

# Scoping Report

## Bird Canyon Natural Gas Infill Project ENVIRONMENTAL IMPACT STATEMENT



Rock Springs Field Office

August 2014



The BLM's multiple-use mission is to sustain the health and productivity of the public lands for the use and enjoyment of present and future generations. The Bureau accomplishes this by managing such activities as outdoor recreation, livestock grazing, mineral development, and energy production, and by conserving natural, historical, cultural, and other resources on public lands.

**BIRD CANYON**  
**NATURAL GAS INFILL PROJECT**  
**ENVIRONMENTAL IMPACT STATEMENT**

**SCOPING REPORT**

**U.S. Department of the Interior**  
**Bureau of Land Management**

**BLM Rock Springs Field Office**  
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**Rock Springs, Wyoming 82901**

**August 2014**



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## **ACRONYMS AND ABBREVIATIONS**

AGWA	Automated Geospatial Watershed Assessment
APD	Application for Permit to Drill
AUM	Animal Unit Month
BLM	Bureau of Land Management
BMP	Best Management Practice
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
COA	Condition of Approval
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
FLPMA	Federal Land Policy and Management Act
GHG	Greenhouse Gas
NEPA	National Environmental Policy Act
NOA	Notice of Availability
NOI	Notice of Intent
ROD	Record of Decision
U.S.	United States

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## 1.0 INTRODUCTION

In compliance with the National Environmental Policy Act of 1969 (NEPA), as amended, the United States (U.S.) Department of the Interior, Bureau of Land Management (BLM), is preparing an Environmental Impact Statement (EIS) to address potential effects of a project proposed by Koch Exploration Company, LLC (Koch) and Memorial Resource Development, LLC (Memorial) (hereinafter referred to collectively as the Companies) to expand natural gas development within the Bird Canyon project area (Project Area). The Project Area encompasses 17,612 acres of land administered by the BLM Rock Springs Field Office in Lincoln and Sublette Counties, Wyoming, approximately 6 miles east of the town of LaBarge (Map 1).

The Companies propose infill development of 348 natural gas wells within the Project Area, which would expand upon existing oil and gas development operations on their federal leases in the Project Area. As of 2013, Memorial has developed 49 well pads, while Koch has developed 15 well pads in the Project Area. There are 92 existing wells owned by the Companies and other operators within the Project Area: 72 wells currently in producing status and 4 shut-in wells. In addition, 14 wells have been properly plugged and abandoned under applicable regulations of the BLM and the Wyoming Oil and Gas Conservation Commission.

The Companies propose to drill 348 natural gas wells vertically or directionally during a 10- to 20-year development period at a rate of approximately 10 to 20 new wells per year, along with associated access roads, pipelines, and ancillary facilities. The Companies would drill four multi-well pads per 640-acre section at an average 40-acre bottom-hole density. Approximately 64 existing well pads within the Project Area would be expanded from 2.4 acres to 3.8 acres to accommodate an average of four wells per well pad. An additional 41 new well pads would be constructed to accommodate an average of four wells per pad, resulting in 3.8 acres of surface disturbance per well pad prior to interim reclamation. Following interim reclamation, the typical well pad size during the production phase of the project would be approximately 1.1 acres. The average life of each well is anticipated to be 40 years.

Approximately 7.25 miles of new roads would be constructed to access new well pads and support facilities under the Proposed Action. Whenever feasible, existing roads within the Project Area would be used in lieu of constructing new access roads. Produced gas would be piped using a gathering system for each well/well pad to a gas pipeline constructed by a third party. Condensates would be temporarily stored in tanks at well production facilities at each well pad, and then hauled by truck for future sale. Produced water would be temporarily stored in tanks, and then hauled off site for proper disposal at a permitted facility. Pipeline infrastructure is currently in place for 68 percent of the planned well locations. Current modeling of pipeline pressures demonstrates no need for any compression in addition to that already in existence near the Project Area. Under the Proposed Action, projected production from proposed wells may require pipe looping (approximately 13.4 miles).

The exact location of project facilities is not known at this time. The BLM will evaluate the impacts of the proposed project in a programmatic EIS document, which, if the project is approved, will be tiered to in subsequent site-specific NEPA analyses once facility locations are known. Placement of final surface locations on BLM-administered land would be determined following identification of any environmental constraints during the Application for Permit to Drill (APD) process and the onsite inspection reviews conducted by the BLM.

In compliance with NEPA, as amended, the BLM published a Notice of Intent (NOI) to prepare an EIS for the Bird Canyon Project in the *Federal Register* on May 9, 2014 (Appendix A). Publication of the NOI initiated a formal public and agency scoping period that closed June 16, 2014, during which the BLM solicited comments regarding the Bird Canyon Project and its potential impacts. While the BLM accepts

and considers public comments throughout the NEPA process, this scoping report summarizes scoping comments received through the end of the scoping period. The EIS will disclose the potential impacts associated with the Companies' Proposed Action and other reasonable alternatives.

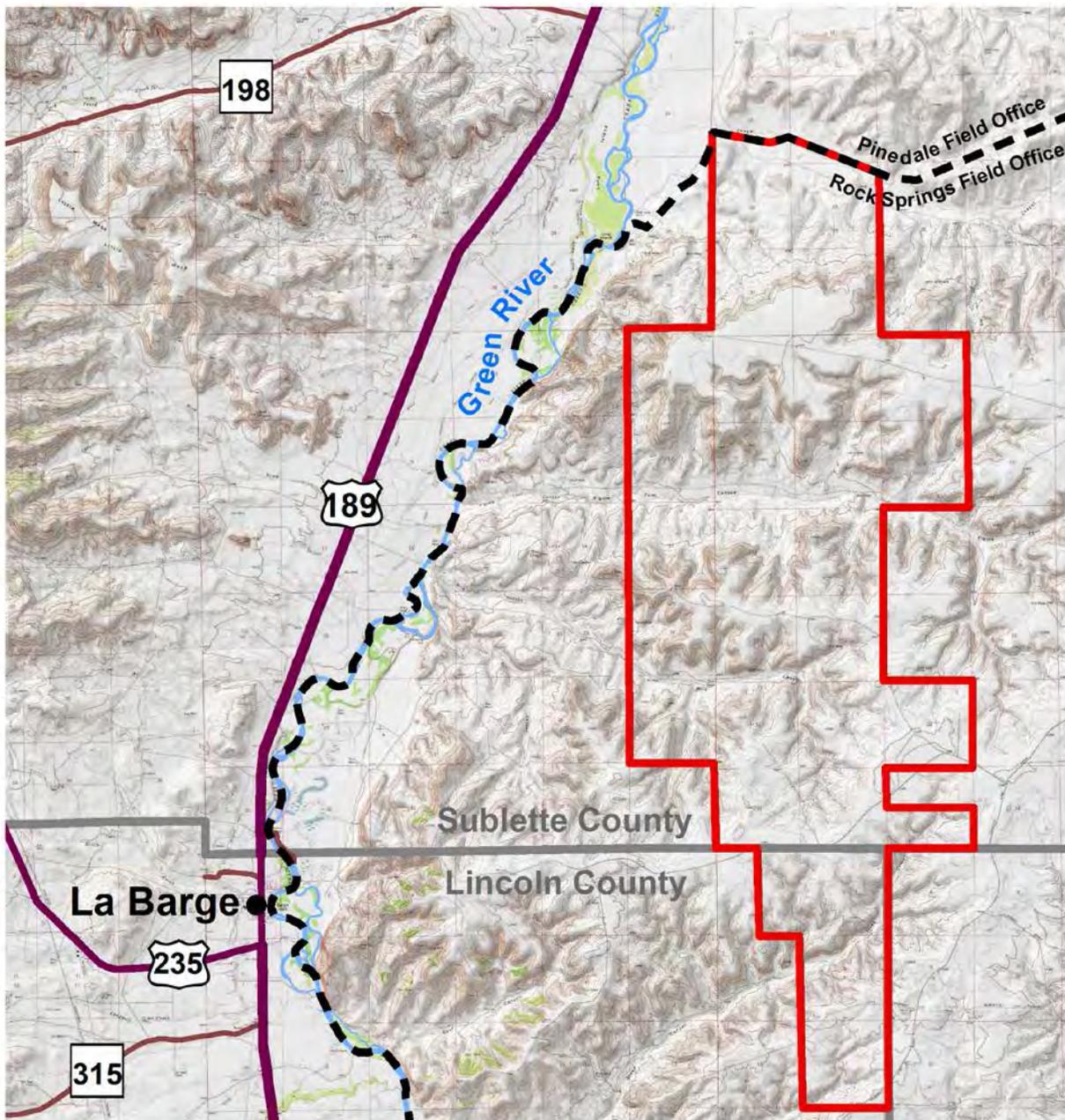
## **1.1 Purpose and Need for the Bird Canyon Natural Gas Infill Project Environmental Impact Statement**

The BLM fluid minerals program administers private industry exploration and development of federal oil and gas leases under the authority of the Mineral Leasing Act of 1920, as amended; the Mining and Mineral Policy Act of 1970; the Federal Land Policy and Management Act of 1976 (FLPMA); the National Materials and Minerals Policy, Research, and Development Act of 1980; and the Federal Onshore Oil and Gas Leasing Reform Act of 1987.

The BLM's purpose is to respond to the proposal by Memorial and Koch to develop and extract oil and gas resources underlying federal oil and gas leases within the Project Area. The need for the action, established by the BLM's responsibility under applicable mineral leasing and development statutes, regulations, and policies, is to recognize the right of federal oil and gas leaseholders, within the limits of lease terms and conditions, to drill for, extract, remove, and market federal oil and gas resources.

The BLM will decide whether to approve, approve with modification, or deny the Companies' proposal. Subsequent to a Record of Decision (ROD), the BLM would require site-specific APDs and other necessary permits and authorizations, as required by applicable statutes and regulations, to develop oil and gas resources in the Project Area. If the site-specific APD or other permit authorization is approved, the BLM will determine the Conditions of Approval (COAs) associated with the action.

Map 1. Bird Canyon Natural Gas Infill Project EIS Location



**BIRD CANYON NATURAL GAS INFILL PROJECT  
PROPOSED PROJECT AREA**

- Proposed Project
-  Bird Canyon Project Area



Projection/Coordinate System: UTM Zone 12/NAD83  
No warranty is made by the Bureau of Land Management for use of the data for purposes not intended by the BLM.



## 2.0 SCOPING PROCESS

Scoping is required under NEPA as defined in Council on Environmental Quality (CEQ) regulations (40 Code of Federal Regulations [CFR] 1500–1508). The BLM NEPA Handbook (H-1790-1) provides additional guidance and direction on scoping as part of the NEPA process.

### 2.1 Purpose of Public and Agency Scoping

Scoping provides an early and open process for determining the scope of issues an agency will address in an EIS. Scoping is the process used to solicit internal and external input and comments on the issues, impacts, and potential alternatives the agency will address in the EIS and the extent to which the agency will analyze those impacts.

### 2.2 Purpose of Scoping Report

This scoping report describes scoping activities for the Bird Canyon Project, summarizes public and agency comments received during scoping, describes the analysis of those comments, summarizes comments by category, and provides a preliminary list of issues, concerns, and opportunities for analysis in the EIS. During EIS preparation, the BLM will consider all substantive issues raised by commenters that are within the scope of BLM decisions.

### 2.3 Notification and Scoping Meeting Advertisements

The formal scoping process began on May 9, 2014 with publication of the NOI in the *Federal Register* (Appendix A) and ended on June 16, 2014. This scoping report summarizes comments received during this period. The NOI notified the public of the BLM's intent to prepare an EIS for the Bird Canyon Project, provided information on the Proposed Action, described the purpose of the scoping process, and identified methods to provide comments (Appendix A).

As part of the scoping process, the BLM advertised the proposed project, scoping period, and scoping meetings using a variety of outreach materials (e.g., postcard, website). Early outreach materials (prior to the NOI) notified local, state, and federal agencies and tribal governments about the proposed project and invited their participation. Outreach materials released at the start of the scoping period provided an overview of the proposed project; provided meeting locations, dates, and times; explained the purpose of the scoping meetings; identified methods for making comments; and provided contact information for questions regarding the Bird Canyon Project. The sections below describe each of the outreach materials.

#### **Notice of Intent**

On May 9, 2014, the BLM published the NOI to prepare an EIS for the Bird Canyon Project in the *Federal Register* initiating the scoping process. The NOI provided a summary of the Bird Canyon Project, notified the public of how to submit scoping comments, identified an initial list of impacts the BLM will evaluate in the EIS, and provided a link to the Bird Canyon Project website and contact information for the BLM Rock Springs Field Office.

#### **Postcard**

The BLM compiled a mailing list of approximately 300 contacts including federal and state agencies, tribes, non-governmental organizations, members of the public, and other stakeholders. The BLM

prepared postcards (Appendix A) that provided information about the project, announced the public scoping meetings, and provided contact information. The BLM mailed postcards to the contacts on the mailing list in advance of the scoping meetings.

**News Release**

On May 9, 2014 the BLM issued a news release titled “BLM Opens Scoping for Bird Canyon Natural Gas Infill Project; Public Scoping Meetings Scheduled.” The BLM posted the news release on the BLM Wyoming online newsroom ([http://www.blm.gov/wy/st/en/info/news\\_room/2014.html](http://www.blm.gov/wy/st/en/info/news_room/2014.html)) and on the project website. The news release provided an overview of the project, information on scoping meeting dates and locations, guidance for submitting scoping comments, and contact information.

**Social Media**

The BLM posted an announcement on the BLM Wyoming Twitter account about the start of the public comment period with a link to the project website on May 9, 2014 (Appendix A). On May 21, 2014, the BLM posted a reminder about the May 29 and May 30 scoping meetings on Twitter and on the BLM Wyoming Facebook page (Appendix A).

**Website**

The BLM developed a website for the Bird Canyon Project that is linked to the BLM Rock Springs Field Office homepage. During the scoping period, the website included the NOI, a news release announcing the NOI, a map of the Project Area, and copies of materials used during the scoping meetings including a fact sheet and display boards providing information about the project. The Bird Canyon Project website (<http://www.blm.gov/wy/st/en/info/NEPA/documents/rsfo/birdcanyon.html>) is one method the BLM will use throughout the NEPA process to communicate project news and updates to the public and interested parties.

**Cooperating Agency Invitations**

The BLM mailed 16 cooperating agency invitation letters in March and June 2014 to federal, state, and local agencies identified as having special expertise or jurisdiction by law applicable to the Bird Canyon Project EIS (Appendix B). The letters notified potential cooperating agencies of the Bird Canyon Project, provided an overview of the Bird Canyon Project, invited participation as a cooperating agency, and provided contact information to submit questions. Cooperating agency invitation letters were mailed to the following local, state, and federal agencies:

- Coalition of Local Governments
- U.S. Environmental Protection Agency Region 8
- Office of Governor Mead
- Office of Senator Barrasso
- Office of Senator Enzi
- Lincoln County Board of Commissioners
- Lincoln County Conservation District
- Little Snake River Conservation District
- Sublette County Board of Commissioners
- Sublette County Conservation District
- Sweetwater County Board of Commissioners
- Sweetwater County Conservation District

- Town of Big Piney
- Town of LaBarge
- Town of Marbleton
- U.S. Fish and Wildlife Service

**Tribal Consultation**

The BLM mailed tribal consultation letters in October 2013 to four tribal governments (Appendix C). The letters notified the tribes of the Bird Canyon Project, provided an overview of the Bird Canyon Project, invited participation for consultation, requested identification of any resources or places of traditional cultural or religious significance, and provided contact information to submit questions. Tribal consultation invitation letters were mailed to the following tribal governments:

- Eastern Shoshone Tribe of the Wind River Reservation
- Northern Arapaho Tribe
- The Ute Tribe of the Uintah and Ouray Reservation
- Shoshone Bannock Tribes of the Fort Hall Reservation

**2.4 Scoping Meetings**

The BLM hosted scoping meetings on May 29 and 30, 2014 (Table 1). These two scoping meetings gave agencies, organizations, the public, and other interested parties an opportunity to learn and ask questions about the Bird Canyon Project and to share issues and concerns with the BLM. The BLM used an open house meeting format to encourage broader participation, allow attendees to learn about the Bird Canyon Project at their own pace, and enable attendees to ask BLM representatives questions in an informal one-on-one setting.

The BLM management and interdisciplinary team from the Rock Springs Field Office were available at the meetings to answer questions and provide further information on the scoping materials. A representative from the Companies attended the May 29, 2014 meeting. Representatives from the EIS contractor were at both meetings.

A total of 8 individuals (not including the BLM, the Companies, or consultants working on the Bird Canyon Project) filled out registration cards at the public scoping meetings. Table 1 provides the locations, dates, times, and number of attendees at each scoping meeting.

**Table 1. Scoping Meeting Locations**

Date and Time	Location	Number of Attendees
Thursday, May 29, 2014 3:30 p.m. to 7:00 p.m.	Southwest Sublette County Pioneers Senior Citizen Center 429 East First Street Marbleton, Wyoming	2
Friday, May 30, 2014 3:30 p.m. to 7:00 p.m.	BLM Rock Springs Field Office Pilot Butte Conference Room 280 Highway 191 North Rock Springs, Wyoming	6

### 2.4.1 Scoping Meeting Materials

At the scoping meetings, the BLM provided a variety of informational materials describing the Bird Canyon Project and the scoping process. Meeting attendees filled out registration cards (Appendix D) at the scoping meetings to document attendance and to be added to the mailing list if they so desired.

The BLM set up nine informational display boards for review during the scoping meetings. The display boards contained information on the following:

1. The National Environmental Policy Act
2. The scoping process
3. Making effective comments
4. Project description
5. Project map
6. A description of the components associated with the proposed project (e.g., multi-well pads, pipelines, access roads)
7. Air quality and water aspects of the Proposed Action (e.g., water source for drilling operations)
8. Biological aspects of the Proposed Action (e.g., descriptions of wildlife and vegetation in the Project Area)
9. Cultural resource aspects of the Proposed Action and surface disturbance (e.g., anticipated acreage of new disturbance)

The BLM displayed eight maps (30" x 40") on easels at the scoping meetings, depicting (Appendix D):

1. Proposed Project Area
2. Existing Oil and Gas Development
3. Air Quality (Class I and II areas in proximity to the Project Area and the Upper Green River Basin Ozone Nonattainment Area)
4. Cultural and Paleontology (cultural and paleontological resources)
5. Livestock Grazing and Wild Horses (livestock grazing allotments and wild horse herd management areas)
6. Wildlife – Big Game (big game crucial, winter, and yearlong range and migration routes)
7. Wildlife – Greater Sage-Grouse and Raptors (Greater Sage-Grouse leks and raptor nests)
8. Oil and Gas Projects in Proximity to the Bird Canyon Project Area

Attendees received a comment form and a fact sheet that included information about the project, the scoping process, and how to submit comments to take home with them (Appendix D).

### 3.0 SCOPING COMMENTS

#### 3.1 Comment Document Collection

This scoping report includes comments submitted during the May 9 to June 16, 2014 scoping period. The BLM will continue to accept and consider all comments received during the NEPA process.

The BLM received 11 comment documents during the scoping period, which were submitted by standard mail or by email sent to the Bird Canyon Project email address (blm\_wy\_bird\_canyon\_eis@blm.gov).

#### 3.2 Comment Document Submissions by Affiliation

Comments were received from interest groups, businesses, state agencies, county or city governments, and federal agencies (Table 2).

**Table 2. Number of Comment Documents Received by Affiliation**

Commenter Affiliation	Number of Comment Documents
Business	2
Interest Groups	3
State Agency	2
County or City Government	2
Federal Agency	2
Other	0
<b>Total</b>	<b>11</b>

#### 3.3 Comment Document Submissions by Geographic Location

Approximately 45 percent of comment documents were received from cities and towns in Wyoming and 55 percent were received from locations out of state (Table 3).

**Table 3. Number of Comment Documents Submitted by Geographic Location**

Location	Number of Comment Documents
Cheyenne, Wyoming	2
Green River, Wyoming	1
Pinedale, Wyoming	1
Laramie, Wyoming	1
Denver, Colorado	3
Salt Lake City, Utah	1
Logan, Utah	1
Farmington, New Mexico	1
<b>Total</b>	<b>11</b>

### 3.4 Comment Summary

The BLM used a multi-step process to catalogue, organize, sort, and summarize comments submitted during scoping. The following nine steps describe the process used for processing comment documents, identifying and bracketing individual comments, and grouping comments into comment categories:

1. Receive and log data for each comment document.
2. Assign each comment document a unique identifier (referred to as a document number) for tracking purposes.
3. Electronically scan the comment document.
4. Review the comment documents and identify (bracket) each individual comment in the comment documents. Many comment documents included multiple individual comments.
5. Code each comment with a comment category based on the content of the comment. Comment categories are broad topics used to group comments expressing similar concerns (Table 4).
6. Enter all individual comments into a sortable database.
7. Sort comments by comment category.
8. Summarize comments by comment category in a narrative form to describe the general questions and concerns associated with each category (Section 3.4.2, Summary of Comments).
9. Develop issue statements to identify questions, concerns, and opportunities to address during preparation of the Bird Canyon Project EIS (Section 4.0, Issues Identified During Scoping).

Table 4 represents the comment categories identified during the Bird Canyon scoping period.

**Table 4. Comment Categories**

Comment Categories
Air Quality
Climate Change
Cultural Resources
Invasive Species and Pests
Livestock Grazing
Monitoring and Mitigation
Oil and Gas Operations
Policies, Regulations, and Permitting
Recreation
Riparian/Wetland Areas
Social and Economic
Soils and Reclamation
Special Status Species – Greater Sage-Grouse
Stakeholder Involvement
Transportation and Access
Water
Wildlife and Fish

**3.4.1 Comment Submittals by Comment Category**

The BLM identified 150 individual scoping comments covering a broad range of comment categories. Table 5 summarizes the number of scoping comments identified by comment category. The greatest number of comments within the scope of the EIS were associated with Water (26), Air Quality (13), Wildlife and Fish (13), and Policies, Regulations, and Permitting (13).

**Table 5. Number of Comments per Comment Category**

Comment Category	Number of Comments per Comment Category
Air Quality	13
Climate Change	2
Cultural Resources	2
Invasive Species and Pests	4
Livestock Grazing	11
Monitoring and Mitigation	8
Oil and Gas Operations	8
Policies, Regulations, and Permitting	13
Recreation	1
Riparian/Wetland Areas	9
Social and Economic	5
Soils and Reclamation	11
Special Status Species – Greater Sage-Grouse	10
Stakeholder Involvement	7
Transportation and Access	7
Water	26
Wildlife and Fish	13
<b>Total Comments Identified</b>	<b>150</b>

### 3.4.2 Summary of Comments

This section summarizes comments submitted during scoping that are within the scope of the EIS. Comment summaries are grouped into comment categories based on the content and substance of the comment. Appendix E contains the text of all individual comments extracted from the comment documents. The BLM's receipt and summarization of scoping comments do not constitute agreement or disagreement with the content of the scoping comments. The purpose of this report is to present the issues raised in the scoping comments for consideration during the NEPA process.

#### ***Air Quality***

Many commenters expressed concerns regarding the Bird Canyon Project location within the U.S. Environmental Protection Agency (EPA)-designated Upper Green River Basin ozone nonattainment area. Commenters pointed out that the BLM must ensure the project complies with the EPA's General Conformity Regulations, including ensuring that emissions from the project would not contribute to future violations of the National Ambient Air Quality Standards and would comply with the State Implementation Plan. Commenters noted that, given the project's location within an ozone nonattainment area and proximity to numerous Clean Air Act Class I and Class II areas, adequate evaluation of impacts and sufficient mitigation was especially important for this project. Commenters cited the June 2011 *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* as a useful framework to address air quality analysis and mitigation for federal oil and gas decisions and recommended early and frequent collaboration with the Interagency Review Team, comprised of air quality representatives from several federal and state agencies.

Commenters were generally concerned that the various activities associated with the Bird Canyon Project would produce emissions that could cumulatively depreciate air quality and air quality-related values near the Project Area and requested specific analysis and mitigation techniques to offset adverse impacts, including best management practices (BMPs), dust suppression measures, and limitations on the pace of development. Specific concerns expressed by commenters included particulate pollution from vehicle traffic, volatile organic compounds emitted from condensate tanks and other sources, and other pollutants emitted from compressors, drilling rigs, and other field equipment.

### ***Climate Change***

Commenters expressed concern that the Bird Canyon Project would contribute cumulatively to climate change through construction and operation activities, including from hydraulic fracturing, venting and flaring, and combustion associated with project implementation. Commenters noted that, pursuant to draft CEQ guidance and Executive Order 13514, the BLM should include an analysis and disclosure of greenhouse gas (GHG) emissions and climate change associated with the reasonably foreseeable development scenario for the planning area, potential climate change impacts from project emissions, and reasonable alternatives and/or practicable mitigation to reduce project-related GHG emissions, along with a discussion of any appropriate climate change adaptation issues. Commenters provided specific recommendations for evaluating climate change in the EIS, including a quantitative estimate of GHG emissions in carbon dioxide-equivalent terms, a description of any existing regional, tribal, or state climate change plans, and a discussion of ongoing and projected regional climate change.

### ***Cultural Resources***

The BLM received comments for cultural resources regarding trails and mitigation of adverse impacts on cultural resources that occur on non-federal land. Commenters pointed out that the southern portion of the Project Area has the potential to affect a non-contributing segment of the Sublette Cutoff of the California National Historic Trail and asked that this impact be fully analyzed and described in the EIS. Commenters also reminded the BLM that the analysis must recognize the limits of BLM authority with respect to non-federal and private land interests concerning mitigation of adverse effects on cultural resources.

### ***Invasive Species and Pests***

Commenters generally expressed concern about the potential for increased spread of invasive species and pests associated with the Bird Canyon Project. Commenters requested that the BLM analyze the introduction of aquatic and terrestrial invasive species and suggested various mitigation and rehabilitation methods the BLM could implement to reduce the impact from the spread of these species. One commenter offered a series of recommendations and guidelines to address aquatic invasive species like zebra mussels. Another commenter offered recommendations targeting invasive weeds and halogeton control.

### ***Livestock Grazing***

Commenters expressed concerns over potential impacts on livestock grazing from the Bird Canyon Project including decline in rangeland health, loss of forage and reduction in animal unit months

(AUMs), and operational and economic impacts on livestock grazing permittees. Several commenters listed specific impacts on livestock grazing that need to be addressed in the EIS, including the impacts on calving/lambing areas, impacts from road improvements or construction and increased traffic, the potential introduction of noxious weeds, and the loss of AUMs. To the extent that oil and gas operations will prevent achievement of rangeland health standards and management objectives, commenters indicated the Companies must be identified as the causal factor and assigned responsibility for corrective actions. Several commenters advocated for the BLM and the Companies to work closely and maintain strong communication ties with livestock permittees. Commenters also requested that the EIS identify stock driveways in and near the Project Area and place livestock crossing signs. Another commenter related that the beneficial effects of livestock grazing upon the environment should be included in the EIS.

### ***Monitoring and Mitigation***

Commenters recommended that the BLM develop a monitoring plan for the Bird Canyon Project that will help the BLM and Companies ensure resource management objectives are being met. One commenter requested that the monitoring plan adopt performance standards to address variability in resources like soils and vegetation. Another commenter requested the monitoring plan provide for annual meetings between the BLM, the Companies, and other interested parties.

Commenters provided several recommendations for establishing appropriate mitigation measures to reduce the impacts from the Bird Canyon Project. Commenters suggested that the BLM consider both offsite and onsite mitigation, and one commenter suggested establishing an offsite mitigation fund to compensate for impacts in coordination with local governments. Another commenter requested that the BLM fully comply with the April 2014 U.S. Department of the Interior Mitigation Policy, *A Strategy for Improving the Mitigation Policies and Practices of the Department of the Interior*, including incorporating landscape-scale approaches to mitigation.

### ***Oil and Gas Operations***

Commenters submitted various comments regarding how the Companies would conduct, and how the BLM would manage natural gas operations in the Project Area. Some comments focused on how project implementation would affect the environment, such as ensuring that no hydraulic fracturing chemicals are released into aquifers during the drilling and maintenance of wells. Commenters suggested that the BLM consider different alternatives to the proposed project such as requiring above-ground pipelines instead of buried pipelines to avoid visual impacts from pipeline scarring and increased risk of noxious and invasive weeds infestation. Commenters requested that directional drilling be used to decrease the number of well pads and surface disturbance. Other commenters suggested that transmission lines be buried and close-loop drilling be used to reduce the project footprint. One commenter suggested that adjacent operations be included in analysis of future development scenarios to reduce cumulative impacts and administrative processing time.

### ***Policies, Regulations, and Permitting***

Commenters submitted several comments regarding the policies, regulations, and permitting that should be followed during the development of the EIS and during project implementation. Some comments were focused on the procedural steps involved in project development, such as obtaining the proper county construction and use permits, while other comments concerned how existing laws should be followed, such as ensuring that the BLM protects valid existing rights. Another commenter requested that the Proposed Action and alternatives conform to the land policies of local governments. One commenter requested that BLM abide by all federal oil and gas regulations, BLM Information Bulletin

No. 2007-119, *Existing Surface Management Authority for Oil and Gas Leases*, comply with the “Doing it Right” principles provided as an attachment to the commenter’s scoping letter, and generally minimize the impacts from oil and gas development by adopting BMPs, COAs, or other protection measures. Commenters relayed the importance of using peer-reviewed science to support the BLM’s decisions and requested that the BLM dedicate the necessary staff and resources to effectively monitor and complete the Bird Canyon Project.

### ***Recreation***

Commenters noted that the Bird Canyon Project Scoping Notice did not identify impacts on recreation as an issue or concern, yet the BLM is obligated to maintain or enhance the health and viability of recreation-dependent natural resources and settings. One commenter relayed that the Bird Canyon Project EIS therefore needs to address impacts on recreation and provide mitigation while working with the local cooperating agencies and the public in reducing adverse effects and conflicts with recreational uses.

### ***Riparian/Wetland Areas***

Commenters expressed concern regarding impacts on riparian areas and wetlands from the proposed project including increased sedimentation from surface disturbance, pipeline hydrostatic testing and produced water discharge, aquatic invasive species introduction and transportation, and alteration of stream structure and channel stability. Commenters provided a series of recommendations and BMPs to reduce the impacts on riparian areas and wetlands associated with (1) pipeline development, (2) design and use of staging/refueling stations, (3) hydrostatic test water discharge, (4) road design, and (5) aquatic invasive species management. Commenters suggested that the BLM analyze methods to protect riparian areas and wetlands including minimum setback requirements, COAs to protect floodplains, and delineation of perennial seeps, springs, and wetlands. To establish adequate baseline conditions against which to compare impacts, commenters requested that the EIS present inventories and maps of existing riparian/wetland areas within the Project Area showing acreages, channel lengths, habitat types, values, and the functions of the waters.

### ***Social and Economic***

Commenters requested that the BLM analyze the potential beneficial and adverse effects on the region and local communities from the Bird Canyon Project, including taxes, housing, social services, and public infrastructure. Commenters noted that an increase in development in the region could strain local services and infrastructure and requested that the EIS disclose these impacts and identify appropriate mitigation and compensation to support the increased demand for these services. One commenter specifically requested an analysis of the social and economic impacts on livestock grazing permittees from the Bird Canyon Project. Several commenters indicated that the BLM should ensure the Bird Canyon Project is consistent with local land use plans and economic policies and programs.

### ***Soils and Reclamation***

Commenters emphasized the importance of developing strategies that minimize disturbance and accelerate reclamation, such as a comprehensive reclamation plan that requires immediate site stabilization and is based on soil types, precipitation, and existing ecologically sustainable vegetation in the high desert area. Furthermore, commenters stipulated that the reclamation plan and seed mixes must be developed in consultation with stakeholders including local conservation districts, livestock operators, and landowners. One commenter encouraged the use of performance-based reclamation standards as opposed to prescriptive standards. Commenters suggested the BLM consider using some

of the successful reclamation methods implemented for other projects, such as use of sterile non-native seed mixes in the Hiawatha project area.

Commenters provided recommendations to reduce impacts on soils during development. Recommendations included control of soil erosion using structures to prevent the spread of sediment to perennial and intermittent stream channels, use of topsoil live haul instead of stockpiling soil, stabilization of vegetation removed as a result of construction activities, establishment of a buffer zone around waterbodies and ephemeral drainages, and reseeding of disturbed areas as soon as possible after the disturbance.

### ***Special Status Species – Greater Sage-Grouse***

Commenters pointed out that while there are no Greater Sage-Grouse leks within the Project Area, two occupied leks are within 2 miles of the project boundary and urged a full evaluation of the direct and cumulative impacts on the species from the Bird Canyon Project. Commenters asked that, at a minimum, the Bird Canyon Project be compliant with the Governor's Greater Sage-Grouse Executive Order and Core Area policy (Executive Order 2011-5) and the December 21, 2011 *A Report on National Greater Sage-Grouse Conservation Measures* (known as the National Technical Team report) to ensure long-term viability of the species. One commenter was concerned that the Bird Canyon Project would exceed the one-well-pad-per-square-mile and 3 percent threshold for surface disturbance recommended by the National Technical Team report and asked that the project be designed to avoid exceeding these thresholds.

Commenters suggested specific measures that should be followed to reduce the impact on Greater Sage-Grouse, including that development activity not be allowed to occur within 2 miles of leks or, if this is unavoidable, to apply seasonal use COAs. Another commenter requested that roads and well pads not be located within 1.9 miles of leks in order to avoid direct impacts on breeding Greater Sage-Grouse and requested that each well be equipped with telemetry to transmit well data to reduce the number of physical trips to each well site by the Companies.

### ***Stakeholder Involvement***

Several commenters requested inclusion on the mailing list for the project. One commenter requested cooperating agency status for all local county and conservation districts and requested a meeting with the Companies and the BLM to discuss the scope of the project. Commenters stated that, historically, there has been relatively little coordination with local governments during project planning and EIS development. Commenter(s) indicated that lack of coordination can lead to resource issues at the local level, which are especially acute with respect to transportation impacts that occur outside of public lands as a result of projects proposed on public land.

### ***Transportation and Access***

Commenters expressed concern over the impacts of the project on roads and transportation systems in the Project Area, including increased heavy truck traffic, increased traffic congestion leading to public safety concerns, air pollution, and maintenance and improvement costs. Commenters requested early and close coordination between the BLM and local governments on traffic impacts, mitigation, and the development of a Transportation Plan. Commenters requested that the EIS contain a meaningful analysis of projected increases in truck traffic and resulting impacts on public safety, recreation access, livestock grazing permittee access, air quality, and road maintenance and upgrades. A commenter suggested that the Companies compensate the counties for the increased levels of use and damage or wear to the roads above normal levels, and coordinate with the respective county road departments and state highway divisions regarding road capacity and traffic levels.

## **Water**

Many commenters expressed the importance of a robust and detailed analysis of potential impacts that may result from the Bird Canyon Project on surface water and groundwater resources. To establish a baseline from which to compare impacts, commenters requested an extensive description of surface water and groundwater resources in and around the Project Area including springs, wetlands, aquifers, and water wells, along with information on the geology and hydrogeology of the Project Area. In addition, commenters asked for a description and a map of surface waterbodies within and/or downstream of the Project Area including perennial, intermittent, and ephemeral waterbodies, and the Clean Water Act Section 303(d) list of threatened and impaired waterbody segments.

Many commenters expressed concerns regarding potential water quality and quantity impacts from drilling, construction, and production activities. Commenters identified leaks and spills, hydraulic fracturing, production wellbore integrity, pipeline use, and maintenance and abandonment of existing wells as potential issues that should be evaluated in the EIS. Moreover, commenters advocated a detailed analysis of water sources for drilling and operation activities, water withdrawal (e.g., drawdown of aquifer levels, reductions in instream flow), water transport, and water disposal throughout all phases of the project. Commenters also expressed concern over sedimentation to watersheds including ephemeral drainages and the potential alteration of stream channel morphology, streambed structure, and surface water quality. Commenters recommended that the BLM conduct a quantitative analysis of erosion and sediment loading, such as through the Automated Geospatial Watershed Assessment (AGWA) Tool; based on the results of such an analysis, the BLM should apply setbacks or other mitigating measures to prevent impacts on surface water.

Commenters requested a detailed discussion of produced water treatment and handling and alternative methods to trucking, the proposed disposal method, including evaporation, recycling of produced water for use in well drilling and stimulation, and piping of produced liquids to centralized locations.

Commenters provided several recommendations for reducing the potential for adverse impacts from the Bird Canyon Project on water resources. For example, commenters recommended development be restricted within designated sole-source aquifers to protect the drinking water resources. Commenters also recommended setbacks to prevent surface occupancy and activities from occurring near public water supplies, private wells, and other surface waterbodies. Commenters requested the EIS describe how water monitoring will occur for the project; one commenter suggested that the BLM develop a groundwater monitoring plan similar to that of the Pinedale Anticline Natural Gas Exploration Development Project for pre- and post-drilling. Several commenters emphasized the importance of collaboration with cooperating agencies and other stakeholders to develop water monitoring and management plans.

## **Wildlife and Fish**

Commenters expressed concern regarding potential impacts from the Bird Canyon Project on wildlife and sensitive wildlife habitat. Comments focused on the potential loss or fragmentation of habitat and migration routes for wildlife from surface disturbance and other project-related activities, especially impacts on big game species including elk, mule deer, bighorn sheep, and pronghorn. Commenters specifically expressed concern regarding the occurrence of big game winter range and parturition areas for mule deer and bighorn sheep in the Project Area, and recommended all infill drilling within crucial winter range be conducted directionally from existing infrastructure and adhere to big game timing stipulations. Commenters cited stress to wildlife associated with traffic, human presence, and use of heavy equipment as a specific concern in addition to direct impacts on wildlife habitat from surface disturbance. Commenters requested coordination with the Wyoming Game and Fish Department and

other stakeholders in the development of a project Reclamation Plan that would have a goal of minimizing long-term adverse impacts to habitat.

Commenters also requested evaluation of potential impacts on rare and/or BLM sensitive species including Idaho pocket gopher, pygmy rabbit, white-tailed prairie dog, Preble's shrew, ferruginous hawk, golden eagle, and mountain plover. See *Special Status Species – Greater Sage-Grouse* above for a summary of the comments received regarding Greater Sage-Grouse.

Commenters expressed concern over potential impacts on recreational fisheries within the Upper Green River drainage basin, and noted that the Green River is a nationally recognized trout fishery. Due to the categorization of certain fish species within the Green River as Tier I species, commenters recommended no loss of habitat function in this area. Commenters also requested that impacts on various aquatic species, amphibians, and reptiles be analyzed. Commenters provided a series of recommendations for reducing the impacts on aquatic resources, including timing limitation stipulations and buffer zones designed to reduce impacts on hibernating and breeding reptiles, aquatic amphibians, and fish.

### **3.4.3 Summary of Out-of-Scope Comments**

In addition to the comments described above, the BLM received scoping comments that were outside the scope of analysis for the Bird Canyon Project EIS. Out-of-scope comments received on the Bird Canyon Project EIS included general opinions of the project (e.g., I support/I oppose), comments associated with decisions and actions that will not be made in the Bird Canyon Project EIS, and other comments that are not within the scope of analysis for the Bird Canyon Project EIS.

## 4.0 ISSUES IDENTIFIED DURING SCOPING

Based on the comments submitted during scoping and summarized above (Section 3.4.2), the BLM developed 18 issue statements, generally in the form of questions, which describe the general issues and concerns identified during scoping. This section also includes specific questions and concerns encapsulated within each issue statement, displayed in bullet-point format beneath each issue statement. Issue statements are organized by comment category (e.g., Air Quality), and each comment category may have none, one, or multiple issue statements based on the broad concerns raised by commenters. The BLM will continue to consider issues during the EIS process as it receives additional input from the public, cooperating agencies, tribes, and other affected parties.

### *Air Quality*

#### **Issue 1: How will the Bird Canyon Project affect air quality and air quality-related values?**

- Will the Bird Canyon Project comply with the EPA's General Conformity Regulations and the requirements of the Wyoming State Implementation Plan for the Upper Green River Basin Ozone Nonattainment Area?
- How will the BLM ensure that the Bird Canyon Project does not contribute to future exceedances of the federal ozone standards?
- Will the Bird Canyon Project maintain National Ambient Air Quality Standards?
- Will the Bird Canyon Project contribute to visibility impacts in Class I and II areas?
- Incorporate quantitative modeling for all appropriate air pollutants resulting from activities associated with the Bird Canyon Project.
- What type of mitigation measures will be applied to reduce the adverse impacts on air quality from the Bird Canyon Project?

### *Climate Change*

#### **Issue 2: How will the Bird Canyon Project affect climate change?**

- Include quantitative estimates of GHG emissions.
- What reasonable alternatives and/or practicable mitigation will the BLM consider to reduce project-related GHG emissions?

### *Cultural Resources*

#### **Issue 3: How will the BLM mitigate impacts on cultural resources within and near the Project Area?**

- Analyze impacts on the non-contributing segment of the Sublette Cutoff of the California National Historic Trail.

### *Invasive Species and Pests*

#### **Issue 4: How will the Bird Canyon Project affect the establishment and spread of invasive species?**

- What methods will be employed to minimize the potential spread of invasive species?

### ***Livestock Grazing***

**Issue 5: What are the impacts on livestock grazing from the Bird Canyon Project?**

- How will the EIS analyze the direct, indirect, and cumulative impacts on livestock grazing, including impacts on rangeland health, potential loss of AUMs, and reduction in allotments?
- Maintain close and frequent communication between the BLM, the Companies, and livestock grazing permittees during project development.
- How will the Bird Canyon Project affect the operations and economic well-being of grazing permittees and their allotments?

### ***Monitoring and Mitigation***

**Issue 6: How will the BLM ensure resource objectives are being met and adverse impacts are being appropriately reduced or eliminated?**

- Develop a monitoring plan in coordination with the Companies and stakeholders.
- Include appropriate onsite and offsite mitigation measures.
- Consider a mitigation fund.

### ***Oil and Gas Operations***

**Issue 7: What equipment, techniques, and design features will be implemented on the Bird Canyon Project to respond to local and regional conditions?**

- Evaluate ways to reduce the potential impacts from oil and gas drilling activities, such as minimizing surface disturbance, ensuring that aquifers are protected, and using additional methods to reduce impacts on the environment and human health and safety.
- What alternatives to the Proposed Action will be considered to address potential impacts on the human and natural environment?

### ***Policies, Regulations, and Permitting***

**Issue 8: How will the Bird Canyon Project comply with applicable policies, regulations, and permitting?**

- The Bird Canyon Project needs to be consistent with federal, state, and local policies, permits, regulations, executive orders, and other applicable legislation and guidance.
- Ensure adequate federal resources can be directed to the Bird Canyon Project during EIS development and for monitoring during project implementation.

### ***Recreation***

**Issue 9: What will be the impacts on recreational opportunities from the Bird Canyon Project and how will they be mitigated?**

- The BLM is obligated to maintain or enhance the health and viability of recreation-dependent natural resources and setting.
- The EIS should address impacts on recreation and identify appropriate mitigation in collaboration with stakeholders.

***Riparian/Wetland Areas***

**Issue 10: How will adverse impacts on riparian and wetland areas be minimized or avoided?**

- Characterize all wetlands and water resources in the Project Area.
- What type of mitigation measures will be employed at the permitting stage to reduce impacts on riparian areas and wetlands, such as buffers, setbacks, and erosion control structures?
- Include BMPs and protective measures for wetlands.

***Social and Economic***

**Issue 11: How will the Bird Canyon Project affect economic and social conditions on local, regional, and national levels?**

- Fully analyze the potential beneficial and adverse impacts from the Bird Canyon Project on a range of economic and social indicators including taxes, royalties, housing, employment, social services, and infrastructure.
- How will the Bird Canyon Project affect local services and infrastructure and how will the increased demand for these services be mitigated?

***Soils and Reclamation***

**Issue 12: How will the BLM ensure appropriate and successful reclamation?**

- What requirements will be included in a reclamation plan for the Bird Canyon Project?
- Consider establishing performance-based reclamation standards.
- Consider applying reclamation methods used successfully for other regional projects.

**Issue 13: How will the Bird Canyon Project affect soils?**

- Consider methods or actions to minimize or mitigate the extent of soil disturbance and erosion.

***Special Status Species – Greater Sage-Grouse***

**Issue 14: How will the Bird Canyon Project affect Greater Sage-Grouse and its habitat?**

- Comply with the Wyoming Executive Order 2011-5 Greater Sage-Grouse Policy.
- What specific mitigation measures or stipulations will be applied to minimize the impacts on Greater Sage-Grouse and its habitat?
- Apply the BLM National Technical Team recommendations or the best available science to reduce the potential impacts on Greater Sage-Grouse.

***Stakeholder Involvement***

**Issue 15: How will the BLM collaborate with and engage stakeholders in the EIS development process and during project implementation?**

**Transportation and Access****Issue 16: How will the Bird Canyon Project affect local and regional traffic and transportation systems and infrastructure?**

- How will the Bird Canyon Project affect traffic, infrastructure, public safety, access, and air quality?
- Engage in close coordination with local governments to evaluate traffic and road infrastructure impacts and to identify potential mitigation measures.
- How will the Bird Canyon Project minimize adverse impacts on traffic and the local transportation network?

**Water****Issue 17: How will the Bird Canyon Project affect surface water and groundwater resources?**

- Characterize surface and subsurface hydrology in and around the Project Area including springs, wetlands, aquifers, and existing water wells.
- How will produced water be properly managed and disposed of to prevent degradation of water quality?
- Analyze the potential impacts on water quality from drilling, well completions, and operational activities.
- Include a detailed analysis of water sources for drilling and operation activities, water withdrawal (e.g., drawdown of aquifer levels, reductions in instream flow), and water transport during each phase of the Bird Canyon Project.
- How will the Bird Canyon Project contribute to erosion and sedimentation and how will these impacts be minimized?
- What mitigation measures and BMPs will be employed to reduce the adverse effects to surface water and groundwater resources?
- Establish a water monitoring plan in coordination with local, state, and federal cooperating agencies.

**Wildlife and Fish****Issue 18: How will the Bird Canyon Project affect fish, wildlife, and special status species and their habitats?**

- How will the Bird Canyon Project affect big game and big game habitat in and around the Project Area including migration routes, big game winter range, and big game parturition areas?
- Analyze the potential impacts on rare and/or BLM sensitive species including Idaho pocket gopher, pygmy rabbit, white-tailed prairie dog, Preble's shrew, ferruginous hawk, golden eagle, and mountain plover.
- What are the potential impacts on the recreational fisheries within the Upper Green River drainage basin and how can they be avoided so there is no loss of habitat function?
- What measures, such as timing limitations and buffers, will be employed to reduce the impact on wildlife and aquatic resources?

## 5.0 SUMMARY OF FUTURE STEPS IN THE PROCESS

The BLM will consider the comments submitted during scoping and the issues identified in this scoping report when developing alternatives to the Proposed Action. The BLM will continue to consider issues identified during scoping, along with other issues and potential impacts, during preparation of the EIS. The BLM will analyze and document potential impacts that could result from implementing the Proposed Action and the alternatives in a Draft EIS.

A Notice of Availability (NOA) for the Draft EIS will be published in the *Federal Register* announcing availability of the Draft EIS for review and comment. Publication of the NOA for the Draft EIS will initiate a public comment period during which the BLM will invite the public and other interested parties to provide comments on the Draft EIS. The BLM will hold public meetings during the public comment period and will advertise meetings through mailings to contacts on the project mailing list and through other notification methods. The BLM will review and consider all comments received on the Draft EIS during the public comment period. The BLM will revise the Draft EIS as appropriate based on public comments and all substantive comments and responses will be incorporated into the Final EIS. An NOA for the Final EIS will be published in the *Federal Register* announcing the availability of the Final EIS.

The BLM will prepare a ROD to document the selected alternative and identify any accompanying mitigation measures. The BLM will issue the ROD no sooner than 30 days after the NOA for the Final EIS is published in the *Federal Register*.

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***Bird Canyon  
Natural Gas Infill Project  
Scoping Report***

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***Appendix A***

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Notification and Advertisements

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**APPENDIX A**  
**NOTIFICATION AND ADVERTISEMENTS**

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## Notice of Intent



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the RMP amendment in order to consider the variety of resource issues and concerns identified.

Preliminary issues have been identified by BLM personnel, federal, state and local agencies and other stakeholders and include:

- Compliance with NEPA, FLPMA, and other applicable laws, executive orders, regulations and policy;
- Recognition of valid existing rights;
- All lands that may affect or be affected by BLM management decisions. Planning decisions in the RMP amendment will apply only to BLM-administered lands and federal mineral estate; and
- A collaborative and multi-jurisdictional approach, when possible, to jointly determine the desired future condition and management direction for the public lands. To the extent possible and within legal and regulatory parameters, the BLM management and planning decisions will complement the planning and management decisions of other agencies, state and local governments, and jurisdictions intermingled with, and adjacent to, the planning area.

The BLM will evaluate identified issues to be addressed in the plan, and will place them into one of three categories:

1. Issues to be resolved in the plan amendment;
2. Issues to be resolved through policy or administrative action; or
3. Issues beyond the scope of this plan amendment.

The BLM will provide an explanation in the draft RMP amendment/EA as to why an issue was placed in category two or three. The public is encouraged to help identify any management questions and concerns that should be addressed in the plan. The BLM will work collaboratively with interested parties to identify the management decisions that are best suited to local, regional, and national needs and concerns.

Comments may be submitted in writing to the BLM at any public scoping meeting or through one of the methods listed in the **ADDRESSES** section above. 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. While you may ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

**Authority:** 40 CFR 1501.7 and 43 CFR 1510.2.

**Larry Claypool,**

*Acting State Director.*

[FR Doc. 2014-10498 Filed 5-9-14; 8:45 am]

**BILLING CODE 4310-22-P**

### DEPARTMENT OF THE INTERIOR

#### Bureau of Land Management

[LLWYD04000-2013-LL13110000-EJ0000]

#### Notice of Intent To Prepare an Environmental Impact Statement for the Bird Canyon Natural Gas Infill Project, Lincoln and Sublette Counties, WY

**AGENCY:** Bureau of Land Management, Interior.

**ACTION:** Notice of Intent.

**SUMMARY:** In compliance with the National Environmental Policy Act (NEPA) of 1969, as amended, and the Federal Land Policy and Management Act of 1976, as amended, the Bureau of Land Management (BLM) Rock Springs Field Office (RSFO) intends to prepare an environmental impact statement (EIS) for the Bird Canyon Natural Gas Infill Project and by this notice announces the opening of the scoping period. The plan of development for this project proposes that 348 natural gas wells be drilled on public lands in the 17,612 acre Bird Canyon project area.

**DATES:** Comments must be received by June 9, 2014. The BLM will hold two public meetings as part of the public comment period; these will be announced through the local news media and the BLM Web site at [www.blm.gov/wy/st/en/info/NEPA/documents/rsfo/birdcanyon.html](http://www.blm.gov/wy/st/en/info/NEPA/documents/rsfo/birdcanyon.html) at least 15 days in advance. In order to be included in the analysis, all comments must be received prior to the close of the 30-day scoping period or 15 days after the last public meeting, whichever is later. The BLM will provide additional opportunities for public participation as appropriate.

**ADDRESSES:** Written comments on issues and planning criteria may be submitted through any of the following methods:

- *Mail or Delivery:* BLM Rock Springs Field Office, Attn: Spencer Allred, 280 Highway 191 N., Rock Springs, WY 82901.
- *EMail:* [blm\\_wy\\_bird\\_canyon\\_eis@blm.gov](mailto:blm_wy_bird_canyon_eis@blm.gov) with "Public Comment" in the subject line.
- *Fax:* 307-352-0329.

All comments must include a legible full name and address on the envelope, letter, fax, postcard or email.

Documents pertinent to this proposal may be examined at the RSFO, 280 Highway 191 N., Rock Springs, Wyoming.

**FOR FURTHER INFORMATION CONTACT:** Spencer Allred, Natural Resource Specialist, at 307-352-0325. Persons who use a telecommunications device for the deaf may call the Federal Information Relay Service (FIRS) at 1-800-877-8339 to contact the above individual during normal business hours. The FIRS is available 24 hours a day, 7 days a week, to leave a message or question with the above individual. You will receive a reply during normal business hours.

**SUPPLEMENTARY INFORMATION:** Koch Exploration Company, LLC, and Memorial Resource Development, LLC, propose to drill 348 new natural gas wells within 17,612 acres of public land in the existing Bird Canyon Field, in Lincoln and Sublette counties, Wyoming. Drilling activities would occur over the next 10 to 20 years. The life of the project, including final reclamation, is projected to be approximately 55 years. The wells would be directionally drilled on expansions of existing well pads or on newly constructed multiple-well pads. Average well-pad spacing would be four pads per 640 acres. It is estimated that well pads would initially occupy 3.8 acres, which would then be reclaimed back to 1.1 acres after production facilities are installed. Total estimated initial disturbance for this project, including access roads, well pads and pipelines, is 392 acres. Following interim reclamation, including reclamation of 64 existing pads, total estimated long-term surface disturbance is 20 acres.

The proposed project is in an area designated as marginal nonattainment for ozone within the Upper Green River Basin by the Environmental Protection Agency (EPA) in July 2012.

Oil and gas development has occurred in the Bird Canyon Field since the 1960s. During that time, 90 wells have been drilled within the project area. Eighteen of those wells have been plugged or shut-in, leaving 72 wells in the field that are actively producing at this time.

An EIS will be prepared to analyze the impacts of the proposed project which the RSFO has preliminarily identified as socioeconomic, watershed qualities, historical and cultural resources, wildlife habitat, air quality, water quality and livestock forage. Identification of opportunities to apply mitigation hierarchy strategies for on-site, regional, and compensatory

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mitigation, and (appropriate to the size of the project) landscape-level conservation and management actions to achieve resource objectives] will be considered.

A critical part of the EIS process is gathering comments and concerns from the public to help the BLM understand the scope of the issues associated with this project. The BLM will utilize and coordinate the NEPA public comment process to comply with section 106 of the National Historic Preservation Act (16 U.S.C. 470f) as provided for in 36 CFR 800.2(d)(3). Native American tribal consultations will be conducted in accordance with BLM policy and sites of religious or cultural significance or other tribal concerns will be given due consideration. Federal, State and local agencies, along with tribes and other stakeholders that may be interested in or affected by the proposed project, may request or be requested by the BLM to participate in the development of the EIS as a cooperating agency. Additional opportunities for public participation will be provided when the Draft EIS is published.

Comments can be submitted in writing to the BLM at any public scoping meeting or through one of the methods listed in the ADDRESSES section. 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. While you may ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

Authority: 40 CFR 1501.7.

Larry Claypool,

Acting State Director.

[FR Doc. 2014-10489 Filed 5-8-14; 8:45 am]

BILLING CODE 4310-22-P

## DEPARTMENT OF THE INTERIOR

### Bureau of Land Management

[LIDC00000.14XL1109AF.L10200000.DS0000.LXSSD0090000.241A; 4500061279]

#### Notice of Availability of the Draft Cottonwood Resource Management Plan Amendment for Domestic Sheep Grazing and Supplemental Environmental Impact Statement, Idaho

AGENCY: Bureau of Land Management, Interior.

**ACTION:** Notice of availability.

**SUMMARY:** In accordance with the National Environmental Policy Act of 1969, as amended, and the Federal Land Policy and Management Act of 1976, as amended, the Bureau of Land Management (BLM) has prepared a Draft Resource Management Plan (RMP) Amendment for Domestic Sheep Grazing and Supplemental Environmental Impact Statement (EIS) and by this notice is announcing the opening of the comment period.

**DATES:** To ensure that comments will be considered, the BLM must receive written comments on the Draft RMP Amendment/Supplemental EIS within 90 days following the date the Environmental Protection Agency publishes a notice of availability of this document in the *Federal Register*. The BLM will announce future meetings or hearings and any other public participation activities at least 15 days in advance through public notices, media releases, and/or mailings.

**ADDRESSES:** You may submit comments related to the Draft RMP Amendment and Supplemental EIS by any of the following methods:

- **Web site:** [http://www.blm.gov/id/st/en/prog/nepa\\_register/cfo\\_SEIS-plan-amdt-sheep.html](http://www.blm.gov/id/st/en/prog/nepa_register/cfo_SEIS-plan-amdt-sheep.html).
- **Email:** [BLM\\_ID\\_SheepSEIS@blm.gov](mailto:BLM_ID_SheepSEIS@blm.gov).

• **Mail:** BLM Coeur d'Alene District, ATTN: Sheep SEIS, 3815 Schreiber Way, Coeur d'Alene, ID 83815.

The Draft RMP Amendment and Supplemental EIS is available on the project Web site at [http://www.blm.gov/id/st/en/prog/nepa\\_register/cfo\\_SEIS-plan-amdt-sheep.html](http://www.blm.gov/id/st/en/prog/nepa_register/cfo_SEIS-plan-amdt-sheep.html), in the BLM Coeur d'Alene District Office at the above address, and at the BLM Cottonwood Field Office, One Butte Drive, Cottonwood, ID 83522.

**FOR FURTHER INFORMATION CONTACT:** Scott Pavey, telephone 208-769-5059, BLM Coeur d'Alene District Office (address above); email: [BLM\\_ID\\_SheepSEIS@blm.gov](mailto:BLM_ID_SheepSEIS@blm.gov). Persons who use a telecommunications device for the deaf (TDD) may call the Federal Information Relay Service (FIRS) at 1-800-877-8339 to contact the above individual during normal business hours. The FIRS is available 24 hours a day, 7 days a week, to leave a message or question with the above individual. You will receive a reply during normal business hours.

**SUPPLEMENTARY INFORMATION:** The BLM proposes to amend the 2008 Cottonwood RMP by providing new management direction and allocations for livestock grazing on 19,405 acres of BLM-managed lands within 4 BLM

allotments in Idaho and Adams Counties of Idaho.

In August 2008, the BLM published the Proposed Cottonwood RMP and Final EIS and subsequently received a number of protests on the proposed decision. The BLM Director denied all protest points but one, which was in regard to the adequacy of the range of alternatives for management of domestic sheep grazing on four BLM allotments that are within bighorn sheep habitat. Specifically, the Director found that the Final EIS did not include an adequate range of alternatives to address potential disease transmission from domestic sheep and goats to bighorn sheep, and required that the State Director complete a supplemental EIS that would include a reasonable range of alternatives for managing livestock grazing and would analyze the impacts of domestic sheep and goat grazing within the four allotments. The Director further specified that the supplemental EIS be for the limited purpose of analyzing the impacts of domestic sheep and goat grazing within four allotments.

The Supplemental EIS identifies and analyzes three related planning issues:

- (1) Bighorn sheep—Domestic sheep and goats may contact and transmit diseases to bighorn sheep, which may be a contributing factor to the downward trend in bighorn populations.
- (2) Native American tribal interests and treaty rights—BLM management of livestock grazing, specifically domestic sheep and goats, may affect the availability of resources and uses (specifically related to bighorn sheep) that are important to the interests and rights of the Nez Perce Tribe.
- (3) Livestock grazing and social and economic interests—Changes to BLM management of livestock grazing may affect the local economy.

Please note that public comments and information submitted including names, street addresses, and email addresses of persons who submit comments will be available for public review and disclosure at the above address during regular business hours (8:00 a.m. to 4:00 p.m.), Monday through Friday, except holidays.

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. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

Scoping Meeting Postcard

**Bird Canyon Natural Gas Infill Project**  
**Environmental Impact Statement**  
**Public Scoping Meetings**

The Bureau of Land Management (BLM) Rock Springs Field Office is preparing an environmental impact statement (EIS) for the proposed Bird Canyon Natural Gas Infill Project. The BLM is seeking public input on issues and alternatives that should be addressed in the EIS. Scoping meetings provide an opportunity for the public to learn about and comment on the project.

Koch Exploration Company, LLO and Memorial Resource Development, LLO propose to drill 348 new natural gas wells within the existing Bird Canyon Field in Lincoln and Sublette counties, Wyoming. The project area encompasses 17,612 acres of public lands administered by the BLM Rock Springs Field Office. Drilling activities would occur over the next 10 to 20 years. The life of the project, including final reclamation, is projected to be approximately 55 years. The wells would be directionally drilled on expansions of existing well pads or on newly constructed multiple-well pads. The proposed project is in an area designated as marginal nonattainment for ozone within the Upper Green River Basin by the Environmental Protection Agency.

BLM  
 High Desert District - Rock Springs Field Office, Wyoming

**You are invited to attend the scoping meetings at the following locations:**

- |   |  |
|---|--|
| <b>Thursday</b><br><b>May 29, 2014</b><br>3:30 p.m. – 7:00 p.m. | Southwest Sublette<br>County Pioneers<br>Senior Citizen Center<br>429 East First Street<br>Marbleton, Wyoming  |
| <b>Friday</b><br><b>May 30, 2014</b><br>3:30 p.m. – 7:00 p.m.   | BLM Rock Springs Field Office<br>Pilot Butte Conference Room<br>280 Highway 191 North<br>Rock Springs, Wyoming |

**Bird Canyon Natural Gas Infill Project EIS**  
 BLM Rock Springs Field Office  
 Spencer Allred, Project Manager  
 280 Highway 191 North  
 Rock Springs, WY 82901

**FOR MORE INFORMATION, PLEASE CONTACT:**

Bird Canyon Natural Gas Infill Project EIS  
 BLM Rock Springs Field Office  
 Spencer Allred, Project Manager  
 280 Highway 191 North  
 Rock Springs, WY 82901  
**Phone:** 307-352-0325  
**Email:** blm\_wy\_bird\_canyon\_eis@blm.gov

**Website:** [www.blm.gov/wy/st/en/info/NEPA/documents/rsfo/birdcanyon.html](http://www.blm.gov/wy/st/en/info/NEPA/documents/rsfo/birdcanyon.html)

## News Release



Release Date: May 9, 2014

Contact: Shelley Gregory, 307-315-0612

### **BLM Opens Scoping for Bird Canyon Natural Gas Infill Project** ***Public Scoping Meetings Scheduled***

The Bureau of Land Management (BLM) Rock Springs Field Office has published a Notice of Intent in the *Federal Register* and is initiating a public comment period on the proposed Bird Canyon Natural Gas Infill Project.

The project proposal includes the drilling and production of 348 new natural gas wells within 17,612 acres of public land in the Bird Canyon Field, Lincoln and Sublette counties, Wyo. The wells would be directionally drilled from existing or new multi-well pads with an average spacing of four pads per 640 acres. Well pads would initially occupy 3.8 acres with a total estimated initial disturbance, including access roads, well pads and pipelines, of 392 acres for the project area. Wells pads would be reduced to 1.1 acres after interim reclamation with a total estimated long-term surface disturbance of 32 acres for the project area. Development would take place over the next 10 to 20 years with an estimated project life of 55 years.

The proposed project is located in the Upper Green River Basin which was designated as a marginal non-attainment zone for ozone by the Environmental Protection Agency in July 2012. An environmental impact statement (EIS) will analyze project impacts to air quality as well as employment, the local economy, viewsheds, historical and cultural resources, wildlife habitat, water quality, livestock forage and other issues, concerns and mitigation opportunities identified during the scoping period.

Oil and gas development has occurred in the Bird Canyon Field since the 1960s. During that time, 90 wells have been drilled within the project area. Eighteen of those wells have been plugged or shut-in, leaving 72 actively producing wells.

The proposal and associated documents can be reviewed at the Rock Springs Field Office or online at [www.blm.gov/wy/st/en/info/NEPA/documents/rsfo/birdcanyon.html](http://www.blm.gov/wy/st/en/info/NEPA/documents/rsfo/birdcanyon.html).

Public scoping meetings have been scheduled to provide information and collect comments. The May 29 meeting will be held at the Southwest Sublette County Pioneers Senior Citizen Center, 429 E. First St., in Marbleton, Wyo. The May 30 meeting will be held at the BLM Rock Springs Office, 280 Highway 191 N., in Rock Springs, Wyo. Both meetings will start at 3:30 p.m. and end at 7 p.m.

Public comments are essential to the EIS process and help the BLM develop a reasonable range of alternative actions and a comprehensive environmental analysis. Substantive and constructive comments relating directly to this proposal and impending EIS should be emailed to [blm\\_wy\\_bird\\_canyon\\_eis@blm.gov](mailto:blm_wy_bird_canyon_eis@blm.gov) with "Public Comment" in the subject line; faxed to 307-352-0329; or mailed or delivered to the BLM, Attn: Spencer Allred, 280 Highway 191 N., Rock Springs WY 82901. Comments will be accepted until June 16.

Before including your address, phone number, email address, or other personal identifying information in your comment, be advised that your entire comment - including your personal identifying information - may be publicly available at any time. While you may ask us in your comment to withhold from public review your personal identifying information, we cannot guarantee that we will be able to do so.

For more information, please contact Spencer Allred at 307-352-0325.

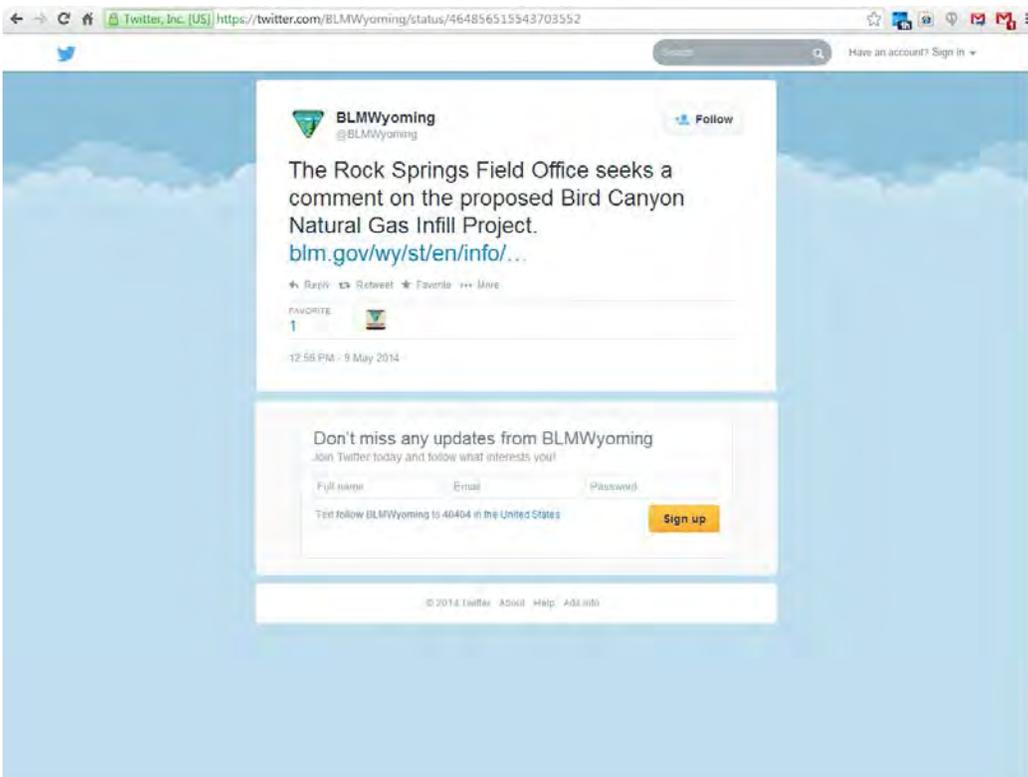
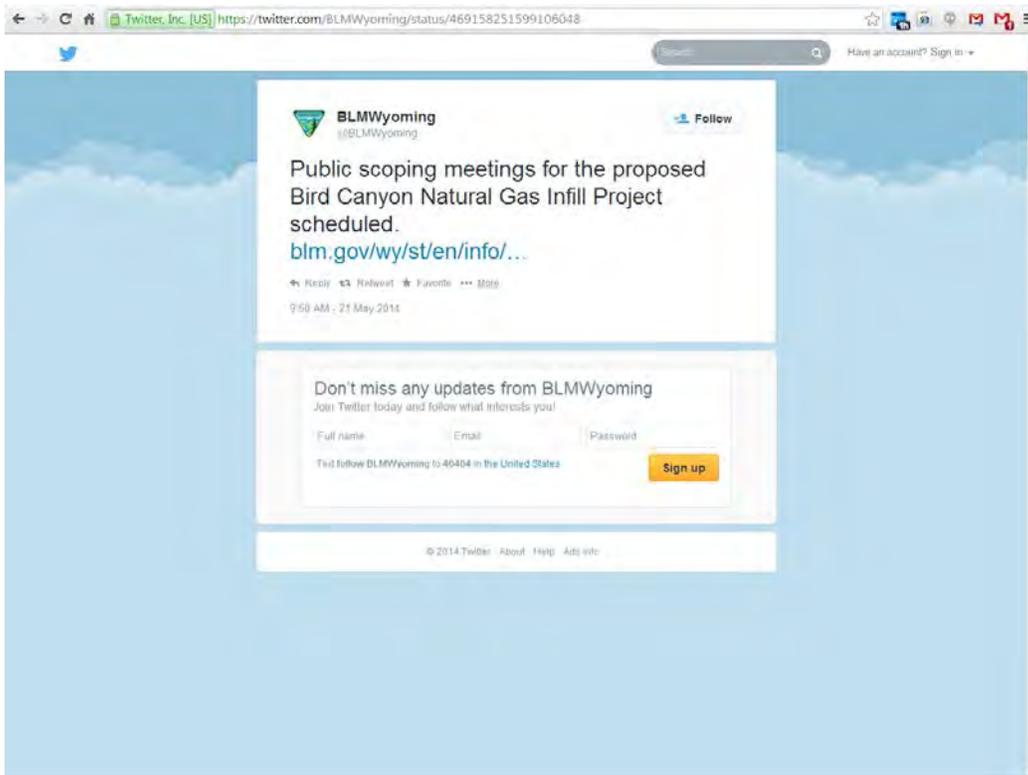
Persons who use a telecommunications device for the deaf (TDD) may call the Federal Information Relay Service (FIRS) at 1-800-877-8339 to contact the individual above during normal business hours. The FIRS is available 24 hours a day, 7 days a week, to leave a message or question with the above individual. You will receive a reply during normal business hours.

The BLM manages more than 245 million acres of public land, the most of any Federal agency. This land, known as the National System of Public Lands, is primarily located in 12 Western states, including Alaska. The BLM also administers 700 million acres of sub-surface mineral estate throughout the nation. The BLM's mission is to manage and conserve the public lands for the use and enjoyment of present and future generations under our mandate of multiple-use and sustained yield. In Fiscal Year 2013, the BLM generated \$4.7 billion in receipts from public lands.

- BLM -

3

## Twitter Feed



## Facebook Posting



The image shows a screenshot of a Facebook post from the Bureau of Land Management - Wyoming. The post is dated May 21 and features the BLM logo. The text of the post announces public scoping meetings for the proposed Bird Canyon Natural Gas Infill Project. It lists two meeting dates and locations: May 29 at the Southwest Sublette County Pioneers Senior Citizen Center in Marbleton, Wyo., and May 30 at the BLM Rock Springs Office in Rock Springs, Wyo. A URL is provided for more information: [www.blm.gov/wy/st/en/info/NEPA/documents/rsfo/birdcanyon.html](http://www.blm.gov/wy/st/en/info/NEPA/documents/rsfo/birdcanyon.html). At the bottom of the post, there are options to 'Like', 'Comment', and 'Share'.

 **Bureau of Land Management - Wyoming**  
May 21

Public scoping meetings for the proposed **Bird Canyon** Natural Gas Infill Project have been scheduled to provide information and collect public comments.

- May 29: Southwest Sublette County Pioneers Senior Citizen Center, 429 E. First St., in Marbleton, Wyo., 3:30 p.m. to 7 p.m.
- May 30: BLM Rock Springs Office, 280 Highway 191 N., in Rock Springs, Wyo., 3:30 p.m. to 7 p.m.

[www.blm.gov/wy/st/en/info/NEPA/documents/rsfo/birdcanyon.html](http://www.blm.gov/wy/st/en/info/NEPA/documents/rsfo/birdcanyon.html)

Like · Comment · Share

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***Bird Canyon  
Natural Gas Infill Project  
Scoping Report***

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***Appendix B***

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Cooperating Agency Invitation Letters

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**APPENDIX B**

**COOPERATING AGENCY INVITATION LETTERS**

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Cooperating Agency Invitations .....B-1  
Example Cooperating Agency Invitation Letter .....B-2

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## **Cooperating Agency Invitations**

Cooperating agency invitation letters were mailed in March and June 2014 to the following local, state, and federal agencies:

### **Local, State, and Federal Agencies**

- Coalition of Local Governments
- U.S. Environmental Protection Agency Region 8
- Office of Governor Mead
- Office of Senator Barrasso
- Office of Senator Enzi
- Lincoln County Board of Commissioners
- Lincoln County Conservation District
- Little Snake River Conservation District
- Sublette County Board of Commissioners
- Sublette County Conservation District
- Sweetwater County Board of Commissioners
- Sweetwater County Conservation District
- Town of Big Piney
- Town of LaBarge
- Town of Marbleton
- U.S. Fish and Wildlife Service

## Example Cooperating Agency Invitation Letter

In Reply Refer To:  
3600(WYD04)

MAR 27 2014

CERTIFIED - 7013 0600 0000 5978 4750 - RETURN RECEIPT REQUESTED

Re: Invitation to Participate as a Cooperating Agency in the Development of an Environmental Impact Statement for the Bird Canyon Natural Gas Development Project

The Bureau of Land Management (BLM) Rock Springs Field Office (RSFO) would like to invite you to become a cooperator during the preparation of an Environmental Impact Statement (EIS) for the Bird Canyon Natural Gas Development project located approximately 6 miles east of La Barge, Wyoming.

Our goal in working with cooperators is to help streamline the approval process for those agencies having jurisdiction or special expertise regarding this project. We see this being accomplished by incorporating agency requirements into the environmental analysis or during public outreach efforts. Other agencies may possess special expertise needed to evaluate the impacts of the proposal. We see this as an opportunity to develop close working relationships and to merge steps where possible to meet the authorizing requirements of our respective agencies.

### Project Details

Koch Exploration Company, LLC and Memorial Resource Development, LLC propose to drill 348 new natural gas wells within 17,612 acres of public lands in the Bird Canyon area, Lincoln and Sublette counties, Wyoming. Wells would be directionally drilled from both expanded existing and new multiple-well pads. Project development would include access roads and pipelines associated with well pad development. Development would occur over the next 10 to 20 years. The life of the project, including final reclamation, is projected to be approximately 55 years.

Under this proposal, average well pad spacing would be four pads per 640 acres. Well pads would initially occupy 3.8 acres. These pads would then be reclaimed back to 1.1 acres after production facilities are installed. Total initial disturbance for this project (including access roads, well pads, and pipelines) is estimated at 392 acres. Following interim reclamation (including reclamation of 64 currently existing pads), total long-term surface disturbance is estimated at 20 acres.

The proposed project is located within the Upper Green River Basin marginal nonattainment zone. This area was designated as marginal nonattainment for ozone by the Environmental Protection Agency (EPA) in July of 2012.

### Factors to Consider

The Council on Environmental Quality (CEQ) regulations implementing NEPA (40 CFR 1500-1508) emphasize the use of cooperating agency status as a means of assuring timely coordination with state, federal, and local agencies in preparation of NEPA analyses and documentation. Agencies with authority to grant permits or a portion of a permit shall be given cooperating agency status (40 CFR 1508.15). Cooperating agency status may also be given to those agencies having special expertise (40 CFR 1501.6, 1508.5). Due to these two factors, the BLM is inviting you to participate as a cooperating agency during preparation of the environmental analysis.

2

We ask that you consider the following criteria before deciding to accept cooperating agency status:

1. Your agency will be asked to provide the necessary technical expertise to help identify and resolve issues (natural, cultural, socioeconomic, etc) significant to the proposal.
2. Your agency will be asked to assist in preparation or review of the analysis or portions thereof while meeting scheduled deadlines.
3. Your agency will be asked to attend internal and public meetings, and public hearings pertaining to the proposal. Any travel or other associated expenses would be at your agency's cost.
4. You agency would need to understand and accept that, as the lead agency, BLM has final decision-making authority regarding the scope of the analysis, level of detail, final decision, etc.
5. Your agency will be asked to respect the pre-decisional process of keeping working draft documents internal (prevent release of working draft documents to the public prior to formal publication).
6. Your agency may be asked to sign a Memorandum of Understanding (MOU) that would detail the cooperative relationship that would be expected from each party in relation to this project.

After considering these criteria, if you would like to be involved as a cooperating agency for the Bird Canyon Natural Gas Development Project, please fill out the enclosed form and return it to the address below at your earliest convenience:

Bureau of Land Management  
High Desert District – Rock Springs Field Office  
Attn: Spencer Allred  
280 Highway 191 North  
Rock Springs, WY 82901

If you have any questions, please contact Spencer Allred, Natural Resource Specialist, at (307) 352-0325. Thank you for your interest in America's public lands.

Sincerely,

/s/Kimberlee D. Foster

Kimberlee D. Foster  
Field Manager

Enclosures:  
Cooperating Agency Return Form  
Project Map

SAllred;jll:3/19/2014:Bird Canyon EIS - Generic Coop Agency Invite Ltr

COOPERATING AGENCY RETURN FORM

This form is provided for your convenience in responding to the Bureau of Land Management's (BLM) invitation for your agency to become a cooperator with BLM during preparation of the environmental analysis for the Bird Canyon Natural Gas Development Project.

Please fill out this form and return it in the supplied self-addressed, stamped envelope. Be assured that we will follow up with you in accordance with your response:

- Under the regulatory mandates, our agency has legal decision making authority or special expertise and would like to become a cooperator with BLM on this project.
- The information that you have provided is sufficient, and we do not desire to become a cooperator at this time. We request to be placed on the mailing list for documents generated during the processing of the Bird Canyon EIS.
- Thank you for your correspondence. Our agency has no further interest in the Bird Canyon Natural Gas Development Project and requests you remove us from your mailing list for this project.

Contact Information:

Agency Representative: \_\_\_\_\_  
(Please print)

Title: \_\_\_\_\_  
(Please print)

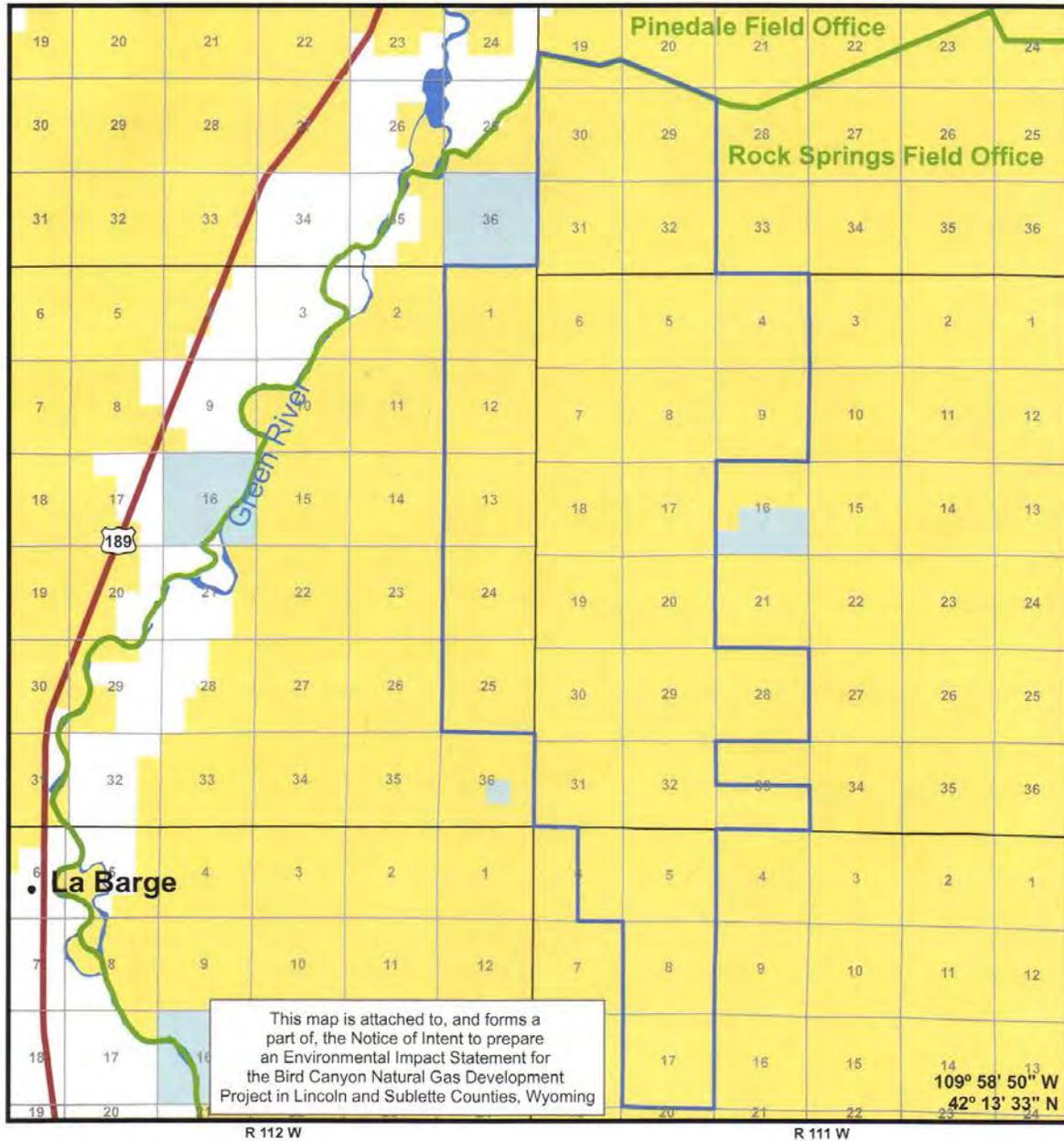
Email: \_\_\_\_\_  
(Please print)

Telephone No. \_\_\_\_\_ Date: \_\_\_\_\_

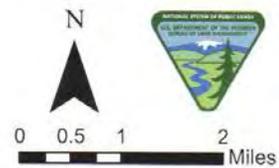
Preferred Mailing Address: \_\_\_\_\_

Signature: \_\_\_\_\_

### Bird Canyon Natural Gas Development Project



- Bird Canyon EIS Project Boundary
- Bureau of Land Management
- Private
- State



No warranty is made by the Bureau of Land Management for use of the data for purposes not intended by BLM

Prepared by Bureau of Land Management, Rock Springs Field Office

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***Bird Canyon  
Natural Gas Infill Project  
Scoping Report***

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***Appendix C***

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Tribal Consultation Invitation Letters

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**APPENDIX C**

**TRIBAL CONSULTATION INVITATION LETTERS**

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Tribal Consultation Invitations.....C-1  
Example Tribal Consultation Invitation Letter .....C-2

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## **Tribal Consultation Invitations**

Tribal consultation invitation letters (see below) were mailed in October 2013 to the following tribal governments:

### **Tribal Governments**

- Eastern Shoshone Tribe of the Wind River Reservation
- Northern Arapaho Tribe
- The Ute Tribe of the Uintah and Ouray Reservation
- Shoshone Bannock Tribes of the Fort Hall Reservation

## Example Tribal Consultation Invitation Letter

In Reply Refer To:  
8100(WYD04)  
040-12-196



CERTIFIED - 7013 0600 0000 5978 9168 - RETURN RECEIPT REQUESTED

Darwin St. Clair, Jr.  
Eastern Shoshone Tribe of the Wind River Reservation  
P.O. Box 538  
Fort Washakie, WY 82514

Re: Consultation for the Memorial Resource Development, LLC. and Koch Exploration Company, LLC., proposed Bird Canyon Natural Gas Development Project in Lincoln and Sublette Counties, Wyoming

Dear Chairman St. Clair:

The Bureau of Land Management, Rock Springs Field Office wishes to initiate consultation with the Northern Arapaho Tribe of the Wind River Reservation regarding the proposed Bird Canyon Natural Gas Development Project of Memorial Resource Development, LLC. and Koch Exploration Company, LLC. The project is located in Lincoln and Sublette Counties, Wyoming, approximately 61 miles northwest of Rock Springs and 5 miles east of LaBarge (see enclosed location maps).

Gas and oil development began in the Bird Canyon Area in 1959 and greatly expanded in the 1970's through 1980's and presently supports 83 producing wells. The new proposal includes a combination of vertical and directional drilling of 348 new wells over a 10 to 20 year time frame. The new wells would be directionally drilled from both existing well pads and new multiple-well pads. Project development would include access roads, pipelines and power lines associated with well pad development. The life of the project, including final reclamation is projected to be approximately 55 years.

Under this proposal, average well pad spacing would be four pads per 640 acres. Well pads would initially occupy 3.8 acres. These pads would then be reclaimed back to 1.1 acres after production facilities are installed. Total initial disturbance for this project (including access roads, well pads, pipelines and powerlines) is estimated at 392 acres. Following interim reclamation (including the reclamation of 95 currently existing well pads), total long-term surface disturbance is estimated at 20 acres.

Previous investigations within the project area have resulted in the recordation of 165 prehistoric sites. Based on the cultural material left behind, most of these sites can be classified as open camps where the activities had an emphasis on food gathering and lithic tool manufacturing. Surface artifacts confirm that similar activities were conducted within the project area for nearly 10,000 years. To date, no formal habitation structures, stone circles, cairns or stone-lined hearths have been recorded.

Each future action such as new well pad construction and the installation of supporting infrastructure such as pipelines and access roads under this project proposal will require a separate analysis under Section 106 of the National Historic Preservation Act. We want to ensure that any important and natural resources and/or places with traditional cultural significance for your Tribe within the project area are considered and addressed in the Section 106 reviews.

We hope that you will let us know if there are any resources or places of traditional cultural or religious significance to members of your tribe within the project area that might be affected by the proposed action. Any information you provide us will be fully considered.

We have sent a copy of this letter to Mr. Wilfred Ferris, the Tribal Historic Preservation Officer, as he has been designated as the official cultural liaison for the Eastern Shoshone Tribe of the Wind River Reservation. If this information is incorrect, please notify us of the correct person to contact.

We appreciate your time and consideration in this regard. If you have any questions concerning this project, please contact Rock Springs Bureau of Land Management Archaeologist, Gene Smith, at (307) 352-0301 or email [g3smith@blm.gov](mailto:g3smith@blm.gov).

Sincerely,

/s/ Joshua F. Hanson

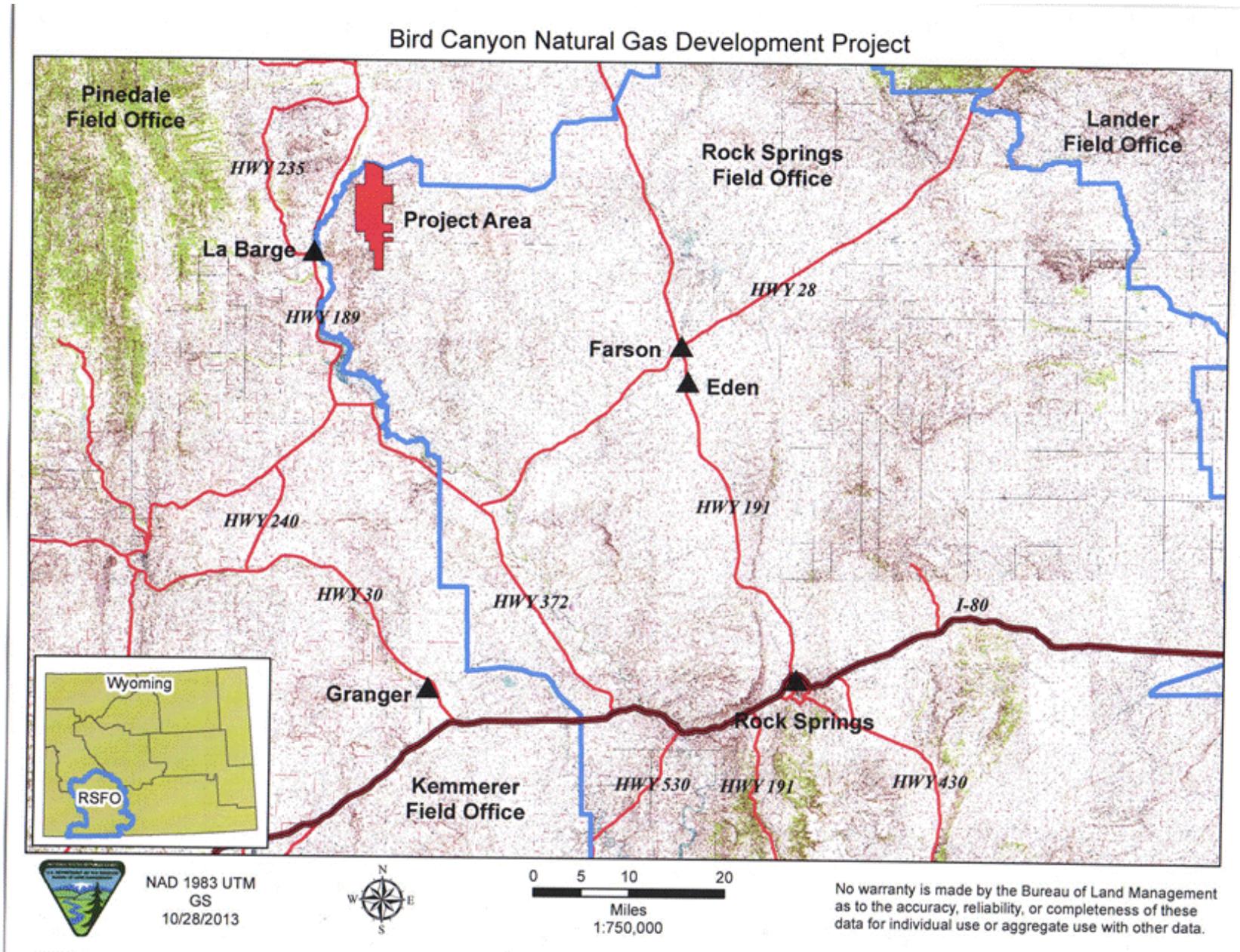
Joshua F. Hanson  
Acting Rock Springs Field Manager

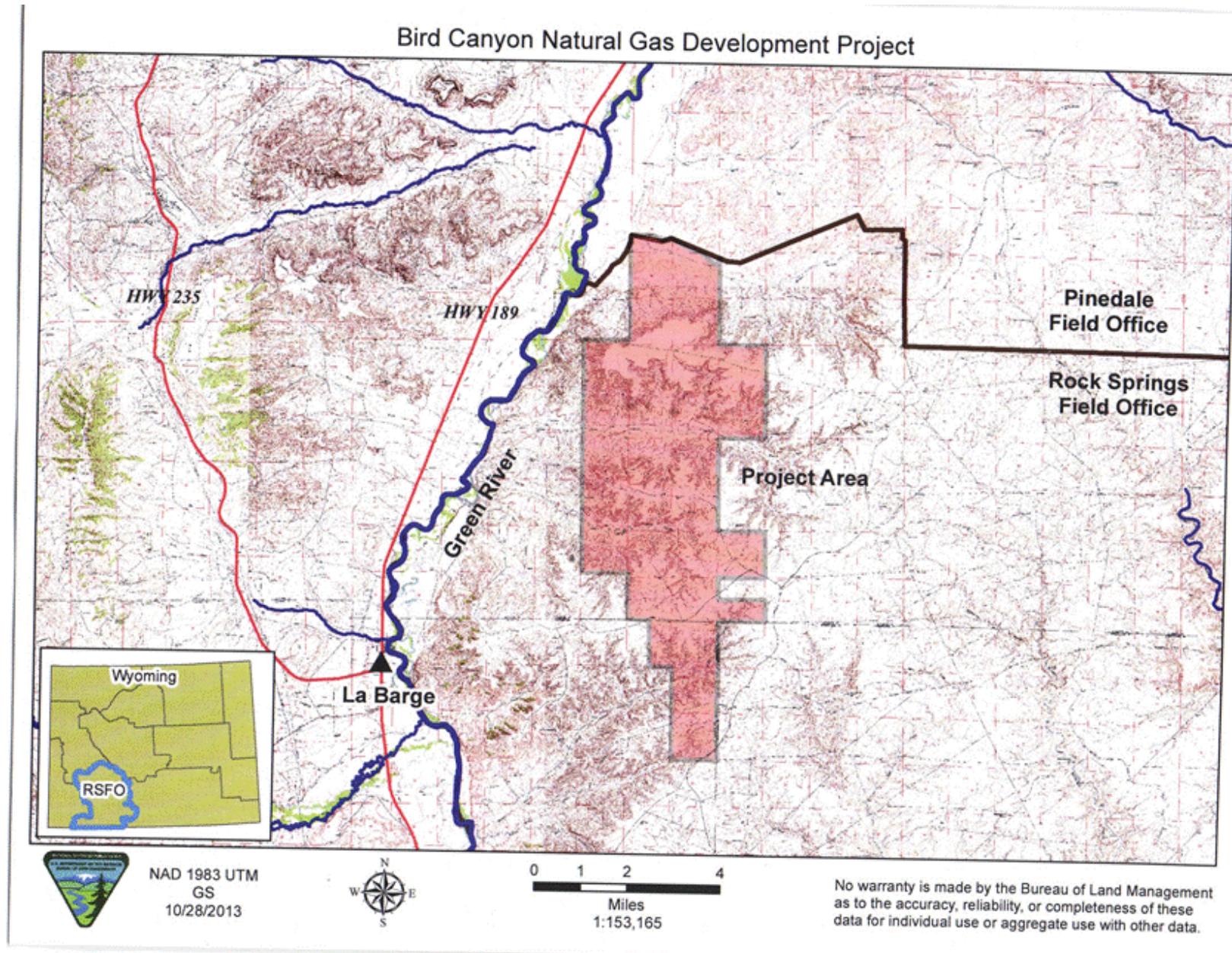
Enclosure

cc: Wilfred Ferris  
Tribal Historic Preservation Office  
Eastern Shoshone Tribe of the  
Wind River Reservation  
PO Box 538  
Fort Washakie, WY 82514  
Cert# 7013 0600 0000 5978 9397

GSmith;jll:10/29/2013:E Shoshone Bird Canyon Infill Consultation Letter

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***Bird Canyon  
Natural Gas Infill Project  
Scoping Report***

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***Appendix D***

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Scoping Meeting Materials

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**APPENDIX D**  
**SCOPING MEETING MATERIALS**

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### Scoping Display Boards

Natural Gas Infill Project

# Bird Canyon

## Environmental Impact Statement

### National Environmental Policy Act

The National Environmental Policy Act (NEPA) requires federal agencies, including the Bureau of Land Management, to prepare an environmental impact statement (EIS) that considers the following factors when a proposed project could result in significant effects:

- Input from public, agency, tribal and other affected parties
- A reasonable range of alternatives
- Environmental consequences
- Social, economic and human health consequences
- Mitigation to reduce adverse impacts and monitoring to evaluate mitigation effectiveness






Natural Gas Infill Project

# Bird Canyon

## Environmental Impact Statement

### What is Scoping?

Scoping provides members of the public, agencies and other affected parties an opportunity to:

- Learn more about the project
- Provide comments on the project
- Identify issues to be analyzed in the EIS

#### Project Timeline

- Notice of Intent Published in Federal Register: **May 9, 2014**
- Public Scoping Meetings: **May 29 & 30, 2014**
- Preparation of Draft EIS: **2014 – 2015**
- Notice of Availability of Draft EIS: **2015**
- 45-Day Public Comment Period: **2015**
- Preparation of Final EIS: **2015 – 2016**
- Notice of Availability of Final EIS: **2016**
- 30-Day Review Period: **2016**
- Record of Decision: **2016**

Please provide comments at this meeting or submit comments by mail prior to the close of the public comment period. Comments will become part of the official public record and will be considered in the development of the EIS.





Natural Gas Infill Project

# Bird Canyon

## Environmental Impact Statement




### Making Effective Comments

- State specific concerns instead of making broad statements
- Focus your comments on specific issues and provide supporting details
- Identify important environmental and community concerns

Effective comments help ensure all issues are identified and addressed in the NEPA analysis. See below for examples of effective comments:

- "We would prefer that this project employs a local workforce"
- "This EIS needs to consider cumulative impacts associated with other oil and gas development in the area, specifically impacts to air quality from this and other projects"



# Bird Canyon Natural Gas Infill Project

## Environmental Impact Statement

BLM

### Project Description

Koch Exploration Company, LLC and Memorial Resource Development, LLC (the companies) propose to drill approximately 348 new natural gas wells on public lands in the existing Bird Canyon Field in Sublette and Lincoln counties, Wyoming.

- Natural gas infill project
- Project area includes approximately 17,612 acres of public lands administered by the Bureau of Land Management (BLM) Rock Springs Field Office
- Approximately 6 miles east of LaBarge, Wyoming
- Constructed over a 10- to 20-year period
- Average life of 40 years per well
- Average of 1.1 acres of disturbance per well pad following interim reclamation



High Desert District—Rock Springs Field Office, Wyoming

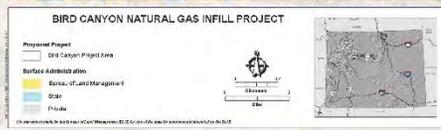
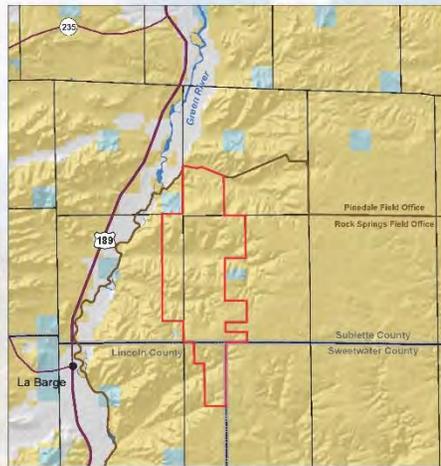


# Bird Canyon Natural Gas Infill Project

## Environmental Impact Statement

BLM

### Project Area Map



# Bird Canyon Natural Gas Infill Project

## Environmental Impact Statement

BLM



### Project Description

The project proposed by the companies includes the following components:

- Directional or vertical drilling from both expanded existing and new multiple-well pads
- Average well pad spacing would be four pads per 640 acres
- Well completion using hydraulic fracturing
- Access roads
- Gathering pipelines
- Solar panel power supply at well locations
- Reclamation would commence at well location after production equipment is installed.

High Desert District—Rock Springs Field Office, Wyoming



# Bird Canyon Natural Gas Infill Project

## Environmental Impact Statement

BLM

### Air Quality

- The project area is within the Upper Green River Basin Ozone Nonattainment Area, which requires the BLM ensure the project conforms to the Wyoming State Implementation Plans
- Project-specific emissions inventory for criteria pollutants and greenhouse gases will be developed
- The EIS will quantify, through modeling, potential impacts to air quality, including ambient concentrations, visibility and atmospheric deposition
- The project will evaluate potential air emissions reduction strategies and mitigation measures



### Water

- Project area located just east of Green River
- All water used for drilling and completion operations would be obtained from the Green River drainage system
- Produced water would be temporarily stored in tanks, then hauled off site for proper disposal at a permitted facility



- A groundwater monitoring plan would be established
- Analysis will include sedimentation modeling

High Desert District—Rock Springs Field Office, Wyoming



# Bird Canyon Natural Gas Infill Project

## Environmental Impact Statement

BLM



### Biological Resources

- Wildlife associated with shrub-steppe habitats, buttes, rock outcrops, large draws and deep canyons
- Adjacent to Green River riparian corridor
- Several sensitive plant, bird and mammal species including Endangered Species Act listed and candidate species
- In proximity to several Greater Sage-Grouse leks
- Big game winter range and migration corridors have been identified in the project area
- Within the Little Colorado Focus Area of the Wyoming Range Mule Deer Habitat Management Plan: Big Piney—LaBarge Area

High Desert District—Rock Springs Field Office, Wyoming



# Bird Canyon Natural Gas Infill Project

## Environmental Impact Statement

BLM

### Surface Disturbance

- Existing disturbance includes approximately 90 wells and associated infrastructure, 18 of which have been plugged or shut-in
- Approximately 392 acres of new initial surface disturbance (2 percent of project area)
- Approximately 32 acres of long-term surface disturbance after reclamation, including reclamation of existing pads (less than 1 percent of project area)



### Cultural Resources

- A non-contributing segment of the Sublette Cutoff of the Oregon-California-Mormon Pioneer-Pony Express National Historic Trail bisects the southern portion of the project area
- A Class I cultural resource overview is being prepared
- Class III cultural resource inventory will be conducted for each new well pad or ground disturbance

High Desert District—Rock Springs Field Office, Wyoming



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Fact Sheet

# Bird Canyon Natural Gas Infill Project

## Environmental Impact Statement

BLM

### Project Description

Koch Exploration Company, LLC and Memorial Resource Development, LLC propose to drill 348 new natural gas wells within the existing Bird Canyon Field, in Lincoln and Sublette counties, Wyoming. The project area encompasses 17,612 acres of public lands administered by the Bureau of Land Management (BLM) Rock Springs Field Office. Drilling activities would occur over the next 10 to 20 years. The life of the project, including final reclamation, is projected to be approximately 55 years. Total estimated initial disturbance is 392 acres. Following interim reclamation, including reclamation of existing well pads, total estimated long-term surface disturbance is 32 acres.

The project proposed by the companies includes the following components:

- Directional or vertical drilling from both expanded existing and new multiple-well pads
- Well completion using hydraulic fracturing
- Access roads
- Gathering pipelines
- Solar panel power supply at well locations



### The National Environmental Policy Act and Scoping

The National Environmental Policy Act (NEPA) requires federal agencies, including the BLM, to prepare an environmental impact statement (EIS) that considers the following factors when a proposed project could result in significant effects:

- Input from public, agency, tribal and other affected parties
- A reasonable range of alternatives
- Environmental consequences
- Social, economic and human health consequences
- Mitigation to reduce adverse impacts and monitoring to evaluate mitigation effectiveness

Scoping provides members of the public, agencies and other affected parties an opportunity to learn more about the project, provide comments and identify issues to be analyzed in the EIS. Comments will become part of the official public record and will be considered in the development of the EIS.



**Mail or email comments to:**

Bird Canyon Natural Gas Infill Project EIS  
 BLM Rock Springs Field Office  
 Spencer Allred, Project Manager  
 280 Highway 191 North  
 Rock Springs, WY 82901  
**Email:** [blm\\_wy\\_bird\\_canyon\\_eis@blm.gov](mailto:blm_wy_bird_canyon_eis@blm.gov)



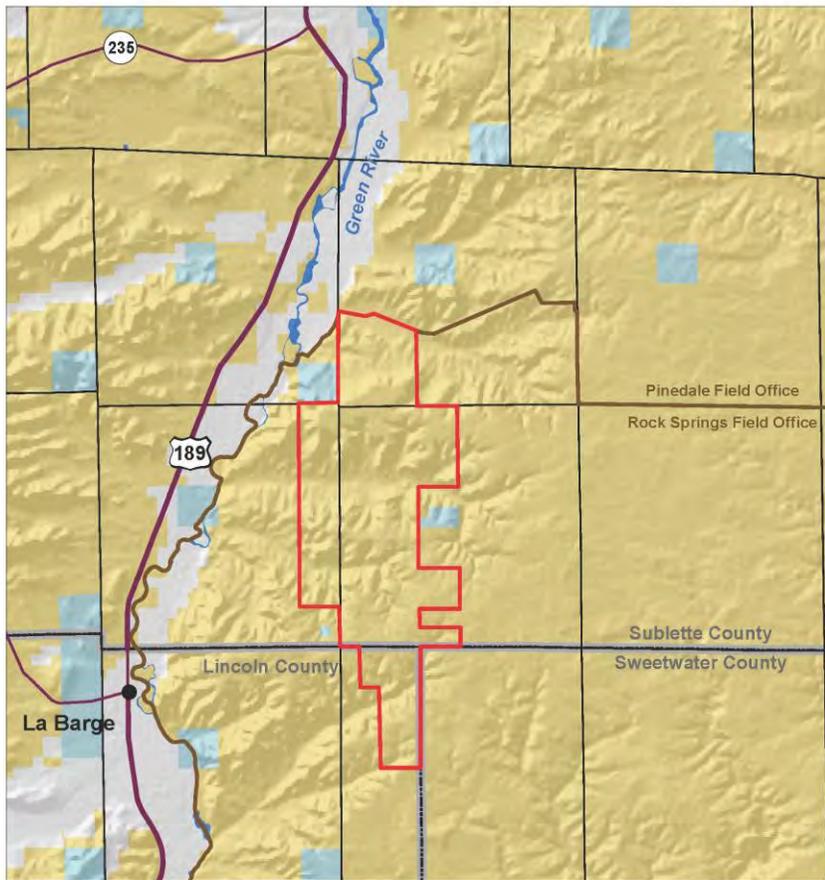
High Desert District – Rock Springs Field Office, Wyoming

# Bird Canyon Natural Gas Infill Project

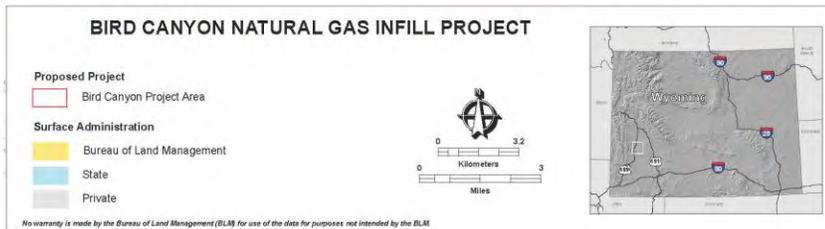
## Environmental Impact Statement

BLM

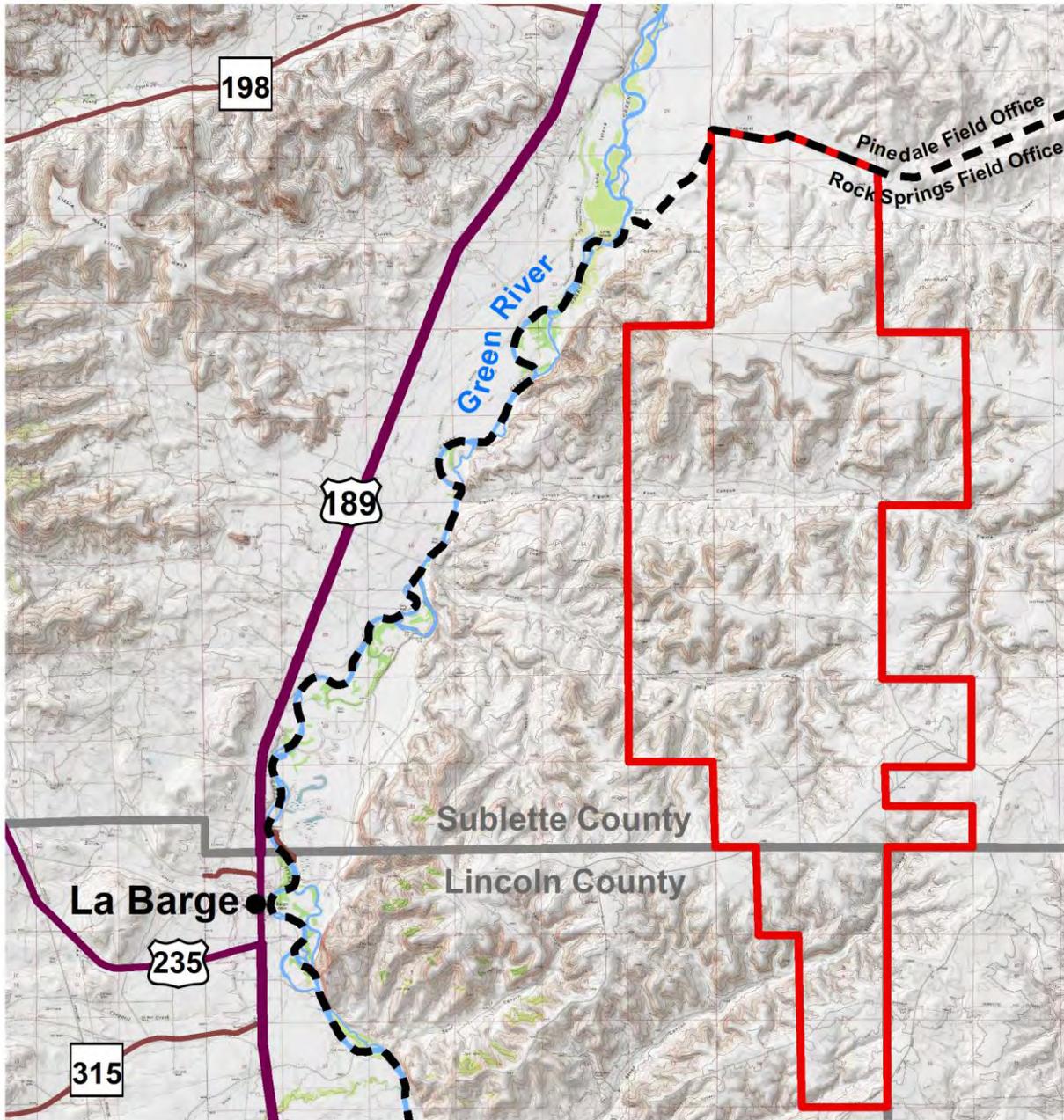
### Project Area Map



High Desert District – Rock Springs Field Office, Wyoming



### Map – Proposed Project Area



#### BIRD CANYON NATURAL GAS INFILL PROJECT PROPOSED PROJECT AREA

Proposed Project

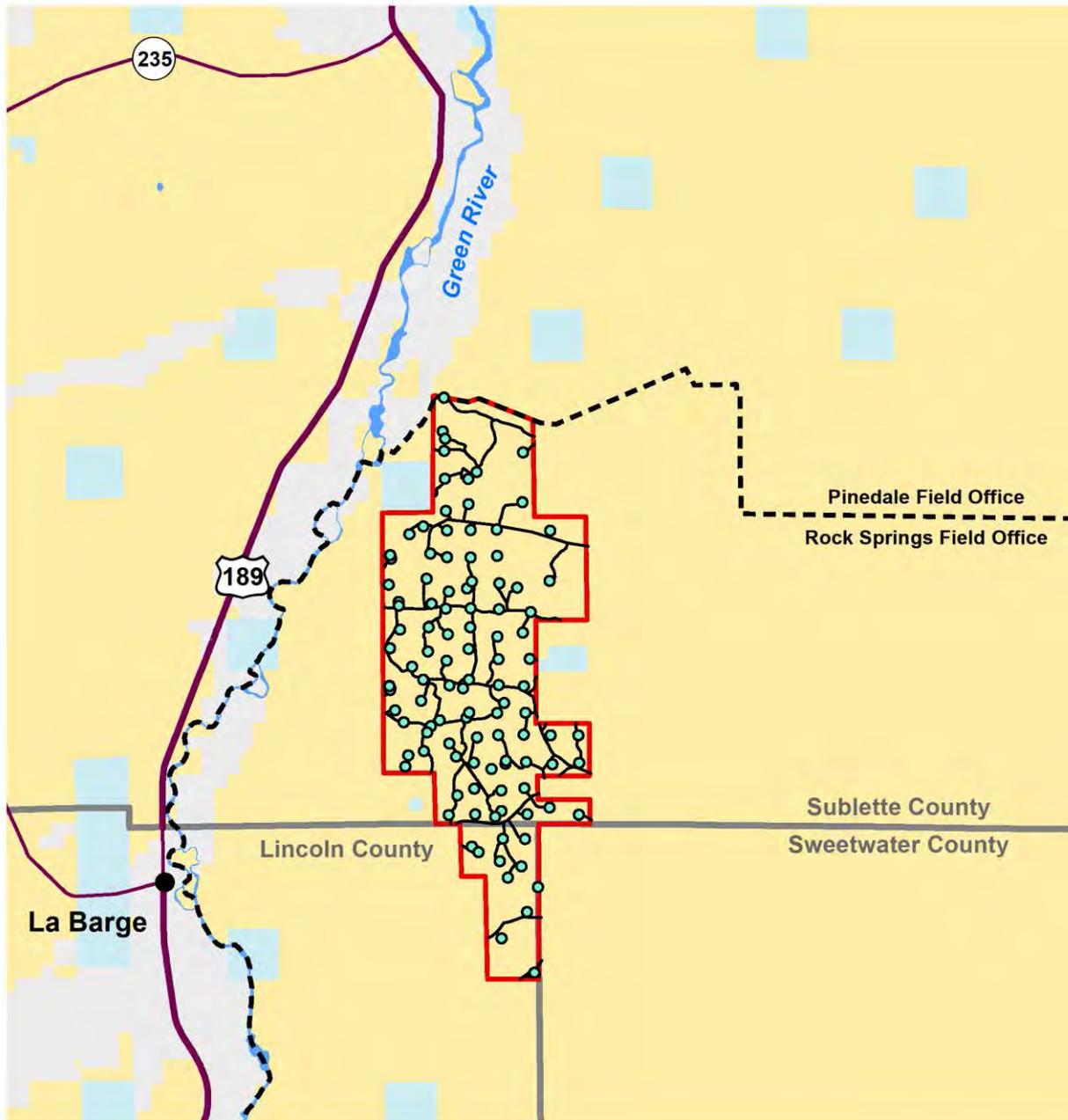
 Bird Canyon Project Area



Projection/Coordinate System: UTM Zone 12/NAD83  
No warranty is made by the Bureau of Land Management for use of the data for purposes not intended by the BLM.



### Map – Existing Oil and Gas Development



#### BIRD CANYON NATURAL GAS INFILL PROJECT EXISTING OIL AND GAS DEVELOPMENT

**Proposed Project**

- ▭ Bird Canyon Project Area

**Surface Ownership**

- ▭ Bureau of Land Management
- ▭ State
- ▭ Private

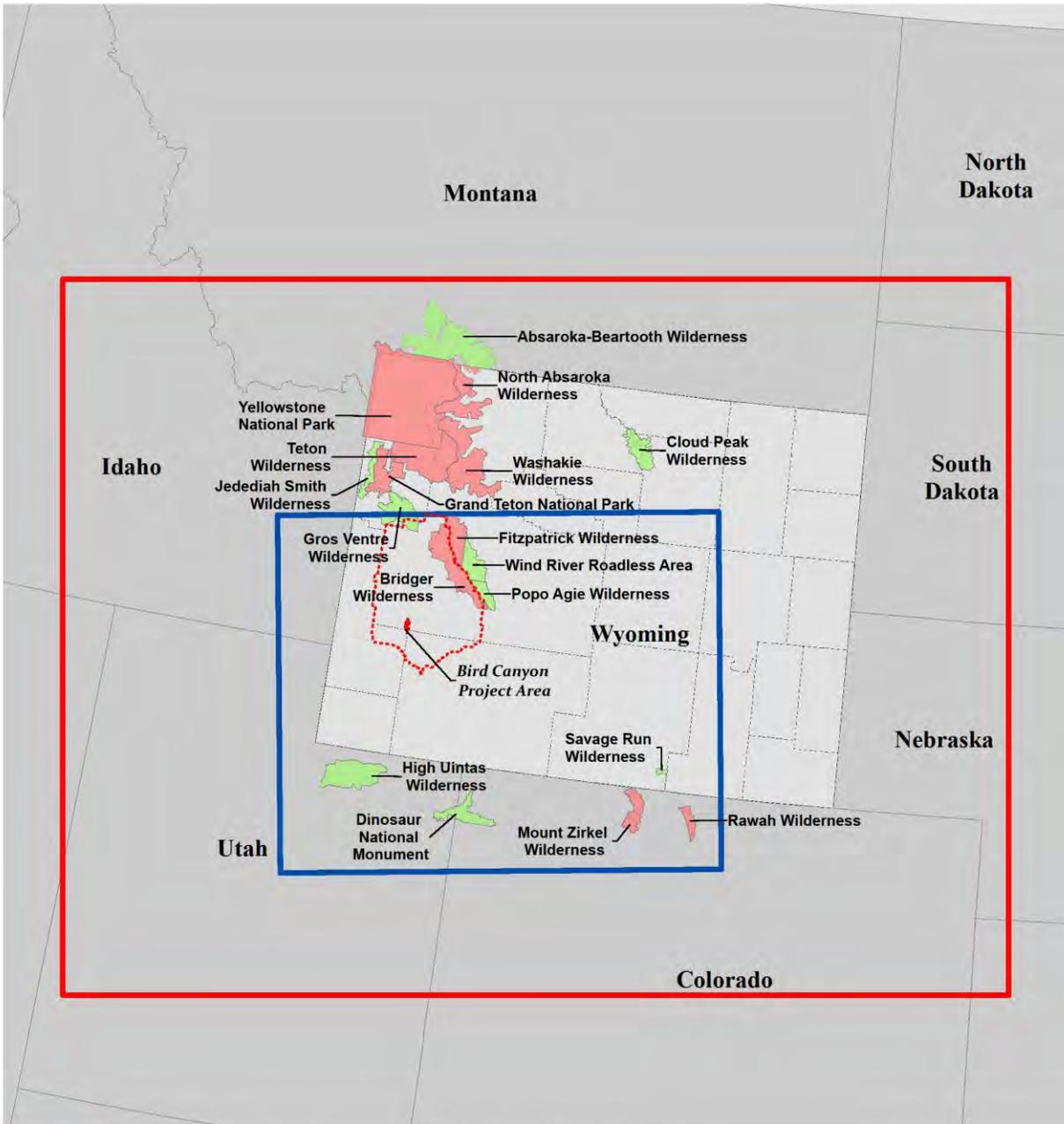
**Existing Development**

- Roads
- Well Locations



Projection/Coordinate System: UTM Zone 12/NAD83  
No warranty is made by the Bureau of Land Management for use of the data for purposes not intended by the BLM.

### Map – Air Quality



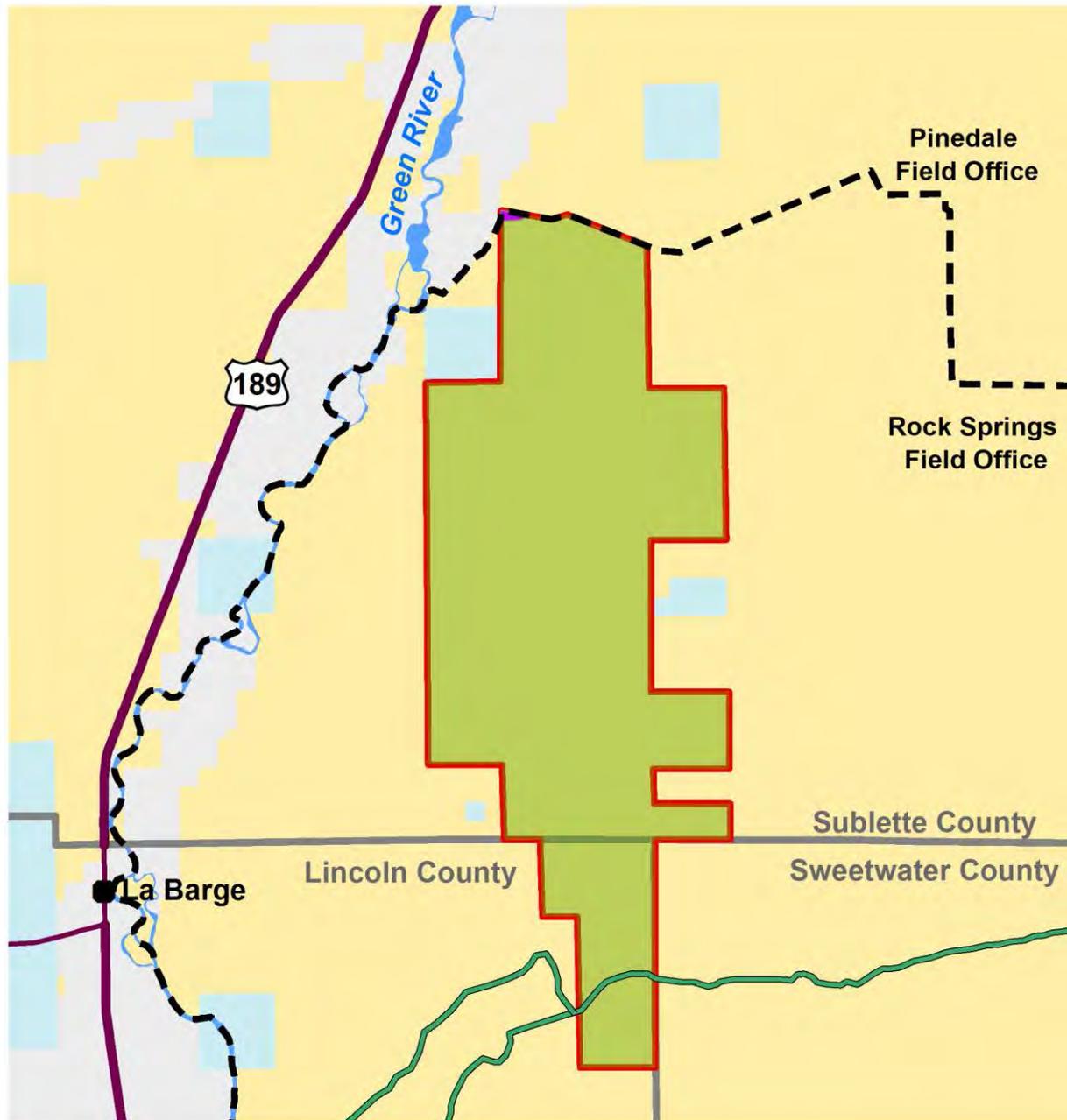
#### BIRD CANYON NATURAL GAS INFILL PROJECT AIR QUALITY

- |                          |                                  |
|--------------------------|----------------------------------|
| <b>Proposed Project</b>  | <b>Ozone Non-Attainment Area</b> |
| Bird Canyon Project Area | Upper Green River Basin          |
| <b>Modeling Grids</b>    | <b>Sensitive Area</b>            |
| 12 km Grid               | Class I                          |
| 4 km Grid                | Class II                         |



Projection/Coordinate System: UTM Zone 12/NAD83  
No warranty is made by the Bureau of Land Management for use of the data for purposes not intended by the BLM.

### Map – Cultural and Paleontology



#### BIRD CANYON NATURAL GAS INFILL PROJECT CULTURAL AND PALEONTOLOGY

**Proposed Project**

- Bird Canyon Project Area

**Surface Ownership**

- Bureau of Land Management
- State
- Private

**Historic Trails**

- Sublette Trail Cut Off

**Potential Fossil Yield Classification**

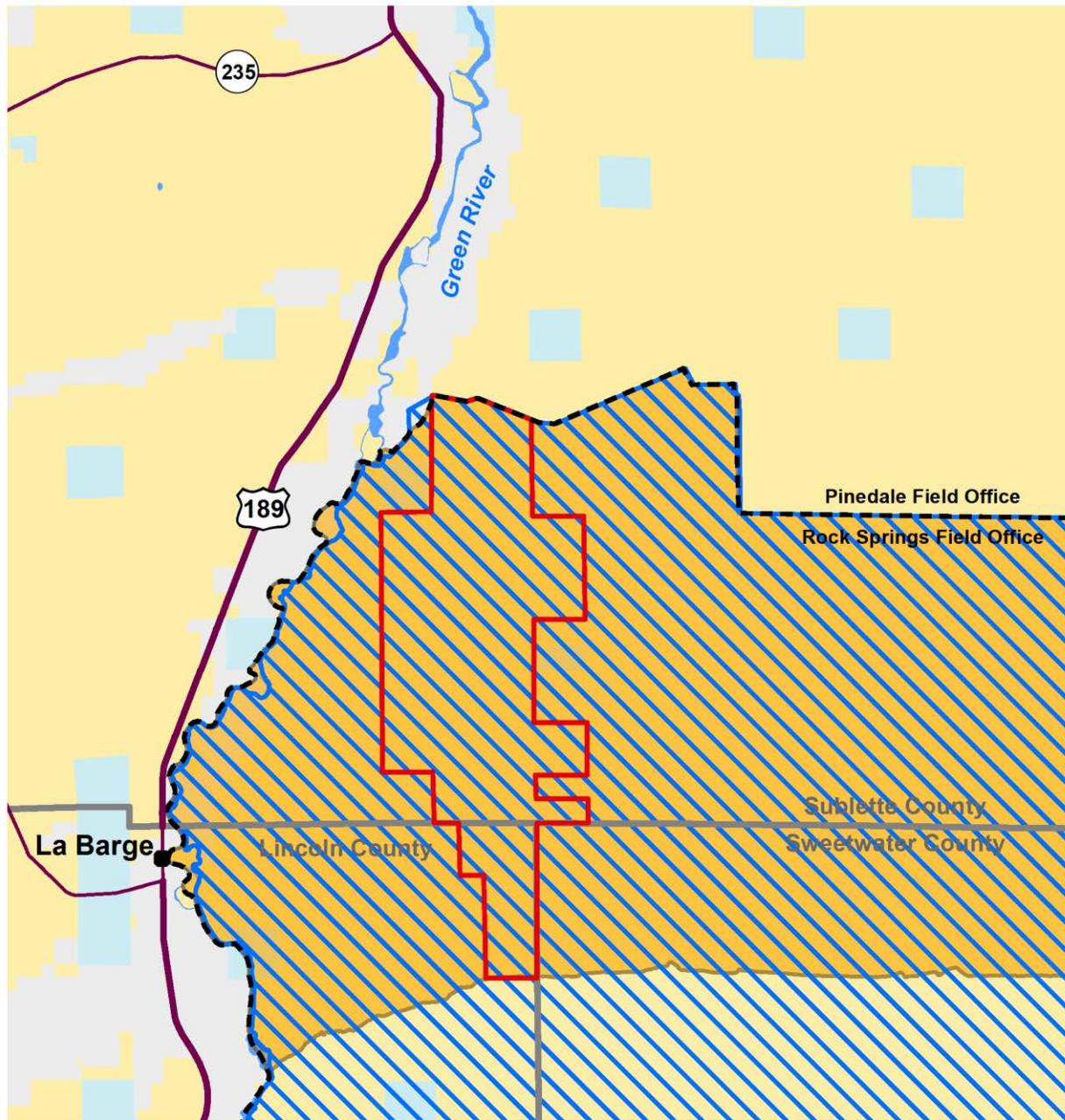
- Class 5 (Very High)
- Class 2 (Low)

Projection/Coordinate System: UTM Zone 12/NAD83

No warranty is made by the Bureau of Land Management for use of the data for purposes not intended by the BLM.



### Map – Livestock Grazing and Wild Horses



#### BIRD CANYON NATURAL GAS INFILL PROJECT LIVESTOCK GRAZING AND WILD HORSES

**Proposed Project**

Bird Canyon Project Area

**Surface Ownership**

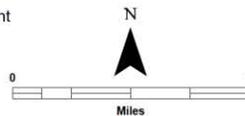
Bureau of Land Management  
 State  
 Private

**Wild Horses**

Little Colorado Herd Management Area

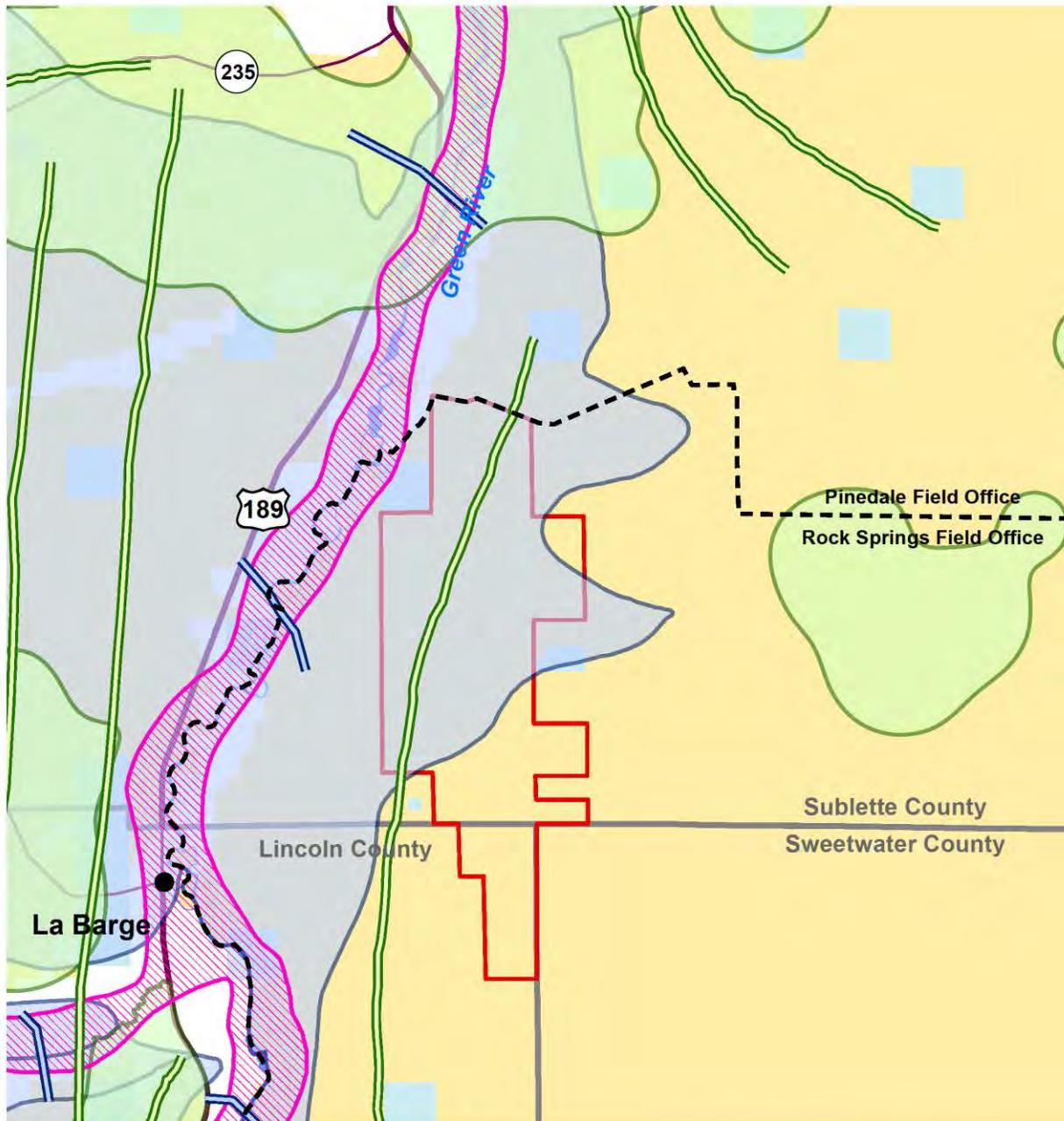
**Livestock Grazing**

Figure Four Grazing Allotment



Projection/Coordinate System: UTM Zone 12/NAD83  
 No warranty is made by the Bureau of Land Management for use of the data for purposes not intended by the BLM.

### Map – Wildlife – Big Game



#### BIRD CANYON NATURAL GAS INFILL PROJECT

#### WILDLIFE - BIG GAME

**Proposed Project**

- Bird Canyon Project Area

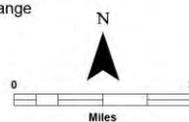
**Surface Ownership**

- Bureau of Land Management
- State
- Private

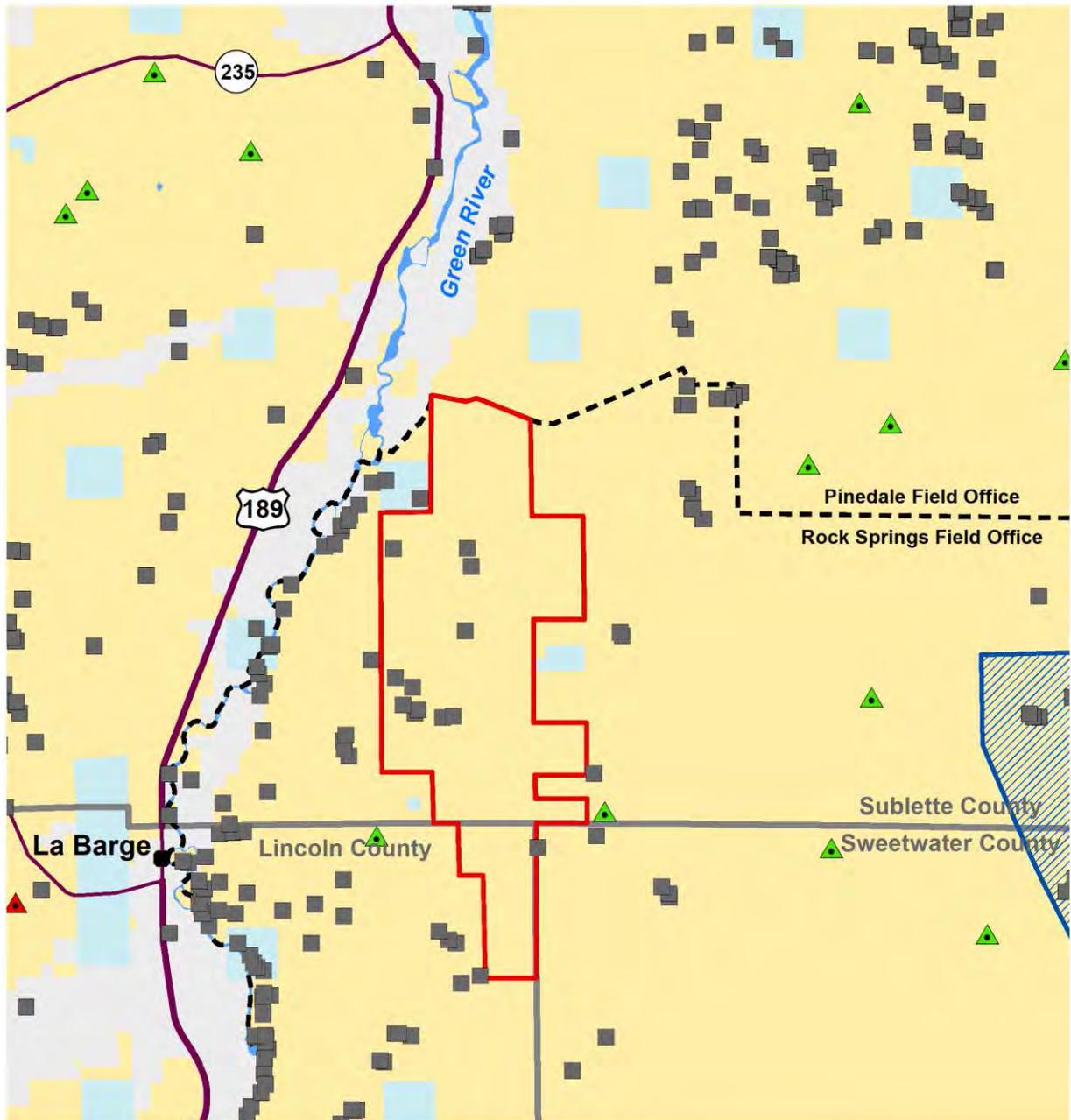
**Big Game Habitat**

- Pronghorn Crucial, Winter and Yearlong Range
- Mule Deer Crucial and Winter Range
- Moose Crucial, Winter and Yearlong Range
- Pronghorn - Migration Route
- Mule Deer - Migration Route

Projection/Coordinate System: UTM Zone 12/NAD83  
 No warranty is made by the Bureau of Land Management for use of the data for purposes not intended by the BLM.



### Map – Wildlife – Greater Sage-Grouse and Raptors



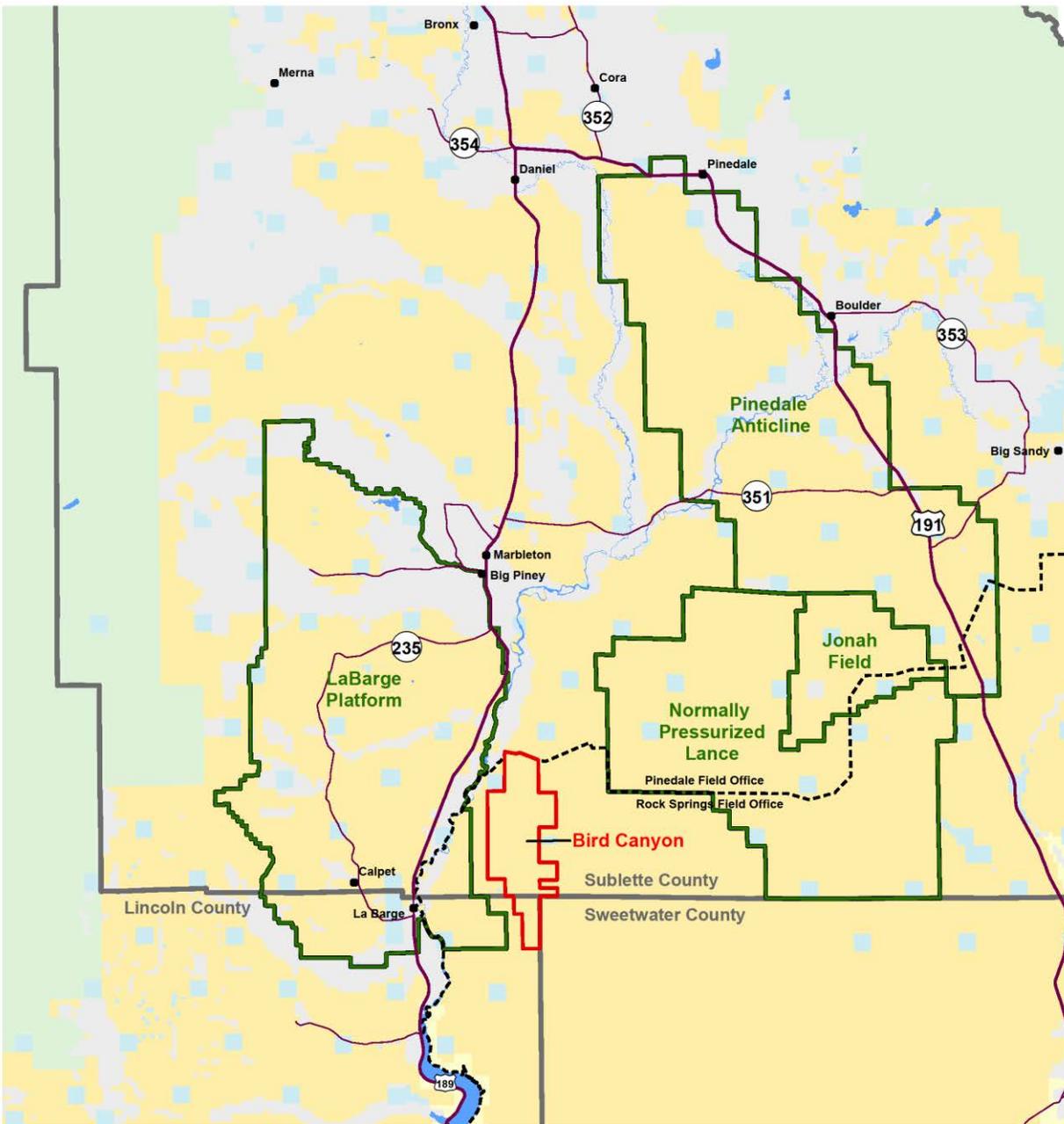
#### BIRD CANYON NATURAL GAS INFILL PROJECT WILDLIFE - GREATER SAGE-GROUSE AND RAPTORS

- |                           |                               |
|---------------------------|-------------------------------|
| <b>Proposed Project</b>   | <b>Raptors</b>                |
| Bird Canyon Project Area  | Raptor Nests                  |
| <b>Surface Ownership</b>  | <b>Greater Sage-Grouse</b>    |
| Bureau of Land Management | Occupied Leks                 |
| State                     | Unoccupied Leks               |
| Private                   | Greater Sage-Grouse Core Area |

Projection/Coordinate System: UTM Zone 12/NAD83  
No warranty is made by the Bureau of Land Management for use of the data for purposes not intended by the BLM.



### Map – Oil and Gas Projects in Proximity to Bird Canyon Project Area



#### BIRD CANYON NATURAL GAS INFILL PROJECT OIL AND GAS PROJECTS IN PROXIMITY TO BIRD CANYON PROJECT AREA

- Proposed Project**
- ▭ Bird Canyon Project Area
- Oil and Gas Project**
- ▭ Oil and Gas Project
- Surface Ownership**
- ▭ Bureau of Land Management
- ▭ State
- ▭ Private
- ▭ U.S. Forest Service



Projection/Coordinate System: UTM Zone 12/NAD83  
No warranty is made by the Bureau of Land Management for use of the data for purposes not intended by the BLM.

### Scoping Meeting Registration Card



MEETING LOCATION

MEETING DATE

FIRST NAME

MI

LAST NAME

ORGANIZATION

PHONE

EMAIL ADDRESS

MAILING ADDRESS

CITY

STATE

ZIP CODE

Yes, I would like to receive information on the Bird Canyon Natural Gas Infill Project Environmental Impact Statement via:  Email  Standard Mail

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***Bird Canyon  
Natural Gas Infill Project  
Scoping Report***

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***Appendix E***

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Scoping Comments

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APPENDIX E
SCOPING COMMENTS

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### Commenters Listed by Document Number

Table E-1 includes all comment documents received by the Bureau of Land Management (BLM) during the scoping period and indicates the assigned document number.

**Table E-1. Commenters Listed by Document Number**

Document Number	Last Name	First Name	Agency or Organization Name
1001	Canon	Tim	Bjork, Lindley, Little PC
1002	Garner	Scott	Wyoming Game and Fish Department
1003	Mahr	Aaron	National Park Service
1004	Johnson	Wally	Sweetwater County Board of County Commissioners
1005	Fearneyhough	Jason	Wyoming Department of Agriculture
1006	Pendry	Bruce	Wyoming Outdoor Council
1007	Ratner	Jonathan	Western Watersheds Project
1008	Brooks	Connie	Coalition of Local Governments
1009	Hinkle	Vanessa	U.S. Environmental Protection Agency
1010	Mullins	Tom	Synergy Operating
1011	Molvar	Erik	WildEarth Guardians

## Scoping Comments by Comment Category

Table E-2 includes the comment document number and each comment made during scoping, reproduced as they were received by the BLM and organized by comment category. All comment excerpts in this appendix were copied “as is” from scanned/electronic comment documents using electronic text recognition software. Errors in character recognition may have resulted in minor inaccuracies in the rendered text displayed in Table E-2. To identify the name of the person and/or organization who submitted a comment, locate the corresponding document number in Table E-1.

**Table E-2. Scoping Comments by Comment Category**

Comment Document Number	Comment
<b>Air Quality</b>	
BC-1006	THE BIRD CANYON PROJECT IS IN THE OZONE NONATTAINMENT AREA SO COMPLIANCE WITH EPA REGULATIONS MUST BE ASSURED. As noted in the Federal Register notice for this project, the proposed project is located in an area that has been designated by the Environmental Protection Agency (EPA) as being in nonattainment with the National Ambient Air Quality Standard (NAAQS) for ozone. 79 Fed. Reg. 26773 (May 9, 2014). Given this legal deficiency, the BLM must ensure that it complies with all applicable legal and regulatory requirements that apply in this nonattainment area. In particular, the BLM must ensure that it complies with the EPA "general conformity" regulation that applies in nonattainment areas. 40 C.F.R. § 93.150-93.165. Under these regulations the BLM must ensure that emissions from any project it approves "would not," • Cause or contribute to any new violation of any standard in any area, • Interfere with provisions in the applicable [state implementation plan--SIP] for maintenance of any standard, • Increase the frequency or severity of any existing violation of any standard in any area, or • Delay timely attainment of any standard or any required interim emission reductions or other milestones in any area including ... emission levels specified in the applicable SIP for several purposes.
BC-1006	See, e. g., id. § 93.153(g)(1)(i)-(iv). Since it is highly unlikely this 348 well project will be below the emissions levels specified in the EPA regulations (100 tons per year of nitrogen oxides or volatile organic compounds) where regulatory action is not required, the BLM will in all likelihood have to engage in a "conformity evaluation" to "demonstrate that the Federal action conforms to the requirements of this subpart." Id. § 93.152. This is a very detailed and thorough process, as detailed in the EPA regulations. The BLM must ensure full compliance with these regulations for the Bird Canyon Project. We would note that two other BLM natural gas projects in this area are also undergoing conformity evaluation, the Normally Pressured Lance Project and the LaBarge Platform Project, so BLM will likely have to combine these analyses or at a minimum ensure they are consistent with one another.
BC-1008	Air quality in this region remains a controversial environmental issue. Due to ozone exceedances in 2006 and 2007, the project area is classified as "marginal nonattainment for ozone." While it is difficult to distinguish between pollution generated in the basin and the pollution that migrates from other western states, increased vehicular traffic, additional residents, well site machinery, and existing central facilities, all contribute to additional air pollution that is associated with energy development. The Operators must undertake remedies to maintain the local economies while protecting the historically high quality of air in the region.
BC-1008	The air quality mitigation discussion should also distinguish between particulates and ozone precursors of NOx and VOCs. The EIS must quantify how equipment will reduce NOx and VOC emissions and not contribute to potential exceedances for ozone or other air pollutants.
BC-1009	We recommend that the EIS consider and disclose the potential environmental effects of the proposed oil and gas development and determine whether there is a need to impose project-specific mitigation measures through conditions of approval or other mechanisms to minimize the potential impact of the project.

**Table E-2. Scoping Comments by Comment Category**

Comment Document Number	Comment
BC-1009	<p>The EPA, U.S. Department of Agriculture and U.S. Department of Interior entered into a "Memorandum of Understanding (MOU) Regarding Air Quality Analyses and Mitigation for Federal Oil and Gas Decisions through the National Environmental Policy Act Process" on June 11, 2011. We believe using this helpful tool will ensure effective and efficient NEPA air quality evaluations. We are eager to continue to work with the BLM using this tool, and we commend the BLM Wyoming office for beginning a collaborative process early with the Interagency Review Team to develop a protocol for the air analysis. It will be appropriate to utilize the MOU's stakeholder process to share reasonably foreseeable development (RFD) and emissions inventory information and to determine any steps for the air quality analysis, such as quantitative air quality modeling. We look forward to continuing to participate in the stakeholder process.</p>
BC-1009	<p>There is a need to evaluate how activities that may occur under this EIS could affect air quality and air quality related values (AQRVs) and what measures may be needed to manage significant impacts. This is particularly important given regional concerns with high ozone levels, as well as the fact that the project area is near several CAA Class I Areas., e.g., Bridger Wilderness Area, Fitzpatrick Wilderness Area, Mount Zirkel Wilderness Area, Rawah Wilderness Area, Yellowstone National Park, Grand Teton National Park, Teton Wilderness Area, Washakie Wilderness Area, North Absaroka Wilderness Area. The CAA provides such areas with special protection for AQRVs, including visibility. The EPA recommends that the EIS disclose the current air quality conditions in the planning area, as well as potential air quality impacts associated with activities contemplated in the planning area. More specifically, the EPA recommends that the Draft EIS include an evaluation of the direct, indirect, and cumulative impacts from potential activities on the following: • Each of the criteria pollutants and their appropriate National Ambient Air Quality Standards, i.e., ozone, particulate matter, carbon monoxide, nitrogen oxides, sulfur dioxide and lead; • AQRVs in potentially impacted Class I areas and sensitive Class II areas; • Prevention of Significant Deterioration increment at potentially impacted Class I and sensitive Class II Areas; and • Projected ambient concentrations of hazardous air pollutants including Acetaldehyde, Benzene, Ethyl benzene, Ethylene glycol, Formaldehyde, Methanol, n-Hexane, Toluene, Xylene (mixture), and any other compounds that the BLM identifies as potential hazardous air pollutants in the planning area.</p>
BC-1009	<p>The EPA recommends that the BLM identify mitigation measures (including control measures and design features) it would apply to the project in the event that potential adverse impacts to air quality or AQRVs on affected lands are predicted. These could include emission standards or limitations, best management practices (BMPs), dust suppression measures for unpaved roads and construction areas, control technologies, and limitations on the pace of development. The EPA also recommends that the BLM identify the regulatory mechanisms it will use to ensure their implementation (e.g., conditions of approval).</p>
BC-1011	<p>We are concerned that the Project Area is within an EPA nonattainment area for air quality, and that permitting additional pollution sources will exacerbate air quality problems and make it more difficult to come into attainment. This project should not be allowed to proceed if there is a net increase in airborne pollutants for which this area is in nonattainment</p>
BC-1011	<p>We are concerned that emissions of methane and other chemicals during well fracking and completion will exacerbate climate change problems. With this in mind, "green completions" should be required, preventing the venting or flaring of methane or other harmful by products.</p>
BC-1011	<p>We are concerned about the massive amount of particulate pollution resulting from vehicle traffic, and especially heavy truck traffic, on constructed gravel roads built to access the project. Dust pollution is a direct health hazard to wildlife and humans, and also can have a significant negative effect on plant growth and productivity, with consequent impacts to herbivorous wildlife (including sage grouse). Measures to eliminate the possibility of dust pollution should be required for this project.</p>
BC-1011	<p>We are concerned that volatile organic compounds (VOCs) may be emitted from condensate tanks and other sources permitted as part of this project. VOCs are ozone precursors and contribute to air quality nonattainment in the project area. This project should include elimination of new sources of VOC emission as well as pollution controls to be retrofitted on previously existing facilities within the field as part of the project.</p>

Table E-2. Scoping Comments by Comment Category

Comment Document Number	Comment
BC-1011	We are concerned that compressors, drilling rigs, and other well field equipment permitted as part of the project, as well as well field vehicle traffic that increases in response to the project's approval, will contribute air pollution in the form of nitrogen and sulfur oxides, carbon dioxide, and ozone precursors to the air, further degrading air quality. The project must include emissions control equipment on new facilities as well as retrofitting emission control on existing facilities in the project area to achieve a net reduction in each identified air pollutant.
<b>Climate Change</b>	
BC-1009	Pursuant to draft Council on Environmental Quality (CEQ) guidance and Executive Order 13514, the EPA recommends that the BLM include an analysis and disclosure of greenhouse gas (GHG) emissions and climate change associated with the RFD for the planning area, potential climate change impacts from the emissions, reasonable alternatives and/or practicable mitigation to reduce project-related GHG emissions, and a discussion of any appropriate climate change adaptation issues. For the EIS analysis, we suggest the following approach: • Estimate the anticipated GHG emissions associated with the proposed project. We recommend that GHG emissions be estimated in CO2-equivalent terms and translated into equivalencies that are more easily understood by the public (e.g., annual GHG emissions from x number of motor vehicles, see <a href="https://www.epa.gov/cleanerenergy/energy-resources/calculator.html">https://www.epa.gov/cleanerenergy/energy-resources/calculator.html</a> ). • Assess and identify measures to reduce GHG emissions associated with the proposed project, including alternatives and/or potential requirements to mitigate emissions. • Describe any existing regional, tribal or state climate change plans or goals that cover the project area. • Include a summary discussion of ongoing and projected regional climate change relevant to the project area in the "affected environment" section of the EIS, based on U.S. Global Change Research Program assessments. This would enable the EIS to identify potential impacts that maybe exacerbated by climate change (e.g., reclamation could become more difficult with climate change, or the impacts of water consumption could increase). It would also enable the BLM to determine whether it may be appropriate to consider reasonable alternatives to adapt to anticipated climate change.
BC-1011	We are concerned that this project will contribute to the problem of climate change, through leaks throughout the life cycle of the fossil fuels recovered and through venting or flaring of waste products. The climate impacts of combustion required for the implementation of the project (drilling rigs, well field equipment such as compressors, vehicle traffic). The cumulative impacts analysis for such a project, taking into account all the other fossil fuel projects (as well as uses of end products for combustion) are cumulatively significant, and the cumulative effects analysis will necessarily be complex and difficult. We are concerns also about the likelihood that fracking in this field will create new fissures through which methane will be vented to the surface, further exacerbating the climate impacts of carbon emissions. See attached report.
<b>Cultural Resources</b>	
BC-1008	The EIS must also ensure that "its actions and authorizations are considered in terms of their effects on cultural resources located on non-Federal land." BLM Manual 8100.08. This analysis must recognize the limits of BLM authority with respect to non-federal land interests and not interfere with private property interests. While the mitigation of adverse effects on cultural resources may be required as a condition of a lease, permit, or license issued by BLM, the regulatory authority is limited to federal lands. Id.
BC-1003	Thank you for this opportunity to participate in scoping for the Bird Canyon Natural Gas Infill Project. The south end of the project area has potential to affect the Sublette Cutoff of the California National Historic Trail. Although that section of trail has been identified by BLM as non-contributing, National Trails Intermountain Region (NTIR), the NPS office responsible for administering the trail, asks that impacts to it be described in the EIS.
<b>Invasive Species and Pests</b>	
BC-1002	The following is a list of impacts that should be analyzed in the EIS: Introduction of aquatic nuisance species (AIS).

**Table E-2. Scoping Comments by Comment Category**

Comment Document Number	Comment
BC-1002	The following is a list of impacts that should be analyzed in the EIS: Introduction of terrestrial nuisance species.
BC-1002	We have included the following recommendations as guidelines that will assist with developing the proposed gas field. These are only recommendations and other methods may be available to minimize impacts to the aquatic resources and as the project develops, more details regarding development of the gas field, other recommendations may follow. These recommendations cover a broad area of potential activities and impacts, some of which may not occur in the final development of the project. Preventing the spread of aquatic invasive species (AIS) is a priority for the State of Wyoming, and in many cases, the intentional or unintentional spread of organisms from one body of water to another would be considered a violation of State statute and Wyoming Game and Fish Commission Regulation. To prevent the spread of AIS, the following is required: 1. If equipment has been used in a high risk infested water [a water known to contain Dreissenid mussels (zebra/quagga mussels)], the equipment must be inspected by an authorized aquatic invasive species inspector recognized by the state of Wyoming prior to its use in any Wyoming water. 2. Any equipment entering the state by land from March through November (regardless of where it was last used), must be inspected by an authorized aquatic invasive species inspector prior to its use in any Wyoming water. 3. If aquatic invasive species are found, the equipment will need to be decontaminated by an authorized aquatic invasive species inspector. 4. Any time equipment or surface water is moved from one 4th level (8-digit Hydrological Unit Code) watershed to another within Wyoming, the following guidelines are recommended: DRAIN: Drain all water from watercraft, gear, equipment, and tanks. Leave wet compartments open to dry. CLEAN: Clean all plants, mud, and debris from vehicle, tanks, watercraft, and equipment. DRY: Dry everything thoroughly. In Wyoming, we recommend drying for 5 days in summer (June- August); 18 days in Spring (March- May) and Fall (September- November); or 3 days in Winter (December- February) when temperatures are at or below freezing.*A list of high risk infested waters and locations in Wyoming to obtain an AIS inspection can be found at: wgf.d.wyo.gov.
BC-1008	CLG recommends the adoption of a project specific noxious weed rehabilitation and control program. BLM or the Operator must aggressively control noxious and invasive weeds with an emphasis on halogeton control. The Reclamation Plan must emphasize that control of halogeton is critical because of its toxicity to sheep and other livestock and when not controlled it becomes the dominant plant species on disturbed areas and reduces forage available for livestock and wildlife. It is a significant concern when addressing impacts to sage-grouse and conformance to Standards for Healthy Rangelands.
<b>Livestock Grazing</b>	
BC-1005	This project has the potential to impact livestock grazing permittees, agriculture producers, local economies, the public, and natural resources both in and near the approximately 18,000 acre project area. For these reasons, we are submitting comments for inclusion in analysis during the EIS process
BC-1005	The following issues, specific to livestock grazing permittees, should be analyzed during the EIS process by the BLM: decreased Animal Unit Months (AUMs) and the associated economic impact to permittees, increased off- and on-road traffic as well as an increased number of speeding vehicles which could pose a threat to livestock in the area and affect permittees ability to manage livestock, construction of new roads and modification of existing roads which could impact permittees, cut fences, opened gates, damaged range improvements, decreased palatability of forage due to road dust and development activities, unsuccessful reclamation and the associated impact to forage availability, introduction and spread of noxious weeds, "drift" or run-off of herbicides and the associated impacts on near-by forage, and the overall economic impact this project may have on permittees and their ability to maintain a viable operation.

Table E-2. Scoping Comments by Comment Category

Comment Document Number	Comment
BC-1005	Communication is a key component and the BLM and Koch Exploration Company, LLC (Koch) should talk with permittees early and often to ensure these uses can occupy the same area with minimal conflict and develop a plan to mitigate any identified conflicts. We also strongly encourage, and support, compensatory mitigation. We encourage Koch and the BLM to explore all possible alternatives to reduce conflicts between livestock, permittees and Koch operations or personnel. This may include, but is not limited to: movement of livestock to other allotments, construction of range improvement and/or development of additional water wells on public or private land, voluntary paid non-use of allotments, and purchase or lease of additional grazing land to replace lands no longer available to grazing.
BC-1005	The impact upon food and habitat for fish and wildlife are usually well documented in NEPA documents. The consequences of this project upon food and habitat for domestic animals deserve the same degree of study and documentation. Grazing is an essential tool to achieve desired environmental objectives in the planning area, including obtaining positive effects upon food and habitat for both wildlife and livestock. The EIS needs to include 1) positive effects of livestock grazing upon the environment and managed grazing as a tool to achieve environmental objectives and 2) the impacts of this project on limiting the ability of livestock grazing to achieve these positive effects.
BC-1005	We strongly encourage BLM and Koch to work closely and consistently with affected grazing permittees to address their concerns and recommendations. Moreover, it is imperative BLM officials continuously inform all livestock grazing permittees who are directly or indirectly affected of the issues, decisions, and resulting actions regarding this proposal.
BC-1008	As directed in their respective land use plans and policies, for example, the CLG members also strive to protect agricultural land uses, including the ranching and farming heritage, which is a primary foundation of the custom and culture of the affected counties.
BC-1008	The EIS must thoroughly address the direct, indirect, and cumulative impacts on livestock grazing operations affected by the proposed action. The Coalition estimates that the project will affect several grazing allotments and the associated animal unit months (AUMs). Moreover, the seasons of use coincide for the most part with the times when energy development can also occur, that is between May and November of each year. See Pinedale RMP, App. 20. Thus, there may be overlap between drilling and livestock grazing with the potential for conflicts that need to be addressed.
BC-1008	The EIS should identify stock driveways used to move sheep and cattle through the project area and in the vicinity of the project area. It also needs to identify other critical areas, such as sources of water, calving/lambing areas (where applicable), and existing and planned range improvement projects that may be adversely affected. These issues should be addressed in annual planning meetings between the Operators and the livestock grazing permittees. The Operators should designate a liaison to be responsible for communication with affected livestock operators and landowners on a regular basis.
BC-1008	Well pad, pipeline, and road construction, for example, will remove vegetation and these may include sites where livestock grazing permittees and BLM cooperated on vegetation projects which were already implemented to improve forage. Other work may interfere with or compromise livestock water projects and springs. The EIS must also address the fact that fugitive dust from heavy project-related truck traffic could affect livestock forage, water, increase livestock losses, and reduce weight gains. BLM and the Operators must agree to work with CLG and affected livestock grazing permittees in developing appropriate measures to mitigate for these impacts.
BC-1008	Furthermore, to the extent that oil and gas operations will prevent achievement of management objectives prescribed in the 2008 Pinedale and 2010 Kemmerer RMPs and the Wyoming Standards for Healthy Rangelands, the Operators must be identified as the significant causal factor and assigned responsibility for corrective actions. To mitigate for any temporary loss of AUMs, the Operators should agree to support vegetation and forage enhancement to improve range productivity.

**Table E-2. Scoping Comments by Comment Category**

Comment Document Number	Comment
BC-1008	The Operators should also agree to place livestock crossing signs in the project area where appropriate and should agree to coordinate truck traffic with affected grazing permittees and landowners to reduce livestock collisions. The Operators should compensate operators for livestock fatalities at replacement cost, as opposed to market cost. The Operators' personnel should also agree to reduce speeds to a level appropriate for travel within grazing allotments and to respect the times when livestock must be moved.
<b>Monitoring and Mitigation</b>	
BC-1004	Protection of Unique Natural Features (cultural, historical, recreational and environmental): Even though the proposed development is an infill project within an existing oil and gas field, Sweetwater County encourages the BLM and the developer to apply standard inventory and mitigation protocols to protect any unique natural features that may be indentified within the project area.
BC-1006	THE BLM MUST ENSURE FULL COMPLIANCE WITH THE NEW DEPARTMENT OF THE INTERIOR MITIGATION POLICY. The Department of the Interior recently released "A Strategy for Improving the Mitigation Policies and Practices of the Department of the Interior." Under this new policy, among other things, BLM must ensure that it incorporates a landscape scale approach into all facets of development and conservation planning and mitigation, and it must utilize the full mitigation hierarchy (avoidance, minimization, and last compensation) in project planning and review. The BLM indicates in the Federal Register notice for this project that it will comply with this new direction, stating, it will identify opportunities to apply the mitigation hierarchy on-site, regionally, and as compensatory mitigation and landscape level conservation and management to achieve resource objectives. 79 Fed. Reg. at 26773-74. We urge the BLM to ensure careful adherence to this new policy as it plans for the Bird Canyon Project.
BC-1008	CLG members recommend that the monitoring program adopt performance standards that focus first on vegetation, soil and water quality, rather than focusing primarily, if not exclusively, on wildlife population numbers. Development impacts are detectable earlier in vegetation and soil impacts, while wildlife numbers may take a year or more before there is a detectible change and those changes may be due to other regulatory actions, such as hunting limits. By setting these standards specific to the project soil, vegetation, and availability of water, the monitoring program will detect adverse changes more quickly and the affected entities can respond more quickly under this adaptive management model.
BC-1008	A Monitoring Plan must be developed and provide for annual planning meetings (and more as needed) among the Operator, BLM, affected livestock grazing permittees or landowners, and the local cooperating agencies. Such meetings will address resource issues such as livestock grazing, reclamation, transportation, habitat, wildlife and the development plan for the coming year. This will allow the Operators, affected interests and BLM to plan and adjust for situations where reclamation or mitigation is not working or where there are other resource conflicts.
BC-1008	Off-site compensatory mitigation supplements onsite mitigation, when mitigation measures and onsite mitigation measures are not sufficient. BLM IM 2008-204. CLG supports the exploration of opportunities for onsite compensatory mitigation before going to offsite mitigation. Onsite or mitigation actions, such as improvement of vegetation and wildlife habitat, will provide alternative habitat to wildlife as they are immediately displaced by drilling. There is a role for offsite mitigation but BLM must exhaust onsite opportunities before considering offsite mitigation. Id.
BC-1008	Compensatory mitigation should also be coordinated with the local governments, because the development of replacement resources will directly affect land uses on and off public lands. Any off-site compensatory mitigation should not result in the loss of private land or interests within the affected counties and that it should address more than a single impact, such as impacts on wildlife habitat. The EIS must analyze such proposals to specifically identify exactly what is being mitigated and the type of projects.
BC-1008	If utilized, the need for and methodology of offsite and compensatory mitigation must be fully analyzed and disclosed in the EIS. In such case, habitat leasing on private property should be considered and analyzed as an alternative.

Table E-2. Scoping Comments by Comment Category

Comment Document Number	Comment
BC-1008	As to Regional Mitigation, IM 2010-098, many of the proposed provisions exceed BLM’s authority and are confiscatory. CLG incorporates by reference its comments on the Regional Mitigation draft manual.
<b>Oil and Gas Operations</b>	
BC-1008	Additionally, in light of the possibility of casing cracks and chemical transport, particular care must be taken to properly drill, as well as maintain, natural gas wells to minimize the possible release of fracking chemicals into any aquifer.
BC-1008	In many instances, BLM requires project proponents to bury pipelines on the theory that it reduces visual impacts. However, it is the CLG’s experience that buried pipelines have their own, often greater, impacts due to the surface disturbance and the visual impacts that persist for decades. Pipelines are a notorious source of noxious and invasive weed infestations. Thus, if technically feasible, the proponent should be required to construct the pipeline above ground or if small enough, to rip the pipeline in, to reduce surface disturbance and the related adverse impacts.
BC-1008	The notice states that much of the drilling will occur from existing or multi-well pads. The EIS must fully address the impacts of new well pad construction and demonstrate that it conforms to the 2008 Pinedale and 2010 Kemmerer RMPs. In general vegetation disturbance should be minimized, as well as using existing easements and limiting the size of equipment/materials storage yards and staging areas. See e.g. Pinedale RMP at App. A3-4.
BC-1008	CLG supports directional drilling to decrease the number of new well pads, while preserving production. This reduces surface disturbance for the entire project by minimizing pad construction, pipeline construction, and transportation needs. If there are any requirements imposed for directional drilling, then the EIS must disclose and analyze the feasibility of such techniques within the project area.
BC-1008	At the same time, drilling restrictions, such as caps on surface disturbance or requirements for non-traditional drilling, must conform to the geological characteristics of the field and the lease terms. This is a mature field, where drilling is defined by existing units and lease terms. BLM lacks the authority to change the lease terms.
BC-1010	Synergy is writing in support of this responsible development activity and would like to have our adjacent Bird Canyon field acreage included in any analysis or future development scenario to minimize future regulatory costs and burdens. Cumulative impacts would be reduced and administrative processing times reduced benefiting all stakeholders and leaseholders in the area. Synergy would also prefer to develop our acreage utilizing existing well pad surface disturbance areas and directionally develop as many of our locations as is reasonably feasible to access. Since the majority of our acreage is developed with 1 well per 320 acre spacing unit, significant infill drilling potential exists. Please provide my contact information to Koch Exploration Company, LLC and Memorial Resource Development, LLC, such that I can assist in this EIS process in more detail.
BC-1011	All powerlines associated with this project should be buried beneath roadways to minimize the impacts of overhead lines and reduce vegetation disturbance and noxious weed invasion.
BC-1011	Closed-loop (pitless) drilling should be required throughout this project to reduce the surface footprint of disturbance by preventing construction of reserve pits, which are also an unnecessary hazard to birds and other species of wildlife.
<b>Policies, Regulations, and Permitting</b>	
BC-1001	Domestic energy production plays a crucial role in the United States economy, and the BLM should be mindful of this fact when developing "mitigation hierarchy strategies" and "landscape-level conservation and management actions" in the Bird Canyon Project EIS. 79 Fed. Reg. at 26,773-74. In addition, the BLM must also protect valid existing rights, an obligation the BLM failed to mention in its Notice of Intent. In its further communications and documentation on this project, the BLM should clearly state its intention to protect valid existing rights, and to avoid imposing unreasonable and unnecessary restrictions on oil and gas development in the Bird Canyon Project Area.

**Table E-2. Scoping Comments by Comment Category**

Comment Document Number	Comment
BC-1004	Sweetwater County Permits: Sweetwater County Oil & Gas Construction/Use Permits are required for all oil and gas wells proposed within the leased area. Other County permits, such as Construction, Use, Conditional Use, and Zone Changes, may be required for other facilities such as compressors, processing/separation facilities and production water disposal facilities. For more information on zoning permits, please contact Eric Bingham, Land Use Director at (307)872-3916.
BC-1004	Work Camps: If a compelling need can be demonstrated, work camps may be permitted through the Sweetwater County Conditional Use Permit Process. This permitting process takes 45 to 60 days to complete. For more information on Sweetwater County Conditional Use Permits for work camps, please contact the Sweetwater County Land Use Department at (307)872-3916.
BC-1004	Enforcement: Sweetwater County strongly encourages the BLM to commit the necessary monetary and staff resources to provide the necessary enforcement to ensure development is implemented in a manner that complies with the BLM's Record of Decision.
BC-1005	Peer-reviewed science should underlie BLM's decisions. The BLM must identify the science supporting their decisions and planning regarding this project. Decisions in the proposed plan should allow BLM officials, grazing permittees and Koch the opportunity to work cooperatively. BLM should provide flexibility to ensure the best site-specific, case-by case decisions are made throughout the life of this project.
BC-1006	We also note BLM Information Bulletin (IB) No. 2007-119, "Existing Surface Management Authority for Oil and Gas Leases." This IB reiterates many of the points made in Exhibit 1. For example, it states, "The Secretary has broad authority and discretion under the [Mineral Leasing Act] to administer oil and gas leasing and operations of those leases." Accordingly, we also ask the BLM to fully consider IB 2007-119 in approving the Bird Canyon Project.
BC-1006	As Exhibit 1 and IB 2007-119 make clear, the BLM can and should put in place any needed COAs or best management practices (BMP) for the Bird Canyon Project that are needed to protect resources and resource values such as golden eagles, ferruginous hawks, pygmy rabbits, big game crucial winter range, important cultural resources such as historic trails, etc. We therefore again ask the BLM to carefully read Exhibit 1 in full and to carefully apply the well-documented legal authorities that it identifies that are retained by the agency despite having issued oil and gas leases.
BC-1006	THE BLM SHOULD ENSURE "DOING IT RIGHT" PRINCIPLES ARE APPLIED TO THE BIRD CANYON PROJECT AS BMPs, STIPULATION REQUIREMENTS, OR COAs. Appendix 1 to these comments presents a report the Wyoming Outdoor Council has developed that discusses numerous practices that can be required of oil and gas development projects so as to ensure the BLM and the operator are "doing it right" when it comes to oil and gas development. We ask the BLM to consider these doing it right principles and to require relevant provisions as BMPs, COAs, or stipulation requirements before approving development in the Bird Canyon Project area. Again, this will help ensure important resources such as golden eagle nesting and foraging areas and big game crucial winter ranges are adequately protected.
BC-1006	BLM HAS AN OBLIGATION TO MINIMIZE THE ADVERSE ENVIRONMENTAL IMPACTS OF OIL AND GAS DEVELOPMENT IN THE BIRD CANYON PROJECT AREA. A wide array of BLM regulations and policies require the BLM to minimize the impacts of oil and gas development or to ensure that the environmental impacts of such development are greatly reduced. Ensuring these regulations and other authorities are fully abided by is necessary if the BLM is to meet its National Environmental Policy Act (NEPA) obligations relative to an EA: an EA must "provide sufficient evidence and analysis" of the environmental impacts of a project, which will allow the BLM to properly determine whether the project "will not" have significant environmental impacts, as is required under the Council on Environmental Quality (CEQ) regulations to support a finding of no significant impact. 40 C.F.R. §§ 1508.9(a)(1),1508.13.

Table E-2. Scoping Comments by Comment Category

Comment Document Number	Comment
BC-1006	The following authorities require the BLM to minimize the impacts of this project or to reduce its environmental impacts to the maximum extent possible, and we ask the BLM to ensure each of the following provisions is fully considered in its NEPA analysis of this project, and in the BMPs, COAs, and stipulations it requires for the project in its decision document. Fully implanting these provisions in necessary to meet the CEQ requirement for an EA that it "provide sufficient evidence and analysis" of a proposed action: The 3101.1-2 Regulation; The Standard Lease Form; Leasing, Permitting, and Easement Regulations; Other BLM Regulations; Onshore Oil and Gas Order No. 1.; Onshore Oil and Gas Order No. 1; Statutory Provisions.
BC-1006	Clearly the BLM bears strong obligations to ensure environmental protection is required when an oil and gas project is developed. Merely accepting an operator's proposed plans does not meet these obligations. At a minimum more stringent possible provisions need to be considered in the EA, and possibly adopted as BMPs, COAs, or stipulations for this project, in order to meet BLM's regulatory, statutory, and NEPA obligations. The BLM has a wide range of options at its disposal to regulate the siting or design of facilities and the timing of operations. And as emphasized by Exhibit 1, BLM' s "retained rights" allow and even obligate it to fully regulate the time, place and manner of oil and gas development, up to and including suspending oil and gas operations in the interest of conservation, prohibiting development if impacts are substantially different or greater than normal, specifying the rates of oil and gas development and production, and preventing "adverse impacts" by requiring "reasonable measures," which can be used to limit all types of environmental harm.
BC-1008	Under the Federal Land Policy and Management Act (FLPMA), BLM must analyze the proposed Bird Canyon project to determine if it is consistent with local land use plans, programs and policies. 43 U.S.C. §1712(c)(9). The local governments support energy development as one of the principal multiple uses on public lands and an important component of the local and regional economy.
BC-1009	Based on our current understanding of the planning area, the EPA has identified the following topics that we recommend be analyzed and disclosed in the Draft EIS so that potential impacts to public health and the environment can be fully understood: (1) air resources; (2) greenhouse gas emissions and climate change; (3) groundwater resources; (4) surface water resources; (5) public drinking water supply resources; (6) wetlands, riparian areas and floodplains; and (7) water management and water resource monitoring.
<b>Recreation</b>	
BC-1008	The Bird Canyon Project Scoping Notice does not identify impacts to recreation as an issue or concern. Under the Pinedale RMP, however, BLM must "[m]aintain or enhance the health and viability of recreation-dependent natural resources and settings within the planning area." 2008 RMP at 2-25; see also 2010 Kemmerer RMP at 2-32. The EIS, therefore, needs to address impacts to recreation and provide for mitigation. BLM and the Operators should work with the local cooperating agencies and the public in reducing adverse effects and conflicts.
<b>Riparian/Wetland Areas</b>	
BC-1002	Our concerns include impacts to the aquatic ecosystems associated with increase sedimentation, stream channel crossings, aquatic invasive species introduction and transportation, water quality, and the disturbance to riparian habitats and wetlands associated with this project.
BC-1002	The following is a list of impacts that should be analyzed in the EIS: Destabilization of stream banks due to various reasons including discharge, roads, and removal of vegetation

**Table E-2. Scoping Comments by Comment Category**

Comment Document Number	Comment
BC-1002	<p>We have included the following recommendations as guidelines that will assist with developing the proposed gas field. These are only recommendations and other methods may be available to minimize impacts to the aquatic resources and as the project develops, more details regarding development of the gas field, other recommendations may follow. These recommendations cover a broad area of potential activities and impacts, some of which may not occur in the final development of the project. Any pipeline crossing of water courses should be adequately protected against surface disturbances and damage to the pipelines that might result in a spill event. Any pipeline crossing of intermittent streams can be trenched. Stream banks should be restabilized using vegetation. Willow clumps or native potted plants should be used to stabilize the disturbed banks. Any pipeline crossing of perennial streams and rivers (Green River) should be accomplished by boring under the active channel to avoid impacts to the channel and associated riparian areas. This would further eliminate any concerns with sedimentation and the need to avoid critical times of year such as when fish are spawning. Not entering the live channel will also minimize AIS concerns. Boring pits should be located far enough back from the channel that stream bank stability is not reduced. Boring should cover the entire riparian habitat, including any side channels. Willow clumps or native potted plants should be used to stabilize any disturbed banks. Any pipeline crossings of live streams should be protected by automatic shutoff valves. Additional shutoff valves should be installed on both sides of any drainage basin crossed within ten miles above a Blue Ribbon or Red Ribbon trout water. Riparian canopy or stabilizing vegetation should not be removed if possible. Crushing or shearing streamside woody vegetation is preferable to complete removal. Any such vegetation that is removed in conjunction with stream crossings (perennial or intermittent) should be reestablished immediately following completion of the crossing. Any pipelines that parallel drainages should be located outside the 100 year floodplain. Pipeline crossings of riparian areas and streams should be at right angles, to minimize the area of disturbance. Right-of-way widths should be minimized where the pipeline crosses riparian areas and streams.</p>
BC-1002	<p>We have included the following recommendations as guidelines that will assist with developing the proposed gas field. These are only recommendations and other methods may be available to minimize impacts to the aquatic resources and as the project develops, more details regarding development of the gas field, other recommendations may follow. These recommendations cover a broad area of potential activities and impacts, some of which may not occur in the final development of the project. Riparian areas and floodplains should not be used as staging or refueling areas. All chemicals, solvents and fuels should be kept at least 500 feet away from perennial streams, ephemeral streams, and riparian areas.</p>
BC-1009	<p>We recommend that the EIS present inventories and maps of existing wetlands and waters of the U.S. within the project area, including waters that are regulated under Section 404 of the CWA and wetlands and waters that are protected under Executive Order 11990 - Protection of Wetlands (May 24, 1977). We suggest providing information on acreages and channel lengths, habitat types, values, and functions of these waters.</p>
BC-1009	<p>We suggest that the BLM describe potential indirect impacts to wetlands and riparian areas that could occur due to impacts on the following: • Stream structure and channel stability; • Streambed substrate, including spawning habitats; and • Stream bank vegetation, riparian habitats, and aquatic biota.</p>
BC-1009	<p>BLM-authorized oil and gas development and construction activities have the potential to cause changes in hydrology due to surface disturbance, compaction and increased run-off. These changes in hydrology may result in stream structure failure and additional sediment loading of wetlands and riparian areas.</p>
BC-1009	<p>We recommend that the EIS analyze methods to protect wetlands, riparian areas and floodplains, including the following: • Application of minimum setback requirements for wetlands and riparian areas. The EPA recommends that surface occupancy and activities be prevented within the footprint of wetland and riparian areas, as well as within 500 feet from wetland and riparian areas; • Restrictions such as conditions of approval or other mechanisms to protect floodplains, that will prevent surface occupancy and activities within the 100-year floodplain; and • Delineation and marking of perennial seeps, springs and wetlands on maps and on the ground prior to project level development to ensure identification of these resources to facilitate their protection.</p>

Table E-2. Scoping Comments by Comment Category

Comment Document Number	Comment
BC-1009	We also recommend including a list of potential site-specific mitigation requirements and BMPs to prevent adverse impacts to these aquatic resources. These could include silt fences, detention ponds and other storm water control measures.
<b>Social and Economic</b>	
BC-1004	Since the oil and gas industry provides approximately 43% of the County's property tax base, the Sweetwater County Board of County Commissioners (Board) strongly supports the Bird Canyon Infill Project to be located in Sublette and Lincoln Counties adjacent to the northwest corner of Sweetwater County.
BC-1004	Sweetwater County Comprehensive Plan Goals: Sweetwater County Comprehensive Plan Goals related to this Project include: "Encourage and support responsible resource exploration/development within the region." • "Evaluate natural resource development proposals for their effects on air, water and environmental quality." • "Recognize and protect the County's unique cultural, recreational, environmental and historical resources." • "As feasible, locate worker housing within existing communities where services are/can be provided." • "Encourage a balance between resource development and environmental protection."
BC-1005	Many EISs are deficient in regard to identifying or analyzing social and economic impacts to grazing permittees imposed by development. We strongly suggest the EIS include a full and thorough social and economic impact analysis. Specifically, since grazing on public lands represents as vital economic value to agriculture producers and local communities, we recommend the analysis includes impacts upon livestock grazing and management in and adjacent to the planning area. This may include, but is not limited to: the value of one AUM, cost of reductions in AUMs or animal numbers to permittees, cost of failed reclamation and cost of changes in the vegetative composition or sera I stage of the forage in the project area. In addition to its economic value, grazing represents irreplaceable environmental and social values, contributing to the preservation of open spaces, the scenic views and visual beauty of the area, and the traditional image of the historic rural landscapes of Wyoming and the West. BLM should include any loss of these values to permittees, members of the community and visitors in the analysis.
BC-1008	In addressing the potential social and economic effects to the local communities in the EIS, BLM needs to discuss impacts to local infrastructure, housing capacity and needs, distribution of severance taxes and federal mineral royalties which are not directly returned to the counties from which production occurs. The Wyoming statutory allocation of these revenues, only provides for limited amounts to cities and counties, with no dedicated funds to assist the local government entities most directly impacted. This is a critical point for CLG members who will incur substantial costs to provide infrastructure without funds to cover the work.
BC-1008	BLM must also consider the proposed action's consistency with the economic policies and programs of the CLG cooperating agencies and require appropriate mitigation and compensation for impacts to local infrastructure in reconciling socio-economic conflicts. 43 U.S.C.§1712(c)(9).

**Table E-2. Scoping Comments by Comment Category**

Comment Document Number	Comment
<b>Soils and Reclamation</b>	
BC-1002	We have included the following recommendations as guidelines that will assist with developing the proposed gas field. These are only recommendations and other methods may be available to minimize impacts to the aquatic resources and as the project develops, more details regarding development of the gas field, other recommendations may follow. These recommendations cover a broad area of potential activities and impacts, some of which may not occur in the final development of the project. Soil erosion should be controlled. Erosion control structures should be in place to prevent the spread of sediment to perennial and intermittent stream channels. Any riparian canopy or bank stabilizing vegetation removed as result of construction activities should be reintroduced and protected from grazing until the new growth is established. Willow clumps and/or potted native plants should be used as they will provide protection and healing of the disturbed areas quicker. Buffer zone of 500 feet or the 100 year floodplain of undisturbed vegetation should be left along each side of standing waters and water courses to minimize sedimentation and direct fish habitat impacts. Buffer zones for of at least 300 feet for ephemeral drainages. Disturbed areas should be reseeded with appropriate plant varieties as soon as possible after the disturbance.
BC-1004	Disturbance and Reclamation: Sweetwater County encourages and supports field development strategies that minimize disturbance and accelerate reclamation. Reclamation seed mixes should consider wildlife and noxious weed control. Sweetwater County strongly supports upfront final reclamation bonding.
BC-1005	Reclamation is a key component of any project such as this and reclamation guidelines must be complete, realistic and fully implemented. Reclamation and mitigation requirements and the consequences of failure on the part of Koch should be clearly stated and enforced by the BLM.
BC-1008	Performance-based as opposed to prescriptive standards are better able to adapt to the variability of soils, precipitation, and vegetation found in the project area. The standards should be defined for the affected biological and physical resources as well as potentially conflicting land uses. CLG recommends that the project establish performance-based operating and reclamation standards that focus on site stabilization within the first year, with interim vegetation, and final reclamation with native species. Reclamation needs to be tailored to site activity, site capability, and adapt to what works.
BC-1008	The CLG members incorporate by reference the extensive comments filed on reclamation with respect to several EIS documents including Continental Divide-Creston. At a minimum, the reclamation plan needs to provide that reclamation will commence in the form of immediate site stabilization. Intermediate reclamation should also be designed to preserve productive soils, using a mix of sterile non-native seeds and native seeds. Final reclamation should be as soon as it is determined which lands are not needed for production activities. BLM must monitor reclamation success at every stage.
BC-1008	CLG supports an effective Reclamation Plan that is based on actual soil types, precipitation, and existing and ecologically sustainable vegetation. Reclamation in the high desert areas can be challenging and needs to be adjusted for each site to reflect prevalence of sodic soils and lack of precipitation. The reclamation plan needs to take into account all resource uses as well.
BC-1008	The Reclamation Plan must be developed in close consultation and coordination with CLG members, affected livestock operators and landowners and address noxious weed control, wildlife habitat and livestock forage mitigation and site appropriate reclamation. Specifically, BLM must provide for consultation with the local conservation districts as to the approval of seed mixtures because they have jurisdiction by law, and their special expertise should be utilized at all phases of the project.
BC-1008	BLM should provide for immediate soil stabilization based on onsite soil survey, weather, slope and slope aspect. Disturbed areas not needed for long-term production operations or vehicle travel should also be recontoured, protected from erosion, stabilized and revegetated with a self-sustaining, vigorous, diverse, native or otherwise approved plant community sufficient to minimize visual impacts, provide forage, stabilize soils, facilitate capture of rainfall and snow and reduce runoff, and impede the invasion of noxious weeds and ensure establishment of natural plant community.

Table E-2. Scoping Comments by Comment Category

Comment Document Number	Comment
BC-1008	After surface disturbance, the operator would do interim reclamation, to preserve soil and reduce erosion. The interim reclamation phase would use an initial mix of native and sterile seed mixes. Native species tend to be very difficult to establish and during the several years required, noxious weeds or invasive plant species can become established. Chemical treatments will kill noxious weeds and the native plants used in reclamation.
BC-1008	In other project areas such as Hiawatha, BLM offers the alternative of sterile non-native seed and native seed mixes to effect initial plant growth and to stabilize the site. CLG members note that this method was used to good effect on drill sites on the Bridger-Teton National Forest.
BC-1008	The EIS should also provide that if construction operations allow, the Operators will use topsoil live haul, which is the direct placement of recently salvaged (not stockpiled) topsoil. Live-haul of salvaged soil eliminates the problems of maintaining soil viability while soil is stockpiled and can improve reclamation success. This avoids the problems of stockpiled soils and the related deteriorating fertility, micro-flora, and loss of seed viability.
<b>Special Status Species – Greater Sage-Grouse</b>	
BC-1002	There are no sage-grouse leks located within the project area. However, two occupied leks, the Steed Canyon and Little Colorado Lek 1 leks, are both within the 2 mile boundary of the project area. If any development activity occurs within the two mile lek boundary of these occupied leks we recommend seasonal use stipulations be applied (no activity from March 15 to June 30) for development of new wells. This infill project has the potential to displace sage-grouse and negatively impact habitat using areas within or near the infill project. Additionally, this project will add cumulative impacts not only to sage-grouse and mule deer populations but to other sagebrush obligate species in the project area.
BC-1004	Wildlife Management: Developers are encouraged to work with the appropriate agencies to ensure that field development occurs in a manner that sustains Sweetwater County's wildlife resources. Sage grouse are of particular concern. Sweetwater County encourages the BLM to ensure that development complies with the latest sage grouse core area policies established by the State of Wyoming.
BC-1006	PROTECTIONS FOR THE SAGE-GROUSE MUST BE ENSURED. Efforts to ensure greater sage-grouse ( <i>Centrocercus urophasianus</i> ) conservation so as to avoid Endangered Species Act listing have become a dominant, pervasive issue with the BLM. Therefore, the BLM must ensure full compliance with sage-grouse conservation measures as it develops the Bird Canyon Project. At a minimum this will require compliance with the State of Wyoming's sage-grouse conservation Executive Order. But in addition to that BLM is presently developing its plans for sage-grouse conservation in Wyoming. These new conservation provisions will apply to the Rock Springs and Pinedale Field Offices. See The Wyoming Greater Sage-Grouse Draft Land Use Plan Amendment and Draft Environmental Impact Statement. We urge the BLM to ensure it fully complies with these new sage-grouse conservation measures as it develops the Bird Canyon Project.
BC-1008	The Notice does not refer to sage grouse habitat nor disclose overlap with sage grouse core areas identified by the Governor's Executive Orders.
BC-1011	BLM is currently revising the Green River Resource Management Plan, and a greater sage grouse plan amendment to improve protections for this Candidate Species is currently underway. The project in question will need to incorporate enhances sage grouse protection measures in order to avoid contributing to the need to list this species as threatened or endangered. With this in mind, we recommend that all recommendations of the BLM National Technical Team in its 2011 report be incorporated in full into at least one alternative, and that this alternative be selected for implementation if the infill project moves forward. We are concerned about projects that potentially impact Proposed Priority Habitats (Core Areas), preliminary General Habitats, and/or connectivity areas as outlined in the Wyoming Greater Sage-grouse RMP Amendment, which will ultimately govern activities such as this project.

**Table E-2. Scoping Comments by Comment Category**

Comment Document Number	Comment
BC-1011	We are concerned that the infill project will result in cumulative surface disturbance exceeding the 3% threshold recommended by the National Technical Team and demonstrated to be the threshold at which lek abandonment occurs by Knick et al. (2013). The project should be designed such that cumulative surface disturbance does not exceed this threshold for any square mile section in the Project Area. If the Project Area already exceeds this threshold from existing surface disturbances, the Project should incorporate mandatory requirements that existing surface disturbances be reclaimed to native vegetation such that remaining disturbances added to Project disturbances do not exceed 3%.
BC-1011	We are concerned that BLM intends to permit well pads at 160-acre spacing, or 4 per square mile. This exceeds the one well pad per square mile section recommendation in the BLM’s National Technical Team report (which represents the best available science on the subject). Well pad density should be limited to one well site per square mile, and wells should be drilled from existing well pads (expanded if necessary) in preference to constructing new well pads. For new well pads, all equipment except wellheads (such as compressors, dehydrators, separators, well monitoring equipment, and tank batteries) should be located on existing well pads; any new well pads should permit the location of wellheads only, and the entire well pad and access road should be reclaimed to native vegetation immediately following completion of the last well on the pad. This is being proposed by EnCana for the Normally Pressured Lance project nearby, and therefore is a reasonable alternative.
BC-1011	No roads or well pads should be sited within 1.9 miles of active sage grouse leks, in order to avoid significant direct impacts to breeding sage grouse on the lek. Please note that this measure does not provide sufficient protection by itself for nesting habitat, which tends to occur unsuitable habitats within 5.3 miles of the lek.
BC-1011	We are concerned that traffic along well field roadways and human activity at well pads will disturb and/or displace sage grouse from preferred habitats. With this in mind, each well site should be equipped with telemetry to transmit well performance data remotely, without the need for “tripping” the well on a frequent basis. Condensate should be pipelined to a central facility to minimize heavy truck traffic in the field. In both these regards, existing wells should also be retrofitted with these technologies as part of the infill project to reduce impacts to sage grouse and other wildlife. In addition, well field-related traffic should be restricted to areas at least 4 miles from an active lek or identified wintering habitat during the season of use of these habitats by sage grouse.
BC-1011	Overall, BLM should implement all recommendations of its own National Technical Team (2011) for this project, as well as subsequent science (such as controls on noise and protections for sage grouse winter range) in order to reduce impacts below the threshold of significance.
<b>Stakeholder Involvement</b>	
BC-1001	Please place our office on your mailing list for this project and specifically provide us with complete paper copies of the draft EIS, final EIS, and Record of Decision for this project at the address provided above.
BC-1003	Please include this office on the project mailing list. Correspondence may be addressed to Lee Kreutzer, Archeologist, National Trails Intermountain Region, National Park Service, 324 S. State Street, Salt Lake City, UT 841111 or at Lee_Kreutzer@nps.gov.
BC-1007	Yes put us on the list for getting everything on this
BC-1008	CLG members are entitled to be cooperating agencies and officially request that status for the county and conservation districts, including Sweetwater County and SWCCD as well as LSRC. The local governments all have the requisite expertise and are affected by the project even when it is not located in each of the counties.
BC-1008	CLG respectfully requests an advance meeting with the Operators and BLM to discuss the scope of the project so that the social, economic, and environmental impacts may be assessed at the early stages of Draft EIS development.
BC-1008	The EIS alternatives should conform to the local land policies of the CLG cooperating agencies.43 C.F.R. §§1610.3-1, 1610.3-2.

Table E-2. Scoping Comments by Comment Category

Comment Document Number	Comment
BC-1008	Historically, there has been relatively little coordination with local governments, especially with respect to transportation impacts that occur outside of public lands. Thus, BLM decisions leave county resources stretched to provide necessary infrastructure, including transportation facilities, services, and to compensate for the indirect and cumulative impacts.
<b>Transportation and Access</b>	
BC-1004	Sweetwater County Roads: Prior to utilizing any Sweetwater County Roads for this project, Sweetwater County encourages the developers to contact Mr. John Radosevich, Sweetwater County Public Works Director, at (307) 872-3921, to discuss the following: Road Access Permits and Road Crossing Licenses. • Utilization of County Roads for the transportation of heavy equipment or overweight loads. • Special roadway maintenance or improvement concerns- bridges, culverts, cattle guards. • Dust control. • Traffic Safety.
BC-1008	CLG members are concerned about the impacts of the proposed Bird Canyon infill project on all roads within, and near, the project area. Increased heavy truck traffic, for example, stresses roadbeds, drainage, and traffic capacity on roads that may already exceed their levels of service, adds to congestion in communities and contributes to dust, haze and air pollution.
BC-1008	There are also impacts on road systems outside of the project area that should be addressed. Specifically, much of the equipment and supplies will likely be transported by truck from or through Sweetwater County. The additional truck traffic puts additional pressure on existing state and county roads. The increased traffic affects residents and businesses in all three counties. The solution is early consultation with the affected county road departments and county commissioners.
BC-1008	The EIS, therefore, must include a meaningful analysis of the projected increases in truck traffic and resulting impacts on public safety, air quality capacity or road maintenance. This includes identifying which roads will need to be upgraded and those that need to be constructed, including specific maintenance requirements and responsibilities.
BC-1008	In mitigating these significant impacts, the Operators should agree to coordinate with the respective county road departments and state highway divisions regarding road capacity and traffic levels. The Operators should also compensate the Counties for the increased levels of use and damage or wear and tear above normal levels. A Transportation Plan must also be developed in close coordination with the local governments to address conflicts early in the process. The Transportation Plan must be consistent with the county road systems and must provide that all transportation related decisions will be made in close consultation with affected counties, conservation districts, landowners and livestock operators. This is especially important with respect to the control of fugitive dust emissions. BLM should further provide for the option of surfacing roads that will be used for the life of the project to reduce dust and soil erosion.
BC-1008	Project roads should be designed to meet required standards for safety and construction, to minimize impacts on soils and vegetation, and to allow for effective reclamation for those project roads that do not serve other purposes.
BC-1008	The EIS also needs to disclose the impacts on existing roads that provide recreation and grazing permit access. A significant number of the roads provide access to grazing allotments and are necessary to maintain structures and manage livestock. Similarly, these other roads provide important recreation access almost year-round. Even if the roads also provide access for this project, they may well need to remain open to meet the access needs of other land users.
<b>Water</b>	
BC-1002	The following is a list of impacts that should be analyzed in the EIS: Sedimentation to the watershed, including ephemeral drainages and the potential alteration of stream channel morphology and stream bed structure, including side channel habitat.
BC-1002	The following is a list of impacts that should be analyzed in the EIS: Changes in water quality due to spills or other contaminant to the rivers, increase sedimentation, and other sources.

**Table E-2. Scoping Comments by Comment Category**

Comment Document Number	Comment
BC-1002	<p>We have included the following recommendations as guidelines that will assist with developing the proposed gas field. These are only recommendations and other methods may be available to minimize impacts to the aquatic resources and as the project develops, more details regarding development of the gas field, other recommendations may follow. These recommendations cover a broad area of potential activities and impacts, some of which may not occur in the final development of the project. Hydrostatic Test Waters: Avoidance - The concerns with transporting AIS with hydrostatic test water can be avoided by using a potable water supply. Potable water, if used for hydrostatic testing, can be moved from between watersheds without concern for moving. The discharge of potable water should be accomplished in a manner that does not increase erosion or alter stream channels. Discharge should occur into temporary sedimentation basins and the dewatering of the temporary sedimentation basin should then be done in a manner that precludes erosion. Release of Hydrostatic Test Waters Hydrostatic test waters released during pipeline construction could cause alterations of stream channels, increased sediment loads and introduction of potentially toxic chemicals into drainages, thereby resulting in adverse impacts to aquatic biota. Furthermore, release of water into drainages other than the source drainage can result in an unacceptable risk of introducing aquatic invasive species (New Zealand mud snail, European ear snail, whirling disease spores, etc.). Introduction of aquatic invasive species can be devastating to the ecosystems of vast basins in the receiving waters. To minimize impacts, we recommend the direct discharge of hydrostatic test waters to streams other than the source water be avoided. Failure to do so could be seen as a violation of Commission Regulations. Discharge should occur into the source drainage in a manner that does not increase erosion or alter stream channels. Discharge should occur into temporary sedimentation basins and the dewatering of the temporary sedimentation basin should then be done in a manner that precludes erosion.</p>
BC-1004	<p>Water Resources: In regards to water resources, the Sweetwater County Comprehensive Plan-2002 provides the following goals: "Determine/assess the impact of development on water resources as part of the approval process" and "Require developing interests to provide verification as to the adequacy and safety of water resources." With these goals in mind, the Sweetwater County encourages the project developers to work closely with the BLM and the State of Wyoming to ensure that water quality, quantity and disposal issues are addressed in a safe and responsible manner.</p>
BC-1008	<p>The transportation of produced water both inside and outside the field must be fully analyzed. This activity can also have major impacts on state county and project roads. All possible disposal locations and transportation method should be analyzed including piping and infield disposal.</p>
BC-1008	<p>The Bird Canyon Project Scoping Notice does not address disposal of produced water from gas wells. The EIS needs to include a detailed discussion of exporting and possible treatment of produced water. BLM, for example, must detail the source and distance of the water to be trucked both to and from the drilling sites. The EIS should also discuss the alternative of allowing the water to be evaporated in the field and the reasons that this option is not considered. Piping of produced liquids to centralized tank batteries offsite would also reduce traffic to individual wells.</p>
BC-1008	<p>The EIS should also provide for groundwater monitoring similar to the Pinedale Anticline Natural Gas Exploration and Development Project (PAPA). The SCCD in conjunction with WDEQ, BLM and the operators developed the program and conduct water quality monitoring in the PAPA.</p>
BC-1008	<p>The EIS needs to identify water sources as wells and springs may be affected by water used for drilling operations. The grazing allotments, small communities or ranch homes use springs and these may be affected if water is taken from shallow aquifers. If the water modeling shows no impact on the existing wells, then the EIS should so state.</p>

**Table E-2. Scoping Comments by Comment Category**

Comment Document Number	Comment
BC-1009	<p>It is important to characterize both the existing and potential groundwater drinking water resources in the project area. We recommend the EIS include the following information: • A description of all aquifers in the study area, noting which aquifers are Underground Sources of Drinking Water (USDWs). Federal Safe Drinking Water Act regulations define a USDW as an aquifer or portion thereof: (a)(I) which supplies any public water system; or (2) which contains a sufficient quantity of ground water to supply a public water system; and (i) currently supplies drinking water for human consumption; or (ii) contains fewer than 10,000 mg/1 total dissolved solids; and (b) which is not an exempted aquifer (See 40 CFR Section 144.3);• Available water quality and water yield information for each aquifer; • Maps depicting the location of sensitive groundwater resources such as municipal watersheds, source water protection zones - sensitive aquifers, recharge areas, and sole source aquifers (if any); • Descriptions and locations of groundwater use (e.g., public water supply wells, domestic wells, springs, and agricultural and stock wells). Also see comment #5 below; • A map and discussion of proposed production wells, existing producing wells, and nonproducing wells in the area including their status (e.g., idle, shut-in, plugged and abandoned), if available. Please refer to the Wyoming Oil and Gas Conservation Commission (WOGCC) for location and abandonment information; and • Information on any groundwater sampling in the project area and information on any known groundwater contamination.</p>
BC-1009	<p>The EPA recommends that the EIS analyze potential impacts to groundwater quality and quantity related to oil and gas production. Potential impacts include those associated with the following: leaks and spills; production and disposal of produced water or processing waters; use of pits, underground injection control (UIC) wells and evaporation ponds; production well bore integrity; pipeline use; and impacts associated with restimulation, maintenance and abandonment of existing wells. The EPA also recommends that the EIS discuss measures the BLM will require to minimize the potential for these impacts to occur and how the operations will be monitored to determine if the mitigation measures are effective. Appropriate groundwater protection measures can vary depending on hydrologic conditions and the presence of drinking water resources.</p>
BC-1009	<p>Specifically, the EPA recommends that the BLM analyze and disclose potential groundwater protection, monitoring and mitigation measures, including: • BMPs and measures that BLM will require of operators such as water reuse, closed loop drilling, lining of evaporation ponds, monitoring of water quality and water levels, and closure and monitoring of reserve pits and evaporation ponds; • Setback restrictions and a description of the implementing mechanisms used to minimize the potential for impacts to drinking water resources, including domestic water wells and public water supply wells. Setbacks are effective health and environmental protection tools because they provide an opportunity for released contaminants to attenuate before reaching a water supply well. They may also afford an opportunity for a release to be remediated before it can impact a well, or for an alternate water supply to be secured. For these reasons, we recommend that the BLM prevent surface occupancy and activities from occurring within a half mile from public water supply wells and 500 feet from private wells (see comment #5 below). We note that a number of states including Colorado and North Dakota have adopted a 500 foot setback from occupied dwellings (and by default, the associated domestic well) and that WOGCC is currently considering increasing setback distances. • A mitigation plan for remediating future unanticipated impacts to drinking water wells, such as requiring the operator to remedy those impacts through treatment, replacement, or other appropriate means; • A general production well schematic that depicts the following: casing strings; cement outside and between the various casing strings; and the relationship of the well casing design to potentially important hydro-geological features in the project area such as confining zones and aquifers or aquifer systems that meet the definition of a USDW. Discuss how the generalized design will achieve effective isolation of the project area's USDWs from production activities and prevent migration of fluids of poorer quality into zones with better water quality; and • Abandonment procedures for sealing wells no longer in use in order to reduce the potential for inactive wells to serve as conduits for fluid movement between production zone(s) and aquifer(s). This is particularly important where existing wells do not have surface casing set into the base of USDWs or lack sufficient production casing cement.</p>

**Table E-2. Scoping Comments by Comment Category**

Comment Document Number	Comment
BC-1009	Structural features such as faults and fractures can play an important role in providing pathways for gas and liquid migration from one formation or zone to another. For this reason, we recommend that the EIS provide available information on the complexity of the geology and hydrogeology for the project area and also a summary of the potential for natural or enhanced migration of fluids (gas and liquid) via geologic faults and fractures. In addition, we recommend that the type of depositional setting for each sedimentary formation be included in order to assess the ability of the geology to naturally "confine" or separate fluids from production zones and fluids in USDWs. The information may include geologic maps with structural information, basin or production reports on the type of mechanisms that control hydrocarbon production zones, hydrogeologic reports or test results that would provide information on groundwater movement (velocity, vertical and horizontal) permeability or hydraulic conductivity. Aquifer characteristics are typically discussed in the section on groundwater and we recommend that any geologic structures that would be barriers to flow or enhance transmissivity or permeability also be described in this section.
BC-1009	The EPA recommends the EIS describe the current water quality conditions for surface water bodies within the project area, including intermittent, perennial, and ephemeral streams, rivers, lakes, reservoirs, and surface water drinking water sources. We recommend comparing existing conditions to existing water quality standards or other reference conditions and presenting associated water quality status and trends.
BC-1009	The EPA also recommends the EIS include the following information: • A map of water bodies within and/or downstream of the project area that includes perennial, intermittent and ephemeral water bodies; water body segments classified by WDEQ as water quality impaired or threatened under the Clean Water Act (CWA) Section 303(d); water bodies considered not impaired by WDEQ, and water bodies that have not yet been assessed by the WDEQ for impairment status. We also recommend that a table based on WDEQ's most current Integrated 305(b) and 303(d) report be provided to identify the designated uses of the water bodies and the specific pollutants of concern, where applicable; • A map of municipal watersheds and designated source water protection zones; and • A map and description of topography and soils, specifically steep slopes and fragile or erodible soils, especially near surface waters and intermittent/ephemeral channels.
BC-1009	We recommend that the EIS analyze potential impacts to surface waters related to erosion and sedimentation from land disturbance and stream crossings, as well as potential impacts associated with oil and gas well development, including drilling and production and potential spills and leaks from evaporation ponds and pipelines. We also recommend that the BLM (a) analyze potential impacts to impaired water bodies within and/or downstream of the planning area, including water bodies listed on the most recent EPA-approved CWA § 303(d) list, and (b) coordinate with WDEQ if there are identified potential impacts to impaired water bodies (in order to avoid causing or contributing to the exceedance of water quality standards). Where a Total Maximum Daily Load (TMDL) exists for impaired waters in the area of potential impacts, pollutant loads should comply with the TMDL allocations for point and nonpoint sources. Where new loads or changes in the relationships between point and nonpoint source loads are created, we recommend that the BLM work with WDEQ to revise TMDL documents and develop new allocation scenarios to ensure the project does not cause or contribute to exceeding water quality standards. Where TMDL analyses for impaired water bodies within, or downstream of, the planning area still need to be developed, we recommend that proposed activities in the drainages of CWA impaired or threatened water bodies be either carefully limited to prevent any worsening of the impairment or avoided where such impacts cannot be prevented.

Table E-2. Scoping Comments by Comment Category

Comment Document Number	Comment
BC-1009	Erodible soils may represent a source of pollutants in the planning area. Increased sediment from surface disturbance may degrade water quality. Depending on a host of variables including soil characteristics, industrial operations and topography, associated runoff could introduce sediments as well as salts, selenium, heavy metals, nutrients and other pollutants into surface waters. To fully disclose and, if necessary, mitigate the potential impacts of soil disturbance, we recommend that the Draft EIS include a quantitative analysis of erosion and sediment loading for each alternative. For example, the Pinedale Field Office is using the Automated Geospatial Watershed Assessment (AGWA) Tool to identify areas within the Normally Pressurized Lance Project Area most susceptible to land-use change from the proposed oil and gas drilling activities. The goal of the hydrologic modeling using AGWA is to compare and predict surface runoff, water yield, and sediment yield within the NPL Project Area. Results of the model simulations will be used to assist BLM in the preparation of the EIS for the NPL Project and to aid in the determination of best management practices and future monitoring and mitigations of water resources. We recommend that the BLM consider using this model or another appropriate model that would be applicable to this project.
BC-1009	Contaminants from surface events such as spills, pit and pipeline leaks, and nonpoint source runoff from surface disturbance have the potential to enter and impact surface water resources if these events occur in close proximity to water bodies. If surface activities are set back from the immediate vicinity of surface waters, including wetlands, this provides an opportunity for accidental releases to be detected and remediated before impacts reach water resources. If accidental releases are not detected, the setback provides a safety factor and some possibility of natural attenuation occurring. Setbacks also help prevent point source pollutants such as sediments from impacting surface waters.
BC-1009	Accordingly, the EPA recommends that the BLM evaluate opportunities such as conditions of approval or other mechanisms to prevent surface occupancy and activities from occurring near perennial waters including lakes and reservoirs, intermittent and ephemeral streams, steep slopes, and impaired waters within the planning area. The EPA recommends the following minimum setbacks: • Minimum 100 foot setback from slopes greater than 30%; • Minimum 500 foot setback for flowing waters (rivers and streams) or 100-year floodplain, whichever is greater; • Minimum 500 foot setback for lakes, ponds and reservoirs, wetland and riparian areas and springs; • Minimum 750 foot setback for 303(d) Impaired waters; • Minimum 1,000 foot setback for special or significant waters; and • Minimum 100 foot setback for intermittent and ephemeral streams.
BC-1009	In addition, we recommend the BLM consider opportunities such as conditions of approval or other mechanisms to prevent surface occupancy and activities within Areas of Critical Environmental Concern where important water resources may be impacted.
BC-1009	In order to ensure that public drinking water supply sources (e.g., surface water sources, including groundwater under the direct influence of surface water [GWUDI] sources, and groundwater sources) are protected from potential impacts associated with BLM-authorized activities in the project area, it is important to identify where these sources are located. Therefore, the EPA recommends that the EIS include a map identifying public water supply wells. In addition, we recommend that the EIS identify the location of sensitive groundwater resources such as: municipal watersheds, source water protection zones, sensitive aquifers, recharge areas, and sole source aquifers.
BC-1009	EPA and WDEQ are currently discussing source water protection measures that we might jointly recommend to BLM. In the mean time, in order to ensure public drinking water supply sources (e.g., surface water sources, including GWUDI sources, and groundwater sources) are protected from potential impacts associated with oil and gas leasing, the EPA recommends the following minimum setbacks: • Minimum half mile setback from public water supply wells or setback from critical zones identified in source water protection or wellhead protection plans; • Minimum 1000 foot setback on both sides of streams extending for at least 10 miles upstream from surface water intakes for public water supplies; and • Minimum 1000 foot setback from reservoirs and lakes that are public drinking water supplies.
BC-1009	In addition, we recommend that development be restricted within designated sole source aquifers, if any are designated within the project area, to protect these valuable drinking water resources.

**Table E-2. Scoping Comments by Comment Category**

Comment Document Number	Comment
BC-1009	Water demand associated with the drilling and completion of new wells in the project area is an important consideration that will benefit from analysis and disclosure. Depletion of surface water and groundwater in the planning area may affect watershed health, stream flows and aquifer levels. We recommend that the EIS include a general discussion of the following: • A range of estimated water demand per well anticipated for well drilling, completion and stimulation in the planning area (based on predicted well depths, formation characteristics, and well designs, as well as hydraulic fracturing operations, if used); • Possible sources of water needed for oil and gas development; and • Potential impacts of the water withdrawals (e.g., drawdown of aquifer water levels, reductions instream flow, impacts on aquatic life, wetlands, springs and other aquatic resources).
BC-1009	In addition, the EPA recommends the EIS include a water management plan describing how flowback and produced water will be managed including: • Estimated volume of produced water per well; • Options and potential locations for managing the produced water (i.e., UIC wells, evaporation ponds, and surface discharges); and • Potential impacts of produced water management.
BC-1009	The EPA recommends the BLM consider and evaluate the standards in Wyoming BLM Instruction Memorandum No. WY-2012-007 regarding management of oil and gas exploration and production pits. In addition, we recommend that BLM encourage the operators to consider recycling produced water for use in well drilling and stimulation, thereby decreasing the need for water withdrawals and for produced water management/disposal facilities and minimizing the associated impacts.
BC-1009	The EPA recommends that the EIS address how water quality monitoring in the planning area will occur prior to, during, and after anticipated development to detect impacts to both surface water and groundwater resources, including private well monitoring. We recommend that the EIS describe how the project will comply with the Wyoming Oil and Gas Commission's requirements for pre-drilling baseline and post-drilling monitoring of groundwater, along with additional water quality monitoring activities. A recent example of a water quality monitoring plan is the "Long-Term Plan for Monitoring of Water Resources" developed by BLM for the Gasco Energy Inc. Uinta Basin Natural Gas Development Project Final EIS. Also, the National Ground Water Association's Water Wells in Proximity to Natural Gas or Oil Development Brief provides information on the importance of baseline sampling for private wells and types of analysis recommended.
<b>Wildlife and Fish</b>	
BC-1002	The proposed Bird Canyon Natural Gas Infill Project has the potential for serious detrimental impacts to many species of wildlife located in the project area. The northern 2/3 of the project is located within crucial mule deer winter range for the Wyoming Range Deer Herd Unit (MD 131). The Wyoming Range herd is considered one of the most popular and important mule deer populations in the state of Wyoming. This infill project will continue to displace deer and create significant damage to habitat that is necessary to maintain current deer numbers within the herd unit.
BC-1002	The Department recommends that any infill drilling within crucial winter range be conducted directionally or horizontally from existing infrastructure (use existing roads and well pads) and big game timing stipulation should be applied (no drilling activities from Nov 15 - April 30). The WGFD would like to see new roads or pipeline corridors minimized and for the proponent to rely on the existing footprint to reduce further habitat disturbance.
BC-1002	The development of a reclamation plan should be done to minimize long term negative habitat impacts in the area. The WGFD would like to be involved in development and/or review of the reclamation plan in order to emphasize interim reclamation phases for wildlife habitat requirements.
BC-1002	The proposed project is located within the Upper Green River drainage and may cause impacts to the Green River along with several other intermittent drainages located within the Bird Canyon field. The Green River has a Wyoming Trout Stream Category of "Blue" meaning they are of nationwide importance to anglers and produce greater than 600 pounds of trout per mile. This river is an extremely important recreational fishery.

Table E-2. Scoping Comments by Comment Category

Comment Document Number	Comment
BC-1002	The Green River is managed primarily as a wild brown trout fishery. Cutthroat trout are stocked in the lower portion of the Green River to provide additional diversity to the fisheries. Native nongame fish are also present in the Green River. Of most importance are the flannel mouth sucker <i>Catostomus latipinnis</i> , and the bluehead sucker <i>Catostomus discobolus</i> . The Department has categorized both the flannelmouth sucker and bluehead sucker Tier I species. Tier I species are physically isolated and/or exist at extremely low densities throughout their range, and habitat conditions are declining or vulnerable. Therefore, the Department has been directed by the Commission to recommend that no loss of habitat function occur. Some modification of the habitats may occur as a result of this project, however, we recommend that habitat function be maintained (i.e., the location, essential features, and species supported are unchanged). The drainage also supports native fish species that are more common and abundant across their range. These species include: mountain suckers <i>Catostomus platyrhynchus</i> , mottled sculpin <i>Cottus bairdi</i> , and speckled dace <i>Rhinichthys osculus</i> .
BC-1002	The following is a list of impacts that should be analyzed in the EIS: Impacts to wetlands and associated wildlife species, particularly amphibians and reptiles
BC-1002	The following is a list of impacts that should be analyzed in the EIS: Direct impact to populations and habitats for bluehead sucker and flannelmouth sucker and as important is the impacts to sport fish populations (direct and indirect alteration of aquatic habitat important for all life stages, direct kill of fish species, direct kill of eggs and fry, indirect kill of eggs and fry).
BC-1002	The following is a list of impacts that should be analyzed in the EIS: Alterations of upland habitats and its impacts to amphibians and reptiles.
BC-1002	We have included the following recommendations as guidelines that will assist with developing the proposed gas field. These are only recommendations and other methods may be available to minimize impacts to the aquatic resources and as the project develops, more details regarding development of the gas field, other recommendations may follow. These recommendations cover a broad area of potential activities and impacts, some of which may not occur in the final development of the project. To reduce impacts on aquatic amphibians hibernating in aquatic substrates, we recommend limiting construction through the winter months. However, if construction is to take place during the winter months, construction should take into consideration the herptile assemblages to ensure suitable overwintering habitat (soft unconsolidated substrates) is protected. To protect breeding amphibians we recommend no disturbance in the riparian, wetlands, or backwater areas during the spring and early summer. WGFD recommends a 500 meter NSO buffer for riparian and wetlands. Minimize disturbance to snake hibernacula. When possible, we recommend avoiding disrupting talus slopes, caves, and cliffs. If work is needed to be performed in areas adjacent to these habitat types, we recommend a 100 meter buffer be placed around hibernacula features. Work should be performed during the summer months (June 1 to August 31) to avoid disruption of hibernating reptiles.
BC-1002	We have included the following recommendations as guidelines that will assist with developing the proposed gas field. These are only recommendations and other methods may be available to minimize impacts to the aquatic resources and as the project develops, more details regarding development of the gas field, other recommendations may follow. These recommendations cover a broad area of potential activities and impacts, some of which may not occur in the final development of the project. No instream work in the Green River from September 15th - November 15th to protect spawning brown trout, their redds, and fry. No instream work in the Green River during the months of May through July to protect spawning flannelmouth suckers and bluehead suckers, and their fry.

**Table E-2. Scoping Comments by Comment Category**

Comment Document Number	Comment
BC-1006	BLM MUST ENSURE ADEQUATE PROTECTION FOR CRUCIAL WILDLIFE HABITAT AND MIGRATION CORRIDORS. Areas within the proposed project boundary overlap important habitat for mule deer ( <i>Odocoileus hemionus</i> ) and bighorn sheep ( <i>Ovis canadensis</i> ). Management alternatives must provide adequate planning to recognize the specific habitat and timing needed to protect both mule deer crucial range and bighorn sheep migration corridors identified by the Wyoming Game and Fish Department. The BLM is tasked with management "in a manner that will protect the quality of scientific, scenic, historical, ecological, [and] environmental ... values," 43 U.S.C. §1 701] ( a)(8)), which necessitates robust protections of designated crucial wildlife habitat. Additional monitoring may be necessary to identify other species impacted prior to drafting management alternatives.
BC-1011	We are also concerned that this project may have a significant direct and/or cumulative impact on big game migrations or crucial habitats such as winter ranges and parturition areas. BLM will need to evaluate the overlaps between the project area and known migrations corridors, crucial winter ranges, and parturition areas and the proposed project area. Please not that disturbance from vehicle traffic, human activity, and heavy equipment during both the construction/drilling phase and the production phase of the field are likely to cause significant stress, displacement, and potentially reduced inclusive fitness for big game populations using the area; for this reason timing limitations that apply to construction and drilling only are insufficient to prevent major impacts to big game populations.
BC-1011	We are also concerned about potential impacts to rare and/or BLM Sensitive Species such as Idaho pocket gopher, pygmy rabbit, white-tailed prairie dog, Preble’s shrew, ferruginous hawk, golden eagle, and mountain plover, which have the potential to occur in and near the project area. Please evaluate potential impacts to these species and proposed an alternative that minimizes impacts to them.

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