CRE notes that BLM's sister agency, the US Fish and Wildlife Service has experience in fulfilling their DQA duties, see, U. S. Fish and Wildlife Service Will Correct Panther Information In Response to Information Quality Act Challenge.37

B. The Data Quality Act Applies to Third-Party Data
The DQA's quality requirements – and the Request for Correction process – apply to all data used and relied on by agencies in their information disseminations, such as Environmental Impact Statements, as was discussed in the Bureau of National Affairs/Daily Environment article, Advocacy Group Data Submitted to Agencies Must Meet OMB Requirements, Official Says.38

There are two key implications of the third-party DQA requirements:
1. The various studies BLM used in the drafting of the PEIS need to comply with the DQA, even if they were originally published prior to the enactment of the law.
For example, in Table 4.15-2, "Estimated Health Effects Associated with a Hypothetical 1,000,000-bbl/day Oil Shale Industry," the draft PEIS is relying on a 1984 study for some of its key health data. This study is subject to the DQA standards and BLM will need to verify that it currently complies with DQA standards as part of its pre-dissemination review process.

Similarly, the 1973 DOE study that is cited as a source for estimates in Table 4.1.2-1 "Assumptions Associated with an Underground Mine with Surface Retort at Production Levels of 25,000–30,000 bbls of Shale Oil per Day" will also need to be vetted to see if it meets DQA requirements.
2. BLM will not be able to rely on the data, models and assumptions provided to the agency in any comments on the draft PEIS unless those materials are DQA compliant.
Since individuals and watchdog organizations have the statutory right to file petitions seeking

correction of the third-party data, BLM has the legal obligation, as was previously explained, to release the full text of all public comments received.

C. DQA Correction of Third-Party Data in Action: The World Health Organization Example
For an example of the ability of watchdogs to effectively use the DQA's Request for Corrections process with respect to third-party data, please see CRE's Request for Correction of Information Contained in A World Health Organization Report.39 CRE's action resulted in the Department of Health and Human Services informing the Director-General of the World Health Organization that a major WHO report could not be used by the US Government because:
The consultation process of the development of the WHO/FAO Report and the resulting Report itself would not meet these current U.S. data quality standards, as the process lacked a high degree of transparency, and the data and analytic results contained within the Report were not subject to formal, independent, external peer review among other criteria.40

D. The United States Court of Appeals for the D.C. Circuit Determined that OMB's DQA Guidelines are "Binding"
In Prime Time Int'l Co. v. Vilas. 599 F.3d 678 (D.C. Cir. 2010), the court ruled41 that OMB's DQA guidelines were "binding" because they contained a permissible interpretation of the DQA under Chevron and thus, agency compliance with the DQA is a non-discretionary duty.42 In itsruling, the Court clearly held that the OMB interpretation was entitled to Chevron-level deference (as opposed to a lower level of deference under Skidmore), because the OMB guidelines have the force of law having been promulgated under a specific Congressional delegation in the DQA.
Thus, the Court held that the OMB guidelines are legally binding, not just internally binding, as might be the case with many Executive orders and agency manuals or handbooks. A detailed legal analysis of the court's opinion may be found here43 while a news account of the case and its implications may be found here, Industry Sees Ruling Opening Door To Court Review Of Data Quality Suits.44
It should be noted that the Department of Justice took great exception to CRE's interpretation of the D.C. Circuit's decision. Justice was sufficiently concerned by CRE's analysis of the opinion that they appealed the ruling. In their appeal, Justice requested that the court "amend its opinion to clarify that the Court did not decide whether the Information Quality Act ("IQA") creates judicially enforceable rights." The Justice Department took the unusual but well-warranted step of including a print-out of CRE's website (found in Exhibit B of DOJ's appeal45) even though CRE was not a party to the case. The court rejected DOJ's appeal.
Thus, BLM adherence to the DQA is judicially enforceable. Moreover, OMB and BLM Data Quality Act standards apply to: the draft PEIS; the studies BLM relied on in developing the PEIS; and comments and supporting material received on the draft PEIS that the agency uses or relies on its decision-making process. Accordingly, CRE recommends: (1) BLM should release their pre-dissemination review record for the draft PEIS and (2) BLM should release the full text of all public comments on the draft PEIS.

31 Available at http://www.gpo.gov/fdsys/pkg/FR-2002-02-22/pdf/R2-59.pdf .
32 Available at
http://www.whitehouse.gov/sites/default/files/omb/assets/omb/memoranda/fy2005/m05-03.pdf
33 Available at http://www.thecre.com/pdf/20021026_doi-final.pdf .

34 Available at http://www.thecre.com/pdf/20021026_blm-final.pdf .
35 Available at http://www.thecre.com/pra/wp-content/uploads/2010/12/A-Decade-of-the-Data-Quality-Act.pdf .
36 Available at http://thecre.com/post/
37 Available at http://www.fws.gov/informationquality/topics/FY2004/Florida%20Panther/3-21-2005-news.pdf .
38 Available at http://www.thecre.com/pdf/bna.pdf .
39 Available at http://www.thecre.com/pdf/20030908_correction.pdf .
40 Letter to the Honorable J.W. Lee, M.D., Director-General of the World Health Organization from the Department of Health and Human Services, Office of the Secretary, January 5, 2004, [See, page 2 of HHS's review available at http://www.commercialalert.org/bushadmincomment.pdf .
41 Available at http://thecre.com/pdf/20100414_DQA_Prime.pdf .
42 Prime Time Int'l Co. v. Vilsack, 599 F.3d 678, 685 (D.C. Cir. 2010) (holding "because Congress delegated to OMB authority to develop binding guidelines implementing the IQA, we defer to OMB's reasonable construction of the statute") (Citing United States v. Mead, 533 U.S. 218, 226–27 (2001)).
43 Available at http://www.thecre.com/tpsac/wp-content/uploads/2010/06/Prime-Time-Master.pdf .
44 Available at http://thecre.com/pdf/20100502_DQAJudicialReview.pdf.
45 Available at http://thecre.com/pdf/20100527_PrimeTime_GovPetfon.pdf **#15])>**

<([#16 [*9.3*] V. Water Rights Issues Do Not Provide a Basis for Modifying the Land Use Plans
Notably, water rights have not changed between the 2008 PEIS and the current 2012 PEIS. Water rights were thoroughly considered by BLM in the 2008 PEIS, which contributed to BLM's 2008 land use plan allocations. Furthermore, the land use planning stage is not the appropriate point in the environmental planning process to make premature determinations on how water rights could potentially be used. This would be more appropriate in the leasing state or the project development stage. **#16])>**

<([#17 [*3.4.2*] [*6.3.2.1*] VI. There Are Adequate Water Quantities to Sustain Oil Shale Development
Much of the criticism associated with oil shale focuses on the impacts that oil shale development would have on water supplies.46 For example, the 2009 lawsuit brought by environmental organizations (that resulted in the settlement requiring BLM to take a fresh look at the EIS) argued, "oil shale development could dry up many streams and rivers – including the Colorado river."47 The complaint further contended that "commercial oil shale development will impact water supplies, as water dedicated to this use will increase stress on a resource already over taxed by other activities....[And] commercial oil shale development will cumulatively impact water supplies by contributing to global warming."48 Likewise, reports issued by Western Resource Advocates offer cautionary language about water usage and oil shale development.49 While extracting oil from oil shale would require significant amounts of water, there is no evidence that the water usage required would be unsustainable or problematic.

Of great importance, in the 2012 Draft PEIS, BLM has not identified the water usage required for the development of oil shale as a justification to revisit the 2008 land use plans.50

Accordingly, it would be inappropriate for BLM to modify land use plans based on the quantity of water that is projected for use for oil shale production.

Moreover, both the 2008 Final PEIS and the 2012 use the same assumptions and analyses regarding water usage for oil shale development. For example, both the 2008 PEIS and 2012 Draft PEIS assume (based on a 2005 study by the Rand Corporation) that the in-situ process would require 1-3 bbl of water per barrel of oil shale produced; and that 2.6-4.0 bbl of water per barrel of oil shale produced would be required for a surface mine and surface retort. Likewise, both the 2008 PEIS and 2012 Draft PEIS find that production levels of 50,000 bbl of oil per day would requires 7,050 acre-ft/year of water. Finally, both the 2008 PEIS and 2012 draft PEIS conclude that there will be a water surplus of 340,348 (ac-ft/yr) in 2000 and 268,425 (ac-ft/yr) in 2030 in Colorado.

Just as the 2008 PEIS did, the 2012 Draft PEIS supports the conclusion that oil shale development will not adversely impact water availability. Without any changes in the data or analysis for water use between the 2008 PEIS and 2012 Draft PEIS, water usage for oil shale development cannot serve as a purpose to revisit the land use plans.
Moreover, recent developments in technology suggest that the assumptions used by BLM regarding water usage for oil shale development are incorrect. Red Leaf Resources has recently stated that the company uses less than half barrel of water to produce a barrel of oil. Red Leaf further explains that the amount of water required for oil shale production is unrelated to the technology used to produce the oil shale, but is instead required for dust control and to meet on-site worker demand.51

The CRE endorses BLM's position that the quantity of water that will be used for oil shale is not a problem based on the 2008 land use allocations. Accordingly, it would be arbitrary and capricious to amend the 2008 land use plans based on the level of water usage for oil shale development.

46 See, e.g., Western Resource Advocates, Water on the Rocks: Oil Shale Water Rights in Colorado, 2009 available at http://www.westernresourceadvocates.org/land/wotrreport/wotrreport.pdf.
47 Legal Complaint, Colorado Environmental Coalition v. Salazar, p 21.
48 Id.
49 Western Resource Advocates, Oil Shale 2050: Data, Definitions, and What You Need to Know About Oil Shale in the West, p 21, available at http://www.westernresourceadvocates.org/oilshale2050/WRA-OilShale2050.pdf.
50 2012 Draft Oil Shale and Tar Sands Programmatic Environmental Impact Statement, pages 1-5, available at http://ostseis.anl.gov/documents/peis2012/vol/OSTS_VOLUME_2.pdf. The reasons stated in the April 14, 2011 Notice of Intent mirror the reasons outlined in the 2012 PEIS. Notably, BLM does not cite water issues as being a justification for "taking a hard look" or a "fresh look" at the land use plans finalized in the 2008 PEIS.
51 Amy Joi O'Donoghue, Oil Shale Project Approved, KSL, April 1, 2012, available at http://www.ksl.com/?nid=960&sid=19773270 **#17])>**

<([#18 [*10.6.3*] VII. Conclusion
In a speech by President Obama on the United States energy security, the President declared, "We've known about the dangers of our oil dependence for decades. . . We cannot keep going from shock when gas prices go up to trance when they go back down -- we go back to doing the same things we've been doing until the next time there's a price spike, and then we're shocked again. We can't rush to propose action when gas prices are high and then hit the snooze button when they fall again…our best opportunities to enhance our energy security can be found in our own backyard."52
Oil shale is the answer to enhance the US energy security and most of the world reserves are located in the United States. Nonetheless, oil shale development and investment has suffered from the very same boom-bust cycle as described by President Obama. Historically, when oil prices are high, oil shale is the solution for the United States energy needs. But once the price of oil falls again, oil shale is written off as "not at present a proven commercially-viable source." The United States cannot once again "hit the snooze button" on oil shale. The United States needs a sustained commitment to oil shale development—a commitment provided by Congress in the Energy Policy Act of 2005— in order for it to become economically viable.

52 President Barack Obama, Remarks by the President on America's Energy Security, March 30, 2011,
http://www.whitehouse.gov/the-press-office/2011/03/30/remarks-president-americas-energy-security **#18])>**
<([#19 [*2.2*] As recognized by the BLM,53 technological advances for the extraction of oil shale lie just over the horizon. Rand Corporation concluded, "Advances in thermally conductive in-situ conversion
may enable shale-derived oil to be competitive with crude oil prices below $40 per barrel. With a firm commitment to oil shale development, oil shale will occupy a central role in the national energy agenda.
However, by proceeding with Preferred Alternative in the 2012 PEIS, BLM will effectively eliminate oil shale development in the United States. BLM concluded in the 2008 PEIS that the land use plans currently in place "do nothing more than to remove the administrative barrier to BLM considering any application to lease….[and] would not result in any impacts on the environment or socioeconomic setting of the area under consideration."54 Nevertheless, BLM has decided to, without justification, revisit the land use plans established in 2008 and to restore the administrative barriers that stand in the way oil shale development. Moreover, BLM concluded that the 2008 PEIS, "create[d] a balanced commercial leasing program, consistent with the intent of Congress." Instead, counter to its own conclusion and Congressional intent under the Energy Policy Act of 2005, the Preferred Alternative in the 2012 PEIS will eliminate oil shale development in the United States.

53 76 FR 21003, at 21004, April 14, 2011. **#19])>**
<([#20 [*2.1.1*] For the foregoing reasons, CRE recommends that BLM remains firmly committed to the development of oil shale by not reducing the land allocated for oil shale and therefore to not adopt the Preferred Alternative, and instead select the No Action Alternative. CRE also urges BLM to adhere to DQA guidelines in assessing the viability of oil shale development.
#20])> CRE is a Washington, DC based regulatory watchdog which works to ensure that federal agencies comply with the "good government" laws including the Data Quality Act, the

Paperwork Reduction Act, and the Regulatory Flexibility Act. As previously mentioned, what is at stake in the US oil shale program are reserves about equal to the entire world's proven oil reserves. To ensure that federal and state regulatory agencies, the Congress, and stakeholders are apprised of the most significant events affecting the development of this critical resource, CRE is making available to the aforementioned groups an Interactive Public Docket dedicated to this important subject which is titled BLM Oil Shale, and is described herein. The public is invited to provide comments on CRE work products.
Respectfully Submitted,
Jim Tozzi
Member, Board of Advisors
54 2008 PEIS, p ES-6 (emphasis added).

OSTS2012D50309
Organization: Defenders of Wildlife campaign
Received: 5/4/2012 2:41:33 PM
Commenter1: - Washington, 20036 (United States)
Organization1: Defenders of Wildlife campaign
Commenter Type: Environmental Organization
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** klett
Attachments: OSTS2012D50309.htm (OSTS2012D50309-59018.htm Size = 4 KB)
050412_oil_shale_comments_OSTS2012D50309.xlsx (OSTS2012D50309-59017.xlsx Size = 2377 KB)
Submission Text
To Whom It May Concern:

Please find attached nearly 40,000 comments from Defenders of Wildlife supporters on the Draft Oil Shale and Tar Sands Programmatic Environmental Impact Statement. Many of these individuals signed on to a version of the text below, however some chose to personalize their comments.

"**<([#1** [*2.3.1*] As a supporter of Defenders of Wildlife and someone who cares about America's wildlife and wild places, I am writing today to urge the Bureau of Land Management to protect millions of acres of public lands from oil shale development by selecting "Alternative 3" in the oil shale Draft Environmental Impact Statement, the alternative most protective of our public lands.

I am pleased that BLM is taking clear and measured steps to restore order to the federal oil shale and tar sands policy. While the agency's preferred alternative (2(b)) is a step in the right direction, a stronger approach is needed to protect our public lands.

Alternative 3 in the Draft Environmental Impact Statement would not allow for commercial development of oil shale extraction until further research is done for a clearer understanding of

its impacts on our public lands and the wildlife that live there.

This alternative places important environmental and ecological areas off-limits to development and requires companies to prove their technologies and evaluate their impacts on communities, human health and the environment.

The two million acres of land in Utah, Wyoming and Colorado being considered for oil shale development is a massive amount of America's public land to be sacrificed for the development of a destructive and unproven energy source.
#1])>
<([#2 [*3.7.3.1*] These vast expanses of public lands are home to the iconic pronghorn, sage grouse, prairie dogs, golden eagles and other wildlife. They are also habitat that is key to the survival and recovery of the highly endangered black-footed ferret.
#2])>
<([#3 [*6.3*] Oil shale production is a dirty business that is not economically viable. The BLM itself estimates that its development would consume large amounts of water, cause significant air pollution and destroy thousands of acres of wildlife habitat.
#3])>
<([#5 [*3.10.3*] Oil shale is currently producing no jobs and no revenue. The Congressional Budget Office confirmed that it is not expected to produce significant revenues through 2022.
#5])> <([#4 [*3.10.4*] The industry already has access to thousands of acres of public and private lands for research and development. We shouldn't sacrifice even more western public lands for such a destructive and unproven energy source.

These millions of acres of western public lands are vital to economies that rely on tourism and wildlife-related recreation. In Colorado alone these activities generate $3 billion in economic activity. Protecting jobs and related revenue from these sustainable economies must be prioritized over the speculative investment in oil shale production on public lands.

America's wildlife and wild places are too valuable to squander on the destructive and unproven practice of oil shale development.
#4])>
Thank you for the opportunity to comment on this matter."

Please accept these individuals' comments with regard to Draft Oil Shale and Tar Sands Programmatic EIS and our thanks for your agency's collaboration in ensuring that the voices of these concerned citizens are heard.

Sincerely,
Addie Haughey
Federal Lands Associate
Defenders of Wildlife
Email: ahaughey@defenders.org See Attachment.

OSTS2012D50310
Organization: American Petroleum Institute, Emily Kennedy
Received: 5/4/2012 2:48:35 PM

Commenter1: Emily Kennedy - Washington, 20005 (United States)
Organization1: American Petroleum Institute
Commenter Type: Oil & Gas Org
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** aziech 5/16/2012 12:00:00 AM
Attachments: OSTS2012D50310.htm (OSTS2012D50310-59021.htm Size = 1 KB)
API_Letter_to_BLM_on_OSTS_DPEIS_05_04_12_Final_OSTS2012D50310.pdf (OSTS2012D50310-59020.pdf Size = 992 KB)

Submission Text

To Whom It May Concern:
The American Petroleum Institute (API) offers the following comments on the *Draft Programmatic Environmental Impact Statement and Possible Land Use Plan Amendments for Allocation of Oil Shale and Tar Sands Resources on Lands Administered by the Bureau of Land Management in Colorado, Utah, and Wyoming* published by the Department of Interior (DOI) Bureau of Land Management (BLM) in January 2012.
The API is a trade association representing over 500 companies involved in all aspects of the oil and natural gas industry, including the development of oil shale and oil sands as a future energy supply in the United States. The API has formed an Oil Shale Subcommittee with the goal of addressing issues associated with oil shale development and educating policy-makers and the public at large on this important domestic energy resource. Our members are greatly interested in leasing and developing oil shale and oil sands resources found on lands managed by the BLM in Colorado, Utah and Wyoming. Oil Shale Subcommittee members, and the oil shale industry as a whole, are committed to delivering technologies and best practices that will allow for the development of oil shale in an environmentally sustainable manner.

Intent of the United States Congress in Establishing an Oil Shale Program under EPAct 2005

As we have with previous written comments to the Bureau of Land Management on its management of the federal oil shale program, API would like to reiterate the intent of the United States Congress in establishing a program under the Energy Policy Act of 2005.
The U.S. Congress recognized the critical and urgent need for development of domestic energy resources when it enacted the Oil Shale, Tar Sands and Other Strategic Unconventional Fuels Act of 2005, as part of the Energy Policy Act of 2005 (EPAct 2005):
"Congress declares that it is the policy of the United States that…oil shale, tar sands, and other unconventional fuels are strategically important domestic resources that should be developed to reduce the growing dependence of the United States on politically and economically unstable sources of foreign oil imports." (EPAct §369(b); Public Law 109-58)
EPAct 2005 directed the Department of the Interior to promote commercial development of oil shale resources by making land available within each of the States of Colorado, Utah and Wyoming for leasing to conduct Research, Development and Demonstration (R, D, and D) of technologies to recover liquid fuels from oil shale. The Department of the Interior was charged with the creation of an oil shale and oil sands research and development leasing program. The Department of Energy, and expressly the Office of Petroleum Reserves, was directed to create

and implement a "commercial strategic fuels development program".
With the passage of the Energy Policy Act of 2005, Section 369, the Congress and the President forwarded a clear message to the American people of its intention to evaluate and to develop the massive multi-trillion barrel energy source locked in its domestic unconventional hydrocarbon resources, such as oil shale, oil sands, and coal. Congress reiterated the extreme importance of those resources to the national energy security of the nation, while recognizing that development must be accomplished in an "environmentally sound manner and that development should emphasize sustainability".
The intent of EPAct 2005 was that the Department of Interior *shall* establish a royalty rate to "encourage development of oil shale and tar sand resources," "make available" public lands to "conduct research and development activities with respect to technologies for the recovery of liquid fuels from oil shale," and promulgate regulations establishing "a commercial leasing program for oil shale."
It is API's assertion that the lawsuit and settlement agreement with several non-governmental organizations is driving current Administration policy toward reconfiguring the federal oil shale program under the 2012 PEIS. It is further our assertion that all policy and regulatory decisions made by the BLM on development of oil shale on federal lands should be made under the context of Section 369 of EPAct 2005.
<([#1 [*1.1.1*] **Request for Extension of Comment Period**
The comments on the January 2012 OSTS Draft Programmatic Environmental Impact Statement (DPEIS) to amend the BLM Resource Management Plans (RMPs) are due May 4, 2012. The current public comment period does not provide sufficient time for API to analyze the Draft PEIS' 1900 pages of technical analysis, consult its membership, and address the numerous and complex issues which could impact our members. In addition, under the settlement agreement with environmental organizations dated February 15, 2011 concerning the 2008 Final Oil Shale and Tar Sands (OSTS) Programmatic Environmental Impact Statement (PEIS), BLM is required to issue proposed rules to amend the existing oil shale leasing regulations by May 15, 2012. Given the connection between the RMP amendments and the oil shale leasing regulations, API recommends that BLM extend the public comment period on the DPEIS so that the public can fully understand and comment on these closely-related matters. As such, API recommends that BLM extend the DPEIS comment period until July 3, 2012 to allow thoughtful development and submission of comments to the docket.
#1])> Background
In September 2008, BLM issued a Final Oil Shale and Tar Sands (OSTS) Programmatic Environmental Impact Statement (PEIS) analyzing the environmental and socioeconomic impacts of amending 12 land use plans in Colorado, Utah, and Wyoming to designate public lands administered by the BLM as available for commercial leasing for oil shale or oil sands development. No actual oil shale or oil sands leasing was approved under the 2008 OSTS PEIS as the analysis only identified those BLM lands where oil shale and oil sands lease applications would be accepted and resulted in amendments to the corresponding BLM RMPs. Separate National Environmental Policy Act (NEPA) analyses (including compliance with the Section 7 of the Endangered Species Act) would be required before leasing or site development activities could occur. As such, there are multiple future opportunities for site-specific environmental analyses and project-specific NEPA reviews.
The land allocation decisions established by BLM's 2008 land use plan amendments were challenged in a lawsuit brought by several environmental organizations in January 2009. As part

of a settlement agreement entered into by the United States to resolve the lawsuit, the BLM agreed to take another look at the land use allocations resulting from the 2008 OSTS PEIS (now covered under 10 land use plans after some consolidation), and to consider excluding certain lands from future leasing of oil shale and oil sands resources. The settlement mandated that the new NEPA analysis must include a specific alternative that would amend BLM land use plans to restrict the lands available for potential applications for oil shale and oil sands leasing (identified as Alternatives 2a and 2b for oil shale and Alternative 2 for tar sands in the current DPEIS). As a result, BLM is reassessing its 2008 decision that made 1,991,222 acres available for potential development of oil shale and approximately 431,224 acres of public land available for potential development of tar sands. On February 3, 2012, the U.S. Environmental Protection Agency published a Notice of Availability of the BLM OSTS DPEIS regarding possible land use plan amendments affecting oil shale and tar sands allocation on BLM administered lands. Comments regarding the 2012 OSTS DPEIS are due May 4, 2012.

The primary differences between the new 2012 OSTS DPEIS and the 2008 OSTS PEIS on this same subject, is that the current document contains several alternatives (Alternative 2 - the Conservation Focus Alternative, and Alternative 3 - the Research Lands Focus Alternative) that would dramatically reduce the acreage of BLM administered land for which applications for oil shale and oil sands leases could be submitted. Alternative 4 (the Moderate Development Alternative) would be similar to that adopted in the 2008 OSTS PEIS land use allocations except that the Adobe Town "Very Rare or Uncommon" area lands (180,910 acres) designated by the Wyoming Environmental Quality Council in 2008 and BLM designated Areas of Critical Environmental Concern (ACEC) identified in the 2008 OSTS PEIS (76,666 acres - and those ACECs recently established by BLM in Wyoming and Utah) would be excluded from oil shale and oil sands leasing. Under Alternative 1, the No Action Alternative, no existing land use plans would be amended. Alternatives 2b and 4b only apply to oil shale but would first require a company to obtain and comply with all of the provisions of a Research Development and Demonstration (RD&D) lease before it could be later converted to a commercial lease.

BLM has chosen Alternative 2(b) as the preferred alternative for oil shale, and Alternative 2 as the preferred alternative for oil sands. These alternatives are described more fully below. Alternative 2a is also described below because it informs the agency's preferred alternatives for oil shale and oil sands.

Alternative 2a: Conservation Focus Alternative, Oil Shale. Under this alternative, 10 land use plans in Colorado, Utah, and Wyoming would be amended to designate less than 830,000 acres (acreage opened under Alternative C in the 2008 OSTS PEIS) as available for future commercial oil shale leasing. BLM estimates the final area available under Alternative 2a to be 461,965 acres. This alternative would exclude from commercial oil shale leasing the following categories or groups of categories of public lands:

1. All areas that the BLM has identified or may identify as a result of inventories conducted during this planning process, as lands having wilderness characteristics (LWC);
2. The whole of the Adobe Town "Very Rare or Uncommon" area, as designated by the Wyoming Environment Quality Council on April 10, 2008 (180,910 acres total; 167,517 acres of public land, of which 10,920 acres are already a BLM Wilderness Study Area [WSA]);
3. Core or priority sage-grouse habitat, as defined by such guidance as the BLM or the DOI may issue;
4. All Areas of Critical Environmental Concern (ACECs) located within the areas analyzed in the 2008 OSTS PEIS (76,666 acres in existing ACECs in the 2008 OSTS PEIS plus additional

ACEC acreages as a result of Utah and Wyoming planning efforts recently completed); and
5. All areas identified as excluded from commercial oil shale and tar sands leasing in Alternative C of the September 2008 OSTS PEIS (Alternative C made 830,296 acres available for potential commercial oil shale leasing and 229,038 acres available for potential commercial tar sands leasing).

Alternative 2b, RD&D First Requirement, Oil Shale. Under this alternative, the lands open for future oil shale leasing consideration would be the same as those in Alternative 2(a), but only for RD&D leases. The BLM would issue a commercial lease only when a lessee satisfies the conditions of its RD&D lease and the regulations at 43 CFR Subpart 3926 for conversion to a commercial lease. The preference right acreage, if any, which would be included in the converted lease, would be specified in the RD&D lease.

Alternative 2, Conservation Focus Alternative, Tar Sands. Under this alternative, six land use plans in Utah would be amended to designate less than 229,000 acres (acreage opened under Alternative C of the 2008 plan amendment) as available for future commercial tar sands leasing. This alternative would exclude from commercial oil shale leasing the same categories or groups of categories of public lands and/or their resource values as listed above under Alternative 2, Oil Shale. The final area proposed for potential leasing under BLM's tar sands Alternative 2 was estimated as 91,045 acres.

<([#2 [*2.1.1*] **API's Preferred Alternative**

API and its member companies strongly support Alternative 1, the No Action Alternative. There is no compelling reason to change BLM's well researched and thoroughly considered oil shale and oil sands leasing decisions made in 2008.

The analysis in the current 2012 OSTS DPEIS does not support the adoption of alternatives other than Alternative 1. API notes that the other alternatives do not fully comply with Congressional intent established in Section 369 of the Energy Policy Act of 2005 to promote the orderly development of oil shale, oil sands, and other unconventional fuels or current U.S. government initiatives to expand domestic oil and gas production. API is strongly opposed to Alternatives 2a and 2b (for oil shale)

Alternative 2 (for oil sands), and Alternative 3 (as applied to both oil shale and oil sands) as they severely restrict the lands available for potential oil shale and oil sands leasing. While inferior to Alternative 1, Alternative 4 (and its various sub-alternatives for oil shale) is acceptable to API as substantial acreage remains available for oil shale leasing applications under this alternative.

#2])> API Opposes BLM's Preferred Alternatives.

<([#3 [*2.2*] API is strongly opposed to BLM's selection of Alternative 2b for oil shale and Alternative 2 for oil sands as the preferred alternatives. If adopted, these alternatives would dramatically reduce the amount of land potentially available for oil shale leasing from 2,017,714 (slightly revised from the 2008 OSTS PEIS) to 461,965 acres (22.89% of the original allocation) and the land potentially available for oil sands leasing from 430,686 to 91,045 acres (21.14% of the original allocation).

#3])> <([#4 [*2.3*] Although not listed as BLM's preferred alternative, Alternative 3 would also severely limit leasing opportunities to only those areas where there is an existing oil shale RD&D lease signed at the time of the 2012 OSTS Record of Decision is issued (a maximum of 32,640 acres including the Preference Right Lease Areas associated with each RD&D lease). For oil sands, only the pending Asphalt Ridge lease application south of Vernal, Utah covering approximately 2,100 acres is included. If selected, Alternative 3 represents over 98% reduction in area available for potential lease applications and development for oil shale and more than

99.5% reduction in the area now available for potential oil sands lease applications and development (as compared to the existing allocations approved under the 2008 OSTS PEIS ROD).
#4])> <([#5 [*2.4*] Alternative 4a may be acceptable; however, API is opposed to Alternative 4b. While the same lands would be available for oil shale leasing under Alternatives 4a and 4b, Alternative 4b would require companies to first obtain a Research, Development, and Demonstration (RD&D) lease before the lease could be converted to a commercial lease. API believes this requirement will be an unnecessary, expensive, and time-consuming step in the future as oil shale and oil sands development technology matures. **#5])>**
<([#6 [*2.1*] API believes that Alternative 1 (the No Action Alternative) is the right choice for the preferred alternative and believes that the majority of the other alternatives do not comply with the Congressional mandate to promote the responsible development of this important energy resource. The result is greater future dependence on foreign sources of oil and gas and corresponding loss of potential new U.S. jobs and economic activity. API believes that BLM's severe restriction of potential oil shale and oil sands leasing opportunities in the 2012 OSTS DPEIS alternatives represents an unfortunate lack of planning and poor public policy.
#6])> API's Detailed Comments
Our review of the document identified a number of areas where we believe further attention to the statements made is worthwhile on the part of BLM's authors. We have attached one document that contains more detailed comments on the DPEIS. Attachment 1, Comments on the DPEIS for Allocation of Resources, is a table that presents comments that generally reference a specific section or page within the DPEIS. The comments are designed to assist in refining the DPEIS and in several instances describe typographical or other errors noted in the document. The paragraphs below also provide additional API comments and recommendations on the January 2012 DPEIS.
General Comments
<([#7 [*9.8*] API is disappointed in the tone and abrupt change in direction from that presented in the original 2008 OSTS PEIS. The current document does not provide credible factual, legal or policy reasons for proposing to amend the ten Resource Management Plans (RMPs) at this time. Rather, BLM offers two reasons for the proposed RMP amendments: (1) the agency committed to revisit the RMPs as part of the 2011 lawsuit settlement agreement with environmental organizations; and (2) new information has come to light that was not available in 2008. A review of the "new information" described in Section 1.1.1. at page 1-5 includes a list of routine developments that combined do not rise to a level requiring that a new NEPA analysis be conducted of the oil shale and oil sands land use plan allocations made in the 2008 OSTS PEIS Record of Decision (ROD), including:
a. A recently completed U.S. Geological Survey (USGS) in-place assessment of oil shale and nahcolite resources in Colorado, Utah, and Wyoming.
b. A March 2010 U.S. Fish and Wildlife Service (USFWS) Notice of Petition Findings, Endangered Wildlife and Plants, 12-Month Findings to List the Greater Sage-Grouse as Threatened or Endangered (75 FR 13910), concluding that while listing was warranted, it was precluded by higher priority listing actions.
c. BLM recently completed updating its inventory of lands having wilderness characteristics (LWC) in each of the three states for the planning area, and the status of several areas originally proposed to be Areas of Critical Environmental Concern (ACECs) in Utah has changed since the preparation of the 2008 OSTS PEIS.

API believes that the "new information" described above represents routine resource management updates and could have been easily accommodated within the context of required lease sale or other project-specific NEPA and Endangered Species Act reviews. In fact, BLM chose not to use the new USGS in place assessment of oil shale and nahcolite resources in Colorado, Utah, and Wyoming to update the boundaries of the 2012 OSTS DPEIS study area (see Section 2.5.1 at page 2-77). The routine nature of the "new information" leads API to the conclusion that the only reason the 2008 OSTS PEIS is being reconsidered now is to accommodate the 2011 settlement with environmental organizations that included the reassessment as a component of the settlement.

API notes that BLM's publication of the 2012 OSTS DPEIS constitutes an abrupt change in direction on the entire federal oil shale and oil sands leasing program in the face of a routine legal challenge from special interest groups. This is disappointing because the U.S. oil shale and oil sands industry needs consistency in federal policy and regulation to provide the confidence needed to make continued investments in technology and demonstration projects. The industry was hopeful that Section 369 of the Energy Policy Act of 2005 would provide federal agencies with the clear intent of Congress to support the responsible development of oil shale and oil sand resources and technology. The new 2012 OSTS DPEIS represents a significant step backwards in this regard.

API believes that BLM's efforts to reexamine the existing RMPs as part of a settlement agreement does not provide an independent basis to amend the RMPs absent some other reasoned decision making. While BLM has the discretion to reopen both the RMPs and the oil shale leasing rules, it should not do so based on arbitrary reasons. Moreover, it cannot violate Congressional intent to encourage research and development of oil shale and oil sands resources located on public lands. **#7])>**

The Document Improperly Abandons/Ignores the Convincing Analysis in the 2008 OSTS PEIS

<([#8 [*9.8*] The 2008 OSTS PEIS and subsequent ROD were well researched and written, and compliant with NEPA and other applicable laws and regulations. API believes that the ROD for the 2008 OSTS PEIS reached logical and appropriate conclusions regarding land use plan amendments for allocation of oil shale and oil sands resources on lands administered by BLM. Under the ROD approving the 2008 OSTS PEIS and land use plan amendments, eight land use plans were amended to designate 1,991,222 acres as available for application for commercial oil shale leasing. Specifically, the lands that were available for application include all lands within the most geologically prospective oil shale areas that are BLM-administered public lands. The rational for this decision (Alternative B in the 2008 OSTS PEIS) is extremely instructive in the current case and API recommends that BLM carefully review their prior conclusions in this matter to inform the current analysis. This important discussion in the 2008 OSTS PEIS ROD is repeated below for emphasis:

BLM's 2008 OSTS PEIS ROD beginning at Page 16.

"Alternative B for oil shale was selected as the Proposed Plan Amendment based on: 1) its consistency with the requirements of the Energy Policy Act of 2005, 2) its balanced use and protection of resources, 3) the FPEIS's analysis of potential environmental impacts, and 4) the comments and recommendations from cooperating agencies and the public.

Alternative B is structured to be consistent with the congressional mandate of the Energy Policy Act to emphasize the "most geologically prospective lands in Colorado, Utah and Wyoming*" as available for application for leasing. Alternative B, therefore, identifies and offers the most*

geologically prospective acreage (based on grade and thickness of the oil shale deposits) of the Green River Formation located in the Piceance, Uinta, Green River, and Washakie Basins of Colorado, Utah, and Wyoming. As compared with Alternative C, Alternative B makes more Federal oil shale available for application, and provides for fewer fragmented tracts. Alternative B also provides for more contiguous tracts that could be configured for economically and technically feasible extraction or recovery of the resources. Alternative B would also allow access to more of the most geologically prospective oil shale lands, particularly in Colorado. ***Unlike Alternative C, which excludes lands based on existing management decisions for oil and gas development, Alternative B provides the decisionmaker with the discretion to balance the oil shale use and protection of resources on the public lands during subsequent site-specific NEPA analysis*** *(emphasis added). This balanced approach is consistent with FLPMA (Federal Land Policy Management Act) principles of "multiple use," and "sustained yield." The requirement to perform future NEPA analyses and to comply with other environmental laws allows the decisionmaker to optimize the recovery of energy resources, to establish appropriate lease stipulations to mitigate anticipated impacts, or to fully protect a resource or resource value by choosing not to offer an area for lease at any particular time.* ***Even if some technologies may not allow mining of some tracts to proceed without unacceptable impacts to other resource values, Alternative B would allow the agency the opportunity to choose to offer leases when a technology is proposed that can be used compatibly with the resource values in question. This is consistent with the comments that supported a viable and sustainable commercial oil shale leasing program, while ensuring that any impacts to sensitive resources or resource values are mitigated to any commercial development*** *(emphasis added). It is also consistent with the planning decisions for other mineral resources for these parcels which authorize leasing subject to restrictive conditions, rather than preclude leasing altogether.*

Alternative B does, however, exclude certain lands within the most geologically prospective oil shale areas under the basis of existing laws and regulations, executive orders and other administrative designations or withdrawal. These include WSAs, National Monuments, WSRs, NCAs, and existing ACECs that are closed to mineral development."

BLM used similar language in the 2008 OSTS PEIS ROD at page 31 regarding the selection of Alternative B for oil sands development by amending four land use plans to designate a total of 431,224 acres available for application for commercial oil sands leasing. The key drivers for selection that BLM identified were compliance with the Energy Policy Act of 2005, a balanced use of natural resources, maintaining decisionmaker discretion, and maintaining the proper role of subsequent NEPA analysis in the decisionmaking process.

It is also instructive to review the logic BLM used in not selecting Alternative C in the 2008 OSTS PEIS ROD (which would have significantly reduced the lands available for potential leasing and development of oil shale and oil sands resources). In describing their logic for not selecting Alternative C regarding oil shale, BLM concluded the following:

BLM's 2008 OSTS PEIS ROD beginning at Page 22.

"Alternative C was not selected as the Proposed Plan Amendment because the alternative would not make the "most geologically prospective lands in Colorado, Utah and Wyoming" as available for application for leasing. Thus it is not fully consistent with the mandate of the Energy Policy Act of 2005. Much of the most geologically prospective acreage would be excluded under Alternative C; in particular areas which are in close proximity to three of the six RD&D leases would be excluded. In addition, this unreasonably fragments the area that would

be available for application, resulting in parcels that are unlikely to be explored, leased, or developed. This could be an impediment to sound and rational development of the resource and can reduce the economic return to the public. If oil shale resources are by-passed because of the exclusions in Alternative C, that could also limit the benefits to the nation from exploitation of a domestic unconventional energy source. Selection of alternative C precipitously limits or restricts the decisionmaker's discretion to balance oil shale use and the protection of resources or resource values, in accordance with FLPMA's principal of "multiple use." "
All of the iterations of Alternatives 2 and 3 of the 2012 OSTS DPEIS make significantly less acreage available for potential for oil shale and oil sands leasing than was offered under Alternative C of the 2008 OSTS PEIS. API can only assume that BLM's well considered analysis from 2008 would apply equally to current Alternatives 2a and 2b for oil shale and Alternatives 2 and 3 for oil sands. API strongly supports the sound logic and balanced approach taken by BLM in the Record of Decision on the 2008 OSTS PEIS. In view of the above, API strongly encourages BLM to reconsider their "preferred alternatives" of 2b for oil shale and Alternative 2 for oil sands. **#8])>**

The Document Fails to Meet the Intent of the Energy Policy Act of 2005

<([#9 [*9.2.2*] In August 2005, the U.S. Congress enacted the Energy Policy Act of 2005, Public Law (P.L.) 109-58. In Section 369 of this Act, also known as the "Oil Shale, Tar Sands, and Other Strategic Unconventional Fuels Act of 2005," Congress declared that oil shale and oil sands (and other unconventional fuels) are strategically important domestic energy resources that should be developed to reduce the Nation's growing dependence on oil from politically and economically unstable foreign sources. To support this declaration of policy, Congress directed the Secretary of the Interior (the Secretary) to undertake a series of steps, several of which are directly related to the development of a commercial leasing program for oil shale and oil sands. Compliance with Section 369 of the Energy Policy Act of 2005 is mandatory for Federal agencies, including BLM. The preferred alternatives (Alternative 2b for oil shale and Alternative 2 for oil sands) substantially reduce the acreage of lands potentially available for oil shale and oil sands leasing, but BLM does not explain in the 2012 OSTS DPEIS how the RMP amendments (particularly Alternatives 2a, 2b, and 3) are consistent with Section 369 of the Energy Policy Act of 2005, which encourages commercial leasing of oil shale and oil sands. Moreover, the proposed RMP amendments and upcoming revisions to the oil shale leasing regulations have effectively eliminated the regulatory certainty Congress intended to establish to encourage oil shale and oil sands investment. In the 2012 OSTS DPEIS, BLM and DOI appear to be using agency policy decisions to obstruct existing Federal Law. In selecting Alternative 2(b), BLM says the only path to potential commercial oil shale production is through the RD&D Program. However, the Energy Policy Act of 2005 specifically mandated that BLM establish a competitive commercial leasing program that is separate and distinct from the RD&D program. **#9])>**

The Document Fails to Support Executive Branch Efforts to Expand U.S, Domestic Energy Production

<([#10 [*2.1*] Speaking at the Cushing Pipe Yard in Cushing Oklahoma on March 22, 2012, President Obama clearly articulated the Administration's position on U.S. energy policy. The President described an "all-of-the-above" energy strategy to "keep us on track to further reduce our dependence on foreign oil, put more people back to work, and ultimately curb the spike in gas prices that we are seeing year after year after year". President Obama went on to say "so yes we're going to keep on drilling. Yes we're going to keep on emphasizing production. Yes we're going to make sure we can get the oil to where it is needed." The President noted that renewable

energy, new clean energy sources, and improving energy efficiency were also part of the "all-of-the-above" strategy. The President observed that "We want every source of American made energy. I don't want the energy jobs of tomorrow going to other countries. I want them here in the United States of America. And that's what an all-of-the-above strategy is all about. That's how we break our dependence on foreign oil." The President's message was clear.

Nearly seven years since the passage of the Energy Policy Act, global oil demand has increased, markets have become tighter, and instability in the Middle East and Africa have caused prices to jump markedly, almost doubling, to close to $110 a barrel, which only underscores our country's alarming dependence on foreign oil supplies. These recent events and continued political instability in the Middle East underscore the critical importance of domestic oil shale and oil sands resources to our national security and strategic interests. The clear policy direction as provided in EPAct 2005 indicates the paramount importance of oil shale development to meet urgent national energy needs.

BLM's 2012 OSTS DPEIS fails to supports the President's "all-of-the-above" energy strategy to encourage domestic energy production from significant oil shale and oil sands deposits. Estimates for the oil shale resource in Colorado, Utah, and Wyoming are placed at between 1.2 and 1.8 trillion barrels of oil

equivalent of resource in the ground with as much as 500 billion to 1.1 trillion barrels of oil that is considered potentially recoverable. It is with a sense of incredulity that with a gallon of gasoline surging to above $4 in many parts of the country, we are urging an agency of the Obama Administration to keep American energy supplies on the table for development.

As agencies of the Executive Branch, DOI and BLM are obligated to actively support and assist in implementing the President's energy strategy. Such support is more likely to resemble the alternatives selected in the Record of Decision (ROD) for the 2008 OSTS PEIS than BLM's preferred alternatives presented in the 2012 OSTS DPEIS. In fact, supporting the President's policies requires that BLM abandon the agency's current Preferred Alternatives 2b (for oil shale) and 2 (for oil sands) in favor of Alternative 1 (the No Action Alternative). **#10])>**

<([#11 [*9.1*] **The Purpose and Need of the DPEIS is Defective and Fails to Comply with the Intent of NEPA**

The 2012 OSTS DPEIS is biased in that it describes the probable outcome of the NEPA analysis within the purpose and need Statement. Page 1-4 of the DPEIS reads as follows:

"As noted above, the BLM has decided to reconsider the 2008 allocations. The purpose and need for this proposed planning action is to reassess the appropriate mix of allowable uses with respect to oil shale and tar sands leasing and potential development. ***Specifically, the BLM will consider amending the applicable RMPs to specify whether any areas in Colorado, Utah, and Wyoming currently open for application for future leasing and development of oil shale or tar sands should not be available for such application for leasing and development*** *(emphasis added)."*

This purpose and need statement portends the outcome of this supposedly unbiased NEPA analysis by stating that the document will only consider removing lands from those areas currently approved to receive oil shale and oil sands lease applications. There is no consideration of expanding the currently available oil shale and oil sands leasing areas even in the face of potential domestic energy shortages or the recent spike in U.S. gasoline prices. The expected outcome of the analysis is quickly confirmed in Section 2.4.4 at page 2-76 where BLM identifies Alternative 2b (for oil shale) and Alternative 2 (for oil sands) as the agency's preferred alternatives. Both of these alternatives severely contract the public lands available for receiving

applications for oil shale and oil sands leasing and possible future development.
In stark contrast to the predetermined outcome identified in the purpose and need of the 2012 OSTS DPEIS, the 2008 OSTS PEIS identifies the purpose and need of the NEPA document "to meet the requirements of the Energy Policy Act of 2005". This is a vastly superior NEPA approach because it does not drive the analysis to a predetermined outcome. The NEPA analysis contained in the current document has been structured so that it inappropriately bends to meet the requirements of the 2011 settlement agreement rather than representing a fresh look at the issues. API recommends that the purpose and need statement be rewritten to be more neutral or should adopt the original purpose and need statement from the 2008 OSTS PEIS. **#11])>**
<([#12 [*1.5*] [*9.3*] **The 2012 OSTS DPEIS Fails to Follow the Prescribed "Multi-Step" NEPA Process**
The 2012 OSTS DPEIS clearly states that the document is the first step in a multi-step NEPA process. This first step considers potential impacts associated with amending 10 BLM Resource Management Plans
(RMPs) to identify appropriate lands for receiving applications for oil shale and oil sands leases and future development. The 2012 OSTS DPEIS notes in multiple places that subsequent site-specific NEPA analyses will be required for issuing RD&D leases and for those cases where a RD&D lease is converted into a commercial lease (e.g. 2012 OSTS DPEIS at Section 1.1.1 page 1-6 lines 8-23 and Section 1.4.1 page 1-17 lines 32-38). As such there will be multiple opportunities for public review and site-specific analyses of proposed oil shale and oil sands leases and development. Alternatives 2a, 2b, and 3 in the 2102 OSTS DPEIS fail to properly account for and utilize these subsequent NEPA reviews because they prematurely remove large areas of potential oil shale and oil sands leasing without allowing proper site-specific environmental reviews.
#12])> <([#13 [*2*] [*9.3*] These alternatives fail to properly acknowledge the multi-step NEPA review process that follows inclusion of BLM lands in agency land use plans as available for consideration of oil shale and oil sands lease applications. This top-down resource management approach relegates the local or regional BLM land manager to that of an observer rather than a participant in resource management decisionmaking. This local resource "management from Washington DC" approach could have the unintended consequence of restricting important domestic energy development opportunities without receiving the input of commercial energy interests, workers, local land managers, other government agencies, special interest groups, and the affected public. Furthermore, Alternatives 2a, 2b, and 3 in the 2102 OSTS DPEIS do not provide for the necessary fine scale (site-specific) environmental reviews that can effectively reconcile necessary resource protections with ongoing needs for developing additional domestic energy resources. The restrictive "policy level" edicts contained in Alternatives 2 and 3 of the 2012 OSTS DPEIS are not appropriate for this high-level NEPA screening phase of the process because they may inappropriately preclude important energy development by not allowing the needed lease specific NEPA review to occur. **#13])>**
<([#14 [*9.3*] **Alternatives 2 and 3 of the 2012 OSTS DPEIS Inappropriately Restrict the Role of Local/Regional BLM Land Managers**
In addition to shortcutting the NEPA process, the 2012 OSTS DPEIS inappropriately restricts the authority of the Federal Land Manager by identifying a host of criteria that would automatically withdraw BLM administered lands from potential leasing for oil shale and oil sands development. In comparison, the 2008 OSTS PEIS ROD describes a process that includes more acreage for potential applications for oil shale and oil sands leases and properly engages local

and regional BLM land managers in the resource allocation and management decisionmaking process. Each potential application would be subject to a lease sale NEPA review and a project specific NEPA review. This approach provides the decisionmaker with the discretion to balance the oil shale and oil sands use and protection of resources on the public lands during subsequent site-specific NEPA analysis. These NEPA reviews are the appropriate administrative venue for considering site-specific environmental issues such as ACEC designations or the specific protections needed for threatened and endangered species (or candidate species such as the greater sage-grouse) under Section 7 of the Endangered Species Act. It is inappropriate to remove this site-specific resource management responsibility from BLM land managers.
In discussing the logic for not selecting Alternative C (which would have significantly limited the acreage of lands available for receiving oil shale and oil sands lease applications) contained in the 2008 OSTS PEIS, BLM clearly articulated their thoughts on this matter as shown below:
BLM's 2008 OSTS PEIS ROD beginning at Page 22.
"*Selection of alternative C precipitously limits or restricts the decisionmaker's discretion to balance oil shale use and the protection of resources or resource values, in accordance with FLPMA's principal of "multiple use." Although as presently being researched, in situ oil shale extraction would have many impacts similar to those of oil and gas development, exclusion of areas based on existing management prescriptions (e.g., no surface disturbance or seasonal limitation that are in place for oil and gas leasing) unnecessarily speculates upon the nature and degree of impacts that would be caused by future oil shale development. It would be premature to eliminate areas prior to site-specific analysis based on factors that are not known now, but that would be known at the leasing or operation permitting stages, such as location, timing and type of oil shale technology, that may show that these resources could be adequately protected through mitigation."*
API agrees with the resource management approach and convincing logic articulated by BLM on the topic of oil shale and oil sands leasing in the 2008 OSTS PEIS ROD. API suggests that the authors of the 2012 OSTS DPEIS review the current document and make necessary adjustments to restore the proper balance of potential oil shale and oil sands use and the protection of resources or resource values. In making these adjustments, API recommends that the proper role of site and project-specific environmental reviews and federal land manager discretion be emphasized. **#14])>**
<([#15 [*2.2*] [*1.5*] **Conservation Focus Alternative 2a and 2b for Oil Shale and Alternative 2 for Oil Sands are Defective and Do Not Comply with NEPA**
NEPA requires that agency alternatives be well defined so that both agency decisionmakers and the general public can understand the reasonably foreseeable impacts associated with each alternative. As currently constructed, Alternatives 2a and 2b for oil shale and Alternative 2 for oil sands do not meet that requirement. This is particularly true with the component of Alternative 2a and 2b (oil shale) and Alternative 2 (oil sands) that states that "*core or priority sage-grouse habitat, as defined by such guidance as the BLM or the DOI may issue*" would be excluded from the lands available for potential leasing applications. These alternatives also include a similar non-specific statement excluding areas from oil shale and oil sands leasing that the BLM has identified or may identify as a result of inventories conducted during this planning process, as lands having wilderness characteristics (LWC). The lack of clarity regarding the current restrictions posed by Alternatives 2a and 2b for oil shale and Alternative 2 for oil sands, combined with the open-ended nature of what constitutes "*core or priority sage-grouse habitat*" and the unknown future requirements of the "*guidance as BLM or the DOI may issue",* make it

virtually impossible for oil shale and oil sands interests to either identify the excluded lands or understand any associated restrictions. API contends that this lack of clarity as to the specifics of these alternatives makes them defective from a NEPA process perspective and potentially from a legal perspective, as well. **#15])>**

<([#16 [*9.2.4*] [*2.2*] **The Sage-Grouse Related Restrictions are Premature and there are Other, Less-Onerous, Methods of Achieving Sage Grouse Protection**

API believes that withdrawing lands from potential oil shale and oil sands leasing due to sage-grouse habitat protection is premature given that no specific federal regulatory or administrative actions have occurred with respect to managing core or priority sage-grouse habitat. As a result, these alternatives are vague and poorly defined making it difficult for interested parties to accurately identify the lands that are being withdrawn from potential leasing. API strongly objects to the provisions of Alternatives 2a and 2b for oil shale and Alternative 2 for oil sands that would result in the wholesale exclusion of core or priority sage-grouse habitat from future lease sale applications and believes that greater sage-grouse protection and management can be effectively achieved without the use of such draconian measures.

Wholesale removal of hundreds of thousands of acres of potential energy resources from possible future leasing based on the limited analysis contained in the OSTS DPEIS is clearly inappropriate.

API believes that the potential leasing acreage being eliminated, at least at the PEIS stage, as a result of the greater sage-grouse is unnecessary and is not supported by the analysis contained in the DPEIS. The current programmatic document is not the appropriate stage in the NEPA process to make these site-specific determinations. API supports further detailed analysis of potential greater sage-grouse impacts and site-specific mitigation measures in future lease sale or project-specific NEPA documents where the scale of the evaluation is finer and additional (and site-specific) greater sage-grouse data is available. In addition, the use of suggested management practices may make it possible to site future oil shale and oil sands projects without causing unacceptable impacts to the greater sage-grouse. API believes that there are compatible opportunities to further develop oil shale and oil sands energy resources while simultaneously protecting the greater sage-grouse. As such, API believes that coarse scale greater sage-grouse habitat mapping should not be used to automatically eliminate large areas of important energy resources from future consideration.

API points to the large text box at Section 4.8.1 beginning at page 4-124 of the 2012 OSTS DPEIS that describes greater sage-grouse habits and habitats and identifies a number of measures and suggested management practices that can be used to reduce or eliminate harm to the greater sage-grouse. API and our member companies recognize that implementing some of these management practices could result in specific areas being excluded from potential oil shale and oil sands leasing and development. Nonetheless, we believe that the site-specific approach for greater sage-grouse management described in Alternatives 1 and 4 for oil shale and oil sands is superior to the inappropriate and restrictive approaches included in the various iterations of Alternatives 2 and 3. **#16])>**

<([#17 [*9.7*] **Alternative 2b and 4b for Oil Shale Could Result in Unnecessary Project Delays**

API is opposed to Alternative 2b. While the same lands would be available for oil shale leasing under Alternatives 2a and 2b, Alternative 2b would require companies to first obtain a Research, Development, and Demonstration (RD&D) lease before the lease could be converted to a commercial lease. API believes this requirement will be an unnecessary, expensive, and time-

consuming step in the future as oil shale and oil sands development technology matures. API also believes that RD&D leases as the current sole lease interest is contrary to the EPAct 2005 direction to implement a commercial leasing program. Alternative 2b is predicated on the inappropriate conclusion that oil shale energy projects will operate indefinitely in a research and development mode. Once technically sound and environmentally acceptable technologies have been developed under the current RD&D program, there is no reason to require all future commercial oil shale lease applications using the same technology to repeat the cumbersome RD&D process. While BLM could amend appropriate RMPs in the future to allow direct commercial applications using proven oil shale technology, the amendment process is time consuming and will result in significant project delays. The same unnecessary project delays described above for oil shale Alternative 2b would also apply to Alternative 4b. **#17])>**
<([#18 [*6.3.2.1*] **Water Use Estimates in the 2012 OSTS DPEIS do not Reflect Current Patterns and Result in Unrealistically High Water Use Estimates**
Although some uncertainty remains regarding the potential water use from various oil shale development technologies, API notes that the 2012 OSTS DPEIS has assumed a worst case scenario. The analysis does not provide any credit for water recovery from oil shale processing or reuse of water from other local mineral extraction industries (water used or recovered for local oil and gas operations). The
analysis also includes significant additional water use associated with coal-fired power production that it assumes will be built to support the oil shale industry. Even with these worst-case scenario assumptions, the document concludes that there is sufficient water currently available to support a robust oil shale industry and also serve other needs for the foreseeable future.
The 2012 OSTS DPEIS evaluates potential impacts using the assumption that any additional power needed to operate RD&D or commercial oil shale projects would be provided by expanding or building new coal-fired power plants (Section 4.1.6 at page 4-13). BLM advises that they made this assumption to avoid the possibility of underestimating potential impacts. API believes that this assumption is inappropriate and does not reflect the ongoing changes to the power production marketplace in Colorado, Wyoming, and Utah resulting from the rapid expansion of natural gas production in this region. There are multiple examples of power plants switching to burning natural gas in this region with resulting decreases in both air emissions and water use as compared to coal-fired power plants of equivalent capacity (see for instance the April 12, 2012 article in the Wyofile online news service regarding a Wyoming power plant making plans to switch from coal to natural gas fired generation at an existing facility at http://wyofile.com/2012/04/utility-wants-to-convert-wyoming-coal-unit-to-natural-gas/). API urges BLM to review the trends in natural gas power plant construction (and switching) in the region and revise the water use section of the 2012 OSTS DPEIS to make a more realistic estimate of potential water use in oil shale operations. The current pessimistic water use assumptions are not supported by the facts on the ground. While the NEPA process supports an impact analysis that is conservative, it does not require one that is unrealistic.
In any event, API notes that water rights are unique in these western states and that potential oil shale projects would have to acquire these rights in the state and local water marketplace like other current and future water users. There is every indication that necessary water rights will be available to support a robust oil shale industry in Colorado, Utah, and Wyoming. The input from our members strongly suggests that an objective examination of available technologies and costs would conclude that responsible, low-impact, and sustainable water usage is both technically and

economically feasible for an oil shale industry producing one to two million barrels per day. The member companies of the API Oil Shale Subcommittee are committing significant capital and research toward developing technologies and processes to reduce energy usage in their projects while protecting ground and surface water resources. Many of these same firms are collaborating under BLM's RD&D leasing program, under which the developer has to successfully verify to the BLM that its technology is viable, environmentally acceptable, and sustainable before commercial scale implementation. Regardless of location, each company pursuing oil shale operations will have to validate the environmental and economic viability of its project. API also notes that water use requirements will be evaluated at a finer scale in subsequent NEPA reviews where potential impacts can be assessed on a site and project-specific basis. These future detailed reviews will provide project, technology, and site-specific information on water use to BLM decisionmakers. **#18])>**

<([#19 [*6.3*] **Additional Note on the Political Nature of BLM Decision-making and Global Commercial Development**

As stated previously, BLM has failed to make a compelling technical or legal case for reconfiguring the 2008 OSTS PEIS. As we seek an intellectually honest rationale for the BLM's arbitrary reconfiguration of the 2008 OSTS PEIS, we have examined BLM's recent statements on the economic case for oil shale development.

BLM has repeatedly pointed to the economic viability of oil shale development (or rather its presumed lack of viability) as a factor in its decision making process [In its February 3, 2012 announcement of the DPEIS, BLM justified its preferred alternative selection by stating that "*t+o date, technological and economic conditions have not combined to support a sustained commercial oil shale industry in the United States,…" and in its April 14, 2011 "Notice of Intent to Prepare a Programmatic Environmental Impact Statement (PEIS) and Possible Land Use Plan Amendments for Allocation of Oil Shale," BLM stated as its rationale that "*a+s there are not economically viable ways yet known to extract and process oil shale for commercial purposes, the BLM, through its planning process, intends to take a hard look at whether it is appropriate for approximately 2,000,000 acres to remain available for potential development of oil shale, and approximately 431,224 acres of public land to remain available for potential development of tar sands."].

As we have stated previously, we are hard-pressed to understand the connection between the viability of commercial oil shale technologies and whether certain lands should be made available for oil shale development in the future and believe they are entirely separate issues. This is a technologically intensive industry and as with other high-tech industries, development takes time. Progression towards development of U.S. oil shale resources also requires a strong, positive, partnership between industry, financial markets and the federal government. Industry and capital investment have responded negatively to the uncertain terms, uncertain regulation, and policies under this Administration's stewardship of the federal oil shale program. **#19])>**

<([#20 [*10.3*] [*6.3.5*] However, since BLM has chosen to include it [economic viability of oil shale development] as a factor in its decision making process, we would like to provide for BLM more insight into commercial oil shale development globally.

It is a fact that several technologies have been developed around the world and that oil shale has been produced on a commercially viable basis for decades outside of the United States. A close examination of activities, technologies, and government policies that have been set into motion elsewhere in the world indicate that, where government policies promote rather than prohibit commercial-scale oil shale development, existing technologies are already in place that can

successfully process oil shale resources in a manner that complies with strict environmental standards.

From Estonia, where commercial-scale oil shale development has taken place for decades, to Jordan, where foreign companies have made recent and significant investments toward the eventual development of oil shale, governments have instituted policies that recognize and promote the value and significance of this natural resource in terms of its benefits to their economic, energy, and national security. More recently, renewed interest in this resource has been sparked in Israel, where oil shale deposits could yield billions of barrels of domestic oil. The cases provided below demonstrate that the U.S. might well follow examples set by these governments in other parts of the world.

Estonia

The Estonian government's National Development Plan for the Utilization of Oil Shale [*See* National Development Plan for the Utilization of Oil Shale 2008-2015, Ministry of the Environment of the Republic of Estonia, Tallinn 2008, *available at* http://www.envir.ee/orb.aw/class=file/action=preview/id=1155858/P%F5levkivi_arengukava_+EN.pdf; and Ministry of the Environment, News, "Riigikogu approves development plan for use of oil shale," *available at* http://www.envir.ee/1082834.].

sets forth the strategy for developing oil shale in the country from 2008-2015. Approved by the Estonian parliament in October 2008, the Plan is based on securing a stable supply of oil shale energy and energy independence, as well as achieving increased efficiencies in and reduced environmental impacts of oil shale mining and use. The plan notes the energy security and economic benefits of the country's oil shale resource, while also seeking to diversify its energy portfolio by immediately establishing an annual upper limit of 20 million tons of oil shale mining capacity and a 15 million ton upper limit by 2015. To mitigate environmental impacts associated with oil shale mining and use, the

plan calls for the implementation of modern technologies, acceleration of the recycling of residues, and instituting new environmental charge rates for the use of oil shale and related groundwater needs.

Today, the Estonian energy company Eesti uses two Enefit-140 units at its Estonian oil plant to process oil shale in the country. Enefit-140 uses solid heat carrier technology to produce liquid fuel and retort gas. The patented technology relies on a three-part process comprised of the following stages: drying, thermal decomposition, and combustion. The plant's two units can process up to 140 tonnes of oil shale per hour and annually produce up to 240,000 tonnes of liquid fuel (1.5 million barrels) and 60 million Nm3 of retort gas, which can be used to produce hydrogen and power. In recent years, annual production levels have increased to 1 million barrels of liquid fuels and 40 millions Nm3 of retort gas. Improvements to the units' design have increased their online time from about forty-five percent to nearly eighty percent, exceeding the plant's planned capacity of seventy-five percent.

In terms of the impact of this process on the environment, this oil shale production does not require the use of water, and only about one percent of the production waste is comprised of total organic compounds. In addition, carbon dioxide emissions from liquid fuel production are notably less than the emissions emanating from the generation of electricity from oil shale, since most of the carbon remains in the liquid fuel. In spite of production volume increases, technological advances have enabled Eesti to reduce the amount of pollution discharged from the production of liquid fuels.

These developments are not being conducted without any environmental scrutiny. Oil shale

activities in Estonia are subject to fifty-five international conventions and agreements that contain environmental restrictions. Included among them are the U.N. Convention on Biological Diversity and European Commission Directives 79/409/EEC pertaining to the conservation of wild birds, 92/43/EEC relating to conservation of natural habitats and wild fauna and flora. These provisions require the protection of endangered species and their habitats, with protected areas that restrict geological and mining activity.

Jordan

The Government of Jordan has estimated that the country is home to between 50 and 70 billion metric tonnes of identified oil shale reserves, ranking third in the world. Studies conducted since the 1960's indicate that oil shale deposits are located in more than 60% of the country.

While it has traditionally relied on imported energy to meet most of its needs, Jordan's National Energy Strategy for 2007-2020 is focused in part on achieving greater energy independence by increasing the country's use of domestic energy resources, including oil shale. In order to raise the portion of domestic energy resources from 4% in 2008 to 25% in 2015 and 39% in 2020, the country aims to raise oil shale's contribution to the nation's energy portfolio to 11% in 2015 and 14% in 2020. This would require an estimated $1.4 to $3.8 billion in investments in oil shale exploration.

At the same time, the Jordanian government has embarked on a comprehensive mission to craft a regulatory environment that ensures responsible development of the country's oil shale resources. Oil shale projects must comply with a variety of rules and standards, including World Bank/International Finance Corporation guidelines, Equator Principles, reasonable and prudent operator standards, and emission limits, which are included in concession agreements. While commercial-scale oil shale production in Jordan has not yet taken place, international companies are devoting significant resources toward achieving that reality.

For example, following a formal agreement reached with the Jordanian government in 2009, the Jordan Oil Shale Company (JOSCo), a wholly-owned subsidiary of Royal Dutch Shell (Shell), registered as a company in Jordan to explore the potential for commercial development of oil shale resources in the country using proprietary In situ Conversion Process (ICP) technology. The area to be assessed is located on 22,250 km² of land on three tracts in the central, southern, and northwestern parts of Jordan.

Shell's ICP technology, which is currently under development but has been the subject of research and testing since the early 1980's, does not rely on incineration or mining and surface retort techniques to produce energy from oil shale. Rather, ICP uses underground heaters to raise the temperature of the oil shale in place to remove the kerogen and hydrocarbon gas below ground, and then relies on conventional methods of extraction to produce the resources. As a result, the waste that is generated during the separation process remains underground. Additional benefits of ICP technology include the capacity to access oil shale resources without mining, its ability to produce higher quality crude oil and larger quantities of oil and gas more efficiently, requiring a smaller surface area than other production techniques.

Israel

According to the Israeli government, oil shale deposits are present in 15% of the country [*See* Reuters, "Oil shale may help energy independence," May 8, 2011, *available at* http://www.ynetnews.com/articles/0,7340,L-4061436,00.html.],
and one assessment estimates that the total amount of oil shale in place in Israel to be close to 250 billion barrels. In turn, public policies have sought to promote investment in the development of these resources.

For example, the Ministry of Energy and Water Resources' Energy Research and Development Department has sought to promote technologies that can turn oil shale into an energy resource to provide an antidote to "excessive fuel price increase or supply difficulties" [*See* Ministry of Energy and Water Resources, Energy Research and Development Department, *available at* http://energy.gov.il/English/Subjects/RAndDChiefScientist/Pages/GxmsMniEnergyResearchAndDevelopmentDepartment.aspx.].
In addition, the Ministry's Earth Science Research Administration seeks in part to maintain the scientific infrastructure for oil shale [*See* Israel Ministry of Foreign Affairs, Ministry of National Infrastructures, *available at* http://www.mfa.gov.il/MFA/MFAArchive/2000_2009/2002/10/Ministry+of+National+Infrastructures.htm#energy.].
Israel Energy Initiatives Ltd (IEI), a subsidiary of U.S.-based Genie Energy, has been working to develop a means to produce clean transportation fuels from oil shale using In-Situ conversion technology [*See* IEI, About Us, *available at* http://www.iei-energy.com/aboutus.php.].
In 2008, IEI obtained an exclusive exploration and production license from the Israeli government in an area covering 70,000 acres with an estimated 40 billion barrels of oil [*See* IEI, About Us, *available at* http://www.iei-energy.com/aboutus.php; IEI, Home Page, *available at* http://d129998.u26.alsonetworks.com/index.php; and IEI, Oil Shale – Our National Treasure, *available at* http://d129998.u26.alsonetworks.com/shale_oil-natural_treasure.php.].
This area is located within Israel's Shfela basin, which has been estimated to hold approximately 150 billion barrels of oil [*See* IEI, What is Oil Shale?, *available at* http://d129998.u26.alsonetworks.com/what_is_oil_share.php.].
IEI's Chief
Executive Officer has stated that successful production in the license area could yield 50,000 barrels of oil per day (20% of Israel's consumption rate) for thirty years.
In sum, as other countries as well as the United States seek to become more energy self-sufficient and chart courses to greater economic and national security, the game-changing impacts associated with commercial development of oil shale resources is spurring governments to take actions that will help turn potential benefits into reality. In such cases, businesses are responding by making investment decisions and applying proven technologies to oil shale development in a manner that could significantly meet the growing energy demands of citizens around the globe.
With the passage of time, oil shale production technologies that have developed and advanced over time will continue to evolve and achieve even greater efficiencies and improvements. How this vast resource is developed in the United States remains uncertain. U.S. Federal actions that create obstacles or uncertainty about the potential for commercial-scale development will surely be a limiting factor.
During this period of unprecedented economic and geopolitical uncertainty, the examples seen in Estonia, Jordan, and now Israel should serve as a wake-up call to action for decision-makers in the United States and countries around the world who have an interest in achieving greater energy independence. **#20])>**

Conclusion

<([#21 [*2.1.1*] For the reasons discussed above and further outlined in Attachment 1, API strongly urges BLM to adopt Alternative 1, the No Action Alternative. The 2012 OSTS DPEIS provides no convincing logic for changing the thoughtful conclusions BLM reach in the ROD for the 2008 OSTS PEIS. Accordingly, API recommends that current (2008) BLM land use plan

allocations for oil shale and oil sands leasing be retained as written and not amended. **#21])>**
In closing, the API appreciates the opportunity to comment on the *Draft Programmatic Environmental Impact Statement and Possible Land Use Plan Amendments for Allocation of Oil Shale and Tar Sands Resources on Lands Administered by the Bureau of Land Management in Colorado, Utah, and Wyoming* and asks the Bureau of Land Management to carefully consider our comments and address them as it finalizes the OSTS PEIS document. Should you have any further questions, please contact me at 202-682-8260 or kennedye@api.org.

Comments
<([#22 [*13*] 1. General: The large document has incorporated much of the information from the 2006-2008 EIS effort and does reflect updating data in some sections. This is particularly important when discussing important resource issues such as water. Please consider making a statement to the effect that this document represents the current state of the information when many references are pre-2007. The statement could be included as part of the opening remarks in each of the resource descriptions in Section 3. **#22])>**
<([#23 [*13*] 2. Executive Summary: The ES addressing only the alternatives and BLM's preferred alternative lacks a summary discussion of the resource findings presented in Sections 3-6
#23])> <([#24 [*13*] 3. Page ES-6, line 28: BLM inserts uncertainty into the available lands restriction by adding "may issue" to this limitation. Suggest rewording to … "or the DOI has promulgated through regulation"
#24])> <([#25 [*3.1.7*] 4. Page ES-6, line 31: BLM inserts uncertainty into the available lands restriction by not defining specifically what Utah & Wyoming have "recently completed". Please direct the reader toward a specific document that identifies the applicable ACECs or where they are discussed.
#25])> <([#26 [*9.3*] 5. Page 1-17, line 31: Why bother discussing commercial projects in this EIS when it is stated that this document's NEPA scope is limited to something less than the RD&D level of projects? The RD&D leases do have a PRLA included but it is stated that further NEPA review is required prior to commercial development.
#26])> <([#27 [*9.6*] 6. Page 1-21, line 15: How different are the oil and gas lease stipulations relative to those seen in the RD&D leases to date? Why not include current RD&D lease stipulations in the BLM handbook? It would demonstrate similarities or differences among industries to the Resource Manager.
#27])> <([#28 [*6.3*] 7. Page 2-1, line 27: A more informed discussion on the methods/process for oil shale and oil sands resources recovery could be inserted in this section. Alternatively, reference to select subsections of 4.0 and Appendix A could be made to indicate that more technology description is included in the document.
#28])> <([#29 [*3.1.8*] 8. Table 3.1.1-1, line 2: Suggest deletion of the Utah GSENMM Plan from the table to consistently show the 10 RMP that are affected in prominent tables. Acknowledgment of the RMP could be inserted in the text following the table similar to the presentation on page 1-19 since the existing leased acreage will likely never be developed nor acreage be available for leasing in the future. **#29])>**
<([#30 [*13*] 9. Table 3.1.2-1: The data presented is that available in 2006 as noted in the footnote. Please review and update the table as needed to reflect more recent information (References note that this was reviewed in October 2011). This could be done for Section 3 in general as much of the document appears based on information gathered for the 2008 EIS.

#30])> <([#31 [*3.12.2*] 10. Page 3-276, line 30: The socioeconomic history of oil shale development in the area suggests that the maintenance of a current baseline is important in keeping the future impacts in perspective. The socioeconomic section does reflect current information; however, the tables related to the environmental justice discussion reflect the pre-2010 census data. It is suggested the section be reviewed and updated as necessary to reflect current data. This comment is applicable to similar discussions in Sections 4 thru 6.
#31])> <([#32 [*6.3.6*] 11. Page 4-4, line 2: For completeness, consider giving a short reason that surface mining of oil shale in Colorado is not being discussed in the EIS.
#32])> <([#33 [*6.2.1*] 12. Page 4-14, line 11: The premise that coal is the energy source for oil shale and oil sands development is not reasonable in today's or predicted future energy markets. For comparative purposes consider providing the summary of emissions if natural gas was used as the energy source. Such a comparison would allow the reader to infer their own magnitude of impacts when reviewing impacts presented in the remainder of the document that are based solely upon coal as a fuel versus a project sited gas fired power plant.
#33])> <([#34 [*6.2*] 13. Page 4-25, line 19: Assuming Comment 15 was accepted and addressed, a sentence could be added that long-term disturbance of electrical transmission lines would be reduced if power were generated at the project site. Similar remarks could also be added as appropriate in other resource discussions.
#34])> <([#35 [*6.2*] 14. Pages 4-36 & 4-37, line 45: BLM discussion on climate change cites reports and numbers where they acknowledge the values have a high level of uncertainty. It might be better to return to the qualitative discussion consistent with the rest of the section than contain numbers with high uncertainty.
#35])> <([#36 [*3.4.4*] 15. Page 4-39, lines 9-21: Data are presented from operations monitoring in this paragraph; however the information lacks good context such as information on background or reference well data to demonstrate the impact of the RD&D activity.
#36])> <([#37 [*3.4.6*] 16. Page 4-39, line 24: Consider review and possible revision to the remarks regarding Chevron's project based upon recent announcements regarding their oil shale leases.
#37])> <([#38 [*3.4.5*] 17. Page 4-40, line 27: Consider adding some context to the change in groundwater flow by giving the range of flows in Yellow Creek in the vicinity of the study.
#38])> <([#39 [*13*] 18. Page 4-55, line 46: Reference to oil sands could be deleted in this sentence as well as others in the section because the focus is oil shale development.
#39])> <([#40 [*3.5.1.8*] 19. Page 4-57, line 4: Consider providing an update on the status of the proposed rulemaking for the final PEIS.
#40])> <([#41 [*13*] 20. Page 4-74, line 1: Table 4.8.1-1 presents the magnitude of unmitigated impacts to the aquatic resources. A more reasonable assessment would to present the magnitude after application of generally accepted mitigation practices typically required by BLM in permitted actions. This comment is also applicable to other resource topics where the magnitude of impacts is presented before mitigation. **#41])>**
<([#42 [*13*] 21. Page 4-142, lines 15-16: Typo: What is the need for the italic in this paragraph?
#42])> <([#43 [*13*] 22. Page 4-148, line 32: Typo: Similar vs. Similarly
#43])> <([#44 [*6.2.1*] 23. Page 4-149, line 35: Consistency is suggested when discussing new power plants sizes (Pg. 4-13 Line. No. 38).
#44])> <([#45 [*6.2.1*] 24. Section 4.9.1.4.2, page 4-152: The discussion on power plants in the section on transmission lines and pipelines appears out of place. Would such a discussion be better in Section 4.1.6 leaving only the focused remarks on visual resources (i.e. power plant

have a visual impact).
#45])> <([#46 [*13*] 25. Page 4-200, lijne 6: Consider restating the sentence "If exposures…." because emissions will be limited by controls and worker safety requirements that are stipulated in the permits issued for operations.
#46])> <([#47 [*6.2.1*] 26. Page 5-5, lines 20-29: What is the justification for the authors in the oil shale and oil sands evaluation of impacts use of different external energy sources, coal fired power plants and on site natural gas/propane respectively? A similar change is also noted for other parameters defined in the assumptions. Also compare Tables 4.1.1-1 and 5.1.1.-1 for impact values.
#47])> <([#48 [*6.3*] 27. Chapters 4 and 5: The impact descriptions presented in Sections 4 & 5 contains information that are duplicative or common to both oil shale and oil sands development. Such information could be presented once. This allows the mineral specific information to be presented more concisely and with a short reference back to the general information when needed. The present approach makes finding unique Area information difficult. Much of Chapter 5's 162 pages could be reduced about 90 % by presenting only the unique oil sands impact discussion.
#48])> <([#49 [*3.7.4.5*] 28. Table 6.1.4-4, page 6-205: The listing of the mammal species needs to be reviewed and several bird entries deleted and if not already listed, added under the bird section of the table.
#49])> <([#50 [*13*] 29. Section 6.1: The treatment of comparing alternatives among the resources is inconsistent. For example, land use and water use describe impacts by alternative but wildlife is done by state. Consider placing a table at the front of the section providing guidance on what level of analysis will be provided for each resource and resource alternative discussed. (The comparison of alternatives is more fully presented in Section 6.5.1)
#50])> <([#51 [*13*] 30. Sections 6.1 and 6.2: The impact descriptions presented in Sections 6.1 and 6.2 contains information that are duplicative or common to both oil shale and oil sands development. Such information could be presented once. This allows the mineral specific information to be presented more concisely and with a short reference back to the general information when needed. The present approach makes finding unique Area information difficult. Much of Chapter 6.2's 251 pages could be reduced presenting only the unique oil sands impact discussion.
#51])> <([#52 [*8.3*] 31. Page 6-4, lines 40-44: The statement that oil shale and oil sands development is largely incompatible with oil and gas development is misleading. Use Agreements and various drilling technologies are available to resolve conflicts among willing parties. Mineral development conflicts would occur where resource recovery would use the same extraction method (i.e. surface or underground mining) on the same land; however, precedent leasing would typically result in a design and subsequent lease agreements that is compatible with development. The Enefit RD&D project is an example where both mining and oil and gas development co-exist (see page 6-122).
#52])> <([#53 [*3.10.1*] 32. Section 6.1.1.11.2, page 6-63: Table 6.1.1-13 should be updated to reflect the more recent community input data
#53])> <([#54 [*3.9.6*] 33. Page 6-113, lines 32-33: It seems unreasonable to state the act of leasing has the potential to adversely impact cultural resources by lease terms limiting an agency's ability to avoid, minimize, or mitigate adverse effects of proposed development. This statement should be deleted or expanded upon to describe the lease terms that allow a lessee to impact cultural resources. See page 4-158 or 5-118 for a possible expansion of this thought. A

similar situation is noted in Section 6.1.3.9, pg. 6-162, line 26.
#54])> <([#55 [*2.3*] 34. Section 6.1.3.4, page 6-125: The purpose of Alternative 3 needs to be more fully explained. Sec 6.1.3 appears to summarize the prior NEPA work. The RD&D projects have all the commercial acres identified. It appears that Alternative 3 effectively closes future lands to any commercial development (except PRLA) and would only allow RD&D projects.
#55])> <([#56 [*4.2*] 35. Page 6-129, lines 4-6: What does this sentence add to defining the GHG emission concerns for the project? Consider adding the period at the end of the sentence and expanding the discussion to include any data on expected emissions.
#56])> <([#57 [*2.4*] 36. Page 6-171, line 19: Alternative 4 proposes to remove lands that are "proposed for" future planning restrictions in addition to those lands removed by BLM action since the 2008 PEIS. The analogy is similar to Candidate T&E species status to the Listed species. The listed has the full support of law where the candidate does not.
#57])> <([#58 [*2*] 37. Section 6.1.5, page 6-224: This is most useful section in the EIS for assessing comparatives. Information from this section could be put in tabular form to expand the Executive Summary.
#58])> <([#59 [*4.3*] 38. Table 6.1.6-2, page 6-246: The information on coal mining and preparation impact should be reviewed and updated as appropriate. More recent data from the three western state agencies regulating mining would be the source for such an update as opposed to the central / eastern state mining operations.
#59])> <([#60 [*4.3*] 39. Table 6.1.6-3, page 6-249: The information on coal fired power plant impact should be reviewed and updated as appropriate. In addition, an analysis of gas fired power plant impact should be added to reflect the future trend in electric power generation.
#60])> <([#61 [*4.3*] 40. Page 6-304, line 44: The information on socioeconomic impacts should be reviewed and updated as appropriate using data from those current RD&D developments and projecting forward when appropriate.
#61])> <([#62 [*4.3*] 41. Page 6-307, line 30: The discussion of hydraulic fracturing should be reviewed and updated based on information that is more recent.
#62])> <([#63 [*4.3*] 42. Page 6-311, lines 38-42: A discussion of gas-fired power plant should also be provided, as coal may not be the fuel choice for newly constructed power plants.
**#63])>

OSTS2012D50311
Organization: Elaine Livingston
Received: 5/4/2012 2:55:16 PM
Commenter1: Elaine Livingston - Vestal, New York 13850 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/14/2012 12:00:00 AM
Attachments: OSTS2012D50311.htm (OSTS2012D50311-58953.htm Size = 1 KB)
Submission Text
<([#1 [*12*] Stop the tar sands and shale oil development. They are both too destructive to the environment, and use too dangerous toxic chemicals that threaten human health as well as

wildlife. A few greedy corporations should not be allowed to rape OUR land for their profits.
#1])>

OSTS2012D50312
Organization: Rio Blanco County Board of County Commissioners, Kenneth Parsons
Received: 5/4/2012 2:56:30 PM
Commenter1: Kenneth Parsons - Meeker, Colorado 81641 (United States)
Organization1: Rio Blanco County Board of County Commissioners
Commenter Type: Local Government
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/14/2012 12:00:00 AM
Attachments: OSTS2012D50312.htm (OSTS2012D50312-59023.htm Size = 1 KB)
2012_OSTS_PEIS_COMMENTS_Rio_Blanco_County_CO_OSTS2012D50312.pdf (OSTS2012D50312-59022.pdf Size = 201 KB)
Submission Text
Comments of the County Commissioners of Rio Blanco County, Colorado are in the attached file: 2012 OSTS PEIS Comments Rio Blanco County CO.pdf See Attachment.

BOARD OF COUNTY COMMISSIONERS
RIO BLANCO COUNTY COURTHOUSE
POST OFFICE BOX I
MEEKER, COLORADO 81641
May 4, 2012
BLM Oil Shale and Tar Sands Draft Programmatic EIS Argonne National Laboratory 9700 S. Cass Ave. Argonne IL 60439
Ken Salazar, Secretary
U.S. Department of the Interior 1849 C Street, N.W. Washington DC 20240
Bob Abbey, Director
Bureau of Land Management 1849 C Street, N.W., Room 5665 Washington DC 20240
RE: draft 2012 OSTS PEIS Comments
Dear Secretary Salazar, Director Abbey, et al:
Rio Blanco County has offered comments on previous iterations of this OSTS PEIS and welcomes the opportunity to do so again. As a county directly in the crosshairs of any potential development of oil shale, any such opportunity is of great interest to us. We wish to see no repeat of the crisis-oriented, federal push for a commercial oil shale industry such as was played out in the late 1970's and early 1980's. We must have a thoughtful and rational path allowing for the economic development of natural resources while doing so in a way that respects the environment, wildlife, and people in the region. It is in the best interests of the nation, the state, and Rio Blanco county that a quality OSTS PEIS is the result of this process.
In the past our comments have focused on two points. The first has been the extraction processes being considered and how this would impact the natural environment and wildlife in our county. The second has been the potential impacts to our citizens, communities and way of life, particularly the importance of mitigating these impacts in a timely and appropriate manner.

<([#1 [*1.3*] On this occasion, however, our comments will be more focused on issues which, when commented upon in earlier phases of this process, have been viewed by those conducting the PEIS as outside of the scope of the study. This unfortunate circumstance echoes what we see as the disconnect within the process between the federal government and the local governments with the most at stake concerning oil shale. In addition, we will again comment in some detail on the socioeconomic aspects of the study. Just one indicator that the focus has shifted away from the local connection is seen in where the public hearings were NOT held: in the White River district where the richest potential oil shale resource lies, where the large majority of RDD leases exist, and where kerogen extraction is likely to be most profitable.
In general, we continue to be skeptical of the validity and purpose of the 2012 OSTS PEIS.
#1])> <([#2 [*9.8*] General concerns with the process and draft 2012 OSTS PEIS:
Beyond an agreement which settled the lawsuit by "a coalition of environmental organizations" it is very difficult to find references to any significant new information which would cast doubt on the validity of the 2008 record of decision (ROD), at least in the Piceance Basin of Colorado. Climate change and air quality have many post-2008 citations included in the draft but it is noted in the summary on page 6-230:
"However, because of the need for project- and site-specific information, it is not possible to identify the nature and magnitude of regional air quality and AQRVs impacts of commercial oil shale development under all four alternatives. Thus, it is not possible to differentiate among these alternatives regarding regional air quality and AQRVs impacts."
#2])> <([#3 [*3.10.2*] On the other hand, a regional socioeconomic study released in 2008 by the Associated Governments of Northwest Colorado (AGNC) and the Colorado Department of Local Affairs (DOLA), as an example for contrast, is cited nowhere in this 'revised' PEIS. In particular, very little appears to have been done in reviewing the socioeconomics of our region or considering how impacts might be mitigated.
#3])> <([#4 [*9.8*] Taken together with the regulations published in 2006 and 2008 for oil shale and tar sands resources, the 2008 OSTS PEIS and subsequent land use amendments constituted a reasonable and rational establishment of an oil shale and tar sands program as mandated in the Energy Policy Act of 2005. The 2008 OSTS PEIS's chosen alternative is consistent with the multiple use requirement of the Federal Land Policy Management Act (FLPMA), and is consistent with the Rio Blanco County Master Plan and county policies which call for responsible development of available energy resources.
#4])> <([#5 [*2.1.1*] [*2.4.1*] Indeed, it appears that much of the 2012 draft OSTS PEIS is exactly the same as the 2008 final OSTS PEIS which makes it very difficult for us to understand the rationale for the BLM's preferred alternative being so restrictive as compared to the one adopted in the 2008 ROD. The Rio Blanco County Commissioners can support either the No Action alternative or alternative 4 in the 2012 draft OSTS PEIS but reject the Preferred Alternative.
#5])> <([#6 [*1.3*] While Rio Blanco County was a cooperating agency in the 2008 PEIS, we did not respond to solicitations in time to have that status in the 2012 OSTS PEIS. In retrospect, it does not appear that our input as a cooperating agency would have made any difference, seeing what has
transpired to this point. In contrast to the open and complete process seen in 2008, it does not appear that the BLM coordinated closely, as required by FLPMA, with the local governments where the oil shale resource is located.
#6])> <([#7 [*1.3*] The preferred alternative in the draft 2012 OSTS PEIS is at odds with the input of the majority of the task force and stakeholders which the BLM was directed to honor and

follow in the 2005 Energy Policy Act. This would seem to us to violate the memoranda of understanding (MOUs) with cooperators which require the BLM to publish the written input of cooperators who disagree with the preferred alternative. Rio Blanco County was unable to locate an explanation of the points of difference and rationale for the choice being made. **#7])>**
<([#8 [*9.2.2*] The preferred alternative in the draft 2012 OSTS PEIS drastically shrinks, diminishes and in many areas removes virtually all of the lands made available for Oil Shale and Tar Sands development in 2008, and does so using the same data and science. Such a drastic reversal in lands available for development between the 2008 PEIS and the 2012 Preferred Alternative seems to violate regulatory Task Force requirements of certainty for industry and investors. Further, this drastic reversal of lands made available in 2008 for development constitutes a piecemeal revision of previous BLM Resource Management Plans, in violation of the Section 202 Planning Process under FLPMA. This Preferred Alternative threatens to undermine the process and the work of the 2008 OSTS PEIS, and dismantle a reasonable and rational oil shale and tar sands program in violation of Section 369 of the 2005 Energy Policy Act. **#8])>**
<([#9 [*8*] The Preferred Alternative is inconsistent with the BLM's mandate to manage our public lands for multiple uses. Given the size of the resource located in Rio Blanco County it seems inappropriate to exclude all but 35,308 acres of the greatest potential for development from leasing. These lands outlined in the Piceance basin as Most Geologically Productive are currently leased for grazing, nahcolite, oil and natural gas and it makes no rational sense to exclude most them from oil shale leasing. There is a reason why all but one of the first round RDD leases and all of the second round candidates are in the Piceance basin in Rio Blanco County: this is where the potential economic value of the resource is greatest.
#9])> <([#10 [*9.2.1*] [*3.1.3*] On April 14, 2011, the BLM caused to be published in the Federal Register, Volume 76, No 72/Thursday, April 14, 2011, pages 21003-21005, a notice of intent to prepare the 2012 OSTS PEIS.
The preliminary purpose and need statement in the notice of intent, states the 2012 OSTS PEIS will analyze removing from oil shale and tar sands leasing "All areas that the BLM has identified or may identify as a result of inventories conducted during this planning process, as lands containing wilderness characteristics[.]" Id., at page 21004; and further:
"Lands that the BLM identifies as having wilderness characteristics will be considered during this planning initiative, as described above, and consistent with Secretarial Order No. 3310, dated Dec. 22, 2010, and BLM Manuals 6301 and 6302. Future leasing of lands determined by the BLM to have wilderness characteristics, if compatible with the
allocation decisions stemming from this initiative, will subsequently be assessed in accordance with BLM Manual 6303, as appropriate (Le., where the BLM has not determined, consistent with BLM Manual 6302, whether the lands with wilderness characteristics at issue should be receive a wild lands designation, BLM Manual 6303 will apply)".
This language seems de facto evidence of the BLM's intent to implement, administer and/or enforce Secretarial Order 3310 and one or more of the BLM guidance manuals promulgated under Order and violates the spending moratorium of Section 1769 of the April 21, 2011 Congressional Continuing Resolution to Fund Fiscal Year 2011 through September 30, 2011, which states:
"For the fiscal year ending September 30, 2011, none of the funds made available by this division or any other Act may be used to implement, administer, or enforce Secretarial Order No. 3310 issued by the Secretary of the Interior on December 22, 2010"

This spending moratorium has been carried forward, to the best of our knowledge, in all subsequent Congressional spending resolutions up to and including the current one.
#10])> <([#11 [*1.5*] Detailed concerns with the draft 2012 OSTS PEIS and the Preferred Alternative:
1. Lack of nexus between LWC, Sage Grouse, any stated concerns and new information and the wholesale reduction of acreage from 346,609 to 35,308 available for leasing
The 2012 OSTS PEIS Preferred Alternative, appears to be the direct result of the lawsuit settlement agreement between the BLM and ideological opponents to oil shale development, and was entirely pre-determined and pre-decisional, in violation of NEPA. We can find no legitimate rationale for revising the acreages approved in 2008, and feel that the BLM has settled on this preferred alternative without having first analyzed its impacts. **#11])> <([#12** [*9.1*] Further, we see no rational relationship to the stated purpose and need "… to reassess the appropriate mix of allowable uses with respect to oil shale and tar sands leasing and potential development." and the acreage proposed for development under the Preferred Alternative.
#12])> <([#13 [*3.1.3*] [*3.7.5.1*] Rio Blanco County has reviewed the Lands Excluded from Application for Oil Shale Leasing
as shown in Figure 2.3.3-1 excluding ACECs, Sage Grouse Habitat, and Lands with Wildness Characteristics (LWC). Our review included recent data concerning Greater Sage Grouse Preliminary Priority Habitat (PPH) and Preliminary General Habitat (PGH) from March 12, 2012, which we understand that the BLM is considering for further modification of its alternatives.
As stated elsewhere in our comments, we support the exclusion of ACECs and under our land use regulations would not approve development in an ACEC. We oppose excluding LWC and oppose the exclusion of all these mapped PPH and PGH areas in Rio Blanco County where fluctuations in habitat, predation and bird populations place us at the extreme margins of the bird's historical range. The point is that wholesale exclusion of these areas provides no justification of the acreage reduction seen in the Preferred Alternative.
If one excluded all of these LWC, PPH, PGH, and ACEC areas from the Most Geologically Prospective BLM-administered lands in the Piceance basin, one is left with between 232,000 and 315,000 acres which should still be available for application for leasing. The difference between these numbers being the choice of which sage grouse habitat mapping one uses: that in the draft 2012 OSTS PEIS or the March, 2012, revised mapping. These areas are shown in the following maps.
Figure 1: 315,078 acres Available for Leasing (2012 draft data)
Figure 2: 232,869 acres Available for Leasing (revised PPH, PGH data)
Thus Rio Blanco County cannot support the wholesale reduction of lands available for application for leasing down to 35,308 acres.
#13])> <([#14 [*9.7*] 2. Limiting the only path to gaining a lease to RDD projects.
The draft 2012 OSTS PEIS Preferred Alternative significantly restricts the acreage allotted in the 2008 PEIS for research and development leasing and improperly limits technology testing to strictly in situ efforts. Therefore, it does not allow for the development of other technologies and does not provide leasing opportunities for technologies developed outside of the current Research Development and Demonstration (RDD) program. This is an inappropriate limitation given that development and production of oil from oil shale has been demonstrated to be technologically and economically feasible elsewhere in the world.
To limit public lands available for commercial leasing to the those lands encompassed by

existing oil shale RD&D leases and their associated preference right lease acreage, plus the areas encompassed by the three RD&D lease applications currently under review is to deny that good science and technology development can occur on private lands or elsewhere in the world and prevent those in possession of such technology from access to the oil shale resources on public lands in the United States. This point, in and of itself, would seem to be adequate grounds for disallowing the Preferred Alternative.

#14])> <([#15 [*6.3.2.1*] 3. Analysis of water-related issues

Some technologies, such as those utilized by projects currently under construction in Utah to extract oil from the oil shale rock are not only economically feasible, but require little or no consumption of water. Such technologies have not received any treatment under this PEIS.

#15])>

<([#16 [*6.3*] Although parts of the PEIS considered potential conflicts between oil shale development and conventional natural gas operations in the Piceance basin, the analysis did not look at potential symbiotic relationships. For example, the natural gas industry produces excess water which then must be either be treated and discharged (a difficult and controversial process) or removed from the area and evaporated from collection ponds. The potential use of this non-tributary water for the needs of a commercial oil shale industry needs to be considered at the PEIS level as an option for reducing water consumption by a commercial oil shale industry.

#16])> <([#17 [*6.3.2.1*] We also feel that the use of outdated water information in the PEIS for its basic analysis is flawed. The Phase 1 Energy Development Water Needs Assessment report (Colorado, Yampa, and White River Basin Roundtables Energy Subcommittee 2008), estimated water requirements for the extraction and production of natural gas, coal, uranium, and oil shale through 2050. Since the release of that report, the Colorado and Yampa-White Basin Roundtables have refined water demand estimates for oil shale development through Phase 2 of the Energy Study. That report also includes recent work completed to address water requirements for oil shale development (Colorado, Yampa, and White River Basin Roundtables Energy Subcommittee 2010).

The water needs for oil shale addressed in these studies have factored in recent information developed by the Colorado and Yampa-White Basin Roundtables' Energy Subcommittee that considered the amount of produced water that will be made available during shale processing. In addition, work by the subcommittee has shown that electrical energy needed for the development of oil shale could be produced by combined cycle gas turbines, not the coal-fired power plants cited in the 2012 draft OSTS PEIS. One result of this work by the roundtable is to reduce previous estimates of oil shale water demands. Their current estimate is that an oil shale commercial operation in Rio Blanco County producing 550,000 barrels of oil per day in 2050 would require only 37,900 to 42,000 acre-feet of water a year.

#17])> <([#18 [*3.4.1*] The Phase 1 Energy Development Water Needs Assessment report also noted that compact entitlements in the Colorado River Basins are not fully utilized and that those basins (Colorado, Gunnison, Southwest, and Yampa-White) have water supplies that are legally and physically available for development given current patterns of water use.

However, the Yampa-White River Basin population, under medium economic development assumptions, is projected to increase by about 2.6 times between 2008 and 2050, from about 45,000 to about 117,000 residents. Mining jobs in the basin are expected to grow by over 400 percent between 2007 and 2050. According to the Yampa White needs assessment report, without 100% success in constructing storage projects there is a gap of 51,000 acre feet in 2050 at the 550,000 bopd-level commercial production from oil shale. Their model considers

consumptive and non-consumptive needs for agriculture, recreation, environment, endangered species, mining & industry and energy development.
The Rio Blanco County Commissioners feel that for a commercial oil shale industry to have an opportunity to prove its economics, informed and unbiased water planning is critical. This water must remain allocated for industrial use in our basin rather than be seen available for other uses in other areas. Since the 2008 OSTS PEIS ROD has been questioned and the process reopened, then this information should be used in the revision of the PEIS.
#18])> <([#19 [*3.10.1*] 4. Comments specific to socioeconomics
Consideration of humans as part of the environment
: the lack of focus on the impact of development on those residents within the Region of Impact (ROI), their economies, infrastructure and way of life seems inappropriate. The data used is very dated, the modeling is very general and not customized to the ROIs, and the lack of consideration of alternatives, in the level of detail seen in other parts of the PEIS, for the mitigation of these impacts is truly short-sighted and inappropriate for the scale of potential impacts.
2012 OSTS PEIS Socioeconomics Chapter 4 **#19])>**
<([#20 [*3.10.1*] 4.12 SOCIOECONOMICS
Many statements here questioning the assumptions of what is local in a ROI. For Colorado, the distribution of RDD leases is a strong indicator of where any future commercial development will occur: the Piceance Creek area in Rio Blanco County. While social impacts will occur throughout the ROI designated in this study the geography and transportation networks insure that the direct extraction impacts occur in the immediate area. When impacts are thus "averaged" over a large geographical area where the population is concentrated far from the site of the extraction the impacts appear to be far less significant than they are in the immediate area where the extraction activity is occurring.
#20])> <([#21 [*3.10.2*] Also, we repeat our concern over the PEIS analysis' failure to consider the BBC/AGNC/DOLA study on regional impacts in Colorado which was released in April, 2008. This study is based on considerably more recent data and provides far greater detail, within its limited scope, than is available in the draft 2012 OSTS PEIS documents.
Key assumptions: (expressed in section 4.12)
#21])> <([#22 [*3.10.1*] Material and equipment procurement: construction phase, 15% local purchase seems high given the recent natural gas boom in Rio Blanco County. While the analysts may consider purchases in Grand Junction as local purchases within the ROI, such purchases do nothing for the economy of Rio Blanco County. The aforementioned natural gas boom saw pre-fabricated modular temporary housing purchased from outside the ROI as the dominant employer-provided housing and thus 25% locally-purchased materials is far too large an estimate. **#22])>**
<([#23 [*3.10.1*] Wages and salary spending: In line with the temporary housing mode noted above, the estimates of 75% wages spent in ROI and 25% income used on existing expenses seems very considerably high. Many of these skilled workers, both in natural gas and oil shale RDD, were living in temporary living quarters (TLQ) in Rio Blanco County, leaving their families at home in other states, and spending none of their wages locally. **#23])>**
<([#24 [*3.10.2*] Worker housing:
the final paragraph of this section correctly identifies employer-provided TLQs as the most effective way to minimize community impacts. However, it misses other key problems in the Piceance Creek area. (1) All potable water must be trucked into the area as groundwater, of the quality needed for human consumption, is very limited. These water-haulers are making trips in

excess of 50 miles one-way with quantities likely to be in the tens of thousands of gallons per day over a winding & congested road subject to flash flooding in summer and icy conditions in winter. (2) There is the associated problem of human waste from these TLQs. Since the BLM has chosen not to permit TLQs on public lands they are forced onto the limited private land which lies mainly along drainage bottoms and where the soils have limited percolation capacity. Pump and haul operations along the same road and conditions described above are an even greater concern as this area is in the Source Water Protection area for the Town of Rangely. **#24])>**
<([#25 [*3.10.1*] 4.12.1.1 Economic Impacts
Noting once again the very dated (1984) nature of the underlying numbers used in the IMPLAN analysis, it appears that there are only four numbers in Appendix G which represent the employment data. Further, given the constraints of geography and roadway adequacy, we would question the relevance of a linear distance weighting in the gravity model as opposed to a weighted lane-road-mile distance with consideration of congestion factored in. **#25])>**
<([#26 [*3.10.2*] The break points between small, moderate, and large impacts being set at 5% and 10% do not seem consistent with markers used by other demographers. For example, the fastest growth in Colorado during the past decade was in Douglas County, averaging 6.24% per year and was considered booming metropolitan growth. Noting the impacts seen in the BBC/AGNC/DOLA study in Garfield and Mesa counties in Colorado during the recent natural gas boom one can contrast that with the 2.88% and 2.62% annual growth seen in those counties over that same decade. This actual growth would fall into the middle of small impact growth by the measures set forth in this document. One can but wonder if the cooperators from this area view this as small impact growth. For perspective, the BBC study anticipated a growth of 500% over 30 years for Rio Blanco County from 6,000 to 39,000 residents for a 50,000 bopd commercial oil shale industry. **#26])>**
<([#27 [*3.10.2*] 4.12.1.2 Social Impacts
Although it is, to some degree, understandable that the PEIS take a "100,000 ft view" of the overall ROI, the coarseness of the data used in the region is once again very misleading as to the impacts. For example, on 4-173 a statement that an in situ facility would require between 5 and 18 local employees during the construction phase with an increase of between 0.2% and 0.5% increase in expenditures for local public service provision sounds pretty benign over a 3-state ROI. Making the not unreasonable assumption that the in situ operation was in Rio Blanco County this would equate to, based on a $30M county budget, an increased expenditure of $60K-$150K. The experience of the recent natural gas boom would indicate that our county alone might need to add 5 employees (building, planning, road & bridge and law enforcement) and the associated impacts to infrastructure would make the annual increase in expenditures easily ten times the amount predicted herein. These predictions may appear useful at the federal level but at the local level they are less than worthless: they are misleading and engender complacency that the impact to the public and communities is small and can be ignored. **#27])>**
<([#28 [*3.10.2*] 4.12.1.8 Transportation Impacts
The concern with upgrading and designing of access roads is well founded. Engineering estimates for County Road 5, the only paved public access to the heart of the Piceance basin, is over $140M. The engineering redesign for this corridor, including stronger, wider bridge structures is just now being completed. There are many other major projects which must also be designed and constructed to provide safe, reliable, and efficient road access into the Piceance Creek area from major highway networks and regional supply and population centers. Attempting to construct these upgrades during the rush to build the facilities needed for a

commercial shale oil facility in this area would create severe traffic flow problems, major delays on ingress and egress times, and endanger lives needlessly. **#28])>**
<([#29 [*3.10.2*] [*5*] 4.12.2 Mitigation Measures
The statement here is correct in that mitigation measures will be required. The list of options includes many uses of could and it is possible which, while true, are of little value in actually establishing appropriate mitigation measures. Most of the measures listed are already in place as well as others, such as springtime load restrictions, which are not included. Others, such as operator support for health screenings and libraries are so tangential to the core impacts as to be viewed as filler. Project-scale and site-specific analyses will be required of all plans for development of commercial leases along with mitigation measures.
There are a few key areas which are completely missing but sorely needed:
1. Recommendations, to be included in each of the alternatives, for developing a realistic strategy for each ROI based on where the facilities will be developed, the timeline for construction, the size and scale of such facilities, and the details of the individual socioeconomic sub regions of the ROIs. We are asking for a call for a detailed socioeconomic study in each ROI at the time of commercial leasing coupled with a strategy for implementing the mitigation measures in a timely fashion. **#29])>**
<([#30 [*10.5*] 2. Taking a "100,000 ft view" consistent with the draft, there needs to be a recommendation to the U.S. Congress and to the state legislatures of each of the three states for providing a distribution of leasing bonus and royalty payments, state severance tax revenues, and credits for operator-supplied mitigation which provides for the adequate funding of these mitigation measures, both up front of the commercial development and ongoing during the extraction and reclamation phases. Such measures would provide for socioeconomic justice to the public in the ROI, a system whereby operator participation in mitigation is rewarded and encouraged, where then the citizens of the three states and the United States see fair and reasonable return on their extracted resources.
#30])> <([#31 [*5*] The lack of an explicitly expressed call for regional mitigation planning and coordination is a major shortcoming in the draft PEIS. Remember, humans are a a part of the environment, too.
#31])> <([#32 [*3.13*] 4.14.1 Common Impacts (HAZARDOUS MATERIALS AND WASTE MANAGEMENT)
Page 4-188, lines 33-34. The stated assumption is that wastewaters would be treated on site isn't consistent with BLM policy which has generally forced facilities onto private land and/or made pump & haul the only viable disposal methodology.
#32])> <([#33 [*3.13*] Page 4-189, lines 27-28. Again, collection of pyrolysis water in lined ponds and then released would not seem to be consistent with BLM policy. BLM has not permitted lined ponds on public lands to evaporate produced water from natural gas wells and permits for releasing treated formation waters are difficult if not impossible to obtain. **#33])>**
<([#34 [*13*] 2012 OSTS PEIS Socioeconomics appendix G
The paucity of actual numerical estimates for any ROI or sub region is concerning. The reader has difficulty evaluating the assessments being made when they are couched in the most general, qualitative way. To indicate elsewhere in the PEIS that details on methodology, modeling, and results are given in Appendix G are, at the best, misleading. **#34])>**
<([#35 [*3.10.1*] G.1.1 Direct Employment Data
The sources are pretty dated (1973, 1977, 1982, 1983). This was an era dominated by room and pillar mining with surface retorting. This might be somewhat applicable, though dated, to the

deposits in UT or WY but it has no relation to the in-situ RDD processes being researched in Rio Blanco County, CO. **#35])>**
<([#36 [*6.2.1*] G.1.1.3 Power Plants and Coal Mines
Although this data is far more current than the direct employment data it seems unrelated to the current situation in Colorado. The Colorado Legislature and environmental activists make it quite unlikely that a new coal-fired power plant would be constructed in this state as was seen in the passage of HB11-1365 by the Colorado Legislature. The price and availability of natural gas in the ROI, coupled with the work of the Yampa-White Basin roundtable makes combined cycle natural gas power plants far more likely.
#36])> <([#37 [*3.10.1*] G.1.2 Temporary Housing Construction Data
The criticism here again is that the data is very dated (1973). Experiences with Temporary living quarters during the recent gas boom might provide better insight into how such facilities are being constructed, located and serviced.
#37])> <([#38 [*3.10.1*] G.1.3 Economic Multipliers
Although unfamiliar with the internal structure of IMPLAN software, the applicability of its balance and weighting of parameters should be reviewed for relevance within the oil shale ROI. In this region of abundant federal lands, long distances, few roadways, and widely dispersed regional centers it doesn't seem likely that the balance of parameters would be the same as, for example, the Midwest. Our economies are seldom in sync with state and national economies as different factors dominate.
#38])> <([#39 [*3.10.1*] G.2.1 Population (SOCIAL IMPACTS)
On page G-7 there is a need to check the veracity of the reference to Section 4.11 on per capita expenditures. Section 4.11 in the draft 2012 OSTS PEIS relates to Indian Tribal Concerns.
#39])> <([#40 [*3.10.2*] G.2.4 Social Disruption (SOCIAL IMPACTS)
The statement "Because population increases are likely to be rapid, and in the absence of adequate planning measures, local communities may be unable to quickly cope with the large number of new residents; social disruption and changes in social organization are likely to occur." highlights one of the great weaknesses of the PEIS: None of the alternatives addresses or makes any attempt at addressing one of the truly significant impacts of oil shale development. It is deeply ironic that the BLM can offer alternatives to protect environmental assets on our public lands but cannot do so to protect the public being directly impacted.
This section repeatedly expresses the belief that "community planning" can mitigate social problems and adjustments necessary during boom and bust parts of the economic cycle. I have considerable doubt as to whether the authors of this study have ever been resident in a community of two or three thousand when these cycles are being acted out. Planning can certainly help but resources, financial and otherwise, are equally important. So is the luxury of having time and resources to plan for these cycles comfortably in advance of their onset. It is a matter of shame that this process is so strongly geared toward the admittedly important task of assessing and mitigating the impacts on the natural environment yet so superficial and cavalier in its treatment of the people and communities who are directly impacted. **#40])>**
<([#41 [*3.10.3*] Additional note: Table 3.11.2-7 (Pg 253, Volume I) concerning population & income in the ROI includes several cities (ie Del Norte, Monte Vista, South Fork) which are not in the ROI but several hundred miles away in the San Luis Valley. This casts some doubt as to how familiar the authors were with the ROI.
#41])> <([#42 [*1.5*] Summary:
The Rio Blanco County Board of County Commissioners have deep concerns that the 2012

OSTS PEIS is not following an open and unbiased process as required by FLPMA and NEPA. We are concerned that the process is expending taxpayer funds in a manner contrary to the direction of the U.S. Congress. **#42])> <([#43** [*2.1.1*] [*2.4.1*] We are also concerned that the Preferred Alternative expressed in the draft 2012 OSTS PEIS was not properly vetted through the cooperating agencies. The Commissioners are supportive of the No Action Alternative or, if that is not to be chosen, then they would support Alternative 4. **#43])> <([#44** [*2.2*] The Preferred Alternative should be rejected. **#44])>**
Thank you for your consideration and review of these comments.
Sincerely,
Rio Blanco County Board of County Commissioners

OSTS2012D50313
Organization: Eileen McCabe
Received: 5/4/2012 3:02:38 PM
Commenter1: Eileen McCabe - Taylorsville, Utah 841233749 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/16/2012 12:00:00 AM
Attachments: OSTS2012D50313.htm (OSTS2012D50313-58955.htm Size = 1 KB)
Submission Text
<([#1 [*3*] Comments to BLM on Tar Sands This PEIS as well as the BLM notes in the Federal Register have noted that the methods for extracting oil shale and tar sands are unproven, cause long-term ecological damage and use exorbitant quantities of water. It seems to me that there will be great cost for uncertain benefit, and potentially irrevocable harm to the areas in question. The Carbon and Uintah county areas are most familiar to me. There is much pristine wilderness there, as well as abundant wildlife and recreation areas that could be harmed. There is already concern about stretched water resources in this area, particularly in light of the proposed Blue Castle nuclear power plant on the Green River. **#1])> <([#2** [*10.6.1*] The Energy Policy Act of 2005 was and is heavily weighted in favor of fossil fuels. Given more recent information about global warming and drought, and the falling price of renewables per kilowatt hours, it would be prudent to withdraw tacit support for any oil shale and tar sands development, in favor of methods that cause only temporary disruption or actual benefit to the environment and present long-term economic development opportunities for the areas in question. **#2])> <([#3** [*2.5*] I respectfully request that the areas in the state of Utah be removed for consideration for oil shale and tarsands development. **#3])>**

OSTS2012D50314
Organization: Colorado Dept of Nat Res and Dept of Public Health and Env, Ginny Brannon
Received: 5/4/2012 3:08:53 PM
Commenter1: Ginny Brannon - Denver, Colorado 80203 (United States)
Organization1: Colorado Dept of Nat Res and Dept of Public Health and Env
Commenter Type: Coop Agency - State Govt

Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/16/2012 12:00:00 AM
Attachments: OSTS2012D50314.htm (OSTS2012D50314-59026.htm Size = 1 KB)
Colorado_Public_Comments_on_Oil_Shale_PEIS_OSTS2012D50314.docx
(OSTS2012D50314-59025.docx Size = 47 KB)
Submission Text
See Attachment.

STATE OF COLORADO

John W. Hickenlooper, Governor

Mike King, Executive Director
COLORADO DEPARTMENT OF NATURAL RESOURCES

Christopher E. Urbina, MD, MPH, Executive Director and Chief Medical Officer
COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT

BLM Oil Shale and Tar Sands Resources Leasing Programmatic EIS
Argonne National Laboratory
9700 S. Class Avenue EVS/240
Argonne, Illinois 60439

RE: Comments on Programmatic Environmental Impact Statement and Possible Land Use Plan Amendments for Allocation of Oil Shale and Tar Sands Resources on Lands Administered by the Bureau of Land Management in Colorado, Utah, and Wyoming

The Colorado Department of Natural Resources (DNR) and the Colorado Department of Public Health and Environment (CDPHE) respectfully submit the following comments regarding the Department of the Interior, Bureau of Land Management's (BLM) intent to draft a Programmatic Environmental Impact Statement (PEIS) and Possible Land Use Plan Amendments for Allocation of Oil Shale and Tar Sands Resources on Lands Administered by the Bureau of Land Management in Colorado, Utah, and Wyoming.

<([#1 [*2.2.1*] The prospect of a new PEIS raises important issues for Coloradans, and all Americans, with respect to energy supplies, environmental protection, socioeconomic impacts, and national security. If BLM were to authorize a commercial oil shale industry in Colorado, such a development would likely constitute the largest industrial development in the State's

history with enormous implications for all of Northwest Colorado and for the State.

For Colorado, there is much at stake in the outcome of this program. Colorado recognizes the importance of oil shale resources to the country and, in our uncertain world, reliable, sustainable domestic oil-based resources are increasingly important. But equally important, from Colorado's perspective, is protection of the State's exceptional environment including our wildlife and water resources.
The State continues to believe that the research and development program authorized by BLM must be developed, tested, and monitored. Colorado is host to seven of the nine federal research and development sites and we are confident these programs will yield the necessary information upon which rules and regulations and commercial leasing can be based. Because oil shale development will likely utilize untested technology with potential long-term impacts to Colorado's communities and the environment, the State has consistently opposed plans to commercialize leasing or production of federal oil shale resources prior to a meaningful evaluation of the results of the research and development projects.

For these reasons, DNR and CDPHE support the Preferred Alternative.
#1])>
<([#2 [*3.10.3*] Northwest Colorado

Any future commercial leasing for oil shale would be in Northwest Colorado. Northwest Colorado is blessed with a remarkably diversified economy in which agriculture, tourism, recreation, hunting & fishing, natural gas & mineral development, retirement communities, and their economic drivers co-exist in a relatively balanced and supportive way. Within the Piceance Basin, Colorado is the beneficiary of some of the nation's most important wildlife resources, including robust elk populations and the largest migratory mule deer in North America. These wildlife treasures, the envy of other states, have gradually evolved and grown over the past century to the exceptional levels of today.

The Piceance Basin is home to the largest migratory mule deer herd in North America, a robust migratory elk population, one of only six greater sage-grouse populations in Colorado, populations of Colorado River cutthroat trout, and a host of other wildlife species. These wildlife resources have been built up over millennia and are of long-term statewide and national economic, ecological, and aesthetic importance. Colorado's future is reliant on these resources remaining strong and healthy.

Northwest Colorado is also the home to world-class hydrocarbon resources, holding trillions of cubic feet of clean-burning natural gas, which are currently undergoing an unprecedented gas development boom. As a result of its abundance of natural resources, Northwest Colorado is experiencing extraordinary growth in population and associated challenges. Housing affordability is a significant challenge to these local communities, and the capacity of local communities to absorb growth is already largely consumed. Much of the transportation infrastructure in these communities is in disrepair and is being severely stressed by growth pressures. The costs to repair infrastructure will require up-front financing, before revenues become available from traditional sources such as severance taxes, property taxes, sales taxes, and federal royalties.

This region is thus vitally important to Colorado's future. It is in a precarious balance in the face of extraordinary pressures precipitated by possibly the largest industrial development in the history of the state. Everything state and federal policy makers do with regard to Northwest Colorado must protect the resources, values, and diverse economies and interests found there, and we cannot simply think of this region as an area to be sacrificed for any one purpose. Yet another boom and bust cycle for energy development will be dire for Northwest Colorado, a region that retains considerable skepticism and frustration over the collapse of the oil shale boom of the 1970s. Another failed attempt at oil shale development could preclude development of this nationally significant resource for decades.
#2])>
<([#3 [*3.7.3.1*] [*3.7.3.6*] [*3.7.4.1*] Areas of Concern
Wildlife:

Given current information regarding extraction methodology, it is difficult to accurately depict impacts to wildlife populations in association with oil shale development.

The Piceance Basin contains unique and, in many cases, irreplaceable habitats for a host of wildlife species such as Greater sage-grouse, movement corridors for big game species, winter range for North America's largest migratory mule deer herd, a large and economically important elk population, raptors, and waters containing native cutthroat trout and endangered fish. The primary concern for wildlife due to oil shale development is the overall loss and fragmentation of valuable wildlife habitat, the feasibility of reclamation of disturbed areas, and the damage that would accrue to wildlife populations. The PEIS should include baseline wildlife monitoring and specific conservation measures for deer, elk, sage- grouse, and Colorado River cutthroat trout.

The PEIS should allow for an accurate and complete assessment of the direct, indirect, and cumulative impacts to wildlife habitats and populations both on-site and off-site that will occur from commercial-scale oil shale projects. BLM's analysis should include the impacts to big game in the event they are forced to occupy alternate winter range habitats and the effects of oil shale development on water quality and quantity in critical habitat for threatened and endangered aquatic species.

The assessment should not only factor in the direct effects of oil shale development, but also consider wildlife impacts from existing and new coal extraction areas and power plants needed to supply power to the oil shale operations and associated development, including pipelines, power lines, roads, man camps and other infrastructure.
#3])>
<([#4 [*3.10.4*] The economic impacts from any anticipated loss of wildlife, hunting and fishing opportunity, recreation and tourism on state agencies and local communities should be reviewed in depth. All wildlife issues previously identified in the March 20, 2008 State of Colorado comment letter submitted for the 2008 Oil Shale and Tar Sands Draft PEIS are still applicable and should be included in the updated PEIS. **#4])>**

<([#5 [*3.4.1*] Water Supply:

The State is rapidly approaching full allocation of its Colorado River entitlements. It is not clear how much water would be needed for oil shale development, which probably depends on the prevailing technology. Nevertheless, if oil shale were to consume vast quantities of water, there would be corresponding impacts to the State's agricultural, recreational, and other energy sectors on the West Slope, the Front Range and even along the Eastern Plains. Hence, the State is very concerned that the water implications of this industry be understood prior to decisions regarding commercialization.
According to the Colorado Statewide Water Supply Initiative, water demands from industrial, municipal uses, even with conservation, are expected to increase 55% to 83% from 2008 levels by 2050. This forecast does not include uses for oil shale such that the PEIS should assess water needs for oil shale in the context of the state's increasing water demands.
#5])>
<([#6 [*3.4.1*] Water Quality:

There is tremendous uncertainty regarding the environmental impacts on both surface water and ground water quality due to commercial oil shale operations. The PEIS should include baseline ground and surface water quality monitoring and address the impacts of additional growth on water and wastewater infrastructure in nearby communities. The PEIS should also address potential impacts of water withdrawals on flows upstream of wastewater facilities, and the concomitant reduction in permit limits that might result for these facilities.
#6])>

<([#7 [*3.5.3*] [*3.5.8*] [*3.5.7*] [*9.3*] Air Quality:

The PEIS should include information about potential levels of Mercury, Ozone precursors, and Hazardous Air Pollutants occurring from oil shale development.

The PEIS should include an assessment of the air quality impacts from energy development for electricity generation that is needed for future commercial oil shale development. This assessment should include impacts to visibility and public health.

The PEIS should document the large amount of information about baseline air monitoring being conducted in Colorado. The BLM should commit to conducting the monitoring studies needed in the future to assess baseline air quality conditions. This would include, for example, monitoring in both the Piceance Basin and the Flat Tops Wilderness Area.
#7])>
<([#8 [*3.14*] Health:

The PEIS should present sufficient data to assess potential degradation of the human environment and resulting health impacts to the affected public, potentially resulting from direct or indirect exposure to contaminated media.
#8])>
<([#9 [*6.2.1*] Energy Needs:

According to BLM's analysis in the 2008 PEIS, a 100,000 barrel per day oil shale operation would require all of the electricity from a 1,200 megawatt power plant. The PEIS should include

an analysis of options for meeting power demands for oil shale development in a manner consistent with Colorado's renewable energy standard. The PEIS should also provide for comprehensive planning of energy development on a basin-wide scale in order to adequately assess cumulative impacts.
#9])>
<([#10 [*3.10.2*] Infrastructure:

Because the areas of the Green River Formation are relatively sparsely populated, boom and bust cycles associated with oil shale could have disastrous effects on the communities, stressing existing infrastructure with increased population and associated needs. The PEIS should assess the needs and impacts of an industrial complex significantly greater than the infrastructure that exists today.

The Report by BBC Consulting for the Associated Governments of Northwest Colorado notes that baseline population projections already strain most municipalities such that oil shale development will cause existing towns to reach capacity and new towns may have to be built. The report further concludes that growth related capital costs are forecasted to exceed energy revenues by approximately $1.3 billion, some (but not all) of which may be covered by grant funds. The PEIS should include an assessment of how capital costs will be covered. It should include baseline data for community infrastructure capacity that can be used to assess what additional infrastructure will be required to support oil shale development. It should also include a thorough housing analysis incorporating local constraints including buildable land and infrastructure. **#10])>**

<([#11 [*4.1*] Cumulative Impacts:

The PEIS should include carrying capacity thresholds which have been in place for over two decades and impose objective standards to guard valuable and imperiled public resources from the cumulative impacts of oil shale development. As examples, the BLM should analyze data on the current populations of wintering mule deer and elk and update, if necessary, the number that must be supported for the benefit of the species. Likewise, the BLM should assess the likely socioeconomic impact of a significant new industry in the oil shale region, in conjunction with the current localized natural gas industry. The agency should also reevaluate the carrying capacities for air and water quality in order to assess whether they are currently adequate to protect these vitally important public resources.

Further, we reiterate that the State of Colorado is currently experiencing an unprecedented energy boom in many portions of our state. In particular, the areas that the BLM proposes to make available for application for commercial oil shale leases are experiencing rapid natural gas development. In addition, the areas the BLM proposes to make available for application for oil shale leasing are seeing increased tourism and recreation opportunities. Any oil shale leasing on top of this existing network of energy development and changing land uses must be evaluated in a cumulative fashion.

Thus, it is vitally important to the Departments and to the State of Colorado that the BLM

proceeds cautiously and moves forward thoughtfully with the development of a commercial oil shale leasing program that truly looks at the cumulative impacts in a programmatic way. As the epicenter of the developable oil shale resource in the United States, Colorado has much to gain if this resource is developed responsibly, and much to lose if the risks are not assessed and managed appropriately.
#11])>
<([#12 [*6.1.2*] [*9.7*] Proven RD&D

Northwest Colorado is home to extraordinary oil shale resources, among the richest in the world, yielding 25 gallons of oil or more per ton of rock and estimated to hold nearly 500 billion barrels of recoverable oil shale, which is more than double the proven reserves of Saudi Arabia. Successful development of this resource could provide a substantial new source of domestic oil for the United States, which would have positive implications for our national energy policy and national security.

Given the significant oil shale resource and exigent national energy interests, Colorado is committed to seeing ongoing oil shale research and development move forward. Colorado officials have assisted BLM in reviewing applications for federal research and development leases, and the State currently hosts five of the six "first round" federal research and development leases issued in 2006 and two of the three additional "second round" research and development leases currently under BLM consideration. If successful, these research and development projects could set the foundation for a subsequent commercial oil shale industry. Because oil shale development will likely utilize untested technology with potential long-term impacts to Colorado's communities and the environment, the State has consistently opposed plans to commercialize leasing or production of federal oil shale resources prior to a meaningful evaluation of the results of the research and development projects.
#12])>
Conclusion

<([#13 [*2.2*] Colorado recognizes that oil shale development may offer the potential to supplement the nation's energy supplies. Colorado's goal is that commercial oil shale development be done right – in a manner that avoids unacceptable and irreparable impacts on Colorado's land, air, water, wildlife resources, and communities and that minimizes those adverse environmental and socioeconomic impacts that would result from such development through front-end planning and financing and long-term monitoring and mitigation.

As BLM notes in the PEIS, the magnitude of the impacts cannot be quantified at this time because key information about the location of commercial projects, the technologies that may be employed, the project size or production level, development time lines, and mitigation that might be employed are not known.

Therefore, the State places great importance on a thoughtful, comprehensive PEIS, through which federal, state and local decision-makers will have the necessary tools in hand to evaluate what type of federal program makes the most sense. DNR and CDPHE remain convinced that BLM must gain critical answers to many questions before any commitment to commercial leasing occurs. BLM must similarly gain answers to such questions before any rules and

regulations for commercial oil shale development can or should be finalized. **#13])>**

OSTS2012D50315
Organization: Geologists for Compehensive Energy Development, Gerald Park
Received: 5/4/2012 3:09:06 PM
Commenter1: Gerald Park - , Utah (United States)
Organization1: Geologists for Compehensive Energy Development
Commenter Type: Affiliation Only
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** aziech 5/15/2012 12:00:00 AM
Attachments: OSTS2012D50315.htm (OSTS2012D50315-58957.htm Size = 1 KB)
Submission Text
<([#1 [*11*] Oil Shale extraction methods have advanced well beyond the level upon which your plan is predicated. Rewriting the rules is unnecessary and counterproductive to oil shale development. The work must move forward not inhibited by more layers of regulation. **#1])>**

OSTS2012D50316
Organization: Educator, John Brauner
Received: 5/4/2012 3:10:48 PM
Commenter1: John Brauner - Charlottesville, Virginia 22902 (United States)
Organization1: Educator
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** aziech 5/15/2012 12:00:00 AM
Attachments: OSTS2012D50316.htm (OSTS2012D50316-58959.htm Size = 1 KB)
Submission Text
<([#1 [*10.6.1*] It is imperative that potential environmental problems not be restricted to the physical pipeline, but related also to the requisite functioning of that pipeline. Only if tar sands and shale oil from Canada was used would the pipeline be needed. That source of oil is in itself hazardous to our living because of the great amount of global warming it would create. The pipeline should not be built because it would almost guarantee that negative climate change would occur as a function of its need to operate. The science of climate change must be the major criterion guiding this decision.
#1])>

OSTS2012D50317
Organization: Gordon
Received: 5/4/2012 3:13:55 PM

Commenter1: Gordon - Fruita, Colorado 81521 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** aziech 5/15/2012 12:00:00 AM
Attachments: OSTS2012D50317.htm (OSTS2012D50317-58961.htm Size = 1 KB)
Submission Text
<([#1 [*12.3*] I am greatly concerned about and opposed to the leasing of additional public lands at this time for the development of oil shale and tar sands. It is my understanding that industry already has available to it thousands of acres of public land for this purpose (as well as much private lands). This country needs to get serious about and invest in cleaner, sustainable energy systems, versus fossil fuels!! Thank you
#1])>

OSTS2012D50318
Organization: Outdoor Alliance, Jason Keith
Received: 5/4/2012 3:29:07 PM
Commenter1: Jason Keith - Moab, Utah 84532 (United States)
Organization1: Outdoor Alliance
Commenter Type: Misc. Organization
Classification:
Submission Category: Standard Web Form
Submitted As: Web and E-mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** aziech 5/15/2012 12:00:00 AM
Attachments: OSTS2012D50318.htm (OSTS2012D50318-59029.htm Size = 1 KB)
Outdoor_Alliance_Comments_to_BLM_Oil_Shale_and_Tar_Sands_PEIS_-_050412c_OSTS2012D50318.pdf (OSTS2012D50318-59028.pdf Size = 2013 KB)
Outdoor_Alliance_Secretary Salazar letter_5_4_12.pdf (OSTS2012D50318-59119.pdf Size = 95 KB)
Submission Text
Dear Secretary Salazar:
Outdoor Alliance, a coalition of six national, member-based organizations includes Access Fund, American Canoe Association, American Hiking Society, American Whitewater, International Mountain Bicycling Association, and Winter Wildlands Alliance, represents the interests of the millions of Americans who hike, paddle, climb, mountain bike, ski, and snowshoe on our nation's public lands, waters, and snowscapes. The Bureau of Land Management's Draft Programmatic Environmental Impact Statement and Possible Land Use Plan Amendments for Allocation of Oil Shale and Tar Sands Resources on Lands Administered by the Bureau of Land Management in Colorado, Utah, and Wyoming (DPEIS) involves geographies and outdoor recreational resources that are critically important to our members and the human powered outdoor recreation community at large. Enclosed are our comments to BLM that provide

recommendations as to how BLM can harmonize the important goals of the DPEIS with other sustainable uses of our public lands, especially human powered outdoor recreation.
<([#1 [*2.3.1*] As you know, BLM is considering the potential for oil shale and tar sands development on
2,431,000 acres of public land in Colorado, Wyoming, and Utah, a region which boasts one of the most popular tourist economies in the country thanks to several national parks and iconic landscapes such as the San Rafael Swell, Dirty Devil River, and Desolation Canyon. These are places that many of our members live and many more visit to recreate. While the Outdoor Alliance supports sustainable and responsible energy development on our public lands, the region's longstanding recreational opportunities and associated economic benefits must not be harmed by the development of oil shale or tar sands. Indeed this little known, potentially large scale, extractive experiment on our public lands could put at risk sensitive and over-used water resources and threaten other important values such as clean air, wildlife habitat, cultural resources and undermine the vitality and character of rural communities.
Before the BLM permits any new commercial leases for oil shale or tar sands, research must demonstrate that proven technologies can develop oil resources without harming the resources that currently support stable, long-term economies and healthy communities. Accordingly, Outdoor Alliance supports Alternative 3 as identified in the DPEIS. Alternative 3 appropriately recognizes the need for additional research, development, and demonstration, and takes a precautionary approach toward the expansion of unproven industrial developments that have the potential to seriously undermine popular, world-class outdoor recreation, which is vital to local and regional economies and contributes to the region's quality of life.
You have been a tireless champion for President Obama's America's Great Outdoors Initiative (AGO), which seeks to reconnect Americans to their open spaces in meaningful ways and to also conserve and steward these places. Because the geographies in play with the DPEIS are highly relevant to the goals of AGO we encourage you to take the same into account when refining alternatives for a Final Programmatic EIS for oil shale and tar sands in Wyoming, Colorado, and Utah. We have confidence that a proper balance will be found between carefully and conservatively developing our energy resources on public lands and protecting these landscapes for their experiential, habitat and associated economic value.
#1])>
Thank you for considering our perspectives on this matter.

Dear Reviewers:

Outdoor Alliance, a coalition of six national, member-based organizations includes Access Fund, American Canoe Association, American Hiking Society, American Whitewater, International Mountain Bicycling Association, and Winter Wildlands Alliance, and represents the interests of the millions of Americans who hike, paddle, climb, mountain bike, ski, and snowshoe on our nation's public lands, waters, and snowscapes. These lands include those affected by this Draft Programmatic Environmental Impact Statement and Possible Land Use Plan Amendments for Allocation of Oil Shale and Tar Sands Resources on Lands Administered by the Bureau of Land Management in Colorado, Utah, and Wyoming (DPEIS). Collectively, Outdoor Alliance has

members in all fifty states and a network of almost 1,400 local clubs and advocacy groups across the nation. We prepared these comments to assist the BLM in harmonizing the important goals of the DPEIS with other sustainable uses of our public lands, particularly human-powered outdoor recreation.

The Outdoor Alliance has a significant interest in this DPEIS because our members recreate and live in close proximity to the areas identified for oil shale and tar sands leasing (see below and attached maps).While we certainly support the prudent development of energy resources on our public lands, we are concerned that that the longstanding recreational opportunities and associated economic benefits1 established in this DPEIS planning area could be irreparably harmed by the large-scale development of oil shale or tar sands. This destructive and poorly-understood extractive development experiment could also put at risk sensitive and over-used water resources and threaten other important values such as clean air, wildlife habitat, cultural resources as well as the cultural vitality of rural communities.

The scope of federal public lands that could eventually be leased for oil shale and tar sands development through the Final PEIS (FPEIS) is simply too large. All told, the BLM is considering the potential for oil shale and tar sands development on 2,431,000 acres of public land in Colorado, Wyoming, and Utah, a region which boasts one of the most popular tourist economies in the country thanks to several national parks and iconic landscapes such as the San Rafael Swell, Dirty Devil River, and Desolation Canyon. These unique resources must be 2

conserved for the region to progress towards a diversified and sustainable economy. Before the BLM permits any new commercial leases for oil shale or tar sands, critical research must demonstrate that proven technologies can develop oil resources without harming the resources that currently support stable, long-term economies and healthy communities.

<([#2 [*2.3.1*] Because oil shale and tar sands development remains economically speculative with many as-yet unknown environmental impacts, Outdoor Alliance supports Alternative 3 identified in the DPEIS. Alternative 3 appropriately recognizes the need for additional research, development, and demonstration (RD&D), and takes a precautionary approach toward the expansion of risky and unproven development in an area with existing, world-class outdoor recreation. **#2])>**

COMMENTS

<([#3 [*2.3.1*] The Outdoor Alliance supports the focus of this DPEIS on RD&D of the viability of oil shale and tar sands technology. The lands affected by this planning area are internationally significant recreation areas that sustain robust local economies and promise long-term economic benefits2 from activities such as mountain biking, rock climbing, hiking, canyoneering, and boating. The DPEIS provides a partial listing of the many recreational areas located within an approximately 50-mile radius of the oil shale and tar sands resources to demonstrate the overall importance of recreational land use and the large variety of recreation areas in the region. Many more important recreation areas are located in the DPEIS planning areas and are noted below.

Several important questions remain about the economic viability of producing oil from oil shale

and tar sands, much less whether it can be done without negatively impacting the recreation assets and other important values in the planning area. The 2008 BLM PEIS, which this initiative will update, noted then that:

The current experimental state of the oil shale and tar sands industries does not allow this PEIS to include sufficient specific information or cumulative impact analyses to support future leasing decisions within these allocated lands … [nor] for land use plan amendments to include sufficient site-specific information or cumulative impact analysis to support issuance of a lease.

Much new information has emerged since the BLM's 2008 PEIS that underscores the point that many known problems and uncertain outcomes remain with experimental oil shale and tar sands development. These problems are well-documented in the current DPEIS and other sources and include:

? Production of oil shale and tar sands would necessitate massive mining operations and developed infrastructure causing significant impairment to world-class visual resources and soundscapes. Significant visual resource degradation will negatively affect the rural character of local communities and fundamentally ruin the experience at the many popular recreation areas adjacent to potential leases.

? High energy needs for oil shale and tar sands development requires the consumption of large quantities of scarce water resources and will degrade air quality, causing long term negative impacts to local communities and recreation viewsheds.

? No extraction technology has proven commercially successful for Utah's "oil-wet" tar sands resource.

? Oil shale development creates more than three times the carbon footprint of conventional oil production, contributing significantly to climate change.

? Oil shale development in Colorado, Wyoming, and Utah would require massive water consumption, affecting one of the country's driest regions. This consumption will divert water from traditional agricultural uses, undermine the rural character of many local communities in the planning area, and threaten the ability of rivers and streams to sustain water-based recreation.

Outdoor Alliance supports Alternative 3 which outlines the most conservative and responsible approach to protecting the famous public landscapes and productive recreation economies of Wyoming, Colorado, and Utah. Alternative 3 requires development proponents to demonstrate conclusively—through comprehensive RD&D—that oil shale and tar sands development will not harm the established economies and unique, sensitive resources in the planning area.

We support the direction under Alternative 3 (Oil Shale Research Lands Focus for Oil Shale) which limits any new lands available for commercial oil shale leasing to existing RD&D leases at the time the FPEIS is signed (a total of 32,640 acres available for potential oil shale leasing). Furthermore, Alternative 3 would also analyze foregoing the leasing of tar sands entirely except for one tar sands lease currently under consideration and covering approximately 2,100 acres.

Significantly, Alternative 3 requires subsequent NEPA analyses for any pre-existing lease proposals and reduces the risk of damage from experimental oil shale and tar sands development by over 2.4 million acres. This leaves an appropriate amount of acreage available to research and demonstrate whether these technologies are feasible. **#3])>**

<([#4 [*3.1.1*] **I. RECREATION ASSETS LOCATED IN THE DPEIS PLANNING AREA**

World class recreational opportunities are found throughout DPEIS planning area. These include famous paddling opportunities in Desolation and Gray Canyons on the Green River; climbing, boating, pack-rafting, and canyoneering in the San Rafael Swell; canyoneering and mountain biking in the Tar Sands Triangle; and climbing, mountain biking, and canyoneering in the White Canyon area. Intensive extractive development of the region will irrevocably harm the unique recreational opportunities found only at these places and severely compromise the robust recreation economy that thrives across the PEIS planning area.7 Under any planning alternative, all of these valuable recreation areas, and their associated viewsheds and watersheds, should be excluded from oil shale and tar sands leasing consideration in order to preserve their recreational and scenic qualities and their contributions to local and regional economies.

Given the extensive and varied recreational activities that take place in the areas covered by this DPEIS, and the already extensive amendments being made to ten local Resource Management Plans through this PEIS, the BLM should also consider Extensive Recreation Management Area 4

(ERMA) designations at the locations discussed herein. Appropriate ERMA designations could help to ensure that subsequent NEPA analyses and leasing decisions authorized under this PEIS give due consideration to existing recreational uses and visitor health and safety. Additionally, BLM should evaluate whether to expand Area of Critical Environmental Concern (ACEC) designations in the planning area to protect the fragile watersheds and other sensitive resources that play a central role in many of the recreational activities that occur throughout this vast area.

A. Tavaputs Plateau (Roan Cliffs/Book Cliffs) – Potential Oil Shale Development Area

? Paddling on the Desolation and Gray Canyons of the Green River

The Green River through Desolation and Gray Canyons is a popular multiday float trip, highlighted by gentle whitewater, idyllic beach camping, spectacular scenery, and compelling historic landmarks. The Utah Preferred Leasing Footprint for oil shale with impact the famous and unique Desolation and Gray Canyons. An enormous area immediately upstream on both the Green and White Rivers from this remote, world-famous area could be available for leasing under the BLM's preferred Alternative 2(b) in the DPEIS. Large scale oil shale development in this area would cause severe water overconsumption issues and water quality and air quality degradation, affecting everything downstream on the Green and Colorado Rivers. Additionally, the Wyoming Preferred Leasing Footprint is bisected by the Green River and lies entirely within its drainage. Negative impacts to water quality and availability must not be permitted to imperil the recreational value of the peerless resources downstream, including the commonly floated sections of the Green River between Flaming Gorge and Lodore; the Gates of Lodore section;

and Desolation and Gray Canyons. The scenic and fragile Desolation and Gray Canyons attract large numbers of private boaters and commercial clientele. This highly valued public use and commercial activity will be lost if experimental oil shale development impairs water quantity and quality in this world-class recreational resource.

? Paddling on the White River (Colorado and Utah)

The 100-mile stretch on the White River between Rangely, Colorado and the Green River near the head of Desolation Canyon is valued by boaters for its high desert scenery, geology, historic resources, wildlife, hiking, and solitude.8 Some have called the White River above Desolation Canyon the best canoeing in Utah. Many streams within the DPEIS's Colorado Preferred Leasing Foot print are direct tributaries to the White River. All of the concerns regarding Utah Preferred Leasing Footprint apply to concerns with experimental oil shale development in the Colorado Preferred Leasing Footprint because impacts will affect much of the same river basin.

? Paddling on the Yampa River (Colorado and Utah)

The Yampa is one of the country's most classic multi-day whitewater float trips and is popular with commercial outfitters and private boaters. Most paddlers spend three to five days floating the Yampa and Green Rivers through Echo Park and into Dinosaur National Monument. Paddlers put in near the east edge of Dinosaur National Park and float more than 70 miles to the most common takeout at Split Mountain Campground near Vernal, Utah. Through this section, 5

paddlers enjoy spectacular scenery and gentle whitewater. The canyon contains pictographs, petroglyphs, and cliff ruins from multiple cultures, and the canyon is home to Peregrine Falcons, Bald Eagles, Colorado Pikeminnow, and Razorback Sucker. The canyon is believed to be the last remaining breeding grounds for the Colorado Squawfish, and the Yampa is the longest free-flowing river remaining in the Colorado Basin. The Wyoming Preferred Leasing Footprint encompasses streams that are direct tributaries to the Yampa River. This highly valued public use and commercial activity9 will be lost if experimental oil shale development impairs the water quantity and quality in the Yampa River basin.

B. San Rafael Swell Special Tar Sand Areas

The PEIS states that "in situ" mining methods would be the preferred methods of production for the San Rafael Swell Special Tar Sands Area because the overburden is too great for recovery of the bitumen by surface mining. We anticipate that visits by climbers, campers, and hikers (and their economic contributions to local and regional economies) would plummet if a large-scale tar sands leasing area is developed. The FEIS efforts in the region must ensure RD&D proving that tar sands development causes no water quality or quantity impacts from "in situ" mining methods that could affect the world class boating and canyoneering routes in the San Rafael River and Muddy Creek tributaries to the Dirty Devil River. Likewise, the PEIS must ensure infrastructure and associated industrial machinery does not degrade the world class scenery in this region, which is very popular with climbers and frequented by hikers, river runners, and mountain bikers. The following recreation resources are among those found in the larger San Rafael Swell area:

? Climbing: San Rafael Swell North

The San Rafael Swell is a large anticline that is split in two by Interstate 70. Much of the documented climbing north of I-70 is concentrated within a few miles of the BLM campground at the junction of Cottonwood Wash Road and the Mexican Mountain Road. Climbing areas in the north San Rafael Swell area include Assembly Hall Peak, Bottleneck Peak, Dylan Wall, Eagle Canyon, Head of Sinbad North, Lower Buckhorn Wash, Pine Canyon, Tiki Tower, the Weasel Formation, and Window Blind Peak, among others.10 The largest concentration of routes in this northern section is the Dylan Wall, two miles east of the campground on the north side of the river. This popular climbing area, popular partly because of its convenience to Salt Lake City, is valued for its challenging climbs, expansive views, and sense of seclusion. Climbers at San Rafael Swell North would also look directly into a significant Special Tar Sands Area (STSA) Preferred Leasing Footprint where the viewshed, soundscape, and air quality would be significantly and possibly permanently degraded.

? Climbing: San Rafael Swell South

The San Rafael Swell South area also lies within a STSA Preferred Leasing Footprint. This area includes climbing areas such as Back of the Reef, Eastern Reef Slabs and Walls, Factory Butte, Head of Sinbad South, Little Spotted Wolf Canyon, San Rafael Knob, Swaseyland, Upper Muddy Creek, and Viewfinder Towers.11 The southern San Rafael Swell is a huge area with big slabs on the San Rafael Reef, isolated towers and domes, and long, large walls. Currently there are well over a hundred routes in this area with potential for many more.

? Paddling on the Escalante River, Escalante to Lake Powell

The Escalante River downstream from the town of Escalante to Lake Powell has been described as “the most impressive 73 miles of creek in all of Utah.” Often a trip of seven days or more, the water quality of this pristine, one-of-a-kind drainage must be protected from impairment by mining activity at the Circle Cliffs site, part of the identified Special Tar Sand Areas.

? Paddling on the San Rafael River, Fuller Bottom to San Rafael Campground (Little Grand Canyon)

The San Rafael Swell STSA Preferred Leasing area is also likely to negatively affect the water quantity and quality of the San Rafael River, including the popular pack rafting and kayaking adventure known as the Little Grand Canyon. This upper stretch of the San Rafael River is attractive to paddlers wanting a relatively easy float through a fantastic canyon offering outstanding camping, spectacular side hikes, and fascinating pictographs. Negative impacts to the San Rafael River from experimental tar sands development will also affect the popular Dirty Devil River downstream.

? Paddling and Canyoneering on the San Rafael River, Bridge at San Rafael Campground to I-70 (Black Boxes 1 & 2)

The Black Boxes section of the San Rafael cuts through an amazing canyon that provides excellent exposure to the geology of the San Rafael Swell. Typically run in two days, the Black Boxes section of the San Rafael is one of the highlights of whitewater paddling in the Southwest, featuring spectacular scenery with challenging, accessible, and intermediate-to-advanced whitewater. As with many runs in the Southwest, finding sufficient flow can be a challenge, and any chosen alternative with regard to resource development must ensure maintenance of water levels necessary for recreational activity in the smaller watersheds throughout the areas covered by this PEIS such as the San Rafael River.

? Boating and Canyoneering Muddy Creek

Muddy Creek, another important tributary to the Dirty Devil River, has been described as "the quintessential beginner slot canyon run" because it provides a rare opportunity where novice kayakers and rafters can experience a world class canyoneering float trip of as long as seventy-two miles through a superlative landscape. Most put in off of I-70, traveling to a takeout near the town of Hanksville, Utah. Any permitted activity in the San Rafael Swell area should ensure continued water quantity and quality for this spectacular river.

? Hiking and Canyoneering in the San Rafael Swell

Several hiking and canyoneering areas are popular in the San Rafael Swell, including Devils Canyon, Eagle Canyon, Upper San Rafael River Gorge, the Black Boxes, Swazy's Leap, Black Dragon Canyon, Lower San Rafael River, the San Rafael Reef, Eardley Canyon, Straight Wash, Crack and Chute Canyons, Bell and Little Wild Horse Canyons.12

? Mountain Biking in the San Rafael Swell

Mountain Biking in this area is popular at 5 Miles of Hell, Black Dragon Canyon, Buckhorn Wash, Good Water Rim Trail, June's Bottom Trail, Nefertiti Trail, Bull Bottom Trail, Horseshoe Bend, Temple Mountain, Three Fingers Canyon, and The Wikiup.13 These trails are used for two annual mountain bike festivals sponsored by the Mecca Mountain Bike Club in Emery County. The festivals are also supported by Decker's Bicycle shop in Price. Both participants in the festivals and revenues to the bikes shop have climbed steadily since the inception of the festivals. As the areas reputation for backcountry cycling opportunities grows, visitation from around the country increases. If the pristine nature of the area is compromised, visitors will choose other locations.

C. Tar Sand Triangle - Special Tar Sand Areas

The PEIS notes that the "Tar Sand Triangle deposit may be technically suitable for surface mining; however, the remoteness of the area and other considerations could limit this potential." It is the remoteness of this area that attracts hikers, mountain bikers, climbers, and paddlers along the Dirty Devil River. Surface mining, especially given the uncertainties of this area's economic potential for tar sands, indicates that the BLM should not allow any tar sands leases in this area in order to ensure that the remote and unique character is maintained. The following are among the recreational attractions located in or potentially affected by tar sands development of the Tar

Sands Triangle.

? Paddling on the Dirty Devil River

The Dirty Devil, from its beginning at the confluence of the Fremont River and Muddy Creek to a takeout at Lake Powell, offers a wilderness float trip with fantastic scenery and side hikes. Because much of the water from the Fremont River and Muddy Creeks is withdrawn for agricultural and domestic use, leaving the Dirty Devil largely dependent on flows from side streams along its length, this first-class, seventy-five mile, multi-day float trip is exceedingly vulnerable to disturbances in water quantity and quality stemming from mining activity in the Tar Sands Triangle area. The FEIS should ensure no water quality or quantity impacts to the sensitive region from experimental tar sands development.

? Hiking and Canyoneering in the Tar Sands Triangle: Happy Canyon and Environs

Happy Canyon is a spectacular and remote canyon south of Robbers Roost Country. A major tributary to the Dirty Devil River, Happy Canyon is a very large drainage basin and offers spectacular hiking and technical canyoneering.14

D. White Canyon - Special Tar Sand Areas

The DPEIS notes that the lack of site-specific data precludes any consideration of mining methods for the White Canyon deposit. The data available on the quality of the deposit suggest that it is not of commercial grade because it may be too heavily jointed for in situ methods, and the heavy overburden appears to be unfavorable for surface mining.15 Because of this uncertainty about the viability of mining tar sands and the following exceptional and popular recreation resources in this area, under any planning alternative the BLM should remove the White Canyon area from consideration for tar sands leasing

? Canyoneering at White Canyon: Lower White Canyon (Black Hole)

White Canyon is a spectacular slot canyoneering adventure with 400-foot Cedar Mesa sandstone walls and required bouldering and swimming pools. The Black Hole offers one of the longest and coolest swims of the Colorado Plateau and most use a rope and require advanced route-finding skills.16

? Climbing: Jacob's Chair

Jacob's Chair, also in the White Canyon STSA, is a prominent Wingate Sandstone landmark and climbing destination just north of Fry and White Canyons. Jacob's Chair was first climbed in the 1970s and climbers still go here and the neighboring "Cheesebox" for a remote wilderness climbing experience.17

#4])>

III. ADDITIONAL ISSUES THAT MUST BE ADDRESSED IN THE FINAL PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT

<([#5 [*1.5*] In addition to analyzing socio-economic impacts such as whether the recreation resources and the associated economy of the region will be threatened by these developments, the BLM should include in the Final PEIS language that addresses the following:

REQUIRED NEPA PROCESSES SUBSEQUENT TO THE FEIS

Because the BLM will defer NEPA analyses on individual development proposals until specific leases are considered, this FPEIS should define the scope of these NEPA studies, including how it will analyze cumulative impacts and define mitigation actions. Affects to the regional recreation economy should be addressed in a cumulative fashion. **#5])>**

<([#6 [*3.4.1*] In addition to analyzing socio-economic impacts such as whether the recreation resources and the associated economy of the region will be threatened by these developments, the BLM should include in the Final PEIS language that addresses the following:

WATER DEMAND AND QUALITY

We are encouraged that the BLM through this DPEIS seeks to gain a clearer understanding of the implications of development of oil shale for water quality and quantity. These impacts are particularly significant to those local communities that rely on these water sources and regarding those rivers where the public recreates in the PEIS planning area. The State of Utah has noted that limited quantities of water are available for new energy development and that much of Utah is already closed to new consumptive appropriations. "Given Utah's population growth and projected economic growth over the next decade, the possibility of increased drought, and with limited new water resources available, water consumption of energy resources should be given careful consideration."18 Accordingly, this FPEIS should require a rigorous analysis of the impacts of utilizing water for oil shale and tar sands on local communities (especially municipal, agricultural, and recreational needs), in particular accounting for existing and prospective water demands and water rights. The FPEIS should also require adequate research that documents impacts to water quality and how any proposed project would avoid degrading water quality. Recreational users will not be interested in visiting areas with water quality concerns; private boaters, commercial outfitters, and dependent local economies will all suffer from degraded water quantity and quality.
#6])>

<([#7 [*3.1.1*] In addition to analyzing socio-economic impacts such as whether the recreation resources and the associated economy of the region will be threatened by these developments, the BLM should include in the Final PEIS language that addresses the following:

WILD AND SCENIC RIVERS PROTECTION

The Outdoor Alliance supports management proposals common to all DPEIS alternatives that all areas eligible for Wild and Scenic River (WSR) designation be protected from oil shale and tar sands development.19 Per the BLM Manual, the Bureau "shall afford protective management to all eligible river segments as necessary to ensure that the existing qualities upon which their eligibility is based are not degraded."20

Given the uncertainty surrounding potential impacts from prospective resource development in the planning area, the FPEIS should address protections for eligible river segments in a basin-wide fashion. Given the potential impacts of oil shale and tar sands development on water quantity and quality, including effects to groundwater resources, protecting only a 1/4 mile buffer surrounding eligible WSR segments is simply inadequate to address the nature of potential threats. Eligible rivers identified above in the DPEIS planning area include the Dirty Devil River, Escalante River, Fremont River, Green River, Muddy Creek, San Rafael River, White Canyon Creek, and the White River. At minimum, BLM, through the PEIS process, should demonstrate conclusively that any decision regarding buffer protections is adequate to ensure that these eligible river segments are not degraded. **#7])>**

<([#8 [*3.5.4*] In addition to analyzing socio-economic impacts such as whether the recreation resources and the associated economy of the region will be threatened by these developments, the BLM should include in the Final PEIS language that addresses the following:

AIR QUALITY

The DPEIS fails to adequately analyze air quality impacts. Air quality is already compromised in Utah, Colorado, and Wyoming from oil and gas development, and oil shale and tar sands development would exacerbate air quality degradation in the region. Because a recreation economy cannot thrive or be sustained in an environment where air quality is degraded (not to mention threats to the health of local communities), the FPEIS should ensure the completion of 10

adequate research documenting any impacts to air quality from of oil shale and tar sands development and how lessees will be required to prevent and mitigate impacts from any development if leases are considered by the BLM.
#8])>
<([#9 [*3.5.4*] In addition to analyzing socio-economic impacts such as whether the recreation resources and the associated economy of the region will be threatened by these developments, the BLM should include in the Final PEIS language that addresses the following:

VISUAL RESOURCES

Oil shale and tar sands development will degrade already-affected Class 1 and Class 2 visual resource areas. In Colorado, Utah, and Wyoming, the BLM has concluded that oil and gas development would further affect Class 1 air-sheds and that oil shale and tar sands development activities will make matters worse at these locations, both in terms of on-the-ground disturbance and emissions from new power plants needed to support increased industrial activity. The FPEIS should address this problem by requiring research that demonstrates the impact industrial development would have on the air quality of the region.
#9])>
* * *

Environmental protection and the conservation of key recreation areas serve as an important

economic driver in Utah, Colorado, and Wyoming. More diversified recreation economies have taken the place of areas that were formerly dependent on resource extraction.21 Furthermore the America's Great Outdoors Initiative specifically recognizes the economic value in protecting these lands for recreation.22 It is critical that this initiative be mindful of the extremely valuable recreation resources found in the PEIS planning area and that the FEIS include restrictions so that any future oil shale and tar sands development does not irreparably harm recreation resources and their viewsheds. We look forward to being included in this process, and welcome additional consultation or opportunities for public comment related to this important issue.

Best regards,

OSTS2012D50319
Organization: Royal Laybourn
Received: 5/4/2012 3:38:35 PM
Commenter1: Royal Laybourn - Basalt, Colorado 81621 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/14/2012 12:00:00 AM
Attachments: OSTS2012D50319.htm (OSTS2012D50319-58963.htm Size = 1 KB)
Submission Text
<([#1 [*12*] My family and I recommend that the BLM refuse to leasing of public lands for so called "oil Shale " development. Even for research purposes. There is ample research that this is economically and enviromentally unfeasable. It is irresponsible to waste resources both in terms of degradation of public lands and goverment services to continue to promote this poor energy source. **#1])>** Thank You Royal Laybourn

OSTS2012D50320
Organization: Friends of NW Colorado, Friends of NW Colorado
Received: 5/4/2012 3:43:43 PM
Commenter1: Friends of NW Colorado - Craig, Colorado 81625 (United States)
Organization1: Friends of NW Colorado
Commenter Type: Misc. Organization
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** aziech 5/15/2012 12:00:00 AM
Attachments: OSTS2012D50320.htm (OSTS2012D50320-59032.htm Size = 1 KB)
FoNWCoCommentLetterOilShalePEIS_2012_May_OSTS2012D50320.doc (OSTS2012D50320-59031.doc Size = 57 KB)
Submission Text

Dear Reviewers:

We the Friends of Northwest Colorado a community group representing citizens concerned about the long term economic and environmental sustainability of the communities of Northwest Colorado. The mission of the members of the Friends of Northwest Colorado (hereafter known as the "organization" or the "membership") is to protect, preserve and conserve our unique local natural resources so that all generations, present and future can experience, enjoy, and be nurtured by them. Additionally, our mission is to educate and to be a voice for people who believe in the inherent value of wildlife, water, air, wilderness, and the natural landscape. We appreciate the opportunity to comment on the Draft Programmatic Environmental Impact Statement for Oil Shale and Tar Sands (DPEIS or the plan).

<([#1 [*1.5*] It is our collective view that this draft environmental impact statement is woefully inadequate. It does not let the reader fully understand what the impacts of oil shale development will actually be. As written, we say to the BLM, "go back and do a complete environmental assessment of the impacts. Where you don't have data, tell the reader you do not have data."
#1])>
<([#2 [*2.5*] In light of the lack of detail in the PEIS, we would like to see the BLM add and then adopt a NO ACTION Alternative to the Final PEIS. In the following pages we will argue that a NO ACTION Alternative 2B best supports

· the BLM's multi-use mission,

· the necessary time for industry to prove technologies that would make extraction of the resource commercially viable,

· allowing communities to adjust to growth already being experienced from oil and natural gas development,

· allowing time for mitigation of socio-economic hardships likely to results from combined natural gas and oil shale/tar sands development,

· reflection of where development fits within the public lands framework

· by providing the public a better chance of receiving fair compensation for the use of its land and purchase of the resource and

· protections to our biological and cultural resources.
#2])> <([#3 [*8*] **PEIS does NOT support the BLM Multi-Use Mission**

The PEIS on Oil Shale and Tar Sands does not support BLM's multi-use mission. To quote from the plan:
· *Shale development would likely preclude other mineral development activities on leased lands. PEIS*
· *Temporary or long-term reductions in authorized grazing use may be necessary because of loss of a portion of the forage base. PEIS*

· Commercial activities are largely incompatible with recreational land use…. Including hiking, biking, fishing, bird watching, OHV use, and camping. PEIS
· Direct & Indirect impacts would include: Industrialization of the landscape; declines in the value of private ranches/residences adjacent to oil shale developments or rights of way because of perceived noise, human health, and aesthetic concerns; noise and visual impacts; increased traffic; increased access to previously remote zones; conversion of land in and around local communities from existing agricultural, open space, or other uses to provide services and housing for employees and families that move to the region in support of shale development; loss of available lands to new industrial structures. PEIS

Agency regulations and federal law require that the BLM manage its lands for multiple uses, yet the agency admits that oil shale development will displace every other public use of public land to benefit private companies. A No Action Alternative would is more in keeping with the federally mandated mission of the BLM.
#3])>
<([#4 [*9.7*] **Commercial Viability is NOT Feasible**

The PEIS had been developed before viable technology for the commercial development of this resource. To quote from industry sources,

"For decades, energy companies have attempted to unlock the large, domestic oil shale resources of northwestern Colorado's Piceance (pronounced "Pee-ance") Basin. For more than a quarter of a century, Shell has conducted laboratory and field research on its promising, In situ (in-ground) Conversion Process to recover oil and gas. Shell's research, thus far, has shown great promise. We are committed to doing oil shale the right way through a responsible and thorough research program. This research program will answer some of the few remaining questions to determine if oil shale can responsibly increase domestic energy supplies. We hope to make a decision on a commercial project early in the next decade" (http://www.shell.com/home/Framework?siteId=us-en&FC2=&FC3=/us-en/html/iwgen/shell_for_businesses/exploration_production_shared/mahogany_shared/dir_mahogany.html, visited March 17, 2008).

Cheveron's RD&D will not be completed until 2016, according to the Oil Shale Research, Development & Demonstration Project Plan of Operations submitted to the BLM in 2/15/2006. EGL is between 3-10 years out from production depending upon RD&D (http://www.egloilshale.com/). It will be years before companies developing oil shale technology will know if it is technologically or economically feasible.

Since oil shale/tar sands development appears to be many years down the road, and the requirements for water and energy appear to make cost-effective development most unfeasible, we fail to see why there is such a rush to lease this land. It raises strong suspicions of ulterior motives

We must know more about the technologies that would be used in extracting energy from our particular types of Tar Sands. We must ensure that the Oil Shale RD&D process has allowed us

to assess the impacts of experimental extraction technologies on energy consumption and water use before proceeding with a plan for wide-scale commercialization. A NO ACTION alternative would provide the necessary time for industry to prove technologies that would make extraction of the resource commercially viable.
#4])>

<([#5 [*3.10.3*] **Human Impacts of Proposed Development**

The development envisioned by the study would come at a time when our land is already experiencing severe pressure from the current energy boom and significant population growth across the West. Oil Shale/Tar Sands development will create additional strain. To quote from the plan:
· *"The number of new residents lured by commercial development of oil shale will substantially change demographics and social fabric of rural communities. Quality of life will be changed. Transition will occur away from traditional agricultural way of life. Small isolated, close-knit, homogeneous communities with a strong orientation toward personal and family relationships will become more urban, with increasing cultural and ethnic diversity and increasing dependence on formal social relationships within the community". PEIS*
· *Because of the relative economic importance of oil shale developments in small rural economies and the lack of available local labor and economic infrastructure, large-scale oil shale developments are likely to cause a large influx of temporary population. PEIS*
· *Oil Shale development will likely steal jobs from the service industry. PEIS*
· *Local communities may be unable to absorb new residents. PEIS*
· *Colorado impacts will include the loss of recreation -- hunting, fishing and tourism income -- for example: 10% reduction in recreation employment would be a loss of 1,415 jobs and $18.3 million lost in income, w/ 20% reduction 2,830 jobs would be lost and $36.5 million lost in income. PEIS.*
· *Property value impacts could be substantial as a result of deterioration in aesthetic quality, increases in noise, real or perceived health effects, congestion, or social disruption. PEIS* **#5])>**
<([#6 [*6.2.1*] The *PEIS* also states an additional 2,400 megawatts of electrical energy will be needed when commercial levels of development are reached. It states that new, coal fired generation plants will be built. While no specifics are given on siting, some general questions are: will any new coal-fired plant must utilize the very latest low impact, low carbon footprint, technology. Where will the coal come from? A new local mine? New rail line or coal transport? Who will build and operate these new facilities?
#6])>
<([#7 [*1.5*] The PEIS has the BLM finding itself again in favor of development of the public lands, adding to its history of financing development, and promising to make development compliant with this country's environmental protection laws. The BLM will never find a new energy development plan in non-compliance. Never. And we the public ask why? We the public have known why for some time. Six long standing reasons follow, and all must be investigated and brought into the most basic public democratic reasoning of lawfulness and accountability in the revised PEIS.

1. A review, has been over looked, of the Congressional debate and law which established the

federal public lands system, and so has research been over looked into whether such lands have ever yet been truly public and whether the Congress has ever yet investigated the mandate that such land be preserved in a condition fit for the time when the public will finally access them for sustenance of healthy economic and cultural survival.

2. The ability of the Federal Government and its land agency the BLM to thus far avoid public knowledge and understanding of the full factual picture of how energy development of the public lands subsurface fuels and minerals fragments the land's habitat – from its near paper-thin soil crust to its largest ungulates, carnivores, birds of prey – until its natural systems of balance and rebalance are instead now excessive, and relenting adaptations and lost ability of adaptations resulting in closer and closer conditions of ecosystem collapse.

3. The ability of the Federal Government, its land management agency the BLM and its corporate users of our public lands nearly free resources to bury from public sight or weaken with false science or fears of American economic regression the economic facts in an as-yet unchallenged history of accessing the public's resources for private wealth and power. This burying from public knowledge of the stages of accessing eventually all known public lands profitable resources for private gain includes the following: persistent de-regulation of corporate behavior – both physical on-ground and market behavior; subsidies from the public's taxes to underwrite R&D of resource extraction; and an assumption that the public will never grasp the economics of the corporate free market system that either doubts itself or privately manipulates its own system to guarantee itself greater and greater profits – profits not from its system's adequate rational and success, but from the public's collective resources.

4. The ability of the Federal Government and its BLM agency to cover the fact and knowledge that the public's land is being privatized, so that they will less and less have to be made accountable for their health and sustainability until the eventual time in our public history when they – the public's land – are handed back over to the public in near useless condition.

5. The ability of the Federal Government and its land management agency the BLM to inhibit thus far the actualization, in dollar figures, for the public of the loss in market value of the public land's sustainable, renewable resources.

6. The ability now, in the current systemic financial uncertainty, of the Federal Government to confer the exploiting and marketing of the public lands remaining resources as collateral to the very capitalizing and marketing banking industries that have so thoroughly amassed the public's welfare, labor, taxes, and resources for private gain.
#7])>

<([#8 [*2.5*] It is difficult to understand why the BLM is rushing toward a commercial leasing program without even knowing if oil shale development is feasible economically. In light of that, it's even more difficult to understand why the BLM seems so anxious to give oil shale development priority over other uses on our public lands as shale development would likely preclude all other activity, including natural gas development in priority areas. A No Action Alternative allows communities to adjust to growth already being experienced from oil and natural gas development. A No Action Alternative would allow communities to mitigate socio-

economic hardships likely to results from combined natural gas and oil shale/tar sands development. And a No Action Alternative would allow full review and community discussion of the place of development on public lands.
#8])>

<([#14 [*4.2*] **Environmental Impacts of Development**
This plan proposes development in some of the best hunting, fishing, and recreation areas in Colorado, Wyoming, and Utah. We can and should protect these areas from adjacent impacts such as diminished air quality and habitat fragmentation. The cumulative impact of this massive development will negatively affect our air, water, wildlife and communities in Colorado, Wyoming, and Utah. To quote from the plan:
· *In Colorado, 10,789.7 acres of Areas of Critical Environmental Concern (ACEC's) are included in areas designated for commercial oil shale leasing. PEIS*
· *Direct and indirect impacts of commercial oil shale development will include: wildlife displacement and mortality (including threatened and endangered species), industrial noise across the landscape, visual transformation of the landscape, increased traffic, new roads, increased access to currently remote areas, industrialization of agricultural and undeveloped landscapes, sprawl, as agricultural and open lands near existing communities are converted to new housing and new development necessary to support increasing populations, loss of available land for other new (clean?) industries, loss of threatened/endangered plant species, new rights of way stripped of and maintained w/out major vegetation, decreased property values for adjacent landowners due to noise human health, and aesthetic concerns, degradation or loss of cultural sites. PEIS*
· *"There is a potential for commercial oil shale development projects to adversely affect most of the threatened, endangered, and sensitive species that occur in the counties where development could occur."*
· *Additional likely impacts include:*
o *Habitat loss, alteration, fragmentation, and resulting changes in habitat use*
o *Disbursement and displacement – habitat modification, noise, fire, lights, etc.*
o *Mortality – collisions with structures and vehicles, changes in predator populations, and chronic or acute toxicity from herbicides, hydrocarbons, or other contaminants*

o *Increased accessibility – humans infiltration of previously remote habitat DPEIS 4.66* **#14])>**
<([#9 [*3.4.1*] Water
Water is finite. Almost all of the water in the Colorado River Upper Basin is appropriated by the 1922 Interstate Colorado River Compact. In addition, the Navajo Nation is asserting a claim for up to 800,000 acre feet. It is our view that they will prevail. In the State of Colorado, where will the oil shale developers obtain enough senior water rights to develop oil shale under present technology? Ranchers and municipalities own most of the senior rights. The municipalities are not going to sell their water rights. If ranchers sell their rights, they are out of business. How will the oil shale developers reclaim the water they have used? This must be a high priority to render the used, polluted, water potable so that this water can be returned to the river from where it came.
#9])> <([#10 [*3.7.4.1*] Fish and Wildlife
Our first concern is five species of fish that are already listed on the Endangered Species list and

the one species awaiting listing. The species listed as Endangered are the pike minnow, razorback sucker, boney tail sucker and the humpback chub. The Colorado River Cutthroat Trout (CRCT) has been petitioned for listing. The Endangered Species Act of 1973 states that it is unlawful to modify or remove habitat of listed species. Water from warm water streams, such as the White River, are within the range of the 4 species listed as Endangered. Streams, such as Trapper's Creek, contain viable populations of CRCT.
#10])> <([#11 [*3.7.5.1*] Fish and Wildlife
Our second concern is disruption, or loss, of sagebrush, *Artimisia tridentata,* subsp. This loss will have adverse effects on greater sage grouse, *Centrocercus urophasianus*, which is under a federal court order for the Fish and Wildlife Service to reevaluate for listing on the ESL. If there is substantial removal of sage grouse habitat as would be the case in the current plan then, listing of this species would probably be one end result.
#11])> <([#12 [*3.7.3.4*] [*3.7.3.6*] Fish and Wildlife
Another concern is the impact to our big game populations. Deer and elk were prevalent in the Rifle, CO, area prior to oil and gas development. Hunting is now a sport of the past in that area, due to, in part, the development. Should development occur, big game loss could occur simply by drinking unprotected, polluted water. These impacts upon the land are just unacceptable. We urge the BLM to consider these and the likely cumulative effects of this industry on wildlife habitat and protected areas across the West.
#12])>
Conclusion

<([#13 [*2.5*] After more than $23 billion spent on research, oil shale technology is still experimental. Yet the Bush and Obama administration are rushing to create a massive federally driven oil shale development program before anyone knows if the technology will work, let alone what cost it will exact on our air, water, wildlife and communities. The government should force industry to prove they can develop oil shale without wrecking the environment through research-scale projects before anyone talks about commercial leasing or production. There are just too many unknowns in the PEIS. It is ill-prepared and inconclusive. As presented, we must conclude that the ***No Action*** alternative be the only alternative that is reasonable and prudent. Western Colorado has already suffered through decade-long economic calamity prompted by the collapse of the last oil shale scheme on Black Sunday. The administration's unseemly haste to lock in a massive oil shale program before anyone knows if it works shows a negligent disregard for western Coloradans and the state's future.
#13])>
Sincerely On behalf of Friends of Northwest Colorado and Citizens of the West,

Jane & Larry Yazzie Genevieve Yazzie

PO Box 884 PO Box 884

Craig, CO 81626 Craig, CO 81625

David Morris Monty Robertson

1083 Colorado St 350 Clay Ave

Craig Co 81625 Craig CO 81625

OSTS2012D50321
Organization: Elected officials in Tri-state area
Received: 5/4/2012 3:51:34 PM
Commenter1: - Grand Junction, Colorado 81501 (United States)
Organization1: Elected officials in Tri-state area
Commenter Type: Elected Official
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** aziech 5/15/2012 12:00:00 AM
Attachments: OSTS2012D50321.htm (OSTS2012D50321-59035.htm Size = 1 KB)
LEO_oil_shale__tar_sands_letter_OSTS2012D50321.pdf (OSTS2012D50321-59034.pdf Size = 273 KB)
Submission Text
Dear Bureau of Land Management,
<([#1 [*2.2.1*]
We are writing to express our support for the approach that is being taken in the Bureau of Land Management's recently released Draft Programmatic EIS (PEIS) for oil shale and tar sands, which defines the terms of potential future leasing of oil shale and tar sands deposits on federal lands in Colorado, Utah and Wyoming. As elected officials in these states, we believe it is essential that the final plan ensures that key questions are answered before opening public land to commercial development. Given that a commercial industry does not yet exist, it is smart to require that research and development of oil shale and tar sands technologies be completed and the impacts analyzed before moving forward with a commercial leasing program. The final plan should reflect a common sense approach that puts the prosperity of our region first.
Our public lands are enormous economic drivers in the Intermountain West. Tourism, recreation, hunting and fishing, ranching, and other industries provide billions of dollars of revenue and hundreds of thousands jobs throughout the three-state region. Our public lands also contain the headwaters to critical western water supplies, the economic backbone of our economies. The BLM has acknowledged in the Draft PEIS that the potential impacts of development on communities, water and air are largely unknown but potentially significant. We do not know, for instance, if either industry would produce significant revenues, but we do know that development would divert critical water resources from existing and future uses and require trade-offs that may be substantial, but which we cannot yet assess. We thus strongly urge the BLM to prioritize research and development in the final PEIS, to ensure that impacts are analyzed and we can make smart decisions about commercial leasing.
These lands are our heritage, and for many, our livelihoods. As representatives of communities across the three-state region, we have a responsibility to work to protect those values. It is critical that we know more about the impacts of oil shale and tar sands development before putting

communities, water and air at risk.
#1])>

OSTS2012D50322
Organization: David Rodgers
Received: 5/4/2012 3:56:58 PM
Commenter1: David Rodgers - Santa Clarita, California 91387 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/16/2012 12:00:00 AM
Attachments: OSTS2012D50322.htm (OSTS2012D50322-58965.htm Size = 4 KB)
Submission Text
Dear Bureau of Land Management, **<([#1** [*2.3.1*] I am writing to submit comments on the Oil Shale and Tar Sands Draft Programmatic Environmental Impact Statement (PEIS). I am very concerned about the possible impacts of oil shale development on Glen Canyon, Grand Canyon, and the Colorado River. I believe that we need more research on the potential impacts of oil shale and tar sand development before allowing leasing of our public lands for this use. Such development could have serious and irreversible impacts, including on water supplies and quality, air quality, native ecosystems and wildlife, and recreational uses. I strongly urge you to choose Alternative 3, Research Only, as the BLM's Preferred Alternative in the Final PEIS. This is essential to ensure that we have the best possible information before considering opening our natural open spaces and ecosystems to the development of oil shale and tar sand resources. **#1])> <([#2** [*3.4.1*] Here are some of my specific concerns regarding the Draft PEIS: * The Draft Programmatic EIS needs to ensure water quality will not be adversely effected by development of oil shale and tar sand resources. The water usage for oil shale production far outstrips the amount of oil produced, even prior to the refinement process. Water resources in the West are already overused and the effects of climate change and increased population will only add further strain to an already depleted system. **#2])> <([#3** [*3.4.1*] * The Draft Programmatic EIS should be conducted in such a way to address issues of dust, noise, and pollution in the affected areas. Heating oil shale in the ground can contaminate vital groundwater supplies. High salt concentrations in groundwater restricts water available to native plants and is harmful to agricultural production as well. The Colorado River Basin already spends millions of dollars annually on damages caused from high salinity. **#3])> <([#4** [*3.1.1*] * The Draft Programmatic EIS should address the potential encroachment on protected areas and National Parks such as Glen Canyon Recreation Area and Canyonlands National Park. This includes a thorough analysis of the damage to these priceless parks by oil shale and tar sands development. **#4])> <([#5** [*2.3.1*] This EIS should ensure that all alternatives seriously assess the issues outlined above. Considering the present lack of adequate information and the tremendous risks of misguided development, the only reasonable alternative at this point is Alternative 3, Research Only as outlined in the PEIS. **#5])> <([#6** [*3.10.4*] I and my family for years have been visiting and hiking in National Parks, wilderness areas, proposed wilderness areas, primitive areas and national monuments in southern and eastern Utah. We spend money on these trips and help

support the economy of Utah. Oil shale and tar sands development in or near these areas will destroy the various features which attract us and millions of other tourists per year from all over the world. **#6])> <([#7** [*10.6.1*] Further, I and my family own 3 hybrid cars. Our next car will be all electric, and we are moving to solar power generation at our home so that our electric car can be re-charged by solar energy. We are making all these changes because we support the reduction and ultimately the complete cessation of the burning of fossil fuels. Mass extraction of oil from shale and tar sands is a move by our nation in the wrong direction entirely. What will all do when the world runs out of fossil fuels, which is inevitable, and our climate has been irreversibly altered? We must move now to develop clean, renewable sources of energy to meet all our energy needs as quickly as possible. **#7])>** Thank you for the opportunity to comment on the Draft Programmatic EIS. Sincerely, David Rodgers Santa Clarita, Calif.

OSTS2012D50323

Organization: National Wildlife Federation, Kathleen Zimmerman
Received: 5/4/2012 4:06:47 PM
Commenter1: Kathleen Zimmerman - Boulder, Colorado 80303 (United States)
Organization1: National Wildlife Federation
Commenter Type: Environmental Organization
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** aziech 5/16/2012 12:00:00 AM
Attachments: OSTS2012D50323.htm (OSTS2012D50323-59037.htm Size = 1 KB)
SFRED_OSTS_DPEIS_2012_comments_FINAL_OSTS2012D50323.pdf (OSTS2012D50323-59036.pdf Size = 422 KB)

Submission Text

Dear Reviewers:
The following comments are submitted on behalf of Sportsmen for Responsible Energy Development (SFRED) and its founding partners the National Wildlife Federation, the Theodore Roosevelt Conservation Partnership, and Trout Unlimited. In addition, the Wyoming Wildlife Federation and the Colorado Wildlife Federation, also members of the SFRED coalition, join in these comments.
SFRED is a coalition of more than 500 businesses, organizations and individuals dedicated to conserving irreplaceable habitats so future generations can hunt and fish on public lands. The coalition is led by the Theodore Roosevelt Conservation Partnership, Trout Unlimited and the National Wildlife Federation.
As an organization, the National Wildlife Federation (NWF) represents the power and commitment of four million members and supporters joined by affiliated organizations in 48 states and territories. NWF and its affiliates have a long history of working to conserve the wildlife and wild places on federal public lands in the West. Many members of NWF and its affiliates use the lands and resources that could be impacted by oil shale and tar sands extraction (In addition to these comments, NWF joins in those filed by Western Resource Advocates while supporting Preferred Alternative 2(b)).
The Theodore Roosevelt Conservation Partnership is a national non-profit conservation organization that is dedicated to guaranteeing every American places to hunt or fish.

Trout Unlimited is a private, non-profit conservation organization that has more than 150,000 members nationwide dedicated to conserving, protecting, and restoring North America's trout and salmon fisheries and their watersheds. Since 1959, Trout Unlimited (TU) has dedicated staff and volunteers toward the protection of sensitive ecological systems necessary to support robust native and wild trout and salmon populations in their respective ranges. TU recognizes that the value of public lands is unparalleled in providing habitat to coldwater fisheries, drinking water and wildlife habitat. TU's expanding conservation program includes a public lands initiative that recognizes the importance of protecting public lands for the survival and restoration of wildlife and fisheries. TU's public lands initiative is not limited to anglers; TU recognizes that many people who fish also utilize public lands for hunting or wildlife viewing opportunities. TU believes that actions taken on public lands are ultimately reflected in the quality of fish and wildlife habitat and populations.

In the tri-state region where oil shale and tar sands development could occur, TU has over 12,000 members who actively utilize and enjoy the resources of the Upper Colorado River basin, including the White River hydrologic basin in Colorado, the Uinta basin in Utah, and the Green River basin in Wyoming. TU believes the impacts from the development and production of oil shale and tar sands would adversely affect its members, as well as non-members, who hunt, fish, recreate, and do business in and around the Upper Colorado River basin.

The Colorado Wildlife Federation (CWF) is Colorado's oldest statewide wildlife conservation organization, a 501(c)(3) nonprofit whose members consist of hunters, anglers and other wildlife enthusiasts. CWF's mission is to promote the conservation, sound management, and sustainable use and enjoyment of Colorado's wildlife and habitat through education and advocacy. CWF understands that wildlife habitat is critical to conserving Colorado's unique wildlife, hunting and fishing heritage, and wildlife viewing opportunities. These wildlife-related recreation pursuits enrich the well-being of residents and visitors and form a substantial segment of Colorado's economy. CWF's members hunt, fish, and recreate on federal public lands in Colorado and elsewhere in the Rocky Mountain region that could be developed for oil shale or tar sands production.

The Wyoming Wildlife Federation (WWF), established in 1937, is celebrating its 75th anniversary. With a membership of 5,000, WWF is Wyoming's oldest and largest statewide sportsmen/conservation organization. WWF works for hunters, anglers, and other wildlife enthusiasts to protect and enhance habitat, to perpetuate quality hunting and fishing, to protect citizens' right to use public lands and waters, and to promote ethical hunting and fishing. Members of WWF use lands and resources that could be adversely impacted by oil shale and tar sands development.

We thank you for the opportunity to review and provide comment on the *Draft Programmatic Environmental Impact Statement and Possible Land Use Plan Amendments for Allocation of Oil Shale and Tar Sands Resources on Lands Administered by the Bureau of Land Management in Colorado, Utah, and Wyoming (2012DPEIS)*.

<([#1 [*2.2*] Our organizations continue to oppose opening federal public lands for commercial oil shale and

tar sands development. Research must precede any consideration of commercial leasing, and that research must demonstrate that extraction technologies exist that will protect clean air and water, conserve fish and wildlife, and sustain the western economies that depend on those resources. For that reason, we are encouraged to see that under the Preferred Alternative 2(b) identified in the 2012DPEIS, operators will only be able to secure commercial development rights after

fulfilling the terms of a Research, Development and Demonstration (RD&D) lease. By requiring companies to first prove their technologies and assess the impacts to communities, human health, and fish and wildlife, Alternative 2(b) helps ensure that commercial oil shale and tar sands development will only be initiated following a fuller understanding and evaluation of its impacts. Preferred Alternative 2(b) also places off-limits areas containing important environmental and ecological values, including fish and wildlife habitats. This is an important step forward because, while the full impacts of commercial-scale oil shale and tar sands development are not yet understood, we do know that such development, using current technology, is incompatible with conservation of fish and wildlife habitats. All of the current extraction technologies being tested require operators to remove existing vegetation and either mine or re-grade the entire surface of the leased site, completely destroying habitat values. We, therefore, support the determination, reflected in the Preferred Alternative, to exclude oil shale and tar sands development within vital habitats such as crucial winter ranges for big game, breeding habitats for Greater sage-grouse, and native trout streams.

Finally, while Preferred Alternative 2(b) represents a more rational and measured approach to oil shale and tar sands development, we continue to believe that no additional public lands should be devoted to this use until the RD&D leases already issued have produced tangible results and an analysis of their impacts has been conducted. We believe that analysis is critical to the development of standard provisions regarding any conversion of RD&D leases to commercial leases. Alternative 2(b) rests on the proposition that BLM can define the standards and procedures the agency will use in determining whether technologies are appropriate for commercial development. We believe that BLM will be in a better position to do so with whatever information is produced by the existing RD&D leases. **#1])>**

<([#2 [*1.5*] **I. THE LEGAL FRAMEWORK**

A. The National Environmental Policy Act

The National Environmental Policy Act (NEPA) does not specifically address programmatic environmental impact statements (EISs). Council on Environmental Quality (CEQ) regulations at 40 CFR §1502.4(b) refer to EISs for broad actions. However, CEQ regulations and guidance discuss this topic only briefly and in very general terms. Courts, therefore, have played a significant role in fleshing out these concepts over time. While many major unresolved issues remain regarding the precise components of programmatic NEPA documents, there is a legal consensus that these EISs perform at least two important functions. First, programmatic EISs, by taking a broad view avoid segmenting environmental analyses of common concerns by analyzing them in the entire program or suite of related or similar actions. Second, programmatic NEPA documents can also be the most effective tool for addressing cumulative environmental impacts. Unfortunately, the 2012DPEIS cannot perform either of these programmatic functions, particularly with respect to its treatment of the potential fish and wildlife impacts of opening two million acres of public land to oil shale and tar sands development. As BLM itself admits, the 2012DPEIS contains no discussion of the cumulative impacts of the potential loss of these lands to fish and wildlife.

In 2008, when it issued its *Final Oil Shale and Tar Sands Programmatic Environmental Impact Statement* (2008FPEIS), BLM understood that due to the experimental state of both oil shale and tar sands technologies, the agency lacked the necessary information to meet Congress's directive in the Energy Policy Act of 2005 to develop a programmatic environmental impact statement (PEIS) that could support commercial leasing. As the agency acknowledged then:

The BLM originally intended the PEIS to support the amendment of land use plans to

allocate areas open to commercial leasing and development of oil shale and tar sands, ***as well as to support the issuance of such leases***. However, in consultation with the cooperating agencies, it was determined that the analysis to support immediate leasing decisions ***would require making speculative assumptions regarding potential, unproven technologies***, and, consequently, the decision to offer specific parcels for lease was dropped from consideration in the PEIS (2008FPEIS at ES-3 (emphasis added)).
Nevertheless, BLM amended 12 land use plans and made available for leasing more than 2 million acres of public lands. We believe that decision was premature and we applaud BLM's resolution to revisit it.
Unfortunately, in 2012, BLM faces much the same challenge. The technologies are no more advanced than they were in 2008 (2012DPEIS at 1-20). Land use decisions and supporting NEPA analyses made
without the benefit of additional research will continue to suffer from the same fundamental flaws BLM encountered when it issued the 2008FPEIS. The agency cannot make an informed decision to dedicate public lands to commercial oil shale or tar sands development. As the agency admits, it does not yet have sufficient information to conduct a cumulative impacts analysis, one of the cornerstones of NEPA (42 U.S.C. §§ 4321-4370f): "[t]he current experimental state of the oil shale and
tar sands industries does not allow this PEIS to include sufficient specific information or cumulative impact analyses to support future leasing decisions within these allocated lands" (2012DPEIS at 1-2).
We note that, while the 2012DPEIS provides a substantially better selection of alternatives than that which was provided in the 2008FPEIS, it still lacks a substantive analysis and comprehension of the likely impacts to fish and wildlife resources and of the economic value of these resources. However, by requiring companies to complete their research, evaluate the impacts of their extraction technologies, and design effective mitigation measures prior to obtaining a commercial lease, BLM hopefully will have the opportunity to secure good, current, independently-verifiable data to support the agency's land use decisions before large tracts of public land are committed to development. Nevertheless, due to these challenges, the 2012DPEIS remains deficient as a NEPA document. Because of the incomplete state of the technology and the corresponding limitations of this PEIS, subsequent NEPA analyses will be required before any commercial leases are issued, including those that arise from an existing RD&D project. These analyses should include either another PEIS or require lessees to conduct full environmental impact statements (BLM must ensure that any subsequent NEPA documents include a robust examination of landscape-level
cumulative impacts and avoid a piecemeal approach to authorizing this new and potentially destructive use of public
lands). Environmental assessments at the leasing stage would not
sufficiently address the legal and other deficiencies contained in this 2012DPEIS.
Given that BLM must delay a full and complete cumulative impacts analysis, the final PEIS should focus instead on three important components of its oil shale and tar sands program:
1. defining the scope of the subsequent NEPA analysis, including the scope of the cumulative impacts analysis;
2. evaluating any available mitigation actions and directing the adoption of effective mitigation; and
3. establishing terms, including stipulations, of RD&D leases and criteria for conversion of

RD&D projects to commercial development leases.
#2])> <([#3 [*4.1*] 1. Defining the scope of subsequent NEPA
As we noted above, the 2012DPEIS fails to address the cumulative impacts of commercial-scale oil shale and tar sands development on fish and wildlife. In order to do so, subsequent NEPA documents must articulate a reasonably foreseeable development scenario for oil shale and tar sands extraction projects and, at a minimum, address all:
1. activities leading to soil and vegetation disturbance;
2. activities leading to changed habitat structure;
3. activities leading to habitat fragmentation; and
4. activities leading to loss of water quantity or quality (Subsequent NEPA analyses must fully address climate changes, including shifts in the vitality and habitat range of fish and wildlife species. *See, e.g.,* Greater sage-grouse discussion *infra* at 16).
The final PEIS should clearly state that this analysis must be completed before commercial leases will be issued or commercial development permitted.
In addition to the cumulative impacts of oil shale and tar sands extraction, BLM must also address the fact the area identified within the 2012DPEIS as containing oil shale or tar sands also includes lands that hold oil, gas, and other minerals. Many of these lands already have producing wells. Yet, the 2012DPEIS contains little information on the combined impact of oil shale and tar sands extraction and oil and gas drilling on fish and wildlife populations. Subsequent NEPA documents must assess the cumulative impacts of all minerals development as well as other human activities on both public and private lands within the region that provide habitat for fish and wildlife.
#3])> <([#4 [*5*] **2. Evaluating available mitigation measures and directing the adoption of effective mitigation**
NEPA is intended to help public officials make decisions that are based on an understanding of environmental consequences, and to take actions that protect, restore, and enhance the environment (*See* 40 C.F.R. § 1500.1(b)).
Federal agencies are required, to the fullest extent possible, to use all practicable means consistent with the requirements of NEPA to "restore and enhance the quality of the human environment and avoid or minimize any possible adverse effects of their actions upon the quality of the human environment" (*Id.* at 1500.2(f)). A crucial element in meeting this mandate is developing and implementing mitigation measures.
The Council on Environmental Quality (CEQ) regulations define mitigation as:
1. avoiding the impact altogether by not taking a certain action or parts of an action;
2. minimizing impacts by limiting the degree or magnitude of the action and its implementation;
3. rectifying the impact by repairing, rehabilitating, or restoring the affected environment;
4. reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action; and
5. compensating for the impact by replacing or providing substitute resources or Environments (40 C.F.R. § 1508.20).
In January 2011, CEQ issued new guidance regarding mitigation (76 Fed. Reg. 3843 (January 21, 2011)).This guidance provides that mitigation measures must be "explicitly described as ongoing commitments and should specify measurable performance standards and adequate mechanisms for implementation, monitoring, and reporting" (*Id*).
Pursuant to CEQ's rules and guidance, the discussion of wildlife mitigation in the 2012DPEIS is

wholly inadequate. First, it consists of little more than a list of measures that might be employed (*See* 2012DPEIS at 4-129).

Second, these measures simply are not up to the task of mitigating the impacts of oil shale and tar sands development on fish and wildlife. With respect to the impacts of human activities on big game, for example, BLM traditionally has relied on seasonal restrictions such as limiting human access to winter ranges from mid-November to the end of April. However, limiting the construction activities associated with oil shale and tar sands projects to the summer months provides no protection for big game. When the animals return to the winter range in November, they will find their habitat has been hauled away, is covered with waste shale, or is devoid of vegetation (Timing limitations also are only applied to exploration and development activities, as described in most BLM land use planning documents; long-term production activities continue to occur during sensitive winter periods).

Seasonal restrictions have also been used with respect to sage-grouse brooding habitats and winter concentration areas (*Id.* at F-20). Given the current imperiled status of Greater sage-grouse

populations, we do not believe such restrictions provide a responsible approach to wildlife conservation and BLM's obligation to manage its lands for multiple uses. Sage-grouse habitats must be protected year-round from the destructive impacts of oil shale and tar sands extraction.

The 2012DPEIS also references the *Recommendations for Development of Oil and gas Resources within Crucial and Important Wildlife Habitats* prepared by the Wyoming Fish and game Department (*Id.* at 4-129).

While we welcome BLM's recognition of these *Recommendations*, they are

directed primarily at limiting the surface disturbance associated with oil and gas development. They include such measures as directional drilling and clustering associated infrastructure in order to reduce the footprint of oil and gas development on fish and wildlife habitat. Yet, BLM assumes that most oil shale and tar sands operations will either drill or mine 100 percent of the surface of the leased area. There simply is no "effective" mitigation ***other than avoidance*** for the habitat losses resulting from oil shale and tar sands development. For example, BLM states in the Final Environmental Impact Statement for the Jack Morrow Hills Coordinated Activity Plan (JMHCAP FEIS) that it may be impossible to reclaim some sagebrush habitats (footnote: U.S. Department of the Interior, Bureau of Land Management. 2000. *Jack Morrow Hills Coordination Activity*

Plan for Public Lands Administered by the Bureau of Land Management, Rock Springs Field Office, Rock Springs:

Environmental Impact Statement, p. 4-74; *see also* U.S. Department of the Interior, Bureau of Land Management.

2008. *Proposed Resource Management Plan and Final Environmental Impact Statement for the Pinedale Resource*

Area, p. 4-297: Although reclamation of some disturbed sites would occur, the level of habitat diversity and quality that existed prior to disturbance would likely not be achieved for several decades and may never return to predisturbance conditions. This would likely result in permanent reductions in wildlife populations and impairment of water quality and vegetation communities in some areas).

Migration corridors for big game have been lost permanently to development. Animals are driven off of crucial ranges onto lands that will not sustain them (*See* Comments submitted by A. William Alldredge on 2008FPEIS).

We therefore support the determination expressed in Preferred Alternative 2(b) to mitigate impacts on fish and wildlife by following CEQ's first rule of mitigation – avoidance – and excluding some vital habitats from
development.
We do not believe other measures are currently available to mitigate the terrestrial impacts of oil shale and tar sands development on vital fish and wildlife habitats. Given the nature of oil shale and tar sands extraction and the fragile environments at risk, we doubt mechanisms other than avoidance will ever prove effective.
Mechanisms may arise as extraction technologies are researched to reduce impacts on water quality and quantity which are also important to fish and wildlife conservation. Those measures must be tied to the specific technologies used and other contemporary water demands. We encourage BLM to use existing RD&D opportunities to examine whether water usage and pollution can be minimized.
#4])> <([#5 [*9.2.6*] **3. Defining stipulations and reporting requirements in RD&D leases**
The final PEIS should clarify that, in addition to standard environmental analyses, all future RD&D lessees will be required to provide a quantifiable analysis of the water and energy demands of their extraction technologies, water quality impacts, air impacts, and other effects on fish and wildlife habitats. This is consistent with the terms specified in the second round of oil shale RD&D lease terms. For example, following completion of research activities, RD&D lessees should be required to specify how much water a commercial-scale operation would require and the impacts of that water demand on other uses, including instream flows and peak flows.
Under these terms, approval of any commercial leases would only be granted upon an adequate analysis of those impacts, and clear and detailed plans for mitigating such impacts (In Preferred Alternative 2(b), portions of three of the five Preference Right Lease Areas for the existing Colorado
RD&D leases are no longer identified as available for application for commercial leasing. These lands include vital
winter ranges for big game. We urge BLM to evaluate whether alternative sites might be more appropriate should
the lease holders complete their projects and apply for approval to expand into commercial development).
BLM can
also, in appropriate circumstances, rely on the broad discretion it has under FLPMA to deny commercial oil shale and tar sands leases without completing the NEPA process (*See, e.g.,* U.S. Department of Energy. October 2011. *Supplement to the Draft Programmatic Environmental Impact Statement for Solar Energy Development in Six Southwestern States*).
#5])> <([#6 [*9.4*] **B. The Federal Land Management and Policy Act and Resource Management**
Planning
According to BLM "a plan-level decision to open the lands to mineral leasing represents BLM's determination, based on the information available at the time, that it is appropriate to allow development of the parcel consistent with the terms of the lease, laws, regulations, and orders, and subject to reasonable conditions of approval" (BLM Handbook H-1601-1, Appendix C at 24).
However, the 2012DPEIS contains

no such determination with respect to oil shale and tar sands. BLM's current guidance on oil shale leasing and land use planning requires its Resource Management Plans (RMPs) specifically to identify the following:

1. Areas open to leasing, subject to existing laws, regulations, and formal orders; and the terms and conditions of the standard lease form.
2. Areas open to leasing, subject to moderate constraints such as seasonal and controlled surface use restrictions. (These are areas where it has been determined that moderately restrictive lease stipulations may be required to mitigate impacts to other land uses or resource values.)
3. Areas open to leasing, subject to major constraints such as no-surface occupancy stipulations on an area more than 40 acres in size or more than 0.25 mile in width. (These are areas where it has been determined that highly restrictive lease stipulations are required to mitigate impacts to other lands or resource values. This category also includes areas where overlapping moderate constraints would severely limit development of fluid mineral resources.)
4. Areas closed to leasing. (These are areas where it has been determined that other land uses or resource values cannot be adequately protected with even the most restrictive lease stipulations; appropriate protection can be ensured only by closing the lands to leasing.) Identify whether such closures are discretionary or nondiscretionary; and if discretionary, the rationale.
5. Resource condition objectives that have been established and specific lease stipulations and general/typical conditions of approval and best management practices that will be employed to accomplish these objectives in areas open to leasing.
6. For each lease stipulation, the circumstances for granting an exception, waiver, or modification. Identify the general documentation requirements and any public notification associated with granting exceptions, waivers, or modifications. 4
7. Whether the leasing and development decisions also apply to geophysical exploration.
8. Whether constraints identified in the land use plan for new leases also apply to areas currently under lease.
9. Long-term resource condition objectives for areas currentlyunder development to guide reclamation activities prior to abandonment (BLM Handbook H-1601-1, Appendix C at 23-24).

The RMP amendments proposed in the 2012DPEIS contain none of this information. In fact, there is no description of commercial lease terms at all because those decisions have been deferred (2012DPEIS at 1-21).

Of course, it is understandable that BLM is unable to make these determinations at this time since it lacks the relevant information to do so. For example, in 2008, after consulting with cooperating agencies, BLM concluded that, because it lacked sufficient information regarding the commercial viability of extractive technologies for both oil shale and tar sands, trying to anticipate a certain level of development would be too speculative (In 2012, no "Reasonably Foreseeable Development Scenario" has been prepared because, unlike oil and gas drilling, oil shale and tar sands extraction is not a "mature" technology. 2012DPEIS at 1-14). However, a detailed description of Reasonably Foreseeable Development (RFD) is precisely what is required by BLM's own land use planning guidance before RMPs can be adopted that open lands to mineral leasing (*See, e.g.*, BLM Handbook H-1601-1, Appendix F-4 at 18 (In the chapter on environmental consequences, draft

and final RMPs/EISs must include "reasonably foreseeable development scenarios" for all uses.)).
Without any information on the level of oil shale or tar sands
development the opening of these lands will set in motion, it is impossible to determine whether the other management goals set forth in these RMPs can be met. Resource Management Plans, however, are required to provide adequate information not just on the plan's objectives but also on how those objectives will be reached. BLM's Land Use Planning Handbook states that "[l]and use plan decisions establish goals and objectives for resource management (i.e. desired future conditions), the measures needed to achieve those goals and objectives, and the parameters for using BLM lands. They identify lands that are open or available for certain uses, including any applicable restrictions, and lands that are closed to certain uses" (BLM Handbook H-1601-1 at 11).
Land use plans
must also "identify the actions needed to achieve desired outcomes, including actions to maintain, restore or protect land health" (*Id*. at 13).
The RMPs amended by this document cannot meet
these requirements. Therefore, no commercial leasing of oil shale and tar sands resources in appropriate at this time.

#6])> II. WHAT IS AT STAKE

<([#7 [*3.10.4*] While oil shale and tar sands proponents extol the potential economic value resulting from largescale
development, they often downplay or ignore the economic value such development could damage. Yet, the quality of the natural environment and fish and wildlife habitats is a critical economic asset in this region (*See* Sportsmen for Responsible Energy Development/Southwick Associates. 2012. *Conserving Lands andProsperity* available at
www.sportsmen4responsiblenergy.org).
A September 2008 report prepared for the Colorado Division of
Parks and Wildlife concluded that the 2007 direct annual expenditures in Colorado from hunting and fishing alone were approximately $1.1 billion (BBC Research & Consulting, *The Economic Impacts of Hunting, Fishing and Wildlife Watching in Colorado, Final Report*, revised September 18, 2008, report prepared for Colorado Division of Wildlife, p. 1. Main report web page: http://wildlife.state.co.us/About/Reports/EconomicImpacts/; report-specific web page: http://wildlife.state.co.us/SiteCollectionDocuments/DOW/AboutDow/Revised2004DOWEconomicImpactReport.pd
f.).
Secondary impacts of the dollars re-spent
within the economy in 2007 are estimated to be $767 million, for a total economic impact of more than $1.8 billion. The same study found wildlife-watching yields an additional total economic impact of $1.2 billion annually. Wildlife plays a similarly important role in Utah and Wyoming.
Even under Preferred Alternative 2(b), BLM admits that oil shale, tar sands and ancillary facility development "may fragment or destroy wildlife habitat and affect the behavior of migratory big game species such as elk and mule deer, which form an important basis for recreational activities in many parts of each [Region of Influence]" (2012DPEIS at 4-176).
The 2012DPEIS identifies "172,339 acres of
mule deer winter habitat, 11,470 acres of mule deer summer habitat, 159,205 acres of elk winter

habitat, and 11,465 acres of elk summer habitat overlap lands that would be available for oil shale leasing" (2012DPEIS Table 2.6-1 at 2-96). In Utah, for tar sands alone, "57,708 acres of mule deer winter habitat, 17,110
acres of mule deer summer habitat, 52,361 acres of elk winter habitat, and 17,170 acres of elk summer habitat overlap lands that would be available for tar sands leasing" (2012DPEIS Table 2.6-2 at 2-121).
Oil shale and tar sands development will diminish tourism and recreational opportunities. Outdoor recreation, including hunting and fishing, would decline. In Colorado, oil shale would result in a loss of up to 2,830 jobs and $36.5 million in income annually in the Regions of Influence (ROIs). In Utah, 1,552 jobs and $12.6 million in income would be lost from oil shale and tar sands in the ROIs. In Wyoming 2,719 jobs and $14.4 million in income would be lost. Additional economic impacts would be felt elsewhere. Impacts from the development scenarios considered in Alternatives 1 and 4 would be significantly greater. **#7])>**
<([#31 [*2.2.1*] Because resources important to both traditional western values, such as hunting and fishing, and
emerging new economies are at stake, the cautious and measured approach to commercial oil shale and tar sands development outlined in Preferred Alternative 2(b) is both appropriate and necessary.
#31])> A. Water Resources
<([#8 [*3.4.1*] [*3.10.2*] [*6.3.2*] Water resources in the West are scarce and are under increasing pressure from development.
Water resources are also extremely important to western economies. In Colorado alone, nonconsumptive
water-related activities contribute between $7 billion and $8 billion to the state's
economy and employ 85,000 people (http://cwcb.state.co.us/environment/non-consumptive-needs/Pages/main.aspx).
It is therefore imperative that subsequent NEPA analyses
evaluate the impact diverting water for oil shale and tar sands development would have on these industries.
Since 2008, however, little new and verifiable data on the precise water demands of oil shale and tar sands extraction technologies has been generated. For example, the Government Accounting Office's (GAO's) October 2010 report on oil shale and water, "Energy-Water Nexus: A Better and Coordinated Understanding of Water Resources Could Help Mitigate the Impacts of Potential Oil Shale Development" (General Accounting Office. October 2012. *Energy-Water Nexus: A Better and Coordinated Understanding of Water Resources Could Help Mitigate the Impacts of Potential Oil Shale Development* [hereinafter GAO Report]),
concluded that oil shale would likely require 4-to-5 barrels
of water for every barrel of oil produced from shale, higher than BLM's projections in the 2012DPEIS (*Id.* GAO concluded the range of water-to-oil is 1:1 to 20:1. The report further stated 4-5 barrels of water to oil was a good working figure).
According to GAO:
The unproven nature of oil shale technologies and choices in how to generate the power necessary to develop this resource cast a shadow of uncertainty over how much water is needed to sustain a commercially viable oil shale industry….These nascent efforts do not adequately define current baseline conditions for water resources in the Piceance and Uintah Basins, nor have they begun to model the important interaction of groundwater

and surface water in the region (*Id.* at 44-45).
****
Water is likely to be available for the initial development of an oil shale industry, but the size of an industry in Colorado or Utah may eventually be limited by water availability. Water limitations may arise from increases in water demand from municipal and industrial users, the potential of reduced water supplies from a warming climate (Climate changes may increase the challenges states will face. As the 2012DPEIS makes clear, by 2050, water in
the Colorado River Basin could be reduced by 6-20%. 2012DPEIS at 4-36 to 4-37. Such reductions would further
stress existing resources, compounding the problems posed by large development projects such as oil shale and tar
sands extraction),
fulfilling obligations under interstate water compacts, and the need to provide additional water to protect threatened and endangered fishes (GAO Report at 44-45).
The 2012DPEIS makes clear that water requirements for commercial development could be substantial. It also projects how much water might be available for oil shale and tar sands development and the impacts of using large quantities of water on existing demand and future uses (though the data is often based on dated materials). Based on these projections, the 2012DPEIS concludes in Tables 3.4.1-2 and 3.4.1-3 and the corresponding text that demand in the Upper Basin could exceed what is legally available to these states.
Moreover, acre-feet of surface water demand is not the only question that must be answered. Much if not most of the water required by oil shale and tar sands development would need to be stored in reservoirs. Big flows only happen in the spring, yet industry would need water all year round. The impacts of storage projects on endangered and native fish species and healthy river systems must be evaluated as well. The 2012DPEIS fails to adequately analyze these impacts.
#8])>
<([#9 [*3.4.2*] There are also significant concerns regarding the major alteration of aquifer hydraulic
characteristics, flow patterns and subsurface water quality over large areas, due to extraction mining and/or *in-situ* processing of oil shale and tar sands resources. Included in these impacts are the drilling, de-watering, isolation, reclamation, waste disposal and excavation activities associated with resource extraction and processing. In addition, because the processes associated with *in situ* extraction techniques, which will affect geological formations including aquifers, may be thermal, chemical and physical, a detailed analysis of these technologies once identified is required in order to evaluate "down-hole" impacts and suitable mitigation measures. The 2008FPEIS failed to provide this analysis and the 2012DPEIS still does not contain sufficient information to support credible conclusions or recommendations regarding oil shale and tar sands development.
The impacts of waste discharges from oil shale processing facilities, power generation, and other processes associated with the exploitation of the oil shale and tar sands resources remains a high concern and the 2012DPEIS lacks an in-depth assessment of such impacts to water resources. For example, it does not describe and evaluate the quantity and quality of leachate water and runoff from spent tar sands or oil shale spoils and tailings and all areas altered by extraction activities so that appropriate mitigation measures can be identified and implemented. This gap remains and must be addressed.

Impacts resulting in increased concentrations and loadings of selenium and salinity in the Colorado River and its tributaries are likely to occur, as acknowledged in the 2008FPEIS and the 2012DPEIS. However, the 2012DPEIS does not address how they may be mitigated or avoided. Such impacts are particularly troubling because they have long been identified as special concerns under existing conditions and could be greatly exacerbated by oil shale and tar sands development.

#9])> <([#10 [*3.4.2*] [*4.2*] The 2012DPEIS does not rigorously address the impacts of alterations in river water quality on
endangered species. This is of particular concern with respect to the Endangered Fish Recovery Implementation Program, for which major efforts and expenses have already been incurred in the Colorado River Basin.

The 2012DPEIS also fails to provide adequate data on the significance of groundwater in the three affected states (Much of the groundwater data in the 2012DPEIS is extremely dated. For example, water use estimates within the
Green River Basin are from 1990. This data does not take into account existing oil and gas drilling operations which
have expanded over the past 20 years the area, nor does the 2012DPEIS make any attempt to consider the
cumulative impacts posed by proposed but not yet operating oil and gas development projects, such as the Hiawatha
Project located within the Washakie Basin. BLM provided 1984 groundwater data for the tar sands analysis section
in the 2012DPEIS).

BLM admits that much is unknown regarding groundwater availability
and significance. Yet, many areas, such as the Green River and Washakie Basins, rely entirely on groundwater as the sole source of drinking water. Groundwater recharge also plays a major role for important streams and habitat for sensitive fish and wildlife species. Major groundwater contamination concerns have been identified, including the burden of spent shale which has significantly higher salt levels than raw shale and may yield other toxic substances (Bartis, Jim. 2005. *Oil Shale Development in the United States: Prospects and Policy Issues.* RAND publication).

However, very little analysis of the potential impacts on other resources or effective mitigation measures (Relying on Best Management Practices (BMPs) through BLM land use plans is not sufficient. There are ample examples of poor BMP implementation and lack of effective monitoring of energy impacts currently within the three-state region).
is provided in the 2012DPEIS. It is clear that, prior to any leasing or development of oil shale and tar sands resources, much more extensive groundwater analyses must be conducted. **#10])>**

B. Fish and Wildlife Values

<([#11 [*3.7.3.1*] [*3.7.3.9*] [*3.7.4.1*] According to the 2012DPEIS, most oil shale and tar sands projects will disturb 100 percent of
the leased surface (See 2012DPEIS at 4-3 to 4-11).

In other words, these projects will completely eliminate the value of those
lands as wildlife habitat. In the arid environs where oil shale and tar sands development is being proposed, "[r]eclamation to functional systems similar to that found pre-disturbance will take in excess of 50 years (Baker 2006)" (Comments submitted by A. William Alldredge, Ph.D. on the 2008FPEIS at 4).

Therefore, habitats disturbed by oil shale and tar sands
development would be unavailable for decades even after reclamation has been initiated" (*Id*). Moreover, impacts on most wildlife are not proportional to the amount of habitat lost (*Id*). "Habitat
is not all created equal, some areas of habitat are simply more valuable that others" (*Id*). Winter range, for example, is considered a limiting factor for big game species. According to the 2012DPEIS, at least 735,000 acres of mule deer winter habitat, including 78,093 acres of mule deer critical winter range; 31,479 acres of mule deer migration corridors; 649,700 acres of elk winter habitat; and 190,478 acres of elk production area is at risk (*See, e.g.,* 2012DPEIS at 6-18; *see also* Comments submitted by the Colorado Department of Natural Resources on the 2008FPEIS).
Displacement of big game
from high value and important habitat to other, often lesser quality habitat, places additional stressors on these animals (Sawyer, Hall, *et al*. 2006. *Winter Habitat Selection of Mule Deer Before and During Development of a Natural Gas Field*. Journal of Wildlife Management 70:396-403; Sawyer, Hall, *et al.* 2009*b*. *Influence of well pad activity on the winter habitat selection patterns of mule deer.* Journal of Wildlife Management 73:1052-1061).
Since big game already is being impacted by the oil and gas
development activities underway in many critical winter range areas in all three states, losing more habitat (and furthering concentrating big game populations into smaller and smaller areas) could lead to unacceptable losses.
Over half a million acres of identified sage-grouse habitat is also at risk. Sage-grouse are on the verge of requiring listing under the Endangered Species Act. They have declined precipitously range-wide. Declines have been estimated at over 50% in occupied area and up to 80% decline in bird abundance, with complete extirpation in several states. A federal court recently concluded that energy development in the eastern reaches of sage-grouse range, including Wyoming and Colorado, poses a significant threat to sage-grouse (*Western Watersheds Project v United States Fish and Wildlife Service,* No. CV-06-277-E-BLW, slip op. at 13 (D. Id. December 4, 2007)).
Leks, nesting habitat, and winter
concentration areas are all vital to the continued viability of sage-grouse.
Based upon the information that is contained in the 2012DPEIS, oil shale and tar sands development poses a huge threat to fish and wildlife, including species that already are on the verge of disappearing. Hundreds of thousands of acres of vital wildlife habitats may be "occupied" by oil shale and tar sands projects to the exclusion of all other uses, including fish and wildlife, perhaps for generations. Reclamation does not address this loss because habitat functions will not be restored for decades. Moreover, none of the other mitigation measures discussed in the 2012DPEIS will reduce the impact of this loss because none of the measures currently in BLM's toolbox were designed to redress a use that destroys and then occupies such vast amounts of land surface.
#11])> 1. <([#12 [*3.7.5.1*] **Greater sage-grouse (**As a keystone species, the health of Greater sage-grouse populations is a good indicator of overall ecosystem health for the sagebrush ecosystem. Landscape-scale conservation strategies targeting the sage-grouse also benefit dozens of additional sagebrush obligate wildlife species, from pronghorn to BLM Sensitive songbirds). Since the 2008 FPEIS was issued, the United States Fish and Wildlife Service (USFWS) determined that listing the Greater sage-grouse as threatened or endangered rangewide is "warranted but precluded by higher priority listing actions." As the agency cautions, "[e]vidence

suggests that habitat fragmentation and destruction across much of the species' range has contributed to significant population declines over the past century. If current trends persist, many local populations may disappear in the next several decades, with the remaining fragmented population vulnerable to extinction" (http://www.fws.gov/mountain-prairie/species/birds/sagegrouse/ (last accessed March 29, 2012)).
The USFWS also found that southwestern and
central Wyoming and northwestern Colorado are strongholds for sage-grouse, with some of the highest estimated densities of males anywhere in the remaining range of the species. The USFWS identified this "high-density sagebrush area as one of the highest priorities for conservation consideration as it comprises one of two remaining areas of contiguous range essential for the long-term persistence of the species" (75 Fed. Reg. 13910, 13950 (March 23, 2010) (citing Wisdom *et al*. (in press, p. 23)).
The sage-grouse "stronghold" identified by USFWS overlaps with areas proposed for oil shale and tar sands development. Such development would eliminate all grouse habitat on the lease, and likely render adjacent habitat unsuitable as well causing abandonment by near-by sagegrouse populations due to industrial activity on the lease. For this reason, we strongly urge BLM
to place all identified sage-grouse Core Areas within Wyoming and all sage-grouse habitat in Colorado and Utah off limits to oil shale and tar sands extraction (BLM currently is in the process of amending all applicable land use plans to improve the agency's sage-grouse conservation efforts and identify priority sage-grouse habitats. To ensure consistency with those new plans, BLM
should take no action that might result in the potential loss of sage-grouse habitat. The Preferred Alternative 2(b)
calls for protection of "priority sage-grouse habitats." However, those habitats have yet to be delineated and we
encourage BLM to err on the side of caution until range-wide conservation measures are in place).
The maintenance of high-quality sagebrush steppe habitats, particularly nesting and wintering habitats, is necessary to maintain viable sage-grouse populations (To ensure viable sage-grouse populations, it is important to consider nesting, brood-rearing, and winter habitats. Holloran and Anderson found that 64% of sage-grouse females nested within 5 km of a lek. Holloran, M.J., and S.H.
Anderson. 2005. *Spatial distribution of greater sage-grouse nests in relatively contiguous sagebrush habitats.*
Condor 107:742-752).
Large sage-grouse Core
Areas like South Pass and the Kinney Rim/Vermillion have been proposed for protection from future oil and gas leasing under BLM's Wyoming sage-grouse plan amendment. Populations in Colorado and Utah are generally more compromised and at-risk than Wyoming; special care must be taken to appropriately scale conservation efforts to states with smaller populations (Connelly proposed comprehensive guidelines regarding the management of sage-grouse, focused around the
conservation of breeding/nesting habitat, late summer brood-rearing habitat, and wintering habitat. Connelly, J.W.,
M.A. Schroeder, A.R. Sands, and C.E. Braun. 2000. *Guidelines to manage sage-grouse populations and their*

habitats. Wildl. Soc. Bull. 28:967-985).
Additionally, Colorado, Utah and Wyoming sage-grouse populations are genetically connected. Impacts from development to the populations in one state are likely to negatively influence populations in the other states. Corridors and genetic connections between different populations and across state lines must inform decision-making. Additional habitat fragmentation and infrastructure impacts that further isolate populations must be avoided.
In December 2011, BLM issued *A Report on National Greater Sage-Grouse Conservation Measures*. This report by the BLM's sage-grouse National Technical Team (NTT) establishes that BLM's objective is "to develop new or revised regulatory mechanisms, through Resource Management Plans (RMPs), to conserve and restore the greater sage-grouse and its habitat on BLM administered lands on a range-wide basis over the long term" (Department of the Interior, Bureau of Land Management. December 2011. *A Report on National GreaterSage-Grouse Conservation Measures*, p. 4).
With the NTT and the
sage-grouse plan amendments, BLM is taking steps to achieve its goal to "maintain and/or increase sage-grouse abundance and distribution by conserving, enhancing or restoring the sagebrush ecosystem upon which populations depend in cooperation with other conservation partners" (*Id.* at 6).
The NTT further provides that "[u]ntil such time as more specific conservation objectives relative to sage-grouse distribution or abundance by sage-grouse management zone, state, or population are developed, BLM will strive to maintain or increase current distribution and abundance of sage-grouse on BLM administered lands in support of the range-wide goals" (*Id*).
As BLM finalizes a new policy based on the NTT's recommendations that will ensure the longterm
viability of the species, and the USFWS moves toward reconsideration of its warranted but precluded finding, it is important that current sage-grouse habitat be preserved. Additionally, BLM needs to address whether adjacent lands may warrant protection because they are likely to provide important habitat in the future, as climate change results in shifting habitat types and ecosystem conditions. **#12])>**

2. <([#13 [*3.7.3.1*] **Mule deer**

Properly managing mule deer dramatically benefits local rural communities. The Western Association of Fish and Wildlife Agencies' Mule Deer Working Group explains why mule deer are important to sportsmen and small towns:
In a 2006 survey of outdoor activities, USFWS reported that nearly 3 million people hunted in the 19 western states (USFWS 2007). In 2006 alone, hunters were afield for almost 50 million days and spent more than $7 billion in local communities across the West on lodging, gas and hunting-related equipment. Although this included hunters that pursued other species, mule deer have traditionally been one of the most important game animals in the West. According to the same 2006 survey, 25.6 million residents in 19 western states spent more than $15.5 billion that year "watching wildlife" (Lutz *et al.* 2010. *Oil/gas, wind, and solar energy development guidelines for mule deer*. Western Association of Fish and Wildlife Agencies Mule Deer Working Group).
Total hunting and fishing sales and revenue for 2010 in project area (USFWS, iFAIMS database at *www.fws.gov*).
Hunting Fishing Total

Licenses/Revenue Licenses/Revenue Licenses/Revenue
Colorado 538,734/$56,200,410 1,039,177/$15,112,929 1,577,911/$71,313,339
Utah 292,695/$12,005,639 466,098/$10,084,698 758,793/$22,090,337
Wyoming 278,632/$25,267,335 370,313/$5,366,360 648,945/$30,633,695
Total Sales/Revenue 2,228,407/$1,240,373,371
Yet, mule deer are struggling across the West. They are declining in population in many areas, including Colorado, Utah, and Wyoming (*See* Theodore Roosevelt Conservation Partnership. April 2011. *Mule Deer and Energy: Federal Policy andPlanning in the Greater Green River Basin* available at
http://www.trcp.org/assets/pdf/TRCP_Mule_Deer_and_Energy_in_the_GRB.pdf ; Ellenberger, J., A.G Byrne. 2011.
Population Status and Trends of Big Game and Greater Sage- Grouse Along the Colorado/Wyoming State Line. A
Report prepared for the National Wildlife Federation available at
http://www.ourpubliclands.org/sites/default/files/files/Executive_Summary.pdf).
Deer face a number of stressors, but most significant
is that their habitat is changing and disappearing. The causes of these habitat losses include but are not limited to suburban and rural sprawl, livestock management, fire suppression, invasive species and traditional and renewable energy development.
During the last decade, as energy production has expanded on western public lands, scientific understanding about the impacts of energy production on fish and wildlife populations has expanded as well, with much being learned about how mule deer respond. For example, a series of studies on the Pinedale Anticline show that drilling and production of natural gas on crucial winter range significantly affect mule deer, with dramatic decreases in wintering populations within the developed area. In 2007, Sawyer *et al.* published research that attributed 27 percent of the decline in mule deer on the Pinedale Anticline to energy development. In 2010, monitoring reports show a 60-percent loss in mule deer since development began in 2001. Many wildlife experts are now concerned that the dramatic increase in energy production on public lands represents the most significant threat to mule deer populations as a result of both direct loss of crucial habitat and disruption. Oil shale and tar sands development further threatens mule deer habitat and populations. **#13])>**
<([#14 [*3.7.3.1*] [*5*] [*3.7.3.9*] BLM's existing mitigation measures have proved insufficient to address big game impacts even
from more traditional forms of oil and gas development. New data from Sawyer *et al* (Sawyer, Hall, *et al.* 2006.; Sawyer, Hall, *et al.* 2009*b*.) illustrate
that timing limitations, for example, should no longer be considered as adequate oil and gas mitigation lease stipulations. This research, based on extensive study within oil and gas development fields in Wyoming, indicates that the standard stipulations BLM routinely and traditionally imposes are ineffective as currently implemented. Timing limitations typically apply only during the exploration and construction phases of oil and gas extraction; they provide no protection during production. Moreover, timing stipulations do not address the loss of habitat once an area can be accessed and disturbed when the seasonal restrictions expire. Current science supports the use instead of No Surface Occupancy stipulations in vital big game habitats such as critical winter range. Critical winter ranges contain the important cover, forage, and security that assure the survival of mule deer and elk herds, even in the worst of winters. Any direct habitat loss to these important lands compromises the ability of populations to survive when snowpack

is at a maximum and temperatures are coldest. As mentioned above, Sawyer's research, among others, demonstrates the impacts of oil and gas developments over a 10 year period on mule deer in western Wyoming: a 46% decline in use on critical winter range and a 60% decline in population abundance are directly attributable to the impacts from energy development ***and relaxing the timing restrictions*** (Sawyer, Hall, R. Nielson. 2010. *Mule Deer Monitoring in the Pinedale Anticline Project Area: 2010 AnnualReport.* Presented to the Pinedale Anticline Planning Office, Pinedale, Wyoming).
Changes in habitat selection and use by mule deer were
immediate and little to no acclimation to well pads was evidenced after 10 years of monitoring (Sawyer, Hall, *et al.* 2006; Sawyer, Hall, *et al.* 2009*b*).
We urge BLM to include additional review of migration corridor studies that illustrate the importance of maintaining big game migration corridors and their proximity to energy development facilities. Sustaining migratory populations of mule deer requires the maintenance and protection of suitable seasonal ranges and maintaining functional uses of migration routes (Sawyer, Hall. 2007. *Final Report for the Atlantic Rim Mule Deer Study*. Prepared for Anadarko Petroleum, BLM,
and the Wyoming Game and Fish Department. April 2007).
Distinguishing between high use areas (which may concentrate deer on key forage habitat and create slow movement through an area) and lower-use areas (which provide faster corridor movement and connectivity between high use areas) can provide mitigation opportunities including facility and road development structure, avoiding fragmentation, and ensuring deer have safe access between areas (Sawyer, Hall, M. Kauffman. 2008. *Identifying Mule Deer Migration Routes Along the Pinedale Front.* Report prepared for the Wyoming Wildlife and Natural Resources Trust. May 2008; Sawyer, Hall *et al.* 2009. *Identifying mule deer migration routes to and from the Pinedale Anticline Project Area.* Report prepared for University of Wyoming School of Energy Resources, Laramie, WY. November 2009). **#14])>**
<([#15 [*3.7.3.12*] Finally**,** the 2012DPEIS fails to mention the recent Western Governors' Association's
recommendation and review of wildlife critical habitat and migration corridors, as required under BLM IM 2012-039. This IM ("*Identification and Uniform Mapping of Wildlife Corridors and Crucial Habitat Pursuant to a Memorandum of Understanding with the Western Governors' Association*") was issued December 21, 2011, and provides guidance to all BLM field offices in identifying wildlife corridors and crucial habitat using the newly developed Western Wildlife Crucial Habitat Assessment Tool (CHAT). This multi-dimensional effort is designed to coordinate information about priority habitat areas existing across political jurisdictions in specific regions of the West. The timeframe for implementing the use of CHAT is immediate, according to the IM. We urge BLM to employ CHAT as another habitat analysis tool under the 2012DPEIS. **#15])>**
<([#16 [*2.2.1*] We support the determination in Preferred Alternative 2(b) to place many vital big game habitats
off limits to oil shale and tar sands development, including crucial winter ranges. However we also encourage BLM to continue to assess whether additional habitat protections for big game may be necessary. In particular, we urge the agency to collect additional data on migration corridors and the importance of transitional ranges to mule deer, elk, and other big game species. **#16])>** **3. Fish**
<([#17 [*3.7.1.1*] [*3.7.4.1*] The discussion of aquatic resources in the 2012DPEIS is improved

over that included in the
2008FPEIS; however, it still does not provide sufficient consideration of potential impacts to Colorado River fish species and associated aquatic habitats. Though native trout and native fishes are mentioned, there is little recognition of their specific locations and importance within the various watersheds that could be impacted by oil shale and tar sands development. This is particularly noticeable with respect to Colorado River cutthroat trout (CRCT).
For example, within the Green River Oil Shale Basin, numerous tributaries to the Green River contain CRCT populations. This includes the eastern portion of the Green River Oil Shale Basin between Flaming Gorge and Wyoming Highway 191. Here, within what is known as the Greater Little Mountain Area, populations of CRCT exist in small, often isolated sagebrush ecosystems. Trout Creek, Gooseberry Creek, Sage Creek, and Currant Creek are important waters for CRCT populations. Considerable time, effort, and money has been spent restoring riparian habitats, improving watershed conditions, and preventing further degradation to these sensitive watersheds. Numerous partners have contributed to the restoration efforts over the last 20 years, including BLM. **#17|)>**
<([#18 [*3.1.2*] The 2012DPEIS contains almost no discussion of the importance of the watersheds to
recreational anglers. Though briefly mentioned in a single paragraph describing the affected environment in the Piceance Basin, no similar discussion of recreational fisheries is included in sections on the Uinta Oil Shale Basin, the Washakie Oil Shale Basin, or the Green River Oil Shale Basin. Angling and hunting within these areas are important economic and tourism drivers. Within the Green River Oil Shale Basin alone, two major reservoirs (Flaming Gorge Reservoir and Fontenelle Reservoir) exist which provide thousands of annual recreational days for boating, angling, picnicking, and hunting activities.
#18|)> Finally, **<([#19** [*3.7.4.3*] the Wyoming Game and Fish Department has recently completed updates to the state's
Strategic Wildlife Action Plans (SWAP) in 2010. This re-evaluation of the Species of Greatest Conservation Need from 2005 includes a new evaluation system for conservation prioritization. Like Utah, Wyoming applies a tier ranking system. For purposes of the 2012DPEIS, the bluehead sucker, flannelmouth sucker, roundtail chub, and the CRCT all are designated as Tier I species (having the highest priority ranking). A more detailed assessment of impacts to these high priority species must be conducted prior to any oil shale and tar sands leasing or development.
#19|)> a. <([#20 [*3.7.1.2*] [*3.7.4.1*] **Colorado River cutthroat trout.**
The potential oil shale and tar sands development area encompasses five native trout conservation populations; one is in a tributary to the Green River just above Flaming Gorge Reservoir, while the other four are located across the divide in headwater tributaries to the Colorado River. Ensuring the future viability of these populations is critical given the extent of extirpation that has already occurred and the tenuous nature of the remaining populations. BLM, through its Colorado, Wyoming and Utah State Directors, is a participant in the CRCT Conservation Team and a signatory to the Team's Conservation Agreement, which ***obligates the BLM to ensure implementation of CRCT conservation actions*** detailed in the Team's Conservation Strategy. The 2012DPEIS mentions the Conservation Agreement and its obligations yet it provides no discussion as to how BLM would protect both current ***and*** potential cutthroat trout habitat. In fact, there is no discussion of the potential CRCT habitat which exists in all three states within the oil shale and tar sands development area.

Strategies for conserving this sensitive species call for securing and enhancing individual populations of CRCT. One of the most challenging needs for CRCT is the reestablishment of large, interconnected habitat areas where fluvial and adfluvial populations can exist free of nonnative
trout species. Headwater streams typically provide habitat for CRCT populations and these stream reaches are typically small with stream widths less than 15 feet and depths less than three feet. Due to the small stream reaches, any degradation or catastrophic event will have immediate and long-term consequences to the fisheries population, and typically result in total fish loss. Such an event was witnessed in a tributary of LaBarge Creek in the 1970's by the Wyoming Game and Fish Department, when an oil spill into the stream killed all CRCT. This population never recovered (Binns, Allan. 1977. Wyoming Game and Fish Internal Report). CRCT populations are not tolerant of sediment loads which can occur with road traffic, air pollution, construction activities, sudden weather events, spills, steep slopes, etc. Such erosion events can cover eggs from spawning, literally wiping out the following year's age class of fish. Oil shale and tar sands development, as described in the 2012DPEIS, creates tremendous potential for heavy surface impacts which could affect coldwater fisheries. The increase in roads, truck traffic, construction activities, toxic spill potential, *in-situ* and open pit operations, and loss of water due to dewatering of streams and groundwater systems all spell potential impacts to CRCT. Like oil and gas drilling, the oil shale and tar sands extraction will result in accidental spills. Most energy development involves high risk to the environment; each of the three states (especially Colorado) has a history of hazardous spills or discharges into coldwater streams in accidents ranging from diesel truck turnovers to uncontrolled discharges of hazardous fuels. Consideration of these impacts must be included in any NEPA analysis.

b. Nongame native fish species.

Since so many nongame native warmwater fishes are concentrated within the potential oil shale and tar sands development area, we recommend avoidance of all disturbance to streams and riparian zones. Maintaining these species' habitats in quality condition will prevent the future listing of additional nongame native fish and conserve those species already listed as federally endangered.

#20])> 4. <([#21 [*3.7.3.1*] [*3.7.4.9*] **Alternative C and wildlife**

In the 2008FPEIS, Alternative C is presented as BLM's attempt to identify those lands that would be excluded from oil shale or tar sand development on the basis of existing land use plan decisions. BLM made the determination that the most effective means of identifying lands that should be excluded on this basis was to exclude those lands within each field office where stipulations for no surface disturbance or seasonal limitations are in place for oil and gas leasing. While we welcome BLM's incorporation of these exclusions in its Preferred Alternative for the 2012DPEIS and agree that the lands identified should be off-limits to commercial oil shale and tar sands leasing, the list of lands is incomplete. Resource managers and the public have had no opportunity to consider whether oil shale or tar sands extraction would be incompatible with other land management objectives. With respect to sage-grouse, much of the vital habitat has not been identified and mapped by either BLM or state wildlife agencies. With respect to many other wildlife species, there is simply no usable data regarding the location and condition of important habitats (There are several efforts underway to collect and standardize landscape-level data on fish and wildlife habitats and populations. These include the Department of the Interior's Landscape Conservation Cooperatives, BLM's Rapid Ecological Assessments, BLM's sage-grouse conservation planning effort, and WGA's wildlife corridors initiative. We urge BLM to

await the outcome of these efforts before moving forward with any additional oil shale and tar sands leasing or development).

As for big game, winter range traditionally has been considered the limiting factor, however, significant losses of summer and/or transitional ranges as a result of oil shale and tar sands projects could also pose threats to the continued vitality of big game populations. Because the 2012DPEIS still contains no information regarding the migration and use patterns of big game herds, it is impossible to estimate those impacts. *See* Comments submitted by A. William Alldredge. However, conservation of big game populations and distributions may require additional ranges be set off-limits. We, therefore, encourage BLM to address these habitats in future NEPA documents.

#21])> C. <([#22 [*3.1.1*] **Areas of Critical Environmental Concern (ACECs) and Other Special**
Designation Lands

1. ACECs

FLPMA defines ACECs as "areas within public lands where special management attention is required to protect and prevent irreparable damage to important historic, cultural, or scenic values, fish and wildlife resources, or other natural systems or processes, or to protect life or safety from natural hazards" (43 U.S.C. § 1702(a)).

Under FLPMA, BLM is obligated to "give priority to the designation and protection of areas of critical environmental concern" (43 U.S.C. § 1712(c)(3)). In the 2008FPEIS, BLM opened all ACECs to application for commercial leasing, except for lands where mineral development is not currently allowed. This commitment to protect only a portion of ACECs was insufficient.

The 2012DPEIS, through Preferred Alternative 2(b), improves upon the 2008 decision by excluding from commercial development all ACECs, including those areas under consideration for designation under current planning processes (2012DPEIS at E-S 6 and 2-28).

We support those additional protections and urge their inclusion in the final PEIS. As the 2012DPEIS makes clear, BLM would not be able to prevent undue degradation to important values for which ACECs were designated should oil shale or tar sands development proceed:

Oil shale and transmission or pipeline development on any ACEC would result in a loss of all or a part of the resources or values for which the area was originally designated. Oil shale development within the viewshed of these areas may also result in adverse impacts on scenic values of these areas (2012DPEIS at 4-21).

Given the relatively small number of acres of designated ACECs that overlap prospective oil shale and tar sands development areas (ACECs that are not closed to mineral leasing include approximately 44,000 acres and are shown in Table 6.1.1-1. Should oil shale development occur in these areas, the values within these designated ACECs would be lost. 2012DPEIS at 6-5), all ACECs should be closed to oil shale and tar sands development, even those that currently are open to mineral development. At the time of designation, it was assumed that the sensitive resources within these ACECs could withstand some level of disturbance from oil and gas drilling or other human activity. Oil shale and tar sands development represents quite a different level of surface disturbance, one that is irreconcilable with the protection of most other resource values.

#22])> 2. <([#23 [*9.2.1*] [*3.1.1*] **Lands with wilderness characteristics**

Because roadless and undisturbed lands provide important fish and wildlife habitat and unique opportunities for outdoor recreation, including hunting and fishing, we support the determination in Preferred Alternative 2(b) to place lands with wilderness characteristics off limits to oil shale and tar sands development. The congressional funding limitation for fiscal year 2011 limiting implementation of Secretarial Order 3310 regarding "wild lands designations" does not prohibit BLM from considering wilderness as part of this PEIS or relieve BLM from its continuing statutory obligation to inventory and manage federal lands for wilderness values (FLPMA requires BLM to "maintain on a continuing basis an inventory of all public lands and their resource and
other values (including, but not limited to, outdoor recreation and scenic values), giving priority to areas of critical
environmental concern. This inventory shall be kept current so as to reflect changes in conditions and to identify
new and emerging resource and other values." 43 U.S.C. § 1711(a)). **#23])>**

<([#24 [*3.1.1*] **3. Wyoming: other lands to be protected**

a. Adobe Town

Adobe Town has been called the crown jewel of the Red Desert, encompassing irreplaceable ecological, geological, historical, and recreation values. At 180,910 acres, Adobe Town is Wyoming's largest and most spectacular desert wilderness. Stretching 26 miles north to south and 19 miles east to west, this area is one of the last places in Wyoming where visitors can take in views of pristine landscape that stretch from horizon to horizon. The landscape ranges from banded badlands to mazes of arches, pinnacles, and spires, offering spectacular scenic vistas and important wildlife habitat.

Following the issuance of the 2008FPEIS, the State of Wyoming designated the Adobe Town area as Very Rare or Uncommon under the state Environmental Quality Act. We are encouraged to see that BLM is proposing to protect the Adobe Town area from development in the Preferred Alternative 2(b). We strongly support this decision and urge BLM to include such protections in the final decision in order to ensure consistency with "state plans and policies" under FLPMA (In the 2008FPEIS, only lands designated as WSA within Adobe Town were protected from commercial
development. All of Adobe Town as a State of Wyoming Very Rare and Uncommon area, not just the WSA, should
be excluded from oil shale development).

Adobe Town has a host of sensitive wildlife habitats that are crucial or vital to meeting the very rare or uncommon designation criteria. These habitats include sage-grouse leks and big game crucial winter ranges. The cliffs and pillars found throughout Adobe Town provide ideal nesting habitat for raptors. There is a desert elk herd, known to the Wyoming Game and Fish Department as the Petition Herd, which is one of the few true desert elk herds in North America, spending the entire year in the Red Desert. **#24])>**

<([#29 [*3.1.1*] **3. Wyoming: other lands to be protected**

b. Little Mountain area, including Greater Red Creek ACEC, Red Creek WSA, and Sugarloaf Basin SMA

These areas were established under the Green River RMP and constitute an outstanding big game hunting resource and CRCT trout habitat. According to the Wyoming Game and Fish Department, the elk hunt in this area is the single most sought-after tag in the entire state. Some of the most important mule deer, elk, pronghorn, and sage-grouse high value habitat exists within

this ACEC complex. Oil shale activities would effectively remove wildlife species, including elk and mule deer, destroying the recreational quality of this area. CRCT populations within this ACEC complex exist in drainages with extremely sensitive soils making these isolated populations vulnerable to extirpation. Important springs help maintain the high water quality necessary for CRCT to exist. **#29])>**

<([#30 [*3.1.1*] **3. Wyoming: other lands to be protected**

c. Jack Morrow Hills planning area

The "most prospective" oil shale area in Wyoming includes portions of the Jack Morrow Hills planning area, a subset of the Rock Springs Field Office set aside from the Green River Resource Management Plan in the 1990s for special planning due to its outstanding wildlife and cultural resources. The results of that planning effort should not be undermined by opening the area to oil shale development. This is an area highly important for both dispersed recreation and elk hunting. It also contains the Boars Tusk and White Mountains Petroglyph Site, both of which are culturally important to Native American tribes. **#30])>**

4. **<([#25** [*3.1.1*] Colorado: other lands to be protected

a. State Wildlife Areas

Colorado State Wildlife Areas (SWAs) should be protected from oil shale development. Six SWAs abut BLM lands or overlap with BLM managed subsurface resources opened for oil shale development in 2008. These areas include:

? Shell Oil SWA – hunting lease
? Yellow Creek Unit
? Square S Summer Range Unit
? Square S Ranch Unit
? Little Hills Unit
? North Ridge Unit of the Piceance SWA

These areas all provide important habitat for fish and wildlife, as well as recreational opportunities and an economic draw for local communities. These areas must be protected from both direct and indirect impacts associated with oil shale development. **#25])>**

<([#26 [*3.1.8*] [*3.7.1.1*] [*3.7.4.1*] **b. ACECs**

(1) East Fork Parachute Creek (It appears that BLM will revisit and correct the illegal decision made in the 2008FPEIS and corresponding Record of Decision to open Naval Oil Shale Reserves (NOSRs) Nos. 1 and 3 to oil shale leasing. That 2008 decision ignored a withdrawal on the NOSRs preventing those lands from being leased for oil shale development. *See* 2012DPEIS at 3-7. BLM must identify the NOSRs as unavailable for application for commercial oil shale leasing in any final PEIS barring issuance of an opening order. Such a decision would eliminate the threat of commercial oil shale development in the East Fork of Parachute Creek).

East Fork Parachute Creek provides year-round habitat for CRCT, the only native trout in the Colorado River basin (U.S. Department of Agriculture, Forest Service. 1996. *Conservation Status of Colorado River Cutthroat Trout,* p. 1, available at: http://www.fs.fed.us/rm/pubs_rm/rm_gtr282.pdf).

East Fork Parachute Creek is identified as one of the five areas containing conservation populations by the *Conservation Agreement and Strategy for Colorado River Cutthroat Trout in the States of Colorado, Utah, and Wyoming* (Available at: http://www.USFWS.gov/mountain-prairie/species/fish/crct/CRCT/)

The Conservation Agreement gives highest
priority for management and protection to streams identified as containing conservation

populations (These populations also meet the BLM's own criteria for a conservation population. A conservation population is defined as: "[a] reproducing and recruiting population of native cutthroat trout that is managed to preserve the historical genome and/or unique genetic, ecological, and/or behavioral characteristics within a specific population and within geographic units." *See* U.S. Department of the Interior, Bureau of Land Management. 2008. *Roan Plateau Planning Area Proposed Plan/Final Environmental Impact Statement*, pp. 3-114).
Populations of CRCT in East Fork Parachute Creek are at least 90% genetically pure (U.S. Department of the Interior, Bureau of Land Management. 2002. *Roan Plateau Resource Management Plan*
Amendment, p. 20).
The importance of these trout populations is clear. This area must be protected from oil shale development in order to ensure the subspecies continues reproducing and recruiting. Oil shale development will likely result in increased sedimentation, reductions in water quantity and quality, ground water flow alteration, and increased likelihood of water contamination with toxic byproducts. These impacts will add stresses to CRCT populations and, in so doing, may undermine one of the values this ACEC was designated to protect.
BLM considers the entire watershed to be important to the long-term functionality of vital ecosystem processes that maintain upland and stream habitats important to these fishes (*Id*). According to BLM, "these streams are regionally and nationally important producers of native, genetically pure and naturally reproducing Colorado River cutthroat trout," going on to proclaim that these streams should be given the "highest priority for management and protection" (*Id*).
(2) Trapper/Northwater Creek ACEC (Trapper/Northwater ACEC is also almost entirely within the NOSR and cannot be available for oil shale development absent issuance of an opening order reversing the withdrawal that currently applies to the area. *See* 2012DPEIS at 3-4). Trapper and Northwater Creeks are tributaries to the Colorado River, and the creeks provide year-round habitat for CRCT. This ACEC is a critical conservation area for CRCT. Three of the five conservation populations of CRCT that exist atop the Roan Plateau are found within this ACEC. Included in these are "core conservation populations," identified by a genetic purity of 99% or higher (*Id.* at 3-116).
We also urge BLM to preclude oil shale development on upper reaches of Trapper and Northwater Creeks that are not included in the Trapper/Northwater Creek ACEC. Industrial development higher up in these watersheds has the potential to impact downstream values, including the values for which the ACEC was designated. At risk, in this case, would be nearly all of the Northwater Creek and a significant portion of the Trapper Creek populations of CRCT.
#26])> 5. **<([#27** [*3.1.1*] [*3.7.1.1*] Utah: other lands to be protected
a. White River ACEC
The Vernal RMP included a potential ACEC of 47,130 acres surrounding the deep canyon of the White River. This potential ACEC would have protected "unique geologic formations with spectacular vistas and the high-value river riparian ecosystem" (U.S. Department of the Interior, Bureau of Land Management. 2008. *The Vernal Field Office Proposed Resource Management Plan and Final Environmental Impact Statement*, p. 4-433).
The White River "provides
critical habitat for the endangered Colorado pikeminnow, as well as habitat for other threatened, endangered, and sensitive species, including the razorback sucker, flannel mouth sucker, roundtail chub, Yellow-billed Cuckoo, Peregrine Falcon, and Bald Eagle" (*Id*).
#27])> D. <([#28 [*3.1.2*] [*3.10.4*] **Economics and Recreational Values**

Public lands and their fish and wildlife resources are increasingly important from an economic standpoint and continue to be a wise long-term investment (*American Landscapes.* Newsletter, Fall 2009. *"Conservation and the Economy: the Economic Benefits of Public Lands."*).
Recreation has become one of the
most important uses of our nation's public lands, providing benefits beyond hunting and fishing (Collins, Sally, and H. Brown. Discussion Paper, 2007. *The Growing Challenge of Managing Outdoor Recreation*, Journal of Forestry 105(7)[Oct/Nov] 371-375)).
Outdoor recreational opportunities sustain an annual $730 billion contribution to the U.S. economy (Outdoor Industry Foundation. 2006. *The Active Outdoor Recreation Economy* available at
http://www.outdoorindustry.org/images/researchfiles/RecEconomypublic.pdf).
For lands managed by the Department of the Interior (which include those BLM
lands within the potential oil shale and tar sands development area) more than 437 million recreational visits in 2010 supported more than 388,000 jobs nationwide and contributed over $44 billion in economic activity, including 9,000 jobs in Colorado, 15,000jobs in Utah, and 14,000 jobs in Wyoming (U.S. Department of the Interior. June 2011. *The Department of Interior's Economic Contributions*).
In Colorado, Utah, and Wyoming, close to 3 million people participated in fishing activities in 2006. This amounted to more than $1.3 billion in expenditures to these three states. More than 523,000 hunters participated in some form of big game hunting in these same three states, contributing approximately $900 million in hunting expenditures (USFWS. 2006. *National Survey of Fishing, Hunting and Wildlife-Associated Recreation: State Overview*).
Ranging from mule deer
hunting in Utah's Bookcliffs to elk hunting in Wyoming's Greater Little Mountain area to fishing wild trout streams in Colorado, the fish and wildlife resources at stake should oil shale and tar sands development proceed are important to sportsmen and to the businesses and families that depend on the renewable economic contribution sportsmen make each year to rural communities. Conserving public lands is essential to maintaining hunting, fishing and outdoor recreation and the western economies that are sustained by them (SFRED's own recently released study concludes that sustainable industries on public lands such as hunting, fishing, and outdoor recreation are important to the continued economic vitality of rural western communities. Sportsmen for Responsible Energy Development/Southwick Associates. *Conserving Lands and Prosperity* available at www.sportsmen4responsiblenergy.org).
We urge BLM not to overlook these values of the lands it manages in trust for all Americans.

#28])> III. CONCLUSION

We are not opposed to the development of energy resources on our nation's public lands. We understand that energy is vital to America and that, given the volatility of global markets, it is imperative that we reduce our reliance on foreign sources. However, because other important values are also at stake, such as fish, wildlife, and water, BLM must ensure that its decisions regarding the use of public lands are responsible and undertaken with a level of care commensurate with the trust that has been placed in its hands. Decisions to make public lands available on a commercial scale for unproven technologies at what could be terrible costs to other valued resources would be irresponsible at this juncture.
Sincerely,

Sportsmen for Responsible Energy Development, the National Wildlife Federation, the Theodore

Roosevelt Conservation Partnership, Trout Unlimited, the Colorado Wildlife Federation and the Wyoming Wildlife Federation. See Attachment.

OSTS2012D50324
Organization: Coalition of Local Governments
Received: 5/4/2012 4:29:14 PM
Commenter1: - Kemmerer, Wyoming 83101 (United States)
Organization1: Coalition of Local Governments
Commenter Type: Cooperating Agency
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** aziech 5/16/2012 12:00:00 AM
Attachments: OSTS2012D50324.htm (OSTS2012D50324-59040.htm Size = 1 KB) CLG_OS-TS_Comments_PDEIS_FINAL_PDF_OSTS2012D50324.pdf (OSTS2012D50324-59039.pdf Size = 174 KB)
Submission Text
The Coalition of Local Governments (CLG) hereby submits its comments on the Oil Shale and Tar Sands Programmatic Draft Environmental Impact Statement (OS/TS PDEIS). The Coalition is an organization of Wyoming local governments including Little Snake River Conservation District, Lincoln County, Lincoln Conservation District, Sublette County, Sublette County Conservation District, Sweetwater County, Sweetwater County Conservation District, Uinta County and Uinta County Conservation District. The Coalition members are cooperating agencies on the PDEIS.
CLG members established this organization to ensure that federal land decisions were consistent with the local governments' plans and policies and to pool their expertise and resources. The Coalition members have more than eight years of experience as cooperating agencies and have worked on more than 25 projects and land use plans, including numerous energy projects. CLG members are currently working on the sage grouse Resource Management Plan (RMP) revisions in Wyoming.
<([#1 [*1.1.1*] As an initial matter, the Coalition notes that the due dates for these comments were poorly stated. The Notice of Availability for the Oil Shale Tar Sands PDEIS was published on February 3, 2012 by the Environmental Protection Agency, 77 Fed. Reg. 5513 (2012) and by the BLM on February 6, 2012. 77 Fed. Reg. 5833 (2012). The BLM notice provided that comments were due within 90 days of the EPA publication, which would be May 3, 2012. The EPA notice, however, incorrectly states that the comments were due May 2, 2012. To further confuse matters, the BLM web site states that the comments are due May 4, 2012. Several local governments formally requested additional time but in the absence of a response from BLM, the Coalition is filing these comments on May 4, 2012.
#1])> 1. <([#2 [*2.1.1*] **WYOMING LOCAL GOVERNMENT ALTERNATIVE**
The Wyoming local governments support the land allocations in Alternative 1 for the oil shale program in Wyoming. Because Wyoming does not have an RD&D lease, it may well be appropriate for initial projects to start with and RD&D to determine which of the several proprietary techniques will work best. The local governments also assume that

the lease stipulations that have been applied for oil and agas to protect soils, water, vegetation and fish and wildlife will also apply. In addition, the reclamation standards should also be similar given the amount of effort that has gone into Wyoming specific reclamation.

Much of the affected land is located within the boundaries of the Rock Springs Field Office (RSFO) which is currently revising its RMP. As currently postured, the designations identified in the preferred alternative for the OS/TS PDEIS will conflict with many pending RMP decisions, such as lands with wilderness character (LWCs), Areas of Critical Environmental Concern (ACECs) and other special designations. It would make more sense to allow the RSFO to handle this issue as an integral part of its energy development and land use planning in the ongoing plan revision process.

The rest of the high potential area in Wyoming is covered by the Kemmerer RMP, which was final in 2008. The OS/TS PDEIS does not provide any factual basis to revise the RMP decisions as they apply to oil shale development. The Kemmerer RMP adopted the Wyoming sage grouse strategy to protect core area habitat.

CLG members object to the effort to revise these land use plans through the back door without the data or information that was used or being used to write the land use plans. This is especially confusing for the public lands in the RSFO. The land allocations in Alternative 1, even if only for Wyoming, should be retained especially in light of the insufficient data found in the OS/TS PDEIS.

Under the 2008 rules, 43 C.F.R. Parts 3900, 3920, 3930, Research Demonstration and Development (RD&D) leases were issued before commercial lease rules were adopted. 43 U.S.C. §15927(e). The OS/TS PDEIS would expand RD&D without any commercial leasing.

The BLM signed a settlement agreement proposes amendments to the Oil Shale Final Rule. The proposed amendments require BLM to expressly state that it has discretion to deny an application converting an RD&D lease to a commercial lease based on environmental and other resource considerations and that BLM has discretion to reject an oil shale commercial lessee's proposed plan of development based on environmental or other resource considerations. This would add additional requirements under 43 C.F.R. §3926.10.

The proposed amendments require BLM to only consider issuing a commercial oil shale lease upon application for a conversion from an RD&D lease to a commercial lease, or after BLM issues a call for expression of leasing interest. The proposed amendments also require BLM to not issue any commercial lease unless it is shown that operations can be done without unacceptable environmental risk. Finally, the proposed amendments require plans of development for oil shale commercial leases to include watershed and groundwater protection plans, and environmental protection and mitigation plans, including defined standards for each of these requirements. BLM acknowledged that approval of any conversion to a commercial lease must be preceded by a NEPA analysis.

These changes, when coupled with the discontinuous parcels made available for RD&D leasing in the OS/TS PDEIS alternatives, other than Alternative 1, will not provide the necessary assurance to industry that it will realize a return on investment. Any land configuration needs to be sufficiently contiguous that a company can recover the multimillion dollar investment that even an RD&D project requires. Alternatives 2 - 4 do not

achieve that objective. **#2])>**

2. <([#3 [*9.2.2*] **OS/TS PDEIS DOES NOT CONFORM TO SECTION 369 OF THE 2005 ENERGY POLICY ACT**

In 2005, Congress directed BLM to establish a commercial program for development of oil shale and tar sands. Section 369 of the Energy Policy Act (2005 EP Act) adopted on August 8, 2005 relates to "Oil Shale, Tar Sands, and Other Strategic Unconventional Fuels." 42 U.S.C. §15927.That title declared it to be the United States' policy that "oil shale, tar sands, and other unconventional fuels are strategically important domestic resources that should be developed to reduce the growing dependence of the United States on politically and economically unstable sources of foreign oil imports." 42 U.S.C. § 15927(b)(1). Congress also directed that it be United States policy that commercial development of oil shale "be conducted in an environmentally sound manner, using practices that minimize impacts." 42 U.S.C. §15927(b)(2).

The 2005 EP Act required that the Interior Secretary promptly follow the completion of the programmatic EIS with regulations establishing a commercial oil shale and tar sands leasing program. 42 U.S.C. §15927(d)(2) ("Not later than 6 months after the completion of the [PEIS] under this subsection, the Secretary [of the Interior] shall publish a final regulation establishing such [commercial oil shale and tar sands leasing] program."). Section 369 directs the Department of the Interior (DOI) to issue commercial oil shale leases 180 days after the final rules are promulgated. *Id*. Lease sales are to include consultation with states, local governments, tribal governments and others to determine the level of interest. *Id*. DOI promulgated the final rules in November 2008. 73 Fed. Reg. 69414 (2008). Rather than follow the law, DOI suspended all oil shale leasing in 2009 and has ignored its Task Force reporting obligations. 42 U.S.C. §15927(h). While DOI is required to file reports with Congress each year, none has been prepared since 2008. http://www.unconventionalfuels.org/publications.html. The only reports now prepared are on "Secure Fuels."

The extent of Congress' commitment to unconventional fuels including oil shale and tar sands is also found in the establishment of a Task Force. 42 U.S.C. §15927(h). Department of Energy is to create commercial strategic fuel development program and to coordinate with state and local governments. DOI was to prepare a new assessment of priority areas in the Green River Region, which includes Wyoming, Utah and Colorado. *Id*. at §15927(m)(B). The heavy oil assessment was also to be updated. *Id*. §15927(p).

BLM proceeded to implement the direction by preparing a programmatic EIS that addressed the environmental impacts of oil shale an tar sands development and identified the public lands with the best potential. Based on the two considerations, BLM identified about two million acres of public land in Wyoming, Utah and Colorado as suitable and available for oil shale and tar sands development. ROD, 2008 OS/TS PFEIS at 1-4. BLM also promulgated rules to implement the commercial leasing program. 43 C.F.R. Parts 3900, 3920, 3930, 3936.

The OS/TS PDEIS is intended to analyze the impacts of a commercial leasing program, not the RD &D program authorized in subsection (c). 42 U.S.C. §15927(c). The 2008 PFEIS accomplished this mandate but the OS/TS PDEIS does not. Instead, its identification of land omits high potential land and limits development to small and

scattered areas that it makes a commercial program less feasible and is calculated to discourage commercial development. The OS/TS PDEIS admits this when it claims the changes are needed to conduct additional research. OS/TS PDEIS at 1-5. The law authorized RD&D separately and did not give the Secretary the discretion to substitute a commercial leasing program with another RD&D leasing program which applies to 25% of the land previously classified as suitable and available. **#3])>**

3. <([#4 [*9.5*] **OS/TS PDEIS FAILS TO CONFORM TO RMP PROCEDURES**

a. OS/TS PDEIS Supersedes RMP Decisions Without Adequate Rationale

The preferred alternative will remove from development lands with alleged wilderness character, notwithstanding a congressional prohibition on changing management to protect these lands. [Continuing Appropriations Act 2011, Pub. L. 112-10 (2011CR); Continuing Appropriations Act 2012, Pub. L. 112-36 (112th Congress) H.R. 2608, 10/05/11] The OS/TS PDEIS also proposes to exclude ACECs and other areas nominated by special interest groups, including groups that sued BLM in 2009, from oil shale or tar sands leasing. In many cases, the preferred alternative vetoes recent land use planning decisions, such as those for the Kemmerer RMP. In the case of the Rock Springs RMP, the OS/TS PDEIS will essentially make decisions that bind the plan revision process, without the requisite analysis or data.

The preferred alternative excludes more than 75% of the lands previously determined to be available for oil shale or tar sands leasing. This occurs even though much of the same land area is still classified as suitable and available for oil and gas leasing.

The OS/TS PDEIS purports to override the local land use planning process by designating LWCs, proposed ACECs and other protective sites, including the evergrowing Adobe Town area. Programmatic decisions cannot override the RMP process and as such, BLM is running roughshod over the rules and procedures established for land use decisions by implementing the resource allocations well ahead of information and analysis.

The Rock Springs Field Office initiated its plan revision in Spring of 2011. Much of the Wyoming high potential area is located in the Rock Springs Field Office but the OS/TS PDEIS appears to use proposed LWCs and ACECs that have not yet been fully addressed within the cooperating agency process, let alone a DEIS. CLG members cannot even comment in this process because it would violate the confidentiality agreement that it signed with BLM. This dilemma illustrates the flaws in BLM's efforts to impose top down decisions on LWCs and ACECs as well as the Adobe Town area, when those issues are still being addressed among the cooperating agencies. If BLM proceeds on this time table, it will eviscerate the land use planning process. This situation also suggests that national BLM has chosen to proceed without regard to its obligation to coordinate with local governments. For instance, Sweetwater County went on record a year ago as only supporting special management for the Adobe Town area within its wilderness study boundaries. The OS/TS PDEIS protects a much larger area even though the Wyoming Rare and Uncommon Area classification only prohibits noncoal surface mining and allows all other forms of mineral development. Wyo. Stat. 35-11-112(a)(v); Environmental Quality Commission rules, Chapter VII.

#4])> **b. <([#5** [*9.2.4*] **Sage Grouse Management**

The State of Wyoming has been aggressively developing a sage grouse strategy for

management since 2004. By 2008, the sage grouse core areas had been defined and management guidelines developed. Wyoming Gov. E.O. 2008-2, 2010-4; 2011-5. Wyoming BLM largely adopted or followed these guidelines in the RMP revisions for the Kemmerer, Pinedale and Rawlins Field Office. Thus, the candidate status of the sage grouse is not a basis to remove these lands from oil shale and tar sands development, especially in light of the significant restrictions already in place. The OS/TS PDEIS omits these entirely.

Wyoming BLM initiated a statewide RMP amendment for the sage grouse to address the 2008 executive order in fall of 2008. [BLM IM 2010-012 Sage Grouse Habitat Management, December 29, 2009; IM 2010-013 Oil and Gas Leasing Screen for Greater Sage Grouse, December 29, 2009] CLG members are cooperating agencies and this process is well along. **#5])>**

4. IMPLEMENTATION OF LWC CLASSIFICATIONS IN RMPS IS UNLAWFUL

A significant percent of the excluded acreage in the OS/TS PDEIS is justified on the basis that the LWCs must be protected. OS/TS PDEIS at 1-5, 2-12, 2-21, 2-52.

a. <([#6 [*9.2.1*] [*3.1.3*] **OS/TS PDEIS violates Congressional Funding Freeze on LWC Identification and Management**

On December 22, 2010, Secretary Salazar announced a new initiative to identify and manage public lands with wilderness character. Secretarial Order No. 3310 Protecting Wilderness Characteristics on Lands Managed by the Bureau of Land Management (Dec. 22, 2010) [The Wild Lands Policy and IM 2011-154 contradict the commitments made to the State of Utah, the U.S. Congress and the public when the Secretary stated that he would honor the Settlement Agreement between Utah and DOI (Answering Yes to the question from Senator Bennett "Do you agree that currently the Department has no authority to establish new WSAs (Post-603 WSAs) under any provision of law, such as the Wilderness Act of [sic] Section 202 of FLPMA?") The Secretary also stated BLM had no authority to impose nonimpairment management on non-WSA lands].

This action was followed with the adoption of manuals to guide BLM employees in the implementation of the extra-wilderness designation process. The resulting controversy and outcry, not to mention Director Abbey's admission that no specific section of Federal Land Policy Management Act (FLPMA) authorized the identification of lands with wilderness character outside of Section 603, led Congress to defund the entire initiative. [Continuing Appropriations Act 2011, Pub. L. 112- 10 (2011CR); Continuing Appropriations Act 2012, Pub. L. 112-36 (112th Congress) H.R. 2608, 10/05/11]

BLM has long contended that a mere inventory of wilderness character falls within its authority, citing 43 U.S.C. §1711(a). But FLPMA is equally clear that BLM cannot change land management based on an inventory unless and until the land use plan is amended. *Id.* The OS/TS PDEIS uses an undisclosed wilderness inventory and then proposes to change the management of these areas to protect the alleged wilderness character without disclosure of the basis for BLM's determination. This is exactly what S.O. 3310 directed BLM to do. When Congress froze all funding for it, two months after the *Colorado Environmental Coalition v. Salazar* (09-0085, 09-0091) settlement, BLM's hands were tied. The apparent decision to proceed regardless of the funding freeze is in contempt of Congress and unlawful. 31 U.S.C. §1341.

Calling these areas LWCs does not change the result. These areas are allegedly

wilderness suitable and BLM proposes to manage them in the same manner as it would have had Congress not shut down all funding related to S.O. 3310. Changing the name from "Wildlands" to "LWCs" does not make the action any more lawful. Apparently, BLM acknowledges the difficulty and has assiduously avoided any kind of public rulemaking process to implement the switch from S.O. 3310 to IM 2011-154.

The OS/TS PDEIS contradicts Congress' clear direction that BLM cease and desist from implementing the provisions of S.O. 3310. The fact that BLM put the implementing manuals in abeyance but issued Instruction Memorandum (IM) 2011-154 that implements the Order does not excuse BLM from the clear violation of Congress' edict [The Antideficiency Act provides that "an officer or employee of the U.S. Government may not make or authorize an expenditure or obligation exceeding an amount available in an appropriation or fund for the expenditure or obligation; involve the government in a contract or obligation for the payment of money before an appropriation is made unless authorized by law . . .." 31 U.S.C. §1341. The act imposes criminal penalties for violation, *Id.* at §1350, and authorizes adverse personnel action for employees that violate the law. *Id.* at §1349].

IM 2011-154 suffers from procedural deficiencies as well. It was issued without coordinating with local governments, public comment or in accordance with rulemaking procedures. Thus, it independently violates Federal Land Policy and Management Act (FLPMA) mandate that its provisions be implemented through rulemaking, 43 U.S.C. §1740.

An instruction memorandum issued by BLM in order to evade the funding and implementation freeze on S.O. 3310 enjoys little or no presumption of legality. *United States v. Mead Corp*., 533 U.S. 318 (2001) (holding that the court owes little deference to agency guidelines). By implementing the IM, BLM runs a serious risk that the OS/TS PDEIS will be set aside.

B. NO LEGAL AUTHORITY TO IMPLEMENT SECRETARIAL ORDER 3310 OR SIMILAR DIRECTION

Unlike the definition of multiple use for National Forests, 16 U.S.C. §529, FLPMA does not include wilderness as one of the statutory multiple uses. 43 U.S.C. §1702(c). Wilderness has its own definition, which is limited to Section 603. ("(i) The term 'wilderness' as used in section 1782 of this title shall have the same meaning as it does in section 1131(c) of Title 16." *Id.* §1702(i). The term 'wilderness' is found only in the definition section, 43 U.S.C. §1702(i) and the wilderness review provisions of Section 603, 43 U.S.C. §1782; 43 C.F.R. §1601.0-5(i). Section 603 is the only provision in federal law that authorizes the identification, study and recommendation of public lands for wilderness designation by Congress. Thus, BLM is not at liberty to add wilderness to other provisions in FLPMA when Congress so clearly chose not to.

Only Section 603 of FLPMA authorizes BLM to manage lands so as to not impair their wilderness character. *Tri-County Cattleman's Association Idaho Cattlemen's Association*, 60 IBLA 305, 314 (1981). There is no other statutory authority for BLM to study and manage public lands as if they were wilderness. Public lands are to be managed so as to not unduly and unnecessarily degrade the resources. (43 U.S.C. §1732(b) [nondegradation standard], except for WSAs which are managed so as to not impair the wilderness character.) Id at 1782(c).

The Interior Secretary's authority to identify public lands as wilderness study areas under Section 603 has expired. *State of Utah v. Babbitt*, 137 F.3d 1193, 1206, n.17 (10th Cir. 1998) (Secretary Babbitt wrote "I also agree with you that FLPMA's section 603 no longer provides authority to inventory BLM land in Utah for wilderness values."). BLM has attempted to claim discretion to manage lands to preserve their wilderness character but the planning rules do not so provide. The rules were revised to remove wilderness study from the general planning process and have never been amended to make wilderness study part of the land use planning process [By comparison, the Forest Service revised its planning rules to integrate
wilderness study and recommendations into each plan revision. 36 C.F.R. §219.27].
Section 202 of FLPMA provides for the development and revision of land use plans. 43 U.S.C. §1712. Land use planning must have coordination with state and local governments, public involvement and be consistent with FLPMA. 43 U.S.C. §1712(a). The criteria for developing and revising land use plans, includes (1) using and observing the principles of multiple use and sustained yield set forth in FLPMA and other applicable laws, 43 U.S.C. §1712(c)(1); (2) interdisciplinary approach, §1712(c)(2); (3) priority to designate ACECs, §1712(c)(3); and (4) "to the extent consistent with the laws governing the administration of the public lands, coordinate the land use inventory, planning, and management activities of or for such lands with the land use planning and management programs of other Federal departments and agencies and of the States and local governments within which the lands are located;"§1712(c)(9). FLPMA further states: "Land use plans of the Secretary under this section shall be consistent with State and local plans to the maximum extent he finds consistent with Federal law and the purposes of this Act." Id.
Nothing in Section 202, which governs land use planning, authorizes wilderness study or wilderness-type management. The history of the planning rules shows that the word "wilderness" was deleted from the draft of the planning rules on purpose. When BLM wrote the rules governing land use plans, it originally defined a resource management plan as including "the initial determination of whether a wilderness study area shall be recommended to the President for recommendation to the Congress as suitable or unsuitable as an addition to the National Wilderness Preservation System." 43 Fed. Reg. 58764, 58768-69 (1978) draft 43 C.F.R. §1601.0-5(p)(2). The definition of a resource management plan was later revised to delete reference to wilderness study area recommendations. 44 Fed. Reg. 46386 (1979). Thus, BLM has no regulations in the land use planning chapter authorizing establishment of wilderness type areas or authorizing nonimpairment management for such lands other than designated WSAs designation pursuant to Section 603, which expired.
BLM adopted the Wild Lands Policy through three Manuals, based on its claimed discretion in FLPMA, Sections 201, 202 and 302 of FLPMA. Those provisions do not support BLM's claimed authority to designate Wild Lands or LWCs or to manage them as if they were designated WSAs for nonimpairment of the wilderness character.
IM 2011-154 was adopted without proper comment procedures and without coordination with local governments. Under Section 202(a), BLM has no choice but to coordinate with local governments and to resolve conflicts in land use plans. 43 U.S.C. §1712(a). So far BLM has failed to do so on this very important issue. No Wyoming local government within the affected area supports proposed or identified LWCs. Several of

the applicable local government plans oppose new wilderness character areas. BLM has clearly violated Section 202 by not coordinating both its inventory and LWC determination with the local governments.

The OS/TS PDEIS also fails to identify which, if any, inventory it has used to identify the LWCs. For example, in the Rock Springs Field Office, BLM has maps of the alleged LWCs which were identified without any coordination with local governments. The single map in the OS/TS PDEIS fails to identify these areas or to disclose the factual basis for the LWC classification. OS/TS PDEIS Figure 2.3.3-3. Thus, it is impossible to divine their location or the resource values that prompted the classification being used in the OS/TS PDEIS. If CLG had access to this information it could provide site specific documentation of the errors in the premise that these are LWCs.

These lands are not "wilderness" as that term is used in the Wilderness Act. These areas are heavily roaded and include the Wyoming Checkerboard where Anadarko owns the alternating sections. There are powerlines, rights-of-way for pipelines, wind farms as well as coal mining and oil and gas development.

It appears that the OS/TS PDEIS adopts this unofficial and inaccurate information and excluded significantly high potential public lands from oil shale leasing. CLG requested the information regarding these inventories in November and never received it. CLG assumes that for Utah the OS/TS PDEIS uses the Utah HR 1925 lands without regard to the RMP decisions that evaluated those lands in 2008.

Figure 2.3.3-3 depicts the Wyoming LWCs without providing any other information or even labels. Chapter 6 of the OS/TS PDEIS lists the areas and acreage without providing maps or a description. The OS/TS PDEIS uses a limited and incorrect definition of wilderness. Footnote to Table 6.2.3 states: "The key characteristics of wilderness that may be considered in land use planning include an area's appearance of naturalness and the existence of outstanding opportunities for solitude or primitive and unconfined types of recreation." This statement is materially incorrect, because the definition of wilderness requires that an area be roadless and that it be greater than 5,000 acres. 16 U.S.C. §1131(a). The OS/TS PDEIS conveniently drops the first two criteria.

Table 6.1.1-2 purports to list LWCs in Wyoming, when that classification has never been adopted or even made public. The Adobe Town WSA consists of 85,710 acres. None of the listed areas correspond to WSAs designated in 1980. Since there is no information provided, CLG members cannot provide meaningful comments. **#6|)>**

5. <(|#7 [*1.5*] [*9.8*] **OS/TS PDEIS FAILS TO CONFORM TO NEPA RULES**

A. PURPOSE AND NEED

"Agency action should be overturned only when the agency has 'relied on factors which Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise.'" *Motor Vehicle Mfrs. Ass'n v. State Farm Mutual Auto. Ins. Co.*, 463 U.S. 29, 43 (1983). The OS/TS PDEIS meets the definition of arbitrary and capricious as the explanation for the land use allocations do not have sufficient explanation or documentation to support them, and the explanation for revision runs counter to the facts.

i. Real Purpose and Need Unaddressed

The Notice of Intent and the statement of Purpose and Need in the PDEIS omit the real basis for the new programmatic EIS. BLM settled two lawsuits, which challenged both the 2008 PFEIS Record of Decision *Colorado Environmental Coalition (CEC) v. Salazar*, No. 09-0085; and the regulations promulgated to implement an oil shale and tar sands leasing program, *Colorado Environmental Coalition (CEC) v. Salazar*, 09-0091. The conduct of the two cases and, particularly, the CEC's failure to prosecute the cases strongly suggests that this was a friendly litigation with an equally friendly settlement [It is ironic that the environmental plaintiffs excoriated BLM for settling the Utah wilderness inventory case with the State of Utah and yet clearly filed these two cases for the purpose of securing sweetheart terms to eviscerate the oil shale and tar sands programs].

Plaintiffs filed the two cases in February of 2009, but the government sought numerous extensions of time to answer and settled the case shortly before the administrative records were to be filed before the court.

BLM's reconsideration of the 2008 OS/TS ROD is based entirely on the terms of the settlement in which BLM committed to this revision. *CEC v. Salazar*, #63 ¶1 ("No later than 120 days after this Settlement Agreement becomes effective, Defendants will publish a notice of intent ("NOI") to consider amending each of the land use planning decisions made by the 2008 OSTS ROD.") BLM also committed to consider excluding from oil shale and tar sands development all "lands with wilderness character" a term that did not exist until December 23, 2010. BLM also agreed to exclude existing and proposed ACECs and the Adobe Town rare and uncommon area. The state law designation of a rare and uncommon area only prohibits noncoal surface mining but allows coal mining under certain conditions, as well as oil and gas development. EQC Rules Ch. VII. It cannot apply to public land. *Calif. Coastal Commn. v. Granite Rock Co.*, 480 U.S. 572 (1987) (holding state's coastal zone management could not regulate mining on federal land).

In the rulemaking case, BLM committed to amending the oil shale and tar sands leasing rules within 15 months. BLM has made no move to initiate the changes. The settlement terms mandate the content of the final rules to a degree that violates public policy and the law, because BLM agrees in advance to what the final rules will provide. BLM also agreed to deny applications to convert RD&D leases to commercial leases based on environmental and resource considerations, to reject plans of development and to limit commercial leases to RD&D lessee after expressions of interest and detailed stipulations. *CEC v. Salazar*, No. 09-0091, Doc. No. 80-1 ¶¶1-6. The settlement predetermines the outcome of the rulemaking such that BLM has relinquished its authority and discretion.

The 2008 regulations remain in effect but cannot be implemented under the terms of the settlement, which prohibit oil shale leasing. By accepting the plaintiffs' demands for content, BLM has failed to comply with the 2005 EP Act, Section 369 to develop a commercial oil shale and tar sands leasing program.

As is clear in the OS/TS PDEIS, BLM also committed to a predetermined outcome in the programmatic EIS to reduce the potential for oil shale and tar sands development by removing 75% of the land base and limiting the remnants of the program to research and development, rather than the commercial scale mandated by federal law. The fast pace of the drafting of the OS/TS PDEIS and the fact that entire chapters are largely the

same as the 2008 PFEIS. BLM is doing a rush job to issue a final decision without regard to the facts or competing legal obligations and constraints.

ii. Purpose and Need for Revision Unsupported in OS/TS PDEIS

The Notice of Intent to revise the 2008 Oil Shale and Tar Sands FEIS stated: "The BLM has decided to take a fresh look at the land use plan allocation decisions made in the 2008 ROD associated with the Programmatic EIS, in order to consider which lands should be open to future leasing of oil shale and tar sands resources." 76 Fed. Reg. 21003 (2012). The Notice of Intent went on to state that:

As there are no economically viable ways yet known to extract and process oil shale for commercial purposes, and Utah tar sands deposits are not at present a proven commercially-viable energy source, the BLM, through its planning process, intends to take a hard look at whether it is appropriate for approximately 2,000,000 acres to remain available for potential development of oil shale, and approximately 431,224 acres of public land to remain available for potential development of tar sands.

Id.

The OS/TS PDEIS expresses the purpose and need as necessary to determine which lands should be removed from the classification of available for leasing. "The purpose and need for this proposed planning action is to reassess the appropriate mix of allowable uses with respect to oil shale and tar sands leasing and potential development. Specifically, the BLM will consider amending the applicable Resource Management Plans (RMPs) to specify whether any areas in Colorado, Utah, and Wyoming currently open for application for future leasing and development of oil shale or tar sands should not be available for such application for leasing and development." PDEIS 1-4. **#7])>**

<([#8 [*9.2.2*] The criteria to exclude high potential oil shale and tar sands lands from leasing suffers

several flaws. First, OS/TS PDEIS does not and indeed cannot explain how it conforms to Section 369, since BLM previously concluded that similar alternative would not conform. 2008 Record of Decision PFEIS (2008 ROD) at 22 ("Much of the most geologically prospective acreage would be excluded under Alternative C; in particular areas which are in close proximity to three of the six RD&D leases would be excluded. In addition, this unreasonably fragments the area that would be available for application, resulting in parcels that are unlikely to be explored, leased, or developed.") **#8])>**

<([#64 [*9.2.1*] Second, Congress has prohibited BLM from spending federal funds to classify and manage lands

as LWCs as directed in S.O. 3310. Alternatives 2-4 propose exclusions based on LWCs, thus implementing the S.O. 3310 in defiance of the ban on spending federal funds to do so [BLM's actions violate the Anti-Deficiency Act, 31 U.S.C. §1341 and the involved officials could face adverse employment actions, *Id.* at §1350, and criminal penalties, §1349].

#64])> <([#65 [*9*] [*3.1.5*] Third, all of the alternatives exclude from oil shale leasing the Adobe Town Rare & Uncommon Area, which is a state law classification that allows leasing but prohibits mining. The rare and uncommon designation cannot apply to public land, because the 1872 mining laws, as amended, preempt state law. *Calif. Coastal Commn. v. Granite Rock Co.*, 480 U.S. 572 (1987) (holding state's coastal zone management

could not regulate mining on federal land).
The Coalition has previously explained that the larger Adobe Town area is not supported by Sweetwater County and impairs private land uses. Fourth, the OS/TS PDEIS provides no information about these areas, although many of the ACECs are merely proposed. Hence, there is no 'fresh look' nor does the OS/TS PDEIS disclose the new information upon which BLM is relying to support the actions proposed in the OS/TS PDEIS. The OS/TS PDEIS does not provide any information that would support the status of these areas or their exclusion. The apparent rush to complete the OS/TS PDEIS resulted in omission of the description of areas to be excluded, and this failure to describe or analyze the areas prevents the public and coordinating entities from meaningful public comment. **#65])>**
<([#9 [*1.5*] [*2*] **b. Detailed Analysis of Alternatives**
The OS/TS PDEIS identifies the Preferred Alternative as 2(b).
The BLM has selected Alternative 2(b) as the Preferred Alternative. The Preferred Alternative would make approximately 461,965 acres available for future consideration for commercial oil shale leasing and 91,045 acres available for application for commercial tar sands leasing, but only for research, development, and demonstration (RD&D) leases. The BLM would issue a commercial lease only when a lessee satisfies the conditions of its RD&D lease and the regulations at 43 CFR Subpart 3926 for conversion to a commercial lease. The preference right acreage, if any, which would be included in the converted lease, would be specified in the RD&D lease.
OS/TS PDEIS at i.
The OS/TS PDEIS, however, does not contain any specific analysis of the expanded RD&D program that is being proposed in lieu of the commercial leasing program. The OS/TS PDEIS attempts to compensate for this defect by stating:
The environmental impacts of Alternative 2(b) would be analytically indistinguishable from those of Alternative 2(a). Only the method of obtaining a lease would be different. Accordingly, the analysis in this PEIS of Alternative 2 applies fully and equally to both alternatives. To the extent there may be differences in environmental consequences between Alternative 2(a) and 2(b), these would be related to the timing of the commencement of impacts, as well as, possibly, length of disturbance. However, these issues are best addressed in the lease and/or project-specific analysis.
OS/TS PDEIS at ES-7, 2-35. The OS/TS PDEIS states that this alternative was not developed until quite late in the process.
As the Draft PEIS was being developed, the idea for this alternative emerged. It is presented here in brief. This alternative is not noted elsewhere in the document but will be developed further in preparation of the Final PEIS. Analytically, this subalternative is indistinguishable from Alternative 2(a) in terms of environmental consequences. Therefore further environmental analysis in preparation of the Final PEIS is not anticipated, although more detailed explanation may be provided, particularly in response to comments received.

OS/TS PDEIS at 2-35.
The OS/TS PDEIS statement that Alternative 2(b) environmental impacts are basically the same as Alternative 2(a) is untrue. Alternative 2(b) changes the timing of oil shale leasing to slow it down and this change in timing significantly changes the nature of the impacts on water, surface disturbance. NEPA requires agencies to consider direct, indirect, and cumulative effects in the context of geography and timing. 40 C.F.R. §1508.25. The preferred alternative delays in issuing RD&D leases and not issuing commercial leases will change the scope and impact and must be separately analyzed. The very limited information about Alternative 2(b) and the omitted discussion of the imminent rule changes do not provide the public with sufficient information to determine whether, in fact, it is virtually identical to Alternative 2(a). If Alternative 2(b) is essentially the same, then BLM should and could have changed Alternative 2(a). BLM has already committed to rule changes in the CEC settlement agreement. The OS/TS PDEIS omits all discussion, even though the rulemaking is a connected action that falls within the scope of this EIS and failure to discuss the connected actions violates NEPA. 40 C.F.R. §§1501.7; 1508.25. For instance, the OS/TS PDEIS claims Alternative 2(b) will change the lease terms but provides no information on what those changes will be, other than it will only authorize RD&D leases. *Id.* at ES-7, 2-35.
NEPA requires that each alternative be analyzed in detail. 40 C.F.R. §1502.14(b) (substantial treatment must be devoted "to each alternative considered in detail including the proposed action so that reviewers may evaluate their comparative merits."). The discussion of alternatives in the EIS must be sufficient to permit a reasoned choice among the options." *State of Wyoming v. USDA*, 661 F.3d 1209, 1243 (10th Cir. 2011) (quoting *AWARE v. Colo. Dep't of Transp*., 153 F.3d 1122, 1130 (10th Cir. 1998)). BLM's failure to explain the preferred alternative or its impacts on the respective states and communities, requires that BLM withdraw the draft and revise or issue a supplement to explain the preferred alternative. 40 C.F.R. 1502.9 ("If a draft statement is so inadequate as to preclude meaningful analysis, the agency shall prepare and circulate a revised draft of the appropriate portion.")
Alternative 2(b) does not conform to Section 369 because it continues the RD&D program instead of providing for a commercial leasing program. While an agency can consider an alternative that requires additional authority, it must disclose this fact. *Forty Questions on CEQ NEPA Regulations*, 46 Fed. Reg. 18026 (1981) as amended 51 Fed. Reg. 15618 (1986), Answer to Question 2(b). The OS/TS PDEIS does not propose an amendment to the 2005 EP Act to modify the mandate.
#9])> c. **<([#10** [*1.5*] [*6.5*] Omission of Significant New Information
The Purpose and Need for the OS/TS PDEIS is justified as a "fresh look" at oil shale and tar sands development. 76 Fed. Reg. 21003 (2011). The OS/TS PDEIS is not in fact a "fresh look," it is merely a retread of an alternative previously rejected by BLM on the grounds that it would not conform to Section 369 of the 2005 EPA. [2008 ROD at 22]. The purposeful omission of new information is significant and violates NEPA. Since the 2008 ROD was signed, several companies have been developing oil shale pursuant to the RD&D leases. The OS/TS PDEIS omits these results and progress reports. Similarly advances in technologies and actual experience with these technologies has been omitted. Instead, the OS/TS PDEIS repeats throughout the conclusion that oil shale and tar sands are not commercially viable and also repeats old data regarding the

amount of water, power and surface disturbance.
The OS/TS PDEIS excludes new information regarding oil shale and tar sands technology and makes very limited the use of the 2010 and 2011 USGS assessments of potential. OS/TS PDEIS 2-77. Chapter 3 and App. A are very similar, if not identical, to the 2008 FEIS and notably do not discuss oil shale extraction technology used by Red Leaf or Enefit.
The OS/TS PDEIS purports to include new information regarding sage grouse, LWCs and ACECs but the information is vague and incomplete as to preclude any kind of meaningful analysis. The OS/TS PDEIS lacks a discussion disclosing the resource values of these areas, the basis for the respective classification, or the other current land uses. The OS/TS PDEIS does not discuss the Wyoming sage grouse strategy or how BLM adopted the state strategy as an interim protection.
Many of these areas have oil and gas leases and even production, which would contradict the description as LWCs. In Wyoming, the OS/TS PDEIS omits that these areas are also located in the Wyoming Checkerboard where the private land is owned by Anadarko, a gas development company. The OS/TS PDEIS concludes that private land is inconsistent with development when the private lands in Wyoming have been developed for decades and generally in conjunction with public lands.
While BLM could theoretically decide not to issue individual leases, it does not have the discretion to simply discard new and relevant information. This information is environmentally significant since it shows retort methods using modest amounts of water and causing significantly less surface disturbance than assumed in 2008. NEPA requires BLM to consider significant new information and this omission results in a significant bias of the OS/TS PDEIS against additional oil shale and tar sands development notwithstanding the congressional mandate to proceed with this program.
Similarly, the OS/TS PDEIS omits the statutorily required assessment of oil shale and tar sands potential. 42 U.S.C. §15927(m). The USGS Assessment reports completed in 2010 and 2011 identified additional land as having high potential but the OS/TS PDEIS did not use this report in its identification of potential lands. Instead, the OS/TS PDEIS simply modified the areas identified in 2008 and made them 75% smaller.
The omission of new information is further documented in the fact that many of the chapters, especially Chapter 3 and the Appendices, are largely unchanged from the 2008 PFEIS. This only shows that BLM limited its update the OS/TS PDEIS to the alleged LWCs and other special designations as a basis to marginalize a congressionally mandated program.

#10])> d. <([#11 [*6.3.5*] [*6.3.2*] **OS/TS PDEIS Dismissal of Technology Fails to Acknowledge Significant Scientific Controversies**

At a minimum, BLM must acknowledge that there is a scientific controversy regarding its key assumptions of environmental impact and support its position. 40 C.F.R. §1508.127(b)(4); *Middle Rio Grand Conservation Dist. v. Norton*, 294 F.3d 1220, 1229 (10th Cir. 2002) (setting aside critical habitat designation EIS on the basis that "[t]he wide disparity in the estimates of water required for the designation, and the associated loss of farmland acreage, indicate that a substantial dispute exists as to the effect of the designation."). Like the above decision, there is a wide disparity in estimates of water, surface area and electrical power assumed to be necessary for oil shale development. BLM, like the USFWS, must address the disparities, especially since the newer data

reflect new information.
The OS/TS PDEIS repeats the refrain that oil shale development will require more than 1 barrel of water for each barrel of oil. OS/TS PDEIS 4-3, 4-9, 4-11, 4-33, 4-47, 4-48, 5-32, 5-35, A-85. As described by Red Leaf and Enefit, two companies operating in Colorado and Utah under RD&D leases, new technology does not rely on large amounts of water in the retort process. The R&D program was intended to provide BLM with this type of information, yet it is excluded from the OS/TS PDEIS. By using outdated or erroneous assumptions, the OS/TS PDEIS exaggerates the water and power needs as well as the surface disturbance.
The same defects apply to the OS/TS PDEIS assumptions about the size of the surface disturbance and the amount of electrical power needed. OS/TS PDEIS at A-46, A-62, A-80, A-84, A-85. In part, these errors arise because the BLM never updated Chapter 3 or the Appendices. These same assumptions are carried through to Chapters 2 and 4-6, thus tainting the entire analysis with erroneous assumptions.
The above assumptions are relevant to the OS/TS PDEIS conclusion that oil shale and tar sands have not been shown to be commercially viable. OS/TS PDEIS at 2-57, 2-76, 3-238. This very curious statement cannot be reconciled with the fact that the province of Alberta has been producing oil from tar sands for more than 20 years and even transports tar sands oil to Utah for refining. Similarly, Enefit has been producing oil from oil shale for more than 30 years. The OS/TS PDEIS does not provide any definition of commercial viability but proven business operations should suffice and it is inexplicable that the OS/TS PDEIS repeats a conclusion that is contradicted by incontrovertible facts. The issue of commercial viability is also the basis for Alternative 2b, which would actually limit oil shale development to another RD&D program, without authorizing commercial leases. The preferred alternative rests on the highly disputed premise that oil shale is not commercially viable. NEPA requires that BLM disclose and discuss scientific controversies. The OS/TS PDEIS does not.
#11])> 6. <([#12 [*3.10.3*] **ONE-SIDED ECONOMIC AND SOCIAL ANALYSIS**
The OS/TS PDEIS assumes that oil shale and tar sands development will lead to a boom and bust economic cycle. OS/TS PDEIS 2-36, 3-242. Based on that premise, the OS/TS PDEIS describes Alternative 1 as harmful and Alternatives 2-4, which feature little to no development, as beneficial. OS/TS PDEIS at ES-9, Table 2.3.2-2, Table 2.4.2-2, Table 2.6-1.
The OS/TS PDEIS omits the fact that the lands classified as high potential are in the regions where there is already a viable energy economy. For example, in southwestern Wyoming, there are several major gas fields producing conventional and coalgas, including Pinedale Anticline, Jonah, Moxa Arch, Continental Divide and Hiawatha. There are numerous other plays for oil and natural gas as well. Coal mining plays important role in Sweetwater and Lincoln Counties, with trona also in Sweetwater and Uinta Counties. Construction of wind farms and related transmission lines continues at a rapid pace as well. Thus, oil shale will add to the economy but is unlikely to be significant enough to create an economic boom.
The OS/TS PDEIS fails to consider the cumulative impacts and connected actions in this discussion of the economic and social impacts. It is true that the current energy development has generated housing shortages and pressure on existing roads. But Wyoming has one of the lowest unemployment records in the country and has

weathered the severe recession, and in reality a national depression, far better than other states such as California, Oregon and Washington.
Taking the OS/TS PDEIS discussion to its logical conclusion, one would conclude that it is BLM's view that it is better for the residents of rural counties and communities to remain poor and isolated. OS/TS PDEIS at ES-9, Table 2.3.2-2, Table 2.4.2-2, Table 2.6-1. It is correct that the upsurge in energy development has changed western Wyoming communities. There is more traffic, more demand for housing and other services. There has also been more opportunity for jobs and to lease or sell private land related to energy projects, with the injection of cash into the economy. Certainly, the State of Wyoming and the trust beneficiaries, the University and Wyoming Game & Fish Department, have also seen significant increases in revenues, which allowed Wyoming to avoid the job losses, bank failures and bankruptcies that haunt many other states and large cities.
The oil shale program would add to the existing energy industry but would be a relatively small portion. Wyoming is already the second largest recipient of federal royalty revenues and revenues from oil shale would not significantly change that. It would, however, represent continued diversification in energy development. **#12])>**

7. CONCLUSIONS AND RECOMMENDATIONS

The OS/TS PDEIS suffers from a number of fatal flaws.
. **<([#13** [*9.2.2*] Any alternative needs to conform to Section 369 of the 2005 EPA, retain the land allocations adopted in 2008 to avoid discontinuous development, and ensure that a commercial leasing program is feasible;
#13])> . **<([#14** [*9.2.1*] Implementation of LWC management in Alternatives 2, 3 and 4 violate the
congressional limitation on the expenditure of funds to implement S.O. 3310 and exceed BLM's authority;
#14])> . **<([#15** [*9.5*] All of the alternatives except Alternative 1 violate FLPMA land use planning
processes and rules by superseding the ongoing plan revision for the Rock Springs area;
#15])> . **<([#16** [*1.5*] OS/TS PDEIS violates NEPA
. by failing to support the purpose and need in the PDEIS;
. by failing to fully analyze the preferred alternative so that the public can meaningfully comment;
. omitting significant new information regarding oil shale and tar sands potential and technological advances;
. failing to fully disclose the basis for excluding land areas from oil shale and tar sands development, when such areas were proposed by special interest groups without providing maps, facts, or rationale to support the adoption of these proposals;
. failing to address the scientific controversies regarding the environmental impacts and resource needs for oil shale and tar sands development.
#16])> The Coalition members appreciate the opportunity to comment on this draft, but believe that unless BLM issues a new draft or a substantive supplement, the OS/TS PDEIS cannot survive judicial scrutiny.

ADDITIONAL COMMENTS BY COALITION OF LOCAL GOVERNMENTS1
OSTS November Comments Resubmitted May 4, 2012 Additional Discussion

<([#17 [*13*] Chapter 1
p. 1-1
Change:
"designate" to "classify"

Additional Discussion:
43 U.S.C. §1712 uses the term classify, not designate. **#17])>**

<([#18 [*9*] p. 1-1
Add to first paragraph:
"For the public lands to be closed to future oil shale and tar sands leasing, DOI will prepare a withdrawal in accordance with FLPMA..."

Additional Discussion:
In the event the Secretary adopts the preferred alternative, FLPMA requires that the Secretary issue a formal withdrawal. 43 U.S.C. §§1702(j); 1714(c). The Secretary must also report this closure of a major multiple use to the congressional committees have jurisdiction over public lands. Id. at §1712(e). **#18])>**

<([#19 [*10.7*] p. 1-4
Add:
"Utah counties currently use tar sands deposits to pave the local roads..."

Additional Discussion:
OS/TS PDEIS repeatedly states that tar sands are not commercially feasible to develop. A paving company in Uintah County has been using tar sands for several decades as paving material. **#19])>**

<([#20 [*9.1*] 1.1 Purpose and Need
Add
"Development of oil shale and tar sands would produce oil. In addition, tar sands provide paving material for local roads without additional processing."

Additional Discussion:
The 2005 EP Act requires that BLM develop a program to use oil shale and tar sands to produce oil. Since this is the law, it should be part of the purpose and need. **#20])>**

<([#21 [*13*] 1.1.1
Add: "The BLM RMPs are currently being revised in Wyoming..."

Additional Discussion:
The Notice of Intent to revise the Green River RMP was
published Feb. 1, 2011, 76 Fed. Reg. 5607. **#21])>**

Page 1 of 14 COALITION OF LOCAL GOVERNMENTS COMMENTS ON OS/TS PDEIS
ADDITIONAL COMMENTS BY COALITION OF LOCAL GOVERNMENTS1
OSTS November Comments Resubmitted May 4, 2012 Additional Discussion

<([#22 [*6.1.1*] 1.2 OS/TS PDEIS 1-10.
Change:
"25 gal of shale per ton of rock (gal/ton) or more and are 25 feet thick..."
to
"15 gal of shale per ton of rock (gal/ton) or more and are 15 feet thick"

Additional Discussion:
The distinction puts Colorado and Utah at a disadvantage. CLG
recognizes this was a decision made in the 2008 PFEIS but it
still appears to be arbitrary. **#22])>**

<([#23 [*9.5*] 1.2 OS/TS PDEIS 1-11, lines 26-27
Delete:
"As discussed in Chapter 2, additional areas are closed and will not be
available for the future opportunity to lease for oil shale and tar sands on the
basis of local planning decisions."

Additional Discussion:
The closures based on the criteria used in the OS/TS PDEIS
are inconsistent with local land use plans and re not supported
by the record or the facts. As CLG informed BLM as part of its
cooperating agency comments, Sweetwater County resolution
on Adobe Town only supports special management within the
wilderness study area (WSA) boundaries. The Wyoming Rare
and Uncommon Area designation only limits mining, not oil and
gas leasing. Thus, it should not be the basis to close this area
to oil shale development. **#23])>**

<([#24 [*9.5*] 1.4.3 OS/TS PDEIS 1-17 Comment:
"If the lack of information is due to the proprietary nature of the
data or BLM's delay in approving operation of RD&D Leases,
then the PEIS should disclose it." It is not credible that BLM has
not received any information, given the number of presentations
being made by the lessees. **#24])>**

<([#25 [*13*] Chapter 2
2.1
Change:

"open" to "revise" **#25])>**

Page 2 of 14 COALITION OF LOCAL GOVERNMENTS COMMENTS ON OS/TS PDEIS
ADDITIONAL COMMENTS BY COALITION OF LOCAL GOVERNMENTS1
OSTS November Comments Resubmitted May 4, 2012 Additional Discussion

<([#26 [*9.1*] 2.1
Add:
"In a separate settlement of a lawsuit challenging the oil shale regulations..."

Additional Discussion:
The OS/TS PDEIS needs to fully disclose the role that the
settlement of the litigation plays in the Purpose and Need,
especially since it is a specific term in the settlement agreement. **#26])>**

<([#27 [*9.2*] 2.2.1 OS/TS PDEIS 2-3, line 66
Add to second paragraph:
"the Taylor Grazing Act...the 1872 Mining Law, the 1920 Mineral Leasing Act,
and the Mining and Minerals Policy Act as well as" **#27])>**

<([#28 [*9.2*] 2.2.1 OS/TS PDEIS 2-3 Comment:
"The Wilderness Act is limited to public land areas designated
by Congress and there is no designated wilderness in the
project area..." **#28])>**

<([#29 [*3.1.7*] 2.2.1 OS/TS PDEIS 2-3
Add to fifth paragraph:
"None of the public lands within the project area contain designated
wilderness or wild or scenic river segments. In Wyoming, the project Area
includes designated segments of the Pony Express trail, Oregon and
California Trail, Mormon Trail, and the Cherokee Trail." **#29])>**

<([#30 [*13*] 2.2.1
Add to fifth paragraph:
"indirectly affect" **#30])>**

Page 3 of 14 COALITION OF LOCAL GOVERNMENTS COMMENTS ON OS/TS PDEIS
ADDITIONAL COMMENTS BY COALITION OF LOCAL GOVERNMENTS1
OSTS November Comments Resubmitted May 4, 2012 Additional Discussion

<([#31 [*3.6*] 2.2.1 Applicable laws by category OS/TS PDEIS 2-5
Noise
Delete: "The EPA issued guidelines for outdoor noise levels that are
consistent with the protection of human health..."
Add: "Noise is subject to state and local government regulation and this may
affect operations, either from the perspective of work safety or when near

residential areas..."

Additional Discussion:
Comment: "The location of shale and tar sands resources makes it unlikely that operations will affect urban or residential areas. The EPA standards are set for human exposure, particularly at night. As used, this discussion is incomplete." **#31])>**

<([#32 [*3.7.2*] 2.2.1 Applicable laws by category
Pesticide and noxious weeds
Delete: "In addition, sites will be subject to federal provisions to control noxious weeds and invasive species and may be subject to regulations governing state-established control areas."
Add: "E.O. 13112 directed all federal agencies to limit infestation and spread of invasive non-native species. State and local government agencies also exercise authorities to treat areas and regulate invasive species. All oil shale and tar sands operations must comply with both federal direction and state law."

Additional Discussion:
Federal law does not regulate invasive or noxious weeds; it is regulated pursuant to state law. Wyo. Stat. §§11-5-101, et seq. **#32])>**

<([#33 [*3.1.7*] 2.2.1 Applicable laws by category
Add: "Rangeland resources" category **#33])>**
<([#34 [*9.2*] 2.2.1 Applicable laws by category
Add: "Fish and Wildlife Resources" category **#34])>**
<([#35 [*3.7.3.2*] 2.2.1 Applicable laws by category
Add: "Wild Horses and Burros" category

Additional Discussion:
Wild horses should have their own category and do not belong in ecological resources since there is no risk of decline. **#35])>**

Page 4 of 14 COALITION OF LOCAL GOVERNMENTS COMMENTS ON OS/TS PDEIS
ADDITIONAL COMMENTS BY COALITION OF LOCAL GOVERNMENTS1
OSTS November Comments Resubmitted May 4, 2012 Additional Discussion

<([#36 [*3.7.3.2*] 2.2.1 Applicable laws by category
Ecological Resources
Delete: "and wild horse and burro herds" **#36])>**

<([#37 [*8*] 2.2.3 Management of BLM-Administered Lands OS/TS PDEIS 2-9, line 39
Add: FLPMA also directs BLM to give priority to principal or major multiples uses, which include mineral development, livestock grazing, fish and wildlife, rights-of-way, and recreation. 43 U.S.C. §1702(m).

Additional Discussion:
The principal multiple uses established in FLPMA differentiate public land management from that of the Forest Service which uses a similar but different definition of multiple use. Omission of the emphasis on public land uses rather than resource preservation suggests that the preferred alternative falls short of this directive as well.
#37])>
<([#38 [*9.2.1*] 2.2.3 Management of BLM-Administered Lands OS/TS PDEIS 2-10
"FLPMA directs the BLM to give priority to the designation of ACECs. Designated ACECs include public lands where special management attention and direction are needed to protect and prevent irreparable damage to important historic, cultural, and scenic values, fish, or wildlife resources or other natural systems or processes."
To:
"FLPMA directs the BLM to give priority to the designation of ACECs in the land use planning process. The respective RMPs within the project area designated ACECs that BLM determined merited special management to protect and prevent irreparable damage to important..."

Additional Discussion:
ACEC designation is specifically limited to resources that are in fact threatened and to those resources determined to be nationally or regionally significant.
This is an important limitation in light of proposed ACECs that the OS/TS PDEIS appears to have incorporated. In the case of the Rock Springs Field Office, the determination of significance is still pending and would not apply to resources that are otherwise ubiquitous. **#38])>**
2.2.3 Management of BLM-Administered Lands OS/TS PDEIS 2-10 to 2-12 See CLG Comments dated May 4, 2012

Page 5 of 14 COALITION OF LOCAL GOVERNMENTS COMMENTS ON OS/TS PDEIS
ADDITIONAL COMMENTS BY COALITION OF LOCAL GOVERNMENTS1
OSTS November Comments Resubmitted May 4, 2012 Additional Discussion

<([#39 [*3.1.7*] 2.2.3 Management of BLM-Administered Lands
Page 2-10 line 35 Add: Any area meeting the definition of having wilderness character must first be determined to be roadless and second must be greater than 5000 acres.

Additional Discussion:
OS/TS PDEIS omits the two initial screens for wilderness character: lack of roads and size.
#39])>

<([#40 [*9.2.1*] Revise: 2-12 lines 8-9
Interior Secretary does not have independent authority to designate rivers under the Wild & Scenic Rivers Act. **#40])>**

<([#41 [*3.9.1*] 2.2.3 Management of BLM-Administered Lands OS/TS PDEIS 2-12
NHST paragraph
Add: "The prospective oil shale resources in Wyoming intersect with several NHSTA segments, including the Oregon and Mormon Pioneer trails and California and Pony Express trails." **#41])>**

<([#42 [*8.3*] 2.2.3 Management of BLM-Administered Lands OS/TS PDEIS 2-12-13
Change:
"A significant portion of the public lands within the most geologically prospective oil shale area is undergoing development of its oil and gas resources. Conflicts in development among resources (e.g., oil shale or tar sands and oil and gas) may occur."
to
"A significant portion of the public lands within the most geologically prospective oil shale area is undergoing development of its oil and gas resources, as well as coal and coal and gas. Conflicts in development among resources (e.g., oil shale or tar sands and oil and gas and wind farms and related transmission lines) may occur."

Additional Discussion:
Sweetwater County has both coal mining and coalgas development. Also wind farm development and related transmission lines are also being developed.
Comment: "PEIS still needs to identify potential conflicts. Otherwise PEIS is all about wilderness or ESA and ignores grazing, ROW, wind farms and other land uses." **#42])>**

Page 6 of 14 COALITION OF LOCAL GOVERNMENTS COMMENTS ON OS/TS PDEIS
ADDITIONAL COMMENTS BY COALITION OF LOCAL GOVERNMENTS1
OSTS November Comments Resubmitted May 4, 2012 Additional Discussion

<([#43 [*9.2.3*] 2.2.3 Management of BLM-Administered Lands OS/TS PDEIS 2-13
Last paragraph re: Energy Policy Act of 2005
Delete: "Land exchanges, however, are not completed on an acre-for-acre basis, but instead are completed on an equal-value basis. One of the more challenging aspects of the land exchange process is developing an exchange proposal where the appraised values of the federal and nonfederal lands are equal. Given the complexities of achieving equal-value land exchanges, especially recognizing the difficulty in valuing a commodity like oil shale or tar sands, a viable exchange proposal may be difficult to achieve. The initial basis for considering land exchange opportunities lies within existing land use plans."
and

"on a case-by-case basis when the results will consolidate ownership and improve management of natural resources."
Add: "exchange is for fair market value and is in the public interest."

Additional Discussion:
Land exchanges are governed by principles of fair market value and public interest. OS/TS PDEIS purports to add other criteria that might be a factor in determining public interest but are not the only factor. **#43])>**

<([#44 [*6.1.1*] 2.3 Oil Shale
Comment: "PEIS should use same standard for each state. This criteria puts Utah and Colorado at a disadvantage by excluding additional potential land that is included for Wyoming."

Additional Discussion:
CLG realizes that BLM made the same determination in 2008 but still believes it should be corrected. **#44])>**
<([#45 [*6.3.5*] 2.3.1 Potential Commercial Oil Shale Development Technologies OS/TS PDEIS 2-15
"Jordan and Estonia both have extensive oil shale developments." **#45])>**

Page 7 of 14 COALITION OF LOCAL GOVERNMENTS COMMENTS ON OS/TS PDEIS
ADDITIONAL COMMENTS BY COALITION OF LOCAL GOVERNMENTS1
OSTS November Comments Resubmitted May 4, 2012 Additional Discussion

<([#46 [*6.3.5*] 2.3.1 Potential Commercial Oil Shale Development Technologies OS/TS PDEIS 2-16
Change: "Because commercial oil shale development technologies are still largely in an R&D phase, many details regarding the specific technologies that may be used in the future to produce oil from oil shale are unknown. In the absence of reasonably complete information about the technologies that may be deployed, a number of assumptions have been made. These assumptions are discussed in Section 4.1."
To:
"Because commercial oil shale development technologies are still largely in an R&D phase, many details regarding the specific technologies that may be used in the future to produce oil from oil shale have not been deployed in the United States although they have been used extensively overseas. The PEIS makes a number of assumptions which are discussed in Section 4.1."

Additional Discussion:
The OS/TS PDEIS limits evaluation of commercial viability to published date, thereby excluding the recent information.
Commercial viability is traditionally determined by whether a

company will invest its money in the technology and there is
ample evidence of that. **#46])>**

<([#47 [*9.3*] 2.3.1 Potential Commercial Oil Shale Development Technologies OS/TS PDEIS 2-20, lines 3238
Delete:
"If and when the BLM receives applications to lease oil shale as well as the additional information to make such a decision, the BLM will conduct additional NEPA and other required analyses, including consideration of direct, indirect, and cumulative effects, reasonable alternatives, and possible mitigation measures appropriate to the anticipated development. On the basis of that NEPA analysis to be conducted at the lease stage, the BLM will consider further amendment of one or more plans, if necessary, including, but not limited to, the establishment of general lease stipulations and BMPs."
Comment:
"BLM has sufficient information from the RMPs to identify general conditions of development and likely lease stipulations. Otherwise the PEIS fails to perform an important function." **#47])>**
Page 8 of 14 COALITION OF LOCAL GOVERNMENTS COMMENTS ON OS/TS PDEIS
ADDITIONAL COMMENTS BY COALITION OF LOCAL GOVERNMENTS1
OSTS November Comments Resubmitted May 4, 2012 Additional Discussion

<([#48 [*9.2.4*] 2.3.2 Alternative 1, Oil Shale No Action Alternative, No Change to 2008 Decision
Third paragraph re: sage grouse

Comment: "The no action aspect should be put into the preferred alternative. There are significant regional differences in habitat suitability for sage grouse and Wyoming Governor adopted an executive orders in 2008, 2010 and 2011 identifying core areas and restrictions. BLM cannot use sage grouse status as an issue for the PEIS and not discuss it in depth. Realistically the PEIS should be justified solely on the settlement and exclude sage grouse status, which is being addressed in other initiatives at both the federal and state levels." **#48])>**

<([#49 [*2*] 2.3.3 Commercial Oil Shale Program Land Allocation Alternatives
"The BLM has also determined that additional areas would be closed and would not be available for future opportunity to lease for commercial development of oil shale resources under all allocation action alternatives."

Additional Discussion:
CLG objects to the closures as they apply to Wyoming and explains the basis in its letter dated May 4, 2012. **#49])>**

<([#50 [*3.1.7*] 2.3.3 Commercial Oil Shale Program Land Allocation Alternatives
Add:

Segments of rivers that the BLM has determined to be potentially eligible and suitable for WSR status by virtue of a WSR inventory.

BLM WSRA guidelines call for a two step review: eligible and suitable. The OS/TS PDEIS appears to treat all studied rivers as both eligible and suitable, when that is not the case. In the Rock Springs District, the last study was 1992 and it is not clear what the OS/TS PDEIS is using. **#50])>**

<([#51 [*3.1.1*] [*3.9.1*] 2.3.3 Commercial Oil Shale Program Land Allocation Alternatives OS/TS PDEIS
2-32, lines 7-10
Change:
National Historic and Scenic trails. Historic Designated trails ~~identified by the BLM Wyoming State Office~~ and a corridor extending at least 0.25 mi on either side of the trail would be excluded from commercial leasing.

Comment: Many of the historic trail segments are not visible and do not meet NPS integrity for eligibility. This is specifically true for Sublette Cutoff, Cherokee, and others. **#51])>**

Page 9 of 14 COALITION OF LOCAL GOVERNMENTS COMMENTS ON OS/TS PDEIS
ADDITIONAL COMMENTS BY COALITION OF LOCAL GOVERNMENTS1
OSTS November Comments Resubmitted May 4, 2012 Additional Discussion

<([#52 [*9.8*] 2.3.3 Commercial Oil Shale Program Land Allocation Alternatives
"For information purposes, under the proposed regulations, the BLM would issue a call for commercial leases...."
Comment:
"There is no indication BLM will issue draft rules before the PEIS. If this is incorrect, the cooperators should be informed."
Separation of the rulemaking from the leasing PEIS omits consideration of the connected actions in violation of how CEQ rules require agencies to define the scope of an EIS. 40 C.F.R. §§1501.7(a)(2); 1508.25. The rulemaking is clearly a connected action that must be discussed. **#52])>**

<([#53 [*9.5*] 2.3.3.1 Alternative 2, Oil Shale Conservation Focus (Alternative 2a), with RD&D First Requirement (2b) OS/TS PDEIS 2-34
Change:
"1) All areas that the BLM has identified or may identify as a result of inventories conducted during this planning process, as LWC; Legislation would be necessary to authorize BLM to designate additional WSAs."
Comment:
"1) this is unlawful as BLM has no legal authority to create new WSAs. BLM can consider an unlawful alternative but must identify

the need for legislation. 2) Conflicts with Sweetwater County 2011
resolution supporting protection for only the boundaries of the
WSA. The Wyoming DEQ classification does not bar mineral
leasing so it should not be excluded on that basis." **#53])>**

<([#54 [*9.2.4*] 2.3.3.1 Alternative 2, Oil Shale Conservation Focus (Alternative 2a), with RD&D First Requirement (2b)
"Core priority sage grouse habitat, as defined by such guidance as the BLM or
the Department of the Interior may issue"
Comment: "3) Here again state and local governments have
taken the initiative to protect sage grouse habitat."
BLM does not have jurisdiction to regulate wildlife. **#54])>**

<([#55 [*2.3*] 2.3.3.2 Alternative 3, Oil Shale Research Lands Focus (RD&D with PRLA only)
No other alternative favors scoping comments, even the scoping
comments from those that favor oil shale and tar sands
development. It should be revised to be less biased. **#55])>**

Page 10 of 14 COALITION OF LOCAL GOVERNMENTS COMMENTS ON OS/TS PDEIS
ADDITIONAL COMMENTS BY COALITION OF LOCAL GOVERNMENTS1
OSTS November Comments Resubmitted May 4, 2012 Additional Discussion

<([#56 [*9.5*] 2.3.3.3 Alternative 4, Oil Shale Moderate Development (2008 OSTS PEIS ROD Minus Adobe Town and ACECs) (Alternative 4a), with RD&D First Requirement
(4b)
This alternative needs to be revised to be consistent with local
government plans. Sweetwater County repudiated the Wyoming
DEQ designation. The resolution was adopted because it only
limits mining not mineral leasing. Wyoming law cannot apply to
public land. Calif. Coastal Commn. v. Granite Rock Co., 480
U.S. 527 (1987). **#56])>**

<([#57 [*3.1.7*] [*9.2.1*] 2.3.3.3 Alternative 4, Oil Shale Moderate Development (2008 OSTS PEIS ROD
Minus Adobe Town and ACECs) (Alternative 4a), with RD&D First Requirement
(4b)
Change:
"1. The whole of the Adobe Town "Very Rare or Uncommon" area, as designated
by the Wyoming Environment Quality Council on April 10, 2008 (180,910 acres
total; 167,517 acres of public land, of which 10,920 acres are already a BLM
WSA).
2. All ACECs located within the areas analyzed in the 2008 OSTS PEIS (76,666
acres in existing ACECs in 2008 OSTS PEIS plus additional ACEC acreages as
a result of Colorado, Utah, and Wyoming planning efforts recently completed).13"
To
"1. All ACECs that are closed to mining and mineral leasing located within

the areas analyzed in the September 2008 Oil Shale and Tar Sands
Resources Leasing Final EIS; (76,666 acres in existing ACECs in 2008 PEIS
plus additional ACEC acreages as a result of Utah planning efforts recently
completed."
Comment: "The Adobe Town area is on the Wyoming
Checkerboard where BLM lacks legal jurisdiction over half of the
affected area. There are existing mineral leases as well." **#57])>**

Page 11 of 14 COALITION OF LOCAL GOVERNMENTS COMMENTS ON OS/TS PDEIS
ADDITIONAL COMMENTS BY COALITION OF LOCAL GOVERNMENTS1
OSTS November Comments Resubmitted May 4, 2012 Additional Discussion

<([#58 [*9.5*] 2.3.3.3 Alternative 4, Oil Shale Moderate Development (2008 OSTS PEIS ROD
Minus Adobe Town and ACECs) (Alternative 4a), with RD&D First Requirement
(4b)
Change:
"Under Alternative, lands that would be available for future consideration for
leasing would include those BLM-administered lands within the most geologically
prospective oil shale areas, including split estate lands where the federal
government owns the mineral rights. ~~The whole of Adobe Town in Wyoming~~
WSAs and ACECs which prohibit leasing would be excluded, ~~as would all
ACECs, as described above~~. Lands available for application for leasing under
Alternative 4 are shown in Figures 2.3.3-9, 2.3.3-10, and 2.3.3-11."

Additional Discussion:
Wilderness protection does not belong in this alternative. It
directly conflicts with public land use plans for CLG members,
including but not limited to Lincoln County, Sweetwater County,
and Sweetwater Conservation District. **#58])>**

<([#59 [*2.4*] 2.3.3.3 Alternative 4, Oil Shale Moderate Development (2008 OSTS PEIS ROD
Minus Adobe Town and ACECs) (Alternative 4a), with RD&D First Requirement
(4b)
"Similarly, with respect to the management of sage-grouse habitat, under
Alternative 4, 20 lands would be managed as in Alternative 1."
CLG prefers this Alternative to Alternatives 2 and 3. Assuming
BLM does not select Alternative 1 or the recommended
Wyoming exception, then this would be better. It shows
appropriate deference to a state strategy that is the product of a
long process.
#59])>
Page 12 of 14 COALITION OF LOCAL GOVERNMENTS COMMENTS ON OS/TS PDEIS
ADDITIONAL COMMENTS BY COALITION OF LOCAL GOVERNMENTS1
OSTS November Comments Resubmitted May 4, 2012 Additional Discussion

<([#60 [*9.2.4*] 2.3.3.3 Alternative 4, Oil Shale Moderate Development (2008 OSTS PEIS ROD

Minus Adobe Town and ACECs) (Alternative 4a), with RD&D First Requirement (4b)
Changes:
~~" Depending on what the applicable RMP provides with respect to LWC and core and priority sage-grouse habitat, it may be necessary to initiate a plan amendment at the leasing and/or development stage to make allocation decisions on an individual RMP basis regarding management of these lands with respect to oil shale and tar sands resources. The reason for qualifying the amount of acreage available for lease under this alternative is that while areas of core and priority sage-grouse and areas of LWC are left open for potential future leasing and development of oil shale and tar sands resources, the likelihood of all this acreage as being available for further oil shale and tar sands resources leasing and development is low.~~ National and state-specific guidance related to sage-grouse management and protection of core and priority habitat may limit the lands available for leasing ~~will likely result in substantially less acreage being available, as will field office management decisions related to the protection of LWC.~~ It is difficult to establish disturbance amounts at the programmatic level, ~~before more is known regarding the specifics of leasehold location and technology to be used."~~ **#60])>**
<([#61 [*2.5*] 2.5.1 Alternatives That Use the New USGS In-Place Oil Assessment Maps as the Basis for 16 the Planning Area To Be Analyzed
"Several comments were received during the public scoping process that suggested that 19 the BLM should develop an alternative that examines the oil shale resource in the area defined 20 by the recent USGS assessment of inplace oil in oil shales of the Green River Formation in the 21 Piceance and Uinta Basins of western Colorado and eastern Utah (USGS 2010a,b; 2011)."

Additional Discussion:
PEIS should document conclusion that additional areas are not commercial now. Pinedale Anticline and Jonah were originally dismissed as lacking commercial potential. **#61])>**

Page 13 of 14 COALITION OF LOCAL GOVERNMENTS COMMENTS ON OS/TS PDEIS
ADDITIONAL COMMENTS BY COALITION OF LOCAL GOVERNMENTS1
OSTS November Comments Resubmitted May 4, 2012 Additional Discussion

<([#62 [*2.5*] 1. The Coalition of Local Governments (CLG) provided comments on Chapters 1 and 2 prior to its publication. Notably BLM accepted very few of the comments and CLG reiterates these comments.
2.5.4 Alternatives That Prohibit Leasing in Specific Areas 1
Add:
A number of scoping comments requested that the BLM develop alternatives prohibiting commercial leasing in specific areas, including all NPS units, the GSENM, existing WSAs, and wilderness-quality lands in Utah. Since the scoping meetings were conducted, the BLM has determined that the scope of this PEIS will be limited to BLM-administered lands only and will not evaluate commercial leasing on USFS- and NPS-administered lands nor will it revise the land use

decisions made in the RMPs. **#62])>**
<([#63 [*2.4*] 2.5.9 Opening of All Lands with Wilderness Characteristics to Oil Shale and Tar Sands Leasing
Additional Discussion:
This should be added to Alternative 4. **#63])>**

OSTS2012D50325
Organization: Uintah County
Received: 5/4/2012 4:32:50 PM
Commenter1: - Vernal, Utah 84078 (United States)
Organization1: Uintah County
Commenter Type: Coop Agency - Local Govt
Classification:
Submission Category: Letter & Resolution
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/16/2012 12:00:00 AM
Attachments: OSTS2012D50325.htm (OSTS2012D50325-59043.htm Size = 1 KB)
20120504_Uintah_County_Comments_on_draft_BLM_Oil_Shale_and_Tar_Sands_PEIS_OSTS2012D50325.pdf (OSTS2012D50325-59042.pdf Size = 6275 KB)
Submission Text
See Attachment.

UINTAH COUNTY
May4, 2012
BLM Oil Shale & Tar Sands PEIS
Argonne National Laboratory
EVS Division, Building 240
9700 South Cass A venue
Argonne, IL 60439
Ken Salazar, Secretary
U.S. Department of the Interior
1849 C Street, N.W.
Washington DC 20240
Bob Abbey, Director
Bureau of Land Management
1849 C Street, N.W., Room 5665

COMMISSIONERS: .
Darlene R. Bums
Michael J. McKee
Mark D. Raymond
ASSESSOR - Rolene Rasmussen
ATIORNEY - G. Marl< Thomas
CLERK-AUDITOR - Michael W. Wilkins
RECORDER - Randy J. Simmons

TREASURER - Wendi Long
SHERIFF - Jeff Merrill
SURVEYOR - John Slaugh
RE: Comments on Draft Bureau of Land Management (BLM) Oil Shale & Tar Sands PEIS
Dear Secretary Salazar, Director Abbey, et all:
<([#1 [*9.8*] On its face the BLM's 2012 Oil Shale and Tar Sands Draft Programmatic Environmental Impact
Statement, BLM Project #W0-300-1310-PP-OSIR for Lands Administered by the BLM in Colorado, Utah and Wyoming (Hereafter 2012 OSTS DPEIS) is nothing more than part of a negotiated settlement from a friendly lawsuit brought by an environmental coalition.' During this process, which began early 2011, it has been unfortunate that Uintah County must continue to educate the federal government on the realities of oil shale and oil sands development. The Administration's death grip on old stereotypes related to oil shale and oil sands development does not make them true.
On May 5, 2011 , Uintah County sent a letter to the Bureau of Land Management respectfully requesting the BLM to cease and desist further activity on the Programmatic EIS for Allocation of Oil Shale and Tar Sands Resources on Lands Administered by the BLM. See attached letter. Apparently, the BLM has decided to ignore the cordial request from a cooperating entity. In addition to this request, Uintah County along with many of its neighboring counties has requested an extension to the comment period. This request was denied on May 3, 2012. Thus, Uintah County is left with no other alternative but to build and preserve the record and wait for the inevitable to be decided.2
So here we go again.

1 In a letter, stamped May 3, 2012, Director Robert Abbey denied a request to extend the comment period by
Representative Jason Chaffetz, citing the Settlement Agreement as prohibitive in the agreed timeline. However,
Uintah County understands that these new draft regulations are expected to be provided to the State of Utah within
the next 10-15 days. Extending the comment period for a few weeks after publication would not disrupt the BLM's
sacred timeline. Director Abbey may not want to connect this PEIS to the new draft regulations, but they are in fact
just two sides of the same coin. What good does it do to talk about the size and location of a water pipe if the
reservoir is drained? Director Abbey also pointed to the 90 day review period as providing sufficient time to review
and comment. However, just three months ago the BLM granted requests for additional time to provide comments
related to the sage-grouse EIS for an additional 45 days.

2 Why "inevitable"? In an email, attached to these comments, Sherri Thompson, Project Manager for this PEIS,
stated: "As there are no economically viable ways yet known to extract and process oil shale for commercial

purposes, and tar sands is not at present a proven commercially-viable energy source, the BLM, through its planning
process, is taking a hard look at whether it is appropriate for approximately 2,000,000 acres to remain available for
potential development of oil shale, and approximately 431,000 acres of public land to remain available for potential
development of tar sands. This new planning initiative will provide the BLM an opportunity to consider the 2008
allocation decisions in light of the still nascent character of the technology necessary to economically develop oil
shale resources, as well as certain information not available in 2008." Sadly, the outcome of this PEIS process was
predetermined. **#1])>**

<([#2 [*9.2.2*] 2005 Energy Policy Act Mandate (or Oil Shale and Tar Sands Program
Section 369 of the Energy Policy Act, adopted on August 8, 2005, declared it to be the United States' policy that "oil shale, tar sands, and other unconventional fuels are strategically important domestic resources that should be developed to reduce the growing dependence of the United States on politically and economically unstable sources of foreign oil imports." 42 U.S.C. §15927(b)(l). This policy statement is an unambiguous mandate from Congress. Further, Congress also directed that it be United States' policy that commercial development of oil shale "be conducted in an environmentally sound manner, using practices that minimize impacts." 42 U.S.C. §15927(b)(2). Apparently Congressional Policy is not even a blip on the BLM's screen for the the Draft OSTS PEIS states on page 1-13, lines 39-45:
"Issues determined to fall outside the scope of the PEIS because they were not pertinent
to the purpose and need for the proposed land use planning decision as described in the
NO! included issues relating to ... foreign oil as a national security issue."
Section 369 further required that the Interior Secretary promptly follow the completion of the programmatic EIS with regulations establishing an oil shale leasing program. See 42 U.S.C. §15927(d)(2). The BLM simply must not be concerned with Congressional mandates for the Preferred Alternative simply emasculates the program by cutting off the most feologically prospective public lands that are otherwise suitable and available for mineral leasing.3

3 The USGS has estimated the total in-place oil shale resources to be: Eocene Green River Formation to be 1.44
trillion barrels; Piceance Basin of Colorado to be 1.52 trillion barrels; and the Uinta Basin to be 1.32 trillion barrels. **#2])>**

<([#3 [*9.2.1*] [*3.1.3*] Wilderness Characteristics
Our May 5, 2011 letter stated:
"According to the preliminary purpose and need statement in the notice of intent, the Programmatic EIS will analyze removing from oil shale and tar sands leasing 'All areas
that the BLM has identified or may identify as a result of inventories conducted during
this planning process, as lands containing wilderness characteristics[.]' Further, the
notice of intent states:
Lands that the BLM identifies as having wilderness characteristics will be considered

during this planning initiative, as described above, and consistent with Secretarial Order No. 3310, dated Dec. 22, 2010, and BLM Manuals 6301 and 6302. Future leasing of lands determined by the BLM to have wilderness characteristics, if compatible with the allocation decisions stemming from this initiative, will subsequently be assessed in accordance with BLM Manual 6303, as appropriate (i.e. where the BLM has not determined, consistent with BLM Manual 6302, whether the lands with wilderness characteristics at issue should be receive a wild lands designation, BLM Manual 6303 will apply).'

This language documents the BLM's intent to implement, administer and/or enforce Secretarial Order 3310 and one or more of the BLM guidance manuals promulgated under Order 3310. However, any attempt by the BLM [to do so] is a patent violation of Section 1769 of the April 21, 2011 Congressional Continuing Resolution to Fund Fiscal Year 2011 through September 30, 2011."

Uintah County followed up with a comment letter, dated November 14, 2011 (attached hereto and incorporated by reference). BLM knows it was all too happy to resolve a friendly-lawsuit and take the opportunity, under the guise of complying with a settlement agreement, to ram through the Administration's environmental agenda. The facts are all too obvious.

From our November 14, 2011 letter:

"While Interior Secretary Salazar issued S.O. 3310 on December 23, 2010, Congress prohibited the expenditure of any federal funds for FY 2011 as of April 7, 2011. BLM Director's admission in a congressional hearing that the Federal Land Policy and Management Act (FLPMA) did not authorize the designation of Wild Lands or "lands with wilderness character" no doubt persuaded many members of Congress to halt this ill-conceived program."

In summary, in late 2010, Secretary Salazar initiated this portion of the Administration's environmental agenda. Then the opportunity came, shortly thereafter, to fmalize a complex and nuanced Settlement Agreement, and a Joint Motion to Administratively Close the Case, with a coalition of environmental groups. This fa~ade of a legal action gave the administration the cover it needed to pursue its wilderness characteristics policy. This chain of events screams of collusion!

Finally as it pertains to lands with wilderness characteristics, BLM lacks authority to manage lands as if they were wilderness unless such lands were designated as wilderness study areas (WSAs) within the 15-year review and study period, 43 U.S.C. §1782, or such lands have been designated by Congress. While BLM can inventory any resource on public lands and this may include wilderness character, it cannot use the inventory to change management. To the extent that any of the proposed Alternatives propose to manage the lands deemed having wilderness character, closing them to oil shale and tar sands development is clearly in violation of the Congressional prohibition. **#3])>**

<([#4 [*9.8*] Cooperators Unanimous Opposition

Uintah County greatly appreciates the support from its neighboring counties in providing a strong unified opposition to the reckless course the BLM is pursuing.

On April 9, 2012, the Uintah County Board of County Commissioners passed Resolution #04-09-2012, A Resolution Opposing the BLM's 2012 Oil Shale and Tar Sands Draft Programmatic Environmental Impact Statement, BLM Project #W0-300-1310-PP-OSffi... (Hereafter 2012 OSTS DPEIS) for Lands Administered by the BLM in Colorado, Utah and Wyoming. This

Resolution outlines direct and pointed comments relating to the 2012 OSTS DPEIS and are attached hereto and incorporated by reference. We have also included copies of resolutions passed by fellow cooperators voicing similar objections to the 2012 OSTS DPEIS. **#4])>**

<([#5 [*9.5*] Local Plan
In very recognizable fashion FLPMA created a system of public land management honoring the American philosophy of "laboratories of democracy." In 1932, U.S. Supreme Court Justice Louis Brandeis stated "It is one of the happy incidents of the federal system that a single courageous State may, if its citizens choose, serve as a laboratory; and try novel social and economic experiments without risk to the rest of the country." New State Ice Co. v. Liebmann, 285 U.S. 262 (1932) (dissenting opinion). Uintah County, a political subdivision of the State of Utah, is exercising its duty under our system of Federalism to try sound novel approaches to manage public lands within its boundaries. Again, it is incumbent on federal agencies to the maximum extent possible be consistent with State and local plans (including the State of Utah and Uintah County). Anything short of this constitutes a violation of federal law and is subject to judicial review.
Uintah County has adopted into its general plan, in conjunction with the State of Utah, the Uintah Basin Energy Zone and a Plan for Managing and Developing Oil Shale and Oil Sands Resources within the Borders of Uintah County. A copy of said general plan provisions and relevant Utah Code sections are attached hereto and incorporated by reference. The BLM must be consistent with our local plan to the maximum extent possible. **#5])>**

<([#6 [*9.8*] General Objection To DPEIS
In addition to the comments above and those provided in the attached table, Uintah County provides a general objection to the 2012 OSTS DPEIS. As clearly stated in the attached Resolution, Uintah County has shown that this process is unsupportable, arbitrary and a blatant show of conformity to a friendly-lawsuit settlement agreement, which falls out of the public process mandated by Congress. Should BLM continue to go forward with the 2012 OSTS DPEIS regardless of the grievances outlined in the attached Resolution, the only legally viable alternative would be for the BLM to adopt the No-Action Alternative. **#6])>**

<([#7 [*9.8*] Comment Fonn
Uintah County, Utah, a cooperating agency in this environmental review process, has summarized other more specific comments in the attached comment form. These comments are provided in this format to help the reader follow our comments related to this voluminous document. Said comments are provided to log more specific concerns but should not be construed as limiting the impact or legal effect of Uintah County's general objection to the entirety of this process.4 Uintah County reserves the right, under this general objection, to legally challenge the entire 2012 OSTS DPEIS as soon as BLM completes its charade and reaches its apparent inevitable conclusion.

4 Uintah County chooses to exercise restraint by not just logging a general comment borrowed from General
Anthony Clement McAuliffe: "Nuts!" **#7])>**

<([#8 [*1.3*] Section 4(C)(l) of the MOU Between the Department of the Interior, Bureau of Land

Management and Uintah County, Utah As a Cooperating Agency (hereinafter "MOU") states: ''The Parties agree to participate in this planning process in good faith and make all reasonable efforts to resolve disagreements." So far Uintah County has been flat out ignored in this process. In addition, Section 5(E) of the MOU states: "Where the BLM and one or more Cooperators disagree on substantive elements of the RMP/EIS (such as designation of the Alternatives to be analyzed or analysis of effects), and these disagreements cannot be resolved, the BLM will include a summary of the Cooperator's views in the Draft RMPNDraft PEIS and the Proposed RMPA/Final PEIS. The BLM will also describe substantial inconsistencies between its proposed action(s) and the objectives of state, local, or tribal land use plans and policies." BLM has failed to conform to its own simple obligations with its MOU. **#8|)>**
If you have any questions regarding our comments, please contact Jonathan Stearmer, jonathan@uintahcountyattomey.org by email or at 435-781-5432.
Sincerely,
UINTAH COUNTY COMMISSION
Darlene R. Burns, Chair
Michael J. McKee

cc: Tom Vilsack, Secretary of Agriculture, 1400 Independence Ave., S.W.,
Washington DC 20250
Tom Tidwell, Chief US Forest Service, 1400 Independence Ave., S.W.,
Washington DC 20250
Harv Forsgren, Regional Forester US Forest Service, 324 25th Street, Ogden, Utah 84401
Juan Palma, BLM State Director, P.O. Box 45155, Salt Lake City, Utah 84145
Mark Ward, Utah Assoc. of Counties, 5397 So. Vine Street, Salt Lake City, UT 84107
Kathleen Clarke, PLPCO, 5110 St. Office Bldg, Box 141107, Salt Lake City, UT 84114
United States Department of the Interior
BUREAU OF LAND MANAGEMENT
Washington, D.C. 20240
The Honorable Jason Chaffetz
House of Representatives
Washington, DC 20515
Dear Representative Chaffetz:
http://www.blm.gov
MAY 3 2012
Thank you for your April 18, 2012, letter requesting an extension of the timeframe to submit comments on the Draft Oil Shale and Tar Sands Programmatic Environmental Impact Statement (PEIS). Comments are currently due May 4, 2012. Your request is to extend the comment period for a minimum of 60 days.
Regrettably, the Bureau of Land Management (BLM) is unable to grant your request for an extension. On January 16, 2009, a lawsuit was filed by several organizations challenging the 2008 PEIS Record of Decision (ROD). This suit was settled, and as a condition of that settlement, the BLM has agreed to engage in a new planning initiative that takes a fresh look at the allocation decisions made in the 2008 ROD. Under the February 2011 settlement agreement filed with the District Court in Colorado, the BLM agreed to use its best efforts to complete its decision-making and approve a ROD for this new planning process by December 31, 2012.
The BLM anticipates issuing amendments to the existing oil shale regulations by May 15, 2012.

The changes in the regulations will not have an impact on the allocation decisions made in the PEIS. The regulations will guide approval of and apply to leasing and development operations once a decision has been made to move forward with a commercial oil shale project. The PEIS reassesses the appropriate mix of allowable uses with respect to opening lands for future oil shale and tar sands leasing and potential development.
Our goal is to achieve the terms of the agreement with maxirnwn public participation. We are working diligently to comply with the settlement agreement while providing many opportunities for public participation. In March 2012, the BLM held four open houses in several cities in Colorado, Utah, and Wyoming to encourage public participation in the review process. Furthermore, the public is provided 90 days to review and comment on the Draft PEIS, as required by the BLM land use planning regulations (43 CFR 1610.2(e)). We believe this provides the public with sufficient opportunity to review and provide substantive comments on the draft document.
As this document supports only decision-making regarding land use allocation and not lease issuance or approval of development activities, there will be further opportunity to participate in future NEP A processes relating to potential oil shale development in Colorado, Utah, and Wyoming. I appreciate your interest in this important matter.
Sincerely,

be: LLM:W0620:LS:401
LLM:W0320
LLM:W0300
TYPED:LLM: W0600:MIB5070:CRichardson:5/3112:ES0-3 7799:3021

UINTAH COUNTY
STATE OF UTAH

April 26, 20 12
BLM Oil Shale & Tar Sands PEIS
Argonne National Laboratory
EVS Division, Building 240
9700 South Cass A venue
Argonne, IL 60439
Ken Salazar, Secretary
U.S. Department of the Interior
1849 C Street, N.W.
Washington DC 20240
Bob Abbey, Director
Bureau of Land Management
1849 C Street, N.W., Room 5665
COMMISSIONERS:
Michaal J. McKee
Darlene R. Bums
Mark D. Raymond
ASSESSOR • RoleMe Rasmuessen
ATTORNEY - JoAnn B. Stringham

CLERK-AUDITOR • Michael W. Wilkins
RECORDER • Randy J. Simmons
TREASURER • Wend! Long
SHERIFF • Jeff Merrill
SURVEYOR - John Slaugtl
RE: Request for Extension to Comment Period on Draft BLM Oil Shale & Tar Sands PEIS
Sent via First Class Mail and email: Secretary Ken Salazar exsect{il.ios.doi.uov;
Robert Abbey Dircctonmblm.gov
Dear Secretary Salazar, Director Abbey, et all:
<([#9 [*1.1.1*] On April 9, 2012, Uintah County, Utah passed a resolution opposing the BLM's 2012 Oil Shale
and Tar Sands Draft Programmatic Environmental Impact Statement (attached hereto with other resolutions from counties in the Tri-State area). As a cooperating agency in this environmental review we respectfully request an extension to the comment period. currently set to expire May 4, 2012. It is our understanding that this request for an extension has also been made, by resolution, by eight other counties, also acting under their cooperator status. Three distinct justifications necessitate this extension.
First, under the friendly~lawsuit settlement agreement the BLM agreed to develop new oil shale regulations. We understand the draft regulations are due to be published on or around May 15, 2012. As a cooperator it is impossible for us to make clear concise comments on the PDEIS until we have the opportunity to understand at least in some detail the scope of these new regulations. Indeed, cooperators run a substantial risk in proffering inconsistent and confusing responses to the DPEIS and any draft regulations; thus, undermining the integrity ofNEPA process. Consequently an extension should be granted to at least 30 days after publication of this new oil shale regulation.

Second, the sheer volume of the DPEIS necessitates a time consuming review. As a cooperator, Uintah County requests additional time to vet and analyze the DPEIS. This need becomes even more prominent based on the anticipation of new draft regulations pending publication, for it is extremely difficult to adequately comment on a four volume DPEIS if we do not have all relevant information.
Third, as detailed in the attached Resolution, Uintah County has raised numerous legal challenges to the very process of the BLM taking a "fresh look" at lands available for oil shale and oil sands. Granting an extension will allow the BLM to thoughtfully consider the consequences of continuing down this tenuous political road and give time for the BLM to make the correct decision to cease and desist all actions related to the DPEIS.
We look forward to seeing the requested extension granted. **#9])>** If you have any questions regarding
our comments, please contact Jonathan Stearmer, jonathan/iflllimahcountvattorne\·.om by email or at 435-781-5432.

UINTAH COUNTY COMMISSION
cc: Tom Vilsack, Secretary of Agriculture. 1400 Independence Ave., S.W.,
Washington DC 20250
Tomas Tidwell, ChiefUS Forest Service, 1400 Independence Ave., S.W.,
Washington DC 20250

Harv Forsgren, Regional Forester US Forest Service, 324 25th Street, Ogden, Utah 84401
Juan Palma, BLM State Director, P.O. Box 45155, Salt Lake City, Utah 84145
Mark Ward, Utah Assoc. of Counties, 5397 So. Vine Street, Salt Lake City, UT 84107
Kathleen Clarke, PLPCO, 5110 St. Office Bldg, Box 141107, Salt Lake City. UT 84114
Sally Shoemaker
From:
Sent:
To:
Subject:
Attachments:
Thompson, Sherri J [sthompso@blm.gov]
Monday, October 17, 2011 9:32AM
Clayton, Creed; Modde, Tim; Carlson, DaveE; John Ha~a; Jonathan Teichert; Kirk Wood; Melinda Brimhall; Mike Braaten; Rex Sacco; Tom Jankovsky; Sally Shoemaker
2012 011 Shale/Tar Sands PEIS Draft Review
OSTS_Chapter_1 [1].docx
The BLM is in the process of taking a fresh look at the decisions made in the 2008 Oil Shale and Tar Sands Programmatic
Envirorunental Impact Statement (OSTS PEIS). As background, the Notice of Intent (NOI) to Prepare a
Programmatic Environmental Impact Statement (PEIS) and Possible Land Use Plan Amendments for Allocation
of Oil Shale and Tar Sands Resources on Lands Administered by the Bureau of Land Management in Colorado,
Utah. and Wyoming was published on Aprill4, 2011. As there are no economically viable ways yet known to
extract and process oil shale for commercial purposes, and tar sands is not at present a proven commerciallyviable
energy source, the BLM, through its planning process, is taking a hard look at whether it is appropriate
for approximately 2,000,000 acres to remain available for potential development of oil shale, and approximately
431,000 acres of public land to remain available for potential development oftar sands. This new planning
initiative will provide the BLM an opportunity to consider the 2008 allocation decisions in light of the still
nascent character of the technology necessary to economically develop oil shale resources, as well as certain
information not available in 2008. In 2009, a consortium of plaintiffs filed two lawsuits in the federal District
of Colorado, each now captioned CEC v. Salazar, against the BLM and the Department of Interior. The second
suit challenged the ELM's 2008 resource management plan amendments and record of decision (ROD) for Oil
Shale and Tar Sands Resources. This suit was settled. Under the settlement agreement filed with the District

Court in Colorado, the BLM agreed to use best efforts to complete its decision~making, and approve a Record
of Decision for this new planning process by December 31, 2012.
As such, we are working with some extremely tight timeframes. The internal Draft ofthe 2012 OSTS PEIS will
be available on October 17th for a three week review period, ending November 4, 2011. Argonne National
Laboratory, the contractor for this PEIS, will provide the document to a Sharepoint site, where it can be
downloaded. I am giving your names, phone numbers and email addresses to Argonne National Laboratory
today so that you can access the file transfer site. This will take a day or two, so in the meantime, I have
attached Chapter 1 to this email in case anyone has time to get started today.
Chapters 1-5 will be available Monday morning, October 17th. Chapter 6 will be available on Friday, October
21st. Comments should be made using Track Changes. Staff can send comments directly to Kurt Picel, the
Argonne National Laboratory Project Manager atkpicel@anl.gov
I know you and your staffs' are very busy with other work. We appreciate your help and involvement in this
process. If you have any questions regarding the review, please contact Sherri Thompson, Project Manager, at
303.239.3758. Thank-you!

UINTAH COUNTY
BY U.S. MAIL TO:
Robert Abbey, Director
STATE OF UTAH

May 5, 2011
Bureau of Land Management 1849 C Street NW, Rm. 5665
Washington DC 20240
. JuanPalma
Utah State Director
Bureau of Land Management 440 West 200 South, Suite 500
Salt Lake City, Utah 84101
COMMISSIONERS:
Mlchalll J. McKee
Darlene R. Bums
Mar1c D. Raymond
ASSESSOR - Rolene Rasmuessen
ATTORNEY - JoAnn B. Slrlngham
CLERK-AUDITOR· Michael W. Wilkins
RECORDER • Randy J. Simmons
TREASURER - Wend! Long

SHERIFF • Jeff Merrill
SURVEYOR • John Slaugh
BLM Oil Shale and Tar Sands Resources Leasing Programmatic EIS Scoping
Argonne National Laboratory
EVS, 240
9700 S. Cass A venue,
Argonne, Illinois 60439
Sherri Thompson, Project Manager
Bureau of Land Management
Colorado State Office
2850 Y oungfield Street
Lakewood, Colorado 80215
AND BY ELECTRONIC SUBMISSION AT THE FOLLOWING INTERNET WEBSITE:
http://blm.gov/st5c
Subject:
Dear Sir or Madame:
Request to Cease and Desist Further Activity on Programmatic EIS for
Allocation of Oil Shale and Tar Sands Resources on Lands Administered
by the BLM in Colorado, Utah and Wyoming, W0-300-131 0-PP-OSHL
On April 14, 2011, the BLM caused to be published in the Federal Register, Volume 76,
No 72 Thursday, April 14, 2011, pages 21003-21005, a notice of intent to prepare the
abovereferenced
Programmatic EIS. According to the notice of intent, the BLM "intends to take a
hard look at whether it is appropriate for approximately 2,000,000 acres [approved in prior BLM
RMPs for oil shale leasing and development] to remain available for potential development of oil
shale, and approximately 431,224 acres of public Jand [approved in prior BLM RMPs for tar
sands leasing and development]to remain available for potential development of tar sands." ld,
at page 21003. The Programmatic EIS will consider amending severa1 RMPs according1y,
including the Vernal, Price, Richfield and Monticello RMPs in Utah. ld
According to the preliminary purpose and need statement in the notice of intent, the
Programmatic EIS will analyze removing from oil shale and tar sands leasing "All areas that the
BLM has identified or may identify as a result of inventories conducted during this planning
process, as lands containing wilderness characteristics[.]" ld, at page 21004. Further, the
notice of intent states:
Jd
Lands that the BLM identifies as having wilderness characteristics will be
considered during this planning initiative, as described above, and consistent with
Secretarial Order No. 3310, dated Dec. 22,2010, and BLM Manuals 6301 and
6302. Future leasing of lands determined by the BLM to have wilderness
characteristics, if compatible with the allocation decisions stemming from this
initiative, will subsequently be assessed in accordance with BLM Manual6303,
as appropriate (i.e., where the BLM has not determined, consistent with BLM
Manual 6302, whether the lands with wilderness characteristics at issue should be
receive a wild lands designation, BLM Manual 6303 wilJ apply).
This language documents the BLM's intent to implement, administer and/or enforce
Secretarial Order 3310 and one or more of the BLM guidance manuals promulgated under Order

3310. However, any attempt by the BLM to implement, administer and/or enforce Secretarial Order 3310, including any effort by the BLM to proceed further on the above-referenced Programmatic EIS, is a patent violation of Section 1769 of the April 21, 2011 Congressional Continuing Resolution to Fund Fiscal Year 2011 through September 30,2011, which states:
For the fiscal year ending September 30, 2011, none of the funds made available by this division or any other Act may be used to implement, administer, or enforce Secretarial Order No. 3310 issued by the Secretary of the Interior on December 22, 2010.
The BLM should immediately cease and desist all activities related to the abovereferenced Programmatic EIS and immediately publish a revised notice in the Federal Register signifying its cessation of all work on the Programmatic EIS in compliance with the abovequoted provision in the 2011 CR. Otherwise, the BLM would be in contempt of Congress. We are prepared to seek a court order to this effect if necessary.
Please advise what course of action you will take as soon as possible. Thank you.
UINTAH COUNTY BOARD OF COMMISSIONERS
Michael J. McKee ,
UINTA COUNTY
STATE OF UTAH
November 14, 2011
BLM Oil Shale and Tar Sands Programmatic EIS
Argonne National Laboratory
9700 South Cass A venue
Argonne,IL.60439
Sherri Thompson
Bureau of Land Management
2850 Y oungfield Street
Lakewood, CO 80215
COMMISSIONERS:
Darlene R. Burns
Michael J. McKee
Mark D. Raymond
ASSESSOR - Rolene Rasmussen
ATTORNEY - G. Mark Thomas
CLERK-AUDITOR - Michael W. Wilkins
RECORDER - Randy J. Simmons
TREASURER - Wendi Long
SHERIFF - Jeff Merrill
SURVEYOR - John Slaugh
Re: Uintah County, Utah's Comments on 2011 the Preferred Alternative of the Draft Oil Shale and Tar Sands Programmatic Environmental Impact Statement (PEIS)
To Whom It May Concern:
Uintah County writes to reiterate its view that Alternative 1, the no-action alternative of the above-referenced PEIS, should be chosen by the BLM as the preferred alternative for this PEIS. The primary reasons making Alternative 1, the no-action alternative, the preferred alternative herein, were already explained at pages 6-8 ofUintah County's November 7, 2011 written comments submitted in this matter. Uintah County incorporates herein by this reference, pages

6-8 of its November 7, 2011 written comments, as primary reasons why the no-action alternative should become the preferred alternative herein.
Additional reasons for making the no-action alternative the preferred alternative are as follows: Alternative 1, the no-action alternative, clearly conforms to the mandate by Congress in the 2005 Energy Policy Act, (2) conforms to the authority that the Bureau of Land Management (BLM) can exercise, (3) also is consistent with the local government plans, programs, and policies; (4) Choosing an alternative that cuts back on domestic energy production capability is ill advised given the dire condition of the world's present energy-related politics.

Sherri Thompson
November 14, 2011
Page 2
1. 2005 Energy Policy Act Mandate for Oil Shale and Tar Sands Program
Section 369 of the Energy Policy Act, adopted on August 8, 2005, declared it to be the United States' policy that "oil shale, tar sands, and other unconventional fuels are strategically important domestic resources that should be developed to reduce the growing dependence of the United States on politically and economically unstable sources of foreign oil imports." 42 U.S.C. § 15927(b)(I). Congress also directed that it be United States policy that commercial development of oil shale "be conducted in an environmentally sound manner, using practices that minimize impacts." 42 U.S.C. §15927(b)(2).
Section 369 further required that the Interior Secretary promptly follow the completion ofthe programmatic EIS with regulations establishing an oil shale leasing program. See 42 U .S.C. §15927(d)(2) ("Not later than 6 months after the completion of the [PEIS] under this subsection, the Secretary [ofthe Interior] shall publish a final regulation establishing such [commercial oil shale and tar sands leasing] program."). The Interior Department did not issue final rules until November 2008. Thus, any programmatic EIS must commit to a robust program. Alternatives 2 and 3 do not conform to the Energy Policy Act direction which still limits BLM's discretion to simply emasculate the program by eliminating public lands that are otherwise suitable and available for mineral leasing.
2. Lands With Wilderness Character
On February 15, 2011 , BLM settled a challenge of the adequacy of the Final PEIS with a coalition of environmental groups. BLM agreed to revise the oil shale and tar sands regulations and to revise the EIS to consider an alternative that would exclude all lands with wilderness character from future oil shale and tar sands leasing. CEC v. Salazar, Civ. Nos. 09-85; 09-90. Uintah County, in its November 8, 2011 written comment and elsewhere, has provided BLM with detailed comments regarding its lack of authority to manage lands as if they were wilderness unless such lands were designated as wilderness study areas (WSAs) within the 15-year review and study period, 43 U.S.C. § 1782, or such lands have been designated by Congress.
While Interior Secretary Salazar issued S.O. 3310 on December 23 , 2010, Congress prohibited the expenditure of any federal funds for FY 2011 as of April 7, 2011. BLM Director's admission in a congressional hearing that the Federal Land Policy and Management Act (FLPMA) did not authorize the designation of Wild Lands or "lands with wilderness character" no doubt persuaded many members of Congress to halt this ill-conceived program.
While an agency can consider an alternative for which it needs statutory authority, it must disclose this salient fact. The Alternative 2 of the 2011 PEIS fails to disclose or discuss the need

for additional legal authority. Moreover, while BLM can inventory any resource on public lands and this would consider wilderness character, it cannot use the inventory to change management.
Sherri Thompson
November 14, 2011
Page 3
43 U.S.C. §1711(a). To the extent that Alternatives 2, 3 and 4 propose to manage the lands with wilderness character to close them to oil shale and tar sands, BLM is clearly in violation of that prohibition.
It appears that the BLM has inventoried "lands with wilderness character" in three states in preparation of the PEIS yet it did so without consideration of the above and with no analysis or disclosure of the need or impacts of such designations. In the Vernal Field Office Resource Management Plan, lands with WC were analyzed in detail and those that were determined to possess WC were designated as such in the RMP. The attempt to make additional
WC lands designations is simply another attempt to circumvent the resource planning process, plan decisions, analysis, disclosure and public participation.
3. Only Alternative 1, the No Action Alternative Is Consistent With State and Local Government Plans and Policies
FLPMA requires that any BLM land use plan to conform to state and local government plans to the extent it is consistent with federal law. 43 U.S.C. §1712(c)(9) ("Land use plans ofthe Secretary under this section shall be consistent with State and local plans to the maximum extent he finds consistent with Federal law and the purposes of this Act."). Alternatives 2, 3 and 4 all fail to meet this standard and thus only Alternative 1 conforms to the consistency mandate.
4. Any Alternative Which Cuts Back on Domestic Energy Production Capability Is Ill Advised Given the Current International Energy Related Political Climate.
The Interior Department's current policies to delay or shut down energy development is incomprehensible when viewed in the context of current world events as well as the economic recession that has gripped the country for more than four years. The Department's continued efforts to stymie domestic energy production threaten national security in a profound way. Oil and gas imports from the Middle East continue to be vulnerable due to increased Islamic militancy in even countries that were previously considered allies. The changes in government and leadership leave the U.S. relationship with countries like Egypt, Libya, and Yemen fragile. The oil fields in Mexico are declining and Venezuela production was nationalized by its charismatic but erratic president, who is not a U.S. ally. The Interior Department's continued efforts to limit domestic energy production cannot be justified in this context.
Chapters 3-6
Uintah County chooses not to provide additional comments on Chapters 3-6 of the PEIS. For the reasons stated in its November 7, 2011 written comments, Uintah County views this entire 2011 PEIS effort as an illegal attempt at an end run around the Congressional Moratorium against the Order 331 0 Wildlands Policy and all that resembles it. This PEIS effort is plainly an effort to push the Order 3310 Wildlands Agenda. For these reasons, Uintah County will not grace or
Sherri Thompson
November 14, 2011
Page 4
dignify this illegal 2011 PEIS effort with additional comments on Chapters 3-6 at this time. The County reserves the right to comment in detail on the public draft with full expectation that our comments will be fully considered at that time. We have downloaded three different

versions of the draft and did not have adequate time to do a comprehensive review. A determination was made that it was more cost effective to wait for the final draft when we should have a more reviewer friendly text and adequate time to conduct a more comprehensive review. This in no way affects our selection of the preferred alternative, which is supported by our comments here.
Sincerely,
UINTAH COUNTY COMMISSION
Darlene R. Bums, Chair
Michael J. Me
UINTAH COUNTY COMMISSION
RESOLUTION NO. #04-09-2012
A RESOLUTION OPPOSING THE BLM'S 2012 OIL SHALE AND TAR SANDS
DRAFT PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT,
BLM PROJECT #W0-300-1310-PP-OSHL (HEREAFTER 2012 OSTS DPEIS)
FOR LANDS ADMINISTERED BY THE BLM IN COLORADO, UTAH AND WYOMING
This Resolution is adopted in open meeting after due opportunity for public comment, by the Board of Commissioners ofUintah County, in order to redress the many violations of law, regulation, and policy by the BLM with respect to the BLM's 2012 OSTS DPEIS.
BACKGROUND
As background to this Resolution, Uintah County recites the following grievances:
WHEREAS, On April 14, 2011, the BLM caused to be published in the Federal Register, Volume 76, No 72/Thursday, Aprill4, 2011, pages 21003-21005, a notice of intent to prepare the 2012 OSTS DPEIS; and
<([#10 [*9.2.1*] [*3.1.3*] WHEREAS, the preliminary purpose and need statement in the notice of intent, states the PEIS
will analyze removing from oil shale and tar sands leasing "All areas that the BLM has identified or may identify as a result of inventories conducted during this planning process, as lands containing wilderness characteristics[.]" ld., at page 21004; and
WHEREAS, the notice of intent further states at page 21004:
Lands that the BLM identifies as having wilderness characteristics will be considered during this planning initiative, as described above, and consistent with Secretarial Order No. 3310, dated Dec. 22, 20 I 0, and BLM Manuals 630 I and 6302. Future leasing of lands determined by the BLM to have wilderness characteristics, if compatible with the allocation decisions stemming from this initiative, will subsequently be assessed in accordance with BLM Manual6303, as appropriate (i.e., where the BLM has not determined, consistent with BLM Manual 6302, whether the lands with wilderness characteristics at issue should be receive a wild lands designation, BLM Manual 6303 will apply); and
WHEREAS, the Purpose and Need portion of the 2012 OSTS DPEIS states at page 1-5, lines 14-18:
"In addition, the BLM has recently completed updating its inventory of lands having wilderness characteristics (L WC) in each of the three states for the planning area, and the status of several areas originally proposed to be Areas of Critical Environmental Concern (ACECs) in Utah has changed since the preparation of the 2008 OSTS PEIS."
WHEREAS, this language documents the BLM's intent to implement, administer and/or enforce Secretarial Order 3 31 0 and one or more of the BLM guidance manuals promulgated under

Order
3310;and
WHEREAS, any attempt by the BLM to implement, administer and/or enforce Secretarial Order 3310, including any effort by the BLM to proceed further on the 2012 OSTS DPEIS, violates the spending moratorium of Section 17 69 of the April 21, 2011 Congressional Continuing Resolution to Fund Fiscal Year 2011 through September 30, 2011, which states:
For the fiscal year ending September 30, 2011, none of the funds made available by this division or any other Act may be used to implement, administer, or enforce Secretarial Order No. 3310 issued by the Secretary of the Interior on December 22, 201 0; and
WHEREAS, this spending moratorium has been carried forward in all subsequent Congressional spending resolutions up to and including the current spending resolution; and
WHEREAS, the 2012 OSTS DPEIS, is an admitted attempt by the BLM to implement, administer and/or enforce Secretarial Order 3310 and its policies and objectives, all in violation of the Spending Moratorium of the 2011 Continuing Resolution; and **#10])>**
<([#11 [*9.8*] WHEREAS, the 2008 Oil Shale and Tar Sands Programmatic EIS (2008 OSTS PEIS) was
required under Section 369 (d) (1) ofthe Energy Policy Act of2005 and was prepared in cooperation with 14 federal, state, and local governmental organizations; and
WHEREAS, the 2008 OSTS PEIS was 3 years in the making, and it honored the input of a task force of Governors and other stakeholders as per requirement of the 2005 Energy Policy Act;
WHEREAS, the Record of Decision (ROD) for the 2008 OSTS PEIS amended 10 land use plans in Colorado, Utah, and Wyoming to make approximately 2 million acres of public lands available for potential leasing and development of oil shale and approximately 430,000 acres available for tar sands leasing. Together with the regulations published in 2006 and 2008 for oil shale and tar sands resources, the 2008 OSTS PEIS and subsequent land use amendments constituted a reasonable and rational establishment of an oil shale and tar sands program as mandated in the Energy Policy Act of 2005; and
#11])> <([#12 [*6.1.2*] WHEREAS, the oil shale and tar sands program to which the 2008 OSTS PEIS and related
regulations gave birth, was a reasonable response to the fact that oil shale and tar sands resources in the Green River Formation located in northeastern Utah, northwestern Colorado and southwestern Wyoming may reach 9 trillion barrels of oil; and
WHEREAS, the U.S. Geological Survey Oil Shale Assessment Team reports the estimated total in-place oil shale resource for the Uinta Basin of Utah to be 1.32 trillion barrels; and
#12])> <([#13 [*9.8*] WHEREAS, the preferred alternative in the 2012 OSTS DPEIS drastically shrinks, diminishes
and in many areas outright reverses virtually all of the lands made available for Oil Shale and Tar Sands development in 2008, and does so using the same data and science; and
#13])> <([#14 [*2.2*] WHEREAS, the 2012 OSTS DPEIS fails to analyze alternative 2b, and the BLM admits as
much on pages 2-35 of the 2012 OSTS DPEIS; and
#14])> <([#15 [*9.2.2*] WHEREAS, such a drastic reversal in lands available for Oil Shale and Tar Sands development
between the 2008 PEIS and the 2012 preferred alternative, violates regulatory Task Force requirements of certainty for industry and investors; and
WHEREAS, such a drastic reversal of lands available for Oil Shale and Tar Sands development

in 2008, constitutes a de facto, piece-meal revision of previous BLM Resource Management Plan, in violation of the Section 202 Planning Process under FLPMA;
WHEREAS, the preferred alternative in the 2012 OSTS DPEIS entirely ignores the input of the task force, the cooperating agencies, and the other stakeholders which the 2005 Energy Policy Act directed the BLM to honor and follow; and moreover the 2012 OSTS DPEIS may well violate various memoranda of understanding (MOUs) with counties, cities and local government coalitions which require the BLM to (1) publish the written input of cooperators who have unresolved disagreements over the substantive elements of the 2012 OSTS DPEIS, and (2) describe the objectives of the cooperators' land use plans and policies; and
WHEREAS, the 2012 OSTS DPEIS restricts the acreage allotted in the 2008 PWID for research and development leasing;
WHEREAS, the 2012 OSTS DPEIS threatens to arbitrarily undermine the process and the work utilized in creation of the 2008 OSTS PEIS, and essentially dismantle a reasonable and rational oil shale and tar sands program in violation of Section 369 of the 2005 Energy Policy Act; and **#15])>**
<([#16 [*1.5*] WHEREAS, the 2012 OSTS DPEIS is the creature of a friendly lawsuit settlement agreement
between the BLM and ideological opponents to oil shale development, and is therefore entirely pre-determined and pre-decisional in violation ofNEPA, with no apparent rationale for revising the acreages approved in 2008; and **#16])>**
<([#17 [*2.2*] WHEREAS, the BLM has settled on a preferred alternative in the 2012 OSTS DPEIS
admittedly without having first analyzed its impacts; BLM should be required to withdraw the preferred status of the alternative until it has performed this analysis; and
WHEREAS, the acreage approved for Oil Shale and Tar Sands development in the 2012 OSTS DPEIS preferred alternative bears no rational relationship to the stated purpose and need;
#17])> <([#18 [*1.5*] WHEREAS, the Department of Energy has basically abdicated the responsibility Congress
placed upon it to defend and uphold a viable oil shale energy program in America, leaving it instead to the BLM encumbered by a host of anti-oil shale pre-wilderness groups steering BLM's every move; **#18])>**
<([#19 [*9.5*] WHERAS, the alternative adopted in the ROD of the 2008 OSTS PEIS is now the No Action
Alternative of the 2012 OSTS DPEIS; and
WHEREAS, the 2008 OSTS PEIS chosen alternative is consistent with the multiple use, sustained yield mandate of the Federal Land Policy and Management Act (FLPMA); and
WHEREAS, the 2008 OSTS PEIS chosen alternative is consistent with county general plans and policies which call for responsible development of available energy resources, but in stark contrast the 2012 OSTS DPEIS is plainly inconsistent with State and Local plans and policies, including the Uintah Basin Energy Zone legislation passed in the 2012 Utah Legislature (Senate Bill83- SEE UTAH CODE 631-8-102 & 105.5) and passed by the Uintah County Commission (amendment 8.16 of the Uintah County General Plan), and should the BLM continue with the 2012 OSTS DPEIS it will need to adequately explain why consistency is not achievable; and
WHEREAS, Uintah County has adopted the following into its general plan:
"Further, additional lands in Uintah County should also be approved for full oil shale
and/or oil sands leasing and development if they either have a minimwn resource

thickness of 15 feet, or are estimated to produce a minimwn yield of 15/ gal of oil per ton of ore. Lands with these minimum resource thicknesses and gallonage yield estimates were approved for oil shale and/or oil sands development in Wyoming within the Green River Formation. Similarly situated resources should be subjected to the same approval process."
Should the BLM continue with the 2012 OSTS DPEIS it will need to be to the maximum extent possible consistent with this general plan or adequately explain why consistency is not achievable; and **#19])>**
<([#20 [*6.3.4*] WHEREAS, even prior to 2008, the development and production of oil from oil shale has been
proven beyond a doubt to be teclmologically and economically feasible; and **#20])>**
<([#47 [*6.3.2.1*] WHEREAS, even prior to 2008, this same technology to extract oil from the oil shale rock is not
only economically feasible, but it requires little to no consumption of water, contrary to the myths which falsely claim that oil shale extraction requires large consumption of water resources; and **#47])>**
<([#21 [*6.2.2*] WHEREAS, the energy captured in the extract of oil from shale (natural gas capture, etc.,) more
than makes up for energy consumed in that extraction process, thus dispelling the myth that the oil shale extraction process consumes more energy than it produces; **#21])>**
<([#22 [*3.10.3*] WHEREAS, the rising price of gasoline, coupled with ever increasing loss of good paying jobs
due to the Administration's policies against energy development on western public lands, result in increasing hardships for families and the local economy, to the point where some fear the window of opportunity is about to close for a civil, lawful and orderly response as citizens feel more and more pressured and desperate financially; and
#22])> <([#23 [*6.3.3.1*] WHEREAS, the 2012 OSTS DPEIS improperly limits technology testing to strictly in situ
efforts and does not allow for development of other technologies; and
#23])> <([#24 [*1.1.1*] WHEREAS, the BLM has left insufficient time for the public and cooperators to meaningfully
comment on the public 2012 OSTS DPEIS by the present comment deadline of May 4, 2012, because a highly relevant commercial oil shale BLM regulation is not due to be published until May 15, 2012 and the public should have the right to view that regulation first and then submit comments on the 20I2 OSTS DPEIS in light of the regulation; and
#24])> <([#25 [*2.1.1*] WHEREAS, the same problems with lack of consistency with local plans and policies and
failure to honor the input of cooperators and all stakeholders, also besets many public lands EIS projects, in addition to the 20 I2 OSTS DPEIS. The cooperators from Utah and Wyoming have already unanimously requested for the No-Action alternative in the 2012 OSTS DPEIS become the preferred alternative. **#25])>**
RESOLUTION
NOW THEREFORE, BE IT RESOLVED BY UINTAH COUNTY, STATE OF UTAH AS FOLLOWS:
<([#26 [*9.2.1*] I. Uintah County declares the BLM's continuing to administer and carry out the 2012

OSTS DPEIS, and updating any inventory of lands having wilderness characteristics, to be an open contempt and flaunting of the Congressional Spending Moratorium first imposed in the 20II Continuing Resolution and carried forward in all subsequent Congressional spending resolutions up to and including the present;
2. Uintah County calls upon the BLM to cease all further activities with respect to administering and carrying out the 2012 OSTS DPEIS, because doing so constitutes an open contempt and violation of the Congressional Spending Moratorium against implementing, administering and/or enforcing Secretarial Order 3310, which Spending Moratorium was first imposed in the 20 II Continuing Resolution and carried forward in all subsequent Congressional spending resolutions up to and including the present;
3. Uintah County calls upon the BLM to immediately cease and desist all activities related to the 2012 OSTS DPEIS and immediately publish a revised notice in the Federal Register signifying its cessation of all work on the Programmatic EIS in obedience to the above-quoted Spending Moratorium. Otherwise, the BLM would be in contempt of Congress;
#26])> <([#27 [*2.1.1*] 4. Should BLM continue to go fo rward with the 20 12 OSTS DPEIS regardless of these
grievances, the only legally, viable alternative would be if the BLM adopted the NO-Action Alternative. which is identical to the Alternative chosen in the ROD of the 2008 OSTS PEIS ;
#27])> <([#28 [*9.5*] 5. Should BLM decide to flagrantly defy Congress and proceed with the 2012 OSTS
DPEIS, it is still obligated under FLPMA to be consistent with State and Local plans to the maximum extent possible;
#28])> <([#29 [*9.1*] 6. The BLM must cease and desist all activities related to the 20 12 OSTS DPEIS because
even within its own document the Purpose and Need is unsupportable, arbitrary and a blatant show of conformity to a friendly-lawsuit settlement agreement, which falls out of the public process followed in developing the 2008 OSTS PEIS, and the 2012 OSTS DPEIS omits full and proper analysis of economically viable and technologically advanced extraction methods;
#29])> <([#30 [*1.1.1*] 7. Should BLM decide to ignore all of the above and proceed, the BLM should extend the
May 4, 2012 deadline for public comment on the 2012 OSTS DPEIS at least 30 days after publication of the expected oil shale regulation due to be published on or around May 15, 2012.
#30])>
<([#31 [*1.3*] 8. The BLM should honor the input of cooperators, particularly if they are local governments, as required by Section 202(c)(9) of FLPMA and the relevant terms of the ELMCooperator
MOUs, in all matters, not just with respect to the 2012 OSTS DPEIS.
#31])> APPROVED AND ADOPTED by a duly constituted quorum of the Board of County Commissioners ofUintah County Commissioners of Ui ntah County this 9111 day of April, 2012.
BOARD OF COUNTY COMMISS IO\ERS
UINTAH COUNTY, UTAH

ATTEST:
Michael W. Wilkins, Clerk/Auditor
8.16 Uintah County hereby creates an Energy Zone with the county for the purpose of

maximizing efficient and responsible development of energy and mineral resources. The land area and boundaries of the Uintah County Energy Zone are described as follows:
Township 28 Range 18E, Township 28 Range 19E, Township 28 Range 20E, Township 28 Range 21E, Township 28 Range 22E, Township 28 Range 23E, Township 28 Range 24E, Township 2N Range 1 W, Township 2N Range IE, Township 2N Range 2E, Township 38 Range 18E, Township 38 Range 19E, Township 38 Range 20E, Township 38 Range 21E, Township 38 Range 22E, Township 38 Range 23E, Township 38 Range 24E, Township 48 Range 19E, Township 48 Range 20E, Township 48 Range 21E, Township 48 Range 22E, Township 48 Range 23E, Township 48 Range 24E, Township 48 Range 25E, Township 58 Range 19E, Township 58 Range 20E, Township 58 Range 21E, Township 58 Range 22E, Township 58 Range 23E, Township 58 Range 24E, Township 58 Range 25E, Township 68 Range 19E, Township 68 Range 20E, Township 68 Range 21E, Township 68 Range 22E, Township 68 Range 23E, Township 68 Range 24E, Township 68 Range 25E, Township 78 Range 19E, Township 78 Range 20E, Township 78 Range 21E, Township 78 Range 22E, Township 78 Range 23E, Township 78 Range 24E, Township 78 Range 25E, Township 88 Range 17E, Township 88 Range 18E, Township 88 Range 19E, Township 88 Range 20E, Township 88 Range 21E, Township 88 Range 22E, Township 88 Range 23E, Township 88 Range 24E, Township 88 Range 25E, Township 98 Range 17E, Township 98 Range 18E, Township 98 Range 19E, Township 98 Range 20E, Township 98 Range 21E, Township 98 Range 22E, Township 98 Range 23E, Township 98 Range 24E, Township 98 Range 25E, Township lOS Range 17E, Township lOS Range 18E, Township lOS Range 19E, Township lOS Range 20E, Township lOS Range 21E, Township lOS Range 22E, Township lOS Range 23E, Township lOS Range 24E, Township lOS Range 25E, Township 118 Range 17E, Township liS Range 18E, Township liS Range 19E, Township liS Range 20E, Township liS Range 21E, Township liS Range 22E, Township liS Range 23E, Township liS Range 24E, Township liS Range 25E, Township 128 Range 20E, Township 128 Range 21E, Township 128 Range 22E, Township 12S Range 23E, Township 12S Range 24E, Township 12S Range 25E, Township 13S Range 20E, Township 138 Range 21E, Township 13S Range 22E, Township 138 Range 23E, Township 138 Range 24E, Township 13S Range 25E, Township 13S Range 26 E, Township 14S Range 21E, Township 14S Range 22E, Township 148 Range 23E, Township 148 Range 24E, Township 14S Range 25E, and Township 14S Range 26 E.
These lands contain abundant, world-class deposits of energy and mineral resources, including oil, natural gas, oil shale, oil sands, gilsonite, coal, phosphate, gold, uranium, and copper, as well as areas with high wind and solar energy potential; and the highest management priority for all lands within the Uintah Basin Energy Zone is responsible management and development of existing energy and mineral resources in order to provide long-term domestic energy and supplies for Utah and the United States of America.
8.17 Uintah County's Plan for Managing and Developing Oil Shale and Oil Sands Resources within the Borders of Uintah County:

1. Representatives from Uintah County have observed economically viable technologies for extracting and processing oil shale and oil sands and know that they exist and are applied every day. Similar applicable technologies should immediately be applied today to oil shale and oil sands resources within Uintah County.
2. All lands approved for oil shale and oil sands leasing and development in the 2008 BLM Oil Shale and Tar Sands Programmatic Environmental Impact Statement (2008 OSTS PEIS) should be fully leased and developed for those resources.
3. Further, additional lands in Uintah County should also be approved for full oil shale and/or oil sands leasing and development if they either have a minimum resource thickness of 15 feet, or are estimated to produce a minimum yield of 15/gal of oil per ton of ore. Lands with these minimum resource thicknesses and gallonage yield estimates were approved for oil shale and/or oil sands development in Wyoming within the Green River Formation. Similarly situated resources should be subjected to the same approval process
4. Uintah County requires all applicable Federal agencies to fully comply with The Federal Land Policy and Management Act of 1976, as amended (hereinafter "FLPMA"), by being consistent with State and local plans to the maximum extent possible in managing public lands within Uintah County. Uintah County is committed to insure management of public lands is subject to consistent objective policy and not the political vagaries of the day.1 Sound

1 Secretarial Order 3310, dated Dec. 22, 20 I 0 and the 20 II Oil Shale and Tar Sands Programmatic Environmental Impact Statement are perfect examples of an attempted end-run by the Executive around Legislative mandates and a new administration's attempt to undue years of objective sound policy making to satisfy campaign promises. However, any attempt by the BLM to implement, administer and/or enforce Secretarial Order 3310, including any effort by the BLM to proceed further on the 20 II OSTS PEIS. is a patent violation of the funding moratorium against such activities. as found in Section 1769 of the April2\, 20 II Congressional Resolution to Fund Fiscal year 20 II through September 30. 20 I I, and subsequent Congressional funding measures which per:petuate this moratorium, which states:

For the fiscal year ending September 30. 20 II [and subsequent fiscal years as applicable], none of the funds made available by this division or any other Act may be used to implement. administer. or enforce Secretarial Order 3310 issued by the Secretary of the Interior on December ?2, 20 I 0.

The BLM should immediately cease and desist all activities related to the 7011 OSTS PEIS and immediately publish a revised notice in the Federal Register signifying its cessation of all work on the Programmatic ElS or it will continue to be in contempt of Congress.

consistent management will increase the energy independence of the United States of America and provide local economic stability. Any attempts by a federal agency to not adhere to the plain language of FLPMA requiring consistency with State and local plans will be challenged and if necessary legal action will ensue.

In very recognizable fashion FLPMA created a system of public land management honoring the American philosophy of"laboratories of democracy." In 1932, U.S. Supreme Court Justice Louis Brandeis stated "It is one of the happy incidents of the federal system that a single courageous State may, if its citizens choose, serve as a laboratory; and try novel social and economic experiments without risk to the rest of the country." New State Ice Co. v. Liebmann, 285 U.S. 262 (1932) (dissenting opinion). Uintah County, a political subdivision of the State of Utah, is exercising its duty under our system of Federalism to try sound novel approaches to manage public lands within its boundaries. Again, it is incumbent on federal agencies to the maximum extent possible be consistent with this plan. Anything short of this constitutes a violation of federal law and is subject to judicial review.

5. Consistent with this Chapter, Uintah County will utilize best available technology to develop a map showing all lands that should be leased and fully developed for oil shale and oil sands in Uintah County. This map will supersede the current State of Utah map showing lands estimated to produce a minimum yield of 25/gal of oil per ton of ore and a copy thereof shall be available for public inspection in the office of the Uintah County Commission.

Enrolled Copy S.B. 83

1 UINTAH BASIN ENERGY ZONES
2 2012 GENERAL SESSION
3 STATE OF UTAH
4 Chief Sponsor: Kevin T. Van Tassell
5 House Sponsor: John G. Mathis
6
7 LONG TITLE
8 General Description:
9 This bill modifies Title 63J, Chapter 8, State of Utah Resource Management Plan for
10 Federal Lands, by creating the Uintah Basin Energy Zone.
11 Highlighted Provisions:
12 This bill:
13 < defines the term "Uintah Basin Energy Zone";
14 < creates the Uintah Basin Energy Zone;
15 < adopts an energy exploration, access, and development policy for the Uintah Basin
16 Energy Zone, including:
17 C promoting full, responsible development of energy and mineral resources within
18 the Uintah Basin Energy Zone; and
19 C achieving and maintaining sustainable levels of energy, hard rock, and natural
20 resources in the Uintah Basin Energy Zone;
21 < promotes local, state, and federal collaboration to develop energy and mineral
22 resources in the Uintah Basin Energy Zone; and

23 < makes technical changes.
24 Money Appropriated in this Bill:
25 None
26 Other Special Clauses:
27 This bill provides an immediate effective date.
28 Utah Code Sections Affected:
29 AMENDS:
S.B. 83 Enrolled Copy
- 2 -
30 63J-4-401, as last amended by Laws of Utah 2009, Chapter 121
31 63J-8-102, as enacted by Laws of Utah 2011, Chapter 49
32 63J-8-105, as enacted by Laws of Utah 2011, Chapter 49
33 ENACTS:
34 63J-8-105.5, Utah Code Annotated 1953
35
36 Be it enacted by the Legislature of the state of Utah:
37 Section 1. Section 63J-4-401 is amended to read:
38 63J-4-401. Planning duties of the planning coordinator and office.
39 (1) The state planning coordinator shall:
40 (a) act as the governor's adviser on state, regional, metropolitan, and local
41 governmental planning matters relating to public improvements and land use;
42 (b) counsel with the authorized representatives of the Department of Transportation,
43 the State Building Board, the Department of Health, the Department of Workforce Services,
44 the Labor Commission, the Department of Natural Resources, the School and Institutional
45 Trust Lands Administration, and other proper persons concerning all state planning matters;
46 (c) when designated to do so by the governor, receive funds made available to Utah by
47 the federal government;
48 (d) receive and review plans of the various state agencies and political subdivisions
49 relating to public improvements and programs;
50 (e) when conflicts occur between the plans and proposals of state agencies, prepare
51 specific recommendations for the resolution of the conflicts and submit the recommendations
52 to the governor for a decision resolving the conflict;
53 (f) when conflicts occur between the plans and proposals of a state agency and a
54 political subdivision or between two or more political subdivisions, advise these entities of
the
55 conflict and make specific recommendations for the resolution of the conflict;
56 (g) act as the governor's planning agent in planning public improvements and land use
57 and, in this capacity, undertake special studies and investigations;
Enrolled Copy S.B. 83
- 3 -
58 (h) provide information and cooperate with the Legislature or any of its committees in
59 conducting planning studies;
60 (i) cooperate and exchange information with federal agencies and local, metropolitan,
61 or regional agencies as necessary to assist with federal, state, regional, metropolitan, and local
62 programs;
63 (j) make recommendations to the governor that the planning coordinator considers

64 advisable for the proper development and coordination of plans for state government and
65 political subdivisions; and
66 (k) oversee and supervise the activities and duties of the public lands policy
67 coordinator.
68 (2) The state planning coordinator may:
69 (a) perform regional and state planning and assist state government planning agencies
70 in performing state planning;
71 (b) provide planning assistance to Indian tribes regarding planning for Indian
72 reservations; and
73 (c) assist city, county, metropolitan, and regional planning agencies in performing
74 local, metropolitan, and regional planning, provided that the state planning coordinator and the
75 state planning coordinator's agents and designees recognize and promote the plans, policies,
76 programs, processes, and desired outcomes of each planning agency whenever possible.
77 (3) When preparing or assisting in the preparation of plans, policies, programs, or
78 processes related to the management or use of federal lands or natural resources on federal
79 lands in Utah, the state planning coordinator shall:
80 (a) incorporate the plans, policies, programs, processes, and desired outcomes of the
81 counties where the federal lands or natural resources are located, to the maximum extent
82 consistent with state and federal law, provided that this requirement shall not be interpreted to
83 infringe upon the authority of the governor;
84 (b) identify inconsistencies or conflicts between the plans, policies, programs,
85 processes, and desired outcomes prepared under Subsection (3)(a) and the plans, programs,
S.B. 83 Enrolled Copy
- 4 -
86 processes, and desired outcomes of local government as early in the preparation process as
87 possible, and seek resolution of the inconsistencies through meetings or other conflict
88 resolution mechanisms involving the necessary and immediate parties to the inconsistency or
89 conflict;
90 (c) present to the governor the nature and scope of any inconsistency or other conflict
91 that is not resolved under the procedures in Subsection (3)(b) for the governor's decision about
92 the position of the state concerning the inconsistency or conflict;
93 (d) develop, research, and use factual information, legal analysis, and statements of
94 desired future condition for the state, or subregion of the state, as necessary to support the
95 plans, policies, programs, processes, and desired outcomes of the state and the counties where
96 the federal lands or natural resources are located;
97 (e) establish and coordinate agreements between the state and federal land management
98 agencies, federal natural resource management agencies, and federal natural resource
99 regulatory agencies to facilitate state and local participation in the development, revision, and
100 implementation of land use plans, guidelines, regulations, other instructional memoranda, or
101 similar documents proposed or promulgated for lands and natural resources administered by
102 federal agencies; and
103 (f) work in conjunction with political subdivisions to establish agreements with federal
104 land management agencies, federal natural resource management agencies, and federal natural

105 resource regulatory agencies to provide a process for state and local participation in the
106 preparation of, or coordinated state and local response to, environmental impact analysis
107 documents and similar documents prepared pursuant to law by state or federal agencies.
108 (4) The state planning coordinator shall comply with the requirements of Subsection
109 63C-4-102(8) before submitting any comments on a draft environmental impact statement or
110 on an environmental assessment for a proposed land management plan, if the governor would
111 be subject to Subsection 63C-4-102(8) if the governor were submitting the material.
112 (5) The state planning coordinator shall cooperate with and work in conjunction with
113 appropriate state agencies and political subdivisions to develop policies, plans, programs,
Enrolled Copy S.B. 83
- 5 -
114 processes, and desired outcomes authorized by this section by coordinating the development of
115 positions:
116 (a) through the Resource Development Coordinating Committee;
117 (b) in conjunction with local government officials concerning general local government
118 plans;
119 (c) by soliciting public comment through the Resource Development Coordinating
120 Committee; and
121 (d) by working with the Public Lands Policy Coordinating Office.
122 (6) The state planning coordinator shall recognize and promote the following principles
123 when preparing any policies, plans, programs, processes, or desired outcomes relating to
124 federal lands and natural resources on federal lands pursuant to this section:
125 (a) (i) the citizens of the state are best served by applying multiple-use and
126 sustained-yield principles in public land use planning and management; and
127 (ii) multiple-use and sustained-yield management means that federal agencies should
128 develop and implement management plans and make other resource-use decisions that:
129 (A) achieve and maintain in perpetuity a high-level annual or regular periodic output of
130 mineral and various renewable resources from public lands;
131 (B) support valid existing transportation, mineral, and grazing privileges at the highest
132 reasonably sustainable levels;
133 (C) support the specific plans, programs, processes, and policies of state agencies and
134 local governments;
135 (D) are designed to produce and provide the desired vegetation for the watersheds,
136 timber, food, fiber, livestock forage, and wildlife forage, and minerals that are necessary to
137 meet present needs and future economic growth and community expansion without permanent
138 impairment of the productivity of the land;
139 (E) meet the recreational needs and the personal and business-related transportation
140 needs of the citizens of the state by providing access throughout the state;
141 (F) meet the recreational needs of the citizens of the state;
S.B. 83 Enrolled Copy
- 6 -
142 (G) meet the needs of wildlife;
143 (H) provide for the preservation of cultural resources, both historical and

144 archaeological;
145 (I) meet the needs of economic development;
146 (J) meet the needs of community development; and
147 (K) provide for the protection of water rights;
148 (b) managing public lands for "wilderness characteristics" circumvents the statutory
149 wilderness process and is inconsistent with the multiple-use and sustained-yield management
150 standard that applies to all Bureau of Land Management and U.S. Forest Service lands that are
151 not wilderness areas or wilderness study areas;
152 (c) all waters of the state are:
153 (i) owned exclusively by the state in trust for its citizens;
154 (ii) are subject to appropriation for beneficial use; and
155 (iii) are essential to the future prosperity of the state and the quality of life within the
156 state;
157 (d) the state has the right to develop and use its entitlement to interstate rivers;
158 (e) all water rights desired by the federal government must be obtained through the
159 state water appropriation system;
160 (f) land management and resource-use decisions which affect federal lands should give
161 priority to and support the purposes of the compact between the state and the United States
162 related to school and institutional trust lands;
163 (g) development of the solid, fluid, and gaseous mineral resources of the state is an
164 important part of the economy of the state, and of local regions within the state;
165 (h) the state should foster and support industries that take advantage of the state's
166 outstanding opportunities for outdoor recreation;
167 (i) wildlife constitutes an important resource and provides recreational and economic
168 opportunities for the state's citizens;
169 (j) proper stewardship of the land and natural resources is necessary to ensure the
Enrolled Copy S.B. 83
- 7 -
170 health of the watersheds, timber, forage, and wildlife resources to provide for a continuous
171 supply of resources for the people of the state and the people of the local communities who
172 depend on these resources for a sustainable economy;
173 (k) forests, rangelands, timber, and other vegetative resources:
174 (i) provide forage for livestock;
175 (ii) provide forage and habitat for wildlife;
176 (iii) provide resources for the state's timber and logging industries;
177 (iv) contribute to the state's economic stability and growth; and
178 (v) are important for a wide variety of recreational pursuits;
179 (l) management programs and initiatives that improve watersheds, forests, and increase
180 forage for the mutual benefit of wildlife species and livestock, logging, and other agricultural
181 industries by utilizing proven techniques and tools are vital to the state's economy and the
182 quality of life in Utah; and
183 (m) (i) land management plans, programs, and initiatives should provide that the
184 amount of domestic livestock forage, expressed in animal unit months, for permitted, active

185 use as well as the wildlife forage included in that amount, be no less than the maximum
186 number of animal unit months sustainable by range conditions in grazing allotments and
187 districts, based on an on-the-ground and scientific analysis;
188 (ii) the state opposes the relinquishment or retirement of grazing animal unit months in
189 favor of conservation, wildlife, and other uses;
190 (iii) (A) the state favors the best management practices that are jointly sponsored by
191 cattlemen's, sportsmen's, and wildlife management groups such as chaining, logging, seeding,
192 burning, and other direct soil and vegetation prescriptions that are demonstrated to restore
193 forest and rangeland health, increase forage, and improve watersheds in grazing districts and
194 allotments for the mutual benefit of domestic livestock and wildlife;
195 (B) when practices described in Subsection (6)(m)(iii)(A) increase a grazing
196 allotment's forage beyond the total permitted forage use that was allocated to that allotment in
197 the last federal land use plan or allotment management plan still in existence as of January 1,
S.B. 83 Enrolled Copy
- 8 -
198 2005, a reasonable and fair portion of the increase in forage beyond the previously allocated
199 total permitted use should be allocated to wildlife as recommended by a joint, evenly balanced
200 committee of livestock and wildlife representatives that is appointed and constituted by the
201 governor for that purpose;
202 (C) the state favors quickly and effectively adjusting wildlife population goals and
203 population census numbers in response to variations in the amount of available forage caused
204 by drought or other climatic adjustments, and state agencies responsible for managing wildlife
205 population goals and population census numbers will give due regard to both the needs of the
206 livestock industry and the need to prevent the decline of species to a point where listing under
207 the terms of the Endangered Species Act when making such adjustments;
208 (iv) the state opposes the transfer of grazing animal unit months to wildlife for
209 supposed reasons of rangeland health;
210 (v) reductions in domestic livestock animal unit months must be temporary and
211 scientifically based upon rangeland conditions;
212 (vi) policies, plans, programs, initiatives, resource management plans, and forest plans
213 may not allow the placement of grazing animal unit months in a suspended use category unless
214 there is a rational and scientific determination that the condition of the rangeland allotment or
215 district in question will not sustain the animal unit months sought to be placed in suspended
216 use;
217 (vii) any grazing animal unit months that are placed in a suspended use category should
218 be returned to active use when range conditions improve;
219 (viii) policies, plans, programs, and initiatives related to vegetation management

220 should recognize and uphold the preference for domestic grazing over alternate forage uses in
221 established grazing districts while upholding management practices that optimize and expand
222 forage for grazing and wildlife in conjunction with state wildlife management plans and
223 programs in order to provide maximum available forage for all uses; and
224 (ix) in established grazing districts, animal unit months that have been reduced due to
225 rangeland health concerns should be restored to livestock when rangeland conditions improve,
Enrolled Copy S.B. 83
- 9 -
226 and should not be converted to wildlife use.
227 (7) The state planning coordinator shall recognize and promote the following findings
228 in the preparation of any policies, plans, programs, processes, or desired outcomes relating to
229 federal lands and natural resources on federal lands under this section:
230 (a) as a coholder of R.S. 2477 rights-of-way with the counties, the state supports its
231 recognition by the federal government and the public use of R.S. 2477 rights-of-way and urges
232 the federal government to fully recognize the rights-of-way and their use by the public as
233 expeditiously as possible;
234 (b) it is the policy of the state to use reasonable administrative and legal measures to
235 protect and preserve valid existing rights-of-way granted by Congress under R.S. 2477, and to
236 support and work in conjunction with counties to redress cases where R.S. 2477 rights-of-way
237 are not recognized or are impaired; and
238 (c) transportation and access routes to and across federal lands, including all
239 rights-of-way vested under R.S. 2477, are vital to the state's economy and to the quality of life
240 in the state, and must provide, at a minimum, a network of roads throughout the resource
241 planning area that provides for:
242 (i) movement of people, goods, and services across public lands;
243 (ii) reasonable access to a broad range of resources and opportunities throughout the
244 resource planning area, including:
245 (A) livestock operations and improvements;
246 (B) solid, fluid, and gaseous mineral operations;
247 (C) recreational opportunities and operations, including motorized and nonmotorized
248 recreation;
249 (D) search and rescue needs;
250 (E) public safety needs; and
251 (F) access for transportation of wood products to market;
252 (iii) access to federal lands for people with disabilities and the elderly; and
253 (iv) access to state lands and school and institutional trust lands to accomplish the
S.B. 83 Enrolled Copy
- 10 -

254 purposes of those lands.
255 (8) The state planning coordinator shall recognize and promote the following findings
256 in the preparation of any plans, policies, programs, processes, or desired outcomes relating to
257 federal lands and natural resources on federal lands pursuant to this section:
258 (a) the state's support for the addition of a river segment to the National Wild and
259 Scenic Rivers System, 16 U.S.C. Sec. 1271 et seq., will be withheld until:
260 (i) it is clearly demonstrated that water is present and flowing at all times;
261 (ii) it is clearly demonstrated that the required water-related value is considered
262 outstandingly remarkable within a region of comparison consisting of one of the three
263 physiographic provinces in the state, and that the rationale and justification for the conclusions
264 are disclosed;
265 (iii) it is clearly demonstrated that the inclusion of each river segment is consistent
266 with the plans and policies of the state and the county or counties where the river segment is
267 located as those plans and policies are developed according to Subsection (3);
268 (iv) the effects of the addition upon the local and state economies, agricultural and
269 industrial operations and interests, outdoor recreation, water rights, water quality, water
270 resource planning, and access to and across river corridors in both upstream and downstream
271 directions from the proposed river segment have been evaluated in detail by the relevant federal
272 agency;
273 (v) it is clearly demonstrated that the provisions and terms of the process for review of
274 potential additions have been applied in a consistent manner by all federal agencies;
275 (vi) the rationale and justification for the proposed addition, including a comparison
276 with protections offered by other management tools, is clearly analyzed within the multiple-use
277 mandate, and the results disclosed;
278 (vii) it is clearly demonstrated that the federal agency with management authority over
279 the river segment, and which is proposing the segment for inclusion in the National Wild and
280 Scenic River System will not use the actual or proposed designation as a basis to impose
281 management standards outside of the federal land management plan;
Enrolled Copy S.B. 83
- 11 -
282 (viii) it is clearly demonstrated that the terms and conditions of the federal land and
283 resource management plan containing a recommendation for inclusion in the National Wild
284 and Scenic River System:
285 (A) evaluates all eligible river segments in the resource planning area completely and
286 fully for suitability for inclusion in the National Wild and Scenic River System;
287 (B) does not suspend or terminate any studies for inclusion in the National Wild and
288 Scenic River System at the eligibility phase;
289 (C) fully disclaims any interest in water rights for the recommended segment as a result
290 of the adoption of the plan; and
291 (D) fully disclaims the use of the recommendation for inclusion in the National Wild
292 and Scenic River System as a reason or rationale for an evaluation of impacts by proposals

for
293 projects upstream, downstream, or within the recommended segment;
294 (ix) it is clearly demonstrated that the agency with management authority over the river
295 segment commits not to use an actual or proposed designation as a basis to impose Visual
296 Resource Management Class I or II management prescriptions that do not comply with the
297 provisions of Subsection (8)(t); and
298 (x) it is clearly demonstrated that including the river segment and the terms and
299 conditions for managing the river segment as part of the National Wild and Scenic River
300 System will not prevent, reduce, impair, or otherwise interfere with:
301 (A) the state and its citizens' enjoyment of complete and exclusive water rights in and
302 to the rivers of the state as determined by the laws of the state; or
303 (B) local, state, regional, or interstate water compacts to which the state or any county
304 is a party;
305 (b) the conclusions of all studies related to potential additions to the National Wild and
306 Scenic River System, 16 U.S.C. Sec. 1271 et seq., are submitted to the state for review and
307 action by the Legislature and governor, and the results, in support of or in opposition to, are
308 included in any planning documents or other proposals for addition and are forwarded to the
309 United States Congress;
S.B. 83 Enrolled Copy
- 12 -
310 (c) the state's support for designation of an Area of Critical Environmental Concern
311 (ACEC), as defined in 43 U.S.C. Sec. 1702, within federal land management plans will be
312 withheld until:
313 (i) it is clearly demonstrated that the proposed area satisfies all the definitional
314 requirements of the Federal Land Policy and Management Act of 1976, 43 U.S.C. Sec.
315 1702(a);
316 (ii) it is clearly demonstrated that the area proposed for designation as an ACEC is
317 limited in geographic size and that the proposed management prescriptions are limited in
scope
318 to the minimum necessary to specifically protect and prevent irreparable damage to the
relevant
319 and important values identified, or limited in geographic size and management prescriptions
to
320 the minimum required to specifically protect human life or safety from natural hazards;
321 (iii) it is clearly demonstrated that the proposed area is limited only to areas that are
322 already developed or used or to areas where no development is required;
323 (iv) it is clearly demonstrated that the proposed area contains relevant and important
324 historic, cultural or scenic values, fish or wildlife resources, or natural processes which are
325 unique or substantially significant on a regional basis, or contain natural hazards which
326 significantly threaten human life or safety;
327 (v) the federal agency has analyzed regional values, resources, processes, or hazards for
328 irreparable damage and its potential causes resulting from potential actions which are
329 consistent with the multiple-use, sustained-yield principles, and the analysis describes the
330 rationale for any special management attention required to protect, or prevent irreparable
331 damage to the values, resources, processes, or hazards;
332 (vi) it is clearly demonstrated that the proposed designation is consistent with the plans

333 and policies of the state and of the county where the proposed designation is located as those
334 plans and policies are developed according to Subsection (3);
335 (vii) it is clearly demonstrated that the proposed ACEC designation will not be applied
336 redundantly over existing protections provided by other state and federal laws for federal lands
337 or resources on federal lands, and that the federal statutory requirement for special management
Enrolled Copy S.B. 83
- 13 -
338 attention for a proposed ACEC will discuss and justify any management requirements needed
339 in addition to those specified by the other state and federal laws;
340 (viii) the difference between special management attention required for an ACEC and
341 normal multiple-use management has been identified and justified, and that any determination
342 of irreparable damage has been analyzed and justified for short and long-term horizons;
343 (ix) it is clearly demonstrated that the proposed designation:
344 (A) is not a substitute for a wilderness suitability recommendation;
345 (B) is not a substitute for managing areas inventoried for wilderness characteristics
346 after 1993 under the BLM interim management plan for valid wilderness study areas; and
347 (C) it is not an excuse or justification to apply de facto wilderness management
348 standards; and
349 (x) the conclusions of all studies are submitted to the state, as a cooperating agency, for
350 review, and the results, in support of or in opposition to, are included in all planning
351 documents;
352 (d) sufficient federal lands are made available for government-to-government
353 exchanges of school and institutional trust lands and federal lands without regard for a
354 resource-to-resource correspondence between the surface or mineral characteristics of the
355 offered trust lands and the offered federal lands;
356 (e) federal agencies should support government-to-government exchanges of land with
357 the state based on a fair process of valuation which meets the fiduciary obligations of both the
358 state and federal governments toward trust lands management, and which assures that revenue
359 authorized by federal statute to the state from mineral or timber production, present or future, is
360 not diminished in any manner during valuation, negotiation, or implementation processes;
361 (f) agricultural and grazing lands should continue to produce the food and fiber needed
362 by the citizens of the state and the nation, and the rural character and open landscape of rural
363 Utah should be preserved through a healthy and active agricultural and grazing industry,
364 consistent with private property rights and state fiduciary duties;
365 (g) the resources of the forests and rangelands of the state should be integrated as part
S.B. 83 Enrolled Copy
- 14 -
366 of viable, robust, and sustainable state and local economies, and available forage should be
367 evaluated for the full complement of herbivores the rangelands can support in a sustainable

368 manner, and forests should contain a diversity of timber species, and disease or insect
369 infestations in forests should be controlled using logging or other best management practices;
370 (h) the state opposes any additional evaluation of national forest service lands as
371 "roadless" or "unroaded" beyond the forest service's second roadless area review evaluation and
372 opposes efforts by agencies to specially manage those areas in a way that:
373 (i) closes or declassifies existing roads unless multiple side by side roads exist running
374 to the same destination and state and local governments consent to close or declassify the extra
375 roads;
376 (ii) permanently bars travel on existing roads;
377 (iii) excludes or diminishes traditional multiple-use activities, including grazing and
378 proper forest harvesting;
379 (iv) interferes with the enjoyment and use of valid, existing rights, including water
380 rights, local transportation plan rights, R.S. 2477 rights, grazing allotment rights, and mineral
381 leasing rights; or
382 (v) prohibits development of additional roads reasonably necessary to pursue
383 traditional multiple-use activities;
384 (i) the state's support for any forest plan revision or amendment will be withheld until
385 the appropriate plan revision or plan amendment clearly demonstrates that:
386 (i) established roads are not referred to as unclassified roads or a similar classification;
387 (ii) lands in the vicinity of established roads are managed under the multiple-use,
388 sustained-yield management standard; and
389 (iii) no roadless or unroaded evaluations or inventories are recognized or upheld
390 beyond those that were recognized or upheld in the forest service's second roadless area review
391 evaluation;
392 (j) the state's support for any recommendations made under the statutory requirement to
393 examine the wilderness option during the revision of land and resource management plans by
Enrolled Copy S.B. 83
- 15 -
394 the U.S. Forest Service will be withheld until it is clearly demonstrated that:
395 (i) the duly adopted transportation plans of the state and county or counties within the
396 planning area are fully and completely incorporated into the baseline inventory of information
397 from which plan provisions are derived;
398 (ii) valid state or local roads and rights-of-way are recognized and not impaired in any
399 way by the recommendations;
400 (iii) the development of mineral resources by underground mining is not affected by
401 the recommendations;
402 (iv) the need for additional administrative or public roads necessary for the full use of
403 the various multiple-uses, including recreation, mineral exploration and development, forest
404 health activities, and grazing operations is not unduly affected by the recommendations;

405 (v) analysis and full disclosure is made concerning the balance of multiple-use
406 management in the proposed areas, and that the analysis compares the full benefit of
407 multiple-use management to the recreational, forest health, and economic needs of the state and
408 the counties to the benefits of the requirements of wilderness management; and
409 (vi) the conclusions of all studies related to the requirement to examine the wilderness
410 option are submitted to the state for review and action by the Legislature and governor, and the
411 results, in support of or in opposition to, are included in any planning documents or other
412 proposals that are forwarded to the United States Congress;
413 (k) the invasion of noxious weeds and undesirable invasive plant species into the state
414 should be reversed, their presence eliminated, and their return prevented;
415 (l) management and resource-use decisions by federal land management and regulatory
416 agencies concerning the vegetative resources within the state should reflect serious
417 consideration of the proper optimization of the yield of water within the watersheds of the
418 state;
419 (m) (i) it is the policy of the state that:
420 (A) mineral and energy production and environmental protection are not mutually
421 exclusive;
S.B. 83 Enrolled Copy
- 16 -
422 (B) it is technically feasible to permit appropriate access to mineral and energy
423 resources while preserving nonmineral and nonenergy resources;
424 (C) resource management planning should seriously consider all available mineral and
425 energy resources;
426 (D) the development of the solid, fluid, and gaseous mineral resources of the state and
427 the renewable resources of the state should be encouraged;
428 (E) the waste of fluid and gaseous minerals within developed areas should be
429 prohibited; and
430 (F) requirements to mitigate or reclaim mineral development projects should be based
431 on credible evidence of significant impacts to natural or cultural resources;
432 (ii) the state's support for mineral development provisions within federal land
433 management plans will be withheld until the appropriate land management plan environmental
434 impact statement clearly demonstrates:
435 (A) that the authorized planning agency has:
436 (I) considered and evaluated the mineral and energy potential in all areas of the
437 planning area as if the areas were open to mineral development under standard lease
438 agreements; and
439 (II) evaluated any management plan prescription for its impact on the area's baseline
440 mineral and energy potential;
441 (B) that the development provisions do not unduly restrict access to public lands for
442 energy exploration and development;
443 (C) that the authorized planning agency has supported any closure of additional areas
444 to mineral leasing and development or any increase of acres subject to no surface occupancy
445 restrictions by adhering to:

446 (I) the relevant provisions of the Federal Land Policy and Management Act of 1976, 43
447 U.S.C. Sec. 1701 et seq.;
448 (II) other controlling mineral development laws; and
449 (III) the controlling withdrawal and reporting procedures set forth in the Federal Land
Enrolled Copy S.B. 83
- 17 -
450 Policy and Management Act of 1976, 43 U.S.C. Sec. 1701 et seq.;
451 (D) that the authorized planning agency evaluated whether to repeal any moratorium
452 that may exist on the issuance of additional mining patents and oil and gas leases;
453 (E) that the authorized planning agency analyzed all proposed mineral lease
454 stipulations and considered adopting the least restrictive necessary to protect against damage
to
455 other significant resource values;
456 (F) that the authorized planning agency evaluated mineral lease restrictions to
457 determine whether to waive, modify, or make exceptions to the restrictions on the basis that
458 they are no longer necessary or effective;
459 (G) that the authorized federal agency analyzed all areas proposed for no surface
460 occupancy restrictions, and that the analysis evaluated:
461 (I) whether directional drilling is economically feasible and ecologically necessary for
462 each proposed no surface occupancy area;
463 (II) whether the directional drilling feasibility analysis, or analysis of other
464 management prescriptions, demonstrates that the proposed no surface occupancy
prescription,
465 in effect, sterilizes the mineral and energy resources beneath the area; and
466 (III) whether, if the minerals are effectively sterilized, the area must be reported as
467 withdrawn under the provisions of the Federal Land Policy and Management Act; and
468 (H) that the authorized planning agency has evaluated all directional drilling
469 requirements in no surface occupancy areas to determine whether directional drilling is
feasible
470 from an economic, ecological, and engineering standpoint;
471 (n) motorized, human, and animal-powered outdoor recreation should be integrated
472 into a fair and balanced allocation of resources within the historical and cultural framework
of
473 multiple-uses in rural Utah, and outdoor recreation should be supported as part of a balanced
474 plan of state and local economic support and growth;
475 (o) off-highway vehicles should be used responsibly, the management of off-highway
476 vehicles should be uniform across all jurisdictions, and laws related to the use of off-
highway
477 vehicles should be uniformly applied across all jurisdictions;
S.B. 83 Enrolled Copy
- 18 -
478 (p) (i) rights-of-way granted and vested under the provisions of R.S. 2477 should be
479 preserved and acknowledged;
480 (ii) land use management plans, programs, and initiatives should be consistent with
481 both state and county transportation plans developed according to Subsection (3) in order to
482 provide a network of roads throughout the planning area that provides for:

483 (A) movement of people, goods, and services across public lands;
484 (B) reasonable access to a broad range of resources and opportunities throughout the
485 planning area, including access to livestock, water, and minerals;
486 (C) economic and business needs;
487 (D) public safety;
488 (E) search and rescue;
489 (F) access for people with disabilities and the elderly;
490 (G) access to state lands; and
491 (H) recreational opportunities;
492 (q) transportation and access provisions for all other existing routes, roads, and trails
493 across federal, state, and school trust lands within the state should be determined and
494 identified, and agreements should be executed and implemented, as necessary to fully authorize
495 and determine responsibility for maintenance of all routes, roads, and trails;
496 (r) the reasonable development of new routes and trails for motorized, human, and
497 animal-powered recreation should be implemented;
498 (s) (i) forests, rangelands, and watersheds, in a healthy condition, are necessary and
499 beneficial for wildlife, livestock grazing, and other multiple-uses;
500 (ii) management programs and initiatives that are implemented to increase forage for
501 the mutual benefit of the agricultural industry, livestock operations, and wildlife species should
502 utilize all proven techniques and tools;
503 (iii) the continued viability of livestock operations and the livestock industry should be
504 supported on the federal lands within the state by management of the lands and forage
505 resources, by the proper optimization of animal unit months for livestock, in accordance with
Enrolled Copy S.B. 83
- 19 -
506 the multiple-use provisions of the Federal Land Policy and Management Act of 1976, 43
507 U.S.C. 1701 et seq., the provisions of the Taylor Grazing Act of 1934, 43 U.S.C. 315 et seq.,
508 and the provisions of the Public Rangelands Improvement Act of 1978, 43 U.S.C. 1901 et seq.;
509 (iv) provisions for predator control initiatives or programs under the direction of state
510 and local authorities should be implemented; and
511 (v) resource-use and management decisions by federal land management and
512 regulatory agencies should support state-sponsored initiatives or programs designed to stabilize
513 wildlife populations that may be experiencing a scientifically demonstrated decline in those
514 populations; and
515 (t) management and resource use decisions by federal land management and regulatory
516 agencies concerning the scenic resources of the state must balance the protection of scenery
517 with the full management requirements of the other authorized uses of the land under
518 multiple-use management, and should carefully consider using Visual Resource Management
519 Class I protection only for areas of inventoried Class A scenery or equivalent.
520 (9) Notwithstanding any provision of Section 63J-8-105.5, the state is committed to

521 establishing and administering an effective statewide conservation strategy for greater sage
522 grouse.
523 [(9)] (10) Nothing contained in this section may be construed to restrict or supersede
524 the planning powers conferred upon state departments, agencies, instrumentalities, or advisory
525 councils of the state or the planning powers conferred upon political subdivisions by any other
526 existing law.
527 [(10)] (11) Nothing in this section may be construed to affect any lands withdrawn
528 from the public domain for military purposes, which are administered by the United States
529 Army, Air Force, or Navy.
530 Section 2. Section 63J-8-102 is amended to read:
531 63J-8-102. Definitions.
532 As used in this chapter:
533 (1) "ACEC" means an area of critical environmental concern.
S.B. 83 Enrolled Copy
- 20 -
534 (2) "AUM" means animal unit months, a unit of grazing forage.
535 (3) "BLM" means the United States Bureau of Land Management.
536 (4) "FLPMA" means the Federal Land Policy Management Act of 1976, 43 U.S.C. Sec.
537 1701 et seq.
538 (5) "Forest service" means the United States Forest Service within the United States
539 Department of Agriculture.
540 (6) "Multiple use" means proper stewardship of the subject lands pursuant to Section
541 1031(C) of FLPMA, 43 U.S.C. Sec. 170(C).
542 (7) "OHV" means off-highway vehicle as defined in Section 41-22-2.
543 (8) "Settlement Agreement" means the written agreement between the state and the
544 Department of the Interior in 2003 (revised in 2005) that resolved the case of State of Utah v.
545 Gale Norton, Secretary of Interior (United States District Court, D. Utah, Case No.
546 2:96cv0870).
547 (9) "SITLA" means the School and Institutional Trust Lands Administration as created
548 in Section 53C-1-201.
549 (10) (a) "Subject lands" means the following non-WSA BLM lands:
550 (i) in Beaver County:
551 (A) Mountain Home Range South, Jackson Wash, The Toad, North Wah Wah
552 Mountains, Central Wah Wah Mountains, and San Francisco Mountains according to the
553 region map entitled "Great Basin Central" linked in the webpage entitled "Citizen's Proposal
554 for Wilderness in Utah" at http://www.protectwildutah.org/proposal/index.html as the webpage
555 existed on February 17, 2011; and
556 (B) White Rock Range, South Wah Wah Mountains, and Granite Peak according to the
557 region map entitled "Great Basin South" linked in the webpage entitled "Citizen's Proposal for
558 Wilderness in Utah" at http://www.protectwildutah.org/proposal/index.html as the webpage
559 existed on February 17, 2011;

560 (ii) in Box Elder County: Little Goose Creek, Grouse Creek Mountains North, Grouse
561 Creek Mountains South, Bald Eagle Mountain, Central Pilot Range, Pilot Peak, Crater Island
Enrolled Copy S.B. 83
- 21 -
562 West, Crater Island East, Newfoundland Mountains, and Grassy Mountains North according
to
563 the region map entitled "Great Basin North" linked in the webpage entitled "Citizen's
Proposal
564 for Wilderness in Utah" at http://www.protectwildutah.org/proposal/index.html as the
webpage
565 existed on February 17, 2011;
566 (iii) in Carbon County: Desbrough Canyon and Turtle Canyon according to the region
567 map entitled "Book Cliffs" linked in the webpage entitled "Citizen's Proposal for
Wilderness in
568 Utah" at http://www.protectwildutah.org/proposal/index.html as the webpage existed on
569 February 17, 2011;
570 (iv) in Daggett County: Goslin Mountain, Home Mountain, Red Creek Badlands,
571 O-wi-yu-kuts, Lower Flaming Gorge, Crouse Canyon, and Diamond Breaks according to the
572 region map entitled "Dinosaur" linked in the webpage entitled "Citizen's Proposal for
573 Wilderness in Utah" at http://www.protectwildutah.org/proposal/index.html as the webpage
574 existed on February 17, 2011;
575 (v) in Duchesne County: Desbrough Canyon according to the region map entitled
576 "Book Cliffs" linked in the webpage entitled "Citizen's Proposal for Wilderness in Utah" at
577 http://www.protectwildutah.org/proposal/index.html as the webpage existed on February 17,
578 2011;
579 (vi) in Emery County:
580 (A) San Rafael River and Sweetwater Reef, according to the region map entitled
581 "Canyonlands Basin" linked in the webpage entitled "Citizen's Proposal for Wilderness in
582 Utah" at http://www.protectwildutah.org/proposal/index.html as the webpage existed on
583 February 17, 2011;
584 (B) Flat Tops according to the region map entitled "Glen Canyon," which is available
585 by clicking the link entitled "Dirty Devil" at the webpage entitled "Citizen's Proposal for
586 Wilderness in Utah" at http://www.protectwildutah.org/proposal/index.html as the webpage
587 existed on February 17, 2011; and
588 (C) Price River, Lost Spring Wash, Eagle Canyon, Upper Muddy Creek, Molen Reef,
589 Rock Canyon, Mussentuchit Badland, and Muddy Creek, according to the region map
entitled
S.B. 83 Enrolled Copy
- 22 -
590 "San Rafael Swell" linked at the webpage entitled "Citizen's Proposal for Wilderness in
Utah"
591 at http://www.protectwildutah.org/proposal/index.html as the webpage existed on February
17,
592 2011;
593 (vii) in Garfield County:
594 (A) Pole Canyon, according to the region map entitled "Great Basin South" linked in

595 the webpage entitled "Citizen's Proposal for Wilderness in Utah" at
596 http://www.protectwildutah.org/proposal/index.html as the webpage existed on February 17,
597 2011;
598 (B) Dirty Devil, Fiddler Butte, Little Rockies, Cane Spring Desert, and Cane Spring
599 Desert Adjacents, according to the region map entitled "Glen Canyon," which is available by
600 clicking the link entitled "Dirty Devil" at the webpage entitled "Citizen's Proposal for
601 Wilderness in Utah" at http://www.protectwildutah.org/proposal/index.html as the webpage
602 existed on February 17, 2011;
603 (C) Lampstand, Wide Hollow, Steep Creek, Brinkerhof Flats, Little Valley Canyon,
604 Death Hollow, Studhorse Peaks, Box Canyon, Heaps Canyon, North Escalante Canyon, Colt
605 Mesa, East of Bryce, Slopes of Canaan Peak, Horse Spring Canyon, Muley Twist Flank,
606 Pioneer Mesa, Slopes of Bryce, Blue Hills, Mud Springs Canyon, Carcass Canyon, Willis
607 Creek North, Kodachrome Basin, and Kodachrome Headlands, according to the region map
608 entitled "Grand Staircase Escalante" linked at the webpage entitled "Citizen's Proposal for
609 Wilderness in Utah" at http://www.protectwildutah.org/proposal/index.html as the webpage
610 existed on February 17, 2011; and
611 (D) Notom Bench, Mount Ellen, Bull Mountain, Dogwater Creek, Ragged Mountain,
612 Mount Pennell, Mount Hillers, Bullfrog Creek, and Long Canyon, according to the region
map
613 entitled "Henry Mountains" linked at the webpage entitled "Citizen's Proposal for
Wilderness
614 in Utah" at http://www.protectwildutah.org/proposal/index.html as the webpage existed on
615 February 17, 2011;
616 (viii) in Iron County: Needle Mountains, Steamboat Mountain, Broken Ridge, Paradise
617 Mountains, Crook Canyon, Hamlin, North Peaks, Mount Escalante, and Antelope Ridge,
Enrolled Copy S.B. 83
- 23 -
618 according to the region map entitled "Great Basin South" linked in the webpage entitled
619 "Citizen's Proposal for Wilderness in Utah" at
620 http://www.protectwildutah.org/proposal/index.html as the webpage existed on February 17,
621 2011;
622 (ix) in Juab County: Deep Creek Mountains, Essex Canyon, Kern Mountains, Wild
623 Horse Pass, Disappointment Hills, Granite Mountain, Middle Mountains, Tule Valley, Fish
624 Springs Ridge, Thomas Range, Drum Mountains, Dugway Mountains, Keg Mountains West,
625 Keg Mountains East, Lion Peak, and Rockwell Little Sahara, according to the region map
626 entitled "Great Basin Central" linked in the webpage entitled "Citizen's Proposal for
627 Wilderness in Utah" at http://www.protectwildutah.org/proposal/index.html as the webpage
628 existed on February 17, 2011;
629 (x) in Kane County:
630 (A) Willis Creek North, Willis Creek, Kodachrome Badlands, Mud Springs Canyon,
631 Carcass Canyon, Scorpion, Bryce Boot, Paria-Hackberry Canyons, Fiftymile Canyon,
632 Hurricane Wash, Upper Kanab Creek, Timber Mountain, Nephi Point, Paradise Canyon,
633 Wahweap Burning Hills, Fiftymile Bench, Forty Mile Gulch, Sooner Bench 1, 2, & 3, Rock
634 Cove, Warm Bench, Andalex Not, Vermillion Cliffs, Ladder Canyon, The Cockscomb,
Nipple
635 Bench, Moquith Mountain, Bunting Point, Glass Eye Canyon, and Pine Hollow, according

to
636 the region map entitled "Grand Staircase Escalante" linked at the webpage entitled "Citizen's
637 Proposal for Wilderness in Utah" at http://www.protectwildutah.org/proposal/index.html as the
638 webpage existed on February 17, 2011; and
639 (B) Orderville Canyon, Jolley Gulch, and Parunuweap Canyon, according to the region
640 map entitled "Zion/Mohave" linked at the webpage entitled "Citizen's Proposal for Wilderness
641 in Utah" at http://www.protectwildutah.org/proposal/index.html as the webpage existed on
642 February 17, 2011;
643 (xi) in Millard County: Kern Mountains, Wild Horse Pass, Disappointment Hills,
644 Granite Mountain, Middle Mountains, Tule Valley, Swasey Mountain, Little Drum Mountains
645 North, Little Drum Mountains South, Drum Mountains, Snake Valley, Coyote Knoll, Howell
S.B. 83 Enrolled Copy
- 24 -
646 Peak, Tule Valley South, Ledger Canyon, Chalk Knolls, Orr Ridge, Notch View, Bullgrass
647 Knoll, Notch Peak, Barn Hills, Cricket Mountains, Burbank Pass, Middle Burbank Hills, King
648 Top, Barn Hills, Red Tops, Middle Burbank Hills, Juniper, Painted Rock Mountain, Black
649 Hills, Tunnel Springs, Red Canyon, Sand Ridge, Little Sage Valley, Cat Canyon, Headlight
650 Mountain, Black Hills, Mountain Range Home North, Tweedy Wash, North Wah Wah
651 Mountains, Jackson Wash, and San Francisco Mountains, according to the region map entitled
652 "Great Basin Central" linked in the webpage entitled "Citizen's Proposal for Wilderness in
653 Utah" at http://www.protectwildutah.org/proposal/index.html as the webpage existed on
654 February 17, 2011;
655 (xii) in Piute County: Kingston Ridge, Rocky Ford, and Phonolite Hill, according to
656 the region map entitled "Great Basin South" linked in the webpage entitled "Citizen's Proposal
657 for Wilderness in Utah" at http://www.protectwildutah.org/proposal/index.html as the webpage
658 existed on February 17, 2011;
659 (xiii) in San Juan County:
660 (A) Horseshoe Point, Deadhorse Cliffs, Gooseneck, Demon's Playground, Hatch
661 Canyon, Lockhart Basin, Indian Creek, Hart's Point, Butler Wash, Bridger Jack Mesa, and Shay
662 Mountain, according to the region map entitled "Canyonlands Basin" linked in the webpage
663 entitled "Citizen's Proposal for Wilderness in Utah" at
664 http://www.protectwildutah.org/proposal/index.html as the webpage existed on February 17,
665 2011;
666 (B) Dark Canyon, Copper Point, Fortknocker Canyon, White Canyon, The Needle, Red
667 Rock Plateau, Upper Red Canyon, and Tuwa Canyon, according to the region map entitled
668 "Glen Canyon," which is available by clicking the link entitled "Dirty Devil" at the webpage

669 entitled “Citizen’s Proposal for Wilderness in Utah” at
670 http://www.protectwildutah.org/proposal/index.html as the webpage existed on February 17,
671 2011;
672 (C) Hunters Canyon, Behind the Rocks, Mill Creek, and Coyote Wash, according to
673 the region map entitled “Moab/La Sal” linked at the webpage entitled “Citizen’s Proposal
for
Enrolled Copy S.B. 83
- 25 -
674 Wilderness in Utah” at http://www.protectwildutah.org/proposal/index.html as the webpage
675 existed on February 17, 2011; and
676 (D) Hammond Canyon, Allen Canyon, Mancos Jim Butte, Arch Canyon, Monument
677 Canyon, Tin Cup Mesa, Cross Canyon, Nokai Dome, Grand Gulch, Fish and Owl Creek
678 Canyons, Comb Ridge, Road Canyon, The Tabernacle, Lime Creek, San Juan River, and
679 Valley of the Gods, according to the region map entitled “San Juan” linked at the webpage
680 entitled “Citizen’s Proposal for Wilderness in Utah” at
681 http://www.protectwildutah.org/proposal/index.html as the webpage existed on February 17,
682 2011;
683 (xiv) in Sevier County: Rock Canyon, Mussentuchit Badland, Limestone Cliffs, and
684 Jones’ Bench, according to the region map entitled “San Rafael Swell” linked at the
webpage
685 entitled “Citizen’s Proposal for Wilderness in Utah” at
686 http://www.protectwildutah.org/proposal/index.html as the webpage existed on February 17,
687 2011;
688 (xv) in Tooele County:
689 (A) Silver Island Mountains, Crater Island East, Grassy Mountains North, Grassy
690 Mountains South, Stansbury Island, Cedar Mountains North, Cedar Mountains Central,
Cedar
691 Mountains South, North Stansbury Mountains, Oquirrh Mountains, and Big Hollow,
according
692 to the region map entitled “Great Basin North” linked in the webpage entitled “Citizen’s
693 Proposal for Wilderness in Utah” at http://www.protectwildutah.org/proposal/index.html as
the
694 webpage existed on February 17, 2011, excluding the areas that Congress designated as
695 wilderness under the National Defense Authorization Act for Fiscal Year 2006; and
696 (B) Ochre Mountain, Deep Creek Mountains, Dugway Mountains, Indian Peaks, and
697 Lion Peak, according to the region map entitled “Great Basin Central” linked in the webpage
698 entitled “Citizen’s Proposal for Wilderness in Utah” at
699 http://www.protectwildutah.org/proposal/index.html as the webpage existed on February 17,
700 2011;
701 (xvi) in Uintah County:
S.B. 83 Enrolled Copy
- 26 -
702 (A) White River, Lower Bitter Creek, Sunday School Canyon, Dragon Canyon, Wolf
703 Point, Winter Ridge, Seep Canyon, Bitter Creek, Hideout Canyon, Sweetwater Canyon, and
704 Hell’s Hole, according to the region map entitled “Book Cliffs” linked in the webpage
entitled

705 “Citizen’s Proposal for Wilderness in Utah” at
706 http://www.protectwildutah.org/proposal/index.html as the webpage existed on February 17,
707 2011; and
708 (B) Lower Flaming Gorge, Crouse Canyon Stone Bridge Draw, Diamond Mountain,
709 Wild Mountain, Split Mountain Benches, Vivas Cake Hill, Split Mountain Benches South,
710 Beach Draw, Stuntz Draw, Moonshine Draw, Bourdette Draw, and Bull Canyon, according
to
711 the region map entitled “Dinosaur” linked in the webpage entitled “Citizen’s Proposal for
712 Wilderness in Utah” at http://www.protectwildutah.org/proposal/index.html as the webpage
713 existed on February 17, 2011;
714 (xvii) in Washington County: Couger Canyon, Docs Pass, Slaughter Creek, Butcher
715 Knife Canyon, Square Top, Scarecrow Creek, Beaver Dam Wash, Beaver Dam Mountains
716 North, Beaver Dam Mountains South, Joshua Tree, Beaver Dam Wilderness Expansion, Red
717 Mountain, Cottonwood Canyon, Taylor Canyon, LaVerkin Creek, Beartrap Canyon, Deep
718 Creek, Black Ridge, Red Butte, Kolob Creek, Goose Creek, Dry Creek, Zion National Park
719 Adjacents, Crater Hill, The Watchman, and Canaan Mountain, according to the region map
720 entitled “Zion/Mohave” linked at the webpage entitled “Citizen’s Proposal for Wilderness in
721 Utah” at http://www.protectwildutah.org/proposal/index.html as the webpage existed on
722 February 17, 2011, excluding the areas that Congress designated as wilderness and
723 conservation areas under the Omnibus Public Lands Management Act of 2009; and
724 (xviii) in Wayne County:
725 (A) Sweetwater Reef, Upper Horseshoe Canyon, and Labyrinth Canyon, according to
726 the region map entitled “Canyonlands Basin” linked in the webpage entitled “Citizen’s
Proposal
727 for Wilderness in Utah” at http://www.protectwildutah.org/proposal/index.html as the
webpage
728 existed on February 17, 2011;
729 (B) Flat Tops and Dirty Devil, according to the region map entitled “Glen Canyon,”
Enrolled Copy S.B. 83
- 27 -
730 which is available by clicking the link entitled “Dirty Devil” at the webpage entitled
“Citizen’s
731 Proposal for Wilderness in Utah” at http://www.protectwildutah.org/proposal/index.html as
the
732 webpage existed on February 17, 2011;
733 (C) Fremont Gorge, Pleasant Creek Bench, Notom Bench, Mount Ellen, and Bull
734 Mountain, according to the region map entitled “Henry Mountains” linked at the webpage
735 entitled “Citizen’s Proposal for Wilderness in Utah” at
736 http://www.protectwildutah.org/proposal/index.html as the webpage existed on February 17,
737 2011; and
738 (D) Capital Reef Adjacents, Muddy Creek, Wild Horse Mesa, North Blue Flats, Red
739 Desert, and Factory Butte, according to the region map entitled “San Rafael Swell” linked at
740 the webpage entitled “Citizen’s Proposal for Wilderness in Utah” at
741 http://www.protectwildutah.org/proposal/index.html as the webpage existed on February 17,
742 2011.
743 (b) “Subject lands” also includes all BLM and Forest Service lands in the state that are

744 not Wilderness Area or Wilderness Study Areas;
745 (c) "Subject lands" does not include the following lands that are the subject of
746 consideration for a possible federal lands bill and should be managed according to the 2008
747 Price BLM Field Office Resource Management Plan until a federal lands bill provides
748 otherwise:
749 (i) Turtle Canyon and Desolation Canyon according to the region map entitled "Book
750 Cliffs" linked in the webpage entitled "Citizen's Proposal for Wilderness in Utah" at
751 http://protectwildutah.org/proposal/index.html as the webpage existed on February 17, 2011;
752 (ii) Labyrinth Canyon, Duma Point, and Horseshoe Point, according to the region map
753 entitled "Canyonlands Basin" linked in the webpage entitled "Citizen's Proposal for Wilderness
754 in Utah" at http://protectwildutah.org/proposal/index.html as the webpage existed on February
755 17, 2011; and
756 (iii) Devil's Canyon, Sid's Mountain, Mexican Mountain, San Rafael Reef, Hondu
757 Country, Cedar Mountain, and Wild Horse, according to the region map entitled "San Rafael
S.B. 83 Enrolled Copy
- 28 -
758 Swell" linked at the webpage entitled "Citizen's Proposal for Wilderness in Utah" at
759 http://protectwildutah.org/proposal/index.html as the webpage existed on February 17, 2011[;].
760 (11) "Uintah Basin Energy Zone" means BLM, Forest Service, and SITLA lands
761 situated in the following townships in Daggett, Duchesne, and Uintah counties, as more fully
762 illustrated in the map prepared by the Uintah County GIS Department in February 2012 entitled
763 "Uintah Basin Utah Energy Zone":
764 (a) in Daggett County, Township 3N Range 17 E, Township 3N Range 18E, Township
765 3N Range 19E, Township 3N Range 20E, Township 3N Range 22E, Township 3N Range 23E,
766 Township 3N Range 24E, Township 3N Range 25E, Township 2N Range 17E, Township 2N
767 Range 18E, Township 2N Range 19E, Township 2N Range 20E, Township 2N Range 21E, and
768 Township 2S Range 25E;
769 (b) in Duchesne County, Township 3N Range 4W, Township 3N Range 3W, Township
770 3N Range 2W, Township 3N Range 1W, Township 2N Range 6W, Township 2N Range 5W,
771 Township 2N Range 4W, Township 2N Range 3W, Township 2N Range 1W, Township 1N
772 Range 9W, Township 1N Range 8W, Township 1N Range 7W, Township 1N Range 6W,
773 Township 1S Range 9W, Township 1S Range 8W, Township 4S Range 9W, Township 4S
774 Range 3W, Township 4S Range 2W, Township 4S Range 1W, Township 8S Range 15E,
775 Township 8S Range 16E, Township 8S Range 17E, Township 5S Range 9W, Township 5S
776 Range 3W, Township 9S Range 15E, Township 9S Range 16E, Township 9S Range 17E,
777 Township 6S Range 9W, Township 6S Range 8W, Township 6S Range 7W, Township 6S
778 Range 6W, Township 6S Range 5W, Township 6S Range 3W, Township 10S Range 15E,
779 Township 10S Range 16E, Township 10S Range 17E, Township 7S Range 9W, Township

7S
780 Range 8W, Township 7S Range 7W, Township 7S Range 6W, Township 7S Range 5W,
781 Township 7S Range 4W, Township 10S Range 11E, Township 10S Range 12E, Township
10S
782 Range 13E, Township 10S Range 14E, Township 10S Range 15E, Township 10S Range
16E,
783 Township 10S Range 17E, Township 11S Range 10E, Township 11S Range 11E, Township
784 11S Range 12E, Township 11S Range 13E, Township 11S Range 14E, Township 11S
Range
785 15E, Township 11S Range 16E, and Township 11S Range 17E; and
Enrolled Copy S.B. 83
- 29 -
786 (c) in Uintah County: Township 2S Range 18E, Township 2S Range 19E, Township
787 2S Range 20E, Township 2S Range 21E, Township 2S Range 22E, Township 2S Range
23E,
788 Township 2S Range 24E, Township 2N Range 1W, Township 2N Range 1E, Township 2N
789 Range 2E, Township 3S Range 18E, Township 3S Range 19E, Township 3S Range 20E,
790 Township 3S Range 21E, Township 3S Range 22E, Township 3S Range 23E, Township 3S
791 Range 24E, Township 4S Range 19E, Township 4S Range 20E, Township 4S Range 21E,
792 Township 4S Range 22E, Township 4S Range 23E, Township 4S Range 24E, Township 4S
793 Range 25E, Township 5S Range 19E, Township 5S Range 20E, Township 5S Range 21E,
794 Township 5S Range 22E, Township 5S Range 23E, Township 5S Range 24E, Township 5S
795 Range 25E, Township 6S Range 19E, Township 6S Range 20E, Township 6S Range 21E,
796 Township 6S Range 22E, Township 6S Range 23E, Township 6S Range 24E, Township 6S
797 Range 25E, Township 7S Range 19E, Township 7S Range 20E, Township 7S Range 21E,
798 Township 7S Range 22E, Township 7S Range 23E, Township 7S Range 24E, Township 7S
799 Range 25E, Township 8S Range 17E, Township 8S Range 18E, Township 8S Range 19E,
800 Township 8S Range 20E, Township 8S Range 21E, Township 8S Range 22E, Township 8S
801 Range 23E, Township 8S Range 24E, Township 8S Range 25E, Township 9S Range 17E,
802 Township 9S Range 18E, Township 9S Range 19E, Township 9S Range 20E, Township 9S
803 Range 21E, Township 9S Range 22E, Township 9S Range 23E, Township 9S Range 24E,
804 Township 9S Range 25E, Township 10S Range 17E, Township 10S Range 18E, Township
10S
805 Range 19E, Township 10S Range 20E, Township 10S Range 21E, Township 10S Range
22E,
806 Township 10S Range 23E, Township 10S Range 24E, Township 10S Range 25E, Township
807 11S Range 17E, Township 11S Range 18E, Township 11S Range 19E, Township 11S
Range
808 20E, Township 11S Range 21E, Township 11S Range 22E, Township 11S Range 23E,
809 Township 11S Range 24E, Township 11S Range 25E, Township 12S Range 20E, Township
810 12S Range 21E, Township 12S Range 22E, Township 12S Range 23E, Township 12S
Range
811 24E, Township 12S Range 25E, Township 13S Range 20E, Township 13S Range 21E,
812 Township 13S Range 22E, Township 13S Range 23E, Township 13S Range 24E, Township
813 13S Range 25E, Township 13S Range 26 E, Township 14S Range 21E, Township 14S
Range

S.B. 83 Enrolled Copy
- 30 -
814 22E, Township 14S Range 23E, Township 14S Range 24E, Township 14S Range 25E, and
815 Township 14S Range 26E.
816 [(11)] (12) “Wilderness area” means those BLM and Forest Service lands added to the
817 National Wilderness Preservation System by an act of Congress.
818 [(12)] (13) “WSA” and “Wilderness Study Area” mean the BLM lands in Utah that
819 were identified as having the necessary wilderness character and were classified as wilderness
820 study areas during the BLM wilderness review conducted between 1976 and 1993 by authority
821 of Section 603 of FLPMA and labeled as Wilderness Study Areas within the final report of the
822 President of the United States to the United States Congress in 1993.
823 Section 3. Section 63J-8-105 is amended to read:
824 63J-8-105. Maps available for public review.
825 A printed copy of the maps referenced in [Subsection] Subsections 63J-8-102(10) and
826 (11) shall be available for inspection by the public at the offices of the Utah Association of
827 Counties.
828 Section 4. Section 63J-8-105.5 is enacted to read:
829 63J-8-105.5. Uintah Basin Energy Zone established -- Findings -- Management
830 and land use priorities.
831 (1) There is established the Uintah Basin Energy Zone in Daggett, Uintah, and
832 Duchesne Counties for the purpose of maximizing efficient and responsible development of
833 energy and mineral resources.
834 (2) The land area and boundaries of the Uintah Basin Energy Zone are described in
835 Subsection 63J-8-102(11) and illustrated on the map described in Section 63J-8-105.
836 (3) The state finds that:
837 (a) the lands comprising the Uintah Basin Energy Zone contain abundant, world-class
838 deposits of energy and mineral resources, including oil, natural gas, oil shale, oil sands,
839 gilsonite, coal, phosphate, gold, uranium, and copper, as well as areas with high wind and solar
840 energy potential; and
841 (b) the highest management priority for all lands within the Uintah Basin Energy Zone
Enrolled Copy S.B. 83
- 31 -
842 is responsible management and development of existing energy and mineral resources in order
843 to provide long-term domestic energy and supplies for Utah and the United States.
844 (4) The state supports:
845 (a) efficient and responsible full development of all existing energy and mineral
846 resources located within the Uintah Basin Energy Zone, including oil, oil shale, natural gas, oil
847 sands, gilsonite, phosphate, gold, uranium, copper, solar, and wind resources; and
848 (b) a cooperative management approach among federal agencies, state, and local
849 governments to achieve broadly supported management plans for the full development of all

850 energy and mineral resources within the Uintah Basin Energy Zone.
851 (5) The state calls upon the federal agencies who administer lands within the Uintah
852 Basin Energy Zone to:
853 (a) fully cooperate and coordinate with the state and with Daggett, Uintah, and
854 Duchesne Counties to develop, amend, and implement land and resource management plans
855 and to implement management decisions that are consistent with the purposes, goals, and
856 policies described in this section to the maximum extent allowed under federal law;
857 (b) expedite the processing, granting, and streamlining of mineral and energy leases
858 and applications to drill, extract, and otherwise develop all existing energy and mineral
859 resources located within the Uintah Basin Energy Zone, including oil, natural gas, oil shale, oil
860 sands, gilsonite, phosphate, gold, uranium, copper, solar, and wind resources;
861 (c) allow continued maintenance and increased development of roads, power lines,
862 pipeline infrastructure, and other utilities necessary to achieve the goals, purposes, and policies
863 described in this section;
864 (d) refrain from any planning decisions and management actions that will undermine,
865 restrict, or diminish the goals, purposes, and policies for the Uintah Basin Energy Zone as
866 stated in this section; and
867 (e) refrain from implementing a policy that is contrary to the goals and purposes
868 described within this section.
869 (6) The state calls upon Congress to establish an intergovernmental standing
S.B. 83 Enrolled Copy
- 32 -
870 commission among federal, state, and local governments to guide and control planning
871 decisions and management actions in the Uintah Basin Energy Zone in order to achieve and
872 maintain the goals, purposes, and policies described in this section.
873 (7) Notwithstanding the provisions of this section, the state's grazing and livestock
874 policies and plans on land within the Uintah Basin Energy Zone shall continue to be governed
875 by Sections 63J-4-401 and 63J-8-104.
876 Section 5. Effective date.
877 If approved by two-thirds of all the members elected to each house, this bill takes effect
878 upon approval by the governor, or the day following the constitutional time limit of Utah
879 Constitution Article VII, Section 8, without the governor's signature, or in the case of a veto,
880 the date of veto override

Draft Programmatic Environmental Impact Statement and Possible Land Use Plan Amendments for Allocation of Oil Shale and Tar Sands Resources on Lands Administered by the Bureau of Land Management in Colorado, Utah, and Wyoming
Volume 1: Chapters 1, 2, & 3
Comment Form
May 4, 2012

No te F1 ~ ure, T a bl e, an d map ref erence 1n comment co umn.
Page Line Commenter Comment Response

<([#32 [*9.1*] Page: ES-1 (p. 39) Line 34 Commenter: Jon Stearmer, Uintah County
Comment: The purpose is dear- friendly lawsuit settlement agreement
with an environmental coalition. A need has not been shown
as no new information is being analyzed. A careful analysis
of the previous PEIS and this current draft shows very little
change. The Preferred Alternative has little to no analysis at
all. **#32])>**
<([#33 [*6.3.5*] Page: ES-5 (p. 43) Line 15 Commenter: Jon Stearmer, Uintah County
Comment: This is not an experimental stage. It is beyond dispute that
numerous companies have profitably extracted oil from shale
for many years. **#33])>**
<([#34 [*2.5*] Page: ES-5 (p. 43) Line 28 Commenter: Jon Stearmer, Uintah County
Comment: If this is indeed a "fresh look", as stated in the purpose and
need, then the "fresh look" needs to consider an alternative
providing more liberal acreage allocation. By designating the
publicly vetted 2008 RMP as a ceiling the results of this PEIS
are unjustifiably skewed.
#34])>
<([#35 [*2.1*] Page: ES-5 (p. 43) Line 33 Commenter: Jon Stearmer,Uintah County
Comment: This is the only viable alternative based on comments in
Uintah County's Resolution, attached hereto and
incorporated by reference. All neighboring counties in Utah,
Colorado and Wyoming have voiced these comments. To
the extent Uintah County could gather copies of their passed
resolutions they are attached hereto and incorporated by
reference.
#35])>
<([#36 [*2.2*] Page: ES-6 (p.44) Line 16 Commenter: Jon Stearmer, Uintah County
Comment: The use of the word "may" is synonymous with speculation
and conjectures. No new scientific analysis is provided and
this merely a statement filled with political sway. **#36])>**
Draft Programmatic Environmental Impact Statement and Possible Land Use Plan Amendments
for Allocation of Oil Shale and Tar Sands Resources on Lands Administered by the Bureau of
Land Management in Colorado, Utah, and Wyoming
Volume 1: Chapters 1, 2, & 3
Comment Form
M ay 4 2012 '
<([#37 [*3.1.7*] Page: 1-2 (p.50) Line: Second Paragraph Commenter: Jon Stearmer, Uintah
County
Comment: This PEIS was not the first step in which lands within Uintah
County were to be allocated as open or closed to oil shale/oil
sands development. This process was completed after
multiple years of analysis culminating in the 2008 RMP. This
PEIS is merely a charade of a public process to conform with
a settlement agreement.

#37])>
<([#38 [*9.1*] Page: 1-4 (p.52) Line 9 Commenter: Jon Stearmer, Uintah County
Comment: Politically motivated through a friendly lawsuit settlement. **#38])>**

<([#39 [*2.5*] Page: 1-4 (p.52) Line: 2 Commenter: Jon Stearmer, Uintah County
Comment: An alternative should be considered providing more available
land. **#39])>**
<([#40 [*9.8*] Page: 1-5 (p. 53) Line 18 Commenter: Jon Stearmer, Uintah County
Comment: All reasons should be given so the public can weigh the
strength of the decision to take a "hard look." A hollow
statement saying there are other reasons does not allow
cooperators and the public to carefully analyze the
motivation and the science behind this PEIS.
#40])>
<([#41 [*6.3.5*] Page: 1-6 (p.54) Line 18 Commenter: Jon Stearmer, Uintah County
Comment: Experimental state is a political statement. Estonia has been
economically utilizing this resource for almost 100 years.
Brazilian Petrobras has proven their shale oil technology
since 1981. **#41])>**
<([#42 [*6.1.1*] Page: 1-10 (p. 58) Line 12 Commenter: Jon Stearmer, Uintah County
Comment: The same thickness and gallonage should be used
throughout the Green River Formation. Uintah County has,
through its General Plan, adopted the same criteria as
Wyoming. The BLM must be consistent to the maximum
extent possible with Uintah County's Oil Shale Plan, attached
hereto an incorporated by reference.
#42])>
<([#43 [*9.1*] Page: 1-13 (p. 61) Line 39 Commenter: Jon Stearmer, Uintah County
Comment: Most of these comments are not outside of the scope for the
stated purpose and need. All factors must be weighed,
including by not limited to the full cost of outsourcing our
energy production to other countries. This merely allows the
Administration to thump its chest concerning its "green ..
environmental policies. **#43])>**
<([#44 [*6*] Page: 1-14 (p. 62) Line 24 Commenter: Jon Stearmer, Uintah County
Comment: And this is supported by what data? Refer back to comment
on Enefit and Petrobras. **#44])>**
<([#45 [*1.3*] Page: 1-15 (p.63) Line 41 Commenter: Jon Stearmer, Uintah County
Comment: These roles have not been followed based on comment
made in Uintah County's comment letter. BLM has failed to
comply with its own cooperator MOU.
#45])>
<([#46 [*9.5*] Page: 1-21 Line 39 (p. 69) Commenter: Jon Stearmer, Uintah County
Comment: It is not "where possible", but to the .. maximum extent"
consistent with federal law and the purposes of FLPMA. BLM
has been provided with a copy of Uintah County's Energy

Zone and Oil Shale plans. BLM must be consistent with said
plans to the maximum extent possible. **#46])>**

OSTS2012D50326
Organization: THOMAS MESSENGER
Received: 5/4/2012 4:44:21 PM
Commenter1: THOMAS MESSENGER - MOAB, Utah 845322843 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/14/2012 12:00:00 AM
Attachments: OSTS2012D50326.htm (OSTS2012D50326-58967.htm Size = 1 KB)
Submission Text
<([#1 [*2.3.1*] The appropriate alternative is 3-RandD Focus. There is no reason to open further areas before feasibility is demonstrated. **#1])>**

OSTS2012D50327
Organization: Dylan Gregersen
Received: 5/4/2012 4:54:49 PM
Commenter1: Dylan Gregersen - SLC, Utah 84106 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/14/2012 12:00:00 AM
Attachments: OSTS2012D50327.htm (OSTS2012D50327-58969.htm Size = 1 KB)
Submission Text
<([#1 [*12*] The development of Oil Shale and Tar Sands is no appropriate for this state or the current world situation. Utah is know for beautiful landscapes. I've been to the Desolation Canyon Put-in and am disappointed by the miles spotted development already being done. Furthermore, Oil Shale and Tar Sands are not effective means of energy. For these we sacrifice large amounts of water for little gain. While 75% of Earth is covered with water only the smallest fraction is fresh water, which will be being used for this development. Please say no to oil shale and tars sands. **#1])>** Thank you

OSTS2012D50328
Organization: Vermillion Ranch Limited Partnership
Received: 5/4/2012 4:58:25 PM
Commenter1: - Rock Springs, Wyoming 82901 (United States)
Organization1: Vermillion Ranch Limited Partnership

Commenter Type: Private Company
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** aziech 5/15/2012 12:00:00 AM
Attachments: OSTS2012D50328.htm (OSTS2012D50328-59046.htm Size = 1 KB) VRLP_OS-TS_Comments_PDEIS_FINAL_PDF_OSTS2012D50328.pdf (OSTS2012D50328-59045.pdf Size = 136 KB)
Submission Text
Dear Sir or Madam:
Vermillion Ranch Limited Partnership (VRLP or Vermillion) submits its comments on the Oil Shale and Tar Sands Programmatic Draft Environmental Impact Statement (OS/TS PDEIS). Vermillion is a family-owned ranching partnership that operates in the three corners area of Wyoming, Utah and Colorado. Vermillion participated in the Vernal Resource Management Plan (RMP) as well as the Little Snake River RMP process and has been an active proponent of multiple use on federal land.
<([#1 [*2.1.1*] I. LOCAL GOVERNMENT ALTERNATIVE
The OS/TS PDEIS seeks comments on expanded oil shale leasing program in Utah and Wyoming. Vermillion supports either Alternative 1 (no action) or the adoption of an alternative that retains the land use allocations made in Alternative 1 with sufficient flexibility to allow commercial leasing where determined to be feasible.
Vermillion objects to the effort to revise these land use plans through the back door without the data or information that was used or is being used to write the land use plans. This is especially confusing for the public lands in the Rock Springs Field Office. Selection of Alternative 1 for Utah and Wyoming would avoid this conflict and the insufficient data found in the OS/TS PDEIS.
Vermillion actively participated in the Vernal RMP adopted in 2008 and the Little Snake River RMP adopted in 2009. Those decisions affect much, if not most, of the high potential oil shale and tar sands in Utah, and oil shale in Colorado. **#1])> <([#2** [*3.1.3*] Vermillion objects
strongly to the exclusion of all alleged lands with wilderness character (LWCs). BLM carefully analyzed the citizen proposed wilderness areas in the Vernal and LSR planning process. Using the OS/TS PDEIS to eviscerate those decisions betrays the public who participated. Second-guessing those decisions without fully airing the basis for such changes is not consistent with the planning procedures. **#2])>**
<([#3 [*8.2*] In addition, implementation of the LWC classification will greatly impair other multiple
uses, including livestock grazing which depends on access to the allotments, often along public, but unimproved, roads. It will interfere with future and existing range projects to develop water, build fences and otherwise change the landscape to improve it for livestock and wildlife because a more restrictive visual resource management is applied.
#3])> <([#4 [*9.5*] Much of the affected land in Wyoming is located within the boundaries of the Rock

Springs Field Office which is currently revising its RMP. As currently postured, the OS/TS PDEIS will conflict with many pending RMP decisions, such as alleged LWCs, Areas of Critical Environmental Concern (ACECs) and other special designations. It would make more sense to allow the Rock Springs office to handle these issues as an integral part of the ongoing plan revision process.

#4])> <([#5 [*3.1.7*] Vermillion notes that the map in Chapter 2 identifies Adobe Town as a LWC. This area,
excluding the WSA of about 82,000 acres, does not meet the definition of wilderness. It is roaded and is the site of many development activities including oil and gas development, rights-of-way for wind energy and pipelines and water reservoirs. As shown on the map, it appears that Adobe Town LWC also exceeds the area classified by Wyoming Commission on Environmental Quality as rare and uncommon. Figure 2.3.3-3 (showing LWC going to Colorado-Wyoming border).

#5])> <([#6 [*9.2.4*] The rest of the high potential area in Wyoming is covered by the Kemmerer RMP which
was final in 2008. The OS/TS PDEIS does not provide any basis to revise the RMP decisions as they apply to oil shale development. The Kemmerer RMP adopted the Wyoming sage grouse strategy to protect core area habitat. The OS/TS PDEIS does not identify any deficiencies in the Wyoming sage grouse strategy that would support a change in position from the 2008 PFEIS.

#6])> <([#7 [*9.7*] Under the 2008 rules, 43 C.F.R. Parts 3900, 3920, 3930, Research Demonstration and
Development (RD&D) leases were issued before commercial lease rules were adopted. 43 U.S.C. §15927(e). The OS/TS PDEIS would expand RD&D without any commercial leasing.

#7])> <([#8 [*2.1*] The BLM signed a settlement agreement proposes amendments to the Oil Shale Final
Rule. The proposed amendments require BLM to expressly state that it has discretion to deny an application converting an RD&D lease to a commercial lease based on environmental and other resource considerations and that BLM has discretion to reject an oil shale commercial lessee's proposed plan of development based on environmental or other resource considerations. This would add additional requirements under 43 C.F.R. §3926.10.

The proposed amendments require BLM to only consider issuing a commercial oil shale lease upon application for a conversion from an RD&D lease to a commercial lease, or after BLM issues a call for expression of leasing interest. The proposed amendments also require BLM to not issue any commercial lease unless it is shown that operations can be done without unacceptable environmental risk. Finally, the proposed amendments require plans of development for oil shale commercial leases to include watershed and groundwater protection plans, and environmental protection and mitigation plans, including defined standards for each of these requirements. BLM acknowledged that approval of any conversion to a commercial lease must be preceded by a NEPA analysis.

These changes, when coupled with the discontinuous parcels made available for RD&D leasing in the OS/TS PDEIS alternatives, other than Alternative 1, will not provide the necessary assurance to industry that it will realize a return on investment. Any land

configuration needs to be sufficiently contiguous that a company can recover the multimillion dollar investment that even an RD&D project requires. Alternatives 2 - 4 do not achieve that objective. **#8])>**

<([#9 [*9.2.2*] II. OS/TS PDEIS DOES NOT CONFORM TO SECTION 369 OF THE 2005 ENERGY POLICY
ACT

In 2005, Congress directed BLM to establish a commercial program for development of oil shale and tar sands. Section 369 of the Energy Policy Act (2005 EP Act) adopted on August 8, 2005 relates to "Oil Shale, Tar Sands, and Other Strategic Unconventional Fuels." 42 U.S.C. §15927.That title declared it to be the United States' policy that "oil shale, tar sands, and other unconventional fuels are strategically important domestic resources that should be developed to reduce the growing dependence of the United States on politically and economically unstable sources of foreign oil imports." 42 U.S.C. § 15927(b)(1). Congress also directed that it be United States policy that commercial development of oil shale "be conducted in an environmentally sound manner, using practices that minimize impacts." 42 U.S.C. §15927(b)(2).

The 2005 EP Act required that the Interior Secretary promptly follow the completion of the programmatic EIS with regulations establishing a commercial oil shale and tar sands leasing program. 42 U.S.C. §15927(d)(2) ("Not later than 6 months after the completion of the [PEIS] under this subsection, the Secretary [of the Interior] shall publish a final regulation establishing such [commercial oil shale and tar sands leasing] program.").

Section 369 directs the Department of the Interior (DOI) to issue commercial oil shale leases 180 days after the final rules are promulgated. Id. Lease sales are to include consultation with states, local governments, tribal governments and others to determine the level of interest. Id. DOI promulgated the final rules in November 2008. 73 Fed. Reg. 69414 (2008). Rather than follow the law, DOI suspended all oil shale leasing in 2009 and has ignored its Task Force reporting obligations. 42 U.S.C. §15927(h).

While DOI is required to file reports with Congress each year, none has been prepared since 2008. http://www.unconventionalfuels.org/publications.html. The only reports now prepared are on "Secure Fuels."

The extent of Congress' commitment to unconventional fuels including oil shale and tar sands is also found in the establishment of a Task Force. 42 U.S.C. §15927(h). Department of Energy is to create commercial strategic fuel development program and to coordinate with state and local governments. DOI was to prepare a new assessment of priority areas in the Green River Region, which includes Wyoming, Utah and Colorado. Id. at §15927(m)(B). The heavy oil assessment was also to be updated. Id. §15927(p).

BLM proceeded to implement the direction by preparing a programmatic EIS that addressed the environmental impacts of oil shale an tar sands development and identified the public lands with the best potential. Based on the two considerations, BLM identified about two million acres of public land in Wyoming, Utah, and Colorado as suitable and available for oil shale and tar sands development. ROD, 2008 OS/TS PFEIS at 1-4. BLM also promulgated rules to implement the commercial leasing program. 43 C.F.R. Parts 3900, 3920, 3930, 3936.

The OS/TS PDEIS is intended to analyze the impacts of a commercial leasing program,

not the RD&D program authorized in subsection (c). 42 U.S.C. §15927(c). The 2008 PFEIS accomplished this mandate but the OS/TS PDEIS does not. Instead its identification of land omits high potential land and limits development to small and scattered areas that it makes a commercial program less feasible and is calculated to discourage commercial development. The OS/TS PDEIS admits this when it claims the changes are needed to conduct additional research. OS/TS PDEIS at 1-5. The law authorized RD&D separately and did not give the Secretary the discretion to substitute a commercial leasing program with an extended RD&D program that limits such research and development to small and discontinuous tracts of land. Based on the terms of the settlement with CEC, RD&D leases would not have an assurance of conversion to a commercial lease. These and other conditions make development so uncertain that it cannot be described as a commercial program.

#9])> <([#10 [*3.1.3*] [*9.5*] III. OS/TS PDEIS FAILS TO CONFORM TO RMP PROCEDURES

A. OS/TS PDEIS Supersedes RMP Decisions Without Adequate Rationale

The preferred alternative excludes more than 75% of the lands previously determined to be available for oil shale or tar sands leasing. This occurs even though most of the same land area is still classified as suitable and available for oil and gas leasing.

The OS/TS PDEIS purports to override the local land use planning process by designating LWCs and implementation of wilderness management, ACECs and other protective sites, including the ever-growing Adobe Town area. Programmatic decisions cannot override the RMP process and as such, BLM is running roughshod over the rules and procedures established for land use decisions by implementing the resource allocations well ahead of information and analysis.

The preferred alternative will remove from development lands alleged to have wilderness character, notwithstanding a congressional prohibition on changing management to protect these lands. [Continuing Appropriations Act 2011, Pub. L. 112-10 (2011CR); Continuing Appropriations Act 2012, Pub. L. 112-36 (112th Congress) H.R. 2608, 10/05/11] The OS/TS PDEIS also proposes to exclude ACECs and other areas nominated by special interest groups, including groups that sued BLM in 2009, from oil shale or tar sands leasing. In many cases, the preferred alternative vetoes recent land use planning decisions, such as those for the Kemmerer RMP. In the case of the Rock Springs RMP, the OS/TS PDEIS will essentially make decisions that bind the plan revision process, without the requisite analysis or data.

The Utah public lands excluded were carefully reviewed in a separate alternative for the Vernal RMP. Virtually all of these areas have public roads and many, such as the parcels around the Dinosaur National Monument, do not meet the 5,000 acre minimum requirement in order to be considered for wilderness designation. Vermillion livestock graze in this region and Vermillion relies on motorized access to manage its livestock and to maintain range improvements. A LWC classification will materially impair operations.

The Rock Springs Field Office initiated its plan revision in Spring of 2011. Much of the Wyoming high potential area is located in the Rock Springs Field Office but the OS/TS PDEIS appears to use proposed LWCs and ACECs that have not yet been fully addressed within the cooperating agency process, let alone a DEIS. This dilemma illustrates the flaws in BLM's efforts to impose top down decisions on LWCs and

ACECs as well as the Adobe Town area, when those issues are still being addressed among the cooperating agencies. If BLM proceeds on this time table, it will eviscerate the land use planning process. This situation also suggests that BLM has chosen to proceed without regard to its obligation to coordinate with local governments. For instance, Sweetwater County went on record a year ago as only supporting special management for the Adobe Town area within its wilderness study boundaries. The DEIS would adopt protection for a much larger area.

Vermillion has no independent knowledge of proposed ACECs or LWCs. Due to the lack of disclosure and discussion in the OS/TS PDEIS, Vermillion cannot comment meaningfully.

#10])> <([#11 [*9.2.4*] B. Sage Grouse Management

The State of Wyoming has been aggressively developing a sage grouse strategy for management since 2004. By 2008, the sage grouse core areas had been defined and management guidelines developed. Wyoming Gov. E.O. 2008-2, 2010-4; 2011-5. Wyoming BLM largely adopted or followed these guidelines in the RMP revisions for the Kemmerer, Pinedale and Rawlins Field Office. Thus, the candidate status of the sage grouse is not a basis to remove these lands from oil shale and tar sands development given the management restrictions already in place.

Wyoming BLM initiated a statewide RMP amendment for the sage grouse to address the 2008 executive order in fall of 2009. [BLM IM 2010-012 Sage Grouse Habitat Management, December 29, 2009; IM 2010-013 Oil and Gas Leasing Screen for Greater Sage Grouse, December 29, 2009]

#11])> <([#12 [*9.2.1*] [*3.1.3*] IV. IMPLEMENTATION OF LWC CLASSIFICATIONS IN RMPS IS UNLAWFUL

A significant percent of the excluded acreage in the OS/TS PDEIS is justified on the basis that the LWCs must be protected. OS/TS PDEIS at 1-5, 2-12, 2-21, 2-52.

A. OS/TS PDEIS violates Congressional Funding Freeze on LWC Identification and Management

On December 22, 2010, Secretary Salazar announced a new initiative to identify and manage public lands with wilderness character. Secretarial Order No. 3310 Protecting Wilderness Characteristics on Lands Managed by the Bureau of Land Management (Dec. 22, 2010). (The Wild Lands Policy and IM 2011-154 contradict the commitments made to the State of Utah, the U.S. Congress and the public when the Secretary stated that he would honor the Settlement Agreement between Utah and DOI (Answering Yes to the question from Senator Bennett "Do you agree that currently the Department has no authority to establish new WSAs (Post-603 WSAs) under any provision of law, such as the Wilderness Act of [sic] Section 202 of FLPMA?") The Secretary also stated BLM had no authority to impose nonimpairment management on non-WSA lands.)

This action was followed with the adoption of manuals to guide BLM employees in the implementation of the extra-wilderness designation process. The resulting controversy, not to mention Director Abbey's admission that no specific section of Federal Land Policy Management Act (FLPMA) authorized the identification of lands with wilderness character outside of Section 603, led Congress to defund the entire initiative. [Continuing Appropriations Act 2011, Pub. L. 112- 10 (2011CR); Continuing Appropriations Act 2012, Pub. L. 112-36 (112th Congress) H.R. 2608, 10/05/11]

BLM has long contended that a mere inventory of wilderness character falls within its

authority, citing 43 U.S.C. §1711(a). But FLPMA is equally clear that BLM cannot change land management based on an inventory unless and until the land use plan is amended. Id. The OS/TS PDEIS uses an undisclosed wilderness inventory and then proposes to change the management of these areas to protect the alleged wilderness character without disclosure of the basis of BLM's LWC determination. This is exactly what S.O. 3310 directed BLM to do. When Congress froze all funding for it, two months after the Colorado Environmental Coalition v. Salazar (09-0085, 09-0091) settlement, BLM's hands were tied. The apparent decision to proceed regardless of the funding freeze is in contempt of Congress and unlawful, 31 U.S.C. §1341. (The Antideficiency Act provides that "an officer or employee of the U.S.
Government may not make or authorize an expenditure or obligation exceeding an amount available in an appropriation or fund for the expenditure or obligation; involve the government in a contract or obligation for the payment of money before an appropriation is made unless authorized by law . . .." 31 U.S.C. §1341. The act imposes criminal penalties for violation, Id. at §1350, and authorizes adverse personnel action for employees that violate the law. Id. at §1349.)
Calling these areas LWCs does not change the result. These areas are allegedly wilderness suitable and BLM proposes to manage them in the same manner as it would have had Congress not shut down all funding related to S.O. 3310. Changing the name from "Wildlands" to "LWCs" does not make the action any more lawful.
The OS/TS PDEIS contradicts Congress' clear direction that BLM cease and desist from implementing the provisions of S.O. 3310. That BLM put the implementing manuals in abeyance but issued Instruction Memorandum (IM) 2011-154 that implements the Order does not excuse BLM from complying with the defunding. IM 2011-154 suffers from procedural deficiencies as well. It was issued without coordinating with local governments, public comment or in accordance with rulemaking procedures. Thus, it independently violates Federal Land Policy and Management Act (FLPMA) mandate that its provisions be implemented through rulemaking, 43 U.S.C. §1740.
An instruction memorandum issued by BLM in order to evade the funding and implementation freeze on S.O. 3310 enjoys little or no presumption of legality. United States v. Mead Corp., 533 U.S. 318 (2001) (holding that the court owes little deference to agency guidelines). By implementing the IM, BLM runs a serious risk that the OS/TS PDEIS will be set aside.
#12])> <([#13 [*9.2.1*] [*3.1.3*] B. NO LEGAL AUTHORITY TO IMPLEMENT SECRETARIAL ORDER 3310 OR SIMILAR
DIRECTION
Unlike the definition of multiple use for National Forests, 16 U.S.C. §529, FLPMA does not include wilderness as one of the statutory multiple uses. 43 U.S.C. §1702(c). Wilderness has its own definition, which is limited to Section 603. ("(i) The term 'wilderness' as used in section 1782 of this title shall have the same meaning as it does in section 1131(c) of Title 16." Id. §1702(i). The term 'wilderness' is found only in the definition section, 43 U.S.C. §1702(i) and the wilderness review provisions of Section 603, 43 U.S.C. §1782; 43 C.F.R. §1601.0-5(i). Section 603 is the only provision in federal law that authorizes the identification, study and recommendation of public lands for wilderness designation by Congress. Thus, BLM is not at liberty to add wilderness

to other provisions in FLPMA when Congress so clearly chose not to.
Only Section 603 of FLPMA authorizes BLM to manage lands so as to not impair their wilderness character. Tri-County Cattleman's Association Idaho Cattlemen's Association, 60 IBLA 305, 314 (1981). There is no other statutory authority for BLM to study and manage public lands as if they were wilderness. Public lands are to be managed so as to not unduly and unnecessarily degrade the resources. (43 U.S.C. §1732(b) [nondegradation standard], except for WSAs which are managed so as to not impair the wilderness character.) Id at 1782(c).
The Interior Secretary's authority to identify public lands as wilderness study areas under Section 603 has expired. State of Utah v. Babbitt, 137 F.3d 1193, 1206, n.17 (10th Cir. 1998) (Secretary Babbitt wrote "I also agree with you that FLPMA's section 603 no longer provides authority to inventory BLM land in Utah for wilderness values.").
BLM has attempted to claim discretion to manage lands to preserve their wilderness character but the planning rules do not so provide. The rules were revised to remove wilderness study from the general planning process and have never been amended to make wilderness study part of the land use planning process. (By comparison, the Forest Service revised its planning rules to integrate wilderness study and recommendations into each plan revision. 36 C.F.R. §219.27 (1982).)
Section 202 of FLPMA provides for the development and revision of land use plans. 43 U.S.C. §1712. Land use planning must have coordination with state and local governments, public involvement and be consistent with FLPMA. 43 U.S.C. §1712(a).
The criteria for developing and revising land use plans, includes (1) using and observing the principles of multiple use and sustained yield set forth in FLPMA and other applicable laws, 43 U.S.C. §1712(c)(1); (2) interdisciplinary approach, §1712(c)(2); (3) priority to designate ACECs, §1712(c)(3), and (4) "to the extent consistent with the laws governing the administration of the public lands, coordinate the land use inventory, planning, and management activities of or for such lands with the land use planning and management programs of other Federal departments and agencies and of the States and local governments within which the lands are located;"§1712(c)(9). FLPMA further states: "Land use plans of the Secretary under this section shall be consistent with State and local plans to the maximum extent he finds consistent with Federal law and the purposes of this Act." Id.
Nothing in Section 202, which governs land use planning, authorizes wilderness study or wilderness-type management. The history of the planning rules shows that the word "wilderness" was deleted from the draft of the planning rules on purpose. When BLM wrote the rules governing land use plans, it originally defined a resource management plan as including "the initial determination of whether a wilderness study area shall be recommended to the President for recommendation to the Congress as suitable or unsuitable as an addition to the National Wilderness Preservation System." 43 Fed. Reg. 58764, 58768-69 (1978) draft 43 C.F.R. §1601.0-5(p)(2). The definition of a resource management plan was later revised to delete reference to wilderness study area recommendations. 44 Fed. Reg. 46386 (1979). Thus, BLM has no regulations in the land use planning chapter authorizing establishment of wilderness type areas or authorizing nonimpairment management for such lands other than designated WSAs designation pursuant to Section 603, which expired.
BLM adopted the Wild Lands Policy through three Manuals, based on its claimed

discretion in FLPMA, Sections 201, 202 and 302 of FLPMA. Those provisions do not support BLM's claimed authority to designate Wild Lands or LWCs or to manage them as if they were designated WSAs for nonimpairment of the wilderness character.
IM 2011-154 was adopted without proper comment procedures and without coordination with local governments. Under Section 202(a), BLM has no choice but to coordinate with local governments and to resolve conflicts in land use plans. 43 U.S.C. §1712(a). So far BLM has failed to do so on this very important issue. No Wyoming local government within the affected area supports proposed or identified LWCs. Several of the applicable local government plans oppose new wilderness character areas. BLM has clearly violated Section 202 by not coordinating both its inventory and LWC determination with the local governments. **#13])>**
<([#14 [*3.1.3*] The OS/TS PDEIS also fails to identify which, if any, inventory it has used to identify the
LWCs. The OS/TS PDEIS fails to disclose these areas. The single map is not labeled so as to facilitate identification. Thus, it is impossible to divine the resource values that prompted the classification being used in the OS/TS PDEIS. If VRLP had access to this information it could provide site specific documentation of the errors in the premise that these are LWCs.
These lands are not "wilderness" as that term is used in the Wilderness Act. These areas are heavily roaded, and include the Wyoming Checkerboard where Anadarko owns the alternating sections. There are powerlines, rights-of-way for pipelines, wind farms as well as coal mining and oil and gas development.
VRLP assumes that for Utah the OS/TS PDEIS uses the Utah HR 1925 lands without regard to the Vernal RMP decisions that evaluated those lands in 2008.
Figures 2.3.3-2 and 2.3.3-3 depict LWCs but do not provide any additional information. Chapter 6 of the OS/TS PDEIS lists the areas and acreage without providing descriptions. It also omits the full definition of wilderness. The footnote to Table 6.2.3 states: "The key characteristics of wilderness that may be considered in land use planning include an area's appearance of naturalness and the existence of outstanding opportunities for solitude or primitive and unconfined types of recreation." This statement is materially incorrect, because the definition of wilderness requires that an area be roadless and that it be greater than 5,000 acres. 16 U.S.C. §1131(a). The OS/TS PDEIS conveniently drops the first two criteria.
Table 6.1.1-2 purports to list LWCs in Wyoming, when that classification has never been adopted or even made public. The Adobe Town WSA consists of 85,710 acres. None of the listed areas correspond to WSAs designated in 1980. Since there is no information provided, VRLP cannot provide meaningful comments. **#14])>**
<([#15 [*9.1*] V. OS/TS PDEIS FAILS TO CONFORM TO NEPA RULES
A. PURPOSE AND NEED
"Agency action should be overturned only when the agency has 'relied on factors which Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise.'" Motor Vehicle Mfrs. Ass'n v. State Farm Mutual Auto. Ins. Co., 463 U.S. 29, 43 (1983). The OS/TS PDEIS meets the definition of arbitrary and capricious as the explanation for the land use allocations do not have

sufficient explanation and documentation to support them, and the explanation for revision runs counter to the facts.

1. Real Purpose and Need Unaddressed

The Notice of Intent and the statement of Purpose and Need in the PDEIS omit the real basis for the new programmatic EIS. BLM settled two lawsuits, which challenged both the 2008 PFEIS Record of Decision Colorado Environmental Coalition, (CEC) v. Salazar, No. 09-0085; and the regulations promulgated to implement an oil shale and tar sands leasing program, Colorado Environmental Coalition (CEC) v. Salazar, 09-0091. The conduct of the two cases and, particularly, the CEC's failure to prosecute the cases strongly suggests that this was a friendly litigation with an equally friendly settlement. Plaintiffs filed the two cases in February of 2009, but the government sought numerous extensions of time to answer and settled the case shortly before the administrative records were to be filed before the court.

BLM's reconsideration of the 2008 OS/TS ROD is based entirely on the terms of the settlement in which BLM committed to this revision. CEC v. Salazar, #63 ¶1 ("No later than 120 days after this Settlement Agreement becomes effective, Defendants will publish a notice of intent ("NOI") to consider amending each of the land use planning decisions made by the 2008 OSTS ROD.") BLM also committed to consider excluding from oil shale and tar sands development all "lands with wilderness character" a term that did not exist until December 23, 2010. BLM also agreed to exclude existing and proposed ACECs and the Adobe Town rare and uncommon area. The designation of rare and uncommon is pursuant to Wyoming law that only prohibits non-coal surface mining but allows coal and oil and gas development. Wyo. Stat. §35-11-112(a)(v). It cannot apply to public land.

In the rulemaking case, BLM committed to amending the oil shale and tar sands leasing rules within 15 months. BLM has made no move to initiate the rule changes. The settlement terms mandate the content of the final rules to a degree that violates public policy and the law, because BLM agrees in advance to what the final rules will provide. BLM also agreed to deny applications to convert RD&D leases to commercial leases based on environmental and resource considerations, to reject plans of development and to limit commercial leases to RD&D lessee after expressions of interest and detailed stipulations. CEC v. Salazar, No. 09-0091, Doc. No. 80-1 ¶¶1-6. The settlement predetermines the outcome of the rulemaking such that BLM has relinquished its authority and discretion.

The 2008 regulations remain in effect but cannot be implemented under the terms of the settlement, which prohibit oil shale leasing. By accepting the plaintiffs' demands for content, BLM has failed to comply with the 2005 EP Act, Section 369 to develop a commercial oil shale and tar sands leasing program.

As is clear in the OS/TS PDEIS, BLM also committed to a predetermined outcome in the programmatic EIS to reduce the potential for oil shale and tar sands development by removing 75% of the land base and limiting the remnants of the program to research and development, rather than the commercial scale mandated by federal law. The fast pace of the drafting of the OS/TS PDEIS and the fact that entire chapters are largely the same as in the 2008 PFEIS. BLM is doing a rush job to issue a final decision without regard to the facts or competing legal obligations and constraints.

2. Purpose and Need for Revision Unsupported in OS/TS PDEIS

The Notice of Intent to revise the 2008 Oil Shale and Tar Sands FEIS stated: "The BLM has decided to take a fresh look at the land use plan allocation decisions made in the 2008 ROD associated with the Programmatic EIS, in order to consider which lands should be open to future leasing of oil shale and tar sands resources." 76 Fed. Reg. 21003 (2012). The Notice of Intent went on to state that:

As there are no economically viable ways yet known to extract and process oil shale for commercial purposes, and Utah tar sands deposits are not at present a proven commercially-viable energy source, the BLM, through its planning process, intends to take a hard look at whether it is appropriate for approximately 2,000,000 acres to remain available for potential development of oil shale, and approximately 431,224 acres of public land to remain available for potential development of tar sands.

Id.

The OS/TS PDEIS expresses the purpose and need as necessary to determine which lands should be removed from the classification of available for leasing. "The purpose and need for this proposed planning action is to reassess the appropriate mix of allowable uses with respect to oil shale and tar sands leasing and potential development. Specifically, the BLM will consider amending the applicable Resource Management Plans (RMPs) to specify whether any areas in Colorado, Utah, and Wyoming currently open for application for future leasing and development of oil shale or tar sands should not be available for such application for leasing and development." PDEIS 1-4. **#15|)>**

<(|#16 [*9.2.1*] The criteria to exclude high potential oil shale and tar sands lands from leasing suffers

several flaws. First, OS/TS PDEIS does not and indeed cannot explain how it conforms to Section 369, since BLM previously concluded that similar alternative would not conform. 2008 Record of Decision PFEIS (2008 ROD) at 22 ("Much of the most geologically prospective acreage would be excluded under Alternative C; in particular areas which are in close proximity to threeof the six RD&D leases would be excluded. In addition, this unreasonably fragments the area that would be available for application, resulting in parcels that are unlikely to be explored, leased, or developed.") Second, Congress has prohibited BLM from spending federal funds to classify and manage lands as LWCs as directed in S.O. 3310. Alternatives 2-4 propose exclusions based on LWCs, thus implementing S.O. 3310 in defiance of the ban on spending federal funds to do so(31 U.S.C. §1341; §1350 (involved officials could face adverse employment actions) and, §1349 (criminal penalties)).

Third, all of the alternatives exclude from oil shale leasing the Adobe Town Rare & Uncommon Area, which is a state law classification that allows leasing but prohibits mining. The rare and uncommon designation cannot apply to public land, because the 1872 mining laws, as amended, preempt state law. Calif. Coastal Commn. v. Granite Rock Co., 480 U.S. 572 (1987) (holding state's coastal zone management could not regulate mining on federal land). Fourth, the OS/TS PDEIS provides no information about these areas. Hence, there is no 'fresh look' nor does the OS/TS PDEIS disclose the new information upon which BLM is relying to support the actions proposed in the OS/TS PDEIS. The apparent rush to complete the OS/TS PDEIS resulted in omission of the description of areas to be excluded, and this failure

to describe or analyze the areas prevents the public and coordinating entities from meaningful public comment.
#16])> <([#17 [*2.2*] [*1.5*] B. Detailed Analysis of Alternatives
The OS/TS PDEIS identifies the Preferred Alternative as 2(b).
The BLM has selected Alternative 2(b) as the Preferred Alternative. The Preferred Alternative would make approximately 461,965 acres available for future consideration for commercial oil shale leasing and 91,045 acres available for application for commercial tar sands leasing, but only for research, development, and demonstration (RD&D) leases. The BLM

would issue a commercial lease only when a lessee satisfies the conditions of its RD&D lease and the regulations at 43 CFR Subpart 3926 for conversion to a commercial lease. The preference right acreage, if any, which would be included in the converted lease, would be specified in the RD&D lease.
OS/TS PDEIS at i.
The OS/TS PDEIS, however, does not contain any specific analysis of the expanded RD&D program that is being proposed in lieu of the commercial leasing program. The OS/TS PDEIS attempts to compensate for this defect by stating:
The environmental impacts of Alternative 2(b) would be analytically indistinguishable from those of Alternative 2(a). Only the method of obtaining a lease would be different. Accordingly, the analysis in this PEIS of Alternative 2 applies fully and equally to both alternatives. To the extent there may be differences in environmental consequences between Alternative 2(a) and 2(b), these would be related to the timing of the commencement of impacts, as well as, possibly, length of disturbance. However, these issues are best addressed in the lease and/or project-specific analysis.
OS/TS PDEIS at ES-7, 2-35. The OS/TS PDEIS states that this alternative was not developed until quite late in the process.
As the Draft PEIS was being developed, the idea for this alternative emerged. It is presented here in brief. This alternative is not noted elsewhere in the document but will be developed further in preparation of the Final PEIS. Analytically, this subalternative is indistinguishable from Alternative 2(a) in terms of environmental consequences. Therefore further environmental analysis in preparation of the Final PEIS is not anticipated, although more detailed explanation may be provided, particularly in response to comments received.
OS/TS PDEIS at 2-35.
The OS/TS PDEIS statement that Alternative 2(b) environmental impacts are basically the same as Alternative 2(a) is untrue. Alternative 2(b) changes the timing of oil shale leasing to slow it down and this change in timing significantly changes the nature of the impacts on water and surface disturbance. NEPA requires agencies to consider direct, indirect, and cumulative effects in the context of geography and timing. 40 C.F.R. §1508.25. The preferred alternative delays in issuing RD&D leases and not issuing commercial leases will change the scope and impact and must be separately analyzed.

The scant information about Alternative 2(b) and omitted discussion of the regulatory changes do not provide the public with sufficient information to determine whether, in fact, it is virtually identical to Alternative 2(a). BLM has already committed to rule changes in the CEC settlement agreement. The OS/TS PDEIS omits all discussion, even though the rulemaking is a connected action that falls within the scope of this EIS and failure to discuss the connected actions violates NEPA.

If Alternative 2(b) is really identical, then BLM should and could have changed Alternative 2(a). For instance, the OS/TS PDEIS claims Alternative 2(b) will change the lease terms but provides no information on what those changes will be, other than it will only authorize RD&D leases. Id. at ES-7, 2-35.

NEPA requires that each alternative be analyzed in detail. 40 C.F.R. §1502.14(b) (substantial treatment must be devoted "to each alternative considered in detail including the proposed action so that reviewers may evaluate their comparative merits."). The discussion of alternatives in the EIS must be sufficient to permit a reasoned choice among the options." State of Wyoming v. USDA, 661 F.3d 1209, 1243 (10th Cir. 2011) (quoting AWARE v. Colo. Dep't of Transp., 153 F.3d 1122, 1130 (10th Cir. 1998)). BLM's failure to explain the preferred alternative or its impacts on the respective states and communities requires that BLM withdraw the draft and revise or issue a supplement to explain the preferred alternative. 40 C.F.R. 1502.9 ("If a draft statement is so inadequate as to preclude meaningful analysis, the agency shall prepare and circulate a revised draft of the appropriate portion.")

Alternative 2(b) does not conform to Section 369 because it continues the RD&D program instead of providing for a commercial leasing program. While an agency can consider an alternative that requires additional authority, it must disclose this fact. Forty Questions on CEQ NEPA Regulations, 46 Fed. Reg. 18026 (1981) as amended 51 Fed. Reg. 15618 (1986), Answer to Question 2(b). The OS/TS PDEIS does not propose an amendment to the 2005 EP Act to modify the mandate. **#17])>**

<([#18 [*1.5*] C. Omission of Significant New Information

The Purpose and Need for the OS/TS PDEIS is justified as a "fresh look" at oil shale and tar sands development. 76 Fed. Reg. 21003 (2011). The OS/TS PDEIS is not in fact a "fresh look," it is merely a retread of an alternative previously rejected by BLM on the grounds that it would not conform to Section 369 of the 2005 EPA. [2008 ROD at 22].

The purposeful omission of new information is significant and violates NEPA. Since the 2008 ROD was signed, several companies have been developing oil shale pursuant to the RD&D leases. The OS/TS PDEIS omits these results and progress reports. Similarly advances in technologies and actual experience with these technologies has been omitted. Instead, the OS/TS PDEIS repeats the conclusion that oil shale and tar sands are not commercially viable and also repeats out-dated data regarding the amount of water, power and surface disturbance.

The OS/TS PDEIS excludes new information regarding oil shale and tar sands technology and makes very limited the use of the 2010 and 2011 USGS assessments of potential. OS/TS PDEIS 2-77. Chapter 3 and App. A are very similar, if not identical, to the 2008 FEIS and notably do not discuss oil shale extraction technology used by Red Leaf or Enefit.

The OS/TS PDEIS purports to include new information regarding sage grouse, LWCs

and ACECs but the information is vague and incomplete as to preclude any kind of meaningful analysis. The OS/TS PDEIS lacks a discussion of the basis for the respective classification, or the other current land uses. It also does not discuss the Wyoming sage grouse strategy or how BLM Wyoming has adopted restrictions to incorporate the strategy and core area protection. This may well be because many of these areas have oil and gas leases and even production, which would contradict the description as LWCs. In Wyoming, the OS/TS PDEIS omits the fact that these areas are also located in the Wyoming Checkerboard where the private land is owned by Anadarko, a gas development company. The OS/TS PDEIS concludes that private land is inconsistent with development when the private lands in Wyoming have been developed for decades and generally in conjunction with public lands.

While BLM could theoretically decide not to issue individual leases, it does not have the discretion to simply discard new and relevant information. This information is environmentally significant since it shows retort methods using modest amounts of water and causing significantly less surface disturbance than assumed in 2008. NEPA requires BLM to consider significant new information and this omission results in a significant bias of the OS/TS PDEIS against additional oil shale and tar sands development notwithstanding the congressional mandate to proceed with this program. Similarly, the OS/TS PDEIS omits the statutorily required assessment of oil shale and tar sands potential. 42 U.S.C. §15927(m). The USGS Assessment reports completed in 2010 and 2011 identified additional land as having high potential but the OS/TS PDEIS did not use this report in its identification of potential lands. Instead, the OS/TS PDEIS simply modified the areas identified in 2008 and made them 75% smaller.

The omission of new information is further documented in the fact that many of the chapters, especially Chapter 3 and the Appendices, are largely unchanged from the 2008 PFEIS. This only shows that BLM updated the OS/TS PDEIS to tack on alleged LWCs and other special designations as a basis to marginalize a congressionally mandated program.

#18])> <([#19 [*6.3.2*] [*6.5*] D. OS/TS PDEIS Dismissal of Technology Fails to Acknowledge Significant Scientific Controversies

At a minimum, BLM must acknowledge that there is a scientific controversy regarding its key assumptions of environmental impact and support its position. 40 C.F.R. §1508.127(b)(4); Middle Rio Grand Conservation Dist. v. Norton, 294 F.3d 1220, 1229 (10th Cir. 2002) (setting aside critical habitat designation EIS on the basis that "[t]he wide disparity in the estimates of water required for the designation, and the associated loss of farmland acreage, indicate that a substantial dispute exists as to the effect of the designation."). Like the above decision, there is a wide disparity in estimates of water, surface area and electrical power assumed to be necessary for oil shale development. BLM, like the USFWS, must address the disparities, especially since the newer data reflect new information.

The OS/TS PDEIS repeats the refrain that oil shale development will require more than 1 barrel of water for each barrel of oil. OS/TS PDEIS 4-3, 4-9, 4-11, 4-33, 4-47, 4-48, 5-32, 5-35, A-85; Appendix A. As described by Red Leaf and Enefit, two companies operating in Colorado and Utah under RD&D leases, new technology does not rely on large amounts of water in the retort process. The R&D program was intended to provide BLM with this type of information, yet it is excluded from the OS/TS PDEIS. By

using outdated or erroneous assumptions, the OS/TS PDEIS exaggerates the water and power needs as well as the surface disturbance.

The same defects apply to the OS/TS PDEIS assumptions about the size of the surface disturbance and the amount of electrical power needed. OS/TS PDEIS at A-46, A-62, A-80, A-84, A-85; App. A. In part, these errors arise because the BLM never updated Chapter 3 or the Appendices. These same assumptions are carried through to Chapters 2 and 4-6, thus tainting the entire analysis.

#19])> <([#20 [*2.2*] [*6.3.5*] The above assumptions are relevant to the OS/TS PDEIS conclusion that oil shale and

tar sands have not been shown to be commercially viable. OS/TS PDEIS at 2-57, 2-76, 3-238. This very curious statement cannot be reconciled with the fact that the province of Alberta has been producing oil from tar sands for more than 20 years and even transports tar sands oil to Utah for refining. Similarly, Enefit has been producing oil from oil shale for more than 30 years. The OS/TS PDEIS does not provide any definition of commercial viability but proven business operations should suffice and it is inexplicable that the OS/TS PDEIS repeats a conclusion that is contradicted by incontrovertible facts.

The issue of commercial viability is also the basis for Alternative 2b, which would actually limit oil shale development to another RD&D program, without authorizing commercial leases. The preferred alternative rests on the highly disputed premise that oil shale is not commercially viable. NEPA requires BLM to disclose and discuss the controversies and the OS/TS PDEIS does not. **#20])>**

<([#21 [*3.10.3*] VI. ONE-SIDED ECONOMIC AND SOCIAL ANALYSIS

The OS/TS PDEIS assumes that oil shale and tar sands development will lead to a boom and bust economic cycle. OS/TS PDEIS 2-36, 3-242. Based on that premise, the OS/TS PDEIS describes Alternative 1 as harmful and Alternatives 2-4, which feature little to no development, as beneficial. OS/TS PDEIS at ES-9, Table 2.3.2-2, Table 2.4.2-2, Table 2.6-1.

The OS/TS PDEIS discussion omits the fact that the lands classified as high potential are in regions where there is already a viable energy economy. For example, in southwestern Wyoming, there are several major gas fields producing conventional and coalgas, including Pinedale Anticline, Jonah, MoxaArch, Continental Divide and Hiawatha. There are numerous other plays for oil and natural gas as well. Coal mining plays important role in Sweetwater and Lincoln Counties, with trona also in Sweetwater and Uinta Counties. Construction of wind farms and related transmission lines continues at a rapid pace as well. Thus, oil shale will add to the economy but is unlikely to be significant enough to create an economic boom.

Uintah County produces about 50% of the oil and gas recovered in the State of Utah. Oil shale and tar sands development will diversify the energy economy but will not set off a boom.

The OS/TS PDEIS fails to consider the cumulative impacts and connected actions in this discussion of the economic and social impacts. It is true that the current energy development has generated housing shortages and pressure on existing roads, but Utah and Wyoming have some of the lowest unemployment records in the country and have weathered the severe recession, and in reality a national depression, far better than other states such as California, Oregon and Washington.

Taking the OS/TS PDEIS discussion to its logical conclusion, one would conclude that it is BLM's view that it is better for the residents of rural counties and communities to remain poor and isolated. OS/TS PDEIS at ES-9, Table 2.3.2-2, Table 2.4.2-2, Table 2.6-1. It is correct that the upsurge in energy development has changed western Wyoming and eastern Utah communities. There is more traffic, more demand for housing and other services. There has also been more opportunity for jobs, to lease or sell private land related to energy projects and the injection of cash into the economy. Certainly, the State of Wyoming and the trust beneficiaries, the University and Wyoming Game & Fish Department have also seen significant increases in revenues, which allowed Wyoming to avoid the job losses, bank failures and bankruptcies that haunt many other states and large cities.
The oil shale program would add to the existing energy industry but would be a relatively small portion. Wyoming is already the second largest recipient of federal royalty revenues and revenues from oil shale would not significantly change that. It would, however, represent continued diversification in energy development.
#21])> VII. CONCLUSIONS AND RECOMMENDATIONS
<([#22 [*9.2.2*] The OS/TS PDEIS suffers from a number of fatal flaws.
- All alternatives except Alternative 1 do not conform to Section 369 of the 2005 EPA; **#22])>**
<([#25 [*9.2.1*] - Implementation of LWC management in Alternatives 2, 3 and 4 violates the congressional limitation on the expenditure of funds to implement S.O. 3310 and exceed BLM's authority; **#25])>**
<([#23 [*9.5*] The OS/TS PDEIS suffers from a number of fatal flaws.
? All of the alternatives except Alternative 1 violate FLPMA land use planning processes and rules by superseding the existing RMPS and the ongoing plan revision for the Rock Springs area;
#23])> ? **<([#24** [*1.5*] The OS/TS PDEIS suffers from a number of fatal flaws.
OS/TS PDEIS violates NEPA;
? by failing to support the purpose and need in the PDEIS;
? by failing to fully analyze the preferred alternative so that the public can meaningfully comment;
? omitting significant new information regarding oil shale and tar sands potential and technological advances and omitting the rule changes that will significantly affect the timing of development;
? failing to fully disclose the basis for excluding land areas from oil shale and tar sands development, when such areas were proposed by special interest groups without providing maps, facts, or rationale to support the adoption of these proposals;
? failing to address the scientific controversies regarding the environmental impacts and resource needs for oil shale and tar sands development.
#24])> Vermillion appreciates the opportunity to comment on this draft, but urges withdrawal and supplementation of the PDEIS to address the identified omissions.

OSTS2012D50329
Organization: Biodiversity Conservation Alliance, etal, Erik Molvar
Received: 5/4/2012 5:05:45 PM
Commenter1: Erik Molvar - Laramie, Wyoming 82073 (United States)

Organization1: Biodiversity Conservation Alliance, etal
Commenter Type: Environmental Organization
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form and Mail
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** aziech 5/16/2012 12:00:00 AM
Attachments: OSTS2012D50329.htm (OSTS2012D50329-59049.htm Size = 1 KB) OilShale2012DEIScommentsFinal_OSTS2012D50329.doc (OSTS2012D50329-59048.doc Size = 443 KB)
Submission Text
Dear Folks, A hardcopy of our comments has been provided by mail with attachments on an accompanying CD-ROM. We had one additional organization (Jackson Hole Conservation Alliance), who wished to become signatories to our comments, so we have added them to this electronic version and are resubmitting. The attachments accompanying the hardcopy pertain to the electronic comments as well. Thank you, Erik Molvar See Attachment.

NOTE: attachments are in the project file on the P:\drive [OSTS 2012\Public Comments\OSTS Comment Attachments on CD\50239]

Dear BLM Officials:
The following are the comments of Biodiversity Conservation Alliance (BCA), Colorado Environmental Coalition, Rocky Mountain Wild, Jackson Hole Conservation Alliance, and Californians for Western Wilderness on the Oil Shale and Tar Sands Draft PEIS. These comments supplement the comments submitted by Western Resource Advocates, to which BCA is a signatory, and focus primarily on potential oil shale lands in Wyoming. Please address these comments in detail as you move this document through the NEPA process. **<(|#1** [*2.3.1*] *We support Alternative 3, because as dirty and heavy impact a resource as oil shale is, it should be proven through the RD&D process on currently existing RD&D leases before additional public lands are opened up for leasing of any kind.*
Our perception is that oil shale is not ready for prime time. The dirtiest of the fossil fuels, it comes with an even bigger carbon footprint than tar sands. Producing it will release toxins into the atmosphere and likely pollute groundwater and/or surface waters with hydrocarbons, salts, and heavy metals that leach out of retorted shales, either in situ and as tailings. It results in 100 percent destruction to the lands that are produced, regardless of whether it is strip-mined or produced in situ, and it will likely take up to a century for these lands to become productive wildlife habitat again. The water demand of oil shale production is itself a major threat, not just to other water users along the Colorado River system but also to the four species of Endangered fishes inhabiting the Colorado River system. And despite years of trying on RD&D leases, no company has shown that oil shale is viable on a commercial scale.
#1|)>

A. **<(|#2** [*3.1.1*] ***Wyoming proposed wilderness areas that should be protected from oil shale and tar sands development***

The following areas are proposed for wilderness protection in Wyoming. These areas should be protected from oil shale and tar sands development: Adobe Town, Kinney Rim North, Kinney Rim South, Red Creek Badlands, Devils Playground, Buffalo Hump, and Sand Dunes, including citizens' proposed additions to existing WSAs. These lands are identified on GIS datasets included as Attachment 1.

The Adobe Town citizens' proposed wilderness is discussed at great length below under the Adobe Town Very Rare or Uncommon Area, which encompasses the entire citizens' proposed wilderness. It is important to note that lands recognized as possessing wilderness characteristics (the "Adobe Town Fringe") are not shown on Figures 3.1.1-13 and -14; this oversight merits correction. We recommend that the entire Adobe Town citizens' proposed wilderness outside the Wilderness Study Area be shown as "Lands to be Managed to Protect Wilderness Characteristics." For the Rawlins Field Office, all of these areas are mapped as "Lands with Wilderness Characteristics," correcting the oversight, but none (including the designated Wilderness Study Area) are mapped as Lands with Wilderness Characteristics for the Rock Springs Field Office. See Figure 2.3.3-3. This mapping error also is worthy of an update. If the Very Rare or Uncommon Area is withdrawn from oil shale leasing, all of these lands with wilderness character will be protected, however, so these scriveners' errors are of limited import as long as the Very Rare or Uncommon Area is indeed withdrawn from oil shale development as is the apparent intent under the Preferred Alternative. We will discuss other units individually below.

The Kinney Rim is a lofty ridge rising like a wave from a sea of sagebrush. The Kinney Rim North and South citizens' proposed wilderness areas are listed as "Lands to be Managed to Protect Wilderness Characteristics" on Figure 3.1.1-13 and Figure 3.1.1-14, a designation with which we concur. These lands appear to be withdrawn from oil shale leasing under Alternative 2, a withdrawal which we applaud and support.

The Devils Playground – Twin Buttes citizens' proposed wilderness is a land of arid, windswept badlands immediately to the west of Flaming Gorge National Recreation Area, offering outstanding hiking opportunities for visitors to the recreation Area in addition to habitat for the rare midget faded rattlesnake. The Devils Playground/Twin Buttes WSA is listed for the Rock Springs Field Office, but the corresponding citizens' proposed wilderness (or CPW) has apparently been overlooked. DPEIS at Figure 3.1.1-14. We have attached the original citizens' proposed wilderness documentation from 1992. See Attachment 2. In light of the absence of industrial activity within the lands encompassed by the citizens' proposed wilderness, the wilderness characteristics will have improved as human intrusions continue to grow fainter. BLM should evaluate the CPW surrounding the existing Wilderness Study Area and protect all the lands contained therein from oil shale development. Neither the currently designated Wilderness Study Area nor the citizens' proposed wilderness appear to be mapped as "Lands with Wilderness Characteristics" on Figure 2.3.3-3, and portions of this area appear to be made available for oil shale leasing under Alternative 2 in Figure 2.3.3-6. This oversight should be corrected, and these lands should be withdrawn from oil shale leasing in the final decision.

The Red Creek Badlands citizens' proposed wilderness encompasses a maze of shallow canyons through redbeds studded with junipers and pinyon pines. The "Lands with Wilderness

Characteristics" mapped for the Red Creek unit do not appear to correspond with either the Wilderness Study Area or the citizens' proposed wilderness. See Figure 2.3.3-3. We have attached the citizens' wilderness overview for this unit for informational purposes. See Attachment 10. However, these lands being outside the "Most Geologically Prospective Area" do not appear to be offered for lease under any alternative, rendering this oversight of limited substantive importance.

#2])>

B. <([#3 [*3.1.1*] ***Wyoming ACECs and potential ACECs that should be protected from oil shale development***

The following ACECs in Wyoming established under the Green River Resource Management Plan should be protected from oil shale development: Cedar Canyon ACEC (approximately 2,550 acres); Greater Red Creek ACEC (approximately 131,890 acres - originally Red Creek ACEC, expanded from 55,880 acres to include relevant and important values in the Currant Creek and Sage Creek Drainages); Greater Sand Dunes ACEC (approximately 38,650 acres); Natural Corrals ACEC (approximately 1,276 acres); Oregon Buttes ACEC (approximately 3,450 acres); Pine Springs ACEC (approximately 6,030 acres, expanded from 90 acres to include adjacent relevant and important values); White Mountain Petroglyphs ACEC (approximately 20 acres); South Pass ACEC (approximately 53,780 acres); Special Status (Candidate) Plants ACEC (approximately 900 acres); and Steamboat Mountain ACEC (approximately 43,270 acres).

In addition, the following potential ACECs should also be excluded from oil shale leasing: sage-grouse potential ACECs in the South Pass and Salt Wells areas as originally proposed by the Rock Springs BLM identified in the Sage-Grouse Plan Amendment process and others that may be identified in the Pinedale Field Office; the Monument Valley Management Area as identified in the Green River RMP; the Powder Rim proposed ACEC petitioned under the Rawlins RMP EIS, and the migration corridor for the Grand Teton pronghorn herd, extending southward from Trapper's Point to Seedskadee National Wildlife Refuge. In addition, Seedskadee NWR itself should be excluded from oil shale leasing.

#3])>

1. **<([#4** [*3.1.1*] ***Adobe Town Very Rare or Uncommon Area – The entire area should be excluded from leasing***

This PEIS presents an important opportunity to protect the Adobe Town Very Rare or Uncommon Area. The State of Wyoming's 2008 designation of the Adobe Town area as Very Rare or Uncommon under the state Environmental Quality Act should provide the BLM with the legal basis for protecting this entire area. In the original FPEIS, only lands designated as WSA within Adobe Town were protected from commercial development. With Very Rare or Uncommon designation being finalized in 2008, the BLM now has a strong basis for protecting this area's environmental and cultural resources. Of note this area is erroneously listed on Figure 2.3.3-3 as "Adobe Town Rare and Irreplaceable Land," a typographical consideration that does not appear to have substantive import as these lands appear to be withdrawn from oil shale leasing under Alternative 2. See Figure 2.3.3-6.

Notably, in the Environmental Quality Council's Very Rare or Uncommon designation, the Council explicitly stated, "The designation would prevent surface mining for oil shale and uranium, as well as gravel pit mining." See Attachment 3 at 18. Since the EQC holds authority over mining permits, and a mining permit would not issue if such mining would impair the Very rare or Uncommon features for which the area was designated (geologic, fossil, wildlife, scenic, and historical) – a virtual certainty – it makes no sense for BLM to issue leases in this area which the lessee would be potentially unable to develop.

Adobe Town has been called the crown jewel of the Red Desert – encompassing irreplaceable ecological, geological, historical and recreation values. At 180,910 acres, Adobe Town is Wyoming's largest and most spectacular desert wilderness. Stretching 26 miles north to south and 19 miles east to west, this area is one of the last places in Wyoming where visitors can take in views of pristine landscape that stretch from horizon to horizon. The landscape ranges from banded badlands to mazes of arches, pinnacles, and spires, offering spectacular scenic vistas and important wildlife habitat.

Adobe Town was designated as s Very Rare or Uncommon due to its geological, fossil, scenic, wildlife, and cultural/historical values. Non-coal surface mining (which would include oil shale) is expressly prohibited in Very Rare or Uncommon areas, except in cases where surface mining would not detract from such qualities. Because scenic qualities are part of the designation, there is no possibility that an exemption for oil shale mining could be issued.

In its formal designation of this area, Wyoming's Environmental Quality Council stated, "The designation protects the area from non surface coal mining only. The designation would prevent surface mining for oil shale and uranium, as well as gravel pit mining."[1] While part of the Very Rare or Uncommon area is a Wilderness Study Area (WSA), which cannot be made available for oil shale leasing under the PEIS, the remainder is outside the WSA. All of Adobe Town as a state of Wyoming Very Rare and Uncommon area, not just the WSA, should be protected from oil shale development. Further, Adobe Town geological formations, abundant fossil resources, historical and prehistoric sites and features, rare and sensitive (including crucial) wildlife habitats, and scenic values are comparable to existing national park units, and thus are of national value. Left unprotected, these treasures are at risk of elimination.

The Adobe Town area should be managed on a landscape level, through a variety of management designations. By managing this area as a whole, the BLM can better protect its important and varied values. This concept is supported by the recently released America's Great Outdoors report, which recommends the agency incorporate landscape-scale conservation and restoration as a priority in BLM resource management plans and programs.[2]

In the original Draft EIS, the BLM recognized Lands with Wilderness Character in the Rawlins Field Office, notably the Adobe Town Fringe, which overlaps with the potential oil shale development area. Original DPEIS at 3-38. However, this section makes no mention of the Adobe Town Very Rare or Uncommon Area, which encompasses the Adobe Town WSA, Adobe Town Fringe area recognized by BLM to contain lands with wilderness character, and also other citizens' proposed wilderness lands not included in the BLM-defined Adobe Town fringe, and which overlap with potential oil shale development.

1. Adobe Town: Historical, prehistorical, and archaeological values

Adobe Town has a number of historical, prehistorical and archaeological values that meet the criteria for Very Rare or Uncommon designation. It is mentioned prominently in the journals of the Geological Exploration of the 40th Parallel (circa 1869), and was used as a hideout for fresh horses by Butch Cassidy and his gang during the Tipton train robbery of 1900. The area has a high density of archaeological sites dating back 12,000 years, and is still used as an important religious site by Native Americans today.

Adobe Town is mentioned prominently in the Report of the Geological Exploration of the 40th Parallel, a federal document authored by eminent geologist Clarence King in 1869. This area was identified by King as the most superlative geological landscape found along the survey route. King described the general landscapes as follows:

From twelve to fourteen miles southwest of the head of Bitter Creek are seen exposures of the soft green clays, marls, and whitish-gray ands of which the upper beds of the Bridger group are made. Passing eastward of Pine Bluffs [known today as Pine Butte], the country is covered with more or less drifting sand, which forms noticeable trains of dunes. The sand suddenly gives way to the soft Bridger beds which are intricately eroded into branching ravines [Adobe Town and Skull Rims]. This bad-land country extends southeastward to the mouth of a dry valley [Sand Creek] north of Cherokee Ridge [Powder Rim/Cherokee Rim], and from that point a chain of bluff escarpments extends northeasterly for twelve or fourteen miles.[3]

In addition to the historical noteworthiness of the Geological Exploration, Adobe Town is also unusually rich in archaeological sites. According to BLM,

Significant archaeological resources are found throughout the [Adobe Town] WSA, representing continuous occupation from Paleo Indian through late Prehistoric periods, that is, for the past 12,000 years. The cultural site density of the WSA is estimated to be 30 surface sites per square mile, which is unusually high.[4]

2. Adobe Town: Geological values

Adobe Town is a geological masterpiece, dominated by outcroppings of the Washakie formation, a deep bed of volcanic ash deposited 50 million years ago during the Yellowstone eruptions as airborne ash and fluvial desposits of ash interbedded with reddish sandstone that forms rimrock. In 1981, BLM described the geology of the rims as follows:

They are composed of green, gray, and red tuffaceous and arkosic sandstone and minor beds of green shale, light-gray and green tuff, gray siltstone and conglomerate. The exposed beds have created the colorful landscape the Adobe Town Area is known for.[5]

These are the epitome of fragile lands, with highly erodible soils (both the tuffaceous sandstone and the stabilized sand dunes mantled with a fragile veneer of vegetation) and the towers, arches, and balanced rocks which would easily be toppled by mechanical disturbance.

Above the rims, unique geological features include desert pavement and stabilized sand dunes. The rims have been whittled by erosion into spires and pinnacles, solifluction caves (known locally as 'mud caves') large enough to walk through, natural arches, lone towers, groups of castellated pillars, window rocks, grottoes, buttes, caprocks, mushrooms, hat rocks, and eroded badlands banded with pink, red, and purple tones. According to BLM, "Skull Creek Rim, in the core of the area recommended for wilderness, contains some of the most unique and extensive badlands formations in Wyoming."[6] BLM described the effect of this surreal landscape as follows:

Many of the spires take on strange life-like forms – stone sentinals (sic) frozen in time standing guard over their silent desert domain. Walking amidst groups of these strange spires gives one the eerie feeling of being watched – by beings who have witnessed the evolution of Adobe Town for millennia.[7]

In addition, the paleontological resources of Adobe Town are among the finest deposits of Eocene mammals and reptiles in the world. According to BLM, "The Adobe Town area is known as one of the three most valuable sites in North America for certain types of mammalian fossils."[8] This important point appears to have been overlooked in the Paleontological Resources section of the DEIS. BLM further noted,

The WSA is nationally known for the educational and scientific study of paleontological resources. Fossil remains of mammals are numerous and widely distributed throughout the area. Two notable mammalian fossils found in the area are the Uintathere and Titanothere. The Uintathere was a large mammal about the size and configuration of an African rhinoceros. The species of Titanothere found in the WSA was a tapir-like mammal, about 40 inches in height. This area has been identified as one of the premiere sites in North America for paleontological resources.[9]

3. Adobe Town: Wildlife values

Adobe Town also has a host of sensitive wildlife habitats that are crucial or vital to meeting the very rare or uncommon designation criteria. These habitats include nest sites, sage-grouse lek sites, prairie dog colonies, and big game crucial winter ranges. The cliffs and pillars found throughout Adobe Town provide ideal nesting habitat for raptors, offering numerous nesting platforms out of the reach of ground-based nest predators. Raptor nest sites, sage-grouse lek sites, and big game crucial winter ranges are exceptionally sensitive to, among other things, development, as temporary disturbances can lead to nest failure or displacement of big game onto marginal ranges where they may not be able to survive.

The white-tailed prairie dog is a BLM Sensitive Species and also is recognized as a Sensitive Species by the Wyoming Game and Fish Department. There is a small white-tailed prairie dog colony observed at T 14N R97W sec. 12, SE ¼, which has been active at least between 2001 and 2006; white-tailed prairie dogs were also observed in Section 13 NW ¼ of the same township in 2006. Active white-tailed prairie dog colonies also occur in Horseshoe Bend south of the Haystacks.[10]

There are a number of known golden eagle nest sites, including two nest sites along the western end of The Haystacks (T16N R97W Sec. 10 NE ¼ and T16N R97W Sec. 15 SW 1/4), one along Haystack Wash as it leaves the rimrock area (T16N R96W Sec. 30 NW ¼), and one on the lower rim (T15N R96W Sec. 18 NW ¼). In the Rawlins Field Office, two golden eagle nests occur in the southern end of the WSA, with additional nests known from the Willow Creek Rim in the eastern proposed expansion unit and on outcrops to the west of Sand Creek in the southeastern part of the area.

The greater sage-grouse is a BLM Sensitive Species and also is listed as a Sensitive Species by the Wyoming Game and Fish Department. (Sage-grouse are discussed in further detail below.) There are three known sage-grouse leks – one in the southeastern proposed expansion, another north of the WSA and south of The Haystacks, and a third in the northeastern lobe of the WSA. Sage-grouse leks are the hub of nesting activity, and typically most of the hens bred at a lek nest within 3 miles of the lek site. Thus, the area around each lek also constitutes important nesting habitat.

There is a desert elk herd, known to the Wyoming Game and Fish Department as the Petition Herd, which is one of the few true desert elk herds in North America, spending the entire year in the Red Desert. This elk herd is therefore very rare. Its activities are centered on the Powder Rim.

Known prairie falcon nest sites within the proposed Very Rare or Uncommon area include one at T16N R95W Sec. 19 NW ¼; two near Manuel Gap (T16N R97W Sec. 27 SW ¼ and T16N R97W Sec. 28 SW ¼); and T15N R96W Sec. 19 NE ¼.[11] Prairie falcons with fledgling young were observed roosting on a pinnacle just off the Skull Creek Rim at T13N R97W during the early summer of both 2005 and 2006. Prairie falcons with fledgling young were also sighted at T15N R97W Section 19 SW ¼ on July 9, 2006. A known prairie falcon nest also was recorded by BLM on the bluffs above Willow Creek in the eastern proposed expansion.

Several other raptors are on the BLM and Wyoming Game and Fish Department Sensitive Species Lists. The burrowing owl, which is a prairie dog obligate species that nests in burrows of prairie dog towns, has one known nest location in the southwestern corner of the WSA. The ferruginous hawk, the largest hawk in Wyoming, has nest sites confirmed by BLM two miles south of Manuel Gap and in the southeastern proposed expansion.

Due to the rugged and inaccessible nature of much of Adobe Town, no thorough and systematic inventory of nesting raptors has ever been performed. For instance, there are several known nest sites of ferruginous hawks active in recent years which are not in the BLM's database, even in accessible areas. An occupied and active ferruginous hawk nest was observed by Erik Molvar and Joel Sartore on the eroded walls far below East Fork Point at T14N R96W Section 8 SWSE on May 4, 2004. In addition, an active and occupied ferruginous hawk nest was documented in the Haystacks at T17N R96W Section 33 SWSE by Liz Howell, and separately by Erik Molvar, during summer of 2005. The same nest was found to be active again in 2006 by Erik Molvar.

The mountain plover is recognized as a BLM Sensitive Species and as a Sensitive Species by the

Wyoming Game and Fish Department. Until recently, it was listed as Threatened under the Endangered Species Act (ESA). The Horseshoe Bend area south of The Haystacks contains vital mountain plover nesting habitat with a number of confirmed plover sightings.[12] Mountain plovers have also been sighted atop the Adobe Town Rim at T15N R98W Section 25 NE ¼, and at the southern edge of the Adobe Town Rim.

The Great Basin gopher snake is listed as a BLM Sensitive Species. This species has been photographed along the Adobe Town Rim at T15N R97W Section 19, NW ¼.

The Haystacks is identified by the Wyoming Game and Fish Department as crucial mule deer winter habitat. There is also a substantial amount of pronghorn crucial winter range south of Horseshoe Bend along the branches of Haystack Creek. In addition, portions of the area on the north slope of the Powder Rim are mule deer crucial winter range.[13]

4. Adobe Town: Scenic values

The scenic values of Adobe Town are the most impressive of any desert landscape in Wyoming. It has long attracted the attention of writers and authors. In the 2006-2007 edition of Wilderness magazine, writer Allen Best characterizes Adobe Town as "a giant museum of geological curiosities." In 2004, Kerry Brophy wrote of Adobe Town in Wyoming Wildlife magazine as "about as lonesome and lovely a place as you're likely to find". Adobe Town is also featured in the guidebook Wild Wyoming, which characterized the area as "a landscape worthy of National Park status." World-renowned author Annie Proulx described Adobe Town as "The maze of badland formations, mesas, and buttes combine with brilliantly colored rock strata to create spectacular canyonland scenery."

More recently, Adobe Town has become a mecca for photographers, and photographs have been included in calendars, coffee table books such as Wind River Wilderness and Red Desert: History of a Place. A scenic photograph of Adobe Town appeared in the July 2005 issue of National Geographic. Internationally known nature photographer Tom Mangelson noted, "Adobe Town is truly one of the crown jewels of the West, one of the signature Red Desert landscapes that cannot be allowed to fall under the blade of the bulldozer."[14] Photographer Ron Marquart described Adobe Town as follows: "Its landscape is comparable to Bryce Canyon, Canyonlands and Badlands National Parks, and represents the most intricate, outstanding badlands topography in the U.S." Adobe Town was also featured in the new book of photography published by Laguna Wilderness Press, Wyoming's Red Desert: A Photographic Journey.

These scenic values are also important economic values. Both must be protected.

5. Adobe Town: Recreation

Currently, the Adobe Town area is used primarily for recreation. Hikers and photographers concentrate efforts along the Adobe Town Rim, in The Haystacks, and atop the Skull Creek Rim. The unit is an excellent rockhounding area, with moss agates and other semiprecious stones to be found, especially atop the Adobe Town Rim. The flats along the eastern end of the unit are a

well-known trophy antelope hunting area, and The Haystacks, Adobe Town Rim, and Powder Rim are also known mule deer hunting areas. Due to the tangled web of gas field roads to the east of Adobe Town, most visitors approach from the north and west. **#4])>**

1. **<([#5** [*3.1.1*] ***Recreational areas in Wyoming***

As the BLM stated, "Commercial oil shale development activities is incompatible with recreational use (e.g., hiking, biking, fishing, hunting, bird watching, OHV use, and camping)." DEIS at 4-20. We strongly agree with this conclusion. In the PEIS, the BLM must thoroughly assess the impacts on the following areas of high recreational value that fall within potentially leased oil shale areas in Wyoming. We believe oil shale leasing in these areas should be precluded:

1. Little Mountain area, including Greater Red Creek ACEC, Red Creek WSA, and Sugarloaf Basin SMA – These areas were established under the Green River RMP and constitute an outstanding big game hunting resource. According to the Wyoming Game and Fish Department, the elk hunt in this area is the single most sought-after tag in the entire state. Oil shale activities would be certain to drive away elk and destroy the recreational quality of this area.

2. Adobe Town State Very Rare or Uncommon Area – As discussed above, the scenic and wilderness qualities in this area and its viewshed need to be protected from oil shale leasing in order to maintain the scenic and wilderness qualities in this area. Oil shale leasing should be precluded from this area in order to maintain FLPMA-required consistency with the state designation preventing non-coal surface mining. Portions of this area also now fall within the Adobe Town Dispersed Recreation Use Area designated under the Rawlins RMP.

3. Adobe Town Dispersed Recreation Use Area (DRUA) – The Adobe Town DRUA was established under the Rawlins RMP, and includes not only the Very Rare or Uncommon area but also portions of the Kinney Rim North and South citizens' proposed wilderness areas, the western Powder Rim, and the Prehistoric Rim area to the east of Adobe Town.[15] The DRUA is of high value for dispersed and primitive recreation, including hiking, wildlife viewing, hunting, and camping. It should be excluded from oil shale leasing.

4. Kinney Rim North and Kinney Rim South citizens' proposed wilderness areas – These lands provide a roadless, primitive/semi-primitive recreation experience, and represent an increasingly rare large tract of public land in the Red Desert that is free of industrial development. Parts of these now fall within the Adobe Town Dispersed Recreation Use Area designated under the Rawlins RMP.

5. The Flaming Gorge National Recreation Area – This area lays entirely within the area proposed for oil shale leasing in Wyoming. In the FPEIS, National Recreation Areas are not specifically listed as units of the National Landscape Conservation System that will be excluded

from oil shale leasing.[16] However, all of this NRA as well as its viewshed should be excluded from oil shale leasing consideration in order to preserve the scenic and recreational qualities found here.

6. Jack Morrow Hills planning area – This is an area highly important for both dispersed recreation and elk hunting. It contains the Boars Tusk and White Mountains Petroglyph Site, both of which are culturally important to Native American tribes. In addition, an archaeological site in the northwest corner of this area is an ACEC and its setting needs to be protected as well.The "most prospective" oil shale area in Wyoming includes portions of the Jack Morrow Hills planning area, a subset of the Rock Springs Field Office set aside from the Green River RMP in the 1990s for special planning due to its outstanding wildlife resources and strong public interest.
#5])>
<([#6 [*3.8.2*] Because oil shale development includes 100 percent scarification to the land, and represents one of the most major types of visual intrusions possible on BLM lands, leasing should not allow any surface disturbance on lands of Visual Resource Management Class I, II, or III lands. The objectives for Class I and II lands are to "preserve" and "retain" the "existing character of the land, while Class III lands are managed to "partially retain the existing character of the land."*[17] Oil shale development cannot possibly meet these objectives. Based on the definitions for these lands, only the objectives for VRM Class IV, which "provide for management activities which require major modification of the existing character of the landscape" and permit a level of change that is "high," are compatible with oil shale development. See id. The BLM has recently completed a Visual Resource Inventory for portions of the Rawlins and Rock Springs Field Offices, and we recommend that this VRI be incorporated into the EIS process for oil shale as part of its Affected Environment analysis. Notably, the Visual Resource analysis in the DPEIS for the Washakie Basin notes that this is "an area of active energy development" and that associated visual disturbances are found in the basin. DPEIS at 3-207. This section fails to acknowledge that most of the Washakie Basin is in an undeveloped state, however, and contains some of the most outstanding scenic resources in either the Rawlins or Rock Springs Field Offices, including the Adobe Town Very Rare or Uncommon Area, the Kinney Rim citizens' proposed wilderness areas, the Powder Rim, and the Adobe Town Dispersed Recreation Use Area. In order to maintain conformity with local Resource Management Plans pursuant to FLPMA, the BLM should therefore allow oil shale leasing and development on VRM Class IV lands only.*
#6])>

1. **<([#7** [*3.7.5.1*] [*3.7.5.2*] ***Greater Sage-Grouse***

As oil shale development would be expected to result in a 100% loss in habitat function for sage grouse, important sage grouse habitats (both Priority Habitats and General Habitats) should be excluded from oil shale leasing. See Mitigation Measures, DPEIS at 4-133. The BLM is currently undertaking a Sage Grouse Plan Amendment EIS, and the OSTS EIS should include protections at least as stringent as those to be implemented under the Sage Grouse Plan Amendments. The BLM has convened a National Technical Team to develop science-based recommendations for

the management of sage grouse habitats, and we append the Team's report to these comments as Attachment 4 and incorporate the report by reference into these comments. These recommendations do not appear to have been considered under the mitigation measures to be considered for wildlife. DPEIS at 4-132. BLM should implement the recommendations of the National Technical Team in its final decision on oil shale and tar sands leasing; recommended maximum levels of 3% surface disturbance by land area per square mile are especially relevant to oil shale extraction and processing operations. BLM must also render the oil shale/tar sands leasing decision consistent with the agency's 2004 National Sage-Grouse Habitat Conservation Strategy, which remains BLM policy, particularly requirements to consider the best available science.[18]

Sage grouse have been declining across their range over the past 50 years. Wyoming sage grouse populations are some of the largest left in the nation and have experienced lower levels of population loss (showing a 17% decline from 1985-1994); nonetheless, sage grouse populations have experienced major declines rangewide in recent decades (Connelly and Braun 1997). WGFD (2000) reported that since 1952, there has been a 20% decline in the overall Wyoming sage grouse population, with some fragmented populations declining more than 80%; Christiansen (2000) reported a 40% statewide decline over the last 20 years of the 20th Century. Garton et al. (in press) also reported declining trends for the period of 1965-2007. These declines can be attributed to habitat loss (due to agriculture, mining and energy development, reservoirs, roads, and buildings), habitat fragmentation (due to fences, powerlines, roads, and reservoirs), habitat degradation (due to overgrazing, changes in fire regime, and mechanical and chemical sagebrush control efforts), drought, predation (the importance of which is controlled by the amount and quality of sage grouse habitat), and hunting (Braun 1998). These declines are sufficiently serious that the sage grouse has been listed as a Candidate Species under the Endangered Species Act. It is crucially important that the new plan provide for the maintenance and recovery of sage grouse populations, because this bird is headed for the Endangered Species List if population losses continue.

The sage grouse is a reasonably good 'umbrella species' for many types of sagebrush obligate wildlife from pronghorns to pygmy rabbits and BLM Sensitive songbirds, although protecting sage grouse habitat does relatively little for sensitive reptiles (Rowland et al. 2006). Thus, protecting large swaths of sage grouse habitat provides benefits for other types of sensitive wildlife. Large sage grouse Core Areas like South Pass and the Kinney Rim/Vermillion core have been proposed for protection from future oil and gas leasing under the BLM's Wyoming sage grouse plan amendment process as Sage Grouse ACECs as a means of providing a reservoir of healthy populations of sagebrush obligate wildlife; these lands should also be closed to oil shale leasing for the same reasons..

Sage Grouse HabitatsSagebrush steppe is the dominant plant community type found on lands under consideration for oil shale and tar sands development. In the sagebrush steppe habitat type, which encompasses the area proposed for oil shale leasing, some 41% of the historical sagebrush habitat has been converted to other vegetation types or human land uses (Miller et al. in press). Included within this area is southwestern and south-central Wyoming, one of the last bastions of the sagebrush steppe, and although large expanses have been badly fragmented by oil and gas projects like the Continental Divide – Wamsutter projects, large expanses of essentially untouched sagebrush grassland still remain in the oil shale area. In fact, south-central and southwestern Wyoming have been projected to be the most likely place in the nation to retain the sagebrush ecosystem required by sage grouse (and other sagebrush obligates) in

the face of changing climate, based on the area of agreement between 9 climate change models (Neilson et al. 2005, Attachment 5). Rangewide, climate change is expected to favor the expansion of exotic invasive species at the expense of native vegetation species (Miller et al. in press). The sagebrush steppe ecosystem is home to many rare or declining wildlife species, including the ferruginous hawk, sage grouse, burrowing owl, white-tailed prairie dog, swift fox, pygmy rabbit, Wyoming pocket gopher, black-footed ferret, and mountain plover. The fact that south-central Wyoming is perhaps the last major stronghold of the sagebrush steppe ecosystem and the species that are dependent on it presents a compelling reason that the oil shale/tar sands RMP amendments should regulate development and human use in a way that promotes the persistence of large blocks of intact sagebrush steppe rather than allowing the continued fragmentation of sagebrush habitats until only a few tatters of sagebrush steppe remain.

The Core Area system as currently envisioned by the Wyoming state government is a conceptually useful framework for this, although it incorporates certain political compromises that reduce the Core Area system's effectiveness as a conservation tool, such as excluding some of the highest-value sage grouse habitats from Cores based on the desires of industry to develop them, and the implementation of biologically inadequate protection measures for grouse both inside and outside of Core Areas. BLM has full authority to manage sage grouse habitats on BLM lands; these weaknesses in the state's Core Area strategy can and should be corrected on federal lands through BLM management decisions, including the OSTS plan amendments.

To ensure the viability of sage grouse populations, it is important to consider nesting, brood-rearing, and winter habitats (Call and Maser 1985). Holloran and Anderson (2005) found that 64% of sage grouse females nested within 5 km of a lek. Connelly et al. (2000) proposed comprehensive guidelines regarding the management of sage grouse, focused around the conservation of breeding/nesting habitat, late summer brood-rearing habitat, and wintering habitat. We recommend that these guidelines be implemented in the forthcoming RMP amendments, with the modification of a 3-mile NSO and no surface disturbance/vegetation treatment buffer at minimum (5 miles would be preferable) for sage grouse leks in order to protect the leks themselves as well as adjacent nesting habitat. These alternatives should be fully explored and considered in the forthcoming DEIS.
Breeding and Nesting HabitatsAutenreith (1985) considered the lek site "the hub from which nesting occurs" (p. 52). Grouse exhibit strong fidelity to individual lek sites from year to year (Dunn and Braun 1986). During the spring period, male habitat use is concentrated within 2 km of lek sites (Benson et al. 1991). Young males may establish new leks in order to take part in breeding (Gates 1985). Because leks sites are used traditionally year after year and represent selection for optimal breeding and nesting habitat, it is crucially important to protect the area surrounding lek sites from impacts.
The maintenance of high-quality sagebrush steppe habitats, particularly nesting and wintering habitats, is necessary to maintain sage grouse viability on the landscape scale. Regarding energy development, according to Naugle et al. (2010), "Severity of current and projected impacts indicates Severity of current and projected impacts indicates the need to shift from local to landscape conservation." Sage grouse are dependent on sagebrush steppe habitats, and sage grouse distribution is closely linked with the distribution of big sagebrush (McCall 1974). Numerous studies have shown that female sage grouse show strong fidelity to specific nesting areas from year to year (Berry and Eng 1985, Fischer et al. 1993, Lyon 2000). Fischer et al.

(1993) concluded, "Because Sage Grouse hens appear to seek suitable habitat within a relatively small area, nest-area fidelity may reduce nesting if large areas of nesting habitat are destroyed" (p. 1040). Thus, it is important to foster sagebrush growth at levels useful to sage grouse and to avoid activities that destroy suitable sagebrush habitat.

The optimum height and cover of sagebrush for sage grouse nesting habitats varies from region to region. In their eastern Oregon study, Call and Maser (1985) reported that sagebrush between 30 and 60 cm made the best nesting habitat, while a range of 15-80 cm was suitable for nesting. In the foothills of the Sierra Madres, shrub height at nest sites averaged 22 cm (Klott and Lindzey 1989). In other studies, nesting habitat is typified by greater shrub height and shrub cover (Wallestad and Pyrah 1974, Sveum et al. 1998). Dunn and Braun (1986) found that grouse selected areas with taller shrubs and more homogeneous sagebrush densities, and closer distance to wooded or meadow edges. But in Idaho, Klebenow (1969) found that sage grouse did not nest in areas where sagebrush cover exceeded 35%. Within suitable nesting habitat, nest sites tend to be located under taller-than-average shrubs, particularly sagebrush (Hulet et al. 1986).

Habitat attributes have a direct effect on sage grouse population dynamics. Connelly et al. (1991) found that nest success was higher for birds nesting below sagebrush (53%) versus other shrubs (22%), and hypothesized that avian predation was the key to nest success. In central Washington, Sveum et al. (1998) found that sagebrush cover at successful nest sites averaged 51%, and height averaged 64 cm, while at depredated nests cover and height averaged 70% and 90 cm, respectively. Wallestad and Pyrah (1974) found that sagebrush cover exceeded 15% for all nest sites, and cover of sagebrush was positively correlated with nest success. Several studies have shown that successful nest sites have greater cover of tall grass (Gregg et al. 1994, Sveum et al. 1998). With this in mind, Holloran (1999) recommended leaving residual grass heights greater than 12 cm following removal of livestock in autumn. Thus, not only sagebrush height and density but also understory grass cover are important to maintain in sage grouse nesting areas. BLM should incorporate the sagebrush remote-sensing mapping projects occurring in Wyoming and elsewhere across the sage grouse's range into its OSTS DEIS analysis of baseline information, as a means for evaluating sage grouse habitat attributes beyond the useful index of lek size and location.

Early and Late Brood Rearing Habitats

Sage grouse may move some distance from nesting sites for early and late brood rearing. In western Wyoming, Lyon (2000) found that sage grouse moved an average of 1.1 km from the nest site for early brood-rearing, and late brood-rearing habitats averaged 4.8 km distant from the early brood-rearing areas. In Bates Hole, Holloran (1999) found that early brood rearing habitats are typified by decreased sagebrush cover and height and increased forb abundance, and movement to riparian sites occurred as uplands became dessicated. This pattern of movement and habitat selection is echoed in the findings of Oakleaf (1971). In western Wyoming, wet meadows, springs, seeps, and other green areas within sagebrush steppe were important for early brood-rearing, while late brood rearing focused on irrigated hay meadows, wet meadows, and drainage bottoms which remained green when early brood rearing habitats were withering (Lyon 2000). This researcher found that most recruitment loss occurred during the early brood rearing stage, and that this may be a limiting factor in sage grouse populations (Ibid.). In Nevada, Oakleaf (1971) found that meadows with succulent forbs, while occupying only 2.3% of grouse home ranges during the brood rearing period, were disproportionately important as brood-rearing habitat. In central Washington, Drut et al. (1994b) found that during late brood-

rearing, habitat use shifted from low sagebrush to big sagebrush sites, with heightened use of meadows and lakeshores. Brood-rearing habitats should thus be identified and managed to maximize sage grouse recruitment success.

The availability of forage with a high nutritional content is an important factor determining brood success. Broods require forbs, insects and cover for growth, concealment and shade (Autenreith 1985). The diet of sage grouse chicks is dominated by insects in the first week of life, with forbs becoming more important as time progresses (Call and Maser 1985). Oakleaf (1971) reported that succulent forbs dominated the diets of brood-rearing hens and juveniles until the chicks reached 11-12 weeks of age. Drut et al. (1994a) found that in the area with high sage grouse productivity, insects and forbs made up 80% of chicks' diets, while sagebrush buds made up 65% of diets in the area of low sage grouse productivity. These researchers reached the following conclusions:

"Substantially lower consumption of forbs and invertebrates and increased reliance on sagebrush may affect chick growth and survival, which would be reflected in long-term differences in productivity between areas. Insects are a critical nutrition source for developing chicks" (p. 93).

Dunn and Braun (1986) argued that meadows, as important forb-producing areas, should be preserved. Thus, the BLM should manage sage grouse brood-rearing habitat to maximize high-quality forage for chicks.

Mesic meadows and surface waters are focal points of sage grouse activity during certain times of year. Mesic sites associated with springs, seeps, and streams are critical for sage grouse on a yearlong basis, and assumes even greater importance as brood rearing habitat (Autenreith et al. 1982). Call and Maser (1985) stated, "We believe that free water is an essential component of sage grouse habitat", but noted that "[s]age grouse may do well in the absence of free water where they have access to succulent vegetation." (p. 4). Oakleaf (1971) found that the presence of surface water was an important factor that increased the value of meadows as grouse rearing habitat. Thus, BLM should map these key early brood rearing habitats as part of NEPA's baseline information gathering in the OSTS DEIS, and management of oil shale leasing and development should include special emphasis on avoiding and protecting wet meadows, springs, and seeps.

Wintering Habitats

Non-migratory sage grouse winter on their nesting and brood-rearing habitats, while migratory populations may travel some distance to winter on traditional wintering areas. For non-migratory populations, nesting habitat and wintering habitat are one and the same (e.g., Wallestad and Pyrah 1974). In a western Wyoming study, however, sage grouse were migratory and traveled at least 35 km to separate wintering grounds (Berry and Eng 1985). In Colorado's North Park, Beck (1977) found that grouse migrated 5-20 km away from breeding areas during winter. In a southeastern Idaho study, Connelly et al. (1988) found that some adult sage grouse moved more than 60 km to winter range, and some juveniles moved more than 80 km, despite the availability of suitable wintering habitat nearby. In some cases, sage grouse may be widely dispersed during mild winters but concentrate during severe winters (e.g., Autenreith 1985). Sage grouse may be keying in on several habitat variables when selecting appropriate wintering habitat. In the southern Red Desert, Kerley (1994) found that wintering sage grouse moved to tall sagebrush stands on steep south-facing slopes, where the sagebrush were exposed above the snow. Conversely, Beck (1977) found that in North Park, Colorado, 66% of sage grouse wintered on slopes of less than 5%, while only 13% of sage grouse use occurred on slopes

greater than 10%. In Montana, Eng and Schladweiler (1972) found that 82% of winter sage grouse sightings occurred in canopy cover greater than 20%, and a preference was shown for dense stands on lands with little slope. Carpenter et al. (2010) found in Canada, sage grouse selected less rugged topography at lower elevations. Dougherty et al. (2010) found that wintering grouse selected dense sagebrush for both food and cover. The BLM must identify sage grouse wintering habitats within the planning areas and emplace strong measures to protect them from oil shale leasing and development, with an appropriate buffer to ensure that oil shale and tar sands operations immediately adjacent to important wintering habitats do not cause disturbance to birds using those habitats.

Researchers appear to be unanimous in their recommendations that sage grouse winter habitat be protected from disturbance. Kerley (1994) recommended, "Because shrub stands used during winter (category 3 stands) make up a small proportion of available habitats, these patches on south facing slopes, as well as other traditional wintering sites, should not be treated [to remove or reduce shrubs]" (p.113). Since oil shale development would remove all shrubs, it certainly falls into this category of activities that should be proscribed by BLM. Connelly et al. (2000) concurred, recommending against habitat manipulation in sagebrush stands of 10-30% canopy cover heights of at least 25 cm to protect winter habitats. According to Beck and Braun (1980), "Areas of winter concentrations of sage grouse need to be documented and afforded maximum protection" (p. 564). Lyon (2000) recommended that sage grouse wintering habitats be placed off-limits to oil and gas development. Thus, in the OSTS planning area, the BLM needs to rapidly identify sage grouse winter concentration areas and place the areas off-limits to surface disturbance.

Vegetation Treatments

Because the sage grouse is dependent on sagebrush, sagebrush treatments are likely to have major impacts on sage grouse population viability. The OSTS DEIS should consider the cumulative effects that OSTS development would have combined with past and current vegetation treatment programs, and consider the reduction and/or elimination of vegetation treatment projects as part of the overall picture of sage grouse habitat management in the context of OSTS leasing and potential development. Call and Maser (1985) asserted that the spraying of sage grouse nesting habitats is deleterious because it reduces nest cover from avian predators and suppresses forbs that are important in the sage grouse diet. According to Kerley (1994), "shrub stands of 20-40% cover are needed for successful nesting and this shrub coverage should be maintained on identified breeding complexes [within 3.2 km of leks]" (p. 113). Wamboldt et al. (2002) stated:

"Natural or prescribed burning of sagebrush is seldom good for sage-grouse. This assessment recommends that fires within sage-grouse habitat be avoided in most cases, and should be allowed only after careful study of each local situation. The evidence also indicates that habitat loss due to fire may well be the most serious of all the factors contributing to the decline of sage-grouse" (p.24).

Heath et al. (1997) went even farther: "Based on our results, we recommend no reduction or control of sagebrush in areas containing between 18-30% live sagebrush canopy coverage within 4.5 km of leks" (p.50). According to Beck and Braun (1980),

"At present we do not know the relative value of a small versus large strutting ground to the population. Therefore we should afford equal merit to all and strive to maintain the adjacent

habitats, especially areas with sagebrush (Artemesia) suitable for nesting and brood rearing" (p. 563).
Call and Maser (1985) stated that spraying should not occur within the breeding complex (which they defined as within 2 miles of a lek), and should also be forbidden in known grouse winter ranges. Taking into account the negative effects of vegetation treatments on sage grouse nesting and lekking areas, and uncertainty in the overall extent of sage grouse nesting habitat surrounding lek sites in the Great Divide region, the BLM should prohibit vegetation treatments within 3 miles of sage grouse lek sites.

Strip Mining
Strip mining for coal has been shown to impact sage grouse populations through major local decreases in recruitment (Braun 1986); local distribution patterns and decreases in lek use are the principal effects, with disturbance, rather than habitat loss, being the primary factor (Remington and Braun 1991). Because oil shale development either involves strip mining directly, or in the case of in situ methods, involves a level of habitat destruction roughly equivalent to strip mining, Klott (1987) recommended that areas near sage grouse leks be avoided for the purposes of strip mining. We concur, and ask the BLM to withdraw lands within 5 miles of a sage grouse lek from lands suitable for surface mining or in situ development under the OSTS plan amendments.

Road Development
Road development can lead to lek abandonment (e.g., Braun 1986). In western Wyoming, Lyon (2000) found that for sage grouse leks within 3 km of oil and gas developments, grouse hens successful at raising their broods selected habitats farther from roads than unsuccessful hens. This finding indicates that habitats near roads experience reduced brood survivorship. Thus, the oil shale RMP amendments should include a moratorium on all road-building within 3 miles of a lek site.

Lessons Learned from Oil and Gas Development
Over the past 10 years, oil and gas development has posed perhaps the greatest threat to sage grouse viability in the region. There has also been much study concerning the impacts of oil and gas development on sage grouse, the findings of which are applicable to oil shale development as well. Over 8% of the total range of sage grouse has already been impacted by oil and gas development; in addition, the Wyomi9ng Basin and Colorado Plateau ecoregions are among thiose areas that have the greatest proportion of land under lease (and therefore at risk for future industrialization) (Knick et al., in press). Oil shale development, while having a much greater intensity of development (100% landscape destruction rather than the 3-5% of a typical oil and gas field) also involves heavy vehicle traffic, human activity at the site of production, and networks of roads and potentially pipelines to support it. The BLM must consider the current level of energy development impact on sage grouse, which has been sufficient to list the sage grouse as "Warranted but Precluded" under the ESA, cumulatively with the impacts of oil shale development when performing its impact analysis for the OSTS PEIS.
In a study near Pinedale, sage grouse from disturbed leks where gas development occurred

within 3 km of the lek site showed lower nesting rates (and hence lower reproduction), traveled farther to nest, and selected greater shrub cover than grouse from undisturbed leks (Lyon 2000). According to Lyon (2000), impacts of oil and gas development to sage grouse include (1) direct habitat loss from new construction, (2) increased human activity and pumping noise causing displacement, (3) increased legal and illegal harvest, (4) direct mortality associated with reserve pits, and (5) lowered water tables resulting in herbaceous vegetation loss. Pump noise from oil and gas development may reduce the effective range of grouse vocalizations (Klott 1987). Thus, lek buffers are needed to ensure that booming sage grouse are audible to conspecifics during the breeding season. Connelly et al. (2000) recommended, "Energy-related facilities should be located >3.2 km form active leks" (p. 278). But Clait Braun (pers. comm.), the worlds most eminent expert on sage grouse, recommended even larger NSO buffers of 3 miles from lek sites, based on the uncertainty of protecting sage grouse nesting habitat with smaller buffers. Thus, areas within 3 miles of a sage grouse lek should be put under year-round "No Surface Occupancy" stipulations.

Oil and gas development poses perhaps the greatest single threat to sage grouse persistence in Wyoming. Walker et al. (2007) found that sage grouse habitat within 4 miles of a lek site was important to the persistence of the lek. Conversely, Walker et al. (2007) concluded that leks heavily impacted by oil and gas development "typically became inactive within 3-4 years." Harju et al. (2008) found a time lag of 2-10 years post-development, at which point negative effects became evident. The BLM should be able to predict, on the basis of the location of oil and gas projects both major and minor that are currently underway or are presently being approved, which sage grouse leks are likely to become inactive over the short term once development begins, and this is a key analysis that needs to be performed in order to properly evaluate the prognosis of sage grouse populations in Wyoming and other states being adversely impacted by energy development. The same is true for winter habitats. Indeed, Naugle et al. (2006) found that a model using habitat variables and coalbed methane development provided a near perfect fit for grouse distribution data. In the Powder River Basin, CBM well density within a 4 km^2 area provided the best fit for modeling sage grouse habitat use (Doherty et al. 2008).

Walker et al. (2007) found that coalbed methane development within 2 miles of a sage grouse lek had negative effects on lek attendance. Holloran (2005) found that active drilling within 3.1 miles of a lek reduced breeding populations, while wells already constructed and drilled within 1.9 miles of the lek reduced breeding populations. One would expect oil shale development to track within this range; it is important to note that impacts to nesting hens are a second matter, and hens typically nest within 5.3 miles of leks. In Canada, Carpenter et al. (2010) found that sage grouse strongly avoided oil and gas infrastructure to a distance of 1.9 km, and avoided two-track vehicle trails more weakly to a distance of 1.5 km; the closest that a grouse was located to a coalbed methane well was 1,293m. Harju et al (2008) found that negative impacts of development on lek populations extended 4.8 km (3 miles) from the development. Both Holloran (2005) and Walker et al. (2007) documented the extirpation of breeding populations at active leks as a result of oil and gas development in the Upper Green River Valley and Powder River Basin, respectively. Rowland et al. (2006: A4-3 through A4-7) provide a useful literature review of the distance that impacts spread beyond the edge of disturbed areas into adjacent habitats. Road construction related to energy development is a primary impact on sage grouse habitat from habitat fragmentation and direct disturbance perspectives. Rowland et al. (2006) modeled sage grouse distribution, and reached the following conclusions:

"The secondary road network is a highly significant factor influencing processes in this

landscape and is being developed and expanded rapidly across much of the WBEA (Thomson et al. 2005). Secondary roads are being built as part of the infrastructure to support non-renewable energy extraction (Chapters 2, 4). For example, within the Jonah Field in the Upper Green River Valley, >95% of the area had road densities >2 mi/mi^2 (Thomson et al. 2005)." p. 5-10.Furthermore,

"The dominant feature affecting output of the sage-grouse disturbance model was secondary roads, which occupy nearly 8% of the study area (Table 5.2) and are presumed to negatively influence an even larger extent."
Pp. 6-15 through 16. Holloran (2005) found significant impacts of road traffic on sage grouse habitat use, concluding that habitat effectiveness declined in areas adjacent to roads with increasing vehicle traffic, documenting the secondary effect referenced by Rowland et al.
A number of researchers have noted a time lag between initiation of mineral development and sage grouse population declines. Holloran et al. (2010) noted that yearling males avoided lekking near oil and gas infrastructure, and that yearling females avoided nesting within 950m of oil and gas infrastructure. Thus, the time lag in populations may be driven by the exodus of yearlings from affected areas, while older birds hang on until they die. These researchers stated, "Our results…suggest to land managers that current stipulations on development may not provide management solutions."

Lek Buffers
Current BLM nest buffers for oil and gas of ¼ mile for no surface occupancy and 2 miles for seasonal stipulations traditionally applied, and still applied outside sage grouse Core Areas, are grossly inadequate to maintain sage grouse viability in the planning area. The lek buffer must be based not only on maintaining the lek but also the nesting habitat that surrounds the lek. In addition, seasonal prohibitions that prohibit only construction activities near leks are pointless: If roads or wells are built near leks during the off-season, the resulting regular vehicle traffic will have major negative impacts when the sage grouse are present, effectively circumventing any mitigative value of delaying construction activities.
As a rule, breeding and nesting activity are concentrated in the habitats adjacent to the lek site. In a Montana study, Wallestad and Schladweiler (1974) found that no male sage grouse traveled farther than 1.8 km from a lek during the breeding season. But following breeding, males may make long migrations to distant summer ranges (Connelly et al. 1988). Hulet et al. (1986) found that 10 of 13 hens nested within 1.9 miles of the lek site during the first year of their southern Idaho study, with an average distance of 1.7 miles from the lek site; 100% of hens nested within 2 miles of the lek site during the second year of this study, with an average distance from lek of 0.5 mile. In Montana, Wallestad and Pyrah (1974) found that 73% of nests were built within 2 miles of the lek, but only one nest occurred within 0.5 mile of the lek site.
But in Bates Hole, Wyoming, Holloran (1999) found that average nesting distance from lek site was 3.25 km for adults and 5.27 km for yearlings. Wakkinen et al. (1992) cautioned that leks were poor predictors of sage grouse nest sites; although 92% of sage grouse nested within 3.2 km of a lek in this study, sage grouse did not necessarily nest near the same lek where breeding took place.
Lyon (2000) pointed out that quarter-mile lek buffers were insufficient to maintain the viability of grouse populations. Several years ago, a multi-state group of fish and game biologists evaluated the standard BLM mitigation measures for grouse, and found them wholly inadequate. See

Attachment 6. Naugle et al. (2010) reinforce this assertion with a litany of examples of development compatible with BLM's standard suite of stipulations that exceed sage grouse tolerances. Connelly et al. (2000) recommended that sage grouse habitat should be protected within 3.2 km of lek sites under ideal habitat conditions, within 5 km when habitat conditions are not ideal, and within 18 km where sage grouse populations are migratory. Furthermore, these researchers stated that in areas where 40% or more of the original breeding habitat has been lost, all remaining habitat should be protected. Holloran (2005) provided a critical test of BLM's lek buffers' effectiveness in the Jonah and Pinedale Anticline fields, and found that in the face of full-field gas development, finding that extirpation was expected for sage grouse in both fields within 19 years if conditions remained the same (and, of course, conditions have become much worse for grouse under the continued intensification of drilling and road construction in these two fields).

But Beck (1977) cautioned that protection of lek sites only is insufficient to maintain sage grouse winter habitats. And Connelly et al. (1988) later cautioned, "Protection of sagebrush habitats within a 3.2 km radius of leks may not be sufficient to ensure the protection of year-long habitat requirements" (p. 116). And Braun recommended even larger buffers of 3 miles from lek sites where surface disturbance and vegetation treatments should be prohibited, based on the uncertainty of protecting sage grouse nesting habitat with smaller buffers. See Attachment 7.

BLM commits to "Avoid leasing and/or development in sage grouse habitats." DEIS at 4-133. Thus, areas within 5 miles of a sage grouse lek and identified wintering areas should be put under year-round stipulations preventing habitat alterations for the purposes of oil shale leasing and development.

Sage Grouse Predators

A number of raptors and medium-sized mammalian carnivores prey on sage grouse. Sage grouse nest predators include bobcats, golden eagles, red fox, badgers, common ravens, and coyotes (Heath et al. 1997). Coates and Delahanty (2010) found that increases in raven populations were correlated with sage grouse declines in Idaho. Hulet et al. (1986) found that the Uinta ground squirrel was the most important nest predator in their southern Idaho study area. Interestingly, Mezquida et al (2006) postulated that "coyote control is likely detrimental to sage grouse conservation" because coyotes may have a negative influence on foxes, badgers, and ravens, which are the most important nest predators for sage grouse. The maintenance of appropriate habitat and adequate cover, particularly on nesting and brood-rearing habitats, is important to ensure that predation rates do not increase to abnormal levels. In addition to maintaining cover, it is important to avoid the construction of tall structures that serve as raptor perches and concentrate predation pressure, like powerlines and gas condensate tanks, near these habitats. BLM should evaluate in its DEIS the cumulative effects that oil shale will have with predation on sage grouse, and the possible changes to interactions which oil shale development might cause between sage grouse and their predators.

Monitoring

The number of active sage grouse leks can be a useful index of sage grouse population trends (Emmons and Braun 1984). Autenreith et al. (1982) provide a sound monitoring protocol which the BLM should adopt to monitor sage grouse trends. Aerial lek surveys should be undertaken each spring to determine presence/absence of grouse on known lek sites and to locate new lek sites, and a subset of leks should be censused at regular intervals at dawn throughout the

breeding season to gain an index of population trend. It is important to note that the number of grouse at a lek site can vary greatly from day to day (Beck and Braun 1980), so repeat censuses will be needed to establish a mean value. Emmons and Braun (1984) pointed out that timing of lek counts may affect number of grouse observed, as lek attendance is not constant and males commonly move between leks. These researchers recommended that four separate lek counts be taken for each lek, about 10 days apart. Brood counts should be undertaken 11-13 weeks after the peak of hatch using chick distress calls, and average number of chicks per hen should be derived, using both successful and nullparous hens. The OSTS EIS should include a detailed monitoring protocol for recording the response of sage grouse to oil shale development on neighboring lands.

We strongly support the BLM's decision to include a more thorough review of the greater sage-grouse in the PEIS. Notably, while the BLM is taking comments on the scope of this review, the agency is also taking comments on the proposed TransWest Express Line transmission project. That project, like oil shale and tar sands development, will force the agency to ensure its decisions and development activities that follow can protect this important species. Should the BLM not protect this species and its numbers continue to decline, all energy development in the three-state region, including important renewable energy projects, will be seriously compromised.

As the BLM is acutely aware, listing under the ESA is not hypothetical. Since the FPEIS was issued in 2008, the USFWS ruled the sage-grouse is "warranted but precluded" under the ESA. As the agency cautions, "Evidence suggests that habitat fragmentation and destruction across much of the species' range has contributed to significant population declines over the past century. If current trends persist, many local populations may disappear in the next several decades, with the remaining fragmented population vulnerable to extinction."[19] The USFWS determined that southwestern and central Wyoming and northwestern Colorado are strongholds for sage-grouse, with some of the highest estimated densities of males anywhere in the remaining range of the species. The USFWS also identified this high-density sagebrush area as one of the highest priorities for conservation consideration as it comprises one of two remaining areas of contiguous range essential for the long-term persistence of the species."[20]

The BLM recognizes the challenge. As the BLM correctly stated in the FPEIS, "[G]reater sage-grouse have experienced long-term declines because of degradation and loss of important sagebrush steppe and grassland habitat."[21] In addition, as the BLM clearly states, "the decline in greater sage-grouse populations is believed to be the result of a number of factors, including oil and gas wells and their associated infrastructure, traffic, power lines, urbanization, recreation, predators, and a decline in the quality and quantity of sagebrush habitat."[22]

That is why the BLM flagged sage-grouse and oil shale in Instruction Memorandum 2010-071.[23] The precarious nature of the species survival and the nexus to energy development is also why former Wyoming Governor Dave Freudenthal proactively designated core protection areas. It is also why in 2007, the Center for Native Ecosystems petitioned for ACEC designation all known sage-grouse lek sites within the White River Field Office plus four-mile buffers around each site. As provided in the IM, and consistent with Wyoming's strategy and CNE's petition,

one way of to achieve these goals is to establish No Surface Occupancy (NSO).

As noted above, oil and gas development has negatively impacted sage-grouse populations. Because oil shale and tar sands would be concurrent with oil and gas and other uses, the PEIS must consider the cumulative impacts of the proposed action in combination with these uses.

Additional details about the sage-grouse

The sage-grouse is a reasonably good umbrella species for many types of sagebrush obligate wildlife, from pronghorns and pygmy rabbits to BLM Sensitive songbirds.[24] The maintenance of high-quality sagebrush steppe habitats, particularly nesting and wintering habitats, is necessary to maintain viable sage-grouse populations. That's why large sage-grouse Core Areas like South Pass and the Kinney Rim/Vermillion have been proposed for protection from future oil and gas leasing under the BLM's Wyoming sage-grouse plan amendment.

To ensure viable sage-grouse populations, it is important to consider nesting, brood-rearing, and winter habitats. Holloran and Anderson found that 64% of sage-grouse females nested within 5 km of a lek.[25] Connelly proposed comprehensive guidelines regarding the management of sage-grouse, focused around the conservation of breeding/nesting habitat, late summer brood-rearing habitat, and wintering habitat.[26]

In western Wyoming, Lyon found that sage-grouse moved an average of 1.1 km from the nest site for early brood-rearing, and late brood-rearing habitats averaged 4.8 km distant from the early brood-rearing areas.[27] In Bates Hole, Holloran found that early brood rearing habitats are typified by decreased sagebrush cover and height and increased forb abundance, and movement to riparian sites occurred as uplands became desiccated.[28] In addition, the availability of forage with a high nutritional content is an important factor determining brood success. Broods require forbs, insects and cover for growth, concealment and shade (Autenreith 1985). Additionally, mesic meadows and surface waters are focal points of sage-grouse activity during certain times of year. Mesic sites associated with springs, seeps, and streams are critical for sage-grouse on a year-long basis, and assume even greater importance as brood rearing habitat (Autenreith et al. 1982).

As for winter habitats, non-migratory sage-grouse winter on their nesting and brood-rearing habitats, while migratory populations may travel some distance to winter on traditional wintering areas. A western Wyoming study determined sage-grouse traveled at least 35 km to separate wintering grounds.[29] In Colorado's North Park, Beck found that grouse migrated 5-20 km away from breeding areas during winter.[30]

Additionally, researchers appear to be unanimous in their recommendations that sage-grouse winter habitat be protected from disturbance. According to Beck and Braun, "Areas of winter concentrations of sage-grouse need to be documented and afforded maximum protection."[31] Lyon recommended that sage-grouse wintering habitats be placed off-limits to oil and gas development.[32] Thus, in the oil shale and tar sands planning areas, the BLM needs to rapidly identify sage-grouse winter concentration areas and place the areas off-limits to surface

disturbance. Since oil shale development would remove all shrubs, development clearly falls into the category of activities that should be prohibited by the BLM.
Another issue that warrants attention is vegetation treatments. Because the sage-grouse is dependent on sagebrush, sagebrush treatments are likely to have major impacts on sage-grouse population viability. The PEIS should evaluate the cumulative effects that oil shale and tar sands development would have when combined with past and current vegetation treatment programs. The PEIS should also consider the reduction and/or elimination of vegetation treatment projects. Call and Maser asserted that the spraying of sage-grouse nesting habitats is deleterious because it reduces nest cover from avian predators and suppresses forbs that are important in the sage-grouse diet.[33]
In the PEIS the BLM must also evaluate the effects of industrial activities on sage-grouse populations. Strip mining for coal has been shown to impact sage-grouse populations through major local decreases in recruitment.[34] Because oil shale development either involves strip mining directly, or in the case of in situ methods a level of habitat destruction roughly equivalent to strip mining, areas near sage-grouse leks should be avoided. Road development can also lead to lek abandonment.[35] In western Wyoming, Lyon found that for sage-grouse leks within 3 km of oil and gas developments experienced reduced brood survivorship.
When evaluating these and other impacts, oil and gas development provides a good starting point for the BLM's analysis. As Molvar explains, over the past 10 years, oil and gas development has posed perhaps the greatest threat to sage-grouse viability in the region. Over 8% of the total range of sage-grouse has already been impacted by oil and gas development; in addition, the Wyoming Basin and Colorado Plateau ecoregions are among those areas that have the greatest proportion of land under lease (and therefore at risk for future industrialization). In a study near Pinedale, Wyoming sage-grouse from disturbed leks where gas development occurred within 3 km of the lek site showed lower nesting rates (and hence lower reproduction), traveled farther to nest, and selected greater shrub cover than grouse from undisturbed leks.[36] Oil shale development, while having a much greater intensity of development – 100% landscape destruction rather than the 3-5% of a typical oil and gas field – also involves heavy vehicle traffic, human activity at the site of production, and networks of roads and potentially pipelines to support it.
Current BLM nest buffers for oil and gas of ¼ mile for NSO and 2 miles for seasonal stipulations are grossly inadequate to maintain sage-grouse viability in the planning area. The lek buffer must be based not only on maintaining the lek but also the nesting habitat that surrounds the lek. In addition, seasonal prohibitions that prohibit only construction activities near leks are pointless: If roads or wells are built near leks during the off-season, the resulting regular vehicle traffic will have major negative impacts when the sage-grouse are present, effectively circumventing any mitigative value of delaying construction activities.
We therefore recommend that the PEIS and RMP amendments include a 3-mile NSO and no surface disturbance/vegetation treatment buffer at minimum (5 miles would be preferable) for sage-grouse leks, winter habitat, and other vital sage-grouse habitats.
#7])> F. Sensitive fishes and wildlife
<([#8 [*3.7.4.1*] *BLM explains the greater potential for severe impact for Sensitive species due to their smaller population sizes. DEIS at 4-97. But while the Sensitive Species' potential to be impacted is listed in Table 4.8.1-5, nowhere in the EIS are estimates of population size and trend for each species presented, nor does the EIS disclose how many populations of each species are likely to be extirpated under each alternative as a result of the cumulative impacts of oil shale*

development along with existingb types of development (e.g., oil and gas fields) already impacting these species. This presents a difficulty from the NEPA "hard look" perspective.
We are concerned about the impacts of oil shale development on the four species of Endangered fishes that inhabit the Colorado River system: the Colorado pikeminnow, bonytail, humpback chub, and razorback sucker. The negative impacts of oil shale development on these species (see DEIS at 4-122) likely preclude large-scale development except in cases where impacts can be isolated from waterways. The DEIS states that indirect effects from development in Wyoming are unlikely (id.), however this is not the case because contamination entering waterways in Wyoming will inexorably make its way downstream to inhabited stream reaches, and water depletions in Wyoming will affect downstream river flows in Colorado and Utah. In addition, Wyoming has four species of BLM Sensitive fishes that are potentially impacted by oil shale development: the Colorado River cutthroat trout, flannelmouth sucker, bluehead sucker, and roundtail chub. Oil shale has many potyential impacts on fishes, including increasing stream turbidity, contaminants leaching from tailings or from spills, onstructions to fish movement, and nutrient loading associated with increasing human population, should commercial leasing bear fruit. DEIS at 4-76. The only reproductively isolated population of bluehead sucker in Wyoming is in upper Bitter Creek. DEIS at 3-134. This population deserves special protection.
#8])> G. <([#9 [*3.7.3.9*] [*3.7.3.12*] **Key big game habitats deserve protection for oil shale and tar sands development**
Big game crucial winter ranges, parturition areas, and migration corridors are critical to the survival and health of big game herds, and deserve protection from oil shale and tar sands development. The DEIS summarizes potential impacts of oil shale development in such areas. DEIS at 4-85, and see 4-87. The "debilitating stress" referenced in the DEIS can lead to population-level impacts, such as the 60% drop in mule deer wintering on and near the Pinedale Mesa as a result of the Pinedale Anticline gas project. The DEIS states that oil shale operations would displace wildlife for "several decades" but that "Reclamation, which would occur in parallel with or after extraction activities are completed, would reduce or eliminate ongoing impacts to the extent practicable by recreating [sic] habitats and ecological conditions that would be suitable to wildlife species." DEIS at 4-82. We view this statement as an unreasonably optimistic one in light of research indicating that Wyoming big sagebrush can take up to a century to recover following oil and gas activities. Oil shale and tar sands leasing should not occur within 0.5 mile of big game crucial winter ranges, parturition areas, or migration corridors.
The Draft PEIS does not include baseline information on population size and trend for any big game species. See DEIS at 3-163 through 165. It also does not include any estimates for changes to population by alternative. This would seem pose a 'hard look' issue under NEPA.
#9])> *H. Raptor nest sites should be protected from oil shale development*
<([#10 [*3.7.3.1*] [*5*] [*3.7.3.9*] Nesting birds of prey are particularly vulnerable to disturbance by industrial activities of all kinds. Yet the OSTS DEIS has scant analysis on the impacts of oil shale development on raptors in particular, and does not include sufficiently strong mitigation measures. Oil shale development, being particularly noisy and heavy impact by nature, would be expected to be on the more sever end of the spectrum. We recommend attaching mitigation measures requiring not less than a one-mile no surface disturbance buffer for active raptor nests generally and a corresponding two-mile buffer for ferruginous hawks, which are especially sensitive to disturbance. **#10])>**
<([#11 [*3.7.3.1*] [*3.7.3.9*] [*3.7.4.1*] *Raptor populations nationwide are on the rebound following*

declines based largely on insecticide spraying, predator poisoning programs, and shooting in the 1960s and 1970s. Raptors of special concern include the golden eagle, prairie falcon, peregrine falcon, ferruginous hawk, merlin, and burrowing owl. Because they require large natural areas for survival, raptors may be good umbrella species for the protection of entire ecological communities (Burnham and Holroyd 1995).

Importance of Cliff Habitats*Cliffs provide important nesting substrates preferred by a broad spectrum of raptors. A study near Medicine Bow, Wyoming found that cliffs provided the single most important nesting habitat for raptor species in the region, and 93% of all prairie falcon nests were found on cliffs, despite the comparative rarity of this landform in the Medicine Bow area (MacLaren et al. 1988). In a Utah study, prairie falcons and golden eagles nested exclusively on cliff sites (Smith and Murphy 1982). Thus, in terms of value to nesting raptors, areas with cliff topography may be of heightened conservation importance.*

Importance of Prairie Dogs to Raptor Populations*Prairie dogs can be an important mainstay of raptor diets. In a study near Medicine Bow, Wyoming, white-tailed prairie dogs made up 38% of the biomass in the diets of prairie falcons, 18% for golden eagles and red-tailed hawks, and 22% of ferruginous hawk diet biomass (MacLaren et al. 1988). Prairie dog colonies are also important to the survival of raptor populations on their wintering areas. Jones (1989) studied winter raptor aggregations on the High Plans of Colorado "Aggregations of ferruginous hawks, red-tailed hawks, and bald eagles were frequently observed in the vicinity of prairie dog colonies." p. 256. In this study, golden eagles, ferruginous hawks, and red-tailed hawks were observed taking prairie dogs, while bald eagles and northern harriers competed for the captured prairie dogs. Declines in prairie dog colonies as a result of a plague epidemic resulted in a more than 60% decline in wintering bald eagles, ferruginous hawks, and red-tailed hawks (Ibid.). Numbers of wintering ferruginous hawks also declined dramatically following a crash in prairie dog populations in New Mexico (Cully 1991). Thus, full recovery of prairie dog populations would be the optimal outcome for maintaining and recovering raptor populations.*

Effects of Management Activities and Development on Raptors*The primary impact to raptor populations is direct disturbance of raptors on the nest, leading to reductions or loss of viability for eggs or nestlings. Disturbance of nesting raptors may cause nest abandonment, damage to the eggs, subject eggs or nestlings to cooling, overheating, or dehydration leading to mortality, prevent young nestlings from receiving sufficient feedings to remain viable, and cause premature fledging (Parrish et al. 1994). Thus, the BLM should establish adequate nest buffers (on the order of 2 miles in diameter for ferruginous hawks and one mile for other species) around nest sites, preventing all construction of developments (such as facilities and roads) that would lead to future disturbance of nesting raptors through focusing human activities in these areas. Seasonal restrictions are insufficient; a well or road constructed outside the nesting season is still likely to lead to nest abandonment or reductions in recruitment due to disturbance from vehicle traffic that does occur during the nesting period.*

The overall landscape-scale effects of widespread industrialization threaten the viability of raptor populations through habitat loss and fragmentation. Nest buffers currently in force as standard oil and gas stipulations are unlikely to safeguard the viability of native raptors; a more conservative approach is needed in order to safeguard raptor viability in this region. White and Thurow (1985) stated: "We would prefer to see ecosystems kept intact (cf. Wagner 1977) rather than divided into isolated islands set aside for nesting raptors, because aspects of general land use other than restricted areas also affect the health of raptor populations" (p. 21). Thus, not only should nest buffers be implemented, but the overall integrity of the landscape should be

maintained (or improved in areas where it is currently degraded) in order to better provide for raptor viability.

Powerline Corridors*Powerline towers are likely to concentrate raptor nesting and perching activities, to the potential detriment of prey species. Transmission towers may be particularly attractive as nest sites for ravens, and Steenhof et al. (1993) reported that 133 pairs of ravens had colonized transmission towers on a single stretch of powerline in Idaho during its first 10 years of existence. Gilmer and Wiehe (1977) found that nest success for ferruginous hawks was slightly lower for transmission towers than other nest sites, and noted that high winds sometimes blew tower nests away. Steenhof et al. (1993) also found that transmission tower nests tended to be blown down, but found that nest success was not lower on towers for ferruginous hawks and was significantly higher on towers for golden eagles. In North Dakota, Gilmer and Stewart (1983) found that ferruginous hawk nest success was highest for powerline towers and lowest for nests in hardwood trees. Thus, although powerlines can be designed to reduce impacts to raptors, these corridors should be sited more than 2 miles away from prairie dog colonies and sage grouse leks to prevent major impacts to these sensitive prey species.*

Golden Eagles

Golden eagles, their nests and young are strictly protected under the Bald and Golden Eagle Protection Act (16 USC 668a-d). This species is very popular with the wildlife viewing public, and conversely has historically suffered from shooting as well as poisoning directed at terrestrial predators. The maintenance of viable golden eagle populations should be an important consideration in the new RMP(s).

Conservation efforts should focus on protecting nest sites and important foraging areas, such as prairie dog colonies.Golden eagles are highly territorial. Even when surface-disturbing activities such as strip mining are located away from golden eagle nest sites, the destruction of important foraging habitats, such as prairie dog colonies, within the territory of nesting pairs can be a major problem for the viability of nesting golden eagles (Tyus and Lockhart 1979). In New Mexico, plague-related declines in prairie dog abundance from 30 per hectare to less than 1 per hectare triggered a decline in the nesting population of golden eagles (Cully 1991). Thus, golden eagle protection is linked with the maintenance and recovery of prairie dog colonies.

Ferruginous Hawks

The ferruginous hawk has been experiencing declines across the continent for the past 30 years, although Wyoming is often viewed as a stronghold for the species. The ferruginous hawk has been petitioned for listing under the Endangered Species Act in the past, and has also been identified by the Wyoming Game and Fish Department as a Species of Special Concern (Oakleaf et al. 1996).

Prey BaseThe ferruginous hawk has been identified as a species dependent on prairie dogs, and ferruginous hawk populations have shown declines in response to prairie dog population declines (Kotliar et al. 1999, and see Jones 1989). Olendorff (1993) pointed out that prairie dogs and ground squirrels were the most important prey in some areas, while hares and rabbits predominated in the ferruginous hawk diet in others. In several studies from central Utah, ferruginous hawks were found to be highly dependent on jackrabbits as prey, and hawk population fluctuations were closely tied to the rise and fall of jackrabbit populations (Woffinden

and Murphy 1977, Smith and Murphy1978). The proximate cause of this hawk population decline was linked to a decrease in nesting effort and an increase in nomadism in ferruginous hawks following the jackrabbit decline (Woffinden and Murphy 1989). In southeastern Idaho, a jackrabbit population crash was also implicated in a decline of the ferruginous hawk population (Powers 1976).

In contrast, a study on the Canadian high plains found that ferruginous hawk population density and fledging success were consistently correlated with the abundance of Richardson's ground squirrels, and negatively correlated with poisoning efforts (Schmutz and Hungle 1989). On the plains of South Dakota, thirteen-lined ground squirrels dominated the ferruginous hawk diet, while meadowlarks, pocket gophers, and jackrabbits also played important roles (Blair and Schitoskey 1982). In southwestern Idaho, Steenhof and Kochert (1985) found that ferruginous hawks were heavily dependent on Townsend's ground squirrels, and that squirrel declines linked to drought resulted in depressed nest success for the local ferruginous hawk population. In southern Wyoming, ferruginous hawks have a fairly diverse diet. In a study near Medicine Bow, MacLaren et al. (1988) found that jackrabbits contributed 48% to the ferruginous hawk diet biomass, white-tailed prairie dogs 22%, and Wyoming ground squirrels 16%.

Secondary prey may attain paramount importance during prey declines, droughts, and other stochastic events. Secondary prey species become critical to maintaining hawk population numbers when primary prey species crash (Olendorff 1993). Smith and Murphy (1978) found that ferruginous hawk diets shifted increasingly to rodents as jackrabbits became scarce. Thus, it is important to maintain both primary and secondary prey bases to guarantee ferruginous hawk viability over the long term.

Nesting HabitsFerruginous hawks use the same nest from year to year and also build alternate nests within the same territory (Smith and Murphy 1978). In the Centennial Valley of Montana, where cliffs and suitable ground nesting sites are unavailable, ferruginous hawks commonly nest in aspens and willows (Restani 1991). In eastern Washington, ferruginous hawks nested primarily on basalt outcrops and in junipers (Bechard et al. 1990). In central Utah, Smith and Murphy (1978) noted cliff, rock outcrop, and tree nest sites (particularly juniper). Also in Utah, Smith and Murphy (1982) found that ferruginous hawks nested most often in junipers (53% of nest sites) but also used rock outcrops (24%) and ground nests (14%). A subsequent study in the same region found 66% of nests in juniper trees, 32% on rock outcrops, and 2% on the ground (Woffinden and Murphy 1983). In North Dakota, small clumps or rows of hardwood trees were the most common ferruginous hawk nest sites, while ground nests atop rugged moraines made up 22% of the nest sites and powerline towers accounted for 18% of ferruginous hawk nests (Gilmer and Stewart 1983). On the plains of South Dakota, Blair and Schitoskey (1982) found that all ferruginous hawks built ground nests, most of them in rough terrain. Similarly, in southeastern Idaho, all ferruginous hawk nests were ground nests built atop bluffs with the exception of a single juniper nest (Powers 1976).

Ferruginous hawks will also nest on man-made structures. Niemuth (1992) documented ferruginous hawks nesting on the roof of an abandoned shed as well as on an idle center-pivot irrigation apparatus in Wyoming.

Ground-nesting ferruginous hawks can be quite susceptible to predation. Foxes and coyotes have been documented as important predators of ferruginous hawk ground nests (Blair and Schitoskey 1982). The availability of elevated topographical features may be important to nest success for this species.

Effects of DevelopmentFerruginous hawks are among the most sensitive of all raptor species,

and are prone to nest abandonment if disturbed (Parrish et al. 1994). Nest abandonment, egg mortality, parental neglect, and premature fledging are common results of disturbing ferruginous hawk nests (White and Thurow 1985). Smith and Murphy (1978) noted that increased human access is a primary threat to the viability of ferruginous hawk nest success. For their central Utah study, these researchers found that "in all instances of nesting failure where the cause could definitely be determined, humans were at fault" (p. 87). White and Thurow (1985) found that walking disturbance and vehicle use had the greatest effect on ferruginous hawk nest success, while vehicle use had the greatest flushing distance. Instead of becoming habituated, most hawks in this study increased their flushing distances with repeated disturbance (ibid.). In addition, disturbed nests averaged one less offspring fledged per nest when compared to undisturbed control nests. Oakleaf et al. (1996) pointed out that the cumulative effects of oil and gas development may impact large areas of ferruginous hawk habitat.
White and Thurow (1985) recommended quarter-mile nest buffers during years of prey abundance, but noted that sensitivity to disturbance increased when prey were scarce, and recommended that nest buffers be "considerably larger" during years of prey scarcity.Although Olendorff (1993) recommended buffer zones of only ½ mile for ferruginous hawk nests, he recommended much larger buffers during periods of prey scarcity. Because it is impractical to move roads away from nest sites when prey bases decline, the appropriate way to ensure the persistence of ferruginous hawks at traditional nesting sites is to use large buffers within which ground-disturbing activities are prohibited. Cerovski et al. (2001) reviewed the issue of appropriate nest buffers and recommended a 1-mile buffer, kept free from human disturbance. Thus, under this Alternative, 1-mile buffers prohibiting surface disturbance should apply to ferruginous hawk nest sites as well as all other raptor nest sites.

Burrowing Owl

Nationwide, the burrowing owl is a species on the decline. As of 1997, over half of the agencies across North America tracking burrowing owl population trends reported declining populations, while none reported increasing populations (James and Espie 1997). Burrowing owl populations are highly susceptible to stochastic disturbances such as drought, and thus may decline more rapidly than would be predicted on the basis of demographic factors alone (Johnson 1997). In Wyoming, data suggest an overall population decline, with 17.5% reoccupancy of historic sites, but the spotty quality of historical data makes comparisons difficult (Korfanta et al. 2001). The burrowing owl has been identified as a species of concern by both the BLM and the Wyoming Game and Fish Department.
Dependence on Prairie Dog ColoniesBurrowing owls are in a select group of wildlife most closely tied to prairie dog colonies, and prairie dog burrows are preferred nest sites for burrowing owls. Thompson (1984) reported that owls preferred abandoned prairie dog burrows in the early stages of succession. Green and Anthony (1989) found that nest burrows lined with dung were less susceptible to predation, perhaps explaining this unusual behavioral attribute. On the Great Plains, Sidle et al. (n.d.) found that burrowing owls actively selected for active prairie dog towns, and showed much lower usage of towns that had been decimated by plague, shooting, or poisoning. Desmond and Savidge (1999) found that burrowing owl nest success was positively correlated with density of active prairie dog burrows, and recommended preserving prairie dog colonies to maintain the viability of burrowing owl populations. And in the Columbia

Basin, where prairie dogs are absent, burrowing owls nested in badger burrows, but as a result were subjected to badger predation (Green and Anthony 1989). Thus, the ongoing loss of prairie dog colonies has undoubtedly been a prime factor in the decline of the burrowing owl.

In the prosective oil shale area, burrowing owls are closely tied to white-tailed prairie dogs. Thompson (1984) found that burrowing owls near Casper were associated with white-tailed prairie dogs, while near Torrington they were associated with black-tailed prairie dogs. But in eastern Wyoming, fewer than half of the nesting burrowing owls were associated with active prairie dog towns (Korfanta et al. 2001).

Hunting Habits
Burrowing owls hunt most actively during the twilight hours (Thompson 1984). In the Columbia Basin, pocket mice are the primary mammalian prey (Green and Anthony 1989). In Wyoming, insects are the most frequent prey item, but small mammals dominate the dietary biomass (Thompson 1984). Due to the importance of insects (particularly grasshoppers) in the diets of burrowing owls, the widespread use of pesticides would most likely result in impacts to burrowing owl viability **#11])>** *.*
I. <([#12 *[3.9.4]* ***Historic Sites and Trails must be protected from oil shale development***
Under the national Historic Preservation Act, BLM must protect not only properties eligible for listing on the National Register of Historic Places (NRHP), but also their historic settings. Because oil shale development, either in the strip mine and retort form, or the in situ form with pads covered densely in wells and pipes, are inconsistent with the historic settings of eligible properties, they will have major impacts on the settings of such properties and must be excluded from areas within view of eligible properties. Oil shale operations would often "dominate the view" from a visual resources perspective. DEIS at 4-138. At minimum, oil shale leasing should not be allowed within 5 miles of NRHP-eligible properties. This is the "foreground-middleground" area where project impacts can be seen in detail. DEIS at 4-137. Both the visual impact and noise associated with oil shale operations has the potential to result in major impacts to the settings of historic properties. We would feel more comfortable with BLM's commitment to treat lands within 15 miles of historic trails as VRM Class II for the purposes of oil shale development (DEIS at 4-158) if this included assurances that oil shale activities would be allowed in this area only if they were invisible from the trail in question, given the large size and heavy visual impact of oil shale operations.
In the Rawlins Field Office, the Cherokee Historic Trail is one such eligible property which occurs within the Geologically Propsective Area for Oil Shale. DEIS at 3-34, and see Figure 3.1.1-13. Another property in the Rawlins Field Office which we believe to be eligible is the abandoned Cow Creek Ranch (also known as the Jolley Ranch), located at T14N R98W Sec. 27, within the Adobe Town Dispersed Recreation Use Area. Finally, there is a historic structure in the vicinity of Kinney Spring (T15N R98W Sec. 8) which may also be eligible for the National Register. In the Rock Springs Field Office, historic trails passing through the oil shale Prospective Area are noted under Visual Resources in the EIS. DEIS at 3-207. In addition, there are many archaeological sites that are NRHP-eligible, and their settings warrant protection as well. See DEIS at 3-224. BLM must consult with applicable tribes to ensure that Traditional Cultural Properties get similar protections for their settings **#12])>** *.*

J. <([#13 [*3.8.2*] ***Visual Resources***
The area proposed for oil shale leasing encompasses some of the most scenic landscapes in Wyoming's fabled Red Desert. Included within this area are the spectacular badlands of Adobe Town and The Haystacks, the breathtaking swell of the Kinney Rim, the juniper-clad hills of the Powder Rim, the varied badlands and dunes of the Jack Morrow Hills area, and the buttes and canyons of the Flaming Gorge area. These ares are described in detail elsewhere in these comments. The Rawlins Field Office is currently undergoing a Visual Resources Management plan amendment to address the deficiency in its 2009 Resource Management Plan and failure of the associated EIS to adequately address visual resources. The Rock Springs Field Office is currently undergoing an RMP revision which will address visual resources. For both field offices, a Visual Resource Inventory was completed in 2011. In the interim, lands with Scenic Quality Ratings of A or B should be granted protection from oil shale leasing.
Given the commitment in the DEIS to site oil shale activities outside the viewsheds of Key Obesravtion Points (KOPs) and sensitive areas, where possible (DEIS at 4-156), these features should be defined and listed in the decision document. KOPs should include points atop the following promontories: Skull Creek Rim, Adobe Town Rim, the Haystacks, Kinney Rim, Powder Rim, Steamboat Mountain, Joe Hay Rim, Oregon Buttes, Little Mountain, and Devils Playground. Sensitive areas should be defined to include the Killpecker Dune Field, Boar's Tusk, Honeycomb Buttes, Whitehorse Creek badlands, and Red Creek Badlands. **#13])>**
K. Groundwater
<([#14 [*5*] In situ oil shale operations can result in groundwater impacts when groundwater comes into contact with retorted zones. DEIS at 4-195. What types of mitigation measures will be required to prevent the excursion of contaminated groundwater from in situ sites after production has ceased? For example, in Shell's Mahogany Ridge project, the retorted area is (theoretically, at least) isolated by a "freeze wall." However, this freeze wall requires active maintenance. What will happen when companies like Shell walk away from projects like these? Will isolation barriers be required to be maintained permanently? The Mitigation Measures (DEIS at 4-196) are silent on this point, indicating that additional safeguards need to be put in place.
#14])>

L. <([#15 [*6.1.1*] ***Wyoming lands should meet the same 25-foot-thickness/25 gallon per ton criteria for leasing as in Colorado and Utah***

In the original Oil Shale/Tar Sand PEIS, the BLM approved minimum criteria for leasing oil shale in Colorado and Utah at 25 feet in thickness and 25 gallons per ton (GPT), in order to ensure economic feasibility. However, the agency approved a different standard for Wyoming, 15 feet of thickness and 15 gallons per ton. DPEIS at 2-13. In its original Final EIS on oil shale, BLM stated, "Of course, the most geologically prospective deposits in Wyoming are those exceeding 25 gallons per ton and 25 feet in thickness." Original FPEIS at 4-281. These are by definition more geologically prospective than deposits averaging 15 feet thick and 15 gallons per ton. It is illogical for the BLM to assign a different standard for Wyoming oil shales as the geologic properties do not change when one crosses the state line. Wyoming shows a much greater "geologically prospective" oil shale area by square miles than either Utah or Colorado precisely because the standards have been lowered for Wyoming. Wyoming has the lowest-quality oil shale deposits of all three states. BLM was right in making deposits unavailable for

leasing in Colorado in Utah that were less than the 25 ft./25 GPT threshold, but wrong to lower the standard in Wyoming to 15 ft./15 GPT. By avoiding this mistake in the new OSTS leasing decision, the BLM can at the same time provide collateral protections from ill-considered oil shale projects for lands with wilderness characteristics, key sage grouse habitats, and big game crucial ranges and migration corridors in Wyoming which are underlain by uneconomic oil shale deposits.

In the PEIS, the BLM must provide a rational explanation for why the 15 gpt/15-ft threshold was used in Wyoming while a different standard was applied in Colorado and Utah. BLM's response to this issue from the original FEIS is as follows:

"In Section 369 of the Energy Policy Act of 2005, Congress directed the Secretary of the Interior to complete a PEIS for commercial leasing on public lands with an emphasis on the most geologically prospective lands in the States of Colorado, Utah, and Wyoming. There are differences in the quality of the oil shale resource between the three States, so to meet Congress' direction to look at all three States, a different standard was used for Wyoming." Original FPEIS at 4-480.

BLM's response implies that the different standard for Wyoming was necessary to permit oil shale leasing in Wyoming due to the absence of oil shale deposits of 25 feet in thickness averaging 25 gallons per ton. This, however, is not the case, as evidenced by a Wyoming State Geological Survey Analysis while delineates oil shale deposits in Wyoming which exceed 25 feet in thickness and 25 gallons per ton. See Attachment 8.

The arbitrary and capricious nature of a lower leasing standard for Wyoming was also raised in the comments of Glen Miller, a proponent of oil shale development. This commentor states,

"The different grade-thickness criteria established for 'ore' in Utah, Wyoming and Colorado is unusual, and is not logical, unless some undescribed State-specific regulatory or incentive features apply. The 'economics' of determining 'ore' are fairly rigorous; if 15 feet of 15gpt rock is <u>not</u> 'ore' in Colorado, how can it be 'ore' in other states?"

Original FPEIS at 4-711.

In response to this comment, BLM stated:

"00139-009: The standards developed by the USGS Conservation Division, and subsequently adopted by the BLM, use 15 gallons per ton and 15 ft thick as the prospectively valuable classification standard for oil shale resources. The USGS further defined oil shale leasing area criteria on a regional basis as 25 gallons per ton and 25 feet thick." Original FEIS at 4-720. This response does not explain why a 15-foot thickness/15 gallons per ton threshold was selected for leasing in Wyoming rather than the 25-foot thickness/25 gallons per ton applied for Colorado and Utah.

BLM's analysis was based on Fischer assays of well logs and cuttings perfomed in the 1970s and 1980s. According to the agency, "In Wyoming, the most geologically prospective oil shale

resources were defined on the basis of detailed analyses of available oil shale assay data (Wiig 2006a,b)." DPEIS at 1-2, Footnote 2. Wiig (2006a and b) are listed respectively as personal communications from S. Wiig of the Rock Springs BLM Field Office to P. Perlowitz of the Wyoming State Office on June 13, 2006; and to K.P. Smith of the Argonne National Laboratory on June 27, 2006. We append the email to P. Perlowitz to these comments as Attachment 9.

In a telephone conversation between Steve Wiig of the Rock Springs Field Office and Erik Molvar of Biodiversity Conservation Alliance on January 26, 2009 at 4:40 pm, Mr. Wiig stated that he used the same Fischer analyses as were used in the 2008 USGS Open File Report for his analysis of oil shale prospectivity in Wyoming, which he then shared with Argonne National Laboratory. According to Wiig, "I had every assay that was available for that area." Wiig reported having no record of an email between himself and Kathy Smith of Argonne National Lab for June 27th (he stated that "quite a bit of correspondence was going on at that particular time" between Wiig and Smith), but was able to locate the referenced email to Phil Perlowitz. "We basically used the USGS standard" in recommending oil shale areas, he stated. The memo of July 26, 2006 between Wiig and Smith confirms this interpretation.

Wiig (2006a) states in relevant part,

"According to my conversation with Charlie Beecham and the information that was included in the Oil Shale Development RFD writeup, oil shale zones with an average quality less than 20 gal/ton are <u>not considered likely to be developed</u>. Under this scenario, you can eliminate virtually 90% of the known oil shale deposits in Wyoming from further consideration. So the question becomes: just how large an area do you want to analyze in the PEIS and under what criteria?"

Emphasis added.

Three observations can be made from this statement: (1) the 15-foot thickness/15 gallon per ton threshold for oil shale leasing in Wyoming is insufficiently high to support commercial oil shale development, (2) there are in fact oil shale deposits in Wyoming that are above the 20 gpt/20 ft threshold that might be commercially viable, and (3) BLM has inflated the acreage available for oil shale leasing in Wyoming in the face of commercial infeasibility of developing oil shale deposits at the lower end of the spectrum, and instead based the offering on "how much of an area [they] want[ed] to analyze."

In October of 2008, Scott Quillinan of the Wyoming State Geological Survey prepared a spatial analysis of oil shale deposits 25 feet thick averaging 25 gallons per ton or more in Wyoming. See Attachment 9. This analysis was based on data contained in the USGS Open-File Report 2008-1152, titled "Fischer assays of oil-shale drill cores and rotary cuttings from the greater Green River Basin, Southwestern Wyoming." FEIS at 7-181 also indicates that BLM used Fischer assay data from wellbores in the Green River Basin, indicating that this <u>identical dataset</u> was available to them at the time of the FPEIS. The WSGS analysis shows a substantial acreage of Wyoming lands which meet the threshold of 25 gallons per ton over 25 feet of thickness, the threshold set for oil shale leasing in Utah and Colorado under the OSTS PEIS. Thus, it is completely unnecessary to lower the threshold for oil shale leasing in Wyoming below 25 gallons

per ton over a 25-foot stratigraphic interval. Thus, the BLM needs to apply the same standard for Wyoming as in Utah and Colorado and still meet the directives of the Energy Policy Act.

According to Section 369(d)(1) of the Energy Policy Act,

"…the Secretary shall complete a programmatic environmental impact statement for a commercial leasing program for oil shale and tar sands resources on public lands, with an emphasis on the most geologically prospective lands within each of the States of Colorado, Utah, and Wyoming."

Emphasis added. It is abundantly clear that oil shale deposits of less than 25 feet in thickness and 25 gallons per ton are not geologically prospective, regardless of which state they are found in.

Having a different set of standards for leasing oil shale deposits across state lines would violate the intent of the Energy Policy Act in a manner that is arbitrary and capricious and an abuse of discretion. In the review of Federal agency action, courts apply the standard of review set forth in the Administrative Procedures Act ("APA"): "The reviewing court shall – (1) compel agency action unlawfully withheld or unreasonably delayed; and (2) hold unlawful and set aside agency action, findings, or conclusions found to be – (A) arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law…[or] (D) without observance of procedure required by law." 5 U.S.C. § 706. See also Friends of the Bow v. Thompson, 124 F.3d 1210, 1215 (10th Cir. 1997) (Court reiterated that under the APA, it must set aside agency action that is "arbitrary, capricious, an abuse of discretion, or not otherwise in accordance with the law"). In Friends of the Bow, the Tenth Circuit explained what constitutes arbitrary and capricious agency action:

Generally, an agency decision will be considered arbitrary and capricious if "the agency had relied on factors which Congress had not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise."

Friends of the Bow, 124 F.3d at 1215 (internal citations omitted). The NEPA analysis affords BLM an informed basis to ensure a rational connection between the facts found and the decisions made; a basis that also allows BLM to prevent permanent impairment, prevent unnecessary or undue degradation, minimize adverse environmental impacts, and comply with the Public Trust Duty. 43 U.S.C. §§ 1702I, 1732(b)), 1732(d)(2)(A).

An agency action is arbitrary and capricious if the agency has "entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise." Motor Vehicle Mfrs Ass'n of U.S. v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 42-43 (1983); The Lands Council v. Powell, 395 F.3d 1019, 1026

*(9th Cir. 2005); DIRECTV, Inc. v. FCC, 110 F.3d 816, 826 (D.C. Cir. 1997) (quoting State Farm, 463 U.S. at 43). Although a Court's review under this standard is deferential, the agency must nonetheless "articulate a rational connection between the facts found and the conclusions made." Or. Natural Res. Council v. Lowe, 109 F.3d 521, 526 (9th Cir. 1992). Even when heightened deference may be warranted to an agency's "scientific" or "technical" conclusions, the "presumption of agency expertise may be rebutted if the decisions, even though based on scientific expertise, are not reasoned." Oregon Natural Desert Ass'n v. Shuford, 2007 WL1695162, *3 (D. Or. June 8, 2007) citing Greenpeace v. Nat'l Marine Fisheries Serv., 80 F.Supp. 2d 1137, 1147 (W.D. Wash. 2000). We urge BLM to avoid an arbitrary and capricious, and logically unsupportable, outcome by mandating the 25 GPT/ 25 ft. threshold for all three states in the PEIS.*

In light of the fact that oil shale deposits exceeding 25 gpt/25 ft exist in Wyoming in appreciable areal extent, the 25 gallons per ton/25-foot thickness threshold for oil shale leasing could have been applied in Wyoming as it was in Utah and Colorado, and the fact that the BLM has been unable to provide scientific or legal justification for the differing thresholds, the BLM must raise the standard for lands available for oil shale leasing in Wyoming to 25 feet in thickness and 25 gallons per ton. We fully expect this outcome to be analyzed in detail in at least one action alternative per NEPA's requirements to analyze a full range of reasonable alternatives, and urge the BLM to adopt this approach in its final decision on oil shale leasing. In addition to oil shale development, there are important wildlife and recreational resources at stake, and this leveling of the playing field among states will also provide a better balance of multiple uses and resource values in Wyoming, while at the same time prevent industry from wasting capital and impacts to the land on futile prospecting in areas with low-quality oil shale deposits. **#15])>**

Conclusions

<([#16 [*2.3.1*] Given the potential for massive impacts on land, wildlife, water, and air resources inherent to oil shale development, we recommend the implementation of Alternative 3 as the final decision in the OSTS EIS process. We appreciate the opportunity to comment. Please keep us informed of all future opportunities to have input into this process. **#16])>**

[1] Final Order at 18. Available online at http://deq.state.wy.us/eqc/orders/Rare%20or%20Uncommon%20Closed%20Cases/07-1101%20Adobe%20Town/Adobe%20Final.pdf (last accessed April 20, 2011).
[2]http://americasgreatoutdoors.gov/report/
[3]King, Clarence. 1870. Report of the Geological Exploration of the Fortieth Parallel. Washington, DC: Government Printing Office.
[4] BLM 1991. Wyoming statewide wilderness study report: Wilderness Study Area specific recommendations. Cheyenne: BLM Wyoming State Office.
[5] BLM 1981. Overland Planning Unit, URA Step III (Present Situation), .48 Wilderness Resources. Rawlins: BLM.
[6] BLM 1991, at 184.
[7] BLM 1981, at 4.
[8] BLM 1991, at 187.
[9] BLM 1991, at 188.
[10]BLM 2003. Draft Environmental Impact Statement, Desolation Flats Natural Gas Field

Development Project. Rawlins Field Office, Figure 3-1, at I-7.
[11] BLM 2001. Decision Record/FONSI/Environmental Assessment, Veritas Haystacks Geophysical Project. Rock Springs Field Office.
[12] BLM 2003. Draft Environmental Impact Statement, Desolation Flats Natural Gas Field Development Project. Rawlins Field Office. Figure 3-2, p. I-10
[13] BLM 2005. Environmental Assessment for the Cherokee West 3D Seismic Project. Rawlins Field Office.
[14]Protect Adobe Town, today, Rawlins Daily Times, January 19, 2006, p. 7
[15] Record of Decision and Approved Resource Management Plan for Public Lands Administered by the Bureau of Land Management Rawlins Field Office, BLM, 2008, at Appendix 37, and see Maps 2-17 and 2-58.
[16] FPEIS, at 1-10.
[17] BLM Manual 8431 – Visual Resource Contrast Rating, Appendix 2.
[18] Online at http://www.blm.gov/pgdata/etc/medialib/blm/wo/Planning_and_Renewable_Resources/fish__wildlife_and.Par.9151.File.dat/Sage-Grouse_Strategy.pdf
[19]http://www.fws.gov/mountain-prairie/species/birds/sagegrouse/ (last accessed April 27, 2011)
[20] 75 Fed. Reg. 13910, 13950 (March 23, 2010).
[21] FPEIS, at 3-148.
[22] FPEIS, at 3-149.
[23] IM 2010-071 provides: Screen new oil shale lease applications to identify whether the proposed leasing area includes priority habitat. If so, alert the applicant as early as possible that, pending NEPA analysis, the application may be delayed or denied or that lease stipulations and project conditions of approval may be imposed that designate avoidance areas or include No Surface Occupancy restrictions, for example.
[24] Mezquiza et al
[25] Holloran, M.J., and S.H. Anderson. 2005. Spatial distribution of greater sage-grouse nests in relatively contiguous sagebrush habitats. Condor 107:742-752.
[26] Connelly, J.W., M.A. Schroeder, A.R. Sands, and C.E. Braun. 2000. Guidelines to manage sage-grouse populations and their habitats. Wildl. Soc. Bull. 28:967-985.
[27] Lyon, A.G. 2000. The potential effects of natural gas development on sage-grouse (Centrocercus urophasianus) near Pinedale, Wyoming. M.S. Thesis, Univ. of Wyoming, 121 pp.
[28] Holloran, M.J. 1999. Sage-grouse (Centrocercus urophasianus) seasonal habitat use near Casper, Wyoming. M.S. Thesis, Univ. of Wyoming, 130 pp.
[29] Berry, J.D., and R.L. Eng. 1985. Interseasonal movements and fidelity to seasonal use areas by female sage-grouse. J. Wildl. Manage. 49:237-240.
[30] Beck, T.D.I. 1977. Sage-grouse flock characteristics and habitat selection in winter. J. Wildl. Manag. 41:18-26.
[31] Beck, T.D.I., and C.E. Braun. 1980. The strutting ground count: Variation, traditionalism, and management needs. Proc. Ann. Conf. West. Assn. Fish and Wildl. Agencies 60:558-566, at 564.
[32] Lyon, A.G. 2000. The potential effects of natural gas development on sage-grouse (Centrocercus urophasianus) near Pinedale, Wyoming. M.S. Thesis, Univ. of Wyoming, 121 pp.
[33] Call, M.W., and C. Maser. 1985. Wildlife habitat in managed rangelands--The Great Basin of southeastern Oregon: Sage-grouse. USDA Gen. Tech. Rept. PNW-187, 29 pp.

[34] Braun, C.E. 1986. Changes in sage-grouse lek counts with advent of surface coal mining. Proc. Issues and Technology in the Management of Impacted Western Wildlife, Thorne Ecol. Inst. 2:227-231.
[35]Id.
[36] Lyon, A.G. 2000. The potential effects of natural gas development on sage-grouse (Centrocercus urophasianus) near Pinedale, Wyoming. M.S. Thesis, Univ. of Wyoming, 121 pp.

OSTS2012D50330
Organization: Natural Soda, Inc, Michael Clark
Received: 5/4/2012 5:11:39 PM
Commenter1: Michael Clark - Rifle, Colorado 81650 (United States)
Organization1: Natural Soda, Inc
Commenter Type: Private Company
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/16/2012 12:00:00 AM
Attachments: OSTS2012D50330.htm (OSTS2012D50330-59052.htm Size = 1 KB)
Natural_Soda_OSTS-PEIC_Public_Comments--MLC-050412_OSTS2012D50330.docx (OSTS2012D50330-59051.docx Size = 13 KB)
Submission Text
See Attachment.

Michael Clark
Natural Soda, Inc
Rifle, CO 81650

Comments on BLM's 2012 OSTS-PEIS and BLM's Preferred Alternative 2b
<([#1 [*2.2*] BLM's preferred alternative 2b offers little or no viable commercial opportunity due to severe restrictions of productive areas available, now allowing only 10% of Colorado lands opened in 2008. Further, those lands that would be opened by Alternative 2b are non-contiguous and widely separated, inhibiting collection and distribution by pipeline.
BLM's Preferred Alternative 2b precludes the richest oil-shale areas from development.
#1])> <([#2 [*1.3*] Industry faces an uphill battle contesting BLM's Preferred Option, since the BLM has already ignored the preferences of 14 other agencies cooperating in this OSTS-PEIS review. Many of those agencies cooperating in the review selected Alternative 1-- allowing development on all lands proposed in the 2008 OSTS-PEIS.
#2])> <([#3 [*3.1.5*] The BLM has chosen to include as criteria for reducing available acreage all "Areas of Critical Environmental Concern" (ACECs) defined in the 2008 OSTS-PEIS as well as acreage which had been under consideration for ACECs but which have not heretofore been designated as such. This criteria raises concerns that the BLM is choosing to exclude areas from commercial development without adequate and fair consideration to new methods, including in-situ development, that have minimal impact to important environmental elements. **#3])>**
<([#4 [*6.3.3*] Some groups likely to submit public comment are encouraging constituents with comments like "Don't let Big Oil melt public land for private profit" and "When we say they

want to melt the Rockies, we mean it." Such comments are obviously extreme and unscientific. The BLM should give due consideration to the more advanced and in-situ technologies now proposed. **#4])>**
<([#5 [*3.10.3*] Some in the local communities raise concerns about another boom-and-bust cycle if the BLM were to allow access to the larger areas opened by the 2008 OSTS-PEIS. Those concerns should be allayed by the fact that new development is driven predominately by private investment, will be restricted by BLM's permitting process, and must prove economically viable on a trial-basis prior to scale-up. This process can only be step-wise and slow to progress, providing for measured and sustainable growth. **#5])>**
<([#6 [*2.1.1*] We support and encourage the BLM to adopt the 2012 OSTS-PEIS review Alternative 1--that no existing land use plans be amended and all acreage opened by the 2008 OSTS-PEIS remain open. Through its RD&D program and permitting processes, the BLM has ample control over progression of development to ensure demonstrable capabilities and sustainable long-term development that is in the best interest of good environmental stewardship in balance with the production of this potentially important domestic energy source. **#6])>**
On behalf of Natural Soda, Inc, of Rifle CO, we do appreciate the opportunity to comment on the BLMs 2012 OSTS-PEIS.
Michael Clark
EHS Manager,
Natural Soda, Inc.

OSTS2012D50331
Organization: Denver Water, Vicki Parks
Received: 5/4/2012 5:12:41 PM
Commenter1: Vicki Parks - Denver, Colorado 80204 (United States)
Organization1: Denver Water
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:**
Attachments: OSTS2012D50331.htm (OSTS2012D50331-59055.htm Size = 1 KB)
Oil_Shale_andd_Tar_Sands_Public_Comment_Receipt_5-4-12_OSTS2012D50331.pdf (OSTS2012D50331-59054.pdf Size = 199 KB)
Submission Text
Attached are comments for Jim Lochhead and Dave Little on behalf of the Front Range Water Council. See Attachment.

OSTS2012D50333
Organization: State of Utah, John Harja
Received: 5/4/2012 5:22:35 PM
Commenter1: John Harja - Salt Lake City, Utah 84114 (United States)
Organization1: State of Utah
Commenter Type: State Government
Classification:

Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** aziech 5/15/2012 12:00:00 AM
Attachments: OSTS2012D50333.htm (OSTS2012D50333-59061.htm Size = 1 KB)
Oil_Shale_Response_letter_to_Abbey_050412_OSTS2012D50333.pdf (OSTS2012D50333-59060.pdf Size = 14196 KB)
Submission Text
Dear Director Abbey:
Oil shale and tar sands are vital to the future economic and energy balance for the State ofUtah and the nation as a whole. Governor Herbert's Ten Year Energy Plan outlines strategies and objectives to facilitate balanced, responsible development of Utah's energy resources, (including oil shale and tar sands) [http://www.utah.gov/governor/docs/ J Oyear-stragegic-energy.pdf] .The United States Geological Survey estimates that oil shale
lands in Utah contain 1.32 trillion barrels of recoverable oil equivalent [Assessment ofln-Place Oil Shale Resources of the Green River Formation, WY, CO and UT, USGS June 2011]. A viable, commercial
scale and privately funded oil shale and tar sands industry is underway in Utah today, so it is with extreme disappointment and displeasure that the state sees the BLM in full retreat regarding the establishment of a complete commercial leasing program for oil shale and tar sands. This retreat is represented by the Preferred Alternative proposed for adoption in the Draft Programmatic Environmental Impact Statement. The Preferred Alternative proposes to reduce the lands available for leasing and to pull back to a Research Development and Demonstration (RD&D) program that does not meet the ultimate requirements of the law. In addition, the issuance in May of proposed rules to eliminate the existing royalty rate for the commercial leasing of oil shale will further erode implementation of a full leasing program as required under the Energy Policy Act of2005 .. These proposed changes to the 2008 allocation decision for the availability of land and the commercial leasing program are in direct opposition to the laws, plans and policies of state and local governments. The state will vigorously oppose these proposed changes to the current oil shale and tar sands program.
The state participated fully in BLM's 2008 NEPA analysis regarding the availability of lands for the leasing of oil shale and tar sands and the structure of a potcntialleasing program, as required by the Energy Policy Act of2005. This process concluded with a Record of Decision in 2008 allocating certain lands through the BLM's Resource Management Plans as available for leasing The BLM also established the basic framework for a leasing program through adoption ofleasing regulations, now found at 43 C.F.R Pru13900. (See 73 FR 69414, November 18, 2008) The state concluded its review of this earlier effort with the conclusion that the proposed RMP amendments were consistent with state law, policy and programs, as required under provisions of the Federal Land Policy and Management Act, and expressed full support for the establishment of a commercial leasing program.
Despite the adequacy and sufficiency ofthe previous Record of Decision and supporting documentation prepared under the provisions of the National Environmental Policy Act, the BLM has reversed the sound decisions it made in the2008 ROD. The decision to significantly reduce lands available for leasing appears to be predicated on the terms of a Settlement Agreement ("Agreement")drafted in response to litigation [*Colorado Environmental Coalition,*

et. a/. v. Salazar, Civil Action No. 09-cv-0009 I -JLK, Colorado.]. brought by parties antagonistic to the development of adequate and sufficient domestic sources of energy. The BLM declares that this
revisit of its previous decision is based on the need to take a "fresh look" at the land allocations made in the 2008 NEPA analysis in light of"new information which has emerged since the 2008 OSTS PEIS was prepared" [See Executive Summary page 1-1, 1-4].
The Settlement Agreement states that BLM must publish a Notice of
Intent to consider amending each of the land use planning decisions made by the 2008 OSTS ROD, including alternatives that met the plaintiffs goals. These goals, in general, require that BLM have the option to reject a commercial lease based upon "environmental or other resource considerations," and have the option to decline to offer a commercial lease unless it can be shown that "operations can occur without unacceptable environmental risk*"* [Defendants' and Plaintiffs' Joint Motion to Administratively Close the Case, *Colo Env. Coalition v. Salazar,* page 3].
Nowhere in the terms of the Settlement Agreement is there a requirement that the BLM select an alternative that furthers the goals of the plaintiffs. The BLM has misconstrued the intent of the Agreement and abrogated its decision- making responsibilities in favor of an alternative that it was only required to consider, not select.
<([#1 [*1.1.1*] In furtherance of the Settlement Agreement, the BLM proposes to eliminate the current
provisions of the commercial leasing program in favor of a Research and Development program, reduce the amount of acreage available for leasing, and, shortly after the current period to comment on the DPEIS is closed, offer another rulemaking which will propose to "remove the royalty rate for oil shale production" [*Jd*].The eleven day period between the closing of the comment period for the DPEIS and the potential publication of royalty rate provisions affecting oil shale and tar sands does not allow cooperating agencies the chance to include royalty rate and commercial leasing aspects into their comments, thereby impermissibly segmenting the proposed rulemaking as envisioned by Congress. For this reason, the state requested an extension of the comment period, and advises the BLM that it expects the comments upon any proposed royalty rate adjustment be incorporated into the analysis of the issues within the DPEIS.
#1])> Summary of the DPEIS Review
<([#2 [*1.5*] The state has reviewed the Draft Progran1matic Environmental Impact Statement accompanying BLM's current proposal. The state fmds that the information contained within the DPEIS is procedurally deficient and cannot support the proposed Resource Plan Amendments Specifically, the state finds that the BLM has not been diligent in locating and considering information generated since the 2008 Record of Decision. This is unacceptable, particularly given the ease with which this information may be obtained. The State of Utah finds that the DPEIS is incomplete, biased and does not meet the required "hard look" purpose of the National Environmental Policy Act. Any final EIS based upon the provisions contained in this Draft cannot support a decision by the BLM which would alter the provisions in the 2008 ROD concerning the availability of lands for oil shale and tar sands leasing. Decisions based on analyses in the DPEIS will be arbitrary and capricious as a matter of law, and will not be consistent with state law, policy or procedures if the Preferred Alternative, as identified in the DPEIS, is chosen as the final decision.
#2])> As a general point of discussion, documents currently prepared under the provisions of the National Environmental Policy Act have evolved in recent years into a format which is

staggering in its ability to obfuscate information. These documents are so convoluted that the reader is unable to discern the validity and adequacy ofthe NEP A analysis on which the agency bases its conclusions, especially in the short time frame provided. Nonetheless, the state has been able to discern the following salient facts and identify a singular bias by BLM against information supporting the viability of the oil shale and tar sands industries, and local and state economies, instead favoring a particularly antagonistic position towards oil shale and tar sands development.

<([#3 [*9.8*] [*9.2.4*] **Focus of the Current Proposal**

The Executive Summary for the DPEIS states BLM has decided to take a "fresh look" at the land allocations made in the 2008 review based upon the Settlement Agreement and upon "new information which has emerged since the 2008 OSTS PEIS was prepared." (ES-1) BLM further refines this fresh look to include a reconsideration of the 2008 allocations and determine whether it is "appropriate for approximately 2,000,000 acres to remain available for potential development of oil shale," with an equivalent decision for tar sands [Executive Summary, p. ES-1].

The BLM states that the
reason for this reconsideration is specifically 1) the need to review new inventories for lands having wilderness characteristics, 2) the March 2010 decision of the Fish and Wildlife Service concerning sage grouse, and 3) the completion of studies related to Areas of Critical Environmental Concern (ACECs).

In a related action required under the Settlement Agreement, the BLM will propose amendments to the oil shale final rule to remove the royalty rate codified in BLM regulation (43 CFR 3903.52) and perhaps propose alternative adjustments to the royalty rate. These proposed royalty rate adjustments are not scheduled to be made public until mid-May 2012, after the comment period for the DPEIS has concluded.

As discussed further below, the state finds that there is no new information concerning lands with wilderness characteristics in Utah beyond that considered for the 2008 Oil Shale EIS or the 2008 Resource Management Plans. Management for Sage grouse and its habitat is being addressed through a massive effort by the affected states, the BLM, the Forest Service, and the U.S. Fish and Wildlife Service, with these efforts determining the needs of the species and the means to balance species protections with provisions for human needs. Any proposed discussion of sage grouse needs in the current DPEIS is not ripe for analysis, and any proposed restrictions due to sage grouse are premature. Any decision to amend currently operative RMPs, based on an issue currently undergoing such a massive review, would constitute an arbitrary and capricious decision.

The state finds that the BLM has not only based its decision on new information where none exists, but also has, to compound this egregious error, inexplicably ignored new information which supported the conclusions of the 2008 decision, and failed to analyze significant new information that would satisfy NEPA 's required hard look.

#3])> <([#4 [*9.2.2*] **Congressional Mandate**

The Energy Policy Act of2005 (EPACT 2005), Section 369, is the driving force behind the BLM's original Oil Shale and Tar Sands (OSTS) Programmatic Environmental Impact Statement and the resource allocation decisions it supported. Section 369 of EPACT 2005 specifically states "not later than 18 months after the date of enactment of this Act. .. the Secretary (oflnterior) shall complete a programmatic environmental impact statement for a commercial leasing program for oil shale and tar sands resources on public lands, with emphasis

on the most geologically prospective lands within each of the States of Colorado, Utah, and Wyoming.''

BLM advanced the purposes ofEPACT 2005 through its conclusions in the 2008 OSTS Record of Decision and the accompanying decisions within 2008 Records of Decision for the Vernal, Price and Richfield Field Offices, along with adoption of the oil shale leasing regulations codified at 43 CFR Patt 3900. These decisions successfully laid out the availability of land containing the resources and the framework of the regulatory structure for acquiring leases on BLM land for the development of these resources. The state believes that BLM did an adequate and thorough job in reaching the decision contained in the 2008 ROD. The state also applauds the agency's efforts in 2008 to conform with state and local laws as well as engage in significant cooperative exchanges with countless agencies and stakeholders.

The current proposal, and the supporting documentation found in the DPEIS, takes a huge step in the wrong direction. Congress did not ask BLM to determine if commercial leasing was appropriate or not, or to wait on a commercial leasing process in favor of some other proposal. As noted on page 1-3, EPACT 2005 requires the BLM to complete a programmatic EIS, establish a leasing program, consult with the Governors, conduct lease sales and consider land exchanges. The current proposal does not meet those requirements and directly ignores both the mandate and timeline given to it by Congress under Section 369 ofEPACT 2005.

In addition, the Preferred Alternative will push commercial leasing farther into the future by requiring more unnecessary planillng and research and development before commercial leasing can be established. Therefore, the Preferred Alternative is at direct odds with and contravenes the directions given by Congress in the EPACT 2005 to establish an oil shale and tar sands commercial leasing program.

#4])> <([#5 [*1.5*] Precedcntial Value of the Settlement Agreement

BLM has clearly stated that this entire effort is the result of the settlement oflitigation brought by various environmental groups. Litigation, by its very nature, excludes many stakeholders interested in the issue litigated. Because full public involvement is required by NEPA and other laws, the Settlement Agreement requires only that the BLM propose various adjustments to the existing regulatory and planning provisions. The provisions ofNEPA require that other alternatives be considered as well, including the option of doing nothing, which in this case would keep the 2008 land allocation decision intact.

The Settlement Agreement itself is not determinative of the final decisions made in response to the current DPEIS. This means that the No Action Alternative is as viable as the alternatives identified in the Agreement. Yet the Agreement, which was made without the involvement of many of the relevant stakeholders, including the state, is apparently being used to drive a hasty decision. The BLM informed the state and other stakeholders that the calendar is tight, and there is no room for additional analysis and review. This rush to complete the DPEIS by an artificial deadline is arbitrary in light of the vast amount of information the BLM must analyze to adequately meet the requirements ofNEPA.

Request of tlte State

As shown below, this rush to complete has produced numerous major and minor errors which combine to produce a flawed product. The state urgently requests the BLM:

• slow down the analysis;

• carefully analyze the information offered below concerning the maturity of the oil shale and oil sands industry in Utah;

• recognize the clear delineation of jurisdiction between the states and the BLM;

• review the impacts to the social and economic structure of the state and local governments;
• examine the needs of the industry within larger venture capital markets; and produce a complete analysis of impacts.
If necessary, the state requests the BLM and its attorneys petition the court for additional time, based upon the reality of completing the tasks and further analysis outlined below. **#5])>**
<([#6 [*1.3*] Consultation with the Governors
The provisions ofEPACT 2005 require that the BLM consult with the Governors ofthe states involved in the creation of commercial leasing program. Specifically, Section 369 requires theBLMto
Consult with the Governors of States with significant oil shale and tar sands resources on public lands, representatives of local governments in such states ... to determine the level of support and interest in the States in the development of tar sands and oil shale resources.
During the preparation of the 2008 Record of Decision, the BLM met on several occasions with the representatives of the Governors ofthe three states involved, and as a result were advised of the necessary "level of interest." Utah advised the BLM that the level of interest in Utah was high, and that if necessary, the BLM should proceed with a commercial leasing program in Utah even if the other states were not interested. In stark contrast, no such meetings have taken place with the Governor of Utah or his representatives during the current PEIS effort.
Request of the State:
The State of Utah urgently requests meetings with the BLM which meet the letter and the spirit ofthe requirement ofEPACT 2005 to consult with the Governors, and local government, to determine the level of support for a commercial program for the leasing of oil shale and tar sands. Only then will the BLM be able to fully analyze the social and economic impacts to the state as well as work with the state on decisions affecting a critical component of the state's economy. These meetings must include thorough discussion of all information and issues pertaining to a commercial leasing program, including royalty rates, the structure of the leasing program, and the availability of lands for leasing. **#6])>**
<([#7 [*1.3*] [*6.3*] State Authority
The DPEIS reflects a lack of respect for state authority and capabilities. The BLM repeatedly asserts that it wishes to hold off on implementing a commercial leasing program until more information is available on the impacts of oil shale and tar sands operations.". BLM explicitly asserts on many occasions in the DPEIS that oil shale extraction processes are unknown and that it must delay allocations of lands for leasing pending further study In contrast, the state asserts that oil shale processes are fundamentally composed of discrete extractive operations that have existed for decades, all of which are covered by state authority and regulatory programs. For example, the BLM states that it requires more information on the impacts on water quantity and quality [ES.7, found on ES-9] from oil shale and tar sands operations. Yet information
concerning a permitted commercial operation pertaining to water quantity and quality are readily available on the Division of Oil, Gas and Mining's website. The BLM, in cooperation with its state and local regulatory partners, can readily engage in the discussion of impacts to the natural, social and economic environments from these well-understood processes.
The extraction of kerogen from oil shale, as proposed in Utah, is nothing more than a mining operation foUowed by a retort operation. Mining operations have existed in Utah for

over a hundred years and the state has implemented the necessary regulatory controls to mine in an environmentally sensitive manner, using the latest in technology and management practices. Retorts have been used since ancient days to reduce ore and produce useful products. Oil shale and tar sand operations involve well-defined; basic extraction~ processing, and upgrading techniques that have been in use in Australia, Brazil, Canada, China, Estonia, Ireland (commercially in Canada and Estonia), and tested for over 50 years in the U.S. Oil shale and tar sand development activities have existed on Utah State lands for many years with adequate protection of the environment under state regulatory programs sanctioned by the Office of Surface Mining and the Environmental Protection Agency.

Water is owned by the state in trust for its citizens and is subject to the state water appropriation system managed by the Utah State Water Engineer. The federal government must participate in the state's allocation system should it desire to quantify any water rights it may claim [43 U.S.C .Section 666.].

Water rights appropriations are for specific diversion or use proposals. A general water right for general use by the public lands is not aUowable under state law. As discussed further below, the state believes and asserts that water is available for oil shale and oil sands development, both through existing water rights and through the general market system. The state's allocation system examines issues related to availability, prioritization, interference with other rights, and related factors. BLM's decision to defer analysis until it obtains further information on water availability imposes BLM vague desires onto the decision-making process of the state. The state will make decisions regarding the availability of water, not the BLM. The state will, consistent with the authority of the state water engineer, process applications to approve or transfer water rights for oil shale or any other use.

The same is true for air quality and water quality. The state has primacy for enforcement of the Clean Air and Clean Water Acts within the state and works closely with the EPA to insure the protection of these resources. The Utah Department of Environmental Quality, along with federal, state, and industry partners is currently studying issues related to air quality in areas containing the most geologically prospective oil shale resources, and will work to jointly find solutions to air quality issues in these regions .. An inventory of emission sources is underway in conjunction with studies of the factors surrounding the formation of ozone dming the winter months in the Uintah Basin. Protection of water quality from underground or surface mining operations is well within the regulatory authority and expertise of the state. Although issues related to the particular soil chemistry and topography must be addressed, the state is perfectly capable of the project specific analysis and decision making necessary to address any environmental concerns. See the Addendum below for further information concerning the permitting process.

Request of the State for Further Analysis:

Surface and underground mining as well as retorting generates no major unknowns for BLM beyond those presented by other mining and refining operations. The State of Utah strongly requests that the BLM make use of the infonnation readily available to it from its regulatory partners and conduct the required environmental analysis ofthe impacts of wellknown processes rather than continue to insist that the production of a refinable liquid product from oil shale is shrouded in mystery. The BLM must defer to the expertise and authority of the state in these matters, use available information about standard mining and retort processes for its environmental analyses, and stop insisting that it cannot make resource allocations at this time based on upon vague, ill-defined assertions that more information is necessary. **#7])>**

<([#8 [*9.2.1*] [*3.1.3*] **Lands with Wilderness Characteristics**
BLM conducted inventories of lands for the presence of wilderness characteristics prior to the Record of Decisions made for the 2008 oil shale allocation decisions and all other management issues covered in the final 2008 RMPs. No inventories for wilderness characteristics have been conducted since that time. As part of the 2008 RMP decision process, the state commented on management prescriptions for the lands identified, in whatever manner, as possessing the characteristics of wilderness. At the time, the state informed BLM as follows:
The State of Utah has reviewed BLM's inventory of and proposed management for lands identified as possessing wilderness characteristics. The state does not believe that BLM has the authority to create a category of management based solely on the characteristics ofwilderness. The characteristics of wilderness, or their constituent elements, were first recognized by the Wilderness Act of 1964 and passed to the BLM within the provisions of Section 603 of the Federal Land Policy and Management Act of 1976. The authority within Section 603 has now expired by its own terms. The state recognizes that recent court decisions have affirmed BLM's authority to inventory for wilderness characteristics, and have required the BLM to consider new information about these characteristics in its documents prepared under the National Environmental Policy Act. These decisions do not, however, consider or affect the BLM's statutory authority for management policies on the BLM lands. The state cautions BLM against an overly broad reading of these decisions. Management authority must be derived solely from the specific provisions of the Federal Land Policy and Management Act, (e.g. Areas of Critical Environmental Concern) or other specific federal legislation, and it is incumbent upon the BLM to carefully define its detailed legal rationale and reasoning for its proposed management policies, provisions and categories.
The DPEIS does not contain any such analysis of its authority to manage for wilderness characteristics. In addition, the DPEIS does not contain any new information on inventories for lands contained within inventories for wilderness characteristics. All inventories in the areas of concern in the DPEIS were completed prior to 2008. Because the BLM presents no new information regarding new inventories that would indicate the reasons for an increase, decrease or adjustment, related to the management of lands with wilderness characteristics, the BLM must carry forward the decisions made in the 2008 oil shale EIS and the 2008 RMPs for lands managed for wilderness characteristics. A decision containing new management prescriptions for lands with wilderness characteristics would be contrary to the decisions in the 2008 Records of Decision and would therefore be arbitrary and capricious, as it would not be supported by any significant new information. **#8])>**
<([#9 [*9.5*] Since 2008, the State of Utah has passed several laws which have bearing on this decision
regarding the protection of lands with wilderness characteristics. First, Utah Code Section 63J-8-1 03(4) provides that the public lands should not be "segregated into separate geographical areas for management that resembles the management ofwildemess, wilderness study areas, wildlands" and the like. Instead, state law indicates the need for BLM to simply adhere to the normal standard of preventing unnecessary and undue degradation to the land.
In addition, Senate Bill 83, passed in the 2012 General Session of the Utah Legislature, provides that certain areas of Uintah, Duchesne and Daggett Counties are designated as an Energy Zone, and managed for the primary purpose of the production of energy. Senate Bill 83 provides in part, as follows:
The landfJ comprising the Uintah Basin Energy Zone contain abundant, world-class

deposits of energy and mineral resources, including oil, natural gas, oil shale, oil sands, gilsonite, coal, phosphate, gold, uranium, and copper, as well as areas with high wind and solar energy potential; and the highest management priorityfor all lands within the Uintah Basin Energy Zone is responsible management and development of existing energy and mineral resources in order to provide long-term domestic energy and supplies for Utah and the United States.
The state supports a cooperative management approach among.federal agencies, state, and local governments to achieve broadly supported management plans for the full development of all energy and mineral resources within the Uintah Basin Energy Zone. The state calls upon the federal agencies who administer lands within the Uintah Basin Energy Zone to fully cooperate and coordinate with the state and with Daggetl, Uintah, and Duchesne Counties to develop, amend, and implement land and resource management plans and to implement management decisions that are consistent with the purposes, goals, and policies described in this section to the maximum extent allowed underfederallaw, .. .[and to] refi·ain.from any planning decisions and management actions that will undermine restrict, or diminish the goals, pwposes, and policies for the Uintah Basin Energy Zone ... and refi-ainfrom implementing a policy that is contrary to the goals and purposes [of the Energy Zone}.
BLM must give the provisions of this law full consideration based upon respect for the authority of the state to provide for the general welfare of the citizens of the state and must review and analyze the purpose and effect of the law in the DPEIS. Additionally the law is an expression of state planning for the resources of the area, and is entitled to consideration as part of the consistency review discussed below. **#9])>**
<([#10 [*9.2.1*] [*3.1.3*] Because the BLM does not possess any new information about lands with wilderness
characteristics from that available in 2008, a change in any type of management for the lands, from that finalized in the 2008 RMPs and the 2008 Oil Shale EIS, as is proposed by various alternatives within the DPEIS, would constitute an improper use of Secretarial Order 3310, issued December 23, 2010. Secretarial Order 3310 was defunded by Congressional action, which required that no funds may be used to implement or enforce the Order. In this case, the BLM is proposing to restrict the availability of these lands for the commercial leasing of oil shale and tar sands based solely upon the existing, older inventory for the presence of wilderness characteristics. This clear expression of intent to manage for wilderness is the functional equivalent of the creation of wild lands as proposed within the Secretarial Order. Because the CongTessional action clearly stated that the BLM may not implement or enforce Secretarial Order 3310, the DPEIS must be rewritten to reflect this fact. **#10])>**
Request of the State for Further Analysis:
<([#11 [*9.8*] The State of Utah requests the BLM revisit its analysis of the proposed management prescriptions concerning the existing inventories of lands with wilderness characteristics, and
• Recognize that no new information is available since the 2008 Records of Decision;
• Recognize the soundness of the decisions made in the 2008 for the Resource Management Plans Records of Decision and the Oil Shale Record of Decision;
#11])> <([#12 [*9.5*] The State of Utah requests the BLM revisit its analysis of the proposed management
prescriptions concerning the existing inventories of lands with wilderness characteristics, and
• Adopt the intent of state law and policy upon the subject of wilderness and wildernesslike

management;
#12])> <([#13 [*9.5*] The State of Utah requests the BLM revisit its analysis of the proposed management
prescriptions concerning the existing inventories of lands with wilderness characteristics, and
• Adopt the intent of state law and policy concerning the Energy Zone; and
#13])> <([#14 [*9.2.1*] The State of Utah requests the BLM revisit its analysis of the proposed management
prescriptions concerning the existing inventories of lands with wilderness characteristics, and
• Adhere to the Congressional moratorium requiring BLM not enforce in any manner Secretarial Order 3310. **#14])>**
<([#15 [*2.1.1*] The state specifically requests that the BLM adhere to the decisions made in the 2008
Records of Decision concerning lands with wilderness characteristics, and support BLM's previous sound decisions by adopting the currently proposed No-action alternative.
#15])> <([#16 [*3.7.5.1*] [*9.2.4*] Sage Grouse
Eleven ofthe western states, including Utah, are engaged in a cooperative effort to review the status of the Greater Sage grouse within its existing range, and to determine the elements of plans, conditions or stipulations, along with other mechanisms, to preserve the sage grouse while allowing economic development and growth to occur. The state of Utah has been sponsoring programs to protect the sage grouse for years, but the latest coordinated effort is occasioned by the March 2010 decision of the U.S. Fish and Wildlife Service concerning the potential listing of the sage grouse under the provisions of the Endangered Species Act. The Fish and Wildlife Service determined that a listing was warranted but precluded by higher priorities. This decision is now set for review by the end of2015.
As a result of the listing decision, BLM and the Forest Service have initiated, through a Notice of [ntent to Prepare an Environmental Impact Statement, a massive effort to determine if amendments to various Resource Management Plans (BLM) and Land Use Plans (Forest Service) are required in order to address the issues raised in the FWS decision. This effort is scheduled to be completed in 2014.
The State of Utah provided comments to the BLM planning process, and stated as follows:
The Notice of Intent states very specifically that the reason for the entire effort is to respond to the decision by the U.S. Fish and Wildlife Service that the listing of the Greater Sage Grouse is "warranted, but precluded" by higher listing priorities, and that the FWS asserts that BLM and Forest Service lands are the key to sage grouse survival. To the contrary, the state firmly believes that sage-grouse populations in Utah are in good condition, are receiving significant management attention and, therefore, do not warrant listing under the Endangered Species Act. The state will challenge a proposed listing whenever and wherever necessary. The state requests that the BLM and Forest Service receive, review and fully analyze all evidence offered by the state and others in support ofits position that a listing is not warranted as part of the analysis ofthe impacts of the EIS provisions and alternatives. The state specifically requests that the BLMfitlly analyze and explain the ability of the BLM and Forest Service to protect the species without the cooperation of other landowners, as discussedfurther below.
In fact, the state strongly asserts that a decision to list sage-grouse range-wide, but especially in Utah, would be a major setback to current conservation management

activities. Sage grouse in Utah, while challenged, are biologically stable. Utah conservation efforts are being conducted at a scale that will likely be hard to match anywhere else across the species' range. Finally, organizational and funding mechanisms unique to Utah have fostered cooperation andfocusfor continued and longterm conservation into the future. The state is concerned that unnecessary restrictions imposed by the BLM and Forest Service will upset the successfitl efforts underway in Utah, to the detriment of the species.

To further the state's commitment to conservation ofthe sage grouse and economic health of the state, the Governor recently convened a Sage Grouse Working Group. This Working Group is comprised of representatives of the Governor's Office, BLM, Forest Service, Fish and Wildlife Service, National Resource Conservation Service, Utah's Office of Energy Development, School and Institutional Trust Lands Administration, Department o.f Agriculture and Food, Division c~[Wildl(fe *Resources, and representatives o.fthe oil and gas industry, transmission line industry, oil shale industry, ranching community, county commissioners, The Nature Conservancy, and Utah State University. The Governor's charge directed the group to provide recommendations for the protection of sage grouse, while continuing to provide for a healthy economy and protecting private property rights. The Working Group was recently briefed on issues related to the life cycle of the sage grouse and previous and ongoing efforts to protect the species, and expects to provide recommendations within a few months. These recommendations are expected to lead to a state sage grouse plan soon thereafter. The state ·will expect the BLM and Forest Service to adhere to the provisions of this plan, both as a matter of respect for state authority, and in compliance with ELM's Instructional Memorandum 2012-039, which requires the BLM to make use of state data related to wildlife.*

The State of Utah, in response to these factors, is currently, through the Working Group, engaged in an effort to review habitat needs of the sage grouse and make determinations about the relative importance of the habitat against the presence of other human and wildlife needs. The state is doing this in addition to weighing other options concerning the need to list the species. This process is expected to result in the designation of areas of greater and lesser importance. A similar process in the state of Wyoming resulted in the designation of areas as "core" and "non-core," which is a possible outcome of the Utah process as well. The state assumes the Wyoming results, approved by the FWS, are the origin of the term core within the DPEIS. The BLM also recently issued an Instructional Memorandum concerning management of the sage grouse, covering the interim period until the massive planning effort concludes. In it, the term priority habitat is employed, along with general habitat, which is presumably the source of those terms within the DPEIS.

The state is very disappointed, therefore, to see "core" or "priority" discussed within the DPEIS for the State of Utah, and maps prepared with "core" or "priodty" habitat displayed. The state, which is the entity with management authority over the sage grouse, has not yet reached a conclusion about any habitat designations, and does not expect to do so until the Working Group process is completed. The legend for Figure 2.3.3-2 [See page 2-38, DPETS.], entitled "Lands Excluded from Application for Oil Shale Leasing Under Alternative 2 in Utah," clearly shows lands defined as

Core or Priority. The state has not yet made any such determination, and strongly objects to BLM making such a determination. The information contained in the DPEJS about core or priority sage grouse habitat in Utah, as evidenced by this map, and any analysis based upon the

information, is wholly inaccurate, and must be altered to reflect the true situation.
Request of the State for Further Analysis:
Because the data concerning sage grouse habitat is inaccurate, BLM must remove all reference to it in the DPEIS, and replace it with the habitat types which result from the efforts of the state's decision after the Working Group's work is completed. The BLM and the FWS are both represented on the Working Group, and will have every opportunity to influence the final product. Proceeding with the current data does not advance a completely and correctly informed analysis, but only perpetuates the continued use of erroneous data and misinformed opinion.
#16])> <([#17 [*3.10.3*] NEP A Requirements- Social and Economic Studies
BLM has not presented a serious study of the social and economic impacts of the proposal as required by the provisions of the National Environmental Policy Act. The DPEIS contains discussion about the generic social effects of a boom and bust economic cycle, but does not contain a countervailing discussion of the social effects oflimited and reasonable economic growth. The DPEIS discusses the history of oil shale development twenty years ago, but includes no discussion concerning current energy needs, the current pricing structure for oil and gas, and the corresponding ability of oil shale and tar sand operations to continue to contribute a larger share of a healthy economy in the eastern part of Utah, and for the state as a whole. The discussions in the DPEIS generically concerning boom and *bust* economic cycles, without any discussion of reasonable economic growth alternatives demonstrates the agency's bias against development of oil shale and tar sands.
The DPEIS must to include a discussion of the entire market process for creation of a viable oil shale and tar sands industry, including its role in the regulatory certainty needed to attract venture capital. The State of Utah expects the BLM to be an active partner in the marketing of opportunities to diversify the domestic production of the nation's energy needs, not hang its institutional head claiming ignorance of real world market realities.
BLM needs to revisit the analysis of socioeconomic impacts in the DPEIS and present additional analysis of the opportunities to encourage a viable oil shale and tar sands market. BLM has the resources and the expertise to evaluate the reasonable effects of simple mining and retort operations. BLM should immediately communicate with industry to determine the needs for certainty and about reasonable development opportunities. The state knows that if BLM delineates reasonable requirements for resource development, industry will participate. There is clear evidence that industry is engaging in oil shale and tar sands development in Utah. Based on past experience with oil shale and tar sands development on state and private lands in Utah, growth will be measured and moderate, which is a viable alternative to the boom and bust scenarios presented in the DPEIS.
The State of Utah understands the value of a balanced economy, and values the contributions of tourism to the state's economy. However, BLM must not assume that tourism is the only possible contributor to a stable economy in the Uintah Basin and elsewhere in Utah. BLM must recognize and analyze studies which demonstrate the value of oil and gas to the Uintah Basin, and examine the benefits the oil shale and tar sands industry could bring to providing a stable and robust economy in the area. BLM must examine the contributions of tourism, oil and gas, government and other existing industries in the area, then analyze the value that a moderate growth oil shale and tar sands industry might add to that by bringing additional diversity to the area's economy.
BLM must also not falsely assume that a viable tourism industry is put at risk by oil shale production in the Uintah Basin. This is not to say that BLM should not discuss tourism

and outdoor recreation as part of a significant economic evaluation - it should. But BLM must also evaluate wages from the tourism industry against those of the energy industry and evaluate the prospects for employment, revenue and community stability based on those figures.

Other Economic Studies - Examples:

The state contracted with Utah State University and the University of Utah to complete a number of economic and social-attitude studies regarding the use of and values attributed to public land resources by Utah residents. These studies assess: general attitudes of the citizens toward the public lands, off-highway vehicle use on public lands, grazing on public lands, and economic impacts of oil and gas exploration and production. Below are short summaries of a number of these studies, which are available on the state's website.

A statewide survey of the residents of Utah, the *Utah Public Lands Study,* was conducted in the summer of2007 by Utah State University. One focus of the survey involved assessing various ways in which residents engage in economic activities that are linked to public lands and resources. Other major purposes involved assessing attitudes toward public lands as part of the residents' quality of life and sense of community, and assessing attitudes and preferences regarding public land management.

Preliminary results from the *Utah Recreational Off-Highway Vehicle Use Study* conducted by Utah State University show OHV use becoming increasingly popular, but the number of trips taken per year declining. Recreational activities that OHV users participate in are diverse, including both passive (sightseeing and photography) and active (camping and hiking). Rider motivation includes stress relief and nature appreciation, along with achievement, stimulation, independence and socialization with others. The study also shows economic impacts broken out by direct and total impact to Duchesne, Uintah and Daggett counties as well as by regional gross output, employment, household income, and value-added income. A "Random Utility Model" will be used to measure change in the allocation of trips across counties, measure change in the total number of trips taken by Utah OHV users, measure change in economic value accruing to OHV users and generate trip-distribution information for use in economic impact modeling. Full results will be made available upon completion of the study.

The Utah State University study, *Trend information for the Vernal RMP: Livestock Indust1y Issues* indicates that the trend in livestock grazing preference and authorized use in the Vernal Field Office Planning Area is downward. The permitted AUM level proposed in the Draft RMP Preferred Alternative is a reduction of 8,323 AUMs, a 5.7 percent reduction in preference from the current level. This reflects a reduction of 15,376 AUMs, (1 0 percent) from the level 16 years ago.

The Bureau ofEconomic and Business Research at the University of Utah has completed an economic impact study of the oil and gas exploration and production industry in the Uinta Basin titled *The Structure and Economic Impact of Utah's Oil and Gas Exploration and Production Industry: Phase I- the Uinta Basin.* The Phase I study shows that rapidly rising energy prices and the corresponding rise in oil and gas activity are causing an economic boom in the Uinta Basin. During 2006, the oil and gas exploration and production industry was directly responsible for 19.9 percent of employment and 34.8 percent of total wages in the Uinta Basin, while those figures rose to 49.1 percent of the employment and 60 percent of the wages in the Basin when the indirect (multiplier) effects were considered. The industry also has a sizeable fiscal impact on local governments in the Uinta Basin. Property taxes paid on producing oil and gas wells were $18.2 million in 2006 and accounted for 38.7 percent of all property taxes paid in the two counties.

Required Further Analysis Requested by tlte State:
These studies, and other similar work, should be discussed as part of the examination of the social and economic structure of the area influenced by the upcoming oil shale and tar sands mining activities. Only after such consideration can the BLM make reasoned analysis of the economic impacts of the required leasing program. BLM must not make decisions which may influence the structure and robust nature of local and state economies without an examination of the ability and desire of the local economy to face the challenges raised by the proposal. The DPEIS focuses almost entirely on the perceived perils of a boom and bust cycle. This is pejorative and misleading, and does not reflect a serious attempt to analyze the potential contributions, both positive and negative, from the proposed leasing program. BLM must step back, and redo the social and economic analysis with these factors in mind. Failure to do so violates the provisions ofNEPA requiring analysis of the social and economic impacts of a proposal to the same degree as the environmental analysis.
#17])> <([#18 [*3.1.3*] Support for the Mission of SITLA
Utah's School and Institutional Trust Lands Administration (SITLA) is an independent state agency responsible by law for management of lands granted to the State of Utah pursuant to the Utah Enabling Act, (Act of July 17, 1894, 28 Stat. 1 09), for the financial support of Utah's public schools and other state institutions. The United States Supreme Court has referred to this Enabling Act land grant as a "solemn compact" between the United States and the State of Utah that obligates the United States to take into consideration the purposes of the grant when managing federal lands.
The State of Utah is obligated by both the Utah Enabling Act and the Utah Constitution to act as a trustee in managing school trust lands. Among the fiduciary duties imposed by this trust on SITLA is the duty to manage trust lands in the most prudent and profitable manner possible, and not for any purpose inconsistent with the best interest of the trust beneficiaries. Revenues from school trust lands are deposited in the Permanent School Fund, a permanent endowment for public education. Interest and dividends from the Permanent School Fund are distributed to individual public schools statewide annually to supplement critical academic needs.
SITLA manages lands within the boundaries of the BLM Field Offices under discussion in the DPEIS. Most ofthese state trust lands are comprised of numbered sections 2, 16, 32 and 36 in each township, representing the grant of in-place school sections made by the Utah Enabling Act; however it also includes lands acquired from the federal government in a land exchanges. The significance of the checkerboard pattern of land ownership is that because most trust lands are surrounded by BLM lands, planning decisions made by BLM with respect to rights-of-way, withdrawals from mineral leasing, special designations (e.g. ACECs, management for wilderness characteristics, etc.) and other determinations inherently impact the state trust lands, making them an island within the surrounding BLM lands. BLM's decisions on how to manage its lands directly affect the ability of the State of Utah to manage state trust lands for the purposes for which they were granted by Congress, which was to provide revenue for public schools and other beneficiary institutions. BLM management is an issue of significant impact to Utah's school trust. For example, lands within the Vernal Field Office make up approximately 13 percent ofUtah's total surface trust land portfolio.
Conversely, management by SITLA of state trust lands within BLM areas of special designations can directly affect the ability of BLM to achieve management objectives. SITLA is not obligated by law, for example, to manage its lands within BLM areas managed for

wilderness characteristics or ACECs for environmental protection. SITLA development of inholdings consistent with SITLA's governing mandate may substantially defeat the purpose of the special designation.

Request of the State for Further Study

BLM has an obligation to include in its planning an effective and timely means of addressing the impact of federal land actions on in-held state trust lands. BLM must engage in a serious study of its need to support the purposes of the grant of lands to the state for the support of the common schools. Specifically, the BLM needs to rework the DPEIS to include effects of the Jack of a leasing program upon the ability of the state, through SITLA, to expect a robust leasing program for oil shale and tar sands and the related expectation of revenue.

In addition, the DPEIS addresses the requirements of Section 369(n) of the Energy Policy Act of2005(EPACT), Public Law 109-58, only in a cursory manner. Section 369(n) provides in relevant part:

(n) LAND EXCHANGES.

(1) IN GENERAL. To facilitate the recovery of oil shale and tar sands, especially in areas where Federal, State, and private lands are intermingled, the Secretary shall consider the use of land exchanges where appropriate and feasible to consolidate land ownership and mineral interests into manageable areas.

(2) IDENTIFICATION AND PRIORTTY OF PUBLIC LANDS. The Secretary shall identify public lands containing deposits of oil shale or tar sands within the ... Uintah ... basin ... , and shall give priority to implementing land exchanges within those basins .... .

At page l-6, lines 32-34, the PEIS states that the decision in the 2008 ROD that "the specific decision that the BLM will consider and give priority to the use of land exchanges to facilitate commercial oil shale development pursuant to Section 369(n) of the Energy Policy Act of2005" will be carried forward through this planning process. This statement should be clarified to confirm that, pursuant to the EPACT 369(n) directive, BLM lands that are not made available for commercial leasing will nonetheless be available for state exchange, subject to other applicable laws applicable to federal-state land exchanges. **#18|)>**

<([#19 [*9.5*] Consistency with State Law, Plans and Policies

The State of Utah is extremely supportive of the consistency review requirement, as provided in federal law (43 U.S.C. § 171 2(c)(9)) and regulation (43 C.F.R. § 1610.3-2). Pursuant to this regulation, RMPs shall be

consistent with officially approved or adopted resource-related plans, and the policies and procedures contained therein, of ... State and local governments, ... so long as the ... [RMPs] are also consistent with the purposes, policies and programs of Federal laws and regulations applicable to pubUc lands.

BLM correctly notes this requirement, but then qualifies the requirement to be that of consistency with state and local plans, where possible [Section 1.4.5, Page I -21.].

The DPEIS also discusses the plans of the City of Rifle for economic development, and mentions that the final Record of Decision should consider consistency with the City's plans [lei.].

The state certainly believes that BLM should consider the views of the City of Rifle, but more accurately consider consistency with state and local plans, policies and programs as demonstrated to BLM through the Governor's consistency review.

As an explanation for the idea that BLM need only be consistent with state and local laws, plans, policies and f:rograms, the BLM previously provided an interpretation of the consistency requirement [See generally the 2008 RMP efforts.]. BLM stated that the "RMP ... [must] be ... consistent ... to the maximum extent possible by law and [that] inconsistencies between Federal and non-Federal Government plans be resolved to the extent practica1" [Vernal RMP EIS, p. 5- 17]. The BLM thereafter defined an inconsistency as anything that "cannot be resolved or reconciled where state and local plans conflict with federal taw." The state strongly asserts that this interpretation does not fully recognize nuances of the consistency requirement, especially involving discretionary planning decisions ofthe BLM.

The state recognizes that federal law requires certain decisions and establishes parameters within which those decisions can be made. However, the BLM retains considerable discretion within these legal sideboards. State and local governments cannot demand that BLM act outside these sideboards, but when state and local governments' policies pertain to areas within BLM's lawful discretionary decision space, BLM is obligated to make its plans consistent with state and local policies to the maximum extent possible. Thus, it is inappropriate to dismiss state recommendations that fall within BLM's legally prescribed discretion simply because BLM disagrees with the balance struck by the state. To assume that BLM's discretionary choices constitute federal law has the immediate effect of determining that state plans, programs and policies which strike a ditierent balance yet accomplish the same purpose as the BLM's choice are, a priori, in conflict with federal law. Instead, the state asserts that if its recommendations strike a slightly different balance between competing resource demands and this balance is within BLM's lawful discretionary decision space, the BLM must endeavor to make its final decision consistent with state and local government policies.

Request of the State:

The State of Utah provided a consistency review just prior to the 2008 oil shale and tar sands Record of Decision. The state indicated the decision was generally consistent with state law, policy, plans and procedures. Within the decision space laid out by the alternatives within the DPEIS, the no-action alternative, i.e. the status quo, would remain consistent with state and local plans. Other alternatives may not be. Fundamentally, the decision space allowed BLM in this matter is limited. EPACT 2005 requires the creation of a commercial leasing program for oil shale and tar sands within 18 months of enactment. The State of Utah supports this, and found the efforts of BLM in 2008 to be consistent with its laws, plans, policies and procedures. The state is not asking the BLM to step outside the taw in retaining the status quo, and BLM has not demonstrated any information which would require a decision different from that made by BLM in 2008. Therefore, the BLM can easily accommodate the state's request that the Record of Decision in the current analysis reflect consistency with the state's position. BLM should simply adopt the no action alternative at this time. **#19])>**

<([#20 [*6.5*] **The BLM Relies on Outdated Information on Oil Shale and Tar Sands Resources in Utah**

Although the BLM cites the U.S. Geological Survey reassessment of oil shale resources in Colorado, Utah, and Wyoming as one important reason for reevaluating the allocation decisions in the 2008 PEIS, the BLM did not use this new information in its analysis of the most geologically prospective resources. The DPEIS simply carries forward the data used for the 2008 PEIS. The 2012 PEIS would greatly benefit f rom the incorporation of new USGS resource

assessments and new oil shale data resource data published by the Utah Geological Survey in 2008.
This omission of new data is extremely troubling and calls into question both the validity ofBLM's allocation decisions and whether the BLM took the requisite hard look for purposes of NEP A. Despite its insistence that updated geological assessments were important for improved allocation decisions in the 2012 PEIS, the BLM instead demonstrates an almost total disregard for this new information. For example, the BLM relied on digital data provided by the BLM Utah State Office rather than data from USGS or UGS [Draft PEIS, Chapter l, 1.2, pg. 1-10, footnote 4.
Oil shale data for the 25 foot thick, 25
gallon per ton resource standard used in the 2008 PEIS came primarily from older reports focusing on the southeastern part ofthe Uinta Basin. Newer USGS and UGS studies include complete data sets spanning the entire Uinta Basin [Vanden Berg, 2008; UGS Special Study 1 28; USGS 20 I Ob, *Oil Shale Resources of the Uinta Basin, Utah and Colorado,* National Oil and Gas Assessment Project, Digital Data Series DDS-69-BB.
The DPEIS states that "(t)he BLM considered this new (USGS) information and has determined that while the new data should inform and update the 2012 PEIS effort, particularly with respect to information pertaining to the 2008 study area, the boundaries defining the inplace assessment do not represent the most geologically prospective areas of the Green River Formation located in the ... Uinta ... Basin ... (T)he PEIS will not employ the USGS boundary to define the study area" [Draft PEIS, Chapter 2, 2.5.1 , pg. 2-77].
The BLM discusses at some length why it did not consider the increases
found for estimated total in-place oil in the Piceance Basin USGS Oil Shale assessment [The BLM quoted the assessment as saying "much of this previously unassessed resource is of low grade and unlikely to be developed." *!d*], but fails to justify why similar assessments for the Uinta and Green River Basins were not incorporated.
The BLM does not include reference citations in the text, map, or table identifying the geologically most prospective areas in Utah for oil shale [Draft PEIS, Chapter 2, 2.3, pp. 2-13 to 2-1 6];
however, UGS is certain the data
described comes from preliminary information provided by the agency for the 2008 PEIS and does not reflect updated information developed by either UGS or the USGS. The DPEIS references Tabet (2007) as the source of oil shale and tar sand resource data for oil shale lands in Utah [*!d.,* 2.3. I, pg. 2-20, footnote 4: Appendix A references].
These references to information provEded by a UGS senior geologist in 2007 confirms
that the resource data used for the 2012 DPEIS came from information provided by the agency for the 2008 PEIS. This information, as even the BLM acknowledges, is out-of-date and been replaced by information from more recent UGS and USGS resource assessments.
It is disturbing that the BLM employed few people with geological and mining
engineering backgrounds in the analysis of the most geologically prospective areas for the 2012 DPEIS?1 21 Draft PEIS, Chapter 8.
It appears that the BLM chose to update the resource picture without the assistance of suitably trained personnel. The only geologist employed in the current effort evaluated paleontological resources, not OSTS resources. This demonstrates a biased reevaluation by BLM ofthe issues and impacts from OSTS leasing. It also violates the NEPA requirement that insures "environmental information is available to public officials and citizens before decisions

are made and before actions are taken. The information must be of high quality. Accurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEP A" (emphasis added) [40 CFR 1500.1]. **#20])>**

<([#21 [*1.5*] **The Draft PEIS Fails to Adequately Analyze Oil Shale Technologies**

The DPEIS relies heavily on outdated information regarding oil shale and tar sands development technologies and in doing so, fails to provide the kind of comprehensive information required by NEP A for proper decision making.

CEQ regulations are quite clear about the standards required under NEP A for EISs. According to Sec.l500.1 (b)

" .. .information must be of high quality. Accurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEP A."

Because an EIS is used to plan actions and make decisions and must be suppmted by evidence that the agency has made the necessary environmental analyses [40 CFR § 1502. 1]. it must contain the

most accurate, up-to-date information available. Based on our extensive discussions with oil shale and tar sands industries, the DPEIS is cJearly deficient and shows little to no coordination with industry. This may be a product of the backgrounds of the DPEIS contributors, where there is no evidence of industry or development background.

The BLM admits that "some of the information on the environmental consequences of oil shale development. .. is based on past oil shale developments. For purpose of this analysis, in the absence of more specific information of the oil shale technologies to be implemented in the future and the environmental consequences of implementing those technologies, information derived from other types of development. .. was used " (emphasis added) [Draft PEIS, Chapter 4, pg. 4-1].

Consultation and coordination with industry by the BLM is critical to the effective and unbiased analysis of the environmental consequences as well the economic benefits of oil shale and tar sands development. Based upon the previous decisions of the BLM, companies have invested hundreds of millions of private capital in technology, permitting, construction, and processing of oil shale and tar sands. The willingness ofthe state and private landowners to encourage this development in Utah has produced a highly sophisticated, successful, privately funded and well-capitalized oil shale and tar-sands industry in the state.

The BLM qualifies its analysis of oil shale and tar sands technologies by stating that the information on these technologies is presented for the purposes of general understanding and doesn't define the range of possible teclmologies that might emerge in the coming years [*ibid*]. This reflects a lack of due diligence on the part of the BLM. There is infonnation available on newer,

cutting-edge technologies that have moved from the RD&D phase into commercial scale development. BLM's reliance on outdated or general descriptions of the technology and its environmental impacts when there is ample information available on the newest developments in the industry contravenes NEPA's implementation requirements for EISs [40 CFR §1502.2 (g) *"Environmental Impact Statements shall serve as the means of assessing the environmental impact of proposed agency actions, rather thanjust(fying decisions already made"*]. Appendix A references six oil shale projects in Utah from the late 1960s-the mid 1980s and cites these projects as a "wealth of resource, engineering, and baseline environmental data that will be useful in future efforts to develop oil shale resources" [DPEfS Appendix A, pg. A-21].

While past experience may be useful for

the analysis of the impacts of oil shale technologies, it is also important to include analysis of the innovative technologies currently in use tlhat seek to resolve some of the environmental concerns raised by these earlier projects. Relying on technological examples in any industry (e.g. computing for example) from years back simply does not meet the requirement ofNEPA to consider the best information available .. This is true especially in the oil shale and tar sands industries present in Utah.

An examination of Chapters 4 and 5 ofthe PEIS, along with the accompanying references, shows that the BLM did little research on newer technologies and did not make personal contact or mention any coordination witha single representative from industry. This is troubling to the state, since the Preferred Alternative relies on proven success through RD&D projects before allocating additional lease lands. A willingness to communicate and work effectively with industry will be critical under any of the alternatives, but especially under an RD&D driven alternative.

For example, BLM's analysis of the EcoShale™ In-Capsule Technology developed by Red LeafResourc.es was based solely on information derived from Red Leafs website [*Ibid.,* A.5.3 .7, pg. A-87].

Employing a team of researchers devoted to addressing reasons to exclude lands from commercial development while limiting technology and industry research to an effective 'google search' demonstrates BLM's fundamental incapability to work with industry.

A second example is the information regarding the development ofEnefit's RD&D lease at the White River Mine. This DPEIS relies heavily on findings from a 2007 EA for OSEC's proposed development activities at the same site. The only update BLM provides for the purpose of its analysis is that Enefit will employ its own version of the proposed underground mining and aboveground retort technologies based on its Enefit280 plant under construction in Estonia [*Ibid,* A.5.3.34, pg. A-75].

BLM provided no comparative analysis between the Enefit280 process and the ATP retort process the agency evaluated for the purposes of the 2007 EA. It also fails to mention that the Enefit280 plant is possible only due to the commercial success ofEnefit's parent company producing energy from oil shale since before 1950. Framing Enefit's successes and technology as "Enefit280 plant under construction" further shows BLM's bias and active efforts to portray the industry as nascent while in fact it has been functioning successfully and economically outside of the country. This demonstrates that the leading reason that oil shale and tar sands have not been proven commercially is due to the efforts and bias of BLM; not the lack of technology as BLM asserts.

The Utah Division of Oil, Gas and Mining (DOGM) recently granted Red Leaf a permit to begin commercial scale oil shale production in the Uintah Basin. Following a successful pilot test of its EcoShale technology, the company will commence oil shale operations on 1,500 acres in the Uintah Basin on state owned school trust lands. Enefit American Oil, a subsidiary of an Estonian energy company with 50 years of experience commercially producing energy from oil shale, acquired the Utah-based Oil Shale Exploration Company (OSEC) in March of2011. Eesti Energia, the parent company ofEnefit, recently announced it will conduct a commercial study of the application of its Enefit retort process to operations at the White River Min e.

These companies report that their new technology uses less water and result in fewer environmental impacts than the process technologies of the 1980s. For example, the EcoShale technology utilizes low temperatures for heating and does not require process water. The Enefit140 retort process, currently in use in its Estonian facilities and the predecessor to the

Enefit280, uses no water, runs on organic waste, and emits significantly lower C02 emissions [https://www.energia.ee/en/oi 1/oilandgas/enefit 140]
While the BLM acknowledges that these two companies are planning commercial production in the Uintah Basin in the near future, BLM fails to examine these technologies in any detail or evaluate their assertions of reduced environmental impacts. The agency instead relies on assumptions based on old data [*Ibid,* Chapter 4, 4.1, pg. 4-2.].
This omission is serious. According to regulations for the implementation of NEP A:
"If a draft statement is so inadequate as to preclude meaningful analysis, the agency shall prepare and circulate a revised drqft of the appropriate portion." [40 CFR 1502.9(a).].
BLM's failure to include any kind of meaningful consideration of current oil shale and tar sand technologies and their environmental impacts is a serious breach of its responsibility to provide thorough, unbiased analyses in its EISs. CEQ regulations are very clear that EISs shall serve as the means for assessing the environmental impact of proposed agency actions, rather than justifying decisions already made.
#21])> <([#22 [*11*] The state strongly supports the development of oil shale and tar sands resources and
recognizes the significant contribution this development will provide Utah's economy. Utah contains some of the richest oil shale reserves in the world. Unconventional fuels such as oil shale and tar sands are an important component of Governor Gary Herbert's **1** 0-year Strategic Energy Plan for the state [Energy Initiatives and Imperatives: *Utah's I 0-Year Stralgic Energy Plan,* pg. 14.].
Energy development attracts new jobs, capital investment, and economic development opportunities for the state.
Information gathered by the Utah Office of Energy Development (OED) bears this out.
Enefit has invested over $100 million dollars to bring its commercially proven technology to Utah [https://www.energia.ee/-/doc/ l 0 187/pdf/concern/lnterim report 20 II 03 eng. Pdf]
and has indicated it will invest more if given the opportunity to develop resources on public lands. Questerre Energy Corporation recently signed a letter of intent to invest $40 million in Red Leaf and their EcoShale In-Capsule technology, citing the success of the Utah pilot project ["Red Leaf Resources Get Green Light for Oil Shale Project in Utah", April 5, 20 12, http://www.centerwest.org/publications/oilshale/7new/?p- 450].
As recent as April 2012, the major French Oil Company Total entered into a $200 million Joint Venture with RedLeafto further commercial scale operations [http://\vww.marketwatch.com/story/red-leaf-resources-inc-total-ep-usa-oil-shale-llc-announce-a-joint-venture-foroil-
shale-production-project-20 12-04-18, *Red Leaf Resources, Inc & Total E&P USA Oil Shale, LLC announce a joint venture for oil shale production project,* Marketwatch website accessed 5/ 1/2012.].
In March of2012,
the Uintah Transportation Special Service District awarded a $9 million asphalt paving contract to surface the first 17 miles of a road to the Uintah-Grand County line with Plant Mixed Oil Sand Asphalt (PMOSA), a heated blend ofUintah county aggregate and tar sands. Additional paving contracts using PMOSA demonstrate a growing commercial demand for tar sands.
OED also performed an informal survey of companies who had either previously invested in oil shale and tar sands development or had indicated a strong interest in doing so in the future. Survey results showed that 99.7% ofthe investment dollars represented in the survey believed

that the primary impediment to developing oil shale and tar sands was uncertainty surrounding access to BLM lands, ranking overwhelmingly higher than lack of technology, capital, or access to state or private lands. With over $190 million of recent (< 5 year) investment and over $930,000,000 of planned (5< year) investment represented in the survey, OED calculates that implementing the Preferred Alternative, with its RD&D emphasis and limited acreage available for leasing, would prevent approximately $3.26 billion dollars in investment in the state for oil shale and tar sands development. **#22])>**

<([#23 [*3.4.4*] **Availability of Water**

Supposition vs. **Fact**

The characterization of water resource use in the DPEIS study area lacks the clarity necessary to satisfy the requirements ofNEPA, which stipulates that "statements shall be concise, clear, and to the point" [40 CFR § 1502.1]. Broad statements and the confusing application of water use terms cloud and complicate the analysis. The state asserts BLM's data Jacks the necessary

confidence to properly evaluate the impact of oil shale and tar sands on water allocations under the Upper Colorado River Basin Compact, given the lack of clarity contained in the agency's descriptions of water availability and usage.

The BLM describes water use in the Colorado River Basin as "highly developed, allocated, and regulated" [Draft PEIS Chapter 3, 3.4, pg. 3-61.].

This sentence is misleading. Although the statement is true for the lower-basin states, it misrepresents conditions along the main stem of the Green and Colorado Rivers in Utah. None of the Upper Basin States have developed all of their Colorado River Compact water, with the possible exception of New Mexico. Utah has yet to deplete or consume roughly 300,000 acre-feet of its approximately 1.3 7 million acre-feet of water under the Colorado River Compact, as evidenced by BLM's own table included in the DPEIS [*ibid.* Table 3.4.1-3, pg. 3-67.].

The BLM should make it clear in its discussion of water allocation under the Compact that the 6 million acre feet of water available both physically and under the provisions of the Compact is the quantity of water the Upper Basin States may deplete or consume [*ibid.* 3.4.l.l, pg. 3-61].

While the BLM defines the terms "diversion" and "consumptive use" in the DPEJS, it does not define the term "demand." It appears the BLM uses the term synonymously with diversion, which is not correct. Since the BLM does not provide a definition of"demand," the use projections on two of the tables are misleading [*ibid.,* Tables 3.4-1-2 and 3.4.1-3, pp. 3-67-3.72].

and conclusions regarding supply and demand are faulty [*Ibid.* pp. 3-73, 3-74, 3-75].

The Utah Water Demand Table (3.4.1-3) shows the projected 2020 and 2050 demand will be greater than the 23% allocation of 6 million acre-feet available for the Upper Colorado River Basin under the compact [*Footnote* j: *ibid.,* pg. 3-70.].

Without a definition of supply or demand, this comparison is meaningless. The 6 million acre feet of water available for the upper basin states is not a limitation on diversion or demand, but rather a limitation on the allowable depletion or consumption. Statements regarding water use [*Ibid.* pg. 3-73.] make it appear that there is no water available to develop in the Upper Basin states. Utah has not fully used its allocation of the Colorado River Compact and, as the BLM indicates in its 2030 projections, even if consumptive uses are on the high end, Utah will still have a 268,425 acre-foot surplus for consumptive use

[*Ibid.,* Table 3.4.1-2, pg. 3-67]. **#23])>**
<([#24 [*6.3.2*] [*3.4.3*] The BLM Uses Outdated Assumptions Regarding Water Usage for Oil Shale and Tar
Sands Development
The BLM states that 'although a certain amount of water is calculated to be available in . .. Utah ... , this does not imply that the water is readily or physically available for development" [*Ibid. ,* pp. 3-74 and 3-75].
Supporting statements include:
• Oil shale basins and STSAs are situated in areas much smaller than the Upper Colorado
• Hydrologic basin on which water availability was calculated
• Storage and capture infrastructure may not be available in oil shale basins and STSAs
• Developers would have to acquire water rights either through transfer or purchase, since most of the water has been claimed
• Water use would be regulated under a number of state and federal regulations, as well as instream flow requirements to protect endangered fish [*lbid.,pg.* 3-75]
These broad statements would apply to most water use in the Upper Colorado Basin and should not be used as justification for wholesale dismissal of water availability for oil shale and tar sands development.
In its discussion of water use for oil shale development, the BLM bases its assumptions on outdated information [Draft PETS, Chapter 4, 4.5.1 .2, pg. 4-33].
Its assessment assumes 2.6 to 4.0 bbl ofwater per barrel of oil for surface mining with a surface retort and underground mines with surface retorts and 1 to 3 bbl of water for in situ projects. Current technology utilizes 1 to 1.5 barrels of water per barrel of oil. New technologies do not use water for the actual extraction of the oil from the shale but primarily for dust control.
Recently permitted oil shale operations in Utah use considerably less water than the BLM assumes for purposes of the PEIS. According to Red Leafs permit "most water will be consumed for construction of the process capsules and for dust control. The EcoShale In Capsule process itself is a net producer ofwater" [Utah Division of Oil, Gas, and Mining. Red Leaf Large Mining Operation Application, Appendix K. Approved March 14, 2012.].
Red Leafs petroleum removal process extracts water from the oil shale. Removed as water vapor, condensed, recovered and then put to use in mining operations, this process water will supply approximately one third of the total project water demand. All water captured, recovered, or withdrawn for use on the project is to be used on site [*Ibid*]. The DPEIS assumption of 1-3bbl water/bbl oil produced for a 30,000-50,000bbVday in situ plant does not take into account the ditierent water requirements for Red Leafs mining technology [Draft DPEIS, Chapter 4, Table 4.5.2-1, pg. 4-43.].
Enefifs retorting process itself does not require water, although water is needed for cooling, upgrading, power production, and dust control [https://www.enefit.com/en/oil/projects/usa].
In considering the impacts to water resources from Enefit's White Rjver Mine, the BLM references its 2007 EA for OSEC's proposed mining operations at the mine site [Draft PEIS, Appendix A, A.5 .3.4.3, pg. A-79].
Water requirements for the OSEC operations, based on the use of an A TP retort, are likely not comparable to those proposed by Enefit and

again shows that BLM has failed to cooperate and discuss these vital issues with industry. The state strongly suggests that BLM cooperates with industry and again asserts that the DPEIS is deficient without these efforts.
The anticipated decline in available Colorado River water is based in part on the development of water for oil shale and tar sands development [Draft PEIS, Chapter 4, 4.5.2.2, pg. 4-48].
This decline appears to be based
on the water requirements of older technologies and should be revised accordingly.
The BLM appears to believe that water is only available through retiring agriculture water rights [Draft PEIS, Chapter 4, pg 4-34-4.35; Chapter 5, 5.5. 1.2, pg 5-27]. In Utah currently, there are approved water right applications totaling well in
excess of 10,000 acre-feet of water for the express purpose of developing oil shale and tar sands.
The assumptions regarding likely water sources for tar sands development on Asphalt Ridge are flawed [Draft PEIS, Chapter 5, 5.5.2.2.1, pg 5-37]. Water in the Green River, which flows past the southern tip of Asphalt
Ridge, is available for use. Until recently, there was an approved application to divert water from the Green River for tars sands development at Asphalt Ridge. The application is held by the Uintah Water Conservancy District, which plans tar sands development as a future use for the application. **#24])>**

<([#25 [*9.2.2*] **The DPEIS Does Not Fulfill the Requirements of a Commercial Leasing Program as**
Required by the Energy Policy Act of 2005

Section 369 of the Energy Policy Act of 2005 (EPACT) states "not later than 18 months after the date of enactment of this Act ... the Secretary (of Interior) shall complete a programmatic environmental impact statement for a commercial leasing program for oil shale and tar sands resources on public lands, with emphasis on the most geologically prospective lands within each ofthe States of Colorado, Utah, and Wyoming" [Public Law 109-58, "Oil Shale, Tar Sands, and Other Strategic and Unconventional Fuels Act of2005," Section 369 (d)].
Like the 2008 PEIS before
it, the 2012 Oil Shale Tar Sands PEIS seeks to simply identify lands "available for application for leasing" rather than completing an analysis that would make lands available for commercial leasing. The DPEIS, contrary to the intent of Congress in EP ACT, does not actually designate lands available for commercial leasing or establish the necessary guidelines or regulations for a commercial oil shale and tar sands leasing program by the BLM. The Preferred Alternative, in fact, takes a step backwards, constraining commercial leasing by:

• excluding large swaths of geologically prospective lands from application for leasing;
• demanding unnecessary, burdensome NEPA analyses that go beyond those required for conventional oil and gas and surface mining leasing programs; and
• predicating commercial leasing on the successful application of oil shale technology through an RD&D leasing program. **#25])>**

<([#26 [*9.2*] [*2.2*] Geologically Prospective Lands Excluded From Application For Leasing

The Preferred Alternative removes geologically prospective lands due to perceived conflicts with sage grouse core or priority habitat and lands with wilderness characteristics (LWCs). While the Settlement Agreement ("Agreement") [Civil Action No. 09-cv-00085-JLK, February 15,2011.] between the BLM and
environmental plaintiffs that resulted in the revision of the 2008 PEIS ROD required the BLM to

analyze the environmental effects of an alternative that excluded these lands from oil shale and tar sands leasing, the Agreement did NOT require the BLM to select this alternative. As discussed above, BLM's analysis of these two factors is replete with errors in fact and policy. In fact, in light of the requirements ofEPACT, the Preferred Alternative nullifies the intent of Congress to establish a commercial leasing program. **#26])>**

<([#27 [*9.6.1*] Unnecessary, Burdensome NEPA Analyses That Go Beyond Those Required For Conventional Oil And Gas And Surface Mining Leasing Programs

The BLM treats oil shale and tar sands leasing differently than oil and gas leasing and coal leasing by requiring additional levels of analysis before commencing commercial leasing. The agency states "it anticipates, to the best of its knowledge, that the surface disturbing activities involved with other types of mineral development are comparable to those that may result from oil shale and tar sands development" [Draft PETS, Chapter 4, pg. 4-1].

It also says that it anticipates that oil shale development will proceed in a three-step decision-making process similar to that used for federal on shore oil and gas [Draft PETS, Executive Summary, pg. ES-5]. Then it turns around and says that due to the experimental nature of oil shale and tar sands technologies, the BLM believes the stages ofNEPA compliance will be different from oil and gas. It goes on to explain that "(i)f and when applications to lease are received and accepted, the BLM will conduct additional required analyses, including consideration of direct, indirect, and cumulative effects, reasonable alternatives, and possible mitigation measures, as well as assessment of level of development that may be anticipated. (Based on this analysis of future lease applications), the BLM will establish general lease stipulations and best management practices" for oil shale and tar sands leasing and development [*Jd.*]

These extra levels of environmental analyses are unnecessary and place an undue burden on companies wishing to develop oil shale and tar sands resources. The proposed process is so cumbersome and fraught with uncertainty that few companies could afford to secure investment and dedicate capital resources to development efforts, especially given the added possibility of additional delays due to protests or legal challenges. This lengthy process defeats the intent of EPACT to construct a commercial leasing program, a program originally scheduled to be in place by 2011.

There are adequate federal and state regulations to deal with the impacts of oil shale and tar sands operation that protect water quality, air quality, and other resource values. Oil shale and tar sand developments involve well-defined, basic extraction, processing, and upgrading techniques that have been in use in Australia, Brazil, Canada, China, Estonia, and Ireland. Oil shale and tar sands enjoy commercial success in Canada and Estonia and have been produced there successfully for many years. Similar extraction and production technologies have undergone RD&D testing in the United States since the 1960s. The impacts from developing these resources should not require further BLM analysis or research to understand the enviromnental impacts of oil shale and tar sands before leasing can take place.

Oil shale and tar sand leasing and associated development activities have occurred on Utah state lands for many years. These operations have proceeded in a manner that provides adequate protection of the environment under state regulatory programs sanctioned by the Office of Surface Mining (OSM) and the Environmental Protection Agency (EPA). The BLM gives no reason why similar activities, safeguarded by the same level of environmental protection, could not be carried out on federal lands absent further NEP A or BLM analysis. The BLM correctly

states that it would have ample opportunities to assess the impacts of OSTS development plans with further "NEPA analysis and other approgriate review" "before approval of a lease and subsequent plan of development on a lease" [Draft PEIS, Chapter I, pg. 1-l] .
More RD&D and NEPA analysis is not needed now or before BLM proceeds to a commercial OSTS leasing program. **#27])>**

<([#28 [*9.7*] **Commercial Leasing Predicated On the Successful Application Of Oil Shale Technology**
Through An RD&D Leasing Program

The BLM declares in the Preferred Alternative that the agency "would like to maintain focus on RD&D projects" [Draft PEIS, Executive Summary, pg. ES-9.].
This is not the mandate of EP ACT, which was to proceed to commercial leasing. Congress did not ask the BLM to determine whether it wished to have commercial leasing or not. As was stated before, a number of companies have initiated pilot projects on state and private lands in Utah for years. One company, Red Leaf, is confident that its technology will lead to oil shale production on a commercial scale. It requested and received a permit from the Utah Division of Oil, Gas, and Mining (UDOGM) to proceed with commercial operations. The justification for seeking more RD& D data is not valid in the case of oil shale companies who might seek federal leases in Utah. **#28])>**

<([#29 [*9.6*] ***BLM's RD&D Leasing Program***

The BLM declares in the Preferred Alternative that the agency "would like to maintain focus on RD&D projects" [Draft PEIS, Executive Summary, pg. ES-9].
The state fmds this unacceptable, as the previous RD&D Leasing Program was not only excessively burdensome, but not economically attractive and, as a result, effectively killed interest in development of oil shale and oil sands on BLM land. As an example, the first round ofRD&D leases offered more than 5,000 acres for commercial development if a technology was deemed 'worthy' by BLM. The second round decreased the amount 'awarded' to RD&D lease applicants to less than 700 acres, as well as increased the administrative oversight and bureaucratic burden. Quite simply, 700 acres is not enough area for a successful conunercial project, as evidenced by the examples throughout these comment. In addition, BLM placed approximately 50% ofEnefit's preferential lease area as ' off-limits' to development despite having identified this as an area which should be awarded to the RD&D lease holder.
This is a clear example of the disregard for the realities faced by industry and shows that BLM is not truly interested in understanding the requirements of a successful oil shale industry. A simple coordination with industry during the DPEIS process would have borne this out, but BLM showed no effort in this regard. The result is massive regulatory uncertainty that shadows the industry and prevents successful economic development. It is further evidence that the reason that there is less commercial success in the United States is not due to lack of technology, as asserted in the DPEIS; instead it is due to the regulatory uncertainty created by efforts like this DPEIS. **#29])>**

<([#30 [*9.2.3*] **BLM's Deal With Plaintiffs In The Settlement Agreement Is At Variance With The**
Requirements Of EPACT

The BLM in many ways abrogated its responsibilities under EPACT when it signed the Settlement Agreement. The Agreement prohibited the BLM from issuing a call for expression of leasing interest for oil shale or offer lands for competitive tar sands leasing or expressions of interest in tar sands leasing prior to January 15, 2013 [Civil Action No. 09-cv-00085-JLK, 12,

February 15, 20 II.], well after the December 2012 deadline
for issuance of an ROD. This defeated the stated purpose behind the original 2008 PEIS for establishing a commercial leasing program. The Agreement effectively precluded consideration of areas of interest to industry for the purposes of the 2012 PEIS while at the same time giving disproportionate weight to "nominations" of areas precluded from oil shale and tar sands leasing by environmental interests. This turns the intent of EPACT on its head.
The labyrinthine process created in this DPEIS makes it nearly impossible for companies to develop oil shale resources on public lands. How can interested parties make applications for commercial leasing of oil shale in the absence of a commercial leasing program? If BLM delays further oil shale leasing analyses until companies nominate lands for leasing and BLM has no mechanism to allow companies to nominate lands for leasing, it is difficult to see how there can be commercial level oil shale leasing.
This is troubling for a number of reasons. NEP A requires agencies to assess the direct and indirect effects of a proposed action [40 CFR 1508.8.]. It also requires analysis of the cumulative impacts of a proposed action [40 CFR 1508.7]. The BLM proposes to complete the analyses for areas nominated for
commercial OSTS leasing after the ROD. Since this information is critical to an informed decision on the allocation of lands available for leasing and should be considered in the DPEJS, the BLM effectively signed away its statutory responsibility to properly analyze a major federal action that required an EIS under NEP A when it entered into the Settlement Agreement [See 40 CFR 1508.18 (b) (3) as it applies to adoption of a program to implement a specific statutory program, specifically EPACT].
In contrast, the BLM incorporates information related to lands with wilderness characteristics inventoried over five years ago. It proposes to include priority areas for sage grouse in its lands for exclusion from leasing with no supporting evidence for the selection of these core areas. Yet it fails to consider current evidence of interest in lease areas; in fact, it prevents the consideration of this interest. The level of interest in oil shale and tar sands lease areas has a direct and indirect effect on oil shale development. Denial of consideration of industry interest has cumulative impacts both on the development oil shale and tar sands technologies as well as the implementation of a commercial oil shale tar sands leasing program.
The Agreement did not require the BLM to predicate its leasing program on nominations of lands for leasing, nor did it prevent the BLM from establishing a commercial leasing program subsequent to the January 2013 date. Its selection of the Preferred Alternative indicates that the BLM did not seriously consider other options.
By entering into an Agreement that effectively foreclosed the opportunity for industry to express an interest in prospective areas or nominate appropriate areas for leasing prior to a ROD on the FPEIS and creating a situation in which the agency claimed it could not even consider such areas for the purposes of analysis in the DPEIS, the BLM :
• Violates the express provisions ofEPACT to establish a commercial leasing program for oil shale and tar sands; and
• Violates NEP A by segmenting issues to a degree that it is impossible for the agency to take the requisite hard look at the environmental impacts of a commercial leasing program. **#30])>**
<([#31 [*9.2.3*] [*10.5*] [*1.5*] Segmentation of Issues Violates NEP A and Contravenes Intent of EP ACT
The BLM cannot properly analyze the impacts from oil shale and tar sands leasing

because the agency has failed to:
• consider expressions of interest in oil shale and tar sands areas
• establish royalties, fees, rentals, bonus, and other payments for leases
• consider the support and interest in Utah for the development of oil shale and tar sands resources
• establish a program to facilitate land exchanges to consolidate land ownership and mineral interests into manageable areas [Public Law I 09-58, "Oil Shale, Tar Sands, and Other Strategic and Unconventional Fuels Act of2005," Section 369 (e), (n), (o).].
These actions are not only required by EPACT, they are necessary elements of a commercial leasing program. The 2008 PEIS provided the environmental analysis required by EP ACT for a commercial leasing program, with the assumption that within a carefully prescribed
time period the other critical components of the program would be in place. Four years later, these critical pieces remain in a state of flux.
Consider expressions of interest in oil shale and tar sands areas
This was discussed at length earlier.
Establish royalties, fees, rentals, bonus, and other payments for leases
A recent oil shale rulemaking agreement [Civil Action No.-09-cv-00091-JLK] allows the BLM to change royalty rates for oil
shale and tar sands leases, with the notice of proposed rulemaking (NPR) due out after the DPEIS comment period closes. The BLM states that "determining commercial royalty rates" [Draft PETS, Chapter I, pg. 1-13.] is
outside the scope of the congressional requirements ofEPACT for the BLM's programmatic analysis for a commercial OSTS leasing program. By removing and replacing the cunent royalty rate and creating even greater uncertainty for industry, the BLM, as it did with the Settlement Agreement, chose to further erode the formation of a commercial oil shale and gas leasing program,
Consider the support and interest in Utah for the development of oil shale and tar sands resources
The BLM acknowledges that state interest in leasing is relevant, stating "it has been suggested by one of the cooperating agencies, and seconded by others, that BLM develop an alternative that would allow for larger scale leasing and development in Utah and Wyoming where the majority of the cooperators support a program that makes more federal oil shale and tar sands resources available for application for future leasing, while limiting development in Colorado, where the majority of cooperators favor a more cautious approach to leasing and development" [Dra ft PETS, 2.4.4, pg. 2-76].
Governor Herbert has made it quite clear that Utah favors this approach [Utah Energy Initiative: A I 0 Year Strategic Energy Plan, Pg. 7].
However, The BLM dramatically reduced the acreage of lands allocated as available for leasing in Utah in the Preferred Alternative in apparent conflict with the high interest demonstrated by the state for increasing oil shale and tar sands development.
Establish a program to facilitate land exchanges to consolidate land ownership and mineral interests into manageable areas
The BLM admits it has no plans in place for land exchanges. The DPEIS contains no discussion of the ways BLM might facilitate such exchanges, either through requests for nominations for lands to exchange, determination of which federal lands are available for

exchange, extra staff and budgets to identify and expedite proposed exchange opportunities, or streamlined NEP A and land resource appraisals to foster quicker exchanges. The DPEIS simply avoids the subject by claiming that "the possible locations for such future exchanges are unknown at this time" [Draft PEIS, Chapter I, pg. 1-12].
Deferring or avoiding the identification oflands available for future
exchange does nothing to move the BLM forward in facilitating or giving priority to land exchanges as required by EPACT.
The 2012 DPEIS was an ideal opportunity to remedy the lack of coordinated
consideration of the cumulative impacts of these components on a commercial leasing program. Instead, the DPEIS segments these elements, removing them from even initial consideration, and cites the agency's self-imposed inability to weigh these essential factors as justification for scaling back the lands available for leasing even further than it did in the 2008 PEIS. By excluding these significant aspects of a commercial leasing program from analysis in the DPEIS, the BLM fails to properly examine the fuJI range of impacts from oil shale and tar sands leasing as required by NEPA, and has improperly segmented the analysis of the proposal. **#31])>**
<([#32 [*8.3*] [*6.1.1*] **BLM Overstates the Amount of Land Truly Available for Leasing**
BLM overstates the availability oil shale lands by failing to discuss the potential for conflicting known uses. Much of the land proposed for availability for oil shale leasing is already leased for oil and gas, and projects are planned to develop those resources. It is nearly impossible for both developments to occur on the same piece of land. The discussion in the DPEIS does not adequately reflect the true status of lands available for oil shale development because of existing proposals The BLM uses out-of-date (pre-2005) information and grossly underestimates levels of oil and gas drilling in the Book Cliffs area [footnote: Utah Division of Oil, Gas, and Mining drilling statistics by county for Duchesne and Uintah Counties for the years 2008 through 2011 give an average annual rate of264 oil wells in Duchesne County (Diamond Mountain area) and
88 oil wells and 410 gas wells in Uintah County (Book Cliffs area). Using these updated average annual drilling rate
figures for 20 years, rather than the incorrect 15 year p,Janning level presented in Table 6.1.6-5, provides estimates of
5280 oil wells in Duchesne County (versus BLM's 76 oil wells) and J 760 oil and 8200 gas wells in Uintah County
(versus BLM's 62 oil and I 43 gas wells) as the expected amount over a 20-year planning horizon. Attachment A I,
Section 6, Current Crude Source, pg A-1 09, needs to be revised to reflect current information on oil production
levels, which have increased significantly in the last few years. For example, Utah is currently producing at least 57
to 58,000 barrels per day compared to the 43,000 barrels per day depicted in Figure 8. The discussion ofPADD 4
does not reflect the new pipeline connecting Salt Lake City, Utah to the Las Vegas, Nevada market]. The DPEIS must be rewritten to discuss the conflict with oil and gas operations, discuss the minimal amount of lands
available as a result for oil shale leasing in Utah in the next 20 years.
The DPEIS also needs to discuss making a suitable amount of lands available for oil
shale and tar sands leasing in the face of the oil and gas development. As discussed above, the

oil shale industry is ready to proceed, and the BLM must provide enough resource to allow this industry to flourish. Allowing this will reduce our reliance on foreign oil, create jobs and bring significant economic development to every state involved. The state suggests modifying the definition of the most geologically prospective oil shale lands in Utah to include resources to a depth of 3000 feet. **#32])>**

Conclusion

The State of Utah appreciates the opportunity to work with the BLM on the development of active oil shale and tar sands industries in Utah, and stands ready to rework the DPEIS in order to do so. Specifically, we request that the BLM prepare the analyses requested by the state and local governments in Utah, and issue a Supplemental Environmental Impact Statement which discloses these new analyses to public scrutiny under the provisions ofNEP A. The state also urgently requests the BLM to immediately request further time to complete these analyses from the Court, for the reason that the tight time frame originally set out has proven too narrow to meet the provision of substantive federal law. The state offers to support the BLM in this request.

<([#33 [*9.2.3*] [*1.1.1*] The State of Utah also respectfully formally informs BLM, pursuant to the terms of
EPACT 2005, that it will not be bound by the artificial timeline set out in the Settlement Agreement providing that the amendments to the existing oil shale regulations will be offered for public comment on or about May 15, 2012, after the comment period on the DPEIS has closed. The BLM is required by EP ACT 2005 to consider the views of the Governors of the states involved, and is required to consider the effects of the land allocation decisions and the regulatory structure simultaneously as part of those consultations. The land allocation decisions and the leasing and royalty structure are part and parcel of the total leasing program envisioned by EPACT 2005. The state will not allow the law which created these consultation requirements to be artificially segmented by actions of the BLM and non-governmental parties, no matter the forum employed by BLM to create this improper segmentation. The state will be offering the BLM substantive comment about the connection between the land allocation information in the DPEIS and the soon-to-be-announced new regulatory structure. The state will require the BLM to consider any such comments as part of the record in the final decision concerning the Record of Decision based upon the current DPEIS. **#33])>**

<([#34 [*2.1.1*] The State of Utah strongly supports the work done by the BLM which culminated in the
2008 Records of Decision, and will actively and vigorously oppose any amendments or other changes to those decisions. The state specifically requests the BLM to consider the other alternatives within the DPEIS in light of the rush to poor analysis occasioned by the illconceived timeline set out in the Settlement Agreement, and determine that more time is
necessary for BLM to obtain sufficient information to make a reasoned decision. In light of the need for further information and analysis, and the need for a Supplemental EfS to provide this information to the public for review. Fundamentally, the state requests that BLM simply choose the No-action alternative, and affirm the earlier work.

#34])> Thank you for the opportunity to work with you to improve the land in Utah, and to provide for a healthy economy. Additional comment is attached as an Addendum and Technical Comments. Please feel free to contact myself for any further information that you may need.

Addendum To State of Utah Comments

Environmental Permit Requirements

<([#35 [*3.5.2*] [*3.5.5*] [*3.5.6*] [*9.3*] **Air Quality**
The state is heavily engaged in studies designed to identify potential adverse impacts on regional haze and winter ozone levels in the Uintah Basin. The state objects to the conclusory statements drawn from generalized information. The DPEIS indicates that PM2.5 and ozone could rise above acceptable levels in the Uintah Basin if oil shale and tar sands development begins on a commercial scale.
The DPEIS, however, contains some pro forma references to state and federal regulatory means for addressing air quality issues, particularly in the Uintah Basin, that lack the specificity required for informed decision-making. Annual emission inventory for criteria pollutants and VOCs for counties is ten years old [Draft PEIS, Chapter 3, 3.52, pp. 3-105-107].
UDAQ recommends updating the emissions to most
current available inventory.
Utah Division of Air Quality urges the BLM to identify best management practices (BMPs) for the reduction of PM, NOx, and VOC emissions from oil shale and tar sands operations. The Division also requests that BLM consider the cooperative efforts currently underway statewide and regionally to tackle the challenges presented by wintertime ozone. The results of these studies and cooperative partnerships are important for BLM's decision-making process on the allocation of areas available for oil shale tar sands leasing and should be part of the DPEIS analysis.
Regulatory Mechanisms
A Memorandum of Understanding (MOU) signed by the Department of Agriculture, Department of the Interior, and the Environmental Protection Agency on June 23, 2011, committed the signatory agencies to a clearly defined, efficient approach to compliance with NEPA regarding air quality and air quality values (AQRVs) in connection with oil and gas development on federal lands [*Memorandum Of Understanding Among The U.S. Department Of Agriculture, U.S. Department Of The Interior, And U.S. Environmental Protection Agency, Regarding Air Quality Analyses And Mitigation For Federal Oil And* Gas *Decisions Through The National Environmental Policy Act* Process.].
The MOU established procedures for assessing impacts related
to NAAQs and AQRVs. The DPEIS referenced the MOU for GHG emissions [Draft PETS, Chapter 4, 4-6.1.1.1, pg. 4-57]. but failed to do the same for other criteria pollutants.
According to Section V.D. ofthe MOU [*Memorandum of Understanding, pg. 9.*],
" ... the Lead Agency (BLM) will complete and document supporting air quality and AQRVs analyses prior to (f)ederal oil and gas planning, leasing, or field development decisions. " (emphasis added)
These air quality and AQRVs analyses should incorporate the most current data. The county annual emissions inventory data cited in the DPEIS is ten years old. The Utah 2008 Statewide Emission Inventory contains the latest data and is available on the UDAQ web site at: http://www.airguality.utah.gov/Planning/Emission-lnventory/2008 State/08 State List.htm.
The state summary, last updated in November 2010, categorizes emissions for the six criteria pollutants by area source, non-road mobile, on-road mobile, point source, biogenics and wildfires:
(http://www.deq.utah.gov/search results.htm?cx=0032154170477771 85873%3Asg4mqgvgkm&q=2008+emissions+invcntory+county&cof=FOR1D%3A9.
The inventory includes detailed annual emissions from point sources in each county (http://www.airquality.utah.gov/Planning/Emission-

Inventory/2008 State/2008 ForrnB CountyDetails112210.pdf) as well as from area sources (http://www.airquality.utah.gov/Planning/Emission-
Inventory/2008 State/2008 Area revised 11301 O.pdD .
UDAQ has pointed out this omission in previous comments. According to the MOU [*Ibid.*], early in the NEPA process the lead agency will discuss with the agencies:
• information about the affected environment to include in the baseline assessment;
• methodology, assumptions, and scale ofthe analyses; and
• monitoring protocols and mitigation
The BLM has yet to include this important infom1ation in its air quality impact analysis. UDAQ requests the BLM update its data and uti lize the 2008 emission inventory in its analysis for the DPEIS.
Monitored concentrations representative of the study area [Draft PEIS, Chapter 3, Table 3.5.3-2, pp. 3- 11 2-113] reference concentration
levels for PMI 0, PM2.5, and S02 from monitors in surrounding states, specifically the Grand Junction CO Powell Station and Rock Springs, WY station. Data from these monitors, located at some distance from oil shale/tar sands resources in Utah, do not provide the necessary specificity for an accurate accounting of emission levels in the Uintah Basin. UDAQ, through its 2012 Winter Ozone Study, is collecting air quality data from 20 fixed, distributed monitoring stations in the Basin and two air quality "super sites" in Roosevelt and Horsepool. Three permanent monitors in Fruitland, Roosevelt, and Vernal supply regional air quality information. Data from these sites should be considered in any analysis of air quality in the study area.
About 75% of all PM2.5 found on UDAQ's monitoring filters is created by secondary particulate formation, which occurs when precursor emissions, usually NOx, SOx, and VOC, react in the atmosphere to form PM2.5. Oil and gas operations emit precursor gases that contribute to the formation ofPM2.5 and oil shale development would likely do the same.
UDAQ recommends the BLM utilize the data from the aforementioned monitoring
stations located in the Basin, incorporate this data into the FPEIS, and consider it in its Record of Decision. Any impact assessment for air quality from oil shale and tar sands development should contain the available emissions data from the Uintah Basin 2012 Ozone Study (see below). The preliminary results from this study, scheduled for release in July, will provide a more comprehensive picture of air quality conditions in the Basin. Given the challenges facing the Basin with ozone and PM2.5, the BLM should utilize the most up-to-date air quality information to make informed decisions on oil shale lease allocation decisions.
In addition, UDAQ requests the BLM reference the MOU Appendix "Modeling Approaches to Evaluate Air Quality for NEPA Decisions Regarding Federal Oil and Gas" in support ofthe requirements of Section V.D. The Reusable Modeling Framework (RMF) contained in the Appendix recommends that
"(/)or future emissions, projections should be made.ft-om the base year to 10-15 years forward to examine the potential for maximum growth in the planning area. "
Emissions projections will apprise the DLM of potential air quality issues associated with commercial scale oil shale development and should be part of the air quality analyses for lease allocation decision-making.
Best Management Practices
Normally, the state uses the New Source Review (NSR) program to regulate oil and gas emissions, with sources subject to Best Available Control Technology (BACT) review, modeling, and public comment before receiving a permit. To qualify for NSR, sources must meet

a minimum threshold of emissions- 5 tons per year of any criteria pollutant, less than 500 pounds per year of any single hazardous air poll utant, or less than 2,000 pounds per year of combined hazardous air pollutants. If the source emits less than the threshold they fall outside of NSR regulations (de minimis emissions).

In the Basin, many of the oil and gas emission sources, including wellheads and tanks, do not meet the NSR threshold and are not regulated [UAC R307-413-2.]. RD&D oil shale projects will probably also

not meet this NSR threshold. UDAQ and its partners in the Basin are working with stakeholders to determine the feasibility of other regulatory measures for sources that fall outside ofNSR to establish better pollution controls for smaller sources.

Emissions that fall within this de minimis exemption could include fugitive dust from mine operations, products of combustion including SOx, NOx, CO, C02, and VOC fTom oil processing and handling equipment.

Proposed National Environmental Standards for Hazardous Air Pollutants or NESHAPS regulations on oil and gas sources [76 FR 52738, Tuesday August 23, 20 I I.] could significantly lower emissions, particularly from VOC

sources. These VOC reduction methods include the use of low bleed pneumatic controllers, wet seals on centrifugal compressors, rod packing replacement for reciprocating compressors, and the use of vapor recovery units on storage tanks. Use of these controls could prove crucial to protecting Basin air quality while allowing for resource development.

We have included suggested oil shale development BMPs for fugitive dust, VOCs, and combustion engines These BMPs include management practices for emissions from current oil shale development projects. The BMPs cited do not represent the full complement available for emissions reduction.

Fugitive Dust

Blasting

• Stabilize surface soils where drills, support equipment, and vehicles will operate
• Pre-water and maintain surface soils in a stabilized condition
• Apply and maintain a chemical stabilizer on surface soils
• Stabilize soil during blast preparation activities
• Limit the blast footprint to no larger than what can be practically stabilized immediately following the blast
• Maintain surface rock and vegetation where possible to reduce exposure of disturbed soil to wind
• Stabilize soil after blasting
• Water disturbed soils to fonn crust immediately following blast and safety clearance

Clearing

• Stabilize surface soils where support equipment and vehicles will operate
• Pre-water and maintain surface soils in a stabilized condition or,
• Apply and maintain a chemical stabilizer on surface soils
• Stabilize disturbed soil immediately after clearing and grubbing activities
• Water disturbed soils to form crust, or
• Apply and maintain a chemical stabilizer on disturbed soils to form crust.
• Stabilize slopes at completion of activity
• Stabilize sloping surfaces using soil binders until vegetation or groundcover can effectively stabilize the slope

• Apply water and maintain sloping surfaces/wind breaks in crusted conditions
Additional Ongoing Measures
• Water unpaved roads periodically or apply chemical stabilizers
• Remove dust-forming debris from roads promptly and scrape and compact unpaved roads frequently to stabilize the road surface
• Restrict the speed of vehicles in and around the mining operation
• Revegetate, mulch, or otherwise stabilize the surface of all areas adjoining roads that are a source of fugitive dust
• Restrict the travel of vehicles on other than established roads
• Enclose, cover, water, or otherwise treat loaded haul trucks to minimize loss of material to wind and spillage
•Substitute conveyor systems for haul trucks and cover conveyor systems when conveyed loads are subject to wind erosion
• Minimize the area of disturbed land
• Revegetate lands promptly
• Plant special windbreak vegetation at critical points in the permit area
• Control dust using water sprays, hoods, dust collectors or other controls
• Reduce the period of time between initially disturbing the soil and revegetating or other surface stabilization
• Restrict fugitive dust at spoil transfer and loading points
• Control dust from shale storage piles through use of enclosures, covers, or stabilization
Combustion Engines
Require the following emission standards for stationary internal combustion engines:
•2 g/bhp-hr ofNOx for engines less than 300 horsepower
• 1 g/bhp-hr ofNOx for engines over 300 horsepower.
Control emissions from engines utilizing Best Available Control Technology (BACT) such as lean-bum technology, catalysts, air/fuel ratio controllers or other technologies
Schedule proper maintenance and upkeep of vehicles to ensure optimal functioning of engines
Volatile Organic Compounds
• Use vapor control systems on tank breathing vents, with vapors routed to condensers and/or combustion for tanks larger than a certain capacity [40 CFR 60 Subpart Kb] is if the material has a true vapor pressure greater than 5.2 kPa. This is equal to 5.2 bar, 0.05 atmospheres, or 0.76
ps1g.
• Conduct regular leak detection using a VOC detection device and repair all process connections in VOC service
• Ensure regular maintenance of tanks, roof seals, hatch seals, and tank loading process connections
• Replace safety relief valves less than 48 hours after use
• Operate thief hatches in the locked position at all times when the tank itself is not being actively maintained
• Discourage the use of surface evaporation impoundments to receive produced wastewater
• Use pneumatic controllers with a no bleed or low bleed design
Studies and Partnerships

UDAQ is currently involved in several studies to address the problem of wintertime ozone in the Uintah Basin. Stakeholders from the oil and gas industry, federal land management agencies (including the BLM), several western states, and the EPA have joined forces to identify the causes of winter ozone and formulate mitigation strategies.

In 2009 and 2010, monitors showed that concentrations of both PM2.5 and ozone were at or near the current state and national standards. The EPA and the Ute indian Tribe have four monitoring stations in the Uintah Basin: Myton, White Rocks, Ouray, and Red Wash. In the winter of201 0, ozone levels reached a high 8-hour value of 139 ppm during inversion conditions, nearly twice the national health standard. UDAQ wintering monitoring studies for 2007, 2008, and 2009 have shown that , under inversion conditions, PM2.5 concentrations are at or above the standard and can be as high as those seen along the Wasatch Front. Due to low snow cover this winter, in 2012 ozone levels did not exceed these standards. However, UDAQ anticipates that under normal snow cover conditions in the Basin, ozone levels will rise above this standard during wintertime inversions.

The Uintah Basin 2012 Winter Ozone Study was a comprehensive study of the atmospheric chemistry and precursor gases that form wintettime ozone in the Basin. The study was by far the largest and most complex air quality study ever conducted in Utah. The nearly $3 million effort was funded by a number of agencies, including the Uintah Basin Impact Mitigation Special Service District, Western Energy Alliance, BLM's Utah Office, and EPA Region 8. Cooperative research work was undertaken by atmospheric research partners from USU, NOAA's Chemical Sciences and Global Monitoring Divisions, University of Colorado's Institute
of Arctic and Alpine Research, DAQ, EPA, BLM, and local oil and gas producing members of the Western Energy Alliance.

Study components included:

• Basin-wide ozone and precursor measurements to determine spatial extent of the problem.

• Long-term monitoring of ozone and key precursors at two "super sites"- Roosevelt and Horse Pool-to provide baseline trend information against which energy production increases and mitigation work can be evaluated.

• Intensive atmospheric chemistry studies to understand the chemical pathways and determine limiting formation precursors.

• Development of a complete, detailed inventory of emissions sources in the Basin, including information on location, operation, and pollutants emitted.

Preliminary results and conclusions are scheduled for release in July 2012. The goal of the study is to develop a conceptual model of wintettime ozone formation in the basin and identify appropriate and effective air pollution mitigation strategies. While the lack of snow this winter hindered efforts to analyze the photochemical reaction of sunlight on snow that seems to leads to ozone production, the emissions inventory component of the study was still important. The emissions inventory identified source emitters, emission rates, and emissions characteristics. Source specific measurements located areas of high concentrations for precursor gases. This data will not only aid in identifying the location, level, and spatial representation of ozone and its precursors in the Basin, but will also assist in the development of mitigation measures and strategies for emissions reductions in areas where high levels of ozone have been detected.

Utah, Colorado, and Wyoming, the EPA, the BLM, and the U.S. Forest Service are participants in a pilot project called the Three-State Study. The project will provide a regional

assessment of air quality conditions by focusing on the impacts from oil and gas development. Leasing allocation decisions in the DPEIS for oil shale and tar sands will be located in these three states and the findings from this project on air quality issues in the Uintah Basin will have bearing on oil shale development in the area.

Specifically, the pilot project focuses on the flowing activities:

• Expanding air quality monitoring to establish baseline conditions, track trends, and evaluate model performance;

• Creating a data warehouse to store, manage, and share data among state and federal agencies, industry, and their contractors to support modeling of air pollutants; and

• Performing regional scale air quality modeling of current and projected conditions.

UDAQ has also established an Oil and Gas Air Quality Partnership to evaluate the impacts of oil and gas development on air quality and determine the best approaches for managing the Uintah Basin air shed. UDAQ will include oil shale development in this effort. Representatives from the following agencies are involved in the partnership:

Anadarko Petroleum
Bill Barrett Corporation
Bureau of Land Management
Duchesne County Commission
ECO Resources
Energy Dynamics Lab
Environmental Protection Agency
GASCO
McVehil Associates
Newfield Exploration
QEP
Questar
Red Leaf Resources
Rocky Mountain Power
SITLA
Tri-County Health Department
Uintah County Commission
Uintah Impact Mitigation SSD
Utah Cooperatives
Utah Department of Environmental Quality
Utah Division of Air Quality
Utah Governor's Office
Utah Petroleum Association
Ute Energy
Western Energy Alliance

These collaborative efforts demonstrate the willingness of parties involved in resource development in the Basin to work cooperatively in search of solutions. These partnerships and the resulting development of air quality mitigation strategies will have a direct bearing on the resource use decisions contained in the DPEIS and should be given thorough consideration.

#35])>

<([#36 [*3.4.2*] **Water Quality**

Surface Water Quality

In Utah, oil shale reserves are located primarily in the Green River Formation within the Colorado River drainage. Surface waters in the Uintah Basin are known for high salinity. Several rivers located in the area are listed on Utah's 303(d) list of impaired water bodies for high salinity (total dissolved solids, or TDS) at levels that do not protect for agricultural uses. When pollutants impair the use of water a study is required to determine how to reduce them and restore water quality. This study is known as a Total Maximum Daily Load (TMDL). A TMDL establishes the maximum amount of a pollutant allowed in the water while maintaining all of its designated beneficial uses. Several water quality studies have been conducted in the Colorado drainage that address the reduction of pollutants like salinity and the restoration of water quality. A full list of approved TMDL's for this area of Utah is located online at or by request from the Division of Water Quality.

The development of oil shale and tar sands as described in the DPEIS will have impacts on the Bitter Creek and Willow Creek watersheds, which will have to be addressed. Willow Creek is on the 2010 Utah 303(d) list oflmpaired Waters for biological degradation based upon macro invertebrate data. Bitter Creek frequently exceeds numeric water quality standards for both TDS (> 1,200 mg/1) and boron (> 750 ug/1). Currently, the main source of TDS and boron in

the Uintah Basin is from the erosion of weathered rock. The BLM should consider and, wherever possible, control for actions that could potentially increase either TDS or boron concentrations in the surrounding surface waters.

Oil shale development can potentially cause impacts to surface water quality through:

• Erosion;
• Withdrawal of water for operations; and
• Discharge of water used in operations

Ground disturbance activities (erosion) can degrade surface water through drainage from prepared sites, which can contribute sediment, salts, and possibly chemicals and oil shale products into receiving streams. Typically, DWQ minimizes the degradation to surface water from ground disturbance activities through stormwater permits. However, mining activities are exempt from this requirement unless the water comes into direct contact with tailings. The BLM should evaluate the potential for water-tailings contact. In the event a permit is not required for oil shale projects, DWQ recommends the development of a detailed plan that minimizes stormwater influence on surface waters and a monitoring program that measures the effectiveness of mitigation measures. A voluntary mitigation plan would demonstrate a commitment by project developers to sustainable development and would provide necessary data for future expansions.

Withdrawal of groundwater during mining operations can potentially affect surface water quality. Significant decreases in groundwater aquifers can result in a corresponding decrease in inputs to streams or lakes. Such decreases would likely increase stream temperature and Dissolved Oxygen (DO), which could have damaging effects on fish and other wildlife.

It is frequently difficult or impossible to contain all of the groundwater withdrawn for mining operations, which necessitates a Utah Point Source Discharge Elimination System (UPDES) permit. **#36])>**

<([#51 [*3.4.2*] **Groundwater Permits**

Groundwater conditions in the southern Uintah Basin are poorly known because the area has not been exploited for groundwater historically and the predominance of fine-grained sedimentary rocks in the area is not favorable to containing groundwater in aquifers. Aquifers

controlled by the stratigraphy are present, mainly in the subsmt'ace. The Douglas Creek and Bird' s Nest aquifers are good examples of these types of aquifers.
These aquifers will become increasingly important as the area is developed for oil shale and tar sands operations. Isolated aquifers and zones of saturation such as PR Spring may be locally important sources of water. Oil shale and tar sands operators should, as part of their mine development activities, prepare an inventory of springs and seeps near their proposed operation and note occurrences of groundwater in exploratory drill holes and water wells. Operators should take samples from these sources to determine background groundwater quality and class.
When ongoing monitoring or other reporting is necessary to ensure groundwater protection, the permittee and DWQ will develop and mutually agree upon pennit conditions. A draft version of the permit will be made available to the public for a 30-day comment period, and after resolution of concerns raised during this comment pern1it, a final permit will be issued.
#51])>
<([#52 [*3.4.2*] **Groundwater Discharge Permits**
The Utah Ground Water Quality Protection Rules (UAC R317-6) allow DWQ to protect Utah's groundwater resources by issuing ground water discharge permits. The rules require facilities that have the potential to cause a discharge of po11utants to groundwater to apply for a ground water discharge permit. These facilities include mining and milling operations with waste management units such as tailings impoundments and waste storage piles. This requirement ensures that oil shale and tar sands facilities that have the potential to impact groundwater resources are regulated by the state to minimize or prevent degradation of groundwater quality.
Groundwater discharge permits require site-specific characterization of the proposed facility including depth to ground water, hydraulic gradient, ground water flow direction, and pre-operational background ground water quality.
The two primary components of a groundwater discharge permit are best available technology and groundwater monitoring. Best available technology minimizes the discharge of contaminants from the waste source by applying control and containment technologies such as liners, leak detection systems, leak collection systems, and pump-back systems. Groundwater quality monitoring in compliance wells measures the actual effect of the facility operations on groundwater quality. The rules utilize federal drinking water maximum contaminant levels as groundwater quality standards. Permit-specific protection levels are percentages of the standards based on the site- or well-specific Groundwater Class (i.e., the better the ground water quality, the more stringent the protection level). If practical, based on depth to groundwater, compliance monitoring wells are used to provide an early waming of contamination. This allows time to implement corrective actions well before beneficial uses are adversely affected. Permit conditions can also address the discharge of subsurface water affected by a permitted facility that may become a nonpoint source of pollutants to surface water.
Jn some cases, after review of the material submitted in a groundwater discharge permit application, DWQ may conclude that the project qualifies for permit-by-rule status, if it has *de minimus* effect on water quality or if other regulatory programs insure protection of water resources.
#52])> Technical Comments
<([#37 [*13*] Preamble, Page xxiii, line 15:
Insert "SITLA" as an acronym for "School and Institutional Trust Lands Administration (Utah)"
#37])> <([#38 [*2.2*] ES. 6.3, page ES-6, lines 28-29:

Core or priority sage grouse habitat, as defined by such guidance as the BLM or DOI may issue" has not been determined. DOl and BLM have committed to defer to state-level determinations of what constitutes such habitat. These processes are ongoing. As more fully set forth in the body of these comments: (1) the State and its constituent agencies cannot adequately comment on the proposed alternatives until the extent of such habitat is determined; and (2) the PEIS appears to be based on maps of such habitat that have not been themselves released for public comment or reviewed under NEP A. **#38])>**

<([#39 [*10.6*] Chapter 1, Page 1-13, lines 32-37:

It is erroneous to exclude oil shale regulations and national policy from the scope of the PEIS. BLM is obligated to follow the law in its analysis. EPACT 2005 explicitly makes development of oil shale resources a national policy priority. The PEIS needs to include a detailed analysis of the relationship between each alternative and national policy as expressed in EP ACT. Similarly, determination of commercial royalty rates should not be excluded from the scope of the PEIS. Depending on the level at which such rates are set, the range of foreseeable development of oi I shale resources will vary greatly. The analysis of each alternative should include analysis of development scenarios under various royalty rates, or else be delayed until royalty rates are determined, and then analyzed. **#39])>**

<([#40 [*1.5*] **Chapter 1, page 1-20, II. 20-23:**

The PEIS states that BLM has not received any new information since the 2008 OST PEIS and ROD concerning the environmental consequences of commercial oil shale development. There is a wealth of public information that is available and should be considered. These include multiple reports prepared on behalf of the U.S. Department of Energy by the University of Utah's Institute for Clean and Secure Energy on environmental, resource and socioeconomic consequences of unconventional fuel development in the subject area, prepared in response to Section 369 ofEPACT. Significant information is also available with respect to development of oil shale and tar sands on state trust lands in Utah, notably in the form of public files for mine permitting on file with the Utah Division of Oil, Gas and Mining and the Utah Division of Water Quality. The DPEIS must be revised to take into account each of these sources of information. **#40])>**

<([#41 [*9.2.2*] **Chapter 2, Page 2-13, II. 10-24.:**

As noted in the body ofthe state's letter, the PEIS should confirm that just because BLM lands are withheld from competitive leasing does not disqualify the lands from conveyance to the State by land exchange in accordance with Section 369(n) ofEPACT, other exchange authority, or state indemnity selection.

This section of the PEIS should also be reworded to discuss how BLM will follow Congress' mandatory directive in Section 369(n) ofEPACT that it will give priority to land exchanges. As currently draft, the PEIS notes the directive, and then devotes most discussion to why BLM will have problems with doing so. The PEIS should reflect that by law such exchanges are to be a priority. The PEIS should also note the environmental benefits of land exchanges, including protection of natural values and other resources on state trust lands through conveyance to the United States.

This section of the PEIS also needs to be supplemented to reflect legal alternatives to an appraisal process in concluding land exchanges. Existing BLM land exchange regulations state:

In the absence of current market information reliably supporting value, the authorized officer may use other acceptable and commonly recognized methods to determine market value: 43 C.FR. 2201.3-2(c).

This language has been used as the basis for multiple oil shale land exchanges between BLM and Utah on the basis of ton-for-ton conveyance of oil shale, adjusted for energy content, without necessity of appraisal. Similarly, the Utah Recreation Land Exchange Act of2009, Pub. L. 111-53, contains language for transfer of federal oil shale land to the State without appraisal, based on BLM reserving an interest in future oil shale production from the lands equal to 50% of bonuses and rentals, and BLM's royalty share, less preexisting mineral revenue sharing obligations to the State. See H. Rep. 111-79 at 6-7 (analysis of section 3(f)). Proposed legislation now pending in Congress as H.R. 4027 contains similar language with respect to mineral valuation. The PEIS should recognize these authorities. **#41])>**
<([#42 [*6.5*] Chapter 4: Effects of Oil Shale Technologies
Table 4.1.1-1 Assumptions Associated with a Surface Mine with Surface Retort, page 4-3.
This table needs further explanation of the data presented to improve clarity. For example, the "(f)ootprint of development area (acres)" for Wyoming and Utah should give a number based on a time frame (per/yr) as is done with "water use," rather than the vague footnote explanation that it is the disturbance at any given time. The factor listed for "surface disturbance" is a larger number of acres than one could assume is the cumulative life of mine disturbance and it would be helpful to have the number in the table labeled as cumulative rather than having the reader refer to the footnote for extra clarification. The "wastewater" factor is provided on a gal/ton basis, but the table does not contain any data on the annual or cumulative number of tons produced. Such data would make this number meaningful in relation to the other factors provided. The wastewater factor should be in gallons per year, or ac-ft /yr, or gallons per barrel of oil produced in order to be meaningful. The "total employment" factor is not the sum of the direct and indirect employment factors and there is no explanation of how the BLM derived total employment from direct and indirect sources. **#42])>**
<([#43 [*6.5*] Table 4.1.2-1 Assumptions Associated with an Underground Mine with Surface Retort,
page 4-8.
This table suffers from the same lack of clarity in data presented as mentioned for Table 4 .1.1-1. **#43])>**
<([#44 [*6.5*] Table 4.1.3-1 Assumptions Associated with an In Situ Retort Project, page 4-11
This table suffers from the same lack of clarity in the data presented as mention for Table 4.1.1-1.
#44])> <([#45 [*6.5*] 4.1.6 Expansion of Electricity-Generating Capacity, page 4-13
This section mainly refers to the high electricity need for in situ projects proposed for Colorado, and does not differentiate that from the lower power need for the mine and retort technologies proposed in Utah. Specifically, this section does not reflect that ENEFIT and Red Leaf assertion that their operation will supply nearly all their own project energy needs from the retorting process. In addition, the first paragraph incorrectly states that definitive information about the power requirements of commercial oil shale development is not available. This is not the case with the ENEFIT technology. BLM's analysis is faulty because it does not include specific information about ENEFIT and Red Leaf technologies, which are both poised for commercial development in Utah. **#45])>**
<([#46 [*3.4.5*] 4.2.1.2 Acquisition, Conversion, or Transfer of Water Rights, page 4-19
This section only discusses water rights in Colorado, not in Utah or Wyoming. The ENEFIT project acquisition included water rights. The DPEIS needs a more complete and balanced discussion about water rights for all three states. **#46])>**

<([#47 [*3.4.5*] [*6.3.2*] 4.5 Water Resources, starting page 4-31
The discussion in this section and various subsections tends to use relative terms like "large" and "small" without defining what is meant quantitatively by such terms. For example, on page 4-33 under Water Use, on line 41, the PEIS states that "A large amount of water is required during the operations phase." Subsequent sentences give actual numerical ranges of water use, but nowhere is the term "large" actually defined. Likewise, on page 4-39, the last sentence EIS states that "(a) relatively large water-quality impact is expected in areas where population growth is large and the receiving water is small." The PEIS should define such relative terms in quantitative terms. **#47])>**
<([#48 [*6.2.1*] 4.9.1.4.2 Power Generation Facilities, page 4-152
This section relies on outdated information that anticipates new power generation coming from coal-fired power plants. Pending carbon management legislation and a surge of new domestic natural gas supplies means new power plants in Utah would likely be gas-fired. This assumption of coal-fired power generation and any associated analysis incorporating this assumption is out-of-date for the present market situations. BLM needs to revise the DPEIS to reflect the current market situation for new power generation plants. **#48])>**
<([#49 [*3.14*] 4.15 Health and Safety, page 4-199, Table 4.15.2
At the beginning of Chapter 4, the BLM revised the size of mining and surface retort and in situ oil shale projects downward, but this table utilizes the 2008 scenario of a 1,000,000 bbl/day oil shale industry. This table needs to have the size ofthe industry's health effects reduced to match the reduced size of the oil shale operations as provided earlier in Chapter 4. This would probably drop the overall industry to 14 facilities, with a production level below 500,000 bbl/day. The accompanying text and footnote also appear to be inconsistent and provide an overestimation of the number of oil shale workers compared to the total employee numbers given in Table 4. 1.1-1, 4.1.2-l, and 4.1.3-1 **#49])>**
<([#50 [*4.3*] Table 6.1.6-5, Projected Levels of Major Activities for Seven Planning Areas
This table presents faulty analysis of the level of OSTS developments on nonfederal lands in Utah by simply using the phrase "potential unknown" to gloss over known development activities, particularly those in the Book Cliffs area that are mentioned in Appendix B of the PEIS.
#50])>

OSTS2012D50334
Organization: Priscilla Burton
Received: 5/4/2012 5:27:34 PM
Commenter1: Priscilla Burton - , Utah 84518 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/14/2012 12:00:00 AM
Attachments: OSTS2012D50334.htm (OSTS2012D50334-58971.htm Size = 1 KB)
Submission Text
Dear Ms. Thompson and Mr. Nedd, **<([#1** [*2.3.1*] After reviewing the alternatives, I believe that

ES. 6.5 Alternative 3 Oil Shale Research Lands Focus and ES.6.6 Alternative 3 Pending Commercial Lease Tar Sands provides for multiple use, and habitat protection and is the most alternative at this time. Alternative 3 would allow the continued development of 32,640 acres under lease, allowing for the extraction technology and reclamation technology to be refined prior to leasing of additional acreage. Alternative 3 would not preclude future generations from making the choice to lease additional acres, but it would allow the technology to develop. This strikes the right balance for this point in time. Thank you for the opportunity to comment.
#1])>

OSTS2012D50335
Organization: Wyoming Department of Environmental Quality, Todd Parfitt
Received: 5/4/2012 5:34:47 PM
Commenter1: Todd Parfitt - Cheyenne, Wyoming 82002 (United States)
Organization1: Wyoming Department of Environmental Quality
Commenter Type: State Government
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/15/2012 12:00:00 AM
Attachments: OSTS2012D50335.htm (OSTS2012D50335-59063.htm Size = 1 KB)
2012_BLM_Oil_Shale_Tar_Sands_Draft_PEIS_-_Wyoming_DEQ_OSTS2012D50335.pdf (OSTS2012D50335-59062.pdf Size = 3186 KB)
Submission Text
See attached. Hard Copy to follow. See Attachment.

Department of Environmental Quality
Matthew H. Mead, Governor
May 4, 2012
To protect, conserve and enhance the quality of Wyoming's
environment for the benefit of current and future generations.
BLM Oil Shale and Tar Sands Resources
Draft Programmatic EIS
Argonne National Laboratory
9700 South Cass A venue - EVS/240
Argonne, IL 60439
John Corra, Director
RE: Comments on the "Draft Programmatic Environmental Impact Statement and Possible Land Use Plan Amendments for Allocation of Oil Shale and Tar Sands Resources on Lands Administered by the Bureau of Land Management in Colorado, Utah, and Wyoming" dated January 2012
Dear Sir/Madam:
Thank you for the opportunity to comment on the January 201 2, Draft Programmatic Environmental Impact Statement and Possible Land Use Plan Amendments for Allocation of Oil Shale and Tar Sands Resources on Lands Administered by the Bureau of Land Management in Colorado, Utah, and Wyoming. The following is a compilation

of comments from the Wyoming Depa11ment of Enviromnental Quality organized by our agency's divisions.
Land Qualitv Division
Given the voluminous and detailed nature of this document, much of this review was broadly focused on the key "big pictme" elements of the draft PEIS. Areas of general concern to the LQD include, but are not necessarily limited to, groundwater contamination, water consumption for retort processes, wastewater generation and reuse, land disturbance rate and acreage, placement of spent shale, and smface leaching of spent shale. In addition to general comments, this review contains comments that are specific to several sections relative to surface and underground oil shale mining and smface and in situ oil shale ret011 projects.
<([#1 [*6.4*] 1. Section 4.1.1 Smface Mine and Surface Retort Projects states "Regardless of the retort, spent shale volume would increase by 30% over the volume of raw shale introduced into the retort." Does this 30% increase in volume occur as a ' bulking factor' when the shale is removed from the ground, or does this 30% increase in volume occur between introduction to the retort and when the shale is spent, as the statement suggests? **#1])>**
<([#2 [*6.4*] 2. Section 4.1.2 Underground Mine and Surface Retort Projects states "It is assumed that up to 30% of the processed spent shale could be returned to the mine for disposal. If 30% of spent shale is returned to the mine, surface disposal is estimated to require approximately 60 acres/yr. with disposal heights and depths of 250 ft. " Later in this section, "No more than 30% of the spent shale would be disposed of within the mine; the remainder would be disposed of on the surface. This assumption is based on a best estimate of what may be feasible at any given site; specific mine development procedures may accommodate di sposal of a greater percentage of the spent shale inside the mine." Comment: Identifying the underground mining technique which allows a greater percentage of spent shale to be disposed of inside the mine, is optimal. These various underground mining alternatives should be thoroughly examined, relative to the site specific geologic constraints. **#2])>**
<([#3 [*6.3*] 3. Section 4.1.3 In Situ Retmt Projects states that "Groundwater and process water would be of variable quality, with the higher-quality water being used for industrial processes, dust control, revegetation, and so forth. Water of lower quality would be reinjected or otherwise disposed of pursuant to state requirements." Comment: Given the water consumption rates of retort operations, it seems that proposing higher quality water be used for dust control may be better reused in the retort process, and other non-water consumptive uses for dust control be investigated. **#3])>**
<([#4 [*2.2*] 4. The draft PEIS does not describe the methodology used to select the preferred alternative by the Bureau of Land Management (BLM).
• Section 2.4.4 discusses the preferred alternatives and there are comparison tables (Example - Table 2.6-1 and Table 2.6-2). However, it is not clear how the prefen-ed alternatives are selected by BLM.
• It is understood that "under all alternatives there is a lack of information on the magnitude of future actions on public land, the number of projects that might be undertaken, and the likely locations for future development,

the magnitude of the differences among the cumulative effects of the alternatives cannot be evaluated (page 6-243)". However, given these uncertainties, it is very useful for decision makers and readers to understand the methodology and metrics used by BLM to select the prefen-ed alternative.

#4])> <([#5 [*1.5*] 5. The draft PEIS lacks adequate details and is limited in applicability to serve the purpose of the PEIS. **#5])>**

<([#6 [*9.1*] 6. The purpose of the PEIS as understood are listed as below:

• Page 1-4, lines 16 to 20 "The BLM proposes to amend 10 land use plans in Colorado, Utah, and Wyoming to describe those areas that will be open and those that will be closed to application for commercial leasing, exploration, and development of oil shale and tar sands resources. The analyses in this PEIS have been developed to evaluate the effects of this proposed action and its alternatives."

Page 1-5, lines 23 to 27 "The analysis of potential impacts associated with oil shale and tar sands development in Chapters 4, 5, and 6 is programmatic in character and designed to disclose the potential impacts from future leasing and development, in order to provide the decision maker the available, essential information for making the allocation decision."

#6])> <([#7 [*9.3*] 7. It is acknowledged that "subsequent NEPA and other analyses at the leasing stage (whether oil shale, tar sands, or RD&D) will be required to determine the extent of the effect of oil shale and tar sands development when more specific information is known about the specific technologies being proposed and associated environmental consequences in the locations being proposed."

However, it is unclear how this draft PEIS would support the allocation deci sion making. It would be beneficial to include a section or a description how the draft PEIS is intended to be used by the decision makers for the allocation decision.

It is our expectation that project specific NEP A analyses will provide further specificity in the available extraction technologies to be applied and magnitude of impacts on the site specific enviromnent.

#7])> <([#8 [*6*] 8. The Rock Springs oil shale retort si te in Wyoming is not discussed in adequate detai ls in the PEIS. It would be very useful for the PEIS to describe these site operations, environmental impacts and the remediation strategies applied at this site. It would also be crucial to draw distinctions to the advances in technologies made in the extraction of oil shale in recent years over the technologies applied at Rock Springs.

• In appendix A.2 History of Oil Shale Development there are only 2 sections - A.2.1 Colorado Activities and A.2.2 Utah Activities. The activities in Wyoming are not included in this appendix or not discussed elsewhere in the draft PEIS

• The Rock Springs oil shale retort site was an experimental fac ility operated by the U.S. DOE, Laramie Energy Technology Center (LETC)

and its predecessor, Laramie Energy Research Center (LERC) between 1965 and 1979. The available documents on this site are maintained with the Wyoming Department of Environmental Quality, Land Quality Division. **#8])>**

<([#9 [*9.7*] 9. There is a lack of quantitative data from the existing oil and shale RD&D projects and the usage of this data and analysis for the PEIS.

• The RD&D projects are intended by the BLM to provide more information on the technological requirements and the environmental implications. However, for example in section 6.1.3 .4 (compilation of impacts on water resources from existing RD&D projects) there is no discussion or figures showing the impacts of the existing RD&D projects on groundwater. Plots and discussions on contaminants of concern from these existing RD&D projects would give the reader critical information about the magnitude of impacts on groundwater.

• It is understood that more details on the RD&D projects are in the EAs. But, the application of existing data from RD&D projects to supp01t the qualitative statements in the PEIS would improve the quantitative reliability of the PEIS for the decision makers. **#9])>**

<([#10 [*3.4.2*] 10. Chapter 6 (Impact assessment for oil shale and tar sands) discusses the impacts from different alternatives. There is a very limited discussion on the impacts of groundwater resources in this chapter and this discussion is also very broad and lacks any specifics or presentation of data from existing RD&D projects.

• For example, in section 6.1.2.4 discussing the impacts on water resources caused by Alternative 2 it refers that the impacts are same as Alternative 1. When referring section 6.1.1.4 (for alternative 1) there is just a list of possible impacts in very generic terms. **#10])>**

<([#11 [*5*] 11. The PEIS lacks any significant discussion on the available teclmologies and their effectiveness to remediate and restore the environment from the potential impacts caused by the development of oil shale and tar sands. **#11])>**

<([#12 [*3.1.7*] 12. The cover letter (41h paragraph, page 1) says "The oil shale planning area consists of 3,538,038 acres, which includes 2,138,361 acres of public lands and 158,566 acres of split estate lands". It is unclear what the other categories of lands are that constitute the difference between the total of (2,138,361+158,566) and the planning area acreage of 3,538,038. **#12])>**

<([#13 [*9.2*] 13. There does not appear to be reference to the requirement for a mine permit in Wyoming. Table D-15, Federal and State Leasing and Permitting Requirements, lists "NA" for Wyoming. Kerogen is a solid mineral and a mine permit is required for its extraction, tlu·ough either conventional or in-situ mining technology. **#13])>**

Solid and Hazardous Waste Divison

After reviewing Section 4.14 (Hazardous Materials and Waste Management) of the draft PEIS, the SHWD has the following general and specific comments.

General Comments

<([#14 [*3.13*] 1. The PEIS notes that wastes may be generated under different circumstances

dependent on technologies and locations (e.g., tar sand and oil shale facilities; support facilities), and describes general expectations for generic and specific waste types. Regardless of the patticular circumstances, it is the responsibility of the waste generator to be aware and understand the requirements for identifying, classifying and managing wastes including, but not limited to whether a waste is a solid or hazardous waste, the management requirements once generated (e.g., short-term storage) and the permitting requirements. This is particularly true of the 'specialty' wastes discussed in the PEIS, including asbestos, refrigerants, lubricants, process wastes, solvents, protective coatings, etc. **#14])>**
<([#15 [*3.13*] 2. The waste generator must verify that wastes managed off-site are managed at permitted facilities. The PEIS discusses this, but isn't consistent in all parts. Further, the PEIS should note, in certain circumstances, it may be necessary to obtain landfill operator approval before disposing of ce1iain wastes at a permitted landfill. **#15])>**
<([#16 [*3.13*] 3. The PEIS notes the potential for releases to the environment, but generally minimizes this by assuming wastes will be 'stored, used, and disposed of according to all applicable regulations.' While it is true appropriate management can reduce the potential for releases, the PEIS should acknowledge that when spills and releases occur there are requirements for reporting and for conducting clean-up through approved state programs. **#16])>**
<([#17 [*3.13*] 4. In Section 4.14.2 (Mitigation Measures) of the PEIS discusses measures and plans
to mitigate potential impacts from waste management. This is a fairly comprehensive list. However, while the list has a pollution prevention bullet related to substituting less hazardous alternatives, this section should also emphasize the full range of pollution prevention activities, including reducing the amount of waste generated, reusing wastes appropriately and recycling waste components. **#17])>**
Specific Comments
<([#18 [*3.13*] 1. Page 4-188, line 32 ofthe PEIS specifies that solid wastes are expected to be containerized and hauled to a permitted sanitary landfill or ' other appropriate waste disposal facilities.' It should be noted in certain cases this may be a solid waste transfer facility and not a disposal facility; regardless, the ' appropriate' facility must be permitted or approved by state or local government. **#18])>**
<([#19 [*3.13*] 2. At page 4-189, line 13, the PEIS refers to 'established' off-site sanitary landfills. This should be ' permitted' sanitary landfills. **#19])>**
<([#20 [*3.13*] 3. At a number oflocations in the PEIS (e.g., page 4-189, line18; page 4-190, line 18; page 4-1 96, line17), it is noted that temporary on-site storage may occur. Waste storage, particularly hazardous waste storage, is subject to specific requirements and time fran1es.
#20])> <([#21 [*3.13*] 4. At page 4-190, line 4, the PEIS states sludge accumulating in vessels and tanks
should be removed periodically according to cleaning and maintenance schedules. At the time those tanks or vessels are cleaned, it will be the responsibility of the waste generator to manage the sludges in accordance with applicable federal, state and local requirements. **#21])>**

<([#22 [*3.13*] 5. At page 4-190, line 28, the PEIS states landscape wastes may be compos ted onsite.
If wastes other than landscape wastes (for example, other construction
wastes) are proposed for composting, a permit or authorization may be needed for
an on-site composting facility. **#22])>**
<([#23 [*3.13*] 6. At page 4-191 , line 46, the PEIS indicates wastes from upgrading activities may need to be characterized as hazardous wastes. It is possible ce11ain wastes may
meet a hazardous waste ‘ listing’, and it is the generator’s responsibility to be
aware of applicable hazardous waste listings and manage wastes accordingly.
#23])> <([#24 [*3.13*] 7. Page 4-192, line 19, isn’t clear with respect to the types ofwastes and types of
landfill cells (off-site permitted disposal facilities, on-site facilities?) specifically
created to dispose of ce11ain wastes. This should be clarified with more detai l. **#24])>**
<([#25 [*3.13*] 8. On page 4-1 96, line 15, it states owners/operators may elect to treat and di spose
of hazardous waste at the oil shale facility. While the PEIS acknowledges the
need to obtain state permits for hazardous waste management, it is important to
note hazardous waste treatment, storage and disposal (particularly) permit
applications are subject to specific review and public comment and it may take
some time to obtain a permit. **#25])>**
<([#26 [*3.13*] 9. Page 4- 197, line 30. The bullet should also note the reporting requirements for releases and spills of hazardous materials and substances.
#26])> <([#27 [*3.4.5*] Water Quality Division
The following should be added to the bullet list of common impacts under Section 4.5.1:
“Cross flows between aquifers of varying water quality resulting from mining acti vities;”
Also the bullet on Page 4-32 sta11ing on line 6 should include agriculture wells since most
well s on BLM have agricultural (livestock) rather than domestic uses. **#27])>**
<([#28 [*6.3*] Section 4.1.4 discusses rights of way for Transmission Lines and Crude Oil Pipelines, but
should be expanded to include pipelines to the mine/processing sites for natural gas or
other fuels which might be necessary for providing heat for retorting. **#28])>**
<([#29 [*3.5.7*] Air Quality Division
The Wyoming Department of Environmental Quality Air Quality Division (WDEQAQD)
recognizes that the draft Programmatic Environmental Impact Statement (PEIS)
for possible Land Use Plan/Resource Management Plan amendments for allocation of Oi l
Shale and Tar Sands (OSTS) shows that the proposed OSTS study area in the Green
River Basin includes lands/areas that are located within the currently proposed Ozone
Non-Attainment Area boundary for the Upper Green River Basin under all four current
alternatives. Any development that may occur in the Green River Basin portion of the
planned development area in Wyoming may be located within the proposed ozone
nonattainment area, and may be subject to more restrictive nonattainment rules and
regulations. **#29])>**
<([#30 [*3.5.4*] [*3.5.6*] The WDEQ-AQD finds that the PEIS air quality analysis is not specific enough in the
absence of project specific quantitative air quality impact analyses to adequately address
air quality impacts from oil shale development. Therefore, when specific oil shale

development is identified within Wyoming at the implementation stage, the WDEQ-AQD expects the BLM to conduct quantitative air quality impact (i. e., dispersion modeling) analyses that are proportional to the type and intensity of the project based on the locations and emission levels of proposed project sources, which must incorporate geographical and topographical characteristics, and site-specific meteorology. The quantitative air quality impact analyses should be conducted to estimate impacts to air quality (e.g., ambient air quality standards) and air quality related values (e.g., visibility, atmospheric deposition). If the quantitative air quality impact analyses show that significant impacts are predicted, air quality mitigation measures must be considered. If such a need becomes evident during the life of the PEIS, the WDEQ-AQD expects the BLM to consult with WDEQ-AQD on the development of emission inventories, the necessary air quality impact analyses, and mitigation measures.
#30])> Thank you again for the opportunity to provide comments on the draft PEIS. Please feel free to contact me at 307-777-7555 with any questions.
Sincerely,
Todd Parfitt
Deputy Director
cc: John Corra, Director
Nancy Nuttbrock, Land Quality Administrator
Carl Anderson, Solid & Hazardous Waste Administrator
John Wagner, Water Quality Administrator
Steve Dietrich, Air Quality Administrator
Governor's Policy Office
7

OSTS2012D50336
Organization: Roaring Fork Sierra Club Group, Robert Millette
Received: 5/4/2012 5:36:07 PM
Commenter1: Robert Millette - Glenwood Springs, Colorado 81601 (United States)
Organization1: Roaring Fork Sierra Club Group
Commenter Type: Environmental Organization
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** aziech 5/15/2012 12:00:00 AM
Attachments: OSTS2012D50336.htm (OSTS2012D50336-59066.htm Size = 1 KB)
Comments_to_BLM_on_Oil_Shale_PEIS_OSTS2012D50336.doc (OSTS2012D50336-59065.doc Size = 28 KB)
Submission Text
To the Bureau of Land Management:

On behalf of the Roaring Fork Sierra Club Group I welcome the opportunity to submit comments of the Bureau of Land Management's Oil Shale and Tar Sands Draft Programmatic Environmental Impact Statement. We are pleased that the BLM is taking clear and measured steps to establish a rational and balanced approach to the federal oil shale and tar sands program.

<([#1 [*2.2*] While the agency's preferred alternative (2(b)) represents a step in the right direction, we feel that a stronger approach is needed to adequately protect our public lands while still supporting Research, Development and Demonstration (RD&D) of the oil shale industry. We do not understand why it is necessary to open up over 450,000 acres for additional oil shale RD&D leasing while 6 RD&D leases are still being explored and 3 additional applications for the second round of RD&D leasing are currently being evaluated. As yet, no viable process for extracting oil from oil shale has come out of these research and development leases. However, the lease held by Shell Oil seems to be the one most actively developed with efforts focused on their In-situ Conversion Process. But, even Shell speculates that it will be another decade before a viable oil shale process materializes.
#1])>
<([#2 [*2.3*] We would prefer to see an alternative closer to Alternative 3 that would maintain a more limited acreage for RD&D and not allow for commercial development of oil shale extraction until it is clearly demonstrated that a viable process is available. Moreover, we need a better understanding of the impacts that further oil shale development will have on our public lands, fish and wildlife.
#2])>
<([#3 [*3.4.1*] Before moving ahead with the leasing of greater acreage for oil shale and tar sands (the proposed Alternative 2 would allow up to 1 million acres for these purposes), we need to seriously consider the effects of a large scale oil shale development on **i) our water resources, ii) energy requirements and greenhouse gas emissions, and iii) our outdoor recreation and tourism industry.**

Demands on water resources: Current estimates for water requirements for the new oil shale retorting methods are 1 to 3 barrels of water per barrel of oil. Thus, for an oil shale industry projected to produce 2.5 million barrels per day, 105 to 315 million gallons of water per day will be required and an additional 58 million gallons per day will be needed for projected population growth. Where will this water come from? For the Piceance Basin, the major water source will be the Colorado River Basin. However, this basin is already in a water crisis due to global-warming induce drought and increasing population growth. These factors plus the amount allocated to Colorado and Utah under the interstate compact, and maintaining minimum flows, will place severe restrictions on water available for the oil shale industry.
#3])>
<([#4 [*3.5.1.1*] [*12*] **Before moving ahead with the leasing of greater acreage for oil shale and tar sands (the proposed Alternative 2 would allow up to 1 million acres for these purposes), we need to seriously consider the effects of a large scale oil shale development on i) our water resources, ii) energy requirements and greenhouse gas emissions, and iii) our outdoor recreation and tourism industry.**

Energy requirements and greenhouse gas emissions: The energy needs for oil shale development are immense. According to the RAND Corporation, production of 100,000 barrels of oil per day using Shell's in-situ heating method would require 1,200 megawatts (MW) of electricity. This is the capacity of the largest power plant currently operating in Colorado (the Craig Generating Station). A projected large-scale commercial oil shale industry producing 1 million barrels of shale oil per day would thus require 10 power plants the size of the Craig plant.

This seems to us like a huge waste of energy resources. If these new power plants are powered by fossil fuels, they will be producing millions of tons of greenhouse gases and other pollutants per year. Until more energy efficient and less polluting oil shale methods are developed, we are totally against further expansion of the oil shale leases.
#4])>
<([#5 [*3.1.2*] [*3.10.4*] **Before moving ahead with the leasing of greater acreage for oil shale and tar sands (the proposed Alternative 2 would allow up to 1 million acres for these purposes), we need to seriously consider the effects of a large scale oil shale development on i) our water resources, ii) energy requirements and greenhouse gas emissions, and iii) our outdoor recreation and tourism industry.**

Effects on Colorado's outdoor recreation and tourism industry: The land overlying oil shale resources in Colorado, Wyoming and Utah contains some of the best wildlife habitat in the West where outdoor recreation and tourism are huge economic drivers of the economy. In Colorado alone, hunting, angling, and other wildlife-related activities generate $3 billion annually. The projected reductions in river flows as the result of large scale oil shale development will likely concentrate dissolved solids, increase salinity, and devastate fisheries. In a 1996 study, the BLM found that a large scale oil shale industry "would result in the permanent loss or severe degradation of nearly 50% of BLM stream fisheries" and that surface disturbance, base flow reductions, and long-term aquifer disruption would result in the loss of 35% of the Colorado River cutthroat trout fisheries. This is unacceptable.
#5])>
<([#6 [*2.3.1*] Because of these considerations, we recommend that you adopt Alternative 3, or something close to it. Moreover, we urge you to restrict future oil shale leasing and development to a continued, rational research and development program until a viable, economically and environmentally feasible process for extracting oil from oil shale is proven and developed.
#6])>

OSTS2012D50337
Organization: Front Range Water Council, etal, Vicki Parks
Received: 5/4/2012 5:39:16 PM
Commenter1: Vicki Parks - Denver, Colorado 80204 (United States)
Organization1: Front Range Water Council, etal
Commenter Type: Misc. Organization
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/17/2012 12:00:00 AM
Attachments: OSTS2012D50337.htm (OSTS2012D50337-59069.htm Size = 1 KB)
BLM_Oil_Shale_and_Tar_Sands_PEIS_5-4-12_OSTS2012D50337.pdf (OSTS2012D50337-59068.pdf Size = 1923 KB)
Submission Text
The attached comments are being sent for Jim Lochhead and Dave Little on behalf of the Front Range Water Council. See Attachment.

a fl?®fJD@® WJ@a®lf ©®oo
May 4, 2012
BLM Oil Shale and Tar Sands PEIS
220 Water Avenue
Berthoud, CO 80513
Argonne National Laboratory, EVS Division Building 240
9700 South Cass A venue
Argonne, Illinois 60439
Submitted via electronic mail to: http://ostseis.anl.gov/involve/comments/index.cfm
To Whom It May Concern:
Re: Comments on Draft Programmatic Environmental Impact Statement and Possible Land Use Plan Amendments for Allocation of Oil Shale and Tar Sands Resources on Lands Administered by the Bureau of Land Management in Colorado, Utah and Wyoming (DPEIS)
This comment letter is submitted on behalf of the Front Range Water Council (Council), which consists of Denver Water, Northern Colorado Conservancy District, Colorado Springs Utilities, Aurora Water, Board of Works of Pueblo, Southeastern Colorado Water Conservancy District, and Twin Lakes Reservoir and Canal Company. The Council members are the largest water suppliers of municipal, commercial, industrial, and agricultural water needs in the state of Colorado. Collectively, the Council meets the water demands of approximately 80% of Colorado's population. The Council submitted comments to the Bureau of Land Management's (BLM) 2008 Draft Oil Shale and Tar Sands Programmatic Environmental Impact Statement (Draft
PEIS) expressing concern about impacts to the state's water supplies. **<([#1** [*9.8*] The Council appreciates the
BLM's approach to take a "fresh look" at new alternatives and the associated impacts of oil shale and tar sand development on public lands in Colorado. **#1])>** The Council resubmits its comments from
the 2008 Draft PEIS (letter attached) for consideration under the BLM's 20 12 DPEIS, in addition
to the following related comments:
<([#2 [*3.7.4.1*] Impacts to Upper Colorado River Threatened and Endangered Species
The Council commented on the 2008 Draft PEIS that oil shale impacts to the Colorado River's threatened and endangered fish species were not analyzed. The BLM's response to this comment was that such effects would be analyzed in NEPA documents for individual leasing authorizations, and until specific development plans are submitted to the BLM, the details regarding impacts would be unclear. This approach is inadequate to address the programmatic effects on the Colorado River Endangered Fish Species Recovery program. The Council believes this DPEIS must consider the potential effects to the recovery program and the species.
#2])> Members- City of Aurora; Colorado Springs Utilities; Denver Board of Water Commissioners; Municipal Subdistrict,
Northern Colorado Water Conservancy District; Northern Colorado Water Conservancy District; Pueblo Board of
Water Works; Southeast Colorado Water Conservancy District; Twin Lakes Reservoir & Canal Company
BLM Oil Shale and Tar Sands PEIS

May 4, 2012
Page 2
<([#3 [*3.4.5*] Impacts to Colorado's Future Water Development
Similar to its comment on the 2008 Draft PEIS, the Council believes the BLM must consider the most recent data available from the state of Colorado regarding the amount of water available for use in Colorado under the Colorado River Compact as well as policy statements from
the State of Colorado regarding future water development.
#3])> <([#4 [*3.4.1*] [*6.3*] Impacts on Population and Increased Energy Demands
Impacts to Colorado from oil shale development include population growth and increased energy usc. These impacts directly affect water resources, future water development and water supply. The Council continues to be concerned that the DPEIS' analysis of impacts to water supply, water quality, and water development is inadequate, in part because it docs not analyze the
range of impacts associated with various technologies used by oil shale developers. The analysis only generally describes impacts to water resources, and there is no quantification of the impacts, making it difficult to assess the potential severity of impacts.
#4])> <([#5 [*3.4.1*] Water Quality Impacts
The Council remains concerned about impacts to water quality from oil shale development. The DPEIS needs to include technology specific data to adequately analyze potential impacts to water quality.
The DPEIS raises the same concerns about oil shale development that the Council expressed in its 2008 comments on the draft PEIS. This DPEIS lacks sufficient data and does not analyze the ranges of impacts from the various technologies to determine what the impacts will be
to water resources. The Council would like to see the broad scale impacts of oil shale development thoroughly analyzed before the BLM begins to look at individual, project-specific approvals. **#5])>**
Sincerely,
Ji ater Council
Attachment: Front Range Water Council's March 20, 2008 "Comments on Draft Oil Shale & Tar Sands Programmatic Environmental Impact Statement"
DENVffi \!VATER
l(,oo WL· ~ t 12th ''''cnul' •Dl•mw ,.Color.ulo 8020·1·34 12
l'ltonc :IOH .o:.!IHIOOO • fa~ No. :'103·620·6 199 • \\\\W,dcm·t•m•il lcr.oi'S
March 20, 2008
BLM Oil Shale &
Tar Sands Draft Programmatic EIS
Argpnne National Laboratory
9700 South Cass A venue
Argonne, Illinois 60439
To Whom It May Concern:
Re: Comments on Draft Oil Shale & Tar Sands Programmatic Environmental ltnJ)act Statement
The Front Rnnge Water Users Council (Council), consisting of Denver Water, Nonhern Colorado Water Conservancy District, Colorado Springs Utilities, Au rom Water, Board of

Water
Works of Pueblo, Southeastern Colorado Water Conservancy District, and Twin Lakes Reservoir and Cannl Company, submit these comments on the December 2007 Draft Oil Shale and Tar Sands Programmatic Environmental Impact Statement (Draft PETS). The Council members are the largest water suppliers of municipal, commercial, industrial, and agricultural water needs in the state of Colorado. About half of the State's population receives its water supply from Council members. The Council became aware of the Bureau of Land Mnnagement's (BLM) Draft PEIS and the schedule for comments in late Pebruary 2008. Therefore, a letter was submitted to the BLM on behalf of the Council requesting a 60-day extension to the comment period allowing for a more thorough review of the document. 'f'o date no response to the request has been received.
<([#6 [*3.7.4.1*] Negative Impact of Large Uses on Endangered Fish Species
Oil shale development impacts to the Colorado River could negatively impact Threatened and Endangered Species. According to a preliminary review, the water requirements for commercial leasing could be substantial, especially when considered in the context of other cmrent and anticipated projects/activities in the Upper Colorado River Basin. The Council is concerned that the substantial water usc could hold negative consequences for the Colorado River Endangered Fish Species Recovery Program. In nddi tion, the project ns proposed raises several policy questions smrouncl ing the amount of available water from the Upper Colorado River for existing
and futmc development.
The State of Colorado is currently engaged in an effort to recover four fede rally listed fish species (Colorado pikeminnow, Humpback chub, Razorback sucker, and Bonytail) along a ISMile
reach of the Colorado River approximately 50 river miles below the area of development of oil shale. The Programmatic Biological Opinion (PBO) for the Upper Colorado River Endangered Fish Recovery Program is a multi-agency effort, which requires upstream water users to release 10,825 acre-feet of water to the mainstcm of the Colorado River on a demand schedule. Future depletions associated from oil shale development need to be analyzed concurrent with the releases required to determine if there arc impacts to the cooperative efforts on the Upper Colorado River between Front Range Water Users and West Slope water users to benefit the Endangered Species. Currently there is a 120,000 acre-feet pool of developable Colorado River water under the PJ30. What will be the impact of oil shale development on the PBO? Will its uses be beyond the 120,000 acre-feet and will that jeopardize the endangered fish? Will its uses place at risk both existing and future East and West Slope diversions? What arc the impacts on the 120,000 acre-feet of developable Colorado River water? Is the use of the limited water resource for oil shale development in the best economic, social, and environmental interest of the region and Colorado? **#6])>**
<([#7 [*3.4.1*] Negative Impact on Puture Water Development in Colorado
Oil shale development impacts to the Colorado River could have negative impacts on reasonably foreseeable and future water development needs and projects. According to Table 4.5.2-l (Water Budget Data for Oil Shale Development Projects) of the Draft PEIS, the remaining available surface water in the year 2000 was 340,000 acre-feet/year and the projected amount for 2030 ranges between 268,000- 412,000 acre-feet/year. Is this data presented accurate? Does this data take into consideration reasonably foreseeable water development projects? The State of Colorado is only now attempting a comprehensive analysis of the amount of Colorado River

water remaining under the Colorado River Compact. 1\.s a minimum, the Draft PEIS must list the "ranges" of water available for use in Colorado under the Compact. What <~re the social, economic, and environmental impacts to communities OJl the Front Range of Colorado if they arc
unable to develop Colorado River water or they are required to remain dependent on nontributary groundwater? What are the Threatened and Endangered Species issues associated with
this shift in water supply usc? How docs the shift from use of Colorado Ri vcr water to South Platte River water affect the Platte River Recovery Program and the four species being protected by that program? Considering that there is only a limited amount of water that can be developed in the Platte River without impacting the Threatened and Endangered Species in Nebraska, how will development of Colorado River water by oil shale impact the social, economic, and environmental resomccs on the Front Range of Colorado? **#7])>**

<([#8 [*6.3*] [*3.4.1*] Additional Analysis of Population and Technology Impacts Needed

Oil shale development impacts to the Colorado River will have impacts on population growth and energy use. The Draft PEIS should provide a more detailed analysis and additional discussion of the population influx associated with oil shale development, the proposed retorting technologies, and the subsequent energy demands. These variables could potentially have a greater impact on water resources in the region and is inadequately addressed. The Draft PEIS mentions proposed in-situ retorting technology and underground mining techniques with surface retorting that are to be implemented as part of the oil shale development and does not specify duration or the technology most feasible for the oil shale areas located in Colorado. However, variability in amount of water needed and the potential environmental impacts associated with these technologies make it difficult to determine the effects on resources on such a large scale, especially since the incorrect assumption is made that resources will be available for oil shale development under all conditions. Impacts associated with dewatering activities involved with the in-situ retorting process could be signi ficant. These impacts could include degrading/depleting groundwater rcsomccs, critical habitat areas, aquat ic resources, and surface water quality. **#8])>**

<([#9 [*3.4.6*] Water Quality Impacts

Oil shale development impacts to the Colorado River could have negative impacts to water quali ty, water treatment facilities, and raw water users. There is also an increased risk of significantly reduced quality water resulting from the oil shale sites. Another poten tiCll environmental concern is the increase in salinity and other toxic compounds stemming from oil shale development thClt could adversely affect the Colorado River Basin ecosystem, endangered fish species, Clnd municipal, industrial, agricultural, and recreational users. The Draft PEIS provides no discussion about baseline or comprehensive water quality monitoring of the water resources in this region. A water quality monitoring program would provide important background data on water quality in the developable oil shale areas, especially since it is indicated that water generated from oil shale development would be of lower quality than the receiving waters. Therefore, the Draft PEIS should provide more technology specific data to fmther define the impacts of oil shale development on water resources. Oil shale development has not historically been successful in Colorado so the Draft PEIS should also consider the corresponding "bust" cycle if oil shale development is not economically feasible and how the water resomces could be reallocated to beneficial uses that will support population growth in other areas of the state. **#9])>**

<([#10 [*6.2.3*] Increased Energy Demands

Oil shale development impacts to the Colorado River could have negative impacts by increasing energy demands in the region. Along with increased oil shale development and production over the BLM's suggested 20 year period of time, there would be an increase in energy needs. These increased energy needs could elevate levels of greenhouse gases, which could have potential impacts on climate Hnd regional water supplies. The Draft PEIS identifies the need for a 2,400-MW coal fired power plant to service the needs of the oil shale industry and the population growth (double the size of the Craig power plan t, the largest power plant in Colorado). The · Draft PEIS shows inconsistencies between Table 4.1.6-J (Assumptions Associated with a 1,500-MW an.d a 2,400-MW Conventional Coal-fired Electric Power Plant) and the text on Page 4-32. The table indicates water usc of 13,000 acre-feet/year, yet in the text water usc of approximately 13,800 acre-feet/per year is suggested. This 800 acre-feet/year di fference corresponds to approximately 6%, which represents a signi fica nt amount of water in this tri -state area. The Draft PETS should also consider the impacts associated with the amount of water consumed, water quality impacts, and increased emissions, such as greenhouse gases from additional coalfired
power plants to meet energy needs for development. If it takes a 2,400-MW coal-fired
power plant to serve oil shale developmen t, is there a reasonable expectation that there will be sufficient oil developed to justify the cost including other resources consumed, i.e. coal and water. **#10])>**
<([#11 [*1.5*] The Draft PETS has raised substantial concerns that development of oil shale in Colorado could
significantly affect the Council's abi lity to serve its existing customers and the future growth projected for the Front Range of Colorado. The Draft PEIS provides insufficient data and analysis and docs not properly identify or address the direct or cumulative impacts caused by oil shale development. **#11])> <([#12** [*1.1.1*] Furthermore, the BLM's present deadline for comments does not provide
the Council with adequate time to prepare specific comments on this potentially enormous new water use of an already strained water supply. In short, it is critical that the Council have adequate tim~ to develop a comprehensive set of comments on the Draft PEIS. The fact that oil shale development in Colorado has been discussed for decades, and with the potential impacts that oil shale development could have on the state's existing imd future citizens, the Council believes it should have a meaningful role in the comment process. **#12])>**
~)p
Dave Little on behalf of the Front Range Water Users Council
cc:
Governor of Colorado Bill Ritter
Di rector of Colorado DNR Harris Sherman
Senator Wayne Allard
Senator Ken Salazar

OSTS2012D50340
Organization: William Harding
Received: 5/4/2012 5:47:34 PM
Commenter1: William Harding - Silt, Colorado 81652 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:

Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/14/2012 12:00:00 AM
Attachments: OSTS2012D50340.htm (OSTS2012D50340-58973.htm Size = 1 KB)
Submission Text
<([#1 [*2.2*] We are in support of the BLM preferred option. Where we live in Garfield County for over 100 years industry and politicians have promised a technological breakthrough that would produce oil from rock. Garfield County went through two booms on this promise and were left in the devastating wake of two busts, the last one ending May 2nd 1982. It's time we learn from this. The emphasis that the 2012 OSTS PEIS promotes of making industry establish proven technology prior to leasing of public lands under a more reasoned energy policy only makes sense. **#1])>** Sincerely, Bill and Susan Harding Silt Colorado Cc: Senator Mark Udall Senator Michael Bennett

OSTS2012D50341
Organization: Center for Biological Diversity, Campaign
Received: 5/4/2012 6:00:34 PM
Commenter1**:** - , (United States)
Organization1**:**Center for Biological Diversity, Campaign
Commenter Type: Environmental Organization
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** klett
Attachments: OSTS2012D50341.htm (OSTS2012D50341-59071.htm Size = 1 KB) Batch_1_Comments_CBD_OSTS2012D50341.pdf (OSTS2012D50341-59070.pdf Size = 14397 KB)
Submission Text
The following is the first of four baches of comments submitted on behalf of supporters of the Center for Biological Diversity one Friday, May 4, 2012. See Attachment.

This letter pertains to the BLM's "draft programmatic environmental impact statement" for oil-shale and tar-sand development in Colorado, Utah and Wyoming.

<([#1 [*3*] I am deeply concerned about the potential environmental effects if the BLM initiates a commercial leasing program for oil-shale and tar-sands development. It would pollute our land, air and water and exacerbate climate change. Endemic, threatened and endangered species would be lost.

Between global warming, rampant extinction and a quickly drying Colorado River -- problems that oil-shale and tar-sand development would only worsen -- it's hard to imagine a less prudent use of our public lands.
#1])>

<([#2 [*12.3*] I therefore oppose any action by the BLM to continue or to authorize any new oil-shale or tar-sand development on public land, or create or continue land-use allocations that would allow for such uses in the future. **#2])> <([#3** [*2.5*] The draft programmatic environmental impact statement should have included an alternative that does not in any way endorse additional publicland use for this unproven industry.
#3])>
<([#4 [*3.10.4*] Oil shale is currently producing no jobs and no revenue -- the Congressional Budget Office confirmed that it is not expected to produce significant revenues through 2022.

The land overlying oil-shale resources in Utah, Colorado and Wyoming is some of the best wildlife habitat in the West, and outdoor recreation and tourism are huge economic drivers for the region. We must protect this sustainable economy by making smart decisions based on sound information.
#4])>
<([#5 [*3*] I ask that you evaluate carefully and disclose fully the serious impacts of all new energy
required for oil-shale and tar-sand production and its potentially devastating impacts to our climate, as well as the threat it poses to wildlife, special-status, threatened and endangered species, and to our water, air and communities.
#5])>

OSTS2012D50343
Organization: West Slope Colorado Oil and Gas Association, David Ludlam
Received: 5/4/2012 6:02:58 PM
Commenter1: David Ludlam - Grand Junction, Colorado 81505 (United States)
Organization1: West Slope Colorado Oil and Gas Association
Commenter Type: Oil & Gas Org
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** aziech 5/15/2012 12:00:00 AM
Attachments: OSTS2012D50343.htm (OSTS2012D50343-59077.htm Size = 1 KB)
PEIS_WSCOGA_comments_OSTS2012D50343.pdf (OSTS2012D50343-59076.pdf Size = 214 KB)
Submission Text
To Whom It May Concern:
As the voice for beneficial, efficient, responsible and environmentally sound development, production and use of Western Colorado oil and natural gas, West Slope Colorado Oil & Gas Association (WSCOGA) is pleased to provide comments on the revised 2012 Oil Shale and Tar Sands Draft Programmatic Environmental Impact Statement (PEIS) for oil shale and tar sand development. WSCOGA appreciates the Bureau of Land Management's (BLM) focus on this important resource. Oil shale has the potential to diversify our energy portfolio and provide a resounding economic boost to Colorado, Utah and Wyoming.
The BLM mission states that the agency should manage "BLM-administered lands and resources in a manner that best serves the needs of the American people" with decisions being made based

on the "principles of multiple use and sustained yield." **<([#1** [*2.2*] Unfortunately, the revised PEIS restricts the available amount of land so severely as to make commercial activity or viability a near impossibility. The revised preferred alternative in the draft PEIS limits the amount of available land in Colorado. Indeed, it limits oil shale leasing opportunities most drastically in the areas where the majority of oil shale resources are located. So much so that oil shale development, under the preferred alternative, could not be maximized or sustained in the Centennial state.
#1])> <([#2 [*9.8*] WSCOGA firmly believes that if a "fresh look" is to be taken, it must be done in the best interest of the United States and not merely a convenient excuse to change the PEIS for political purposes unrelated to any technical basis. WSCOGA is also concerned that the new information referenced in pages 1-4 of the document does not actually constitute a viable foundation for overhauling the entire PEIS. It would be unfortunate for the American public, in terms of the cost of revisiting the document and the potential loss of return to the American tax payer, if the revised PEIS is to be finalized in its current form.
#2])> <([#3 [*9.8*] WSCOGA strongly urges the BLM to take into consideration the fact that no directive from Congress has been issued requesting the change of time period for leasing development nor has there been any request of a reexamination of the PEIS via Congress. Indeed, quite the opposite: many Western congressional officials have not only supported the 2008 PEIS but have encouraged its timely implementation.
#3])> We support sustainable, timely, environmentally-responsible development to help boost America's energy portfolio and energy security. Oil shale is an important resource, and development and commercial leasing is critical. At no time should political biases take precedence over up-to-date science and thoughtful economic analysis.
WSCOGA has technical concerns related to the factual accuracy of the document that need to be addressed prior to moving forward with a final document and record of decision. The following narrative includes many specific areas in which WSCOGA sees as troubling, outdated or incorrect information. WSCOGA also requests, in certain areas within the document, specific justification and rationale for decisions.
1. **<([#4** [*3.4.1*] [*9.3*] On page ES-9, the statement is made that the BLM looks forward to gaining a clearer understanding of the implications of develop of oil shale for water quality and quantity, for example. Industry has provided much information on water needs for oil shale, and that information is used in Section 4. A number of laws at the Federal, State and local levels are already in place that protect, regulate and monitor water quality and quantity. Any lessee for oil shale – as with any energy lessee – would be required to go through a site-specific NEPA process and demonstrate that their proposed activities will not violate existing laws and regulations. Further, if there is a compelling public need to limit water consumption by an oil shale company or industry to less than the industry currently estimates, no further information is needed from the industry—it would simply be required to stay within the aforementioned bounds. Industry analyses indicate that enough water rights are in place to support oil shale production in excess of 1 million barrels per day. It must be also stated that it is not the responsibility of the BLM to interfere or subjugate water rights legally purchased by operators.
#4])> 2. **<([#5** [*5*] As alluded to previously, it is not within the jurisdiction of the BLM to generate regulations or requirements not authorized by Congress. On pages 1-13 and 2-78, the BLM is exceeding its bounds within the PEIS by enacting CO2 emission requirements. Further, CO2 mitigation is primarily a financial issue, not a technological issue.
#5])> 3. **<([#6** [*2.2*] The amount of land available for RD&D leases under the preferred

alternative 2b in Colorado, which has the best resource, is so restrictive that it will be virtually impossible to obtain actual operating data on multiple processes to achieve the stated purpose. WSCOGA is concerned that alternative 2b could be construed as a thinly veiled excuse to stop oil shale development independent of its potential value to the United States. WSCOGA requests that the BLM analyze the potential loss of investment from companies due to such severe limitations on land use.
#6])> 4. **<([#7** [*1.3*] On page 1-15, the PEIS lists governmental agencies that cooperated in the PEIS. One of the cooperating agencies, Garfield County, Colorado has approved a resolution adamantly opposed to the current PEIS. Further, surrounding counties in Colorado that would also be affected by the outcome of this PEIS, including Rio Blanco and Mesa counties, have signed similar resolutions opposing oil shale development. Since the majority of the oil shale resource is located in NW Colorado, the insights and opinions of those counties should be heavily weighted.
#7])> 5. **<([#8** [*13*] On page 1-17, the footnotes say that EGL have been renamed "since the preparation of this PEIS". To what PEIS does "this" refer? EGL was renamed AMSO in early 2008, and OSEC was renamed Enefit in early 2011, which are well before the issuance of the current draft PEIS.
#8])> 6. **<([#9** [*6.1.1*] [*9.6*] On page 2-13, on what basis did the BLM decide that commercial viability requires 25 ft of oil shale >25 gal/ton in Utah and Colorado but only 15 ft of 15 gal/ton in Wyoming? Economic recoverability is a complex matter that depends on both depth and technology. It cannot be overstated -- simply opening an area for commercial lease application does not mean that any company will actually try to lease it if it does not see commercial viability. Concerns about land speculation are more appropriately addressed by performance clauses in the lease rather than taking them off the potentially leasable area.
#9])> 7. **<([#10** [*6.1*] There are technically incorrect statements about oil shale on page 2-15. Not all oil shale in the Green River formation is a marlstone. The Garden Gulch member is clay rich and does not fall within the marlstone field. The temperature required to generate shale oil varies with time. For timescales of human activity, temperature for significant shale oil generation is as low as 500 oF, as that temperature for a few years will convert a substantial amount of kerogen. The processes being pursued by Shell and by AMSO will generate shale oil at temperatures primarily between 600 and 700 oF. While some recent people are misusing the term "shale oil" to denote shale-hosted natural crude oil, the term "shale oil" has meant the product formed from destructive distillation of oil shale for hundreds of years.
#10])> 8. **<([#11** [*9.6*] On page 2-30, the statement is made that six existing RD&D leases have terms that could allow commercial development up to 5,120 acres each. The most obvious interpretation of this statement is that even though the option 2 acreage largely excludes the preference right lease area from commercial leasing (see, for example, Table 2.3.2-2), it would be
allowed for commercial leasing to the RD&D lease holder by virtue of an existing contract, and this interpretation is supported by words on page 2-54. However, if it is suitable for commercial leasing, why is it not included in the area available for commercial leasing independent of the RD&D lease fate? Does its exclusion mean that the Department of the Interior has determined that the PRLA's are not actually suitable for commercial leasing and just isn't going to tell the RD&D lease holders that they cannot actually lease the PRLA until they consider the commercial lease conversion application? **#11])>**
9. **<([#12** [*9.6*] On page 2-26, the statement is made that if an RD&D lease holder relinquishes

its lease, the area may be leased to another operator with the decisions in the RMP at the time of application. To which application is the BLM referring? The original RD&D lease application or a subsequent application after the original lease is terminated? Does that mean that if Alternative 2 is adopted, essentially all of that acreage would be removed from commercial leasing? What would occur if the lease is transferred to another entity rather than terminated? Would the new entity be required to pursue the same process originally proposed, or could the entity modify the process consistent with either the old, or a new, environmental assessment?
#12])> 10. **<([#13** [*6.3*] The statement is made that MMTA would be excluded from oil shale leasing until technology or other factors exist to develop oil shale without jeopardizing trona mines. Does that mean that if a company demonstrates that it is possible, the land would be available for leasing? If so, why is a lease stipulation a more appropriate way to enforce that requirement? Multi-mineral extraction requirements are already in force for nahcolite and oil shale.
#13])> 11.**<([#14** [*2.2*] It is stated on page 2-35, in effect, that Alternative 2b was not conceived until the PEIS was in draft form and is not even properly discussed in the rest of the document. An obvious question, therefore, is what specific technical discoveries of the PEIS process motivated the creation of this alternative and its eventual adoption? If no technical discoveries were the cause, what specific meetings or actions precipitated the idea after the analysis of alternatives had been completed? As such, on what basis does the Department of the Interior claim that this alternative and decision are consistent with the spirit of the 2005 Energy Act?
#14])> 12. **<([#15** [*2.2*] Figure 2.3.3-1 on page 2-37 demonstrates how much of a farce the preferred alternative is. Almost the entire Piceance Basin is excluded from commercial leasing applications even though it has not been identified as either Sage-Grouse Core or Priority Habitat or Lands with Wilderness Characteristics. Part of the land proposed for commercial leasing applications is identified as Sage-Grouse critical. Further, most of the land made available is in such small isolated parcels that it would not support significant commercial development. It is clear from this map that the explicit purpose of Alternative 2b for Colorado is to prevent commercial development of oil shale, in direct violation of the 2005 Energy Act.
#15])> 13. **<([#16** [*2.4*] As much Figure 2.3.3-1 is a farce, Alternative 4 shows a lack of thought concerning the definition of "moderate" in moderate development. Land proposed for commercial leasing includes Sage-Grouse critical habitat. Even though it is arguable that oil shale development could occur without adversely affecting the Sage Grouse and there is a paragraph outlining the responsibility of the field office in that regard, the amount of acreage so designated is so small that it could easily be eliminated without significant impact on the oil shale industry this century. Similarly, there is a portion of the Cathedral Bluffs designated as Lands With Wilderness Characteristics that could easily be eliminated from leases without adversely affecting the oil shale industry.
#16])> 14. **<([#17** [*2.2*] In discussing a comment about limiting leases to those in process, the PEIS states that it is not consistent with the Secretary's and Director's emphasis on develop and maintaining a robust RD&D process. The preferred alternative has so little land available in such isolated parcels that it is not conducive to either RD&D or commercial activity. The clearest evidence for this is that the number of proposals dropped from 20 to 3 when the preference right lease area was dropped from 5,120 to 640 acres. While it may be profitable to perform multi-mineral extraction on a 640 lease tract, it is doubtful for strictly oil production given the 500-ft restriction of activity from the border of the lease, which potentially reduces the available resource by one third. Further it is clear that a significant portion of the land made available will

not even support a 640-acre lease. WSCOGA requests that the Department of Interior provide specific rational for peppering the available acreage in smaller, incongruous blocks. It is also the opinion of WSCOGA that the BLM and DOI must include figures that discuss the loss to the American taxpayer by overly restricting development in Colorado.
#17])> 15. **<([#18** [*3.10.3*] The discussion on pages 3-241 through 244 is incongruous. Statements are made about rapid growth and employment due to the oil and gas industry, about having to import skilled labor from afar, and about how wages are increasing due to the oil and gas industry, as if all these are detrimental. Currently, the unemployment rates are about 10% in the regions that would be affected by oil shale development, and foreclosures are at least as common as in other parts of the country.
#18])> 16. **<([#19** [*3.10.1*] [*3.10.3*] On pages 3.11.2.2.4, the statement is made that rental housing in the Rifle area is all taken and there are no hotels available. That may have been true 3 years ago, but it is not true now. Rental housing is easy to find, and rents are dropping. Hotel rooms are plentiful, and construction of one hotel was stopped a few years ago because of the drop in demand. In addition, recent analysis from the Colorado River Valley Field Office Resource Management Plan states that housing in surrounding counties, like Pitkin County, Colorado, will continue to be plentiful. If the PEIS is supposed to give a basis for economic status on which to make decisions about oil shale, it must be up to date. Otherwise, it is giving a completely mistaken view of why economic development, including oil shale, is needed to maintain a healthy economy in the Rifle area in the long run. In other words, if it was worth redoing the PEIS, it is worth doing it right and not using data that is 3 years old as if it were current. Again, the way to avoid booms and busts is to have steady growth, and waiting to develop oil shale during a national crisis is exactly opposite to what the country should do. It should have leasing policy that enables enough high-quality resource to be available for leasing so that the industry can learn, mature, and grow gradually over the next 20 years. Alternative 2b will almost kill oil shale development, except possibly for a few small operations.
#19])> 17. **<([#20** [*6.2.1*] On page 4-13, the BLM has projected that the new electricity capacity needed for in-situ oil shale would be generated by coal. That may be true if the electricity is generated in Utah and transmitted to Colorado, and of course, that changes the Colorado impact. If the electricity is generated nearer, it will probably be from a combination of co-produced gases and natural gas. This is an active choice that could be made to minimize impacts, and the PEIS seems to ignore that possibility.
#20])> 18. **<([#21** [*6.3.2*] Section 4.5.1.2 on water use does not mention the possibility of using reverse osmosis or distillation of deep brackish water to supply the water needs for oil shale production. The economics appear tolerable, particularly if waste heat is used for a distillation method, but this has not been actively studied because of the availability of plentiful water at low cost—ironic due to the near hysteria about water availability. The point here is that shale oil production is such a high-value operation and its water needs sufficiently modest that it could likely get along with no significant draw on fresh-water supplies, if the government insists upon confiscating current water rights.
#21])> 19. **<([#22** [*6.3.2.1*] It is likely that a 100,000 bbl/day oil shale industry would use less than 1% of the upper Colorado Basin remaining available surface water. Tables 4.5.2-1 and 3.4.1-2 indicate a water surplus of about 300,000 ac-ft/yr, and a generous estimate of water consumption by an in-situ industry would be only 10,000 ac-ft/yr according to Table 4.5.2-1 if it did not use electrical heating.
#22])> 20. **<([#23** [*6.3*] On page 4-54, the phrases “at best, professional judgment” and “at worst

would be speculation" are used. The PEIS should not be using speculative numbers from non-experts in its consideration. There are several accurate, professionally derived numbers in the literature that agree reasonably well enough that one does not have to use the derogatory qualifier "at best". The point here is that there will be a range of emission estimates for various candidate technologies, and establishment of regulations on CO2 emissions would affect the ultimate outcome.
#23])> 21. **<([#24** [*3.8.3*] Figures 4.9.1-1 and 4.9.1-2 show pictures of a UMATAC industrial process. No one in the United States is considering using this ill-fated technology and as such pictures of the UMATAC process should be removed.
#24])> 22. **<([#25** [*5*] Page 4-154 has a discussion on oil shale activities in the 1980s related to surface disturbance. Nowhere on this page is it noted that those activities generated substantial experience on how to reclaim surface disturbance. It would be prudent for the BLM to include a discussion on current Best Management Practices developed for oil shale over the last three decades.
#25])> 23. **<([#26** [*6.3.2*] In the introductory sentence of 4.12.1.4, it is stated that "it is likely that oil shale technologies will require large amounts of water." What is the BLM using as a comparison? In the arid west, typically 85-90% of the water is used for agriculture, and an oil shale industry will have only a minor effect on that number. So from that perspective, nothing except agricultures uses large quantities of water. Now if one uses a metric of economic value generated per unit of water consumption, how does oil shale compare to other industries? The Department of Interior should not repeat common misstatements about water crippling agriculture—it should analyze the true impacts of the oil shale industry, which are that a major commercial-scale industry would divert only a small percentage of agricultural water, and that could easily be made up by more efficient use of water by agriculture.
#26])> 24. **<([#27** [*3.12.3*] The implicit attitude of section 4.13.1.3 is misstated and inappropriate: Grand Junction and Carbondale are so far away from the oil shale development that any direct impact is clearly a stretch. The oil shale industry will provide jobs and economic growth for those who want to lift themselves out of poverty. The biggest threat to the health and well-being of poor people is an economy that cannot provide decent employment opportunities for all, and an oil shale industry can help provide a robust economy for western Colorado. It also appears that the author if this section is unaware of the discussion regarding oil shale and retorting in the preceding hundreds of pages. WSCOGA requests that the first two sentences be stricken as redundant and useless.
#27])> 25. **<([#28** [*9.6*] The bottom paragraph on page 6-1 states that making land available for lease applications has no impact on the environmental or socioeconomic setting. It is the subsequent development work on the land that would have an impact, and it must be analyzed by the NEPA process. Under this heading, what is the BLM's justification for removing essentially all the land in Colorado from the lease application process?
#28])> 26. **<([#29** [*9.8*] The information about AMSO LLC in section A.5.3.2 is extremely outdated. An Addendum to the original Plan of Operations was submitted in July 2008 and approved by the BLM in October 2008, and a Plan of Operations was submitted in May 2009 and approved by the BLM in September 2009. The stated reason for the update of the PEIS is to incorporate more recent information, and here is a case where the BLM has failed to incorporate relevant information contained within its own regulatory approval process.
#29])> We thank you for the opportunity to add our comments to the public record and look forward to continuing a dialog on this important resource.

OSTS2012D50349
Organization: JWBA, Inc., James Bunger
Received: 5/4/2012 6:15:37 PM
Commenter1: James Bunger - Salt Lake City, Utah 84119 (United States)
Organization1:JWBA, Inc.
Commenter Type: Private Company
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** aziech 5/15/2012 12:00:00 AM
Attachments: OSTS2012D50349.htm (OSTS2012D50349-59092.htm Size = 1 KB)
Bunger_comments_on_OSTS_PEIS_OSTS2012D50349.doc (OSTS2012D50349-59091.doc Size = 60 KB)
Submission Text
<([#1 [*2.1*] The 'no action' Alternative #1 is the only Alternative justified under Section 369 of the Energy Policy Act of 2005, and subsequent Record of Decision of the original PEIS in 2008. **#1])>**
Since the publishing of the 2008 PEIS and RMP guidelines, there has been nothing new that would warrant a revising of these regulations. The 'fresh' and 'hard' looks stated as the objective of this latest PEIS action are policy-motivated objectives not based on any change in underlying facts as found in the original PEIS.
Adoption of any of the other alternatives would eliminate the most prospective of the geologically prospective resources, contrary to the mandates of EPAct 2005 and the findings of the 2008 PEIS. The most prospective resources include those rich resources near the surface that are eliminated in Alternatives other than Alternative 1.
The argument is made that somehow the original PEIS erred in allowing leasing when technologies are not proven. The only way for a resource to be proven is for the availability of a lease to justify the investment in technology development. Any thought that technology will be developed without a lease is unrealistic. But if it is the policy purpose to impede development, that is the argument one would make.
<([#3 [*9.2.2*] For more than 80 years, oil shale has not had a federal leasing program. It still does not have a federal leasing program. And there will be no development of federal resources until there is a leasing program. Lack of leasing is what has led to lack of technology. And lack of leasing of the most economical resource locations has deterred investment.
Section 369 of EPACT 05 was designed to solve these issues and the current effort to roll back progress made toward implementing Section 369 is contrary to the intents of the law. Given the lead times required for development of technology and projects, once a lease has been secured, the effect of any alternative, other than the no-action Alternative 1, will be to delay oil shale development until a crisis atmosphere causes a change in policy. **#3])>**
<([#4 [*9.7*] The R, D and D efforts under way will not solve the technology issue. These efforts are not designed to answer the questions (water, emissions, etc.) that some are saying is required before leasing is made available. These efforts are aimed at a limited sample of technologies situated in limited geologic settings. Further, the uncertainty in lease conversion terms is delaying activity in these projects. Putting the R, D, and D leases on a critical path for

commercial leasing of oil shale effectively defers development.
#4])> <([#5 [*2.1*] When EPACT 2005 was passed the Nation had the time to avoid a crisis in oil supply. At that time oil shale and tar sands could have been the difference between crisis and hardship. It is not certain that we have enough time now to avoid a crisis. Adding additional impediments, by removing the most geologically prospective resources from available leasing, adding excessive layers of environmental review, and withholding leasing regulations all serve to delay what could be an orderly, well-managed development of these vast, rich resources. Impeding development, which Alternatives 2-4 will do, runs the danger of repeating the energy crisis atmosphere that existed in the 70s. Unlike the 70s however, the next crisis will not be solved with more petroleum, renewable alternatives, or gas. Liquids from unconventional sources; oil shale, tar sands, and synthetic liquids will be needed to keep our economy healthy. The no-action Alternative 1 gives us the best chance to avoid the negative impacts of fuel shortages. The no-action alternative is warranted in that no new, substantive facts have come to light, or intervening changes have occurred to justify the other alternatives.
#5])>

OSTS2012D50351
Organization: Weber Sustainability Consulting, Ivan Weber
Received: 5/4/2012 6:42:11 PM
Commenter1: Ivan Weber - Salt Lake City, Utah 84103 (United States)
Organization1: Weber Sustainability Consulting
Commenter Type: Private Company
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** aziech 5/15/2012 12:00:00 AM
Attachments: OSTS2012D50351.htm (OSTS2012D50351-59098.htm Size = 1 KB)
Comments_Draft_OSTS_PEIS_OSTS2012D50351.txt (OSTS2012D50351-59097.txt Size = 5 KB)
Submission Text
<([#1 [*12*] Please allow us to register our discomfort with the very best of the Oil Shale/Tar Sands Programmatic EIS,
and our outright objection to all other than the best. At the very time when we should be sinking our
intelligence, entrepreneurship, capital and resources into the demonstrably clean alternatives, in order to
make them even cleaner and more feasible, instead we continue to exhaust these marginal collective fiscal
resources on massive scale greenhouse gases, pollution-producing substances, and pollutants outright. It
makes no sense at all.

I regret that I've not had time to review the details of any of the specific proposals, other than that of Red
Leaf Resources. This is possibly the most nearly sane of the lot --- but only 'most nearly sane'

for its
restraint of scale of impacts. At face value, Red Leaf has invented a brilliant mechanism for building
insulated cells on a massive scale, heating them to kerogen's melting point, and siphoning off the decant
'wax.' On the bottom line, however, Red Leaf's proposal is outlandishly crazy, destined to irretrievably
contaminate all the lands it contacts. It is possible that more kerogen will be recovered than by other
methods --- but then what do you have? A massively greenhouse-gas producing substance. True, there is
the possibility of reclamation of the burned-out and exhausted oil shale cells. Energetically, however, we
have no sense at all that we are not disproportionately allowing the conversion of one form of energy to
another, and in the process one form of wealth to another. Natural gas happens to be inexpensive, at
present, therefore we are swapping 'fracked' natural gas for kerogen from these cells, with the casualty
occurring in devastated landscapes and a globally altered climate. **#1])>**

<([#2 [*3.4.1*] Water resources are the inevitable compound casualty, impacted essentially forever. As water becomes
more valuable than kerogen or its refined products, largely due to the impacts of refined oil on global
climate stability, then our approach to the technology-specific tipping point will be rapid, indeed: So rapid
that we will realize almost immediately that we should not have done it, at all. This genie has been kept in
the bottle for many years out of a skeptical wisdom. This is where it needs to remain. The difference may
be that we should pay the Tribes and the Native American owners of these lands NOT to develop their
energy resources. **#2])>**

<([#3 [*3.4.1*] As for the remainder of the oil shale/tar sands technologies, the same is true as is the case for the rest of
the oil infrastructure, as well as the "messier" natural gas world: Stop, now, for the following reasons:
* The impacts of gross devastation will rival that of mountaintop removal has done for coal
removal. The quantity of underground and surface waters destroyed by mountaintop removal will
forever distinguish this generation of engineers and coal workers as the most knowingly savage of
all. The OS/TS concern for environment is at least this bad.
#3])> <([#4 [*5*] As for the remainder of the oil shale/tar sands technologies, the same is true as is

the case for the rest of
the oil infrastructure, as well as the "messier" natural gas world: Stop, now, for the following reasons:* Reclamation even of the superficially impacted lands will be nearly impossible to execute well,
particularly in these zones of low- and diminishing-precipitation. When there are not nutrients or water, there is no way to apply enough energy to the land to generate adequate plant growth to secure the surface.
#4])> <([#5 [*3.7.3.11*] As for the remainder of the oil shale/tar sands technologies, the same is true as is the case for the rest of
the oil infrastructure, as well as the "messier" natural gas world: Stop, now, for the following reasons:* Where chemical analysis of Cretaceous and Jurassic soils find that selenium is high --- or arsenic or
any number of trace elements, but particularly selenium --- the damage assumes legendary proportions in the high Colorado Plateau/West Slope rangelands. Give it enough time, which this surely will have over 20 to 100 years or more, and the results will be inevitable. This is not true just
for cattle and livestock, but also for native rangeland animals, such as deer, elk, antelope and smaller mammals, and most emphatically for fish (the highest level of tissue selenium ever found was in catfish at Stewart Lake, in the late 1980s). They simply will cease to proliferate, will exhibit
symptoms of reproductive distress, and (in short) will die out. This isn't a problem for the people developing oil or gas resources, but it's a gigantic problem for those who want to continue to live off of the land: hunters, fishermen, and Native Americans.
#5])>
We have no desire to belabor this set of points. Either you get it, or you don't. It's a monstrous, outrageous problem, with readily addressable ramifications. Agencies in general, and BLM in particular,
must cease to give in to these kinds of proposals that are driven by Congressional and State Legislative
pressures.

OSTS2012D50352
Organization: Glen Canyon Institute, Michael Kellett
Received: 5/4/2012 6:51:14 PM
Commenter1: Michael Kellett - Salt Lake City, Utah 84111 (United States)
Organization1: Glen Canyon Institute
Commenter Type: Misc. Organization
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** aziech 5/15/2012 12:00:00 AM
Attachments: OSTS2012D50352.htm (OSTS2012D50352-58975.htm Size = 3 KB)
Submission Text
I am writing on behalf of Glen Canyon Institute (GCI), to submit comments on the draft Oil Shale and Tar Sands Draft Programmatic Environmental Impact Statement (OSTS PEIS) being

prepared by the Bureau of Land Management (BLM). GCI is a nonprofit organization founded in 1996 and based in Salt Lake City, Utah, with 1,500 members and supporters from the seven Colorado Basin states and across the United States. These members and supporters have a significant interest in the management, protection, and restoration of Glen Canyon, the Grand Canyon ecosystem, the Colorado River, and the entire Colorado Plateau region. **<([#1** [*2.3.1*] We support Alternative 3, Oil Shale Research Lands Focus (RDandD with PRLA only), and urge the BLM to select this as the preferred alternative and proposed management decision in the Oil Shale and Tar Sands Proposed Management Plan and Environmental Impact Statement. Selecting Alternative 3 would help ensure that we have the best possible information before considering opening our natural open spaces and ecosystems to the development of oil shale and tar sand resources. GCI is particularly concerned about the potential impacts of such development on Glen Canyon, Grand Canyon, the Colorado River, and surrounding lands. This development could have serious and irreversible impacts, including on water supplies and quality, air quality, native ecosystems and wildlife, and recreational uses. **#1])>** The following are some of our specific concerns regarding the draft OSTS PEIS: **<([#2** [*3.4.1*] * The OSTS PEIS needs to ensure water quality will not be adversely affected by development of oil shale and tar sand resources. The water usage for oil shale production far outstrips the amount of oil produced, even prior to the refinement process. Water resources in the West are already overused and the effects of climate change and increased population will only add further strain to an already depleted system. **#2])> <([#3** [*3.4.1*] * The OSTS PEIS should be conducted in such a way to address issues of dust, noise, and pollution in the affected areas. Heating oil shale in the ground can contaminate vital groundwater supplies. High salt concentrations in groundwater limit water available to native plants and are harmful to agricultural production. The Colorado River Basin already spends millions of dollars annually on damages caused from high salinity. **#3])> <([#4** [*3.1.1*] * The OSTS PEIS should address the potential encroachment on protected National Park System units, such as Glen Canyon Recreation Area and Canyonlands National Park, designated wilderness areas, and inventoried roadless areas. This includes a thorough analysis of the possible damage to these priceless protected areas by oil shale and tar sands development. **#4])> <([#5** [*2.3.1*] This OSTS PEIS should ensure that all alternatives seriously assess the issues outlined above. Considering the present lack of adequate information and the tremendous risks of misguided development, we want to reiterate that the only reasonable alternative at this point is Alternative 3, Oil Shale Research Lands Focus (RDandD with PRLA only), as described in the OSTS PEIS. Thank you for the opportunity to comment on the draft Oil Shale and Tar Sands Draft Programmatic Environmental Impact Statement. **#5])>**

OSTS2012D50353

Organization: Chad Mullins
Received: 5/4/2012 7:00:06 PM
Commenter1: Chad Mullins - Holladay, Utah 84124 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** aziech 5/15/2012 12:00:00 AM

Attachments: OSTS2012D50353.htm (OSTS2012D50353-58977.htm Size = 1 KB)
Submission Text
<([#1 [*12*] Most of my 67 years have been spent enjoying the outdoor wonders of Utah enjoying the scenery, the habitat and the wildlife. This is a precious resource to be conserved. However, our most precious resources for sustaining life are water and air. Water is a scarce resource in our desert environment, and water quality is critical to the survival of all species. There should be no greater obligation for the BLM than protecting our water resources. Tar sands and oil shale mining threaten those resources in a multitude of ways, not the least of which is the release of toxic waste/solvents into the environment. Safeguarding the environment and our precious life sustaining resources against these hazards should be the first priority in protecting the public interest.
#1])>

OSTS2012D50354
Organization: George Wear
Received: 5/4/2012 7:04:23 PM
Commenter1: George Wear - Glenwood Springs, Colorado 81602 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** aziech 5/15/2012 12:00:00 AM
Attachments: OSTS2012D50354.htm (OSTS2012D50354-58979.htm Size = 2 KB)
Submission Text
My great-grandparents homesteaded in northwestern Colorado in the 1890's. I graduated from Glenwood Springs HS in 1975 and currently live in Glenwood. I have worked as an engineer and analyst in the energy and water resources arenas for 30 years, working for or consulting for state, federal, local government, utilities, and private clients. This has included long-range planning for electric and gas utilities, water rights administration for the entire Colorado River basin, and renewable energy project development support, for which I currently work for the National Renewable Energy Laboratory. **<([#1** [*2.2.1*] I support the Preferred Alternative, because I believe that a limited amount of acreage is all that should be set aside for oil shale RandD. The technology should have to demonstrate that it is cost-effective and environmentally sound before additional leasing should be allowed. Current proposed technologies do not meet these criteria. In particular, studies on water demands for oil shale extraction clearly indicate that the industry will require more water than is available in this over-appropriated section of the Colorado/Green River basins. We will never choose to give up our river ecosystems, our agriculture, our non-industrial economy, and our lifestyles to support this industry. In addition, the electricity needed for extraction technologies such as freeze-wall concepts will be enormous and require new power plants to be constructed. Fuel resource, air quality, and global warming limitations will limit additions to our power grid in the future and, once again, we will not choose to dedicate this limited electricity resource to oil shale development at the expense of our way of life. Finally, I am very concerned about the direct environmental degradation that will occur, both on-site and off, if this business is subsidized into a large industry, and the affects this degradation will have

on our economy, lifestyle, and air and water quality. Thank you for consideration of my comments.
#1])>

OSTS2012D50355
Organization: Earthjustice, Campaign, Alexander Rony
Received: 5/4/2012 7:16:41 PM
Commenter1: Alexander Rony - San Francisco, California 94111 (United States)
Organization1: Earthjustice, Campaign
Commenter Type: Environmental Organization
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** klett
Attachments: OSTS2012D50355.htm (OSTS2012D50355-59100.htm Size = 2 KB)
Comments_Earthjustice1_OSTS2012D50355.pdf (OSTS2012D50355-59099.pdf Size = 13987 KB)
Submission Text
Earthjustice collected 33,698 comments regarding the Oil Shale and Tar Sands Programmatic EIS. Attached are comments 1-5,000. Here is the sample comment that people could edit:

<([#1 [*3*] I am deeply concerned about the potential effects to our water, wildlife, communities and public lands if the BLM initiates a commercial oil shale leasing program. The two million acres in UT, WY and CO previously allocated for commercial leasing is a massive amount of public, taxpayer land that would be sacrificed for a singular use of the landscape.
#1])>
<([#2 [*2.2*] [*12.3*] While the preferred alternative (Alternative 2) is a step in the right direction, BLM should consider an alternative that does not endorse giveaways of public lands to this unproven industry.
#2])>
<([#3 [*3*] Oil shale is currently producing no jobs and no revenue. The Congressional Budget Office confirmed that it is not expected to produce significant revenues through 2022. This means we have time to thoroughly assess the impacts of development to our water, wildlife and communities, and should not rush now to give away public lands.
#3])>
<([#4 [*3.10.4*] The land overlying oil shale resources in Utah, Colorado and Wyoming is some of the best wildlife habitat in the West. Outdoor recreation and tourism are huge economic drivers that depend on this habitat. The farming and ranching sectors require reliable access to water resources, which may be depleted by extensive commercial oil shale development. We must protect these jobs by making smart decisions about how we allow oil companies to move forward with oil shale speculation. **#4])>**

<([#5 [*3*] I recommend that you carefully consider the serious impacts of oil shale production to our wildlife, water, air, and communities as you take another look at oil shale development.
#5])>

See attachment

OSTS2012D50359
Organization: bruce gabow
Received: 5/4/2012 7:24:59 PM
Commenter1: bruce gabow - basalt, Colorado 81621 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/16/2012 12:00:00 AM
Attachments: OSTS2012D50359.htm (OSTS2012D50359-58981.htm Size = 1 KB)
Submission Text
<([#1 [*12*] Please do not let furhter permits or activity towards tar sands development or pursuing oil shale research. The resources they will demand (water, etc.) are too scarce among other issues. **#1])>** Bruce Gabow

OSTS2012D50363
Organization: Roger Miller
Received: 5/4/2012 7:51:14 PM
Commenter1: Roger Miller - Scottsdale, Arizona 85258 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/16/2012 12:00:00 AM
Attachments: OSTS2012D50363.htm (OSTS2012D50363-58983.htm Size = 1 KB)
Submission Text
<([#1 [*3.13*] The main concern is the shale dust after the hydrocarbon is removed. What is to become of it? We don't want it in our atmosphere or fouling western valleys. **#1])> <([#2** [*3.4.1*] The other concern is the water used in the processing and rehabilitation. How much water is to be used and from where is its source. **#2])> <([#3** [*9*] Whose to gain and who to lose in any oil shale development? And isn't there enough privately held oil shale to get into development without futher federal leases?
#3])>

OSTS2012D50364
Organization:
Received: 5/4/2012 7:55:04 PM
Commenter1: - , (United States)

Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/14/2012 12:00:00 AM
Attachments: OSTS2012D50364.htm (OSTS2012D50364-58985.htm Size = 1 KB)
Submission Text
<([#1 [*10.6.1*] Let's preserve something for the future generations. Let's focus on renewable energy. **#1])> <([#2** [*12*] Don't open up more land to surface strip mining for tar sands.... **#2])>

OSTS2012D50365
Organization: US Oil Sands Inc., Barclay Cuthbert
Received: 5/4/2012 8:15:41 PM
Commenter1: Barclay Cuthbert - Calgary, (United States)
Organization1:US Oil Sands Inc.
Commenter Type: Affiliation Only
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** aziech 5/17/2012 12:00:00 AM
Attachments: OSTS2012D50365.htm (OSTS2012D50365-58987.htm Size = 5 KB)
Submission Text
May 4, 2012 BLM Oil Shale and Tar Sands Draft Programmatic EIS Argonne National Laboratory 9700 S. Cass Ave. Argonne IL 60439 Ladies and Gentlemen: Thank you for the opportunity to provide comments to the Oil Shale/Oil Sand Programmatic Environmental Impact Statement (PEIS). With the passage of the Energy Policy Act of 2005 (EPA), Congress recognized the fact that development of these resources is crucial to the future of the United States and I whole-heartedly agree. We can develop these resources and achieve environmentally sound practices while we grow the economies of rural areas such as Vernal and Uintah County, UT and ease our Country's dependence on foreign oil from unstable and sometimes hostile countries and governments. **<([#1** [*9.3*] The PEIS attempts to identify lands that should be open to development of unconventional resources based on a generalized environmental assessment of those lands. Obviously, when considering lands as massive as those containing these oil shale and oil sand resources, it is impossible to generalize environmental conditions in a single document. That is why specific environmental review is suggested for each project. However, I do take exception to the PEIS's function to exclude lands from potential development. As noted, a specific environmental review will be required for each potential project and that is the proper forum to assess impacts on the environment, sensitive and endangered species, and socio economic concerns, among others. To exclude large swaths of land based on a programmatic document is unjust. **#1])> <([#2** [*3.10.3*] I acknowledge that this document is an environmental assessment of impacts of development on the lands in Utah, Colorado, and Wyoming and with

development there are always trade-offs between preservation of the natural environment and development of the American economy. I found that the PEIS dealt only with negative consequences of development and there was no balance to reflect the positive aspects of unconventional resource development. As an example, Appendix G, the socioeconomic and environmental justice impacts of oil shale and oil sand development were considered. The entire appendix dealt with negative consequences of development. It is unfathomable that no benefits of increased employment opportunities in high paying jobs were mentioned, especially as the United States works to recover from one of the most serious economic upheavals in its history. **#2])> <([#3** [*6.1*] In the case of oil sands development, the PEIS takes the approach that it will use similar industries to assess potential impacts, since the resource is different from that present in northern Alberta. However, I believe that oil sand operations in Alberta will more closely represent operations than assessments of proposed projects that never commenced operation. However, when evaluating impacts of proposed development, the PEIS considers "mega projects" similar to those in operation in Athabasca, Alberta. Utah's oil sand resources amount to approximately 2% of those found in northern Alberta and theses resources simply will not support the scale of development that has occurred around Fort McMurrary. The productive capacity from oil sands development in Utah is likely on the order of 25,000 – 50,000 barrels per day and to present individual projects sized at 100,000 barrels of bitumen per day is misleading. In fact, the PEIS includes several photos from Athabasca operations, even though these projects are of a scale beyond that which Utah's resources could support and though these types of projects were excluded from analysis by the report's authors. **#3])> <([#4** [*6.3.5*] On page 5.45 the PEIS states that there are, "no commercially proven technologies for extracting liquids from oil shale or tar sands." The Canadian oil sands are the United States' largest single source of oil imports, while commercial oil shale extraction and processing facilities exist in Brazil and Estonia, so this statement is obviously misleading and may have imparted bias in the team that prepared the PEIS document. Further, when considering bitumen extraction projects, the report's authors seem to have assumed that integrated projects are required; that is, any extraction operations would have to be paired with on-site upgrading of the bitumen. Again, this is not consistent with the development in Alberta's oil sands. While the major mining projects have associated upgraders, the majority of the in situ producers (principally steam assisted gravity drainage, or SAGD) do not upgrade the bitumen and instead dilute the produced bitumen with lighter fractions and ship this mixture to the United States for refining. There is no underlying necessity for any of the projects to incorporate an upgrader, especially given the level of deep conversion capacity at American refineries. **#4])> <([#5** [*9.3*] My overarching conclusion from review of the PEIS is that the lands containing unconventional resources of kerogen and bitumen should be available for leasing. Each specific project should undergo a thorough review of the merits and impacts of the project and should be approved or denied based on that assessment. A programmatic document that excludes huge areas of land from development based on generalized assessments and theoretical projects does not serve America's interests. **#5])>**

OSTS2012D50366

Organization: Katrina Stansfield
Received: 5/4/2012 8:53:20 PM
Commenter1: Katrina Stansfield - Huntington, Utah 84528 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:

Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/16/2012 12:00:00 AM
Attachments: OSTS2012D50366.htm (OSTS2012D50366-58989.htm Size = 2 KB)
Submission Text
<([#1 [*2.2.1*] We are writing to share our concerns about the impact of oil shale development in Utah, and to weigh in on the current Draft Environmental Impact Statement (DEIS). In short, we have serious concerns about the impacts of commercial-scale development on our water and way of life in eastern Utah, and support the balanced approach represented by Preferred Alternative, 2(b) as the best option. **#1])> <([#2** [*3.4.1*] As you are well-aware, Utah is second-driest state in the country and meeting our water needs is not something we take for granted. Ranchers, farmers and rural communities in eastern Utah are sometimes challenged meeting their water demands even during a good year. Therefore, putting dramatically increased stresses on our water supply will only make things worse. Since commercial-scale oil shale development would require anywhere from one to four or more barrels of water for every barrel of oil produced, commercial-scale development is guaranteed to have major consequences for our way of life here. In a 2010 report by the Government Accountability Office for instance, the agency stated that "oil shale development could have "significant impacts on water quantity and quality in eastern Utah, with the exact magnitude of those impacts unknown. **#2])> <([#3** [*2.2.1*] We are also concerned about the impacts to our public lands that the oil shale industry would have. Our public lands are what make Utah such a special place to live, and we count on these places for hunting, fishing, recreating and grazing our cattle. For the above reasons and more, we support the Preferred Alternative 2(b) in the pending DEIS. This plan would lease more than 500,000 acres of public lands to energy companies to do their research and development, while allowing for the opportunity to further study the impacts of oil shale development to our water and way of life. In closing, we thank you for the opportunity to weigh in on this issue, and for the balanced approach being taken by the Department of Interior with respect to its oil shale development program. Since you come from a ranching and farming family too, we know you understand the importance water and shared natural resources to our way of life in the West.
#3])>

OSTS2012D50367
Organization: Desert Skies Ranch, Terry Coppin
Received: 5/4/2012 9:03:37 PM
Commenter1**:** Terry Coppin - Cleveland, Utah 84518 (United States)
Organization1**:**Desert Skies Ranch
Commenter Type: Affiliation Only
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/16/2012 12:00:00 AM
Attachments: OSTS2012D50367.htm (OSTS2012D50367-58991.htm Size = 4 KB)
Submission Text

<([#1 [*2.2.1*] I am writing to share my concerns about the impact of oil shale development in Utah, and to weigh in on the current Draft Environmental Impact Statement (DEIS). In short, I have serious concerns about the impacts of commercial-scale development on our water and way of life in eastern Utah, and support the balanced approach represented by Preferred Alternative, 2(b) as the best option. **#1])> <([#2** [*3.4.1*] As you are well-aware, Utah is second-driest state in the country and meeting our water needs is not something we take for granted. Ranchers, farmers and rural communities in eastern Utah are sometimes challenged meeting their water demands even during a good year. Therefore, putting dramatically increased stresses on our water supply will only make things worse. Since commercial-scale oil shale development would require anywhere from one to four or more barrels of water for every barrel of oil produced, commercial-scale development is guaranteed to have major consequences for our way of life here. In a 2010 report by the Government Accountability Office for instance, the agency stated that "oil shale development could have "significant impacts on water quantity and quality in eastern Utah, with the exact magnitude of those impacts unknown. **#2])> <([#3** [*2.2.1*] I am also concerned about the impacts to our public lands that the oil shale industry would have. Our public lands are what make Utah such a special place to live, and we count on these places for hunting, fishing, recreating and grazing our cattle. For the above reasons and more, I support the Preferred Alternative 2(b) in the pending DEIS. This plan would lease more than 500,000 acres of public lands to energy companies to do their research and development, while allowing for the opportunity to further study the impacts of oil shale development to our water and way of life. In closing, I thank you for the opportunity to weigh in on this issue, and for the balanced approach being taken by the Department of Interior with respect to its oil shale development program. Since you come from a ranching and farming family too, I know you understand the importance water and shared natural resources to our way of life in the West. **#3])>** As you are well-aware, Utah is second-driest state in the country and meeting our water needs is not something we take for granted. Ranchers, farmers and rural communities in eastern Utah are sometimes challenged meeting their water demands even during a good year. Therefore, putting dramatically increased stresses on our water supply will only make things worse. Since commercial-scale oil shale development would require anywhere from one to four or more barrels of water for every barrel of oil produced, commercial-scale development is guaranteed to have major consequences for our way of life here. In a 2010 report by the Government Accountability Office for instance, the agency stated that "oil shale development could have "significant impacts on water quantity and quality in eastern Utah, with the exact magnitude of those impacts unknown. I am also concerned about the impacts to our public lands that the oil shale industry would have. Our public lands are what make Utah such a special place to live, and we count on these places for hunting, fishing, recreating and grazing our cattle. For the above reasons and more, I support the Preferred Alternative 2(b) in the pending DEIS. This plan would lease more than 500,000 acres of public lands to energy companies to do their research and development, while allowing for the opportunity to further study the impacts of oil shale development to our water and way of life. In closing, I thank you for the opportunity to weigh in on this issue, and for the balanced approach being taken by the Department of Interior with respect to its oil shale development program. Since you come from a ranching and farming family too, we know you understand the importance water and shared natural resources to our way of life in the West.

OSTS2012D50368

Organization: Red Rose Ranch, Howard Elms
Received: 5/4/2012 9:05:21 PM

Commenter1: Howard Elms - Huntington, Utah 84528 (United States)
Organization1: Red Rose Ranch
Commenter Type: Affiliation Only
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/16/2012 12:00:00 AM
Attachments: OSTS2012D50368.htm (OSTS2012D50368-58993.htm Size = 4 KB)
Submission Text
<([#1 [*2.2.1*] I am writing to share my concerns about the impact of oil shale development in Utah, and to weigh in on the current Draft Environmental Impact Statement (DEIS). In short, I have serious concerns about the impacts of commercial-scale development on our water and way of life in eastern Utah, and support the balanced approach represented by Preferred Alternative, 2(b) as the best option. **#1])> <([#2** [*3.4.1*] As you are well-aware, Utah is second-driest state in the country and meeting our water needs is not something we take for granted. Ranchers, farmers and rural communities in eastern Utah are sometimes challenged meeting their water demands even during a good year. Therefore, putting dramatically increased stresses on our water supply will only make things worse. Since commercial-scale oil shale development would require anywhere from one to four or more barrels of water for every barrel of oil produced, commercial-scale development is guaranteed to have major consequences for our way of life here. In a 2010 report by the Government Accountability Office for instance, the agency stated that "oil shale development could have "significant impacts on water quantity and quality in eastern Utah, with the exact magnitude of those impacts unknown. **#2])> <([#3** [*2.2.1*] I am also concerned about the impacts to our public lands that the oil shale industry would have. Our public lands are what make Utah such a special place to live, and we count on these places for hunting, fishing, recreating and grazing our cattle. For the above reasons and more, I support the Preferred Alternative 2(b) in the pending DEIS. This plan would lease more than 500,000 acres of public lands to energy companies to do their research and development, while allowing for the opportunity to further study the impacts of oil shale development to our water and way of life. In closing, I thank you for the opportunity to weigh in on this issue, and for the balanced approach being taken by the Department of Interior with respect to its oil shale development program. Since you come from a ranching and farming family too, I know you understand the importance water and shared natural resources to our way of life in the West. **#3])>** As you are well-aware, Utah is second-driest state in the country and meeting our water needs is not something we take for granted. Ranchers, farmers and rural communities in eastern Utah are sometimes challenged meeting their water demands even during a good year. Therefore, putting dramatically increased stresses on our water supply will only make things worse. Since commercial-scale oil shale development would require anywhere from one to four or more barrels of water for every barrel of oil produced, commercial-scale development is guaranteed to have major consequences for our way of life here. In a 2010 report by the Government Accountability Office for instance, the agency stated that "oil shale development could have "significant impacts on water quantity and quality in eastern Utah, with the exact magnitude of those impacts unknown. I am also concerned about the impacts to our public lands that the oil shale industry would have. Our public lands are what make Utah such a special place to live, and we count on these places for hunting, fishing,

recreating and grazing our cattle. For the above reasons and more, I support the Preferred Alternative 2(b) in the pending DEIS. This plan would lease more than 500,000 acres of public lands to energy companies to do their research and development, while allowing for the opportunity to further study the impacts of oil shale development to our water and way of life. In closing, I thank you for the opportunity to weigh in on this issue, and for the balanced approach being taken by the Department of Interior with respect to its oil shale development program. Since you come from a ranching and farming family too, we know you understand the importance water and shared natural resources to our way of life in the West.

OSTS2012D50369

Organization: Mark Dandeneau
Received: 5/4/2012 9:05:53 PM
Commenter1: Mark Dandeneau - Bere, Kentucky 40403 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/14/2012 12:00:00 AM
Attachments: OSTS2012D50369.htm (OSTS2012D50369-58995.htm Size = 1 KB)
Submission Text
<([#1 [*12.1*] I strongly oppose any tar sands developement. **#1])>**

OSTS2012D50370

Organization: Barbara Larime
Received: 5/4/2012 10:07:45 PM
Commenter1: Barbara Larime - Glenwood Springs, Colorado 81601 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/14/2012 12:00:00 AM
Attachments: OSTS2012D50370.htm (OSTS2012D50370-58997.htm Size = 1 KB)
Submission Text
<([#1 [*2.2.1*] I have reviewed the BLM's alternative to the original 2 million acres allocated for tar sands and shale oil R and D. Reducing the area to 325,000 total acres is a more reasonable approach for R and D. It preserves lands from being unnecessarily comprimised for development that may prove to be impractical, too costly, and too resource intensive to ever be implemented. **#1])>**

OSTS2012D50371

Organization: Kraig Schweiss
Received: 5/4/2012 11:55:41 PM
Commenter1: Kraig Schweiss - Sterling, Illinois 610819517 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/14/2012 12:00:00 AM
Attachments: OSTS2012D50371.htm (OSTS2012D50371-58931.htm Size = 1 KB)
Submission Text
<([#1 [*10.6.1*] [*12*] Why is this country so hellbent in wringing every drop of oil out of every rock at the expense of the air, water, and wildlife that inhabit the areas where there may be such? How much greed, arrogance, and stupidity do we have to endure before we say, "Enough is enough"? What good will these drops of oil do in the larger scheme of things other than to pollute, devastate, and kill what is right and beautiful in this country?! Stop this insanity and obsession with a finite resource and turn your attention and efforts to renewable and sustainable resources of sun, wind, geothermal, biofuels, etc. It's way passed time that fossil fuels be left where they need to stay and let the earth renew itself and come back from the brink of global warming and the resulting disasters and catastrophes that are beginning to take their toll on us all. **#1])>**

OSTS2012D50372
Organization: mercedes carlin
Received: 5/5/2012 7:00:35 AM
Commenter1: mercedes carlin - , New York (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/16/2012 12:00:00 AM
Attachments: OSTS2012D50372.htm (OSTS2012D50372-58933.htm Size = 1 KB)
Submission Text
<([#1 [*9*] What happened with the fracking decision? Why is the industry allowed to not divulge what chemicals are being used until AFTER they begin digging? What is theproblem with "overlapping" state regulations? How do their lobbyists get to influence our federal government and we don't? I've sent e-mail after e-mail and I know others who have done the same. Why do I have to comply with state regulations and divulge any possible "toxic" intent and they don't? It has to be money to spend in Washington. Much, of which, I don't have. I'm more than disappointed. I'm damn mad.
#1])>

OSTS2012D50373
Organization: Francesca Rogier
Received: 5/5/2012 10:58:24 PM
Commenter1: Francesca Rogier - Isle of Palms, South Carolina 29451 (United States)
Organization1:
Commenter Type: Member of the Public
Classification:
Submission Category: Standard Web Form
Submitted As: Web Form
Form Letter Category:
Form Letter Master:
Current Task: Issues Entered **Assigned/Due:** mMcHugh 5/16/2012 12:00:00 AM
Attachments: OSTS2012D50373.htm (OSTS2012D50373-58999.htm Size = 1 KB)
Submission Text
<([#1 [*12*] I strongly oppose the extraction of oil from oil shale and tar sands for a number of reasons. Foremost is the environmental damage it causes, which is permanent and irreversible, and whose long-term effects cannot be safely predicted. Next to that is the lack of proof that it would help the economy or lower the price of gasoline domestically. In fact, reliable studies indicate that it will negative affect the economy, as well as increase domestic gas prices. These are more important concerns than the price of stock or the increased profits of drilling companies, refineries, or fuel corporations. Please do not allow it!!! **#1])>**