

Chapter 1

Introduction

1.1 INTRODUCTION

As lead agency, the U.S. Department of Interior (DOI), Bureau of Land Management (BLM), has prepared this Draft Supplemental Environmental Impact Statement (SEIS) to evaluate and disclose to the public the direct, indirect, and cumulative environmental impacts associated with a proposed long-term plan for continued exploration and development of natural gas resources in the Pinedale Anticline Project Area (PAPA) in Sublette County, Wyoming (see Map 1.1-1). BLM is the lead agency for this Draft SEIS because they have regulatory responsibility for all federally owned mineral leases, which are approximately 80 percent of the 309-square mile PAPA. The State of Wyoming and Sublette County are participating in the preparation of this Draft SEIS as cooperating agencies.

Jointly referred to as the Operators, Ultra Resources, Inc. (Ultra), Shell Exploration & Production Company (Shell), Questar Market Resources including Wexpro Company (Questar), BP America Production Company, Stone Energy Corporation, Yates Petroleum Corporation, and others who agree to participate, have notified the BLM Pinedale Field Office (PFO) that they propose a new long-term development plan that includes limited year-round drilling and completions of natural gas wells within their leases in the PAPA (see Map 1.1-2). BLM has identified the need for additional pipeline corridors to transport hydrocarbon products from the PAPA to gas processing plants in southwestern Wyoming. Jonah Gas Gathering Company (JGGC) and Rendezvous Gas Services (RGS) propose gas sales pipelines that would be placed within the new corridors, and Questar Gas Management (QGM) is proposing an expansion of the Granger Gas Processing Plant in Sweetwater County. Analysis of potential impacts associated with the corridors, gas sales pipelines, and the Granger Plant is included in this document.

This document supplements analysis and decisions reached by the BLM as the lead agency, in cooperation with the U.S. Department of Agriculture Forest Service (USFS), U.S. Army Corps of Engineers (COE), and the State of Wyoming, in the *Final Environmental Impact Statement for the Pinedale Anticline Oil and Gas Exploration and Development Project – Sublette County, Wyoming* (the PAPA FEIS - BLM, 2000a) and in the *Record of Decision for the Pinedale Anticline Oil and Gas Exploration and Development Project – Sublette County, Wyoming* (the PAPA ROD - BLM, 2000b).

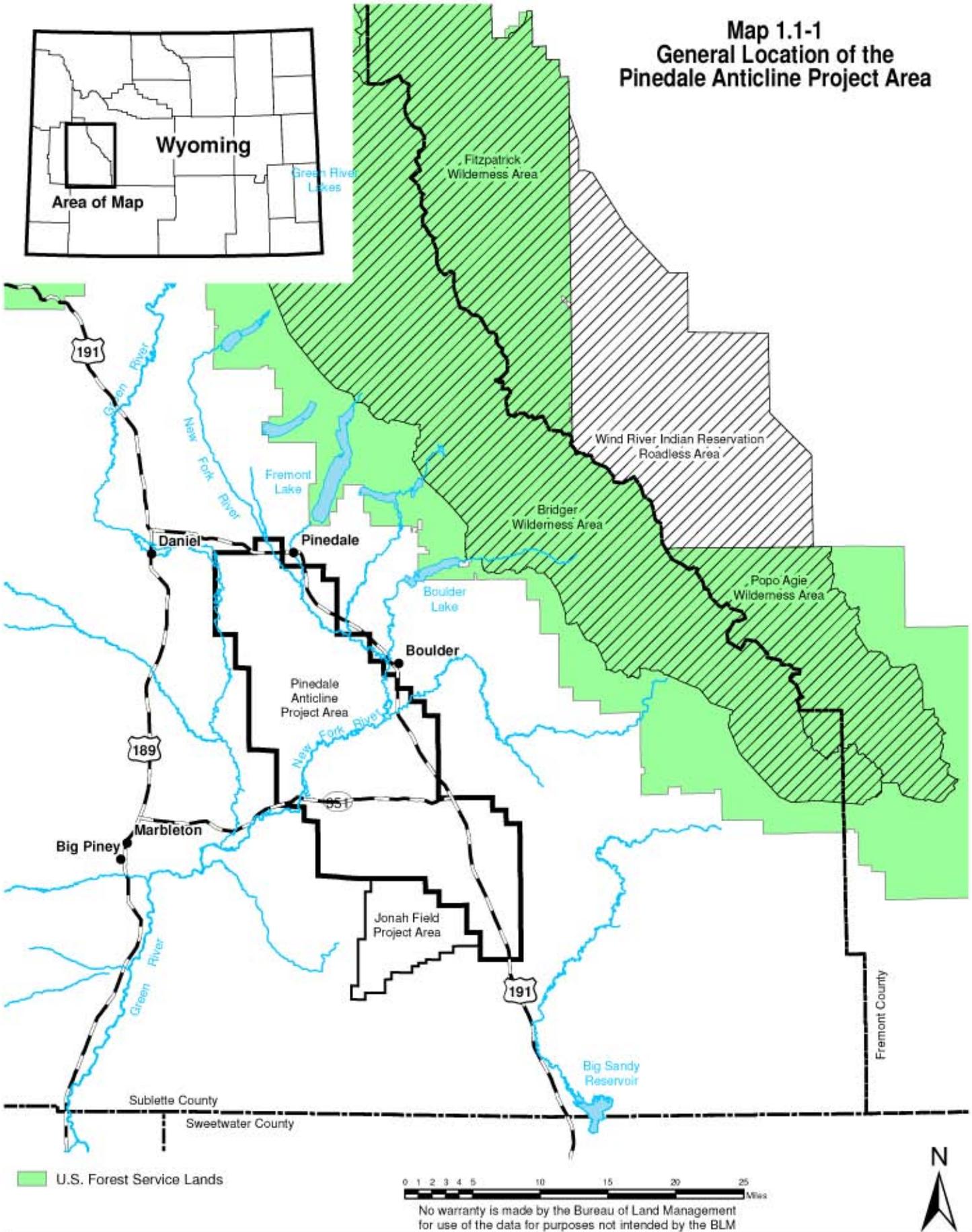
Regulations enacted by the Council on Environmental Quality (CEQ, 1978) require federal agencies to prepare supplements to existing documents (40 CFR § 1502.9(c)(1)) implementing provisions of the National Environmental Policy Act (NEPA) if:

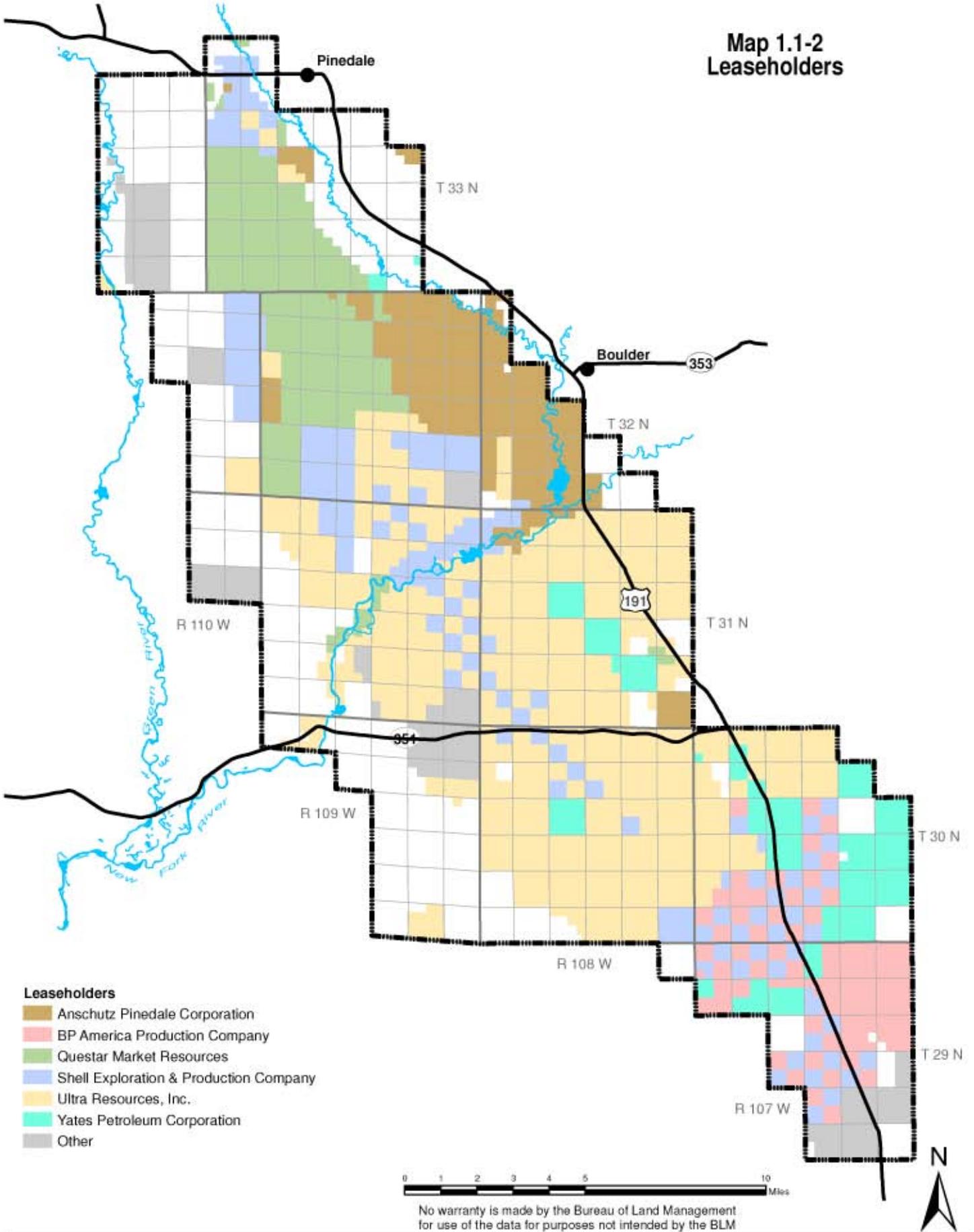
- “(i) *The agency makes substantial changes that are relevant to environmental concerns; or*
- “(ii) *There are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts.*”

BLM provided similar guidance in Handbook H-1790-1 (BLM, 1988a) with the additional explanation:

“if an existing relevant environmental document does not fully cover a proposed action and it is not appropriate to tier, then a determination should be made on whether to supplement or modify the existing document or prepare an entirely new one.”

**Map 1.1-1
General Location of the
Pinedale Anticline Project Area**





BLM prepared this Draft SEIS because the Operators' proposed long-term development plan is substantially different from the approach that was analyzed in the *Draft Environmental Impact Statement for the Pinedale Anticline Oil and Gas Exploration and Development Project – Sublette County, Wyoming* (the PAPA DEIS - BLM, 1999a) and approved in the PAPA ROD (BLM, 2000b). Limits on levels of development and analysis thresholds were set forth in the PAPA ROD. Under the current proposal, these limits may be exceeded. Analysis thresholds associated with air quality have already been exceeded. The Operators' proposal requests exemption from BLM stipulations for wildlife, which restrict development activities within seasonal ranges. BLM has determined the Operators' proposal could cause significant adverse impacts to the human and natural environments.

BLM has recognized that additional air quality impact analysis is required for continued development of the PAPA. The PAPA ROD (BLM, 2000b) states:

“If activity and corresponding emission assumptions and/or impacts exceed those identified in the Pinedale Anticline EIS (376.59 tons/year of NO_x emission from compressors or 693.50 tons/year NO_x emissions from the combination of construction/drilling, well production, and compression), the BLM, in cooperation and consultation with Wyoming Department of Environmental Quality-Air Quality Division (DEQ-AQD), EPA Region VIII, USDA-Forest Service, and other affected agencies, will undertake additional cumulative air quality environmental review as required by CEQ regulations 40 CFR 1502.9(c)(1)(ii).”

BLM has determined the nitrogen oxide (NO_x) emissions from all sources in the PAPA currently exceed the 693.50 tons per year (tpy) analysis threshold specified in the PAPA ROD (BLM, 2000b). This Draft SEIS serves as the additional cumulative air quality environmental review referenced above.

1.2 REGIONAL SETTING

The PAPA is located in west-central Wyoming in Sublette County (see Map 1.1-1). The Town of Pinedale is situated on the northern end of the PAPA. Pinedale is located approximately 80 highway miles south of Jackson and 100 miles north of Rock Springs. Other communities/settlements in the general vicinity of the PAPA include Cora, Daniel, Boulder, Bargerville, Marbleton, and Big Piney.

The PAPA lies between U.S. Highway 191 and the Green River. U.S. Highway 191 runs along the eastern and northern edges of the PAPA and is the primary route to the PAPA as well as the primary route for tourist travel to Yellowstone and Grand Teton National Parks. U.S. Highway 189, also a primary tourist travel route, runs west of the PAPA, and State Highway 351 crosses through the southern portion of the PAPA (see Map 1.1-1). No national forest lands are located in the PAPA; however, the Bridger-Teton National Forest is located west, north, and east of the PAPA. The northern boundary of the PAPA comes within 2.3 miles of these national forest lands.

Sagebrush dominates the PAPA with desert vegetation blending into riparian areas and wetlands of the New Fork River and Green River flood plains. The higher elevation area between these rivers in the northern half of the PAPA is known locally as the Mesa.

1.3 PAPA EIS AND ROD

In the PAPA ROD (BLM, 2000b), BLM's Preferred Alternative is the *Resource Protection Alternative on Federal Lands and Minerals*, as modified from the PAPA DEIS (BLM, 1999a). It is important to summarize the level of natural gas development approved by the BLM in the PAPA ROD because this document supplements the information and analyses in the PAPA DEIS. Collectively, the DEIS and the FEIS are the PAPA EIS.

If any one word could characterize the PAPA EIS, it would be "*uncertainty*" (e.g., see PAPA DEIS, page 1-2). Potential development evaluated in the PAPA EIS was a maximum of 900 initial well pads and 700 producing well pads over 10 to 15 years, which some participants considered optimistic (PAPA DEIS, page 2-2). BLM asserted, "*it is possible that development within the PAPA could go beyond the levels of development considered in this EIS, although few would consider such a level of development as reasonably foreseeable*" (PAPA DEIS, page 2-2).

To allow implementation of the Preferred Alternative, BLM required a supplemental environmental analysis if any approved levels of development in the PAPA ROD (BLM, 2000b) were exceeded. Project components approved in Section 2 of the PAPA ROD include:

- 900 initial well pad locations on all lands and minerals within the PAPA,
- 700 producing wells and/or well pads on all lands and minerals within the PAPA,
- 700 production facilities at individual well locations,
- central production facilities,
- 4 compressor facility sites,
- water wells for drilling/completion,
- 1 BP Amoco Field Office,
- ~121.5 miles of sales pipeline corridor for multiple pipelines,
- ~276.0 miles of access road (including collector, local, and resource roads), and
- ~280.0 miles of gathering pipeline system.

Section 2 also states, "*This ROD authorizes the construction and drilling of up to 900 wells and the completion, testing, and production of up to 700 producing natural gas well pads within the PAPA*".

In addition to expressing "*uncertainty*", the PAPA ROD is ambiguous. In Section 2 alone, it is evident that, from the bulleted list and the statement above, it is not clear whether the PAPA ROD is authorizing "700 wells" or "700 producing well pads", and "900 well pad locations" or "900 wells". Furthermore, in Section 1 - Introduction of the PAPA ROD the following statements occur:

- "*BLM approves the Pinedale Anticline Operators proposal for 700 producing well pads*",
- "*The ROD recognized that in order to develop 700 productive well pads in the PAPA, as many as 900 well pads may need to be constructed*", and
- "*Monitoring for project consistency with the scope of EIS analysis will be based on the total of 700 producing well pads.*"

When the PAPA ROD (BLM, 2000b) was issued in July 2000, the extent to which directional drilling would be implemented in the PAPA was uncertain. There was allowance in the PAPA ROD for multi-well pads, although it was generally assumed at the time that most well pads would contain a single well. It was not the intent of the PAPA ROD to limit wells but rather to

limit well pads within defined Management Areas (MAs) based on sensitive resources. The air quality impact assessment for the PAPA EIS assumed that there would be 700 producing wells in the PAPA. Hence, the ambiguous interchange between wells and well pads.

Multiple requirements for managing development related impacts to specific resources are defined in Section 3 and various appendices to the PAPA ROD (BLM, 2000b). These requirements are summarized in Table 1 of Appendix A herein as:

- Requirements of federal statute and/or agency policy;
- Required plan for development or for implementing another action;
- Required multi-party memorandum of understanding (MOU), programmatic agreement (PA), or less formal agreement;
- Required Adaptive Environmental Management (AEM) with monitoring and/or reporting;
- Required implementation of relevant practices and guidelines; and
- Implementation of required or suggested mitigation.

BLM's Preferred Alternative was to be implemented with restrictions to exploration and development within each of nine defined MAs. Some of the MAs represent various combinations of sensitive resource management zones (SRMZs) analyzed in the PAPA EIS. While the extent of development within the entire PAPA was limited by BLM's Approved Project Components (BLM, 2000b - Section 2) and Administrative Requirements and Conditions of Approval (BLM, 2000b - Section 3), Section 4 of the PAPA ROD (BLM, 2000b) provided specific limits of development within each of the nine MAs based on numbers of producing well pads.

In each MA, the average and maximum number of producing well pads per square mile were based on analysis of various assumptions and limits in the PAPA EIS. According to the PAPA ROD, should development in a MA reach the threshold number of producing well pads, BLM approval of additional pads would halt until additional environmental analyses were completed or until wells on a pad were no longer producing gas, had been plugged, and the pad area had been reclaimed for one full growing season. In such cases, the reclaimed pad would be credited back to the MA and a new well pad may be developed as long as the approved threshold is not exceeded. Descriptions of each MA, objectives for managing the MA, and allowable levels of development are summarized in Table 2 of Appendix A of this document.

Uncertainties associated with levels of exploration and development and geographic distribution of development in each MA are reflected in the allowable levels of development in Table 2 (Appendix A, herein). To ensure specific MA objectives were being met, BLM required a comprehensive monitoring program using an AEM process requiring participation by cooperating agencies and the public. CEQ requires monitoring as a component of NEPA (1978 – 40 CFR §1505.2(c) and §1505.3). The AEM process was implemented in August 2004, when the Secretary of Interior officially chartered the Pinedale Anticline Working Group (PAWG) and task groups to develop recommendations and provide advice to the BLM on monitoring and mitigation issues related to natural gas development in the PAPA.

1.4 EXCEPTIONS AND SUBSEQUENT NEPA DOCUMENTS TIERED TO THE PAPA EIS

The PAPA ROD (BLM, 2000b) allows exceptions (Appendix A-6 in the PAPA ROD) to *Administrative Requirements and Conditions of Approval* (Section 3) for a variety of situations, including seasonal restrictions protecting wildlife and requirements made by BLM for an operator(s) to use Centralized Production Facilities (CPF), directional drilling, and/or pad drilling (multiple wells drilled from the same well pad). The BLM PFO Manager, or his/her designee as the Authorized Officer (AO), grants such exceptions. The Pinedale Resource Management Plan

(RMP - BLM, 1988b) and other NEPA documents authorize this exception process under the Wyoming BLM Standard Mitigation Guidelines for Surface-Disturbing Activities.

In addition to exceptions to lease stipulations, BLM (2003a) noted, “*waivers, exceptions, and modifications are viable and effective means of adapting oil and gas lease stipulations to meet changing circumstances. Circumstances for granting a waiver, exception, or modification are documented in most existing land use plans and are a requirement of all future land use plans*”, and provided the following application of the terms:

- Lease stipulation waiver is a permanent exemption to a lease stipulation;
- Lease stipulation exception is a one-time exemption to a lease stipulation and exceptions are determined on a case-by-case basis; and
- Lease stipulation modification is a change to the provisions of a lease stipulation, either temporarily or for the term of the lease.

Since 2000, BLM PFO has considered exceptions to big game crucial winter range seasonal stipulations, raptor and/or greater sage-grouse breeding/nesting habitat, and raptor and/or greater sage-grouse winter concentration areas. Exceptions to these stipulations have been granted, partially granted, or denied for a variety of activities including drilling, completions, equipment removal, pipeline installation, surveying, seismic and geophysical surveys, wildlife research studies, and various other wellfield activities.

Prior to making decisions regarding exceptions, BLM coordinates a review with the Wyoming Game and Fish Department (WGFD). In the case of crucial big game winter range, a consultation is held with WGFD biologists to assess animal presence or absence, animal condition, weather severity, habitat condition and availability, specific site location, and requested action. Exception requests and subsequent decisions made by BLM from 2001 through 2005 are summarized in Table 3 of Appendix A in this document.

After the approval of the PAPA ROD (BLM, 2000b), BLM evaluated four requests for approval of development strategies related to year-round drilling in subsequent Environmental Assessments (EAs). The Decision Records for each of the EAs are included in Table 4 in Appendix A and are summarized below:

- Questar Year-Round Drilling Proposal – EA Number WY-100-EA05-034, November 2004 - Questar proposed installation of a gathering system for condensate and produced water within the PAPA, a pipeline to transport crude petroleum from the PAPA, and to utilize Tier 2 equivalent emission controls on all drilling rig engines by 2007. In November 2004, BLM issued a Decision Record (BLM, 2004a) approving the proposal allowing Questar to utilize up to six drilling rigs (two rigs per pad for up to three pads between November 15 and April 30 for 9 years beginning November 15, 2005).
- Questar Year-Round Drilling Proposal –Condensate Pipeline Modification (QYDP-CPM) EA Number WY-100-EA05-283, July 2005. In July 2005, BLM issued a Decision Record (BLM, 2005a) for modification of the condensate (crude petroleum) pipeline route. Approval of drilling operations between November 15, 2005 and April 30, 2006 would be contingent upon the liquids gathering system being operational by November 15, 2005. The Decision Record required Questar to utilize Tier 2 equivalent emission controls on year-round drilling rig engines by January 1, 2008.

- ASU Year-Round Drilling Demonstration Project - EA Number WY-100-EA05-254, September 2005. Anschutz, Shell and Ultra submitted a proposal to BLM for a year-round demonstration project. In September 2005, BLM issued a Decision Record (BLM, 2005b) that approved drilling operations between November 15, 2005 and July 31, 2006 within big game crucial winter ranges. It allowed completion operations beginning May 1, 2006. The Decision Record allowed up to two drilling rigs on each of three well pads between November 15, 2005 and July 31, 2006.
- Questar Year-Round Drilling Proposal, Addendum - EA Number WY-100-EA06-043, November 2005. BLM issued a Decision Record (BLM, 2005c) that allowed for accelerated winter development on the Mesa, including well completions and the addition of a third drilling rig.

1.5 EXISTING DEVELOPMENT IN THE PAPA

Since 2000, most natural gas development in the PAPA has been along the Anticline Crest, which is approximately 2 to 3 miles wide centered along the length of the PAPA. The Operators are proposing long-term development within the Anticline Crest as well as continued exploration off the Anticline Crest. As of December 31, 2005, there were approximately 457 producing wells on 322 well pads in the PAPA. Of these, 428 producing wells on 266 well pads were drilled after issuance of the PAPA ROD (BLM, 2000b). An additional 205 producing wells on 26 well pads are projected for 2006. There were 33 drilling rigs operating during August 2005 in the PAPA, the most during any month since the PAPA ROD was issued. Twenty-three rigs were operating in December 2005.

1.6 PROPOSED ACTION

The Operators have proposed a long-term plan for continued development of the PAPA. Their proposal includes up to 4,399 new producing wells that would be drilled from 250 new well pads and from expansion of existing well pads. The Operators are requesting temporary relaxation of seasonal wildlife stipulations in big game crucial winter range and in sage grouse seasonal habitats. The Operators have defined a “core area” within which they propose several Concentrated Development Areas (CDAs). They propose to drill and complete wells during winter (November 15 through April 30) within the CDA portions that coincide with big game crucial winter habitats.

It is estimated that surface disturbance would continue through 2023 and would consist of 12,278 acres of initial disturbance with a life-of-project (LOP) disturbance of 4,093 acres. This disturbance would be in addition to the current existing wellfield disturbance in the PAPA of 5,049 acres. Project components consist of new well pads, expansion of existing well pads, production equipment, gas gathering pipelines, access roads and other ancillary facilities. The Operators are proposing to install additional liquids gathering systems resulting in most of the producing wells being connected to a liquids gathering system. This would result in a reduction of truck traffic that is currently required to haul the condensate and produced water. The Operators are proposing to implement Tier 2 equivalent emission controls on 60 percent of the drilling rig engines operating in the PAPA by 2009, thereby reducing impacts to air quality and air quality related values (AQRVs) in nearby wilderness areas. Two gas sales pipelines are proposed that would transport natural gas from the PAPA to gas processing plants in southwestern Wyoming. BLM has identified three new pipeline corridors that would contain the gas sales pipelines. An expansion of the Granger Gas Plant is also proposed.

1.7 PURPOSE AND NEED

The purpose and need of this document is to supplement the existing PAPA DEIS (BLM, 1999a) through analysis and evaluation of the potential impacts of the approval of additional natural gas development in the PAPA. This Draft SEIS is necessary because there are substantial changes in the Proposed Action that are relevant to environmental concerns ((40 CFR 1502.9(c)(1)(i)) or there are significant new circumstances or facts relevant to environmental concerns and bearing on the Proposed Action or its impacts that were not addressed in the existing analysis (40 CFR 1502.9(c)(1)(ii)). This document discloses and analyzes impacts associated with the No Action Alternative, the Proposed Action Alternative, and a third alternative (Alternative C) in an effort to determine the direction of development within the PAPA. The ROD resulting from this supplemental analysis will consider BLM's greater knowledge and understanding of the natural gas resource in the PAPA since the PAPA ROD (BLM, 2000b) was issued. The decision will include development of appropriate mitigation consistent with the goals, objectives, and decisions of the Pinedale RMP (BLM, 1988b), which is currently under revision.

This Draft SEIS documents the analysis of environmental consequences of past and current levels of natural gas development authorized by the PAPA ROD (BLM, 2000b). The Operators' Proposed Action requests development of the natural gas resources beyond the levels of development analyzed and addressed in the PAPA ROD. This Draft SEIS compares existing environmental impacts versus impacts associated with continued development as authorized by the PAPA ROD and subsequent EAs (the No Action Alternative), the Operators' Proposed Action, and an alternative development plan.

The purpose and need of the proposed development is to enable the commercial production of federally owned mineral resources in conformance with the BLM RMP mineral objectives, and to prevent drainage of federal minerals by wells located on adjacent non-federally owned lands. The Operators have valid existing leases and rights to extract natural gas and have proposed to drill an additional 4,399 wells by 2025. Under their proposal, wells would be drilled from fewer pads than the threshold authorized by the PAPA ROD (BLM, 2000b), but the total surface disturbance would be greater than that analyzed in the PAPA DEIS (BLM, 1999a). Implementation of their proposal would require temporary relaxation of seasonal stipulations that currently provide protection to big game on crucial winter habitats and seasonal habitats utilized by greater sage-grouse.

The Operators' Proposed Action would:

- define the extent of natural gas supplies in the PAPA,
- further contribute to the natural gas supply available to the nation,
- consolidate year-round activity to the most productive areas of natural gas development in the PAPA to date,
- provide for compensatory mitigation,
- further reduce national dependence on energy from foreign sources,
- contribute additional supplies of clean-burning fuels, and
- allow the Operators to develop an additional 20 to 25 trillion cubic feet of domestic natural gas under their existing leases granted by the BLM, State of Wyoming, and private landowners.

The exploration and future development of natural gas resources will help to supply the future domestic energy needs and play an integral part in the nation's energy security. Development of additional natural gas resources in the PAPA is consistent with the Comprehensive National Energy Strategy announced by the U.S. Department of Energy in April 1998, the Energy Policy and Conservation Act (42 United States Code [USC] 6201), and the Energy Policy Act of 2005 (Public Law 109-58).

1.8 RELATIONSHIP TO NEPA AND BLM POLICY

The PAPA EIS process was completed in 2000 in compliance with CEQ Regulations for Implementing the Procedural Provisions of NEPA (CEQ, 1978). CEQ described several situations in which federal agencies would prepare supplements to either a DEIS or FEIS (40 CFR § 1502.9(c) if *“the agency makes substantial changes that are relevant to environmental concerns or there are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts.”* In other situations, agencies may prepare supplements to existing documents if they determine that the purposes of NEPA would be furthered by doing so.

To the extent possible and appropriate, BLM supports the use of existing environmental analyses to address impacts of a proposed action as described in Handbook H-1790-1 (BLM, 1988a). Supplements to existing NEPA documents are prepared when additional environmental analyses are needed. The Handbook specifically advises that the *“relationship between the supplement and the existing EIS is lateral, i.e., the proposed action and alternatives are analyzed to the same level of specificity and detail.”*

The guidance referenced above cannot be applied to this document because the alternatives analyzed in the PAPA EIS were projections of various development possibilities with incomplete information available regarding 1) the extent of the mineral resource, 2) the pace of development over time, 3) the geographic extent and intensity of development, and 4) environmental impact to multiple resources. BLM now has substantial documentation for each of these four issues associated with natural gas development in the PAPA.

Information now available (which was uncertain in nature during preparation of the PAPA EIS) is used in this document to describe the Affected Environment (Chapter 3) and to analyze the Environmental Consequences (Chapter 4) of the Operators' Proposed Action and other alternatives. The current level of natural gas development in the PAPA has been inventoried and described in Chapter 2. The inventory provides the foundation for understanding the current status of each resource included in Chapter 3 and is the basis for evaluating impact for each alternative in Chapter 4. The current inventory of development and associated impact coupled with the specificity of the Operators' proposal allows for the environmental analyses in this document to be more specific and detailed than in the PAPA EIS.

BLM's Pinedale RMP was approved in 1988 (BLM, 1988b) and is currently being revised. The RMP predicted 900 oil and gas wells would be drilled within the subsequent 20 years. The PAPA EIS noted 725 wells had been drilled as of 1998 and the level of development would exceed that addressed in the RMP. The PAPA EIS provided an analysis of reasonably foreseeable development within the Pinedale RMP area and updated projections made in the 1988 RMP. For air quality impact analysis, this Draft SEIS provides additional evaluation of reasonably foreseeable oil and gas development. BLM expects that implementation of any of the alternatives considered in this Draft SEIS will be in conformance with the revised RMP.

1.9 AUTHORIZING ACTIONS, RELATIONSHIPS TO STATUTES AND REGULATIONS

BLM is not the only agency that must issue approvals for the Operators' proposal. A list of permits, approvals and authorizing actions necessary to construct, operate, maintain and abandon project related facilities is provided in Table 1.9-1. The PAPA EIS contains complete descriptions of the regulatory programs listed below in Table 1.9-1, as well as their applicability to oil and gas activities in the PAPA. For additional information regarding these regulatory programs, please refer to the PAPA EIS.

**Table 1.9-1
Permits, Approvals and Authorizing Actions Necessary for Construction,
Operation, Maintenance, and Abandonment of Operators' Proposed Action and Alternatives ¹**

Issuing Agency/Permit Name	Nature of Permit/Approval	Authority
Bureau of Land Management Permit to Drill, Deepen or Plug Back (APD/Sundry process)	Controls drilling for oil and gas on Federal onshore lands	Mineral Leasing Act of 1920 (30 U.S.C. 181 <i>et seq.</i>); 43 CFR 3162
Rights-of-way Grants and Temporary Use Permits	Right-of-way grants on Federal lands	Mineral Leasing Act of 1920 as amended (30 U.S.C. 185); 43 CFR 2880
Rights-of-way Grants and Temporary Use Permits	Right-of-way grants on Federal lands	Federal Land Policy and Management Act of 1976 (43 U.S.C. 1761 - 1771); 43 CFR 2800
Antiquities, Cultural and Historic Resource Permits	Issue antiquities and cultural resources use permits to inventory, excavate or remove cultural or historic resources from Federal lands	Antiquities Act of 1906 (16 U.S.C. Section 431-433); Archaeological Resources Public Protection Act of 1979 (16 U.S.C. Sections 470aa - 47011); 43 CFR Part 3; Section 106 of the National Historic Preservation Act
Approval to Dispose of Produced Water	Controls disposal of produced water from Federal leases	Mineral Leasing Act of 1920 (30 U.S.C. 181 <i>et seq.</i>); 43 CFR 3164; Onshore Oil and Gas Order No. 7
U.S. Army Corps of Engineers Section 404 Permit (Nationwide and Individual)	Controls discharge of dredged or fill materials into waters of the United States	Section 404 of the Clean Water Act of 1972 (33 USC 1344)
U.S. Fish and Wildlife Service Consultation Process, Endangered and Threatened Species	Biological Assessment	Section 7 of the Endangered Species Act of 1973, as amended (16 U.S.C. <i>et seq.</i>)
Wyoming Department of Environmental Quality Water Quality Division Notice of Intent - Storm Water Discharge Permit Temporary Discharge Permits	Controls off-site storm water runoff from construction activities resulting in 1 acre or more of disturbance	Wyoming Environmental Quality Act; Section 405 of the Clean Water Act (40 CFR Parts 122, 123 and 124); WDEQ Water Quality Rules and Regulations, Chapters 1, 2, 18
Air Quality Division Permits to construct and operate Notice of Installation	Regulates emissions from project components Notification of Potential Emissions from production equipment	Wyoming Air Quality Standards and Regulations WDEQ Rules and Regulations

Issuing Agency/Permit Name	Nature of Permit/Approval	Authority
Wyoming Department of Transportation Oversize and Overlength Load Permits Utility Permit Access Permit	Permits for oversize, overlength and overweight loads Highway pipeline crossing Highway access construction	Chapters 17 and 20 of the Wyoming Department of Transportation Rules and Regulations Title 12: Code of Civil Procedures, Chapter 26: Eminent Domain Rules and Regulations for Access Driveways as Approved by the Wyoming Highway Commission
Wyoming Oil and Gas Conservation Commission Permit to Drill, Deepen or Plug Back (APD process)	Regulates drilling of all oil and gas wells in the state	Wyoming Oil and Gas Conservation Commission (WOGCC) Regulations Chapter 3, Section 8. W.S. 30-5-104 (d)(i)(C). W.S. 30-5-115
Well location (part of the APD process).	Regulates downhole well location of all oil and gas wells by reservoir or pool	WOGCC Rule: Chapter 3 Section 2, W.S. 30-5-109
Protection of surface waters and productive formations (part of APD process).	Provides general drilling, casing and cementing rules for oil and gas wells.	WOGCC Rule: Chapter 3, Section 22
Well control (part of APD process).	Provides requirements for blowout preventers	WOGCC Rule: Chapter 3, Section 23
Authorization approving drilling and spacing units	Regulates well spacing and pooling of interests by reservoir or pool	W.S. 30-5-104(d)(ii)(F)(iv). W.S. 30-5-109(a),(b),(c) & (f)
Permit to drill to a nonstandard location	Provides for well relocation while maintaining existing well spacing	WOGCC Rule: Chapter 3, Section 3, W.S. 30-5-109
Permit to directionally drill	Provides the notification requirements for controlled directional drilling	WOGCC Rule: Chapter 3, Section 25
Plugging and abandonment of a well (applies to nonfederal lands)	Provides procedures and regulates the plugging and abandonment of oil and gas wells	WOGCC Rule: Chapter 3, Section 18, Chapter 4, Section 2. W.S. 30-5-104 (d)(vi)(B)
Measurement of oil and gas production.	Regulates the measurement and reporting of oil and gas production	WOGCC Rule: Chapter 3, Section 30 and 31, W.S. 30-5-104 (d)(vi)(B)
Permit to complete a well in multiple zones or pools. (Commingling)	Regulates the production of oil and gas from more than one pool in one well	WOGCC Rule: Chapter 3, Section 35
Authorization to flare or vent gas	Regulates the safe venting or flaring of gas to prevent waste	WOGCC Rule: Chapter 3, Section 40
Permit to use an earthen pit (applies to nonfederal lands)	Regulates construction, use and closure of noncommercial reserve, production and emergency pits on drilling and producing locations	WOGCC Rule: Chapter 4, Section 1, W.S. 30-5-104 (d)(vi)(A)
Spills and fires	Requires notification, with a prevention and cleanup plan, of accidental deaths, fires or releases of 10 or more barrels of non-potable fluids that enter or threaten the waters of the State	WOGCC Rule: Chapter 4, Section 3
Workmanlike operations	Regulates the safety and environmental protection of well production facilities	WOGCC Chapter 4, Section 4
Permit underground disposal of water	Regulates the noncommercial underground disposal of non-potable water and oil field wastes	WOGCC Chapter 4, Section 5, W.S. 30-5-104 (d)(vi)(B)
Permit to close a natural gas processing facility	Regulates closure of infield gas gathering and processing facilities	WOGCC Rule: Chapter 4, Section 13 (b)

Issuing Agency/Permit Name	Nature of Permit/Approval	Authority
Wyoming Department of Employment Workers Safety and Compensation Division	Provides the rules and regulations governing the health and safety of employees and employers of oil and gas drilling and servicing, includes equipment spacing, lighting requirements, hours of operation and other items pertinent to pad size and design	W.S. 27-11-105
Wyoming State Engineer's Office Water Well Permit Temporary Industrial Use of Unappropriated Water S.W.1	Grant permit to appropriate groundwater Surface water withdrawal for hydrostatic testing	W.S. 41-121 through 147 Wyoming State Statutes Section 41-3-110
Wyoming State Historic Preservation Office	Cultural resource protection	Section 106 of National Historic preservation Act (NHPA) and Advisory Council Regulations (36 CFR 800)
Wyoming State Lands and Investments	Right-of-way and easements on state lands	W.S. 36-9-118
Sublette County Planning and Zoning	Energy Pipeline Permit	
Planning and Zoning	Driveway Permit	Zoning and Development Regulations of Sublette County Section 7. Wyoming State Statutes Section 18-5-207
¹ This list is intended to provide only an overview of key regulatory requirements that would govern project implementation. Additional approvals, permits and authorizing actions could be necessary.		

1.10 DECISIONS TO BE MADE BASED ON THIS NEPA ANALYSIS

BLM decision makers will decide, based on the analysis contained in this Draft SEIS, whether to allow, and under what mitigating conditions to allow, the further development, operation, maintenance, and reclamation of proposed development and associated surface disturbance on federal lands within the PAPA. After completing the SEIS process, a new ROD will be prepared and released that will supersede the PAPA ROD (BLM, 2000b). Although the ROD may approve modification of the Operators' development program, the BLM must analyze and approve each component of the project that involves disturbance of federal lands on a site-specific basis. The method used to evaluate each surface-disturbing activity is the Application for Permit to Drill (APD) or rights-of-way grants/temporary use permits, which would be required before any construction could occur.