

DECISION NOTICE
AND
FINDING OF NO SIGNIFICANT IMPACT

***Thunderhead
Coal Bed Methane
Project***

Township 43 North
Range 71 West
Campbell County, Wyoming

Douglas Ranger District
Medicine Bow-Routt National Forests and
Thunder Basin National Grassland

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Introduction

This Decision Notice (DN) documents my decision regarding the Thunderhead Coal Bed Methane (CBM) Project. This decision includes the PODs, originally proposed as Thunderhead 1, Thunderhead 2, and Thunderhead 3. An Environmental Assessment (EA) was prepared and was made available to the public for comment. The EA disclosed the environmental effects of the proposal to develop 32 CBM wells on National Forest System lands located within oil and gas leases held by the Lance Oil and Gas Company and other companies or individuals giving production rights to the operator. The Environmental Assessment addresses three alternatives, the Proposed Action (Alternative B), a Modified Development Scenario (Alternative C) and the No Action Alternative (Alternative A). Other alternatives were considered but eliminated from detailed study for reasons outlined in this decision.

An interdisciplinary team of resource specialists and a third party contractor conducted the environmental analysis and documented results in the EA. In accordance with the National Forest Management Act (NFMA) and the National Environmental Policy Act (NEPA), the team considered the affected area, solicited externally and internally for issues and concerns, formulated alternatives that responded to issues, determined the likely environmental consequences based on both the *Oil and Gas Leasing on the Thunder Basin National Grassland Record of Decision, 1994* (1994 Leasing ROD) and the *Land and Resource Management Plan for the Thunder Basin National Grassland, 2001* (Grassland Plan) management goals and objectives, management area direction, standards and guidelines, and proposed mitigation measures in response to potential effects.

My Decision

I have reviewed the EA and the project file, including the public comments and responses for **Thunderhead Coalbed Methane Project** for development of thirty-two (32) CBM wells on the Thunder Basin National Grassland. This project is located on approximately 2,829 acres in Campbell County, Wyoming. The legal description for the area is: Township 43 North, Range 71 West, 6th Principle Meridian.

I have selected Alternative B, with modifications, as the preferred alternative. Alternative B is described in detail in the Environmental Assessment, Chapter ____, pages _____. Through my selection of Alternative B, with modifications, I am approving surface use of NFS lands on Thunder Basin National Grassland for 30 CBM wells and associated facilities. I am modifying Alternative B by not approving surface use for 2 wells – the Federal 21-11-4371 and Federal 12-11-4371. The locations of these two wells are proposed in close proximity (within ¼ mile) to two ferruginous hawks' nests. The Grassland Plan prescribes a ¼ mile buffer around such nests. Even though the 2001 Plan standards do not necessarily apply to pre-existing oil and gas leases, Lance has agreed to follow the 2001 Plan direction by not occupying the surface within the ¼ mile buffer.

Roads

A total of 11.3 miles of road located on NFS lands will be utilized by this project for access to the individual well sites, compressor stations, water disposal sites, for the construction and

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installation of pipelines and power lines, and for the general operation and maintenance of all facilities:

- 1.4 miles of existing access into and within the project area to be used as is
- 0.4 miles of existing road to be upgraded
- 8.5 miles of new road construction as two-track unless otherwise needed to maintain safety or resource protection
- 1.0 miles of new road construction as improved gravel road
- 8.2 miles of existing road to be decommissioned

Pipelines

Three types of pipelines would be constructed and installed below ground within shared utility corridors and amounting to a total 16.2 acres for pipeline corridors on NFS lands:

- Low-pressure gas lines
- Produced water lines
- High pressure gas collector lines

Where feasible, water lines and gas flow lines will be co-located adjacent to project roads, as analyzed in the Project Environmental Analysis. Table 2.3-5 of the EA identifies the type of lines, length and width of the rights-of-way for these lines and acreage by surface ownership.

Water Disposal

Produced water from project wells would be metered at the wellhead and then piped to six discharge points where produced water would be released into channels. Three discharge points exist and are in use. An additional three discharge points are proposed to distribute the water. Two of the proposed new discharge points would be located on NFS lands, and one would be located on private land. Each discharge point would require approximately 0.25 acre for construction purposes. New discharge points would require approximately 0.5 acre on USFS land.

Existing and proposed discharge points are located on tributaries to Little Thunder Creek rather than the main creek channel to promote evaporation and infiltration. Maximum produced water discharge from the project wells is expected to be 14 gallons per minute (gpm) per well and would result in 420 gpm (1.0 cubic feet per second [cfs]) being discharged into the Little Thunder Creek watershed. All water disposal issues have been identified in the Project Water Management Plan and again in the Project EA, at Section 3.4.2.

Central Gathering Facilities

Produced water and gas from project wells would be transported to six central gathering facilities. Three central gathering facilities would be constructed for this project. Three central gathering facilities already exist and are in use by other non-project wells. Gas would be metered at each facility. Each central gathering facility requires approximately 0.25 acre of disturbance. The total amount of new disturbance associated with construction of all the headers would be 0.25 acre on USFS land and 0.5 acre on private land. Details pertaining to the central gathering facilities are shown in the EA in Table 2.3-6.

Compressor Stations

No compressor stations are included in this project. Gas compression will occur at existing compressor stations on private lands.

Culverts

Five (5) new culverts and three existing culverts would be utilized to facilitate the flow of discharged water produced from project wells. All of the existing culverts were inspected and found to be in good condition and adequate to handle the expected flows. New culverts would be located at existing crossings of perennial channels expected to have flows from produced waters. New culverts would be constructed in accordance with USFS guidelines as detailed in the BLM and USFS Gold Book (BLM and USFS, 1989).

Gates and Cattleguards

Approximately six (6) new cattle guards and gates would be installed to facilitate range management. The locations for the gates are shown on Figure 2.3-1 of the EA.

Stock Tanks

Five (5) stock tanks will be installed on NFS lands to enable produced waters to be used by livestock. Stock tanks were designed and located to accommodate livestock access, control erosion, and limit sedimentation as described in Section 2.3.5.7 of the EA.

Note: the number of wells, miles of road, and miles of utility corridors actually installed may be less than stated here due to the loss of gas potential that is occurring in the field. In no cases shall the numbers be greater than stated in this Decision.

Mitigation Measures and Monitoring

Mitigation measures and associated monitoring are integral components of this decision. All lease stipulations, conditions of approval and mitigation measures listed in the Environmental Assessment (pages 2-23 to 2-32) and in Appendix D will be implemented as part of this decision. All of these measures were design features of the project and were considered in the analysis of effects. Based on the results of that analysis, no additional measures are needed to further mitigate effects of the project. The Company, in cooperation with the USFS, will develop a specific monitoring program to:

- Verify implementation of mitigation measures and design features adopted in EA, Mitigations, and COAs.
- Measure the success of implemented mitigation measures.
- Modify measures as needed based on observed performance.
- Provide feedback to resource specialists and line officers.

The monitoring program will allow for amendments to modify tasks and obligations as conditions change in the project area, and as determined by the authorized officer where it is warranted. Any amendments or changes to the proposal would be in conformance with the analysis written and the conclusions and decisions made.

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Monitoring information will be shared with the BLM in an effort to comply with the November 1991 Interagency Agreement between the USDA Forest Service and the USDI Bureau of Land Management for Oil and Gas Operations.

Rationale for My Decision

Based in large part on the issues identified and analyzed as documented in the EA, and the possible beneficial and adverse effects to the resources, I have decided to implement Alternative B, with modifications. Alternative B, as modified, allows the Operator to develop the leases, which is an existing right. Alternative B, as modified, best responds to the Purpose and Need for the project. It has also been shown to be consistent and in compliance with Grassland Plan Management Direction for Management Area 8.4 Mineral Production and Development, and other applicable laws, regulations and policies.

I considered Alternative C, the modified development scenario. This alternative was developed to meet the intent of the Revised Grasslands Plan and provide protection for sage grouse and ferruginous hawks. However, no sage grouse have been observed within the last five years during breeding season at the historic lek during annual surveys conducted by USFS biologists. Therefore this lek is not considered active under Standard 46 of the Revised Grasslands Plan and no mitigation is required. The modifications I have added to Alternative B are the same as were included in Alternative C for protection of ferruginous hawk nests.

My Decision meets the requirements of the National Environmental Policy Act (NEPA) by responding to the Purpose and Need, responding to the issues identified in the analysis process, and responding to the public comments received during the EA comment period provided.

I have summarized the key points of my rationale below:

Mineral Lease Rights and Regulatory Authority

Oil and gas leases issued by the BLM are a contractual commitment from the United States to allow for development by the Company in accordance with stipulations and restrictions incorporated within the lease. The lessee's right to drill and develop the leasehold cannot be denied on leases allowing surface occupancy, except when occupancy would result in a clear violation of a non-discretionary statute, such as the Endangered Species Act. Agency-imposed COAs that would render a proposed operation economically or technically infeasible are not consistent with the lessee's rights and cannot be required (BLM Instruction Memorandum 92-67 1991). The lessee has the right to construct roads and ancillary facilities on the surface needed to develop the oil and gas resources, subject to the lease stipulations. The implementation of Alternative B will allow the Lance Oil & Gas Company to exercise their right to explore and develop their Thunderhead leases.

Resource Analysis and Protection Measures

Alternative B, as modified, provides for protection of the potentially affected resources before, during and after the planned construction, drilling, testing, production, and reclamation activities associated with these development activities.

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The effects on the quality of the human environment are primarily of local concern and, with the implementation of standard permit Conditions of Approval that have been made a part of this decision and that will be required, any adverse impacts that could occur as a result of this action will be insignificant and of relatively short duration. The effects will not adversely impact public safety and do not involve any unique or unknown risks. The project will not result in a violation of any Federal, State or local law or requirements imposed for the protection of the environment.

Water Disposal: The EA (Sec. 3.4.2.2) and its associated Water Management Plan, discuss the amounts, timing, quality, and anticipated volumes of water releases into the North Prong of Little Thunder Creek. It is estimated that nearly 100% of the water discharged from project wells under maximum flow conditions would be lost through conveyance at the point where the junction of the North Prong and the main channel of Little Thunder Creek meet. This point is about 10 miles below the discharge points. The water quality of the produced waters is expected to be the same or better than the native water in Little Thunder Creek as displayed in Table 3.4-3 of the EA. NPDES permits will be obtained by the Company for these releases. Long-term water quality and flow monitoring are required in conjunction with the NPDES permits.

Air Quality: In consultation with the Environmental Protection Agency, analysis of the affects to air quality has been modified in the Final EA, (Section 3.3 and Table 3.3-2) and we have made a determination that significant effects to air quality due to this project are not likely.

Watersheds, Soil, and Vegetation: The effects on the watersheds, soil and vegetation will be minimal, as determined in the EA, Section 3.2, 3.4, and 3.5.

Wildlife, T&E and Special Status Species: The potential adverse impacts to endangered, threatened, sensitive and rare plant and animal species or their habitats are minimal. (Biological Assessment/Biological Evaluation/MIS report, Greystone and A. Allen, (April 2004).

The Thunderhead CBM project will have "No Effect" on the black-footed ferret and Ute Ladie's tresses. The project "May Affect, Likely to Adversely Affect" the Bald eagle due to potential electrocution on the overhead power lines. Overhead power lines associated with the project would be constructed on adjacent private lands. This determination received concurrence in the form of a Biological Opinion (BO) from the USFWS. The BO included Terms and Conditions which must be incorporated into the project in order to comply with the Endangered Species Act. These Terms and Conditions have been incorporated into the mitigation measures and monitoring plan for this decision.

The Project will have "No impact" on the following R2 sensitive species: finescale dace, plains minnow, black-tailed prairie dog, fringed myotis, Townsend's big-eared bat, sage sparrow, northern harrier, western burrowing owl, Brewer's sparrow, yellow-billed cuckoo, peregrine falcon, American bittern, black tern, purple martin, flammulated owl, Lewis' woodpecker, olive-sided flycatcher, prairie moonwort, foxtail sedge, Barr's milkvetch, and squashberry.

The Project may have a "Beneficial Impact" on the northern leopard frog.

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The Project "May adversely impact individuals, but is not likely to result in a loss of viability in the Planning Area, nor cause a trend toward federal listing" for the following R2 sensitive species: swift fox, ferruginous hawk, long-billed curlew, loggerhead shrike, greater sage grouse, mountain plover, grasshopper sparrow, McCown's longspur, chestnut-collared longspur.

Additionally, effects of the project on one management indicator species (MIS), sage grouse, were considered. This is the only MIS expected to be affected by the project. There is one historic sage grouse lek in POD 1 and another historic lek within 2 miles of the project area. Neither lek has been active in the last 5 years and are therefore considered inactive. Design features have been incorporated into the project to limit adverse effects and maintain nesting, brood rearing, and wintering habitats that exist within the project area. The project has been designed to comply with all objectives, standards, and guidelines in the Revised Grasslands Plan for the protection of sage grouse. Cumulative effects from other on-going activities in the analysis area, particularly coal mining, may adversely affect local sage grouse populations as previously disclosed in the Powder River Basin Oil & Gas EIS (BLM 2003). Sage grouse populations on Thunder Basin NG will continue to be monitored to determine population trend and the adequacy of current protections.

Cultural and Paleontological Resources: Cultural Resource sites and paleontological resources occur in the project area. No ground disturbing activity will occur at any known heritage or fossiliferous resource location. All sites eligible for listing in the National Register of Historic Places will be avoided by the Proposed Action. To ensure that cultural resource sites were identified, the Company has conducted Class I and Class III inventories of the Project Area to determine the location of cultural sites of potential significance.

Land Use: All land uses identified in this project would be accomplished by the operator within the lease boundary, under the authority of the oil and gas lease.

Visual Resources: The area is managed for solid mineral production, 8.4 Mineral Production and Development, Chapter 3, TBNG Plan Revision 2001. The Scenic Integrity Objective for this project area is Low. Mineral operations of all types are emphasized and include CBM development, oil and conventional gas development, heavy-haul trains, coal mines, and associated facilities to accommodate these uses. The Plan Revision specifies that facilities and landscape modifications are visible but reasonably mitigated to blend and harmonize with natural features. Roads, buried pipelines, compressor stations, and overhead and buried power lines are an acceptable intrusion into the landscape and may be constructed under this Decision, incorporating the mitigation measures discussed in Section 2.5 of the EA and Appendix D.

All facilities will be removed after the natural gas reservoirs have been depleted. All surface disturbances will be reclaimed to the satisfaction of the USFS. Therefore, I have determined that impacts associated with this project are acceptable. A Reclamation Plan will be submitted to the USFS prior to commencement of any activity pursuant to this project.

The project will not result in a violation of any Federal, State or local law or requirements imposed for the protection of the environment.

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After reviewing the EA, the public comments received throughout the analysis process, and the project analysis file, I have determined that this CBM well development project serves the public interest. The resource values present in the project area that will be preserved and protected, and the Grassland Plan management objectives that can be accomplished for Management Area 8.4, will be at a level that serves that interest and need.

Environmental Documents Considered in Making the Decision

This decision was made only after carefully considering the contents of the project EA, public comments, agency response to comments, and the supporting project record. The 1994 Oil and Gas Leasing EIS and the Thunder Basin National Grassland Plan, 2001 Revision were reviewed and the analysis incorporated into the mitigation measures as appropriate for site specific conditions. In addition, I considered the 2003 Powder River Basin Oil and Gas Project FEIS; and other applicable laws and regulations. Information from all of these documents was used to formulate site-specific project analysis when considering the possible cumulative effects that could occur by the drilling and development of these 32 coal bed methane wells on NFS lands. The Mitigations Table in the EA (Table 2.3-9) and Appendix D identify more specific measures that were built into the project proposal at the start of the analysis.

Regulatory Environment: Prior to implementing this project, the Operator is responsible for obtaining all necessary and applicable permits involving water discharge and other well field development permits. Permitting offices include the Wyoming State Engineer (NPDES permits) and the Wyoming Department of Environmental Quality (Storm-water Drainage permits) and other Federal, State or local entity with requirements applicable to the project.

After reviewing the EA, the public comments received throughout the analysis process, and the project analysis file, I have determined that this CBM well development project serves the public interest. The resource values present in the project area that will be preserved and protected, and the Grassland Plan management objectives that can be accomplished for Management Area 8.4, and will be at a level that serves that interest and need.

Project Initiation and NEPA Process

This project was initiated in March 2001, when Barrett Resources Corporation submitted APDs to the Buffalo Field Office of the Bureau of Land Management (BLM), to produce coal bed methane gas in the Thunderhead area of Thunder Basin National Grassland.¹ At that time the PODs, including 48 wells, were proposed as Thunderhead 1, Thunderhead 2, and Thunderhead 3. Following submittal of those APDs, the BLM forwarded the project to the Douglas District Office. In August 2001, the Douglas District Ranger responded to the BLM with acknowledgement of the project, a discussion of the requirements of the NEPA process, and the anticipated time schedule for completing the project. In August 2001, Barrett merged with Williams Production RMT Company (Williams) and the leases were transferred to Williams. In February 2002, some of the proposed wells became the property of Westport Resources Corporation. These wells were dropped from the project. At that time the total well count

¹ Oil and gas leases under which the operator has made application were offered for sale by the Bureau of Land Management between the years of 1981 and 1997.

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dropped to the current proposed 32 wells. On November 1, 2003, leases in which the proposed Thunderhead PODs were proposed became the property of Lance Oil & Gas Company.

The NEPA process was initiated by the Douglas Ranger District on July 5, 2001 with the publication of a scoping notice in the Casper Star-Tribune. Initial comments were accepted for thirty days following publication of the legal notice. A total of 8 comments were received from agencies, individuals and organizations. The EA was available for a 30-day comment period beginning on May 30, 2004. A total of 5 comment letters were received.

The Purpose and Need for the Action

Implementation of the Proposed Action would:

- Contribute to available natural gas supply for the national market;
- Prevent drainage of the federally owned gas resource to adjacent, nonfederal wells; and
- Allow Lance to develop natural gas (methane) from coalbeds pursuant to Lance's rights under existing oil and gas leases granted by the BLM.

Natural gas is an integral part of the U.S. energy future due to its ready availability from domestic sources, the presence of an existing market delivery infrastructure, and the environmental advantages associated with this clean-burning fuel. Developing the domestic reserves of natural gas helps to reduce national dependence on potentially unstable foreign suppliers and ensures an adequate, stable supply. Production of domestic natural gas has helped to ensure that the U.S. will maintain its economic well-being and promotes national security. The environmental advantages of natural gas combustion versus other conventional fuels are emphasized in the 1990 Clean Air Act amendments (42 USC 7671 *et seq.*).

Effects of My Decision

Many potential impacts described as Issues (EA, Section 1.7) were reduced by careful design of the proposed action as described in Section 2.3 of the EA. Other potential impacts will be completely mitigated or reduced to a low level by the application of the design features included in Table 2.3-9 of the EA and the Conditions of Approval, displayed in Appendix D of that document, and along with all other aspects of the proposal outlined in the EA.

A key issue considered in the analysis was the disturbance to wildlife. As discussed in the EA at Section 2.4 and Section 3.6, there is a historic sage grouse lek and a historic ferruginous hawk nest location in the Project Area. These locations were surveyed numerous times to in an attempt to document use of these two sites by these species. No grouse have been seen using the lek since 1992. No actual raptor nests were ever found nor were any birds seen in the vicinity since the project was initiated. The analysis does not predict any likely adverse effects to these species as a result of Alternative B, EA 3.7.2.2. However, one of the ferruginous hawk nests was last known to be active in 1999. The Grassland Plan specifically protects ferruginous hawk nest locations for a period of 7 years following the last known year of activity. Therefore this nest location will be protected through 2006 to comply with the Grassland Plan. .

Some resource impacts cannot be completely mitigated and will occur from implementation of my decision during the 4-7 year life of the project. Some impacts will continue beyond the end

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of this project until final site reclamation occurs. I have considered these impacts and have found that none of them will be significant in either context or intensity.

These impacts may include:

1. The removal of vegetation for the new roads and drill pad sites will result in about 51 acres of short-term loss and 5 acres of long-term disturbance, resulting in loss of approximately 1.5 animal unit months of grazing capacity long-term. This loss is an inconsequential fraction of the permitted animal unit months in the respective allotments (EA, Section 3.8.2.2).
2. Possible displacement of wildlife due to the high volume of activity associated with this project. It is expected that activity will lessen as more wells come on line. At the end of the 4-7 year life span of the wells, it is expected that wildlife activity would resume when final reclamation is completed.

Benefits will also occur from implementation of my Decision. Produced waters will be available for livestock use at stock tanks. Produced water will also maintain water levels at Little Thunder Reservoir for aquatic species and recreational uses.

Public Involvement

Scoping for Issues and Concerns

A public scoping statement describing the Proposed Action was mailed in July 2001 to organizations, agencies and individuals identified as parties potentially interested in similar activities on the Thunder Basin National Grassland, and parties that may be affected by the proposed activity (Appendix B of the EA). The solicitation also included adjacent landowners, tribal governments, the County Commissioners, State of Wyoming-Office of Federal Land Policy, which coordinates review and input from all state agencies, and the Wyoming Congressional Delegation and was published in the Casper Star-Tribune. Eight comment letters were received as a result of that scoping effort (Tables 1-7.1 and Appendix C of the EA). In addition, telephone calls were received and those are also identified below. The respondents included:

State of Wyoming – Office of Federal Land Policy
Wendell Funk, Palmyra, Illinois
Wyoming Department of State Parks & Cultural Resources
Wyoming Game and Fish Department
Wyoming Business Council
Biodiversity Associates
US Dept. of Interior, Fish and Wildlife Service
Paul R. Stuart

Using the comments from these respondents along with those from the interdisciplinary team, a list of issues and concerns was developed. In reviewing that list the USFS considered:

1. Those that drive alternative development.

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2. Those that would be analyzed in the Environmental Effects and/or Consequences.
3. Those already decided by law, regulation, Forest Plan, or other higher level decision.
4. Those outside the scope of the Proposed Action.

Potential mitigation measures described in the EA were modified in response to public comment, and these modifications appear in the Conditions of Approval and the stipulations imposed for the project. Comments were also used to develop one alternative to the Proposed Action.

I recognize that some commenters do not support oil and gas activities in this area. However, oil and gas exploration and development is a recognized use of National Grasslands, and managing these activities is part of the Forest Service mission. The Federal oil and gas leases in the project area were issued between the years of 1981 and 1997. The mineral leases issued by the BLM constitute a contractual commitment from the United States to allow for development by the Lessee in accordance with stipulations and restrictions incorporated within the lease.

I feel that the Conditions of Approval along with the mitigations built into the proposed action render this activity within an acceptable level of impact and will not significantly impair resources on the Thunder Basin National Grassland.

Public Comment on Environmental Assessment

On May 30, 2004 the Environmental Assessment was made available for public comment. The mailing list used for the scoping effort was utilized for this effort along with several additional names and addresses as a result of the scoping. Public notice was published in the Casper Star-Tribune on May 30, 2004. Four agencies, groups or individuals commented on the EA. A list of the comments received and the response to those comments is in Appendix G of the EA. The following responded to the EA:

U.S. Environmental Protection Agency
Wendell Funk, Palmyra, Illinois
Wyoming Game & Fish Department
Wyoming Department of Environmental Quality
Wyoming Office of State Lands and Investments

Appendix G summarizes those comments received and responses developed by the Interdisciplinary Team Specialists and other agency and non-agency specialists. I carefully considered the written comments. One letter was received after the close of the comment period and is not considered “timely” under 36 CFR 215.6. None of the comments in the other four letters were considered “substantive” as defined in 36 CFR 215.2. Appendix G is available and will be provided to all parties that commented on the Environmental Assessment along with a final EA, a copy of this Decision and all attachments.

I conclude that the environmental analysis performed and the environmental assessment written adequately studied the potential consequences of the proposed actions and the alternatives. I conclude that no significant impacts would occur as the result of my decision. I conclude that preparation of an EIS is not warranted for this decision.

Summary of Alternatives

Alternative A, No Action

Under the No Action Alternative, the USFS would not approve the proposal as currently described in the Proposed Action on Federal surface or minerals in the Project Area. The ability of a decision-maker to select the No Action Alternative is severely constrained by the contractual rights of the Company to develop its mineral leases as granted by the United States. A No Action Alternative provides a benchmark that enables the decision-maker to compare the magnitude of environmental effects among alternatives to existing management conditions and consideration of the No Action Alternative is required by NEPA (40 CFR 1502.14 (d)).

Denial of the current proposal is not a denial of natural gas development in the Project Area. Although the BLM can deny approval of a particular APD, it cannot deny, in general, occupancy of the surface for the exploration and development of federal minerals that have been leased, unless they were leased with a no surface occupancy stipulation. An oil and gas lease grants the lessee the "right to drill for, extract, remove, and dispose of all oil and gas deposits" from the leased lands, subject to the terms and conditions of the respective leases (BLM Form 3100-11). The denial of the right to develop a valid lease would violate the lessee's contractual rights, as well as result in the loss of federal royalties. Authority for denial can be granted only by Congress (United States Constitution, Article IV, Section 3, Clause 2). The BLM, therefore, can only suspend the lease pursuant to Section 39 of the Mineral Leasing Act pending consultation with Congress for a grant of authority to preclude drilling and provide required compensation to the lessee.

A decision for the No Action Alternative would be considered under the following circumstances:

- If there were no acceptable means of mitigating significant adverse impacts to stipulated surface resource values, such that approval would result in a violation of protective environmental laws; or
- If the USFWS were to conclude that the Proposed Action would likely jeopardize the continued existence of any threatened, endangered, or proposed species in which case the leasing permit application may be denied in whole or in part.

The selection of the No Action Alternative would not allow existing leases to be developed. Its selection would indicate that project development would significantly adversely affect surface resource values, including the possibility of extinction of a protected species. Selection of the No Action Alternative would allow existing land uses to continue in their present state. Existing surface management activities, such as surface coal mining, livestock grazing, and wildlife habitat would continue as they are currently implemented. Implementation of the No Action Alternative, as presented in this hypothetical analysis, would preclude all drilling, construction, production, and reclamation activities as planned by the Proposed Action. CBM development would continue in the general area of the Project on federal, state, and private lands.

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Alternative B, Proposed Action

The US Forest Service proposes to approve a Surface Use Plan of Operations for Lance Oil and Gas Company to drill, complete, operate, and reclaim 32 CBM wells from the Fort Union Wyodak Coal reservoir in the Project Area and located on Forest Service System lands. As discussed in Chapter 1 of the EA, the Proposed Action at the time of this decision is a smaller project than that discussed in the Scoping Statement. The Project Area comprises approximately 2,829 acres in Township 43 North, Range 71 West, Campbell County, Wyoming. All wells would be spaced at one well per 80 acres. Productive well life is estimated to be about 10 years. Average approximate depth of these wells would be less than 1,000 feet. The Project is described in Section 2.3 of the EA and displayed in Figure 2.3-1.

The Company would also construct ancillary facilities needed to support these wells. These facilities include access roads, small diameter pipelines for collecting gas and produced water, electrical utilities, and facilities for discharging produced water.

Implementation of the Proposed Action would occur in three primary phases:

1. Drilling and construction of facilities,
2. Production and maintenance, and
3. Decommissioning and reclamation.

Since the leases granting the Operator authority to develop the minerals on these lands were purchased between the years of 1981 and 1997, USDA Forest Service and the BLM had already authorized surface occupancy with requirements that predated the 2002 Grassland Plan Record of Decision. The proposal was modified during the analysis process to implement the Standards and Guidelines in the Thunder Basin National Grassland Record of Decision.

Alternative C, Modified Development Scenario

Under Alternative C, Lance would be authorized to drill 28 wells, use roads, and develop ancillary facilities in the Thunderhead Project Area as described in Section 2.4 of the EA and displayed in Figure 2.4-1. This alternative was developed in response to internal and public concerns regarding the effects of the project on sage grouse and ferruginous hawks. There is one historic sage grouse lek and two historic ferruginous hawk nest locations in the project area. This alternative was developed to minimize adverse impacts to those locations based on standards included in the Revised Grasslands Plan. Two wells were dropped that would be located within 0.25 mile of the historic lek. Two more wells were dropped that were located within 0.25 mile line-of-sight of the best estimated location of two ferruginous hawk nests.

Alternatives Considered but Not Analyzed in Detail

Alternatives are required to be technically and economically feasible and to provide the opportunity to achieve the Proposed Project. Other alternatives were considered but not analyzed in detail because they would either not meet the Purpose and Need of the Proposal, would be in violation of the Onshore Orders, or would not be within the scope of this environmental process.

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Some of the issues determined during the scoping process suggested potential alternatives to the Proposed Action. These issues were examined and a determination was made that:

- The suggested alternative is not viable for reasons indicated, or
- Applicant-committed mitigation measures will eliminate or mitigate the concern.

Issues raised during the internal and external public scoping process and resolutions to those issues were incorporated into the proposal, as identified in Appendix C or were included in the Surface Use Plan of Operations. Other alternatives were entertained but not analyzed in detail because there either is not the technology available to accomplish the task, the analysis did not bear out significant impacts that required additional mitigation, or mitigation already applied through the Conditions of Approval or site-specific stipulations would adequately relieve the impact. Alternatives considered included additional mitigation for wildlife, reinjection of produced waters, use of alternative access routes, use of helicopters, use of directional drilling, and designation of RNAs in the project area. Section 2.7 of the EA describes in better detail those issues, and why they were or were not incorporated into alternatives, mitigations, site specific stipulations, COAs or made a part of the proposed action.

Findings Required By Laws

National Forest Management Act of 1976 (NFMA)

The statutes and regulations governing management of the NFS provide that all actions allowing the use and occupancy of forest lands must be consistent with the land and resource management plan for that Forest or Grassland (16 U.S.C. § 1604(i); 36 C.F.R. § 219.10(e)). The Thunderhead Coal Bed Methane Project would be located upon lands managed under the Thunder Basin National Grassland, Revised Plan, 2001.

Site-specific project activities for developing oil and gas leases on the Thunder Basin National Grassland (TBNG) are subject to opportunities granted, and limitations imposed, by the Grassland Plan and the FEIS for Oil and Gas Leasing on the TBNG, as long as limitations would not violate lease rights granted. In April of 1994, the FS completed a Final Environmental Impact Statement (FEIS) and issued a Record of Decision (ROD) that authorized the oil and gas leasing action on the TBNG. In that ROD, the Regional Forester made a decision about leasing (36 CFR 228) and also provided surface use guidance for developing oil and gas resources on TBNG.

On July 31, 2002, Rick Cables, the Rocky Mountain Regional Forester, signed a Decision implementing Alternative 3, in the Northern Great Plains Environmental Impact Statement (EIS), which resulted in the Thunder Basin National Grassland Management Plan Revision. The Plan provides for land-use activities relating to public safety, health and welfare, public service improvements, and activities contributing to increased economic activity associated with NFS resources, such as oil, gas, and minerals. I referred to and relied heavily upon the information contained in that EIS and the NEPA project file in making my decision for this CBM project.

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With concurrence from the lessee/operator, this project proposal integrated all Standards and Guidelines contained in the Plan, where they are relevant to project activities.

Endangered Species Act of December 28, 1973 (87 Stat. 884) P.L. 93-205, as amended.

Section 7 of the Endangered Species Act (ESA) requires all Federal agencies to consult with the U.S. Fish & Wildlife Service (USFWS) to ensure that any action it undertakes will not jeopardize the continued existence of a threatened or endangered species or its critical habitat. 16 U.S.C. § 1536(a)(2). The Forest Service prepared a Biological Assessment/Biological Evaluation (BA/BE/MIS) as an analysis of the potential impacts to listed species that would result from the Project (the BA/BE is available for review in the Project Record). Formal consultation was initiated and the Forest Service received a Biological Opinion and letter of concurrence from USFWS. As documented in the BO from the USFWS, the USFS has met the requirements as outlined in ESA, Section 7.

National Historic Preservation Act

National Historic Preservation Act of October 15, 1966 (80 Stat. 915) P.L. 89-665, as amended, & Archeological Resources Protection Act of October 31, 1979 (93 Stat. 721) P.L. 96-95, as amended. Section 106 of the National Historic Preservation Act requires all Federal agencies to consider the impacts of their undertakings on historic properties and provide the Advisory Council on Historic Preservation with a reasonable opportunity to comment on such undertakings. Consequently, prior to proceeding with any Federal undertaking, the Federal agency must analyze the potential impacts to historic properties and determine what means might be necessary to avoid or minimize any such impacts.

A Heritage resource inventory and report have been completed for the Federal lands in the project area. The Wyoming State Historic Preservation Officer has concurred with the Forest Service determination that the project will have no effects on cultural resources.

Executive Order 11990 - Protection of Wetland 42 FR 26961 (signed May 25, 1977), and Executive Order 11988 - Floodplain Management 42 FR 26951, (signed May 25, 1977).

The Forest Service has evaluated the planned action in accordance with these Executive Orders and the decided action has been found to be in compliance with those orders. No wetlands or floodplains occur in the project area. Little Thunder reservoir is located outside of the project area and within the analysis area. The no significant impacts to wetlands or floodplains were identified.

Compliance with Other Laws and Conditions

I ensured that my decision was also consistent with all other relevant laws, regulations, and policies including but not limited to:

- Organic Administrative Act of 1897
- Multiple Use-Sustained Yield Act of 1960
- Forest and Rangeland Renewable Resources Planning Act of 1974
- Clean Air Act of 1955, as amended in 1990
- Protection of Wetlands Executive Order 11990
- Clean Water Act (Federal Water Pollution Control Act) of June 30, 1948, as amended in 1972
- Mineral Leasing Act of February 25, 1920 as amended, including the Federal Onshore Oil and Gas Leasing Reform Act of 1987
- Federal Land Policy and Management Act of 1976

Finding of No Significant Impact (FONSI)

I have considered both the beneficial and potential adverse effects of Alternative B (the Action Alternative), as modified, and the mitigation measures. Based on my experience with other CBM projects in the same vicinity and the results of the site-specific environmental analysis, and after a review of the EA and the project analysis file, I have determined that the effect(s) of implementing this alternative will be limited in scope and intensity.

The Management Area Direction for the project area, 8.4 Mineral Production and Development, Chapter 3, TBNG Plan Revision 2001, states “these areas are managed for solid mineral operations. Mineral operations of all types are emphasized to effectively and efficiently remove available commercial mineral resources, concurrent with other ongoing resource uses and activities...Visitors can experience frequent encounters with people, heavy equipment and noise”. The area immediately east of the project is heavily impacted by the coal mining operations, as stated in the EA 3.2.1.2. The closest coal mine to the Project Area is the Black Thunder Mine less than 2 miles to the east. In 2000, Campbell County coal mines produced around 88.4 percent of Wyoming’s overall coal production; a total of 299,650,294 tons of coal (CCEDC, 2003, online data). CBM drilling immediately ahead of the coal operation serves to extract the available gas before it dissipates out of the mine high-walls.

Therefore, it is my Decision that any effects that may occur will be within an acceptable range, and will, in and of themselves, or by using the appropriate mitigation measures contained in this decision, result in no significant adverse environmental impact(s) (40 CFR 1508.27), either individually or cumulatively, to the physical or biological components of the environment, as defined in 40 CFR 1508.27.

Based on my review of the Environmental Assessment, including appendices and supporting documents contained in the NEPA process file, it is my conclusion that Alternative B is not a major Federal action that would significantly effect the quality of the human environment as defined at 40 CFR 1508.27. Therefore, an environmental impact statement will not be prepared. This finding is based on the following factors:

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1. Both beneficial and adverse effects have been considered, and this action will not have a significant adverse impact on the quality of the human environment. The context of this project is local to the Powder River Basin, the Thunder Basin National Grassland and Campbell County, Wyoming with environmental implications for the immediate/local area, only.
2. Public health and safety have been considered in formulating the proposed action for this project. Industry is obligated by numerous laws and regulations governing implementation of a drilling program. The oversight for meeting industry regulations is met by other Federal, State and local agencies and is not under direct authority of the Forest Service. No public health and safety issues have been raised in regards to this decision.
3. This project area does not involve any characteristics or circumstances in the geographic area that are unique, such as proximity to heritage resources, park lands, prime farmlands, wetlands, wild and scenic rivers or ecologically critical areas.
4. This CBM well development project is similar to other CBM projects that have occurred elsewhere on the Thunder Basin National Grassland. While CBM projects are controversial with some public and environmental groups, there are no scientific disputes among Forest Service professionals and trained resource management specialists over the likely effects of this project on the quality of the physical, biological and human environments.
5. This action does not involve any *unique* or *unknown risks* to the human environment. It is similar to past actions that have occurred on the Thunder Basin National Grassland. The probable effects and risks are well understood.
6. Neither the actions planned, nor this decision, establish a precedent for future actions with significant effects. I have concluded that they do not represent a decision in principle about any future action as every proposed coal bed methane well development project must be considered and evaluated on its individual merits.
7. There are no known significant cumulative effects between this project and other projects implemented or planned on areas separated from the affected area of this project beyond

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those described in the Powder River Basin Oil and Gas EIS. Those effects were disclosed previously in that document. This action, as related to past, other present and foreseeable future actions addressed in the Cumulative Effects section of the EA (Chapter 3), will not individually or cumulatively result in additional significant adverse impacts to the human environment that have not been previously disclosed.

8. The action will not adversely effect any historic sites now listed or eligible for listing on the National Register of Historic Places, nor will it cause the loss or destruction of any other significant scientific, cultural, heritage, historic, or prehistoric or paleontological resource. This finding is based upon the results of site-specific cultural and paleontological resource surveys conducted in the Thunderhead project area as part of the project Plan of Development, and consultation with the Wyoming State Historic Preservation Officer. (EA at 3.9.4)
9. The Thunderhead CBM project will have "No Effect" on the black-footed ferret and Ute Ladie's tresses. The project " May Affect, Likely to Adversely Affect" the Bald eagle due to potential electrocution on the overhead power lines. Consultation with USFWS has been completed and we received concurrence in the form of a Biological Opinion from the USFWS.
10. The Project will have "No impact" on the following R2 sensitive species: finescale dace, plains minnow, black-tailed prairie dog, fringed myotis, Townsend's big-eared bat, sage sparrow, northern harrier, western burrowing owl, Brewer's sparrow, yellow-billed cuckoo, peregrine falcon, American bittern, black tern, purple martin, flammulated owl, Lewis' woodpecker, olive-sided flycatcher, prairie moonwort, foxtail sedge, Barr's milkvetch, and squashberry.

The Project may have a "Beneficial Impact" on the northern leopard frog.

The Project "May adversely impact individuals, but is not likely to result in a loss of viability in the Planning Area, nor cause a trend toward federal listing" for the following R2 sensitive species: swift fox, ferruginous hawk, long-billed curlew, loggerhead shrike, greater sage grouse, mountain plover, grasshopper sparrow, McCown's longspur, chestnut-collared longspur.

11. This action does not constitute, nor will it lead to any violation of any Federal, State or local law, ordinance or requirement imposed for the protection of the environment.

Implementation and Appeal Provisions

Since no substantive comments to this project were received during the 30-day comment period, this decision is not subject to appeal pursuant to 36 CFR 215.12. Implementation may begin as soon as the Permits to Drill are issued by the BLM, subject to the lease stipulations and Conditions of Approval included in this decision.

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Contact Person(s)

The record of the environmental effects analysis process and project file are available for public review at the Douglas Ranger District, 2250 East Richards Street, Douglas, Wyoming. To request a copy of the DN/FONSI or Final EA please contact Mike Sierz at (307) 359-4690. For further information about this decision and the analysis process that preceded it, contact Alice Allen, Project Manager, at (605)-673-4853, <mailto:aaallen@fs.fed.us>

Responsible Official:

Misty A. Hays
Deputy District Ranger

Date:

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