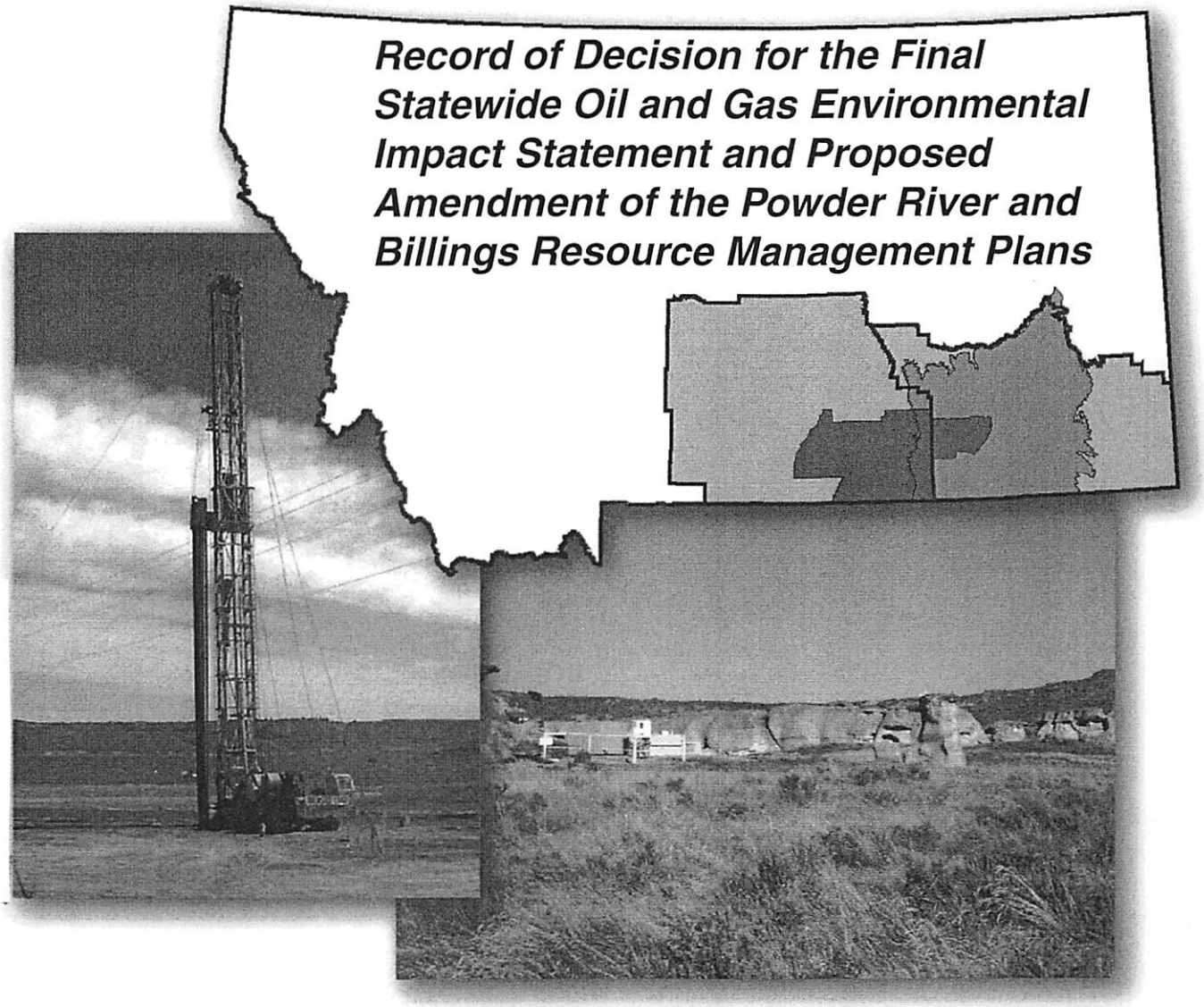
United States Department of the Interior
BUREAU OF LAND MANAGEMENT
Miles City Field Office
Billings Field Office

April 2003

MONTANA

Record of Decision for the Final Statewide Oil and Gas Environmental Impact Statement and Proposed Amendment of the Powder River and Billings Resource Management Plans



Record of Decision

MISSION STATEMENT

It is the mission of the Bureau of Land Management to sustain the health, diversity and productivity of the public lands for the use and enjoyment of present and future generations.

BLM/MT/PL-03/011

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Miles City Field Office
111 Garryowen Road
Miles City, Montana 59301-0940
http://www.mt.blm.gov/mcfo/

In Reply To:

Dear Reader:

This is a copy of the Record of Decision and approved resource management plan amendments for the Powder River and Billings Resource Management Plans. The RMP amendments provide guidance for managing oil and gas activities on over three million BLM-administered oil and gas acres in the Powder River RMP area of the Miles City Field Office and the Billings RMP area of the Billings Field Office.

The Proposed RMP Amendments were analyzed in the *Montana Statewide Final Oil and Gas EIS and Proposed Amendment of the Powder River and Billings RMPs* published in January 2003. The EIS was prepared with the State of Montana (Department of Environmental Quality and the Board of Oil and Gas Conservation) as co-leads and with the following Cooperating Agencies: Environmental Protection Agency, Crow Tribe of Indians, Bureau of Indian Affairs and the Department of Energy. The Northern Cheyenne Tribe also helped prepare the EIS. Copies of the Final EIS are available at local libraries at the BLM offices in Miles City and Billings and on the Miles City Field Office website: http://www.mt.blm.gov/mcfo.

Each of the co-leads will issue its own Record of Decision. The Montana Board of Oil and Gas Conservation issued its Record of Decision on March 26, 2003.

The BLM Record of Decision approves the amendments for the Powder River and Billings RMPs and updates the goals, objectives, management actions and conditions of use in the applicable land use plans.

The proposed RMP Amendments were subject to a 30-day protest period that ended on February 18, 2003. The protests were reviewed by the BLM Assistant Director, Renewable Resources and Planning, in Washington DC. This Record of Decision includes information about the protests and BLM's findings. No significant changes to the proposed plan were made as a result of the protests.

The regulations in 43 CFR 1610.5-2 do not provide for any additional administrative review of this decision. However, implementation of this decision through future authorization of APDs, permits, and other actions, may be administratively reviewed at the time such authorizations are made. Such review will be conducted in accordance with regulations in 43 CFR 3165.3, 43 CFR 3165.4, and 43 CFR 4.

Thank you for your interest and participation in the development of the plan. If you have any questions about the Record of Decision, please contact BLM at (406)233-3649.

Sincerely,

David McIlnay

David McIlnay

Sandra S. Brooks

Sandra S. Brooks

RECORD OF DECISION
MONTANA STATEWIDE OIL AND GAS EIS
AND
AMENDMENT OF THE POWDER RIVER AND BILLINGS RMPS

Prepared by:
United States Department of the Interior
Miles City Field Office
Billings Field Office
April 2003

Deciding Official: _____ Date: April 30, 2003
Martin C. Ott, State Director, Montana BLM

Record of Decision
Montana Statewide Oil and Gas EIS
and
Amendment of the Powder River and Billings RMPs

Lead Agency: U.S. Department of the Interior, Bureau of Land Management (BLM), Miles City and Billings field offices

Type of Action: Administrative

Jurisdiction (Planning Area): Powder River RMP Area—Powder River, Carter, and Treasure counties and portions of Big Horn, Custer and Rosebud counties. Billings RMP Area—Carbon, Golden Valley, Musselshell, Stillwater, Sweet Grass, Wheatland, and Yellowstone counties and the remaining portion of Big Horn County. The BLM planning area comprises approximately 425,336 acres of BLM-administered surface and 662,066 acres of BLM-administered oil and gas estate in the Billings RMP area and approximately 1,080,675 acres of BLM-administered surface and 2,522,950 acres of BLM-administered oil and gas estate in the Powder River RMP area.

Abstract: The BLM with co-lead State of Montana analyzed alternative approaches for managing oil and gas, particularly coal bed methane (CBM) in the 2003 *Montana Statewide Final Oil and Gas EIS and Proposed Amendment of the Powder River and Billings RMPs.*

A 30-day protest period that ended February 18, 2003 resulted in 25 letters of protest from people with standing on the Plan. None of the protests resulted in a change to the preferred (now approved) alternative.

Alternative E is the Approved Alternative. The Approved Alternative provides a comprehensive framework for managing oil and gas resources on public lands in the planning area. This alternative amends the Resource Management Plans and allows coal bed methane exploration and development while minimizing impacts on environmental resources.

Further information regarding this Record of Decision is available from the contact below or at the BLM website (http://www.mt.blm.gov/mcfo).

Bureau of Land Management
Miles City Field Office
111 Garryowen Road
Miles City, MT 59301
Telephone: (406) 233-3649

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ABBREVIATIONS AND ACRONYMS

ACEC	Area of Critical Environmental Concern
AIRFA	American Indian Religious Freedom Act
AO	Authorized Officer
APD	Applications for Permit to Drill
APLIC	Avian Power Line Interaction Committee
BACT	Best Available Control Technologies
BIA	Bureau of Indian Affairs
BLM	U.S. Bureau of Land Management
BMP	Best Management Practices
BO	Biological Opinion
CBM	coal bed methane
DEIS	Draft Environmental Impact Statement
DNRC	Department of Natural Resources and Conservation (Montana)
DOE	U.S. Department of Energy
EC	electrical conductivity
EPA	Environmental Protection Agency
ESA	Endangered Species Act
FLPMA	Federal Land Policy and Management Act
FWS	Fish and Wildlife Service (USDI)
GIS	Geographic Information System
INC	Incidence of Compliance
LOP	Life-of-the-Project
MBOGC	Montana Board of Oil & Gas Conservation
MDEQ	Montana Department of Environmental Quality
MFWP	Montana Fish, Wildlife, and Parks
MOU	Memorandum of Understanding
MPDES	Montana Pollutant Discharge Elimination System
MRWA	Montana Riparian Wetland Association
NAAQS	National Ambient Air Quality Standards
NAGPRA	Native American Graves Protection and Repatriation Act
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NOC	Notice of Completion
NOI	Notice of Intent
NOS	Notice of Staking
NSO	No Surface Occupancy
POD	Plan of Development
PSD	Prevention of Significant Deterioration
RFD	Reasonably Foreseeable Development
ROD	Record of Decision
ROW	right-of-way
RMP	Resource Management Plan
RMU	Regional Monitoring Units
SAR	Sodium Adsorption Ratio
SC	Species of Concern
SHPO	State Historic Preservation Office
SMA	Special Management Area
TAC	Technical Advisory Committee
THPO	Tribal Historic Preservation Office
TEC	Threatened, endangered, candidate
TMDL	Total Maximum Daily Load

UIC	Underground Injection Control
USGS	U.S. Geological Survey (USDI)
WMP	Water Management Plans
WMPP	Wildlife Monitoring and Protection Plan
WSA	Wilderness Study Area

RECORD OF DECISION
AND
RMP AMENDMENTS

INTRODUCTION

The purpose of this document is to approve the Proposed RMP Amendments and provide new management guidance for oil and gas exploration and development activities on over three million acres of Bureau of Land Management (BLM) administered oil and gas estate in the Powder River and Billings Resource Management Plan (RMP) areas.

The Record of Decision (ROD) approves the Proposed RMP Amendments described as "Alternative E" and analyzed in BLM's 2003 *Montana Statewide Final Oil and Gas EIS* (Final EIS) *and Proposed Amendment of the Powder River and Billings Resource Management Plans.*

The BLM and the State of Montana (Montana Department of Environmental Quality (MDEQ) and Montana Board of Oil and Gas Conservation (MBOGC)), as joint lead agencies, prepared the Final EIS. The Final EIS analyzes the effects of anticipated conventional oil and gas development and the potential impacts of CBM exploration and production in 16 counties of south-central and southeastern Montana. The Final EIS documents the direct, indirect, and cumulative effects which may result from predicted CBM development.

The issuance of oil and gas leases includes the right to develop oil and gas resources, including CBM, subject to restrictions derived from nondiscretionary statutes and regulations, lease terms including stipulations and other reasonable measures to avoid adverse impacts (43 CFR 3101.1-2). Specific mitigation measures directing oil and gas, including CBM, development are attached as conditions of approval to approved Applications for Permit to Drill (APDs) and Sundry Notices at the time of project implementation.

This ROD applies to the BLM planning area. The planning area consists of the Billings and Powder River RMP areas (see Map 1-1). The Billings RMP area comprises approximately 425,336 acres of BLM-administered surface and 662,066 acres of BLM-administered oil and gas estate. The Powder River RMP area comprises approximately 1,080,675 acres of BLM-administered surface and 2,522,950 acres of BLM-administered oil and gas estate.

In May 2001, the President's National Energy Policy Development Group issued recommendations for developing and implementing a comprehensive long-term strategy to promote dependable, affordable, and environmentally sound energy for the future. At the same time the President issued Executive Order 13212, "Actions to Expedite Energy-Related Projects", in which agencies are ordered to

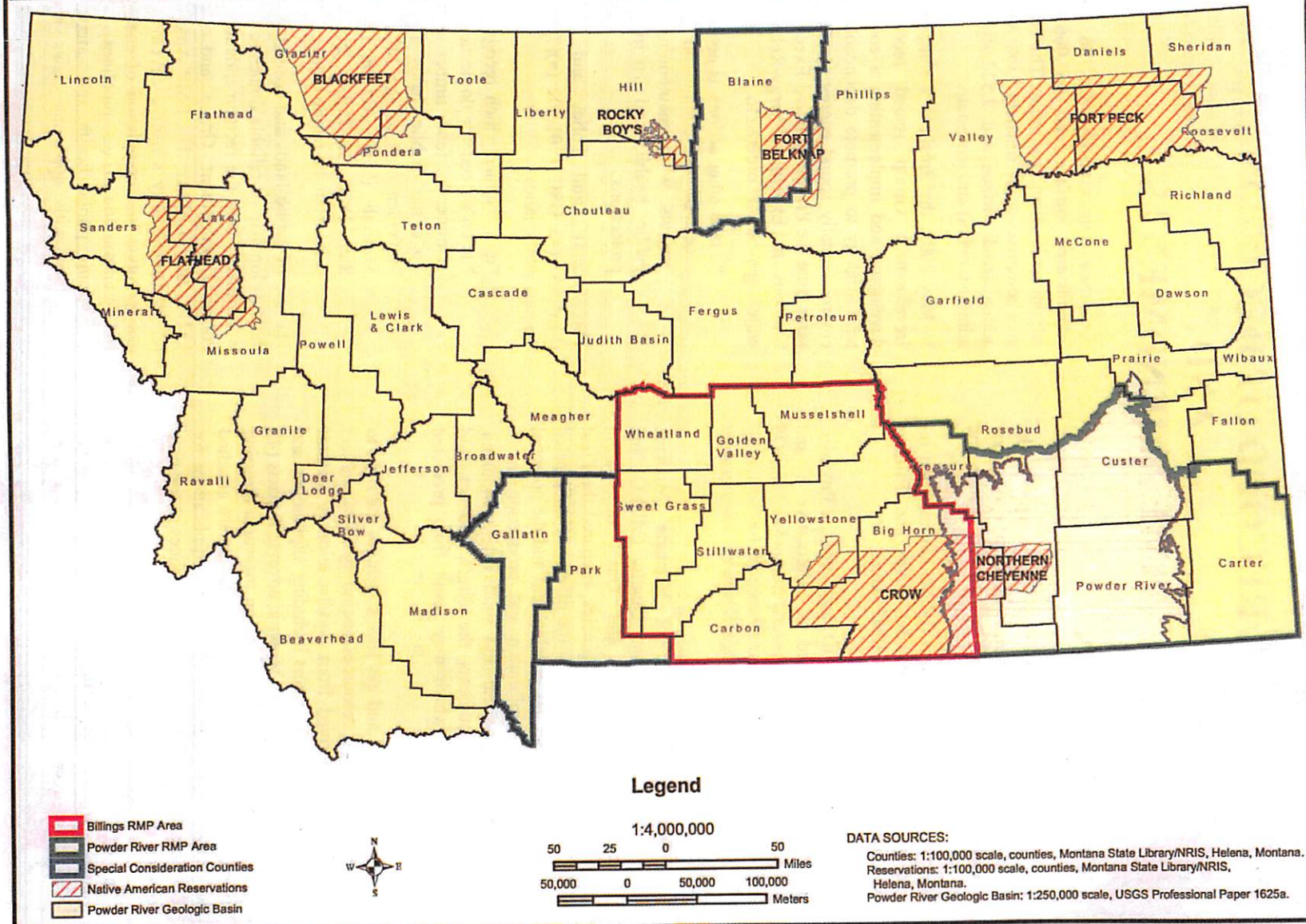
> "...take other actions as necessary to accelerate the completion of such projects, while maintaining safety, public health, and environmental protections."

The Federal Land Policy and Management Act (FLPMA) (43 USC 1701.102 (a)(7)) directs BLM to manage public lands

> "in a manner which recognizes the Nation's need for domestic sources of minerals, food, timber and fiber from the public lands including implementation of the Mining and Minerals Policy Act of 1970 (84 Stat. 1876, 30 U.S.C. 21a) as it pertains to the public lands..."

The use of public lands and federal mineral estate for the development of reliable domestic sources of energy is consistent with the recommendations of the Energy Policy Development Group and Executive Order 13212, and FLPMA. The RMP Amendments provide for environmentally sensitive development of oil and gas resources and completion of energy development and transmission (i.e., pipelines) projects while maintaining public health and safety, and ensuring compliance with applicable laws and regulations.

Map 1-1: Planning Area



Legend

- Billings RMP Area
- Powder River RMP Area
- Special Consideration Counties
- Native American Reservations
- Powder River Geologic Basin

N W E S

1:4,000,000

50 25 0 50 Miles

50,000 0 50,000 100,000 Meters

DATA SOURCES:

Counties: 1:100,000 scale, counties, Montana State Library/NRIS, Helena, Montana.
Reservations: 1:100,000 scale, counties, Montana State Library/NRIS, Helena, Montana.
Powder River Geologic Basin: 1:250,000 scale, USGS Professional Paper 1625a.

EFFECT ON THE OIL AND GAS DECISIONS IN THE RMPs

Prior to these RMP Amendments, guidance for decisions related to management of oil and gas operations were found in the Billings RMP, dated September 28, 1984 and the Powder River RMP, dated March 15, 1985, as revised by BLM's 1994 *Oil and Gas Amendment of the Billings, Powder River and South Dakota Resource Management Plans and Environmental Impact Statement* (1994 Amendment) dated February 2, 1994. The RMPs provide for a certain level of conventional oil and gas development on federal leases and limited CBM exploration and development.

The RMP Amendments approved by this ROD do not change the leasing decisions and stipulations for leasing from the 1994 Amendment relative to the availability of lands for oil and gas development. Those decisions are still valid and will remain in effect. All other aspects of the 1994 Amendment concerning exploration and development of oil and gas and related activities are hereby replaced and amended on the date this ROD was approved.

ALTERNATIVES SUMMARY

The following five management alternatives were considered in the development of the plan amendment. Each alternative was described and analyzed in the Draft and Final EISs.

Alternative A - the "no action" alternative. BLM would continue to review and approve APDs for conventional oil and gas and for CBM wells in accordance with the 1994 Amendment. Approved APDs would include only CBM exploration wells, not production wells.

This is the environmentally preferred alternative (40 CFR 1505.2 (b)). Only a limited number of wells could be approved resulting in fewer impacts than the other alternatives analyzed. Although Alternative A would result in fewer impacts, the alternative does not provide for the continued use of public minerals for oil and gas development consistent with the Energy Policy Development Group and Executive Order 13212 and FLPMA.

Alternative B – BLM would review and approve CBM activities with an emphasis on resource protection. BLM would use stringent mitigation measures to minimize or eliminate adverse impacts to other resources. Examples of such mitigation measures would include requiring the injection of water produced with CBM and requiring all compressors to be fueled by natural gas rather than by diesel or electricity.

Alternative C – BLM would review and approve CBM activities with an emphasis on facilitating production of CBM. BLM would use the least restrictive mitigation measures to minimize or eliminate adverse impacts to other resources. Examples of such measures would be to authorize the discharge of water produced with CBM onto the ground or into the water bodies when the discharge water meets applicable standards. Compressors could be fueled by gas, diesel, electricity, or other means as long as other permitting standards, such as air quality, are met.

Alternative D – BLM would review and approve CBM activities with an emphasis on maintaining or enhancing land uses in combination with CBM development. BLM would use mitigation measures, as much as possible, that compliment the needs of landowners and other lessees. Management of water produced with CBM would be greatly influenced by the surface owner. The water could be made available for beneficial uses or reinjected. Location of facilities, such as compressors, would be influenced by the needs of the land owner.

Alternative E – BLM's preferred alternative. BLM would review and approve CBM activities in a manner that facilitates efficient and orderly CBM development while providing the appropriate levels of resource protection on a site specific basis. Different management actions, such as discharge, impoundment, reinjection or beneficial use, would be used to manage CBM water. Likewise, different management actions affecting location, size, and muffler requirements would be applied to compressors.

Through the analysis process the following alternatives were eliminated from detailed consideration. The reasons for dropping these alternatives can be found in chapter 2 of the Final EIS.

-Revisit leasing decisions

-Establish bond amounts

-Analysis of the Omega Alternative

-Analysis of alternate sources of energy

-Reinject produced water into the same aquifer

-Phased development

DECISION TO AMEND THE PLAN

The decision is hereby made to approve the Proposed RMP Amendments described as Alternative E and analyzed in BLM's 2003 *Montana Statewide Final Oil and Gas EIS and Proposed Amendment of the Powder River and Billings Resource Management Plans.* The plan was prepared under federal regulations, including the FLPMA of 1976 and the National Environmental Policy Act (NEPA) of 1969, as amended. Alternative E describes the management goals and objectives, management actions and conditions of use that will guide future management of oil and gas exploration and development on public lands and federal mineral estate managed by the BLM within the Powder River and Billings RMP areas.

The decision is not the final approval of any specific oil and gas exploration, production, or development activities.

Although a joint EIS was prepared, the decision does not apply to minerals administered by the State of Montana (State) or other State activities. The MBOGC signed a ROD on March 26, 2003.

The decision does not apply to federal minerals under the surface of lands managed by the following federal agencies: Forest Service, National Park Service, Bureau of Indian Affairs, Fish and Wildlife Service, nor to federal minerals under private lands within the administrative boundaries of the National Forest System Lands. Additionally, this decision does not apply in any way to minerals administered by sovereign Native American Tribes.

GOALS, OBJECTIVES AND MANAGEMENT ACTIONS

The preferred alternative describes the management goals, objectives and management actions that will guide future management of oil and gas operations on BLM-administered lands within the Powder River and Billings RMP areas. The decisions relative to the primary issues are as follows.

Air Quality

The number of wells connected to each compressor will be maximized.

The operator must demonstrate in the Plan of Development (POD) how development could occur in accordance with air quality laws. APDs and PODs that may violate air quality standards will not be approved.

Monitoring data will only be used to determine if the NAAQS PM_{10} and NO_2 standards have been exceeded. For federal lands with Class I areas, the Clean Air Act sets a 60 year goal of clear vistas. Clear vistas are defined as reduction in visibility not to exceed 1.0 deciview per year for more than 1 day. Where this threshold is exceeded from a single project, this could be the basis for the federal land managers' designation of visibility impairment. Such a designation could necessitate mitigation. Where the threshold is exceeded based on cumulative actions (i.e. Reasonable Foreseeable Future Actions), this also could be the basis for the federal land managers' designation of visibility impairment. In this instance, Congress directed federal land managers to implement mitigation pursuant to the Regional Haze Rule, in a manner that results in a 25% reduction in impairment every 15 year period to meet the 60 year clear vistas goal.

Coal

There will be no buffer zone for prohibiting CBM production around active coal mines (IM-2000-053).

Hydrology

As part of the permit approval process, the water quality regulatory agencies would prepare additional analysis, conduct monitoring, and require mitigation as needed to ensure compliance with all applicable standards before permits could be approved.

The Interim Memorandum of Cooperation (refer to the Final EIS, Hydrology Appendix) documents Wyoming DEQ's commitment and intent to protect and maintain water quality conditions in the Powder River Basin within Montana.

Water Management Plan

The operator can use a variety of water management and mitigation options so there will be no degradation, as defined by the MDEQ, to water quality in any watershed. "Degradation", as defined in 75-5-103(5), Montana Code Annotated, means a change in water quality that lowers the quality of high-quality waters for a parameter.

The preferred management option for the disposition of CBM produced water is for beneficial use. Produced water management options include, but are not limited to, injection, treatment, impoundment, and discharge.

The operator must obtain 401 Certification from the MDEQ if the disposal action needs BLM approval. A Water Management Plan is required for exploratory wells and for each POD.

At a minimum, the Water Management Plan will be part of an APD and include a water well or spring mitigation agreement with the owner of any water well or spring within one mile; identify any proposed uses of the water (beneficial if possible); and a map showing all wells within one mile of the proposed exploratory CBM well.

Water Management Plans developed as part of a POD include the following additional requirements:

- A cover letter identifying the POD for which the Water Management Plan has been developed and the watershed(s) affected by the project
- A 7.5 minute topographical map indicating the location(s) of any proposed storage ponds and discharge points
- Water quality data for the produced water
- Anticipated rate of water production per well and the calculated amount of annual water production for the field
- Proposed beneficial uses of the produced water addressed in surface owner agreements
- Operator's approach to ensure no undue degradation of the surface water quality within the designated watershed(s)
- A copy of any MPDES discharge permit(s) or significance determination(s) issued by the MDEQ, if required; or UIC permit issued by the MBOGC or disposal permit issued by the EPA or MBOGC
- A water monitoring plan for the area that meets the requirements of MBOGC Rules and the Controlled Groundwater Area
- A statement indicating whether a 401 Certification is required, and if so, a copy of the certificate
- A copy of the most current soil map available for the project area
- Site-specific stratigraphy for any infiltration basin(s) location that is proposed

Produced water management plans and permits will be approved in consultation with affected surface owners. Impoundments proposed as part of the Water Management Plan will be designed and located to minimize or mitigate impacts on soil, water, vegetation, and channel stability and comply with pertinent state and federal regulations. Applications for unlined impoundments proposed as part of the Water Management Plan must also demonstrate that the water to be disposed will not degrade the quality of surface or subsurface waters in the area (Onshore Oil and Gas Order No. 7, Section III.D.2.)

Indian Trust Resources or Interests

The BLM will continue to meet its trust responsibilities with the tribes.

The BLM will require federal lease operators to protect the Crow and Northern Cheyenne Tribes groundwater and CBM from loss or degradation.

The tribes will be invited to participate in the "steering committee" that will evaluate information gathered during the inventory and monitoring phases of the Wildlife Monitoring and Protection Plan (WMPP) and in the Interagency Work Group(s) (see page 13).

Lands and Realty

Transportation corridors will not be required. However, proposed roads, flowline routes, and utility line routes will be located to follow existing routes or areas of previous surface disturbance when possible. The operator will also address in the POD how the surface owner was consulted for input into the location of roads, pipelines, and utility line routes and provide a certification of a surface owner agreement or required bonding.

The operator will demonstrate in the POD how the proposal for power distribution will mitigate or minimize impacts on affected wildlife. For example, on BLM-administered lands the operator may be required to bury a portion of the powerlines near sage grouse habitat to safely eliminate use by raptors and any aboveground lines must be designed following raptor-safe specifications.

When wells or facilities are abandoned, the associated oil and gas roads will either remain open or be closed and reclaimed at the direction of the surface owner. Reclamation requirements will be determined by the surface owner or surface management agency.

Noise

Natural gas-fired engines for compressors and generators will be required, except in areas with sensitive resources, including people, where noise is an issue. In those areas, the decibel level will be required to be no greater than 50 decibels measured at a distance of 1/4 mile from the compressor. This is required to achieve the average day-night level of 55 decibels. (Note: the 50 decibel number cited in the Final EIS was based on rounding-off the 48.6 decibels). This may require the installation of an electrical booster at these locations.

Oil and Gas

Exploration and development of CBM resources on BLM-administered oil and gas will be allowed after site specific analysis and approval, subject to restrictions derived from applicable nondiscretionary statutes and regulations, agency decisions, lease stipulations, permit requirements, conditions of approval and surface owner agreements. The POD will be developed in consultation with the affected Tribes, affected surface owner(s), and other involved permitting agencies.

Reclamation is required on areas of surface disturbance during the production and abandonment phases of development.

Operators must develop a Spill Prevention Control and Countermeasures plan to deal with accidental spills, the plan would include the strategic placement of berms and dikes.

Project Plan of Development

A step-by-step guideline for preparation of the POD is being developed by BLM. The POD will be submitted to BLM in draft form so that it can be reviewed and any changes made prior to allowing surface disturbing activities. At a minimum, the POD will contain the following:

- A cover letter naming the project area and requesting approval
- An APD (form 3160-3) for each federal well in the project area
- A list of all other permitting agencies involved in the project and the name for a point-of-contact for each office
- A list of all existing wells in the project area, including monitoring wells
- Maps submitted in paper or digital format (CD map with any digital GIS coverages used to create the map), showing proposed roads, compressor stations, pipelines, powerlines, CBM well locations, all existing wells, current and proposed monitoring wells, surface ownership, mineral ownership, surface features, and existing structures

- Master drilling and surface use plans with information as required by Onshore Oil and Gas Order No. 1
- A Reclamation Plan for surface disturbance
- A wildlife monitoring plan demonstrating how the project will meet the requirements of the BLM WMPP (see Appendix A).
- A Water Management Plan for the project area
- Certification of surface owner agreements, including water well agreements (or notice that the Surface Owner Damage and Disruption Compensation Act applies and surface owner agreements are pending settlement or court action)
- A list of all potentially affected surface owners within the project area
- A cultural resource plan addressing identification strategies commensurate with the level of the proposed development. This may include a cultural resource location and significance model for identifying areas of critical concern

BLM will also require compliance with Onshore Oil and Gas Order No. 7 which addresses disposal of produced water from federal wells. The operator must submit a plan describing the proposed method and facility to properly manage the produced water.

Vertical wells will be drilled to shallow coal seams while directional wells may be drilled to the deeper coal seams unless the operator can demonstrate why directional drilling is not needed or feasible. Directionally drilled wells will be drilled from the same well pad as the vertical wells.

Development of coal seams will be done either one coal seam at a time or multiple coal seams at the same time. Production of CBM will be from one coal seam per well or multiple coal seams per well. During production of CBM from multiple coal seams from multiple wells, the wells will be located on the same well pad within a spacing unit. Well spacing rules will set a limit of one well per coal seam per designated spacing unit.

Threatened, Endangered and Sensitive Species

The BLM will comply with the Endangered Species Act by implementing on BLM administered public lands and minerals, when applicable, the measures prescribed in the U. S. Fish and Wildlife Service (FWS) Biological Opinion for the Final EIS. These measures are included in the WMPP in Appendix A of the ROD. For example, pages W-10 through W-15 describe the nondiscretionary terms and conditions that implement the reasonable and prudent measures included with the FWS Biological Opinion.

The following actions will be taken to help ensure BLM's activities do not contribute to the listing of prairie dogs or sage grouse as threatened or endangered species. Refer to the WMPP, pages W-6 and W-7 and the Monitoring Table, pages M-14 and M-15 (Appendixes A and C, respectively) for more details.

- Black-tailed Prairie Dog – Active prairie dog towns on BLM lands within 0.5 miles of a specified project area will be identified, mapped and surveyed annually. Efforts will be made to compare the data from the reference colonies with that obtained from the project areas, in order to monitor the response of prairie dog populations to CBM development. If there are prairie dog fatalities from oil and gas development, BLM could establish a no surface zone or timing restriction within the prairie dog town.

- Sage Grouse – BLM and MFWP will conduct sage grouse lek inventories over the BLM planning area every 5 years to determine lek locations. Surveys of different areas may occur during different years with the intent that the entire area will be covered at least once every 5 years. If BLM notes a downward trend, mitigation, such as extension of timing restrictions, could occur.

MANAGEMENT CONSIDERATIONS

The Final EIS fully complies with BLM's multiple use mission while considering and providing for responsible development of important oil and gas resources as described in the FLPMA.

The Final EIS considers the use and protection of the resources managed by BLM, including important energy and natural resources available in the planning area. While the plan amendments support the development of oil and gas resources, they also include the application of mitigation measures to minimize or avoid impacts to resources or land uses from oil and gas activities and prevent unnecessary or undue degradation. In addition to the mitigation measures included in the plan amendments, existing lease stipulations may be applied to protect critical resource values. Other protective measures may be required at the APD stage to mitigate site-specific impacts.

The decision to approve the plan amendments for the Powder River and Billings RMPs takes into account statutory, legal and national policy considerations. The analyses in the Draft EIS and Final EIS were based on evaluation of the Powder River and Billings RMP areas for oil and gas development, identifying sensitive natural and cultural resources, evaluating the effects of surface disturbance in these resources and identifying successful protection measures. The constraints placed on oil and gas development were reviewed in light of resource protection and where possible, major conflicts were resolved to provide a balance between protection of sensitive resources and sound practices for development of oil and gas resources. The decision was also based on input provided by and received from the public, industry, as well as other federal and state agencies. Through the review process, many practicable methods to reduce environmental harm were incorporated into these plan amendments.

Impacts identified for the preferred alternative are acceptable for the following reasons: 1) as the nation's largest land manager, the Department of the Interior, through the BLM, plays a major role in implementing the National Energy Policy developed by President Bush; 2) the National Energy Policy promotes the production of reliable, affordable and environmentally clean energy; 3) among the Nation's most pressing concerns is to reduce our reliance on foreign oil and gas while protecting the environment; 4) BLM-administered lands contain world-class energy and mineral resources, vital to the National interest; 5) the vast energy and mineral resources under BLM's jurisdiction places the agency in the key role of ensuring that our country has an adequate supply of energy necessary for the safety and security of our families, our communities and our Nation; 6) CBM is available on public lands and BLM has a multiple use mission under FLPMA; 7) the preferred alternative is an environmentally sound alternative; and 8) the approved alternative complies with laws and regulations.

MITIGATION

The following mitigation measures from the Final EIS are being adopted. These represent practicable means to avoid or minimize environmental harm from the alternative selected.

Air Quality

Operators on federal leases will be required to post and enforce speed limits to reduce fugitive dust emissions.

Approval of exploration APDs and field development plans will include an analysis of the individual and cumulative impacts to air quality and be conditioned to prevent violations of applicable air quality laws, regulations, and standards.

Options to mitigate impacts include establishing plant cover, watering roads, applying soil stabilizer and graveling or paving unpaved roads.

Access roads, well pads and production facility sites constructed on soils susceptible to wind erosion will be appropriately surfaced to reduce fugitive dust emissions. Dust inhibitors will be used as necessary on unpaved collector, local and resource roads to reduce fugitive dust emissions to the air and resources adjacent to the road.

Cultural Resources

Cultural resource reviews or surveys will be conducted as required prior to the commencement of construction or other surface disturbing activities authorized by BLM.

Guidance for application of this requirement can be found in NTL-MSO-85-1.

Results of cultural resource surveys will be presented as part of the permit review or approval process. Decisions regarding relocation of proposed access roads or well pads, data recovery, and excavation will be made to protect the cultural or historical sites.

Fire

Operators are required to comply with BLM imposed conditions during times of high fire danger. Such conditions may include restrictions on types of activities allowed, hours of operation, and requirements for maintaining certain fire suppression equipment at the work site. Operators must maintain a current fire suppression plan.

Hydrology

Water well and spring mitigation agreements will be used to facilitate the replacement of groundwater that may be lost to drawdown. Replacement water may require supply from offsite sources.

Indian Trust and Other Interests

The tribes will be invited to participate in the Interagency Work Group(s) responsible for developing and recommending the monitoring and mitigation measures needed for each agency to ensure its actions achieve compliance with applicable air and water quality standards across jurisdictional boundaries. Mitigation measures for potential impacts to the Northern Cheyenne Tribe trust resources and other interests is included in Appendix B of the ROD.

Lands and Realty

Road placement is limited to track boundaries where practical to reduce impacts on residential and agricultural lands.

Livestock Grazing

Damaged gates and fences will be repaired or replaced according to landowner requirements at the operator's expense. When working on or near grazing lands, project-related construction equipment and vehicle movement will be minimized to avoid disturbance of grazing lands. Responsibilities for fence, gate, and cattle guard maintenance and noxious weed control will be defined in APDs, BLM approvals, or right-of-way (ROW) grants. Facilities will be placed to avoid or minimize impacts on livestock water.

Paleontology

The BLM APD contains guidance for notifying and mitigating damage to paleontological resources discovered during oil and gas construction activities. Limitations include restricted use of explosives for geophysical exploration, monitoring requirements, and work stoppages for discovered damaged resources.

Recreation

Exploration activities will be coordinated for timing to minimize conflicts during peak use periods.

Solid and Hazardous Waste

Site clearance surveys will be conducted prior to surface disturbance commencement. Solid and hazardous wastes generated as a result of oil and gas lease operations will be disposed of in a manner and at a site approved by the appropriate regulating agency.

Soils

Areas with steep topography will be developed in accordance with the BLM Gold Book (USDI and USDA 1989) requirements.

Lease roads and constructed facilities will be located in accordance with the approved APD. In areas of construction, topsoil will be stockpiled separately from other material, and be reused in reclamation of the disturbed areas. Unused portions of the producing well site will have topsoil spread over it and reseeded.

Construction activities will be restricted during wet or muddy conditions and will be designed following Best Management Practices (BMPs) to control erosion and sedimentation. If porous subsurface materials are encountered during pit construction all onsite fluid pits will be lined. During road and utility ROW construction, surface soils will be stockpiled adjacent to the sides of the cuts and fills.
Stream crossings will be designed to minimize impacts and not impede stream flow. Erosion control measures will be maintained and continued until adequate vegetation cover

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Stream crossings will be designed to minimize impacts and not impede stream flow. Erosion control measures will be maintained and continued until adequate vegetation cover

(defined by BLM on a case-by-case basis) is re-established. Vegetation will be removed only when necessary. Water bars will be constructed on slopes of 3:1 or steeper.

Erosion control and site restoration measures will be initiated as soon as a particular area is no longer needed for exploration, production, staging, or access. Disturbed areas will be recontoured to provide proper drainage.

Topsoil piles may be required to be seeded following the BLM seeding policy.

Displaced farmland, whether in crop production or not, will be reclaimed to original soil productivity through adoption of standard reclamation procedures.

Vegetation

It is the responsibility of the operator to control noxious weeds on lands disturbed in association with oil and gas lease operations. Lease-associated weed control strategies are to be coordinated with any involved surface owners and local weed control boards. A pesticide-use proposal must be reviewed and approved by BLM prior to any herbicide application on lands disturbed by federal oil and gas lease operations. A pesticide application record must be made within 24 hours after completion of application of herbicides. Additional measures may be required to prevent the spread of noxious weeds.

Disturbed areas resulting from any construction will be seeded following the BLM seeding policy or surface owner's requirements. Depending on surface ownership seeding is usually required during the fall or late spring.

To the extent practicable, vegetation will be preserved and protected from construction operations and equipment except where clearing operations are required to conduct oil and gas operations, such as for roads, well pads, pipelines, power lines, utility lines, and structures. Clearing of vegetation will be restricted to the minimum area needed for construction and equipment.

To the maximum extent practicable, all maintenance yards, field offices, and staging areas will be arranged to minimize disturbance to trees, shrubs, and other native vegetation.

Cuts and fills for new roads will be sloped to prevent erosion and to facilitate revegetation.

Riparian zones will be protected by federal lease stipulations and permit mitigation measures. The BLM seeding policy will be followed for all reclamation and reseeding activities.

During reclamation activities, early succession plants will be used for revegetation to provide a quick cover before noxious weeds can take root.

The noxious weed prevention plans must include measures to prevent the spread of weed seeds from any vehicles and equipment from or prior to mobilizing it to the project area.

Operator reclamation plans will be developed in consultation with the surface owner. Reclaimed areas reseeded with native species will require a certified weed-free seed mix. The seed mix used on private surface will be determined by the surface owner. Successful revegetation will usually require at least two growing seasons to ensure a self-sustaining stand of seeded species.

Visual Resource Management

Camouflage of all wellheads on federal surface in Class II Visual Resource Management Areas will be required to preserve the viewshed. Camouflage will consist of paint chosen to blend in with the background and placement of wellheads to reduce visual intrusions.

Wilderness Study Areas

Laws and regulations established to protect Wilderness Study Areas (WSA) prohibit leasing of designated WSA lands for resource extraction. Existing oil and gas leases in WSAs will be developed in accordance with the BLM policy for interim management of WSAs.

Wildlife and Aquatics

Temporary and permanent access roads will be avoided on south-facing slopes within big game winter range, where practicable.

The planting of grasses, forbs, trees, or shrubs beneficial to wildlife will follow the BLM seeding policy. When needed, BLM will require installation of erosion and sedimentation control measures, such as riprap, erosion mats, mulch, bales, dikes or water bars. Riprap material and placement must be approved by the appropriate agency.

All above-ground electrical poles and lines will be raptor-proofed to avoid electrocution

following the criteria and outlined in the Avian Power Line Interaction Committee (APLIC) (1994) and APLIC (1996). (APLIC 1994. Mitigating Bird Collisions with Power Lines: The State of the Art in 1994. Edison Electric Institute, Washington D.C. 78 pp.; APLIC 1996. Suggested Practices for Raptor Protection on Power Lines. Edison Electric Institute. Washington, D.C. 128 pp.).

Activities such as stream crossings that could directly impact sensitive or protected fish species will be undertaken during non-spawning periods for these species. In the unlikely event that multiple, sensitive, or protected fish species with back-to-back spawning periods are present in the same stream reach, one of the following options will be exercised: selecting a nearby, alternative stream crossing site that does not provide suitable spawning habitat for the fish species of concern; using a nearby, existing stream crossing over the channel to avoid instream disturbances; or using shore-based equipment to position and extend the pipeline or other item (e.g., temporary bridge) across the stream, thereby avoiding in-channel activities.

MONITORING

This section describes the monitoring that will be conducted during implementation of the approved RMP amendments.

Land Use Plan Monitoring

Land use plan monitoring will be conducted by BLM. BLM will monitor the plan to 1)ensure compliance with decisions; 2)measure the effectiveness or success of decisions; and 3)evaluate the validity of decisions.

Project Monitoring

At the project level, inspections will consist of physical onsite examination of oil and gas operations, disturbance areas, verification sampling at water quality monitoring points, environmental sampling and analysis of produced water, evaluation of construction and reclamation techniques and results. Inspections will be conducted more frequently during periods of intense activity, in areas of critical or sensitive resources, or where problems have been noted and corrective measures are being implemented.

Resource Monitoring

Resource condition monitoring is conducted to evaluate the effectiveness of mitigation measures, determine the need of existing or additional mitigation measures, ensure desired results are achieved, and assess conditions and trends.

In the Monitoring Table in Appendix C is a series of items that will be monitored for each resource. Each item is evaluated by location, technique for data gathering, unit of measure, and frequency and duration of data gathering. When duration is not specified, the duration is for the next 20 years. The Monitoring Table states the event that will be evaluated and lists the key resources that will be monitored. If an impact can be corrected by a management action within the scope of the plan, the change will be implemented. If the impact or action can be corrected only by a management action that is outside the scope of the Billings or Powder River RMPs, the RMP will be amended and the appropriate action taken.

Some of the activities included for each resource, including management options, will be accomplished by the regulatory agency with jurisdiction, especially those items related to air, water quality and water quantity.

Monitoring will be implemented over a period of years and is tied directly to the BLM budgeting process. Although a high priority, funding levels can affect the timing and implementation of monitoring actions.

The Interagency Work Group(s) discussed on page 13, may also identify monitoring actions that could supplement or replace the specific monitoring actions included in the Monitoring Table in Appendix C.

PUBLIC INVOLVEMENT

Preparation of the *Montana Statewide Draft Oil and Gas Environmental Statement and Amendment of the Powder River and Billings Resource Management Plans* (Draft EIS) began with the publication of a Notice of Intent (NOI) in the *Federal Register* on December 19, 2000. The NOI informed the public of BLM's intention to plan and announced the notice of availability for the planning criteria. Brochures were mailed to over 1,000 individuals, groups, and agencies in December 2000 notifying the public of the

expected issues and upcoming public scoping meetings.

Public scoping meetings were conducted in five towns across the state with a total attendance of 329 people. These meetings were held in January 2001 at Ashland, Billings, Broadus, Miles City, and Helena.

A total of 311 written communications, with more than 2,100 comments, were received after the public scoping meetings. Most of these written comments reiterated oral comments from the public meetings. Oral and written comments covered a spectrum of issues, but the majority were concerned with resource management of water, lands, air, and wildlife resources. Records of public comments and concerns are on file in the BLM Miles City Field Office.

A *Public Comment Summary and Recommendations* report was prepared and made available electronically and in hardcopy in March 2001. The report summarizes the comments received from the public scoping meetings.

Based on public scoping and agency comments, the BLM and the State prepared the Draft EIS. On February 15, 2002, a *Federal Register* notice was published beginning the comment period for the Draft EIS. The Draft EIS presented five alternatives including the no action alternative, and the agencies' preferred alternative (Alternative E).

The agencies received more than 8,800 e-mails, faxes, letters, cards and oral statements on the Draft EIS during the public comment period which ran through May 15, 2002. In addition to the written comments six public hearings were held at communities across the state in April 2002, to receive oral comments on the Draft EIS. The communities were Billings, Bozeman, Broadus, Crow Agency, Lame Deer, and Helena. Over 700 citizens attended the hearings.

From the 8,800 communications, more than 25,000 comments were made on the Draft EIS. Many of the comments tended to be polarized with those supporting CBM development urging selection of Alternative E, and those opposed to CBM development requesting additional safeguards be put in place to protect surface owner rights and downstream resources from impacts. Comments that presented new data, questioned facts or analysis, or raised questions or issues bearing directly upon the alternatives or environmental analysis were responded to in Chapter 5 of the Final EIS. In some cases, comments resulted in changes to the Draft which were incorporated into the Final EIS; however they did not result in changes to the preferred alternative. Consistent with BLM policy, comments expressing personal opinions or statements were carefully considered in the preparation of the Final EIS and ROD but are not responded to directly.

The EPA Notice of Availability for the Final EIS was published in the *Federal Register* on January 17, 2003. The public was given the opportunity to protest the BLM's preferred plan to the BLM Director in Washington D.C.

Protest Period

Any person who participated in the planning process and had an interest which may be adversely affected may protest. A protest may only raise those issues which were submitted for the record during the planning process. The protest had to be filed within 30 days from the date the EPA published the notice of receipt of the Final Environmental Statement for the Final EIS in the *Federal Register*. The protest period began on January 17, 2003 and closed on February 18, 2003.

Main Issues Summary

The following is a summary of the protest issues raised in the protest letters received by the Assistant Director:

Impacts not properly assessed: The following impacts were stated as not being properly addressed; air and water quality, split estate owners, infiltration ponds, wildlife (sage grouse, prairie dogs), noxious weeds, noise, socio-economics, habitat fragmentation, cumula-tive effects, T&E species and irrigation uses.

Impact assessment methodology flawed: Protestors cited the following elements as assessment methodology flaws; faulty assumptions, impact analysis deferred to APD stage, did not consider phased development, new and innovative technologies and directional drilling, scope of analysis too broad.

Document inadequate: Protestors felt that the document was inadequate because: no "hard look" was taken, a DEIS supplement was not prepared, the range of alternatives and purpose and need were too narrow, changes to the

preferred alternative occurred, BLM failed to look at leasing and effects on other RMP decisions, there was insufficient time to comment, the document was misleading, agency and public comments were not considered.

Other: Other issues that were raised included: reclamation practices and bonding, mitigation inadequate, inadequate inventories and monitoring plans not described.

Protest Resolution

The resolution of protests is the responsibility of the Assistant Director of the BLM whose decision is the final decision of the Department of the Interior. The Assistant Director received 119 protest letters. Of these letters, 25 were determined to have standing by previously participating in the planning process. The Assistant Director also received approximately 400 facsimiles and 18,000 e-mails for both Montana and Wyoming EISs. The BLM did not consider a fax letter or an e-mail a valid protest.

Letters from protestors whom BLM determined to have standing were reviewed and protest issues and comments were identified. Each of the protest issues were responded to and those responses were included in return letters to each protestor. The Assistant Director also sent return letters to those who sent protest letters but were determined not to have standing. Letters that identified comments rather than protest issues will also be sent a letter of response after issuance of this ROD.

The Assistant Director has determined that approval of the proposed plan amendment is consistent with the BLM's policy guidance, is based upon valid and complete information and complies with applicable laws, regulations, policies, and planning procedures.

Tribal Consultation

The BLM has consulted with the Crow Tribe of Indians and the Northern Cheyenne's tribal governments from November 2000 through early January 2003 on the plan. A chronology of the consultation process with Native American Tribes is in Chapter 5 of the Final EIS.

U.S. Fish and Wildlife Service Consultation

As required by Section 7 of the Endangered Species Act (ESA) of 1973, the BLM prepared and submitted a biological assessment to the FWS. This document defined potential impacts on threatened and endangered species as a result of management actions proposed in this RMP EIS and Amendment. A letter received September 4, 2002, from the U.S. Fish and Wildlife Service states:

> "We concur with your determinations that the proposed action is likely to adversely affect the threatened bald eagle, and the proposed mountain plover. Although the BLM has determined that implementation of proposed changes in coal bed methane is likely to affect the black-tailed prairie dog *(Cynomys ludovicianus)*, we concur with your determination that the action is not likely to adversely affect the black-footed ferret (*Mustela nigripes*).
>
> "This concurrence is based upon the BLM's commitments to 1) locate project activity to avoid impacts on prairie dog colonies that meet FWS criteria as black-footed ferret habitat (FWS 1989), 2) conduct ferret surveys in suitable habitat, following current lease stipulations for oil and gas development, and 3) if a black-footed ferret or its sign is found during a survey, all development activity would be subject to recommendations from the *Montana Black-footed Ferret Survey Guidelines, Draft Managing Oil and Gas Activities in Prairie Dog Ecosystems with Potential for Black-footed ferret Reintroduction* and re-initiation of Section 7 Consultation with the Service.
>
> "The Service also concurs with your determination that the action is not likely to adversely affect the threatened Ute ladies'-tresses orchid (*Spiranthes diluvialis*), the pallid sturgeon *(Scaphirhynchus albus)*, and the Montana arctic grayling *(Thymallus arcticus)*. The Service gives its concurrence to BLM's determination of "no effect" for the Canada lynx *(Lynx canadensis)*, gray wolf *(Canis lupus)*, interior least tern *(Sterna antillarum athalassos)*, and the warm spring zaitzevian riffle beetle *(Zaitzevia thermae)* (FWS 2002)."

A copy of the letter is included in the Wildlife Appendix of the Final EIS.

Agency Coordination

To prepare the Final EISs, BLM Montana and Wyoming worked cooperatively with the EPA and the Wyoming and Montana DEQs to ensure consistency where appropriate and improve the air and surface water quality impact analysis methods. For example, the agencies agreed to use common analytical assumptions and prepared a joint cumulative impact assessment for surface water based on information provided by the US Geological Survey. Both documents included an expanded section on water and air quality monitoring and the roles and responsibilities of the agencies in regards to issuing permits for water discharges and air emissions. Both documents described in more detail some of the mitigation options available to the permitting agencies to ensure compliance of all activities with the Clean Air Act and Clean Water Act.

CONSISTENCY WITH APPLICABLE POLICIES, PLANS AND PROGRAMS

The BLM's planning regulations require Resource Management Plans to be

> "consistent with officially approved or adopted resource related plans, and the polices and programs contained therein, of other federal agencies, state and local governments, and Indian Tribes, so long as the guidance and resource management plans are also consistent with the purposes, polices, and programs of federal law, and regulations applicable to public lands..." (43 CFR 1610.3-2).

Federal, state, and local agencies and tribal councils were requested to review the amendment and to inform the BLM of any inconsistencies. The agencies did not identify any inconsistencies with other resource related plans. Based on this review, it is concluded that Alternative E is fully consistent with all applicable polices, plans and programs of other federal agencies, state and local governments and tribes. If it is determined through monitoring or other means that such policies, plans, or programs are not being met, this decision will be modified to bring it into compliance. Of special concern is how the Plan Amendment will meet the applicable Federal, State, and Tribal air and water quality requirements. The procedures for satisfying the air and water quality requirements are described in the following section.

ACHIEVING AIR AND WATER QUALITY PROGRAM REQUIREMENTS

Oil and gas, including CBM, exploration and development on BLM-managed lands must comply with the federal and state Clean Air and Clean Water acts. Responsibility for permitting and enforcement of the federal Clean Air Act and Clean Water Act has been delegated to the MDEQ. In addition, the State has its own air quality and water quality protective requirements.

Review and approval of CBM APDs, or PODs, by BLM will be coordinated with the MDEQ in order to ensure that operating requirements needed to comply with any air and water quality standards are implemented. BLM will also work with the MBOGC, EPA, tribes, and other surface management agencies to address concerns over impacts to air and water quality in their respective jurisdictions.

INTERAGENCY WORK GROUP(s)

The BLM and MDEQ will work with the EPA, National Park Service, Forest Service, and other federal, state, and tribal authorities to establish Interagency Work Group(s) for CBM development in the Powder River Basin. The working group(s) will be responsible for developing and recommending the monitoring and mitigation measures needed for each agency to ensure its actions achieve compliance with applicable air and water quality standards across jurisdictional boundaries. In order to ensure consistency, the interagency work group(s) will also coordinate with other work groups established to address CBM development in Wyoming.

The Interagency Work Group(s) will, of necessity, depend upon the regulatory and management policies of the MDEQ as the agency with air and water quality primacy. Each agency within the working group(s) will maintain their regulatory authorities throughout the process.

ROLES, RESPONSIBILITIES AND REGULATORY PROCESS

State of Montana

AIR QUALITY PROGRAM

State Roles and Responsibilities

The MDEQ has delegated responsibilities under the federal Clean Air Act that requires the State to operate an approved ambient air quality monitoring network for the purpose of evaluating compliance with the NAAQS, to report air quality monitoring information to EPA, and to prepare plans for controlling air pollution. Under the Clean Air Act of Montana, the State is required to provide a coordinated statewide program of air pollution prevention, abatement and control.

Regulatory Processes

For Prevention of Significant Deterioration (PSD) of air quality, modeled and monitored results for PM_{10} and NO_2 will be evaluated against the Class I and Class II increments to determine if additional mitigation will be required.
When specific locations and operation requirements for gas compression facilities associated with CBM development are determined, permit applications will be submitted to MDEQ. At that time, additional site-specific air quality analyses may be performed, such as the Best Available Control Technology (BACT) analyses and Prevention of Significant Deterioration (PSD) increment analysis.

The air quality permitting process will be used by MDEQ to analyze emission sources at the project level for CBM activities and develop necessary mitigating measures. The BLM will not approve activities under its jurisdiction that will violate standards.

BLM will impose conditions requiring operators to obtain all necessary state air quality permits for lease operations on BLM-administered lands and to meet state air quality requirements. BLM will take appropriate enforcement action against operators upon finding a violation of an approved federal APD or Sundry Notice.

State Agreements and Policies

The air quality monitoring and analysis will be conducted across the Powder River Basin. The interagency work group(s) will be the forum to determine the need for specific agreements between the states of Wyoming and Montana, EPA, and the tribes, to facilitate regional monitoring, analysis, and mitigation.

The BLM will participate in the Interagency Work Group(s) to consider management options over time in response to new air information. This process will include development of monitoring plans to track regional cumulative impacts to air quality and the establishment of programmatic mitigation at predetermined action levels, as determined appropriate by the State and EPA.

WATER QUALITY PROGRAM

State Roles and Responsibilities

The MDEQ has responsibility under the federal Clean Water Act and the Montana Water Quality Act to monitor and assess the quality of Montana surface waters for pollutants, to prepare plans to control pollution, to assess water quality conditions and trends, to report them to EPA and Congress, and to identify impaired or threatened stream segments and lakes. Furthermore, the State administers a program for the prevention, abatement, and control of water pollution by issuing Montana Pollutant Discharge Elimination System (MPDES) permits.

Limits in MPDES permits or significance determinations will be set so that water quality standards of the receiving waters are not exceeded. Numerical water quality standards have been adopted by the Montana Board of Environmental Review for the Powder, Little Powder and Tongue rivers, Rosebud Creek and their tributaries. MPDES permit or significance

determination limits will be set so that compliance with the Montana water quality standards is achieved.

In accordance with Section 303(d) of the federal Clean Water Act the MDEQ has prepared a list of impaired or threatened waters. This "303(d)" list identifies lakes, rivers, and streams that are not meeting water quality standards and establishes priorities for Total Maximum Daily Load (TMDL) development. The surface waters likely to be affected by CBM development are located in the state's Tongue and Powder TMDL planning areas. The TMDL completion dates for these planning areas are 2005 and 2006, respectively. However, based upon concern due to CBM development the MDEQ and EPA are currently developing TMDLs for these streams for sodium adsorption ratio (SAR) and electrical conductivity (EC).

Regulatory Processes

When site-specific CBM development proposals are submitted to BLM, the operator must include a Water Management Plan that describes how produced water would be managed to meet State water quality requirements. Operators are responsible for obtaining any necessary permits from MDEQ for management, treatment, or discharge of produced water.

The MPDES permitting process would be used by MDEQ to analyze discharges at the project level for CBM activities and to develop necessary permit conditions. Operations that would violate State water quality requirements will not be permitted by BLM.

BLM will require operators to obtain all necessary state water quality permits or authorizations, reviews in lieu of a permit when one is not required, or certifications for federal lease operations. These State permits or authorizations, reviews and certifications will provide documentation of compliance with State water quality requirements.

State Agreements and Policies

The states of Wyoming and Montana entered into an interim Memorandum of Cooperation to protect the downstream water quality of the Powder and Little Powder watersheds that enter Montana from Wyoming. The agreement is based on monthly maximum values for EC, but recognized the need to collect more data on SAR. The memorandum says that at the conclusion of the 18-month interim period the parties shall negotiate a final agreement that will include recognition of protective water quality standards and the allocation of any assimilative capacity.

The Interagency Work Group(s) will be the forum to determine the need for specific agreements between the States, the tribes, EPA, and the surface management agencies to facilitate regional monitoring, analysis, and mitigation. The Interagency Work Group(s) will also review existing agreements and make recommendations regarding their continuation or revision. While BLM will participate in the Interagency Work Group(s), the development of a final agreement between Wyoming and Montana is primarily a State function.

The BLM will participate in the Interagency Work Group(s) to consider management options in response to new water quality information. This process will include development of monitoring plans to track regional cumulative impacts to water quality and the establishment of programmatic mitigation at predetermined action levels as determined appropriate by the State and EPA. BLM will also participate in the Interagency Work Group(s) to address development of TMDLs for the state's Tongue, Powder River, and Rosebud Creek TMDL planning areas.

BLM

BLM STEPS TO OBTAIN APPROVAL TO DRILL

The BLM has primary responsibility for managing the federally owned oil and gas estate. After lease issuance, operations may be conducted consistent with an approved permit. Proposed drilling and associated activities must be approved before beginning operations. The operator must file an APD or Sundry Notice that must be approved according to (1) lease stipulations; (2) onshore oil and gas orders; and (3) regulations and laws. All actions must also conform or be consistent with the Powder River and Billings RMPs. The steps required to obtain approval to drill and conduct surface operations are as follows.

Before drilling an oil or gas well on federal minerals, a Notice of Staking (NOS) or APD must be filed by the lessee or operator for approval with the appropriate BLM office. The NOS notifies BLM that a proposed well site has been staked and signals the need for a site inspection. Filing of the NOS starts the required 30 day public posting period.
An APD must be submitted following submission of the NOS. The APD includes the proposed drilling and surface use plans, maps, statement of bond coverage, operator statements of certification, and a water management plan. An APD can be submitted without filing an NOS, and posting of the APD begins the 30 day public posting period.

During the 30 day public posting period, BLM conducts a site inspection, reviews the APD for completeness and accuracy, and conducts an environmental analysis of the proposal including coordination with other applicable permitting agencies. When the proposed action is on privately owned surface, BLM invites the surface owner to attend the site inspection and provide information or requirements which can be used in the environmental analysis. BLM's review also includes coordination with the MBOGC to determine if the proposed well location conforms with state well spacing rules or if a spacing exception needs to be approved by MBOGC. BLM notifies the State Historic Preservation Office (SHPO) about the results of cultural and historic resource surveys conducted for the proposal. BLM also consults with other State agencies, such as MDEQ, if actions proposed in the APD would require permits issued by MDEQ. BLM approves the APD after completion of the environmental analysis and determining that the APD requirements have been fulfilled.

Before approving full-field development of CBM on federal minerals, a POD must be filed by the lessee or operator for approval with the appropriate BLM office. BLM will work with other agencies that have authority for permitting proposed activities in the review of the POD. BLM and MBOGC will develop procedures to coordinate the review and approval of PODs that involve federal, state and private minerals.

The POD depicts the proposed location of well sites, access roads and production facilities. The POD must include a water management plan, a wildlife monitoring and mitigation plan and cultural resource inventory plan along with an APD for each proposed federal well which will be posted for the 30 day public review period. The water management plan will be approved in consultation with the affected surface owner.
During the 30 day public posting period, BLM conducts site inspections, reviews the APD for completeness and accuracy, and conducts an environmental analysis of the proposal including coordination with other applicable permitting agencies. When the proposed actions are on privately owned surface or may affect private surface, BLM invites the surface owner(s) to attend the site inspections and provide information or requirements which can be used in the environmental analysis. The operator is required to demonstrate that a surface use agreement was offered to the surface owner to protect against losses or that an adequate bond has been secured.

If the proposed action may affect Tribal resources, BLM will consult with the Tribe. BLM will consult with MBOGC about well spacing rules during the POD review process. BLM will also consult with MBOGC if the operator proposes disposal of produced water into pits under the jurisdiction of MBOGC, needs an Underground Injection Control (UIC) permit issued by MBOGC and when an operator needs to offer a mitigation agreement in accordance with Powder River Basin Groundwater Area Order (No. 99-99) requirements and Montana Annotated Code 85-2-521. If the operator needs a UIC permit issued by EPA, BLM will consult with EPA during the POD review process.

BLM will consult and coordinate with MDEQ when air emissions and water discharge or land application permits issued by MDEQ are needed. BLM will also consult with Department of Natural Resources and Conservation (DNRC) when a permit is needed for beneficial use of groundwater and surface water. Coordination will also occur with County Weed Districts to ensure proposed weed control plans comply with laws and regulations. BLM will make decisions for the APDs after completion of the environmental analysis and determining that the APD requirements have been fulfilled, and will make decisions for the POD activities for which BLM has authority after completion of the environmental analysis process and ensuring that the POD requirements have been fulfilled.