SLIDES: Intermountain Oil and Gas BMP Project

Kathryn Mutz

Follow this and additional works at: https://scholar.law.colorado.edu/best-practices-for-community-and-environmental-protection

Part of the Administrative Law Commons, Biodiversity Commons, Business Organizations Law Commons, Dispute Resolution and Arbitration Commons, Energy and Utilities Law Commons, Energy Policy Commons, Environmental Health and Protection Commons, Environmental Law Commons, Environmental Monitoring Commons, Environmental Policy Commons, Land Use Law Commons, Natural Resource Economics Commons, Natural Resources and Conservation Commons, Natural Resources Law Commons, Natural Resources Management and Policy Commons, Oil, Gas, and Energy Commons, Oil, Gas, and Mineral Law Commons, Science and Technology Law Commons, Soil Science Commons, State and Local Government Law Commons, Strategic Management Policy Commons, Urban Studies and Planning Commons, Water Law Commons, and the Water Resource Management Commons

Citation Information

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.
Intermountain Oil and Gas BMP Project

Presented at the Workshop:
Best Practices for Community and Environmental Protection

Wednesday, October 14th, 2009
Kathryn Mutz, Natural Resources Law Center
Intemountain Oil and Gas BMP Project

Welcome to the Intemountain Oil and Gas BMP Project Website

Best Management Practices

The Natural Resources Law Center and its partners welcome you to this free-access website of best management practices (BMPs) for oil and gas development in the Intemountain West. The focus of this website is a searchable database addressing surface resources affected by oil and gas development. The database includes both mandatory and voluntary practices currently in use and/or recommended for responsible resource management in the states of Colorado, Montana, New Mexico, Utah, and Wyoming.

The BMP database is not intended to represent a consensus on what the best practices are for specific applications nor to advise users on the current legal requirements for specific locations. Rather, the database describes each practice and documents the source of the practice (who requires or recommends it in what specific applications). The database provides a link to the source of the BMP and, where possible, it provides supplemental information, including construction specifications, illustrations, pictures, maps, monitoring reports, and evaluations of the potential of the practice for mitigating impacts of development. Because practices change over time, database users should check with appropriate authorities to verify the latest requirements and recommendations for your area.

Workshops and Trainings

The BMP project will be hosting or cosponsoring workshops on BMPs throughout the Intemountain region. Our first workshop is scheduled for October 14, 2009 in Rifle, CO. For additional information or to register for the workshop, go to the Rifle Workshop page. A workshop on the Front Range of CO will be held in early 2010.

We welcome requests to provide training in the use of the BMP Database. To arrange a training or for help with a custom search, contact us!

Resources

For background information on oil and gas development issues, click the Resources button or go to:

BMP Categories

The database includes BMPs to address a variety of resources and issues...

- Air quality
- Aquatic/riparian values
- Climate
- Cultural/Historic
- Grazing
- Health/Safety
- Noise
- Other
- Socioeconomic
- Soils/Surface
- Vegetation
- Visual aesthetics
- Water quality
- Water quantity
- Wildlife disruption
- Wildlife habitat

Browse all

BMP Search

What management practices are recommended or required for oil and gas development? To find out, use the drop down menus or type Keywords. For a more refined search, click "Advanced Search" or use the BMP SEARCH button.

Keywords:

Category:

Location:

Advanced Search...

Submit  Reset

View the Bibliography, alphabetically by title. A bibliography search function is "Coming Soon."

To print search results, click the "File" button on your web browser's tool bar, then click "Print". Records obtained from your Basic or Advanced search are automatically formatted for printing.

You can also copy and paste data into Excel if you are browsing with Internet Explorer or into Zoho, if using Safari.

For help with composing your search or with exporting or printing results, please contact us or see our Help page.

Partners

The structure and content of this website is being developed in conjunction with project partners and advisors from government, industry, the conservation community, academia and landowners. For information on our current partners or to become a project partner, see ABOUT US.

What's New on the Site

The Intemountain BMP Project is a work in progress. Currently, the database includes BMPs for a variety of resources (see the BMP Categories section) from a range of source documents (see the Bibliography), including project Environmental Impact Statements, Resource Management Plans, state wildlife agency guidelines, and industry and conservation group reports and websites.

Our newest Resources page additions are Reclamation and Vegetation. Our newest Database effort is to incorporate cost/benefit analysis data and information on the effectiveness of specific BMPs.

Contributing to the BMP Database & Dialogue

The BMP Forum is a message board system connected to the BMP database. To access or share information about a particular BMP...
BMP Project Components

1. Searchable BMP Database by WebYodel
2. Website Background Materials
3. Research Services
4. Workshops
1 Searchable BMP Database

Searchable (almost) Bibliography of

• Source documents
  ✓ NEPA Documents
  ✓ Agency guidelines
  ✓ Industry recommendations
  ✓ Environmental group recommendations
  ✓ Community plans
  ✓ Many others

• Supplemental documents
  ✓ Specifications
  ✓ Monitoring data
  ✓ Cost/Benefit Analysis
1 Searchable BMP Database

Basic and advanced BMP search functions

- Keywords
- Resource Categories
- Wildlife and Rare Plant Species
- Location
- Oil and gas field
- Timing
1 Searchable BMP Database
Search Criteria:

- **Category** = Wildlife Disruption
- **Species** = Sage grouse
- **Location** = CO and WY
- **Keywords** = +power*
  - Power(s)
  - Powerline
  - Power line

Sort Criteria:
1. Required v. Recommended
2. Location
# Intermountain Oil and Gas BMP Project

## View BMP

### BMP ID: 1520

**Title:** Avoid surface disturbance and permanent structures within 1/4 to 1 mile of leks

**Text:** "Surface disturbance and other actions that create permanent and high-profile structures, such as buildings, storage tanks, and overhead power lines, will not be constructed within 0.25 to 1.0 mile of the perimeter of leks, as determined on a case-by-case basis[.]

### Source Publication Name:

Atlantic Rim Natural Gas Field Record of Decision

### Citation Section:

Appendix B: Atlantic Rim Natural Gas Project Performance-Based Monitoring and Best Management Practices

### Citation Page:

B-16

### Supplemental Documents:

**Usage Type:** Required

**Timing:**
- Construction / Siting / Design
- Drilling
- Production / Operation / Maintenance

**Oil / Gas Field:** Atlantic Rim Natural Gas Field

**Surface Ownership:** Federal

**Mineral Ownership:** Federal

### Primary Contact:

David Simons  
BLM - Wyoming State Office  
5353 Yellowstone Road  
Cheyenne, Wyoming 82003 United States

Phone: (307) 328-4328  
Alt. Phone:  
Fax:  
E-mail: Atlantic_Rim_EIS_WYMail@blm.go

### Alternate Contact:

### Categories:

- Wildlife disruption
- Wildlife habitat

### Location:

Wyoming

### Species:

Sage grouse

### Vegetation Types:

### General Comments:

### Economic Comments:

**Date Entered:** 2009-02-04 13:43 PDT

**Last Updated:** 2009-02-04 13:43 PDT
**Publication Name:** Atlantic Rim Natural Gas Field Record of Decision  
**Publication Type:** Project NEPA Document  
**Author Name:** Bureau of Land Management  
**Publication Year:** 2007  
**Local Source File:** WY038-AtlanticRimROD.pdf  

**Annotation:** This Record of Decision (ROD) documents the Wyoming State Director’s decision to approve the preferred alternative as described in the Atlantic Rim Natural Gas Field Development Project (ARNG) Final Environmental Impact Statement (FEIS). The ARNG FEIS analyzes various options for oil and gas recovery and resource mitigation. The decision emphasizes limiting surface disturbance and performing interim reclamation, cooperative air quality monitoring with the state of Wyoming, and continued resource monitoring and consultation with federal and state agencies. The ROD provides the plan for future management of the federal surface and mineral estate in the Atlantic Rim Project Area (ARPA).  

**Required vs. Recommended:** Required -- [Appendix B] "... to the Atlantic Rim Record of Decision (ROD) lists the requirements that will be imposed, as appropriate, by the Bureau of Land Management (BLM), Rawlins Field Office (RFO) on all oil and gas development actions approved on federal lands and minerals within the Atlantic Rim Project Area (ARPA). These requirements include mitigation identified in specific resource mitigation subsections of chapter 4 of the Final Environmental Impact Statement (FEIS) for the ARPA." Pg. B-1  Required -- Appendix C: "Many of these environmental protection measures [BMPs] would be included as Conditions of Approval (COAs) in this ROD. However, by additionally including them as Operator-committed practices, the various Operators have made a commitment to implement them throughout the life-of-project (LOP), and the impact analyses provided in the Final EIS take into consideration the implementation of these measures based on this commitment." Pg. C-1  

**Ownership:** Federal -- "The ROD provides the plan for future management of the federal surface and mineral estate in the Atlantic Rim Project Area (ARPA)." Pg. 1 "The BLM has approval authority over actions on federal minerals and lands. When evaluating development applications for affected federal minerals and lands, the BLM will consider impacts and surface disturbance that occur on private and/or state lands relative to an Operator’s disturbance cap allocation." Pg. 5-6
2 Website Background Material

- Resource Pages
- Federal, State and Local Laws
- Links
- Case Studies
- Cost/Benefit Analysis
- Effectiveness Data and Critiques
2 Website Background Materials

Resource pages
- The Development Process
- Air Quality
- Water Quality
- Vegetation
- Wildlife
- Reclamation
- GIS
- Communities (coming soon)
2 Website Background Materials

Federal, State and Local Laws

This section includes links to federal, state, and local statutes, regulations, guidelines, and policies related to oil and gas surface operations.

For a five-state comparison of oil and gas regulatory provisions on specific topics, see:

Summary comparison of wildlife provisions
Summary comparison of riparian area provisions
Summary comparison of setback provisions
Summary comparison of reclamation provisions

FEDERAL OIL AND GAS LAW
FEDERAL CLEAN AIR ACT
FEDERAL WATER LAW
COLORADO STATE LAW
COLORADO COUNTY AND MUNICIPAL LAW
MONTANA STATE LAW
MONTANA COUNTY AND MUNICIPAL LAW
NEW MEXICO STATE LAW
NEW MEXICO COUNTY AND MUNICIPAL LAW
UTAH STATE LAW
UTAH COUNTY AND MUNICIPAL LAW
WYOMING STATE LAW
WYOMING COUNTY AND MUNICIPAL LAW

Warning: We do our best to keep this section current, but please check with the appropriate jurisdiction for the final word on current laws and regulations!
Intermountain Oil and Gas BMP Project

Colorado County and Municipal Law

This section includes links to Colorado city and county codes and materials related to oil and gas surface operations.

According to the Colorado Petroleum Association, oil and gas wells are located in 42 of Colorado's 63 counties. The top 3 counties in oil production are Rio Blanco, Weld, and Cheyenne. La Plata, Weld, and Garfield counties lead the state in natural gas production. A number of county and municipal governments in Colorado have enacted local regulations to supplement the applicable federal and state laws and regulations in order to further manage oil and gas development in their areas. Not every county or city in Colorado has chosen to implement such regulations, but among those that have, some are more stringent than others in terms of recognizing environmental concerns and including environmental protection provisions. The following are provided as examples of the variety of local oil and gas regulations currently in place throughout Colorado. Links to the full text of each county's regulations or city's ordinances are provided below, but provisions of particular interest are identified as well.

Also, in 2003, the Oil and Gas Accountability Project (OGAP), a Colorado-based organization that raises awareness about the environmental impacts of oil and gas development and promotes positive industry reform, drafted the Colorado County Model Regulations in an effort to assist local governments in enacting or improving their oil and gas regulations. Because local governments are often limited in what they can regulate, the OGAP Model Regulations provide guidance on what aspects of oil and gas development counties can and cannot regulate.

Lastly, several counties and municipalities in Colorado have designated government personnel to serve as liaisons with the Colorado Oil and Gas Conservation Commission (COGCC). The list of local government designees (LGDs) and their contact information can be found on the COGCC's website (click on "Local Governments," then click on "Listing of Participating LGDs").

Colorado Counties

Gunnison County Oil and Gas Regulations

Gunnison County is located in southwestern Colorado. The Florence Basin underlies a portion of the county. A high level of oil and gas development in surrounding areas as well as in Gunnison county prompted the County to enact temporary regulations specific to oil and gas in 2003 as part of the County Land Use Planning Code by the Gunnison County Board of Commissioners. Those temporary regulations are still in effect. To visit the county website, click here.

Provisions of particular interest include:

§1-103(E) Classification of Oil and Gas Facilities – categorizes oil and gas operations for permitting purposes:

No Significant Impact Oil and Gas Operation – the operation, without mitigation, in its proposed location is unlikely to have any significant adverse impact to the county (taking into consideration the standards in §1-107)

Minor Oil and Gas Operation – the operation consists of the installation or construction by a single operator of 3-5 wells, flowlines, or gathering lines, all within a square mile of each other during the same calendar year

Major Oil and Gas Operation – all remaining types of operations; a public hearing is required as part of the application review process for all major oil and gas operations before an operation permit is granted

§1-104 Application Submittal Requirements for Oil and Gas Permits – establishes the requirements for an application to drill, which in part, include:

A Site Plan Map – identifies all proposed facilities (structures, pipelines, tanks, wells, pits, flow lines, impoundment facilities, storage areas, and equipment); identifies all site features (floodplains, water bodies, drainage patterns, aquatic habitat, vegetative cover, wildlife migration routes, and significant wildlife habitat); describes an operation plan with the method and schedule for drilling, completion, transporting, production, and post-operation activities; and describes a reclamation plan.

Wildlife and Wildlife Habitat Analysis – requires an applicant to consult with the Colorado Division of Wildlife and the U.S. Fish and Wildlife Service and provide an analysis of existing wildlife and sensitive wildlife habitat at the operation site, an evaluation of the impacts
3 Research Services

• Instructions for database searches
  - Help pages
  - Live NRLC staff

• Custom searches and data reports

• Supplemental data research/reports
  - Research, report, and incorporate
    e.g., Comparison of jurisdictions
## Comparison of Oil and Gas Regulations for Wildlife in the Intermountain West

<table>
<thead>
<tr>
<th>Regulation Type</th>
<th>Colorado</th>
<th>Montana</th>
<th>New Mexico</th>
<th>Utah</th>
<th>Wyoming</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Overarching Principles Applicable to all Processes</strong></td>
<td>Conditions of Approval: In selecting conditions of approval from such Best Management Practices or other sources, the Director shall consider the following factors, among other considerations: Anticipated direct and indirect effects of the proposed oil and gas location on wildlife resources. (COGCC Rules 1202(j)(3)(2009).)</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>Migratory Bird Treaty Act: “The United States Fish and Wildlife Service administers the Migratory Bird Treaty Act in Wyoming. Oil and gas owners or operators have to be aware of the obligation to comply with this regulation as they permit, construct, and maintain all facilities that may contain hydrocarbons or produced waters.” (Chap. 4 6.1(c)(v)).</td>
</tr>
<tr>
<td><strong>Definitions</strong></td>
<td>Wildlife Resources: “WILDLIFE RESOURCES shall mean fish, wildlife, and their aquatic and terrestrial habitats.” (COGCC Rules 100 (2009)).</td>
<td>None</td>
<td>None</td>
<td>Pollution Definition: “(S)uch contamination or other alteration of the physical, chemical or biological properties of any waters of the state, or the discharge of any liquid, gaseous or solid substance into any waters of the state in such manner as will create a nuisance or render such waters harmful, detrimental or injurious to livestock, wild animals, birds, fish, or other aquatic life.” (Utah Admin. r. 649-1-1 (2003)).</td>
<td>None</td>
</tr>
<tr>
<td><strong>Best Management Practices: BMPS “are practices that are designed to prevent or reduce impacts caused by oil and gas operations to air, water, soil, or biological resources, and to minimize adverse impacts to public health, safety and welfare, including the environment and wildlife resources.” (COGCC Rules 100 (2009)).</strong></td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td><strong>Minimize Adverse Impacts: shall mean &quot;wherever reasonably practicable, to avoid adverse impacts to wildlife resources or significant adverse impacts to the environment from oil and gas operations, minimize the extent and severity of those impacts that cannot be avoided, mitigate the effects of unavoidable remaining impacts, and take into consideration cost-effectiveness and technical feasibility with regard to actions and decisions taken to minimize adverse impacts.&quot; (COGCC Rules 100 (2009)).</strong></td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td><strong>Restricted Surface Occupancy Area: shall mean “rocky mountain bighorn sheep production areas; desert bighorn sheep production areas; (COGCC Rules 100 (2009)).”</strong></td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>
4 Workshops

- Rifle CO: Best Practices for Community and Environmental Protection, October 2009
- Front Range Workshop, Spring 2010
  - CBM water?
  - Air Quality?
- Database Training, *by appointment*
- Quarterly meetings (Williams)
Project Sponsors/Advisors

Project Funding
• Miller, Agro & Robbins
• RPSEA
• LCAOF
• RMMLF
• U of C Outreach
• Ruckelshaus Institute
• Upper Green River Valley Coalition
• Petroleum Field Services, LLC

In-kind Contributions
• Advice
• DB Information
• Case Studies
• BMP critiques
• Workshop/Field Trips

See our ABOUT US page for details
What We Need from You!

- Try the DB -- What works? What would improve it?
- Give Us Advice
- Provide DB information (Company guidelines or manual?)
- Provide case studies
- BMP critiques
- Speak at our workshops
- Lead field trips
Job Search!

WANTED: Data Manager

- Experience with oil and gas
- Multidisciplinary environmental background
- Advanced degree preferred

- 1+ year commitment
- Great benefits, flexible schedule