Federal Oil Shale Development: A Balanced Approach

Deputy Assistant Secretary of the Interior
Dr. Foster L. Wade
27th Annual Oil Shale Symposium
September 15, 2007
World Consumption and U.S. Energy Production and Consumption
1980-2030 (quadrillion Btu)

World Consumption

History

Projections

U.S. Consumption

U.S. Production

EIA/IEA Data

Imports rise by 0.45 quadrillion Btu/year

History Projections

Net Imports 32%

30%

Annual Energy Outlook 2007
Healthy Lands Initiative

Significant Ecological Changes in the West

- Altered Fire Regimes
- Drought
- Climate Change
- Invasive Species
- Human Stressors
  - Urban-suburban development
  - Increased recreation
  - Increased energy development
Healthy Lands Initiative Goal

Preserve the Diversity and Productivity of Public and Private Lands Across the Landscape

- A science-based, collaborative approach to:
  - Prevent future listings under the Endangered Species Act;
  - Allow for managed energy development and other uses;
  - Leverage appropriated funds through partnerships.
The Healthy Lands Initiative

2008 Project Areas

- **Reclaim Abandoned Well Sites & Mesquite Brush Control in New Mexico** (58,000 acres)
- **Aspen Regeneration, Stream Stabilization & Invasive Species in Wyoming** (33,745 acres)
- **Removal of Pinyon & Juniper, Sagebrush Improvement, Stream Enhancement, Wetland Water Control in Colorado** (12,000 acres)
- **Sagebrush & Bitterbrush Plantings in Idaho** (48,200 acres)
- **Weed Treatments in Nevada, Oregon & Idaho** (35,500 acres)
- **Removal of Pinon and Juniper, Sagebrush Restoration & Stream Enhancement in Utah** (104,000 acres)
Healthy Lands Projects

- **Riparian/Wetland Treatment in CO**
- **Aspen Regeneration in WY**
- **Juniper Removal in UT**

**BEFORE**

**AFTER**
Green River Formation

Location of the Green River Formation Oil Shale and Its Main Basins
Recent History of the Current Oil Shale Program

- The President’s Energy Policy
- Secretarial Initiative
- BLM Implementation
- Energy Policy Act of 2005
Energy Policy Act of 2005

- Sec 369 Oil Shale, Tar Sands and Other Strategic Unconventional Fuels
  - Sec 369(c) Leasing program for Research and Development of Oil Shale and Tar Sands
  - Sec 369(d) Programmatic Environmental Impact Statement and Commercial Leasing Program for Oil Shale and Tar Sands
  - Sec 369(e) Commencement of Commercial Leasing
Research, Development & Demonstration Leases

<table>
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<tr>
<th>Company</th>
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<tr>
<td>Shell Frontier Oil &amp; Gas</td>
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<td>Shell Frontier Oil &amp; Gas</td>
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<td>Chevron Shale Oil Co</td>
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<td>Oil Shale Exploration, LLC</td>
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<td>EGL Resources, Inc.</td>
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Status of R,D&D Leases

- Five projects in Colorado, one in Utah.
- Colorado projects are in situ; Utah project is underground mining with surface retort.
- NEPA analyses completed.
- Leases have been issued.
Strategy to Enhance R, D&D

- Provide opportunities for additional research on oil shale.
- Complete the strategy by making oil shale available to third parties through OSEC operations in Utah.
Programmatic EIS

Sec 369(d) Programmatic Environmental Impact Statement and Commercial Leasing Program for Oil Shale and Tar Sands -- The PEIS will:

- Describe locations of oil shale and tar sands;
- Decide areas to be open to application for commercial leasing, exploration and development;
- Amend land use plans where resources are present to provide opportunity to lease;
- PEIS is a broad level analysis. More environmental (NEPA) analyses will be required at the leasing stage.
Programmatic EIS

Sec 369(d) Programmatic Environmental Impact Statement and Commercial Leasing Program for Oil Shale and Tar Sands

- Argonne selected to complete the PEIS;
- December 2007 - Draft to be released with 90-day public comment period.
- We invite your comments!
- December 2008 - Projected completion date.
Fourteen Cooperating Agencies

National Park Service
Bureau of Reclamation
U.S. Forest Service
U.S. Fish and Wildlife Service
State of Colorado
State of Utah
State of Wyoming

Garfield County, CO
Mesa County, CO
Rio Blanco County, CO
Duchesne County, UT
Uintah County, UT
City of Rifle, CO
Town of Rangely, CO
Oil Shale Regulations
Goal is to Create a Program That:

- Adopts best aspects of fluids and solid minerals programs to perfect extractive technologies for oil shale;
- Is easy to understand, administer and monitor;
- Is flexible enough to adjust to new technology and issues as they emerge;
- Provides adequate protection to the environment and other resources;
- Is not subject to land speculation.
Regulations Will Address:

1) Royalty Rate and Point of Determination
2) Fair Market Value
3) Diligent Development
4) Minimum Production
5) Small Tract Leasing
Oil Shale Regulations

- Team formed: February 2006
- ANPR published: August 2006
- Listening Session in Denver: December 2006 (with reps from CO, UT and WY)
- Listening Session in Utah: April 2007
- Listening Session in WY: August 2007
- Publication of Proposed Rule: March 2008
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