

Thank you for your comment, Vicki Parks.

The comment tracking number that has been assigned to your comment is OSTS2012D50337.

Comment Date: May 4, 2012 17:39:16PM

OSTS 2012 Draft PEIS

Comment ID: OSTS2012D50337

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Privacy Preference: Don't withhold name or address from public record

Attachment: BLM Oil Shale and Tar Sands PEIS 5-4-12.pdf

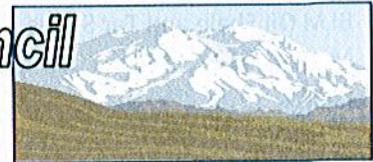
Comment Submitted:

The attached comments are being sent for Jim Lochhead and Dave Little on behalf of the Front Range Water Council.



# Front Range Water Council

220 Water Avenue  
Berthoud, CO 80513



May 4, 2012

BLM Oil Shale and Tar Sands PEIS  
Argonne National Laboratory, EVS Division Building 240  
9700 South Cass Avenue  
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. 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. The Council resubmits its comments from the 2008 Draft PEIS (letter attached) for consideration under the BLM's 2012 DPEIS, in addition to the following related comments:

## 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.

*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*

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.

Impacts on Population and Increased Energy Demands

Impacts to Colorado from oil shale development include population growth and increased energy use. 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 does 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.

Water Quality Impacts

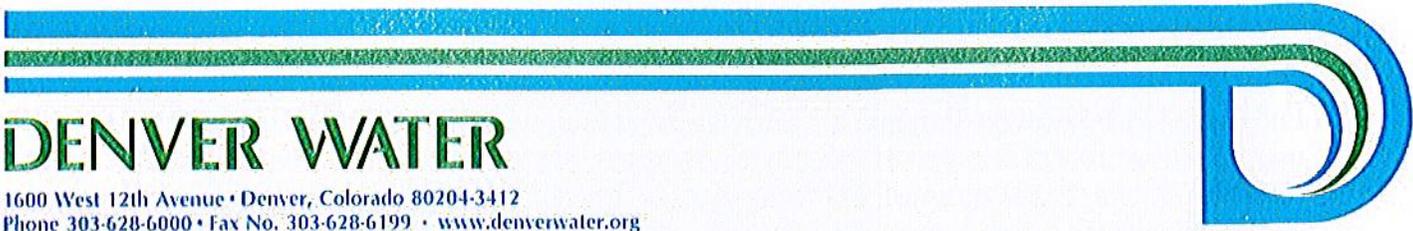
The Council remains concerned about impacts to water quality from oil shale development. The DPEIS needs to include technology specific data to adequately analyze potential impacts to water quality.

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.

Sincerely,

  
Jim Lochhead on behalf of the Front Range Water Council

Attachment: Front Range Water Council's March 20, 2008 "Comments on Draft Oil Shale & Tar Sands Programmatic Environmental Impact Statement"



# DENVER WATER

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Phone 303-628-6000 • Fax No. 303-628-6199 • www.denverwater.org

March 20, 2008

BLM Oil Shale &  
Tar Sands Draft Programmatic EIS  
Argonne National Laboratory  
9700 South Cass Avenue  
Argonne, Illinois 60439

To Whom It May Concern:

**Re: Comments on Draft Oil Shale & Tar Sands Programmatic Environmental Impact Statement**

The Front Range Water Users Council (Council), consisting of Denver Water, Northern Colorado Water Conservancy District, Colorado Springs Utilities, Aurora Water, Board of Water Works of Pueblo, Southeastern Colorado Water Conservancy District, and Twin Lakes Reservoir and Canal Company, submit these comments on the December 2007 Draft Oil Shale and Tar Sands Programmatic Environmental Impact Statement (Draft PEIS). 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 Management's (BLM) Draft PEIS and the schedule for comments in late February 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. To date no response to the request has been received.

### 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 current and anticipated projects/activities in the Upper Colorado River Basin. The Council is concerned that the substantial water use could hold negative consequences for the Colorado River Endangered Fish Species Recovery Program. In addition, the project as proposed raises several policy questions surrounding the amount of available water from the Upper Colorado River for existing and future development.

The State of Colorado is currently engaged in an effort to recover four federally listed fish species (Colorado pikeminnow, Humpback chub, Razorback sucker, and Bonytail) along a 15-Mile 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



CONSERVE

Endangered Fish Recovery Program is a multi-agency effort, which requires upstream water users to release 10,825 acre-feet of water to the mainstem 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 are 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 PBO. 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 are 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?

#### Negative Impact on Future 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 4.5.2-1 (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. As a minimum, the Draft PEIS must list the “ranges” of water available for use in Colorado under the Compact. What are the social, economic, and environmental impacts to communities on the Front Range of Colorado if they are unable to develop Colorado River water or they are required to remain dependent on non-tributary groundwater? What are the Threatened and Endangered Species issues associated with this shift in water supply use? How does the shift from use of Colorado River 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 resources on the Front Range of Colorado?

#### 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 significant. These impacts could include degrading/depleting groundwater resources, critical habitat areas, aquatic resources, and surface water quality.

#### Water Quality Impacts

Oil shale development impacts to the Colorado River could have negative impacts to water quality, 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 potential environmental concern is the increase in salinity and other toxic compounds stemming from oil shale development that could adversely affect the Colorado River Basin ecosystem, endangered fish species, and 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 further 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 resources could be reallocated to beneficial uses that will support population growth in other areas of the state.

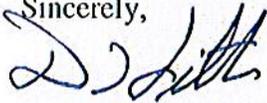
#### Increased Energy Demands

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 and 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 plant, the largest power plant in Colorado). The Draft PEIS shows inconsistencies between Table 4.1.6-1 (Assumptions Associated with a 1,500-MW and a 2,400-MW Conventional Coal-fired Electric Power Plant) and the text on Page 4-32. The table indicates water use of 13,000 acre-feet/year, yet in the text water use of approximately 13,800 acre-feet/per year is suggested. This 800 acre-feet/year difference corresponds to approximately 6%, which represents a significant amount of water in this tri-state area. The Draft PEIS should also consider the impacts associated with the amount of water consumed, water quality impacts, and increased emissions, such as greenhouse gases from additional coal-fired power plants to meet energy needs for development. If it takes a 2,400-MW coal-fired power plant to serve oil shale development, 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.

The Draft PEIS has raised substantial concerns that development of oil shale in Colorado could significantly affect the Council’s ability 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 does not properly identify or address the direct or cumulative impacts caused by oil

shale development. 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 time 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 and future citizens, the Council believes it should have a meaningful role in the comment process.

Sincerely,



Dave Little on behalf of the Front Range Water Users Council

cc:

Governor of Colorado Bill Ritter  
Director of Colorado DNR Harris Sherman  
Senator Wayne Allard  
Senator Ken Salazar