2-5-2010

SLIDES: Water for Oil (Shale)?

Bart Miller

Follow this and additional works at: https://scholar.law.colorado.edu/promise-and-peril-of-oil-shale-development

Part of the Administrative Law Commons, Climate Commons, Energy and Utilities Law Commons, Energy Policy Commons, Environmental Health and Protection Commons, Environmental Law Commons, Environmental Policy Commons, Geotechnical Engineering Commons, Land Use Law Commons, Natural Resource Economics Commons, Natural Resources Law Commons, Natural Resources Management and Policy Commons, Oil, Gas, and Energy Commons, Oil, Gas, and Mineral Law Commons, President/Executive Department Commons, Public Policy Commons, Science and Technology Law Commons, State and Local Government Law Commons, Water Law Commons, and the Water Resource Management Commons

Citation Information
Miller, Bart, "SLIDES: Water for Oil (Shale)?" (2010). The Promise and Peril of Oil Shale Development (February 5).
https://scholar.law.colorado.edu/promise-and-peril-of-oil-shale-development/10

Reproduced with permission of the Getches-Wilkinson Center for Natural Resources, Energy, and the Environment (formerly the Natural Resources Law Center) at the University of Colorado Law School.
Water for Oil (Shale)?

Bart Miller

February 5, 2010
Forecasting Change – Water Context For Oil Shale
Water for Shale

- **Estimated demands** for large scale development:
  - 1.55 million barrels of oil per day
  - Direct demand = 112,675 acre feet (af)
  - Electric power = 244,535 af
  - Increased population = 21,100 af
  - **Total = 378,310 af**

- Denver Metro Area (approx. 1.4 million people) – 275,000 acre feet annually

- **HUGE Uncertainties affecting water needs:**
  1. How much shale could industry reasonably develop
  2. What are water needs for yet-undeveloped technologies?
  3. Power source(s) – Coal? Natural gas? Nuclear?

*Source:* RAND Corporation, BLM, Yampa, CO, and White River Roundtables

Western Resource Advocates
“Water on the Rocks” – WRA’s 2009 Report

- **Absolute Rights**: 650 cfs. in more than 100 existing irrigation ditches in the Colorado and White River Basins.

- **Conditional Rights**: 200 separate structures in the Colorado and White River Basins that could potentially be developed to support oil shale.
  - Most conditional rights have priority dates from the 1950s and 1960s.

**Colorado River Basin**
- Diversions: 4,996 cfs
- Storage: 367,310 af

**White River Basin**
- Diversions: 5,693 cfs
- Storage: 1,186,000 af
Recent Developments

- **Water Right application on the Yampa River:**
  - 375 cfs from the Yampa
  - 45,000 acre-foot storage bucket
  - 60,000 acre-feet used annually
  - 25 statements of opposition
Competing Uses for Water

Western Resource Advocates
Limiting Factors
Our Future?

- “Large-scale oil-shale development could create problems for us and other users” – Chips Barry, Denver Water
- “Oil shale could be a game changer” – Harris Sherman, DNR
- “Any large transfer of water to oil shale would shift the West Slope from an agricultural landscape to an industrial one” – Chris Treese, CRWCD
- “Commercial oil shale development has tremendous potential to transform western Colorado communities” – State Senator Gale Schwartz

Western Resource Advocates
So, What Do We Do?

- We need answers to key questions:
  - Sequencing of development projects
  - Rate of consumption
  - Power generation needs
  - Competition for shared resources
  - Impacts of perfecting conditional water rights on junior users
  - Impacts of climate change
- Let’s not leap before we look.
For more information and a copy of *Water on the Rocks* . . .

Please visit WRA’s website:

www.westernresources.org