



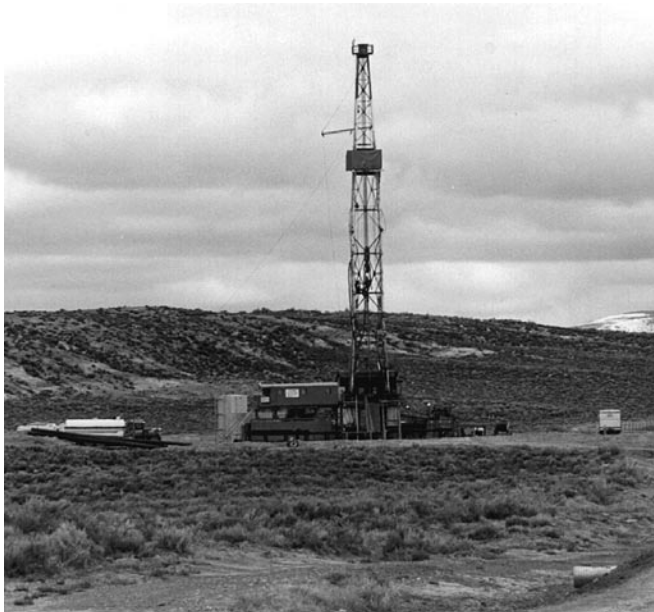
U.S. Department of the Interior
Bureau of Land Management
Wyoming State Office

Rock Springs Field Office

July 2006



RECORD OF DECISION and Jack Morrow Hills Coordinated Activity Plan/Green River Resource Management Plan Amendment



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/WY/PL-06/014+1610

ACRONYMS

ACEC	Area of Critical Environmental Concern	FLPMA	Federal Land Policy and Management Act (of 1976)
AIRFA	American Indian Religious Freedom Act	FR	Federal Register
AML	Appropriate Management Level	GIS	Geographic Information System
AMP	Allotment Management Plan	GPS	Global Positioning System
ANC	Acid Neutralizing Capacity	GRRMP	Green River Resource Management Plan
AO	Authorizing Officer	H ₂ S	Hydrogen Sulfide
APD	Application for Permit to Drill (an oil or gas well)	HAP	Hazardous Air Pollutants
APHIS	Animal and Plant Health Inspection Service (USDA)	HMA	Herd Management Area
AQD	Air Quality Division	HMP	Habitat management plan
ARPA	Archeological Resource Protection Act	HUC	Hydrologic Unit Code
AUM	Animal Unit Month	IBLA	Interior Board of Land Appeals
BA	Biological Assessment	IM	Instruction Memorandum
BBLS	Barrels (a measure of the quantity of condensate)	JMH	Jack Morrow Hills
BCF	Billion cubic feet (a measure of quantity of natural gas)	LAC	Level of Acceptable Change
BLM	Bureau of Land Management	MCF	Thousand cubic feet
CAA	Clean Air Act	MMCF	Million cubic feet
CAP	Coordinated Activity Plan	MMS	Minerals Management Service
CBNG	Coalbed Natural Gas	MOU	Memorandum of Understanding
CDNST	Continental Divide National Scenic Trail	NAAQS	National Ambient Air Quality Standards
CEQ	Council on Environmental Quality	NEPA	National Environmental Policy Act (of 1969)
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act of 1980	NHL	National Historic Landmark
CFR	Code of Federal Regulations	NHPA	National Historic Preservation Act
CO	Carbon monoxide	NO ₂	Nitrogen Dioxide
COA	Condition of Approval	NO _x	Nitrogen Oxides
CSU	Controlled Surface Use	NOI	Notice of Intent
DEQ	Department of Environmental Quality	NRHP	National Register of Historic Places
DPC	Desired Plant Community	NSO	No Surface Occupancy (a stipulation on an oil and gas lease)
EA	Environmental Assessment	O ₃	Ozone
EIS	Environmental Impact Statement	OHV	Off-Highway Vehicle
EJ	Environmental Justice	ORV	Off-Road Vehicle
EPA	Environmental Protection Agency	Pb	Lead
ERRP	Erosion Control, Revegetation, and Restoration Plan	PFC	Proper Functioning Condition (of riparian/wetland areas)
FACA	Federal Advisory Committee Act	PM _{2.5}	Particulate Matter (diameters less than 2.5 micrometers)
		PM	Particulate Matter (diameters less than 10 micrometers)

PSD	Prevention of Significant Determination
RFD	Reasonably Foreseeable Development
RCRA	Resource Conservation and Recovery Act (1976)
RMP	Resource Management Plan (BLM land use plan under FLPMA)
ROD	Record of Decision
ROS	Recreational Opportunity Spectrum
ROW	Right of Way
RSFO	Rock Springs Field Office
SDEIS	Supplemental Draft EIS
SHPO	State Historic Preservation Officer
SMA	Special Management Area
SO ₂	Sulfur Dioxide
SRMA	Special Recreation Management Area
T&E	Threatened and Endangered
TCP	Traditional Cultural Places
TDS	Total Dissolved Solids
U.S.C.	United States Code
USDA	United States Department of Agriculture
USDI	United States Department of the Interior
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
VOC	Volatile Organic Compound
VRM	Visual Resource Management
WAAQS	Wyoming Ambient Air Quality Standards
WAFWA	Western Association of Fish and Wildlife Agencies
WGFD	Wyoming Game and Fish Department
WGSGBP	Wyoming Greater Sage-Grouse Conservation Plan
WO	Washington Office
WOGCC	Wyoming Oil & Gas Conservation Commission
WS	Wildlife Services
WSA	Wilderness Study Area
WYNDD	Wyoming Natural Diversity Database

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RECORD OF DECISION

for the

JACK MORROW HILLS

COORDINATED ACTIVITY PLAN/

GREEN RIVER RESOURCE MANAGEMENT PLAN

AMENDMENT

for

**Public Lands Administered
by the**

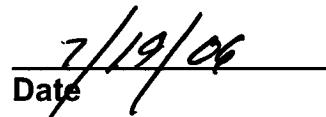
**U.S. Department of the Interior
Bureau of Land Management
Rock Springs Field Office
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Prepared by

**United States Department of the Interior
Bureau of Land Management
Rock Springs Field Office**

July 2006


State Director


Date

RECORD OF DECISION

This Record of Decision (ROD) for the Jack Morrow Hills Coordinated Activity Plan/Green River Resource Management Plan Amendment (JMH CAP/Green River RMP Amendment) was prepared by the Bureau of Land Management (BLM) Rock Springs Field Office (RSFO) in Rock Springs, Wyoming. For ease of writing, the official name of the coordinated activity plan is abbreviated to “the JMH CAP” (without quotes) throughout this document.

The JMH CAP provides management direction for important resources and uses in the planning area. It also addresses conflicts between development of energy resources, recreational activities, and other resource uses. The JMH CAP also provides management direction for certain resources, such as big game habitat, unique sand dune-mountain shrub habitat, and unstabilized and stabilized sand dunes, while allowing recreational activities, mineral leasing and development, livestock grazing, and other activities.

The decision is to select and approve a management strategy for the planning area. Some Green River RMP decisions are superseded by this amendment. Green River RMP decisions not addressed in this Amendment continue unchanged. Green River RMP amendments, including fluid and locatable mineral decisions that were deferred in the “core” area, apply only to the JMH CAP planning area.

What the Decision Will Provide

This ROD will provide overall direction for management of all resources on BLM-administered land within the planning area.

What the Decision Will Not Provide

Many decisions are not appropriate at this level of planning and will not be included in this ROD. Examples include:

- 1) *Statutory requirements.* The decision will not change the BLM’s responsibility to comply with applicable laws and regulations, including the Clean Air Act, Clean Water Act, Endangered Species Act, National Environmental Policy Act, Federal Land Policy and Management Act, or any other federal law.
- 2) *National Policy.* The decision will not change BLM’s obligation to conform with current or future national policy.
- 3) *Funding levels and allocations.* These are determined annually at the national level and are beyond the control of the field office.
- 4) *Changes in wilderness study area boundaries.*

BACKGROUND SUMMARY

The Green River RMP was published in October 1997. Because of concerns raised by the public and BLM regarding resource uses and conflicts in the Jack Morrow Hills (JMH) area, the RSFO deferred decisions on fluid mineral leasing, withdrawals for mineral location, and related mining activities until a Coordinated Activity Plan (CAP) for the area was completed.

The Green River RMP deferred these decisions in a “core” area, which included—

- The eastern portion of the Greater Sand Dunes ACEC (not including any parts of the Buffalo Hump or Sand Dunes WSAs)
- The entire Steamboat Mountain ACEC
- The area of overlapping crucial big game habitats surrounding and adjacent to the Greater Sand Dunes and Steamboat Mountain ACECs (Map 1).

The “core” area encompasses approximately 90,000 acres; however, the JMH CAP area includes about 622,000 acres surrounding and including the “core” area. The BLM administers approximately 574,800 acres of the planning area through the RSFO in Rock Springs, Wyoming. Parts of Fremont, Sweetwater, and Sublette Counties lie within the planning area.

BLM began preparing the JMH CAP in 1998. The original draft Environmental Impact Statement (EIS) for the JMH CAP was issued in July 2000. After comment analysis, BLM prepared a supplemental draft EIS (SDEIS) for the JMH CAP. The SDEIS was issued in February 2003 and the final EIS in July 2004.

During the planning process, BLM hosted 48 public events (including public meetings, public hearings, and speaking at organizational group meetings) and 13 cooperating agency meetings. BLM received 12,129 comments on the draft EIS, and 69,471 on the SDEIS. A total of 1,011 submissions were received during the protest period for the final EIS, of which 986 were considered formal protest letters and were subsequently resolved (see Appendix ROD-1).

Proposed actions in the planning area during preparation of this JMH CAP were evaluated case-by-case against criteria for sensitive areas (see Green River RMP ROD, page ROD-5). This was done to maintain operational consistency with the Green River RMP and maintain a broad range of management options for future resource management within the JMH CAP area that might otherwise have been limited by allowing development or disturbance within highly sensitive areas for wildlife and/or areas that are sensitive for soils, vegetation, visual intrusion, etc. Because these criteria specifically affected oil and gas operations, BLM offered to suspend existing oil and gas leases (under guidance from Section 39 of the Mineral Leasing Act, as amended) on a voluntary basis within the JMH CAP planning area pending completion of the CAP. As a result, many oil and gas operators in the planning area asked that their leases be suspended.

LAND USE PLAN AND IMPLEMENTATION DECISIONS

The decision is hereby made to approve the JMH CAP which is the Proposed Plan in the final EIS, with some reorganization and clarifications as a result of public comment and protest. The JMH CAP contains no significant changes from the final EIS Proposed Plan and is the Selected or Approved Plan for managing the Jack Morrow Hills area of the Rock Springs Field Office, Wyoming. The JMH CAP was prepared under regulations implementing the Federal Land Policy and Management Act (FLPMA) of 1976 (43 CFR 1600). An accompanying EIS was prepared in compliance with BLM planning regulations (43 CFR 1600) and the National Environmental Policy Act (NEPA) of 1969.

Land Use Plan Decisions

Land use plan decisions made in the CAP include—

1. Land use allocations, including identifying two special management areas (SMAs) and expanding one existing ACEC
2. Establishment of Visual Resource Management (VRM) classes
3. Allowable uses and restrictions
4. Establishment of Off-Highway Vehicle (OHV) area designations
5. Surface use restrictions, and designating areas open, closed, available, and unavailable to oil and gas leasing, location, and salable mineral disposal
6. Rights-of-way (ROW) exclusion and avoidance areas.

See Table ROD-1 for a summary. More detail is found in the attached JMH CAP.

A 30-day protest period was provided on the land use plan decisions in the “Proposed JMH CAP/Green River RMP Amendment,” in accordance with 43 CFR 1610.5-2. This ROD serves as the final decision for the land use plan and becomes effective on the date this ROD is signed. There are no further administrative appeal/protest opportunities for these decisions.

Table ROD-1. Summary of Land Use Allocations

Land Use Allocation	Acres	FEIS Reference
Special Management Areas:		
Retain existing 5 ACECs	146,930	Table 3-1
Expand 1 existing ACEC	3,980	Table 4-2
Identify 2 new SMAs: <ul style="list-style-type: none"> • One SMA expands the existing Continental Divide National Scenic Trail system by adding a side trail • One SMA identifies management for cultural and heritage resources in the West Sand Dunes Archaeological District 	19,840	Table 4-2

Land Use Allocation	Acres	FEIS Reference
Other Management Areas:		
Pinnacles Geologic Feature	1,340	Table 3-1
Pinnacles Geographic Area	8,950	Table 3-1
Red Desert Watershed Management Area	179,310	Table 3-1
Steamboat Mountain Management Area	95,400	Table 3-1
Off Highway Vehicle Management:		
Areas open to OHV use	10,020	Table 4-9
Areas closed to OHV use	123,940	Table 4-9
Areas with limited OHV use		Table 4-9
<i>Designated roads and trails</i>	213,810	
<i>Existing roads and trails</i>	274,570	
<i>Seasonal access</i>	476,750	
Visual Resource Management:		
Area in VRM Class I	119,340	Table 4-1
Area in VRM Class II	199,980	Table 4-1
Area in VRM Class III	67,240	Table 4-1
Area in VRM Class IV	235,780	Table 4-1
Minerals and Alternative Energy Resource Management:		
Areas open to oil and gas leasing (subject to leasing restrictions)	305,770	Table 4-3
Areas closed/unavailable to oil and gas leasing	316,570	Table 4-3
Areas open/available to mineral location	467,150	Table 4-7
Areas closed to mineral location	155,190	Table 4-7
Areas closed to non-metallic mineral location	345,740	Table 4-7
Areas open to salable mineral disposal	131,800	Table 4-6
Areas closed to salable mineral disposal	490,540	Table 4-6
Right-of-Way Management:		
Right-of-way avoidance area	434,330	Table 4-10
Right-of-way exclusion area	40,200	Table 4-10

Continuity of Previous Decisions

The attached JMH CAP contains existing land use plan decisions made in the Green River RMP (USDI 1997). Project or activity level plans tiered to the Green River RMP will remain in effect and continue to be implemented in the Jack Morrow Hills planning area.

Implementation Decisions

Certain decisions, such as OHV area designations, VRM area classifications, SMA identification, changes in ACEC designations, ROW avoidance and corridor areas, and identification of lands available for oil and gas leasing will be immediately effective upon issuing this ROD without additional NEPA analysis. These types of allocation decisions are administratively final.

Most activities identified as implementation decisions in the JMH CAP will require the preparation of additional NEPA analysis, which considers project and site-specific conditions and identifies mitigation to reduce impacts, before approval/initiation.

Examples include future oil and gas lease sales, grazing permit renewals, or future land exchanges. Public involvement opportunities, including further protest or appeal opportunities, are provided at that time.

ALTERNATIVES OVERVIEW

BLM considered a reasonable range of alternatives, as required by the Council on Environmental Quality (CEQ) (40 CFR 1502.14).

Alternatives and Management Options Considered but Eliminated from Detailed Analysis

BLM considered the following alternatives and management options:

- 1) National Conservation Area designation or National Park designation
- 2) Other SMA designations
- 3) Closure to livestock grazing
- 4) Closure to mineral leasing
- 5) Maximum unconstrained and maximum constrained alternatives
- 6) Applying Standard Lease Notice 1 as the only mitigation for surface disturbing and disruptive activities due to oil and gas exploration and development activities
- 7) Authorizing activities with a no surface occupancy (NSO) requirement on the entire planning area
- 8) Prohibiting oil and gas exploration and development activity on existing leased areas
- 9) Buy-back/exchange of existing producing mineral leases
- 10) Eliminating surveys for threatened and endangered species required by the Endangered Species Act, federal regulation, and the Wyoming Standards for Healthy Rangelands
- 11) Designation of new wilderness study areas.

A brief description of each alternative and/or management option and the reason for eliminating it from further analysis is contained in Chapter 2 of the final EIS for the Jack Morrow Hills Coordinated Activity Plan/Proposed Green River Resource Management Plan Amendment (USDI-BLM, 2004).

Alternatives Considered in Detailed Analysis

Each of the five alternative activity plans analyzed in the final EIS provided a different emphasis for managing the planning area, and each resolved the planning issues differently.

No Action Alternative (Continuation of Existing Management)

The No Action Alternative is defined as continuation of present management. This represents decisions set forth in the Green River RMP (October 1997), which provide for multiple-use management of public lands and resources to meet foreseeable needs. The No Action Alternative is the baseline to which the other alternatives are compared. The No Action Alternative recognizes valid existing rights. No additional lands are considered for fluid mineral leasing in the 90,000 +/- acre "core" area as defined in the Green River RMP. No existing ACEC changes are proposed. Suspended oil and gas leases in the planning area are reinstated. Existing leases could be developed consistent with lease rights and a case-by-case review, with appropriate mitigation as needed. Based on the predicted drilling and completion rates for the planning area, it is estimated that 126 exploration wells and 95 development wells will be drilled, with 114 wells placed into production. The RFD also predicts that two coalbed gas exploration projects with 50 coalbed gas wells will be developed, for a total reasonably foreseeable development of 271 wells.

Alternative 1 (Development)

Alternative 1 provides for expanded opportunities to use and develop resources in the planning area. Resources are protected to the extent required by applicable laws and regulations. Alternative 1 allows for leasing, location, and sale of mineral resources, and authorization of mineral development throughout the planning area consistent with existing regulatory requirements and statutory withdrawals and closures. Additional lands are considered for fluid mineral leasing in the "core" area. The Steamboat Mountain ACEC designation is removed. This alternative results in modifications or amendments to previous land management decisions in the 1997 Green River RMP. It is estimated that 156 exploration wells and 108 development wells will be drilled, with 132 wells placed into production. The RFD also predicts that two coalbed gas exploration projects with 50 coalbed gas wells will be developed, for a total reasonably foreseeable development of 314 wells.

Alternative 2 (Preservation)

Alternative 2 reduces opportunities to use and develop resources within the planning area compared to the No Action Alternative. This alternative emphasizes improving and protecting habitat for wildlife and sensitive plant and animal species, improving riparian areas and water quality, and protecting historic, cultural, and Native American sites. Boundaries of existing ACECs are expanded to protect sensitive resources, and research natural area (RNA) designations are pursued. Two new ACECs are designated. The core area is closed to future oil and gas leasing. Alternative 2 closes or designates portions of the planning area to restrict some land uses and does not allow development in areas with competing resource uses. Development or activities will occur in specified portions of the planning area, with appropriate mitigation measures. It is estimated that 86 exploration wells and 77

development wells will be drilled, with 90 wells placed into production. The RFD also predicts that one coalbed gas exploration project with 25 coalbed gas wells will be developed, for a total reasonably foreseeable development of 188 wells.

In accordance with the CEQ regulations 40 CFR 1502.2(b), BLM considers Alternative 2 as the most environmentally preferable due to its “preservation” focus. This alternative would result in the least amount of impact to the majority of resources in the JMH CAP area.

Alternative 3 (Conservation)

Alternative 3 provides opportunities to use and develop resources within the planning area while ensuring other resource protection. This alternative allows development and activities to occur throughout the planning area provided that sensitive resources are protected and mitigation requirements are met. Mitigation requirements necessary to ensure the stability of the sensitive resource indicators are determined through an adaptive management approach to resource use and protection. Additional lands are considered for fluid mineral leasing in the “core” area. Boundaries of existing ACECs are expanded as necessary to protect sensitive resources. It is estimated that 115 exploration wells and 90 development wells will be drilled, with 107 wells placed into production. The RFD also predicts that two coalbed gas exploration projects with 50 coalbed gas wells will be developed, for a total reasonably foreseeable development of 255 wells.

Proposed Plan

The BLM’s Proposed JMH CAP provides opportunities to use and develop resources within the planning area by providing opportunities for a balance of uses. The Proposed JMH CAP is a complementary mix of appropriate elements from the other alternatives; however, the Proposed JMH CAP also contains management actions not included in any of the other alternatives. The Implementation, Monitoring, and Evaluation process provides direction on how the various surface use activities and their interactions with other planning area resources will be addressed and helps achieve the multiple use management vision. The Proposed JMH CAP initiates an implementation strategy and provides guidance for monitoring and evaluation of activities. The strategy allows for making adjustments to changing conditions and for further public participation through the establishment of a JMH CAP Activity Working Group (AWG). Boundaries of one existing ACEC are expanded in order to better protect sensitive resources. It is estimated that 115 exploration wells and 90 development wells will be drilled, with 107 wells placed into production. The RFD also predicts that two coalbed gas exploration projects with 50 coalbed gas wells will be developed, for a total reasonably foreseeable development of 255 wells.

The Selected Plan

The JMH CAP is the Proposed Plan in the final EIS, with some reorganization and clarifications as a result of public comment and protest. The JMH CAP is the Selected or Approved Plan, and contains no significant changes from the final EIS Proposed Plan. The Selected Plan is consistent with adjacent local, state, and federal land use plans.

MANAGEMENT CONSIDERATIONS

Based on input received during the planning process, there was both support and opposition to many components of the JMH CAP. Concerns were raised that the Proposed JMH CAP was not consistent with the Wyoming Game and Fish Commission Policy No. VII H (April 28, 1998), which states some modification of crucial habitat is permitted, but only if “habitat function is maintained (i.e., the location, essential features, and species supported are unchanged).” Other concerns were raised that the JMH CAP is inconsistent with other state plans and policies (such as the Wyoming Department of Transportation) and directly contradicts and conflicts with county and Sweetwater County Conservation District plans. This issue is addressed in Section 1.5 of the JMH CAP (Relationships to Federal, State, Local, and Tribal Government Plans). By letter dated August 23, 2004, Governor Freudenthal acknowledged that the Proposed JMH CAP “maintained general consistency with state and local plans, policies and programs.” For more information, see the Coordination and Consistency section.

BLM manages public lands under the FLPMA multiple use mandate. Other laws and regulations affecting public lands and its resources must also be considered. The JMH CAP provides a balance between reasonable measures necessary to protect existing resource values and the need to make beneficial use of the planning area resources. Therefore, implementation of the JMH CAP is the alternative best able to comply with the purpose and need for the activity plan, regulations, policy, and agency direction.

MITIGATION MEASURES

Mitigation measures contained in Appendices 2, 4, 5, and 7 of the JMH CAP are practices and procedures available to BLM to reach the objectives and desired future conditions envisioned within the plan area. They may be added or modified as new information or subsequent analyses indicate.

PLAN MONITORING

The effectiveness of the management decisions and mitigation measures will be determined through the Implementation, Monitoring and Evaluation Process (Appendix 2 in the JMH CAP). Resource baseline and indicator data will be collected. Monitoring for specific resources or activities is described in Section 2.2.1 of the JMH CAP/EIS). These data will be used to evaluate and select effective mitigation measures for proposed projects. This process allows plan decisions and management actions to be evaluated to determine if the objectives of the JMH CAP/RMP amendment are being met. If evaluation indicates that the objectives are not being met or if situations in the resource area change, it may become necessary to modify, amend, or revise decisions and management actions identified in the JMH CAP. Necessary plan modifications will be done in accordance with BLM planning regulations (43 CFR 1600).

Air quality will be characterized by the State of the Atmosphere project. This project estimates concentrations, visibility, and atmospheric deposition impacts throughout the state. The State of The Atmosphere project aims to develop a database of air

quality dispersion modeling files and initial study results covering air quality conditions in the State of Wyoming. This includes emissions information as well as such meteorological data as winds, temperature, atmospheric dispersion, turbulence, etc. The work products derived from the State of the Atmosphere project are intended to describe current air quality conditions (through dispersion modeling) and will be used in future BLM-sponsored modeling analyses of air quality conditions. The work products will also be used to evaluate the effects of emission reduction mitigation on air quality compared to the perceived impact effects.

New Information

As part of the implementation, monitoring, and evaluation process, new information will be considered. New information and studies were released following publication of the Final Environmental Impact Statement. For example, new studies for elk, greater sage-grouse, mule deer, and air quality were released after the close of the protest period. Expectations are that new information gathered from inventories and assessments, research, other agency studies, and other sources will update baseline data or support new management techniques and scientific principles. To the extent that such new information or actions address issues covered in the JMH CAP, these data will be integrated through the implementation, monitoring, and evaluation process. This process includes the use of an adaptive management strategy. As part of this process, management actions and the JMH CAP will be reviewed periodically to determine whether the objectives are being met. Where they are not being met, adjustments of appropriate scope will be considered. Where taking or approving actions would alter or not conform to the overall direction of the JMH CAP, the process provides for preparation of a plan amendment and environmental analysis, and seeking additional public comment in accordance with BLM planning regulations (43 CFR 1600). Examples of new studies are summarized below and additional information is available in the Rock Springs Field Office.

Elk

A study of elk in the JMH CAP area (Sawyer, H. and R. Nielson, 2005. "Seasonal distribution and habitat use patterns of elk in the Jack Morrow Hills planning area, Wyoming." July 2005. Western Ecosystems Technology, Inc., Cheyenne, Wyoming) identifies and describes the distribution and habitat selection patterns of the Steamboat elk herd. This baseline data documents the habitat use and distribution patterns of elk before increased levels of oil and gas development or other mineral extraction occur in the JMH planning area, thereby providing agencies and industry with pre-development information to monitor potential effects on the JMH elk population if, or when, significant levels of development occur.

Greater Sage-Grouse

Two new studies of greater sage-grouse document the investigated impacts of development of natural gas fields on greater sage-grouse. The first study ("Greater sage-grouse (*Centrocercus urophasianus*) population response to natural gas field development in western Wyoming" prepared by Matthew J. Holloran, December 2005; and "Spatial distribution of greater sage-grouse nests in relatively contiguous sagebrush habitats" prepared by Matthew J. Holloran And Stanley H. Anderson, September 2005) documents the investigated impacts of development of natural gas

fields on greater sage-grouse breeding behavior, seasonal habitat selection, and population growth in the upper Green River Basin of western Wyoming. The study findings confirm predicted impacts: that greater sage-grouse appeared to be avoiding leks situated within or near the development boundaries of natural gas fields; that nesting female greater sage-grouse generally avoided areas with high densities of producing wells and brooding females avoided producing wells. The study also found that adult nesting greater sage-grouse subjected to natural gas field impacts throughout the breeding and nesting seasons potentially became habituated to natural gas field-related disturbance, but those brooding adult females subjected to natural gas field development impacts had lower survival rates than control individuals during the early brood-rearing and summer periods.

Another recently released study developed models based on habitat, climate, and human-made influences to determine risks to chicks and nests of greater sage-grouse in Alberta, Canada (“Identifying habitats for persistence of greater sage-grouse in Alberta, Canada,” Cameron L. Aldridge, 2005). Greater sage-grouse may be exposing themselves to more predator danger by feeding in areas having less hiding cover but better food availability. These models may prove useful in identifying areas in need of protection, but further correlation with local conditions is necessary.

Mule Deer

Results of a new study were released after the close of the protest period (Sawyer, H., R. Nielson, D. Strickland, and L. McDonald, 2005. “Sublette Mule Deer Study (Phase II): Long-term monitoring plan to assess potential impacts of energy development on mule deer in the Pinedale Anticline Project Area.” Prepared by Western EcoSystems Technology Incorporated, for the Pinedale Bureau of Land Management, the Wyoming Game and Fish Department, Questar Exploration and Production, and TRC Mariah Associates, 52 pages).

This monitoring effort looked at the potential impacts of the Pinedale Anticline gas field development to the Sublette mule deer herd in regards to 1) direct habitat loss, 2) changes in habitat selection, and 3) population performance.

The monitoring found that well pads account for more direct habitat loss than roads. However, deer used areas within 1.67 to 2.3 miles (2.7 to 3.7 km) of roads less than expected, and did not acclimate to wells, suggesting indirect habitat loss may be much greater than direct habitat loss. There was a 46 percent decline in deer abundance over four years not attributed to other causes. This decline was not seen in the control area, but it is not known whether this is a reduction in population or displacement of animals or a combination of both.

Air Quality

The supplemental air quality analysis for the Jonah Infill EIS and the Jonah Infill Drilling Project Draft and Final Air Quality Technical Support Documents provide new information relating to air quality impacts. The Jonah supplemental analysis identified potentially significant impacts to visibility; however, all potential impacts from the JMH CAP project alone were negligible. This analysis confirms negligible contributions to air quality from the Jack Morrow Hills CAP reasonably foreseeable

activities, and supports the adequacy of the air quality analysis in the SDEIS and final EIS for JMH.

PUBLIC PARTICIPATION

Public participation is described in Chapter 5 of the final EIS. The EPA Notice of Availability for the final EIS was published in the Federal Register on July 16, 2004.

Government agencies, organizations, and individuals received copies of both the supplemental draft and final EIS documents. Individuals and organizations submitted a total of 69,471 comment letters on the SDEIS. Responses to all substantive comments were prepared and printed in the final EIS. The Director received a total of 1,011 submissions during the 30-day protest period for the final EIS. All protests have been dismissed or resolved.

COORDINATION AND CONSISTENCY

Coordination with Native American tribes occurred throughout the planning process. Several letters were sent as part of the consultation process with Native American tribal councils asking them to identify places of concern, and requesting contact information for any other people with whom the BLM should consult concerning sacred sites or other places of concern. The BLM followed up with additional consultation and further discussions with the tribal councils. Native Americans and tribes were encouraged to, and did on several occasions, participate in the numerous field trips, meetings, school visits, and presentations regarding this planning project.

The U.S. Fish and Wildlife Service (USFWS) and BLM began consultation on the impacts of BLM activities in the Jack Morrow Hills area on August 22, 2000. A meeting with field personnel to discuss the JMH CAP and its potential effects on listed species occurred September 2, 2003. The BLM provided drafts of the Biological Assessment (BA) on November 17, 2003; March 3, 2004. The BA determined that the CAP “may affect, but would not likely adversely affect” several T&E species—including the black-footed ferret, Ute ladies’-tresses, and blowout penstemon—and “may affect, likely adversely affect” the “Colorado River Species” and “Platte River Species” (Appendix 3 in the final EIS). BLM initiated formal Section 7 consultation with the USFWS on June 24, 2004. The USFWS sent a concurrence letter on August 3, 2004 (Appendix ROD-2), stating concurrence with BLM’s effects determinations made in the proposed CAP and BA (Appendix 3 in the final EIS).

BLM coordinated with the EPA throughout the JMH CAP effort since the preparation of the 2000 draft EIS. Topics discussed include comments on the draft EIS, SDEIS and final EIS; the Adaptive Management Strategy and subsequent Implementation, Monitoring and Evaluation Process; and general project updates. EPA provided a rating of EC-2 on the supplemental draft (Federal Register notice dated July 11, 2003, and indicated no formal comments on the final EIS (Federal Register notice dated September 10, 2004).

The RSFO extended Cooperating Agency status to the State of Wyoming (including Sublette County, Popo Agie Conservation District, Sublette County Conservation District, and Sweetwater County Conservation District), Fremont County, and

Sweetwater County for the JMH CAP effort. The cooperating agencies were formally invited to participate in the development of the alternatives and to provide existing data and other information relative to their disciplines. In addition to numerous conference calls, the RSFO held meetings with the cooperating agencies to discuss the overall development of the JMH CAP and EIS. The Wyoming Office of Federal Land Policy represents the State of Wyoming, with the following agencies designated as members:

State Government

- Wyoming Game & Fish Department
- Wyoming State Lands
- Wyoming Department of Agriculture
- Wyoming State Historical Preservation Officer
- Wyoming State Geological Survey
- Wyoming State Engineer's Office
- Wyoming Oil & Gas Commission
- Wyoming Livestock Board
- Wyoming Department of Environmental Quality
- Wyoming Governor's Office

County Conservation Districts

- Popo Agie Conservation District
- Sublette County Conservation District
- Sweetwater County Conservation District

County Commissions

- Fremont County Commission
- Sublette County Commission
- Sweetwater County Commission

The BLM interdisciplinary team reviewed county land use plans to ensure consistency where possible. Meetings were held with the respective county planners and commissioners to promote a greater understanding of goals, objectives, and resources of both the counties and BLM.

By letter dated August 23, 2004, Governor Freudenthal provided specific comments regarding concerns with the Proposed JMH CAP and Green River RMP Amendment, but acknowledged that the Proposed JMH CAP "maintained general consistency with state and local plans, policies and programs."

The Governor's comments include:

- Concern that the Proposed JMH CAP/final EIS does not provide adequate protections for greater sage-grouse
- Concern regarding elimination from detailed analysis of the option to buy-back oil and gas leases
- Suggestion that the number of wells be capped at 255 in the ROD

- Concerns over adequate big game crucial habitat protection given language expressed in Appendix 4 in the Proposed JMH CAP/final EIS relative to the enforcement of big game winter range seasonal stipulations and inclusion of Conditions of Approval.

The Wyoming BLM State Director responded to the Governor's comments by letter dated July 19, 2006. The JMH CAP is consistent with officially adopted plans, programs and policies of the State and local governments to the extent it can be and still meet the multiple use objectives of FLPMA.

PUBLIC AVAILABILITY OF THIS DOCUMENT

Copies of the Jack Morrow Hills Coordinated Activity Plan/Green River RMP Amendment are available on request from the Rock Springs Field Office and Wyoming State Office located at:

Bureau of Land Management
280 Highway 191 North
Rock Springs, Wyoming 82901
Telephone: (307) 352-0256

Bureau of Land Management
5353 Yellowstone Road
Cheyenne, Wyoming 82009
Telephone: (307) 775-6256



Robert Bennett
Wyoming State Director
Bureau of Land Management

Date

7/19/06

APPENDIX ROD-1. PROTEST/COMMENT SUMMARY AND RESULTANT PLAN CLARIFICATIONS

The BLM received 1,011 submissions during the protest period for the final EIS; 986 were determined formal protests (see Appendix F of BLM Manual Handbook H-1601-1). The Director of the Bureau of Land Management (BLM) responded to and resolved all protests. Protest resolution resulted in minor corrections and wording clarification, but did not change any of the Proposed JMH CAP/Green River RMP Amendment decisions.

Of the letters submitted to the Director, 15 were not considered formal protests, as they were submitted by parties who either had not participated in the planning process (and therefore had no standing to submit protests), did not protest a proposed decision in the proposed plan, submitted protests after the protest period had ended, or simply asked for clarification and information. Another 10 letters were either duplicates or untimely filed. Responses to these comment letters were provided either by the Director or the Wyoming BLM State Director.

In addition to the 1,011 submissions, 20 comment letters were submitted on the final EIS to either the BLM Wyoming State Director or the Rock Springs Field Manager. Many of these comments reflected issues submitted in the protest letters. These 20 letters also received responses.

The major concerns submitted in protest or comment letters are summarized below along with the BLM response. Some concerns identified that the text, tables, maps, and appendices in the proposed plan were unclear or inconsistent among one another. As a result of these concerns, the text, tables, maps, and appendices have been clarified in the JMH CAP. References to the sections of the JMH CAP containing these clarifications are also identified. Clarified text sections are consolidated at the end of this Appendix for easy reference.

Federal Land Policy Management Act (FLPMA) Violations. Concerns were raised that BLM failed to follow the principles of multiple use and sustained yield as set forth in FLPMA by not proposing a plan that provides harmonious and coordinated management of the various resources without permanent impairment of the productivity of the land and the quality of the environment.

Response to concerns: The Proposed JMH CAP provides direction for managing the many resources and uses in the area, while providing protection for resources through such actions as closing areas to oil and gas leasing, precluding other surface disturbance and disruptive activities, and applying mitigation to other activities that could impact resource values. The JMH CAP meets the intent of multiple use as mandated by FLPMA. Specifically, the plan addresses a wide variety of foreseeable activities, and provides management goals, objectives, specific actions, and mitigation to carry out the management of the various resources in the JMH CAP area.

National Environmental Policy Act Violations. Concerns were raised that the Proposed JMH CAP contains too much uncertainty relative to unknown future management actions that rely on a monitoring plan dependent on other agencies and unsecured funding. Concerns also noted that the BLM had insufficient information on the existing environment to make informed management decisions or provide an adequate analysis of the impacts of those decisions. Other concerns included that BLM failed to disclose the costs of obtaining data where scientific information was incomplete or unavailable. Concerns were raised that the final EIS introduces major areas of new information that were not subject to public review in the Supplemental draft EIS and that a supplement to the final EIS or notice of significant change should be prepared.

Response to concerns: Reasonably foreseeable activities are identified throughout the JMH CAP and provide the basis for identifying potential impacts to resources and appropriate mitigation. The BLM is relying on an adaptive management system, as recommended by the EPA and CEQ, to evaluate the effectiveness of mitigation and adjust management actions as necessary. This should not be construed to mean that the proposed management actions and mitigation are not effective; the intent is to continuously learn about impacts and improve resource management and mitigation. While BLM welcomes additional partnerships in monitoring activities, it does not rely on other agencies and unsecured funding to meet its obligations. Funding is provided by Congress to address all aspects of BLM's multiple use mission.

The necessary and appropriate data were gathered and used in the formulation of alternatives, descriptions of the affected environment, and the impact analysis, to ensure that BLM could make informed and reasonable management decisions. Prior to commencing the planning effort and throughout the planning effort, the BLM considered data needs and adequacy of existing data. For example, land health assessments (1999-2001) and riparian/wetland inventories (1995-2000) were completed for the entire planning area to establish baseline conditions and to identify critical data gaps. The final EIS acknowledges that data gaps do exist for specific resources (Chapter 3, final EIS, page 3-1). Every effort was made to use the most recent and best information available during the EIS process. No data needs were dismissed based solely on the costs of gathering data. Some data needs were not necessary to make informed decisions at this planning level.

The implementation, monitoring, and evaluation process also anticipates the receipt of new information. New information improves the understanding about the nature and extent of actions such as oil and gas development and other activities on various resources. The additional knowledge provided by monitoring activities and future studies will be considered in evaluating the continued effectiveness of existing mitigation. Management adjustments and/or additional mitigation may be identified. A maintenance action or an amendment to the Green River RMP for the JMH CAP planning area, as identified in 43 CFR 1600, will be pursued if necessary. This process serves to keep the land management actions/prescriptions for the JMH CAP area effective and current. See the New Information section in the Record of Decision.

The modifications provided in the final EIS are a result of public comment, incorporation of new information, internal review, and changes in management direction and policy. The Proposed JMH CAP in the final EIS is essentially a

modification of the Preferred Alternative presented in the Supplemental draft EIS. The changes are within the range of those contemplated by the NEPA process without requiring supplementation.

As part of the protest resolution process, BLM conducted a thorough review of new information available since the completion of the final EIS in 2004. This was done to address the requirement in 40 CFR 1502.9(c)(1) that "Agencies shall prepare supplements to either draft or final environmental impact statements if ... (ii) there are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts." This review did not identify any new and potentially significant impacts beyond the range and scope of those already considered and analyzed in the final EIS which would alter the conclusions or land use allocation decisions in the Proposed JMH CAP. BLM will consider new information and data relating to resources and activities as the information becomes available. The proposed Implementation, Monitoring, and Evaluation Process described in the final EIS (Appendix 17) provides for the adjustment of management actions necessary to ensure continuation of resources such as suitable wildlife habitats and provides for uses in the area. Additional knowledge provided through monitoring activities and current and future studies will be considered in evaluating the continued effectiveness of existing mitigation, implementing changes through plan maintenance actions, and application of conditions of approval for permitted activities, as necessary.

The planning process considered several alternatives that addressed resource uses, allocations, and land status designations with extensive public involvement. The JMH CAP provides for the management of the Federal lands and minerals in the planning area in a manner that continues to recognize the valid existing rights and major uses within this area including domestic livestock grazing; fish and wildlife habitat protection, utilization, and development; mineral exploration and production; utility and road rights-of-way; visual resource protection; outdoor recreation, etc.

Consistency with State and Local Plans and Policy. Concerns were raised that the Proposed JMH CAP is not consistent with the Wyoming Game and Fish Commission Policy No. VII H (April 28, 1998), which states that some modification of crucial habitat is permitted but only if "habitat function is maintained (i.e., the location, essential features, and species supported are unchanged)." Other concerns were raised that the Proposed JMH CAP is inconsistent with other state plans and policies (such as the Wyoming Department of Transportation) and directly contradicts and conflicts with county and Sweetwater County Conservation District plans.

Response to concerns: Regarding consistency with State and local plans, Section 202(c)(9) of FLPMA states: "to the extent consistent with the laws governing the administration of the public lands . . . land use plans of the Secretary under this section shall be consistent with State and local plans to the maximum extent he finds consistent with Federal law and the purposes of this Act."

The BLM has worked closely with State and local governments in preparing the JMH CAP final EIS. The State of Wyoming (including Sublette County, Popo Agie Conservation District, Sublette County Conservation District, and Sweetwater County Conservation District), Fremont County, and Sweetwater County have been cooperating agencies in the preparation of the EIS, participating throughout the

process. By letter dated August 23, 2004, Governor Freudenthal provided specific comments regarding concerns with the proposed JMH CAP and Green River RMP Amendment, but acknowledged that the Proposed JMH CAP “maintained general consistency with state and local plans, policies and programs.” The Wyoming State Director has addressed concerns raised by the Governor in the consistency review letter (see the Coordination and Consistency section in the Record of Decision).

Implementation and Monitoring. Concerns were raised that the final EIS did not identify the size of the three oil and gas leasing areas. Other concerns included the assurance of funds for the implementation strategy, how valid existing rights are considered, and that there is uncertainty regarding when indicators would require action and what action would be taken in response to triggers.

Response to concerns: Implementation and monitoring is thoroughly discussed in Chapter 2 with additional detail provided in Appendix 17 of the final EIS. Clarifications and remedies for these implementation and monitoring concerns are discussed in more detail in the JMH CAP/Green River RMP Amendment Clarifications section of this Appendix. See numbers 1, 2, 3, 6, and 8 in this section.

Wildlife Resources. Concerns raised included that BLM failed to analyze impacts to wildlife and wildlife habitat. Other concerns included that the BLM needed to further clarify greater sage-grouse management actions.

Response to concerns: The final EIS analyzed potential impacts on all resource values and uses, including wildlife and wildlife habitat, within the planning area. The BLM did take a “hard look” at potential environmental impacts of the actions proposed under each alternative, based on the best available data, to estimate and disclose potential environmental impacts as required by NEPA (final EIS, Chapter 4).

Clarifications and remedies for greater sage-grouse concerns are included in the JMH CAP/Green River RMP Amendment Clarifications section of this Appendix. See numbers 4, 5, and 6 in this section.

Mineral Management. Concerns raised included impacts to gold mining activities from pursuing withdrawals in areas where there was interest in gold mining activity.

Concerns raised included that BLM failed to recognize lessee’s rights when applying Conditions of Approval (COA) to oil and gas development activities. Some comments suggested that BLM should clarify how COAs are formulated and how they may affect existing lease rights.

Concerns identified that the purpose of the Reasonably Foreseeable Development (RFD) scenario for oil and gas is unclear and that well projections are underestimated. Other concerns were raised as to whether the number of wells in the RFD is a limit to the number that can be drilled within the planning area.

Other commenters said BLM failed to consider the buy back of leases.

Concerns raised in several protests included the application of No Surface Occupancy (NSO) for proposed uses in programs other than oil and gas. It was

unclear in the final EIS if all activities were prohibited in the designated areas, or if exceptions would be considered.

Additional concerns included allowing gravel pits in greater sage-grouse habitat and the Steamboat Mountain ACEC; and allowing surface coal facilities in areas with sensitive resources.

Response to concerns: Areas are identified for withdrawal in the JMH CAP to protect sensitive resources. These are the same areas identified in the proposed plan in the final EIS. The analysis in the final EIS has allowed the BLM to determine which uses are most compatible for any particular area and to provide for reasonable development that would not cause irreparable damage to ACEC values (important historic, cultural, or scenic values, fish and wildlife resources or other natural systems or processes; or to protect life and safety from natural hazards [FLPMA, Sec. 103(a)]).

Clarifications and remedies for concerns regarding COAs, RFD, NSO, lease buy back, coal facilities, and gravel pits are discussed in more detail in the JMH CAP/Green River RMP Amendment Clarifications section of this Appendix. See discussions included in numbers 6 7, 8, 9, 10, and 11 in this section.

Protective measures are provided for sensitive resources such as greater sage-grouse habitat and the Steamboat Mountain ACEC. Site specific evaluation for any proposals would consider alternative site locations and provide for appropriate protection of resource values in compliance with the management prescriptions in the Proposed JMH CAP.

Travel, Access, Realty. Concerns were raised with the definition of a right-of-way avoidance area.

Response to concerns: Clarifications and remedies for this concern are discussed in more detail in the JMH CAP/Green River RMP Amendment Clarifications section of this Appendix. See number 12 in this section.

Visual Resource Management. Concerns raised included that the VRM classifications in certain areas were unclear.

Response to concerns: Clarifications and remedies for VRM classification concerns are discussed in more detail in the JMH CAP/Green River RMP Amendment Clarifications section of this Appendix. See numbers 13 and 14 in this section.

Air Resources. Concerns were raised that there have been changes in activity levels and analyses since the completion of the Pinedale Anticline Technical Air Quality Report on which the JMH CAP analysis is based. Commenters said the analysis is outdated, incomplete, and inaccurate and should be supplemented further.

Response to concerns: Clarifications and remedies for air quality concerns are discussed in more detail in the JMH CAP/Green River RMP Amendment Clarifications section of this Appendix. See number 15 in this section.

Recreation. Concerns were raised that recreational gold panning activities would occur on existing mining claims.

Response to concerns: Mining or prospecting activity associated with recreational gold panning requires permission from a claim holder if the activity occurs on an existing mining claim. More detailed discussion regarding this issue is included in number 16 of the JMH CAP/Green River RMP Amendment Clarifications section of this Appendix.

JMH CAP/GREEN RIVER RMP AMENDMENT CLARIFICATIONS

We made the following changes/clarifications in text, tables, maps, and appendices of the proposed plan in response to public comment or protest. These are included here for easy reference. None of these changes include new significant information, content, or data that were not included in the final EIS, but rather provide clarification regarding the intent of specific management actions, policies, procedures, etc., stated in the final EIS.

1. We refined aspects of the JMH CAP and Implementation, Monitoring, and Evaluation Process (Appendix 2 in the JMH CAP) as follows:
 - Coordination with the JMH CAP Working Group
 - Size (in acres) of three implementation areas
 - How NSO stipulations would be used in drainage situations
 - BLM authority to control phase-out of the lease suspensions under existing lease terms and regulations
 - Clarification that requests for reservoir and geological data in management area 2 are voluntary and that some data may be confidential and proprietary.

See Section 2.2.1 and Appendix 2 of the JMH CAP for refinement and clarification.

2. We refined language in the Implementation, Monitoring, and Evaluation Process section (Appendix 2, JMH CAP Decisions) on public involvement as part of the NEPA and decisionmaking process. The text clarifies that approval of any surface disturbing or disruptive activity will be considered on a case-by-case basis and the analysis will consider many factors, such as type and effect of future uses, surface resource impacts and recovery, planning area condition as shown by the indicator data, operational and environmental justification, current scientific data and potential for effective impact mitigation. This clarifies that the degree of public concern is one factor influencing potential BLM decisions.
3. We clarified the Special Management Areas section (3.14.2.1) to describe surface disturbance restrictions for these areas. Clarifications have also been added under each SMA to identify whether it falls within Implementation Areas 1, 2, or 3. We provided a large fold-out map of the SMAs (Map A) for easy geographic reference.

4. We clarified text, maps, and appendices regarding greater sage-grouse management and habitat areas, and conformance with the “BLM National Sage-Grouse Habitat Conservation Strategy” (USDI 2004b). Oil and gas lease stipulation language, including exception, modification, or waiver language for greater sage-grouse habitat, is consolidated in the JMH CAP. We clarified greater sage-grouse winter concentration areas, management actions, and timing limitations.

See Sections 3.9.3.4, 3.9.3.5, 3.9.3.6, 3.10.3.1, Maps 4, 8, 9, 11, and Appendices 4, 5, and 7 of the JMH CAP for refinement and clarification.

5. We clarified the management practices for greater sage-grouse discussed in Appendices 4, 5, and 6 in the final EIS. See Appendix 5 of the JMH CAP for the standard practices, BMPs, guidelines, and mitigation measures as they pertain specifically to greater sage-grouse.
6. We clarified the wildlife information in Appendix 4 of the final EIS (see Appendix 4 in the JMH CAP). We clarified information on practices for surface disturbing activities in Appendix 6 of the final EIS (see Appendix 5 in the JMH CAP). We clarified the process for considering and applying Conditions of Approval (COAs) to drilling applications in the Minerals and Alternative Energy Resource Management section (see 3.10.3.1) and Appendices 4 and 5. Information on BLM Best Management Practices has also been included in Appendix 5. We clarified exception, modification, and waiver language for oil and gas lease stipulations (Appendix 5 of the final EIS and Appendix 7 of the JMH CAP). We clarified the discussion on valid existing rights (sections 3.10.3 and 4.2 in the JMH CAP).
7. We clarified the Hydrocarbon Occurrence and Development Potential Report and use of reasonably foreseeable development (RFD) scenarios in land use planning.
 - “Reasonably foreseeable development” has been added to the Glossary, defining the purpose of the RFD “as the most likely projection of oil and gas exploration, development, production, and reclamation activity for the planning area for a period of time.”
 - The RFD or activity estimate is not intended to be a land use planning decision or prescribe the number of wells to be allowed in the planning area.
 - The ROD (see Alternatives Considered in Detailed Analysis) provides further clarification in the summary of alternatives on the number of wells anticipated to be drilled and the number anticipated to move into the production phase.
8. We clarified the Minerals and Alternative Energy Resource Management (3.10.3.1, Leasable Fluid Minerals) section to explain that Congressional legislation would be required to fund purchase of any leases from willing leaseholders. We also clarified that adjustments in lease stipulations would be applied as stipulations to new leases, not modifications of existing leases, unless consistent with lease rights.

9. We clarified language in the Management Actions Common to All Alternatives (section 2.2.2.2) and in section 3.10.3.1 to indicate that NSO stipulations are limited to oil and gas activities. Effects of, and mitigation for, other surface disturbing activities will be considered on a case-by-case basis. There are areas that are closed to all surface disturbing and disruptive activities, such as the White Mountain Petroglyphs and Tri-Territory Marker. Multi-layered maps in the final EIS have also been clarified by providing a series of maps depicting individually the location of crucial and sensitive resource values (i.e., greater sage-grouse nesting/early brood rearing habitat, elk birthing areas, etc.). The glossary definition of surface disturbance has been revised.
10. We clarified in the Minerals and Alternative Energy Management section (3.10.3.4.1) and in the Steamboat Mountain ACEC section (3.14.2.1) that salable mineral development in portions of the Steamboat Mountain ACEC must meet the objectives for the ACEC. Protective measures are provided for sensitive resources such as greater sage-grouse habitat and the Steamboat Mountain ACEC. The location of any mineral material sale activity (e.g., gravel pit) will be considered on a case-by-case basis. The site-specific evaluation for any proposals would consider alternative site locations and provide for appropriate protection of resource values in compliance with the management prescriptions in the Proposed JMH CAP.
11. We clarified in the Minerals and Alternative Energy Management section (3.10.3.2.2) that the coal decisions are carried forward from the Green River RMP.
12. We clarified right-of-way avoidance areas in section 3.12.3.5 (Travel, Access, and Realty Management) to indicate that, although avoidance areas are not the preferred areas for rights-of-way, activities could be considered on a case-by-case basis with mitigation of sensitive resources.
13. We clarified the Visual Resources Management section (3.13.3) to correct inconsistencies among the map, acreage tables, and text for VRM class areas II and III. This clarification explains that all of Split Rock lies within the Steamboat Mountain Management Area, which is designated as VRM Class II. No portion of Split Rock is designated as VRM Class III. Joe Hay Rim has also been included in the areas identified in text as VRM Class III to provide for consistency with the map information provided in the final EIS.
14. The Visual Resources Management section (3.13.3) has also been corrected to accurately describe VRM management within the Red Desert Watershed Management Area (also see 3.14.2.1). Specifically, those portions of the area not designated as VRM Class I or II (as depicted on Map 16) will be managed as VRM Class III. Clarification language has been provided for transition areas around VRM Class I areas.
15. We clarified the language in the Air Quality Management section (3.1.3) and the New Information section of the ROD by providing a discussion of the supplemental air quality analyses for the Jonah Infill DEIS as it relates to the JMH CAP. Information explaining the results of the supplemental air quality analysis has been added to the appendix materials. The Jonah supplemental

analysis identified potentially significant impacts to visibility; however, all potential impacts from the JMH CAP project alone were negligible. This analysis shows negligible contributions to air quality from the JMH CAP, and that impacts to air quality are adequately analyzed in the Supplemental draft EIS and final EIS for JMH (Appendix 6). We also provided clarification language on best management practices further clarifying the practices and applications discussed in Appendix 6 of the final EIS.

16. We clarified the language in the Recreation Resource Management section (3.11.3.5) that recreation permits may be required for gold panning activities and that public lands under mining claims are not available for these activities without the permission of the claim holder.

APPENDIX ROD-2. USFWS CONCURRENCE LETTER



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Ecological Services
4000 Airport Parkway
Cheyenne, Wyoming 82001

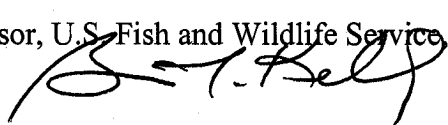


AUG 03 2004

In Reply Refer To:
ES/61411/W.02/WY8580
ES-6-RO-94-F006a-WY95

Memorandum

To: Michael R, Holbert, Rock Springs Field Office Manager, Bureau of Land Management, Rock Springs Field Office, Rock Springs, Wyoming

From: Brian T. Kelly, Field Supervisor, U.S. Fish and Wildlife Service, Wyoming Field Office, Cheyenne, Wyoming 

Subject: Consultation for the Jack Morrow Hills Coordinated Activity Plan

This document transmits U.S. Fish and Wildlife Service (Service) concurrence based on our review of potential activities described under the Jack Morrow Hills Final Environmental Impact Statement (FEIS) and Biological Assessment (BA) and their potential effects on the federally listed species in accordance with section 7 of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.). Your June 24, 2004 request for consultation was received June 24, 2004.

This consultation addresses potential adverse effects to the Platte River downstream listed species and the endangered Colorado River fishes. Our concurrence is based primarily on our review of your June 24, 2004 biological assessment (Appendix 3, BLM 2004). A complete administrative record of all documents and correspondence concerning this consultation are on file in the Wyoming Ecological Services Field office.

The Service and the U.S. Bureau of Land Management (Bureau) began consultation on impacts of Bureau activities to the bald eagle, black-footed ferret, Ute ladies'-tresses, blowout penstemon, grizzly bear, gray wolf, Platte River downstream listed species, and the endangered Colorado River fishes in the Jack Morrow Hills area on August 22, 2000. The Service provided comments on the draft BA on August 22, 2000 and May 23, 2003. The Bureau provided drafts of the BA on November 17, 2003, March 3, 2004, and June 24, 2004. A meeting with field personnel was held to discuss the Jack Morrow Hills Coordinated Activity Plan and its effects to

listed species on September 2, 2003. The Service received the Bureau request for consultation on this proposed action on June 24, 2004.

The Service concurs with your determinations that Bureau-authorized activities described by the Jack Morrow Hills FEIS and BA, together with the protective measures described in the BA, are not likely to adversely affect the black-footed ferret, Ute ladies'-tresses, or blowout penstemon. The black-footed ferret, Ute-ladies'-tresses, or blowout penstemon are not currently known to occupy habitat within the Rock Springs Field Office or the Jack Morrow Hills Coordinated Activity Plan area. The Service's concurrence is based on the commitment by the Bureau to conduct appropriate surveys in suitable habitat for these species prior to any surface disturbing or disruptive activities within suitable habitat for these species. In addition, the Bureau commits to halting all disruptive activities, should presence of the species be identified, within any portion of the planning area until sufficient protective measures are implemented.

In addition, the Service concurs with the Bureau determination that activities associated with the Jack Morrow Hills Coordinated Activity Plan will have no effect on the grizzly bear or the bald eagle and are not likely to jeopardize the continued existence of the gray wolf. The Service's concurrence is based on the premise that no potential roosting or nesting areas exist within the planning area for the bald eagle (BLM 2004), the planning area is outside of the proposed outer boundary of grizzly bear occupancy within Wyoming (Moody et. al. 2002), and does not contain sufficient habitat to sustain grizzly bears (BLM 2004, Moody et. al. 2002). Gray wolves in Wyoming are part of an experimental non-essential population. By definition, any effects to this population would not jeopardize the continued existence of the species.

Platte River Depletions

It has been determined the proposed action, located in Sublette, Sweetwater and Fremont Counties, Wyoming, constitutes a new project that will result in an annual depletion of 1.75 acre-feet (af) to both the central and lower reaches of the Platte River.

Since 1978, the Service has consistently taken the position in its section 7 consultations that Federal agency actions resulting in water depletions to the Platte River system are likely to jeopardize the continued existence of one or more federally-listed threatened or endangered species and adversely modify or destroy designated and proposed critical habitat. During the course of informal consultations with a number of Federal agencies, the Service learned that there are over 1,000 proposed projects which will deplete water from the Platte River system and require formal section 7 consultation. It was also determined that the vast majority of these projects would likely result in individual depletions of 25 af or less per year. To effectively deal with such an anticipated large workload, it was necessary for the Service to develop a streamlined approach which meets the requirements of section 7 for offsetting the adverse effects of each Federal agency action resulting in a minor water depletion.

An intra-Service section 7 consultation was conducted in coordination with those Federal agencies whose actions may result in minor water depletions of 25 af or less per year to the Platte River system. This led to the issuance of a biological opinion by the Service on June 13, 1996,

which provides reasonable and prudent alternatives to avoid the likelihood of jeopardy to federally-listed species and adverse modification or destruction of designated critical habitat occurring along the Platte River. A revision of the 1996 biological opinion made a no jeopardy determination contingent upon the implementation of conservation measures (formerly reasonable and prudent alternatives in the 1996 biological opinion) by the Federal agencies. To satisfy the requirements of the Act, Federal action agencies and project proponents (i.e., Federal and non-Federal) are provided conservation measures described in the 2002 revised biological opinion furnished to your agency. Consequently, the Service concurs with your determination that the proposed project may adversely affect the federally-listed whooping crane, interior least tern, piping plover, pallid sturgeon, and designated whooping crane and piping plover critical habitat.

As a result of section 7 consultation on the proposed Federal action described in the first paragraph, it is our understanding that you intend to take advantage of the conservation measures authorizing the use of funds in a National Fish and Wildlife Foundation account to offset the project-related impacts to Platte River fish and wildlife resources. Therefore, it has been calculated that \$377.35 will be debited from the Foundation account to use in restoring Platte River habitat as described in the referenced biological opinion.

The Service hereby agrees that the process described above will serve to offset the project-related impacts and avoid the likelihood of adverse effects to federally-listed species and their designated and proposed critical habitat. Any need for reinitiation of formal consultation on this proposed action is outlined in the CONCLUSION section of the referenced (2002) biological opinion.

Section 9 of Act, as amended, prohibits taking (harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or attempt to engage in any such conduct) of listed species of fish and wildlife without a special exemption. Under the terms of section 7(b)(4) and section 7(o)(2), taking that is incidental to and not intended as part of the Agency action is not considered a prohibited taking provided that such taking is in compliance with the terms and conditions of an incidental take statement. The Service does not anticipate that the proposed action will result in any incidental take of any threatened or endangered species. Therefore, no incidental take is authorized.

Colorado River Depletions

We understand that the proposed action will cause an average annual depletion of 23.4 acre-feet. A Recovery Implementation Program for Endangered Fish Species in the Upper Colorado River Basin (Recovery Program) was initiated on January 22, 1988. The Recovery program was intended to be the reasonable and prudent alternative to avoid jeopardy to the endangered fish by depletions from the Upper Colorado River.

In order to further define and clarify the process in the Recovery Program, a section 7 agreement was implemented on October 15, 1993, by the Recovery Program participants. Incorporated into this agreement is a Recovery Implementation Program Recovery Action Plan (Plan) which

identifies actions currently believed to be required to recover the endangered fish in the most expeditious manner in the Upper Colorado River Basin.

A part of the Recovery Program was the requirement that if a project was going to result in a depletion, a depletion fee would be paid to help support the Recovery Program. On July 5, 1994, the Service issued a biological opinion determining that the fee for depletions of 100 acre-feet or less would no longer be required. This was based on the premise that the Recovery Program has made sufficient progress to be considered the reasonable and prudent alternative avoiding the likelihood of jeopardy to the endangered fishes and avoiding destruction or adverse modification of their critical habitat by depletions of 100 acre-feet or less. Therefore, **the depletion fee for this project is waived.**

Permits or other documents authorizing specific projects, which result in depletions, should state that the BLM retains discretionary authority over each project for the purpose of endangered species consultation. If the Recovery Program is unable to implement the Plan in a timely manner, reinitiation of section 7 consultation may be required so that a new reasonable and prudent alternative can be developed by the Service.

Activity Description

The Proposed Action examined in this consultation is the approval of the Jack Morrow Hills Coordinated Activity Plan (JMH CAP) Proposed Plan. The Jack Morrow Hills Activity Plan provides an integrated multiple use activity plan for a balanced level of resource uses and provides protection for sensitive and important resource values on the Bureau-administered public lands in the area. The fluid minerals leasing decisions and locatable minerals decisions for the JMH CAP planning area, which were deferred in the Green River Resource Management Plan (RMP) are determined in the JMH CAP, which will result in amendment of the Green River RMP. Other management prescriptions resulting from this planning effort include some refinement of designations of roads for use, grazing practices, surface disturbance practices, cultural resource management prescriptions, recreational activities and facilities, identification of right-of-way windows and concentration areas, and prescriptions for managing wildlife habitat. Determining some of these prescriptions will also result in amendment of the Green River RMP (BLM 2004).

The planning area encompasses about 622,430 acres of federal, state, and private land in southwest Wyoming. Approximately 574,800 acres of public land surface and federal mineral estate within the planning area are administered by the Bureau through its Rock Springs Field Office. It is anticipated that the JMH CAP will be implemented over a 20-year period. The following discussion describes Bureau planning direction and activities by activity-type according to the JMH CAP Proposed Plan (BLM 2004).

Land and Water Resources. The Wyoming Standards for Healthy Rangelands (standards) would apply to all resource uses on Bureau-administered lands. These standards are the minimal acceptable conditions that address the health, productivity, and sustainability of the rangeland. The standards would direct the management of public lands and would focus the implementation

of this activity plan toward the maintenance or attainment of healthy rangelands. Vegetation treatments would be designed by interdisciplinary teams on a case-by-case basis. Appropriate rest for treated areas would be provided (up to one year prior to treatment, and 24 months after treatment unless an onsite analysis determines this time frame should be more or less). Native vegetation would be managed to allow native plant succession to continue. A monitoring plan would be developed by an interdisciplinary team and adjustments made based upon monitoring information.

Wild Horses. The current appropriate management level and wild horse herd management area boundary would remain unchanged from the Green River RMP (1997).

Livestock Grazing. Current livestock grazing intensity is expected to remain unchanged. The 5-year historic average was used as a basis in developing the anticipated grazing use. Grazing use is assumed to remain near the 5-year historic average of 11,602 Animal Unit Months (AUMs) (10,649 cattle and 953 sheep).

Approximately 80 percent of the water used for livestock water developments would be from the Colorado River drainage, with the remaining amount coming from the Platte River drainage. Livestock water developments would be designed to improve resource conditions and livestock distribution. Livestock water developments would provide additional watering sites, thereby improving livestock distribution and reducing competition with other grazers.

Approximately 23 livestock water developments (e.g., pits, ponds, and water wells) would be constructed or rebuilt over the 20-year planning period, disturbing approximately 23 acres. It is assumed that all water used for livestock pits, ponds, and water wells within the Green River and Sweetwater River Basins would have contributed to the surface flows of the Colorado or Platte Rivers or their tributaries. Water depletions are an important issue because water from portions of the planning area is part of the habitat for endangered fish, wildlife, and/or plant species downstream from the project area in the Colorado and Platte River systems. Of the 23 water developments to be constructed, 19 would be in the Green River Basin (Colorado River), and 4 would be in the Sweetwater River Basin (Platte River). Using 5 acre-feet per water development over the 20-year planning period, average annual depletions anticipated from these actions would not exceed 5 acre-feet for the Colorado River system and 1 acre-foot for the Platte River system after all developments were installed.

Livestock water development depletion calculations under each alternative are based on the following assumptions: (1) all developments are installed in year one of the 20-year planning period; (2) ponds average one-quarter acre in surface area; (3) the evaporation rate from surface water equals the summertime peak rate of one-quarter inch per day; (4) water would remain in the pond for 48 days.

Wildlife Management. The Proposed Plan would require appropriate mitigation for protection of wildlife habitat such as seasonal restrictions, avoidance and no surface occupancy. Key habitats include crucial winter ranges, birthing areas, migratory corridors, sage grouse strutting grounds,

nesting and winter concentration areas, and mountain plover nesting habitat. Management of listed species would continue to be done in consultation with the Service. The Proposed Plan would implement recent Bureau management direction regarding greater sage-grouse habitat. The JMH CAP is consistent with the recent "Wyoming Greater Sage-Grouse Conservation Plan" which was developed by the Wyoming Game and Fish Department with a broad range of stakeholders. The JMH CAP proposes to maintain and enhance sage-grouse habitat through an implementation, monitoring, and evaluation approach.

Heritage Resources. Consultation would continue with tribal leaders for activities proposed around respected places. The Bureau would conduct research and mapping of the Indian Gap Trail and develop an interpretation strategy in consultation with the tribes. The Paleosol Deposition area would be designated as the West Sand Dunes Archaeological District Management Area. The proposed management strategy would provide for multiple-use activities with appropriate inventory, testing, and evaluation to define impacts and site-specific mitigation. National Register of Historic Places sites would be protected from surface disturbing activities. Other historic properties would be protected through mitigation, including distance and site restrictions.

Travel Management, Access, and Realty. A transportation plan specific to the JMH area would be developed with interested parties. Emphasis would be placed on providing access while ensuring watershed health and protection of crucial wildlife habitats and sensitive resources. Off-highway vehicles (OHV) designations for open and closed areas and areas limited to existing or designated roads and trails are identified. Seasonal closures would continue. Rights-of-way placement would coincide with transportation planning.

Recreation Resources. Recreation resources would be managed to provide for a wide diversity of recreation opportunities. Project plans would be developed for backcountry byways, Sand Dunes OHV recreation site, Crookston Ranch Historic Site, Boars Tusk, Oregon Buttes, Honeycomb Buttes, Steamboat Mountain, National Historic Trails, White Mountain Petroglyphs, and Native American sites including Indian Gap.

Oil and Gas Leasing - Foreseeable Development. All existing leases within the JMH CAP planning area would see some development over the 20-year planning period. Development activities would be concentrated in the high development potential area. Planned activities include the development of 205 wells and anticipated surface disturbance of approximately 1,600 acres. The extent of surface disturbance associated with fluid mineral development would be approximately 190 acres in the most active year.

Oil and gas leasing management in the JMH CAP would be separated based on 3 separate areas. Unleased portions of Areas 1 and 2 would be leased and once leases expired, they would be available to be released. Wells on existing leases in Area 3 would be drilled during the first 11 years of the planning period (8 year maximum lease term plus 3-year suspension release).

Oil and Gas Leasing - Well Density. The Wyoming Oil and Gas Conservation Commission has established a density of 160 acres per gas well, with federal exploratory units exempt from that density requirement. Nitchie Gulch unit/field is now developed at a density of 160 acres per well. Up to 38 new production wells would be drilled in Nitchie Gulch, with a maximum well density of up to six wells per section. This development is expected to occur over the first 5 years of the planning period. Other producing units in the planning area (Buccaneer, Rim Rock, and Steamboat Mountain units) are developed at a density of 640 acres per well. Future exploratory activity would be widely spaced; however, development activity would most likely occur at a density of 160 acres per well.

Oil and Gas Leasing - Yield. Ultimate gas recovery from existing gas wells is estimated to be 145.4 billion cubic feet. Approximately 24.3 billion cubic feet of gas is left to produce from these active wells. Based on the production history of wells in the planning area, the average estimated ultimate gas recovery is expected to be 2.3 billion cubic feet per well. Decline curve analysis indicates that the average well would produce about 2.3 billion cubic feet of gas over a lifespan of 26 years before declining to a non-economical rate, which would then result in abandonment.

Oil and Gas Leasing - Surface Disturbance. The following disturbance rates are assumed for access roads, drill pads, and pipelines and power lines associated with oil and gas exploration and development drilling activities. The amount of surface disturbance per well is based on standard industry practices and compliance requirements of existing regulations for surface disturbing activities. Access roads normally have: 40 feet total width; a 12- to 14-foot-wide travelway; 4.8 acres initial disturbance per linear road mile; 1.5 miles of road construction for exploration wells; 0.375 miles of road construction for development wells; 4.0 acres long-term disturbance per producing well (no stabilization or revegetation of barrowditch); 4.0 acres of access road stabilized per abandoned dry well, after 3 years; and 4.0 acres of access road stabilized after abandonment of each producing well, after 3 years. Road standards would be in conformance with Bureau guidelines. Drill pads would normally consist of: 3.0 acres initial disturbance per average well pad; 0.7 acres long-term disturbance per producing well; 2.3 acres stabilized per producing well, after 3 years; 3.0 acres stabilized per abandoned dry well, after 3 years; and 0.7 acres stabilized after abandonment of each producing well, after 3 years. Pipelines and power lines would normally consist of: 6.0 acres initial disturbance per producing well; 5.5 acres stabilized per producing well, after 3 years; 0.5 acres long-term disturbance per producing well; and 0.5 acres stabilized after abandonment of each producing well, after 3 years (BLM 2004).

The phase of fluid mineral activity most disturbing to wildlife is drilling because of the high level of human disturbance from the creation of access roads, surface disturbance from the well pads (approximately 3 acres), noise from the rig during drilling, and overall human presence. This phase of activity lasts approximately 1 to 4 months depending on well depth. All wells not put into production would be reclaimed through implementation of a reclamation plan. Production wells that have played out after an estimated 30 years would also be reclaimed. Full

restoration of some habitats (shrubland and basin big sagebrush/lemon scurfpea) would not occur for more than 20 years (BLM 2004).

Oil and Gas Leasing - Water Use. It is assumed that each water development within the Colorado or the Platte River Basin in the planning area causes a depletion to the respective systems because all water used for drilling and completion of wells within the Green River and the Sweetwater River Basins contributes to the surface flows of the Colorado River or Platte River or their tributaries. Drilling of wells would require water to make up drilling fluid. In general, oil and gas wells drilled in the depth ranges expected in the planning area require 1 to 1.5 acre-feet of water. Using 1.5 acre-feet of water per well, depletions from these actions would total approximately 367.5 acre feet in the Colorado River system and 15 acre-feet in the Platte River system. Based on a 20-year time span, the average annual depletion for the Colorado River and Platte River systems would be 18.4 acre feet and 0.75 acre-feet, respectively.

Oil and Gas Leasing - Stipulations/Restrictions. The majority of special status plant species and unique plant communities (i.e., cushion plants) are located within Area 3 of the JMH CAP fluid mineral leasing implementation strategy. Area 3 would retain a “no lease” management prescription or be subject to leasing with a no-surface-occupancy stipulation that would ensure protection of special status plant species and unique plant communities in these areas. A large portion of special status plant species and unique plant communities within Area 3, however, are in areas that have already been leased. These existing leases have a variety of stipulations for resource protection, some of which might not offer any protection to sensitive vegetative resources. In these cases, conditions-of-approval for applications for permits-to-drill could be applied. These would be based on site-specific analysis and would establish specific, necessary mitigation measures not covered by stipulations for resource and environmental protection. Bureau specialists would review sensitive resources with lease operators to develop and implement protective measures to allow effective development operations where impacts could be avoided or mitigated. As part of the “no lease” prescription in Area 3, existing leases that expired before they were developed or were held by production would not be reoffered for lease.

Coalbed gas wells. Currently, there is no active coalbed gas production in the planning area because of low gas production rates on initial well tests and water disposal costs. It is estimated that two coalbed gas exploration projects with a total of 50 wells would be drilled within the planning area (but outside the core area) during the planning period. Because coalbed gas wells are drilled in a “pod” formation for dewatering purposes, with approximately 25 wells per pod, impacts are expected to be intense and localized but might not affect as much acreage as traditional oil and gas well development. As per the JMH CAP Preferred Plan, each of the two coalbed gas well projects would contain up to 25 wells, 9 interior wells and 16 surrounding wells. No production rate assumptions were made for coalbed gas, and no production history is available on which to base a reasonable assessment at this time. All produced water would be reinjected into the subsurface in compliance with water quality regulations.

Minerals - Salable Minerals. Suitable construction materials are lacking on the lands that remain open to development of salable minerals, with the exception of Steamboat Mountain, which is

capped by volcanic rock. Demand for road maintenance materials in the planning area is expected to increase during the planning period, commensurate with the increase in oil and gas development and the needs of the Wyoming Department of Transportation for reconstruction of U.S. Highway 191 and State Highway 28. Development of salable mineral material sites is expected within the latter 10 years of the planning period. Potentially usable clays occur primarily in the southern portion of the planning area. With the surface use constraints that exist in this area and the abundance of clay products available from other sources, no development of this resource is expected within the planning area during the planning period. All sales, permits, and community use pits must be conducted under the requirements of the Mineral Material Sales Act of 1947 and must comply with Bureau regulations for operation of quarries or pits, including reclamation standards.

More than 490,000 acres would be closed to development of salable minerals. In addition to the areas closed to mineral materials sales, the lava portion of Steamboat Mountain, the Pinnacles Geologic Feature, and the area within one-half mile of greater sage-grouse leks, would be closed to mineral material sales. Steamboat Mountain ACEC and the Steamboat Mountain Management Area would be open to mineral material sales only when required to meet other planning objectives. Other sales in the planning area would be carried out where needed to meet planning objectives for the area (e.g., construction of recreational facilities). Some limited talus and landslide deposits could be developed for construction materials, provided that the site-specific analysis required for the sale did not identify any unacceptable impacts.

Locatable Minerals. Although most of the planning area would be open to development of locatable minerals (mineral location), areas of notable recreation importance, including White Mountain Petroglyphs, Crookston Ranch, Tri-Territory Marker, and South Pass Summit, would be withdrawn from filing of mining claims, exploration, and development. A portion of Steamboat Mountain and the northern birthing areas would also be withdrawn from mineral location. Over 155,000 acres would be withdrawn from mineral location. Withdrawals would be pursued for the northern elk calving areas, and the potential diamond mining area of Steamboat Mountain ACEC. Recreational mining activity would be allowed in those parts of the planning area that were not withdrawn from mineral location or where such withdrawals would not be pursued.

Locatable minerals considered to have no foreseeable development potential in the planning area include uranium and deposits of copper, lead, zinc, and silver. Based on current information and commodity prices, gold and diamonds are the only mineral types that have potential for development in the planning area.

Existing levels of mining claim activity from the gold placers in the Dickie Springs/Oregon Gulch area are expected to continue through the planning period. Exploration activity on these claims has typically disturbed 1 to 5 acres at a time and is related to trenching with a backhoe or manual tools. Such activity is limited to the snow-free months, typically May through mid-November.

Existing information indicates that gold occurrences are limited to thin zones within the sand and gravel deposits that host the gold. The limited extent of potential gold occurrences is probably below total resource requirements needed to support a commercial operation. No mine proposals have been submitted. However, a hypothetical gold mine will be used to evaluate the impacts that would be associated with a commercial gold discovery. A hypothetical mine could process as much as 320,000 tons per year of ore and disturb about 53 acres over an 11-year life.

There is potential for diamond occurrences in association with the Quaternary volcanic rocks at Steamboat Mountain, located in the southern portion of the planning area. Exploration might occur during the planning period. Access to the top of Steamboat Mountain is limited; therefore, exploration could consist of using a helicopter to bring in a drill rig to gather the required information. About 2 acres of disturbance would be anticipated from this type of activity.

Exploration disturbing more than 5 acres, activities in excess of casual use, or activities located in special management areas must file plans of operation. Reclamation plans would be developed and bonds posted for these operations. Withdrawals from mineral location are in effect for coal and oil shale in the planning area. These withdrawals are no longer considered necessary and will be revoked.

General - Reclamation. Vegetation would be reestablished along fences and pipelines within 3 to 5 years, whereas water wells, troughs, and reservoirs would remain disturbed during their useful life and would be revegetated upon abandonment. There would be reclamation activities associated with each drilled well.

Special Management Areas. Four of the existing five ACEC designations would remain unchanged. The fifth, Steamboat Mountain ACEC, would be expanded to include the Indian Gap historic trail and key habitats with the rare sagebrush/scurfpea vegetation type. Management objectives include: 1) Enhancing and maintaining the water quality, vegetation, soil, and wildlife resources to ensure biological diversity and a healthy ecosystem; 2) Maintaining the unique diverse habitats (big sagebrush, aspen, limber pine, and mountain shrub communities) in the Steamboat Mountain area, especially on stabilized sand dunes along Steamboat Rim, Indian Gap, and in the Johnson, Lafonte, and Box Canyon areas; 3) Providing suitable habitat to maintain the continued existence of the Steamboat elk herd and other big game populations; and 4) Protecting important heritage resources (cultural, historic, archaeological, and unique geological features) while allowing for educational research and appropriate interpretive uses.

The West Sand Dunes Archaeological District would be established as a new management area to protect important scientific values involving the earliest stages of human occupation of North America (7,000 to 12,000 years ago). Management objectives would include education and interpretation opportunities while still allowing development of natural gas and other resources that occur in the area.

Wilderness. The planning area includes 7 existing Wilderness-Study-Areas (WSAs) (about 119,000 acres). These WSAs would continue to be managed in accordance with the "Interim Management Policy and Guidelines for Lands Under Wilderness Review" until Congress acts on designation.

This concludes consultation pursuant to the regulations implementing the Act, 50 C.F.R. § 402.14. This Project should be re-analyzed if new information reveals effects of the action that may affect listed or proposed species or designated or proposed critical habitat in a manner or to an extent not considered in this consultation; if the action is subsequently modified in a manner that causes an effect to a listed or proposed species or designated or proposed critical habitat that was not considered in this consultation; and/or, if a new species is listed or critical habitat is designated that may be affected by this project.

We appreciate your efforts to ensure the conservation of endangered, threatened, and candidate species and migratory birds. If you have further questions on this subject, please contact Alex Schubert of my staff at the letterhead address or phone (307) 772-2374, extension 38.

cc: FWS/NEFO (Wally Jobman)
WGFD, Lander, Non-Game Coordinator (B. Oakleaf)
WGFD, Cheyenne, Statewide Habitat Protection Coordinator (V. Stelter)

References

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- U.S. Bureau of Land Management. 2004. Final Environmental Impact Statement for the Jack Morrow Hills Coordinated Activity Plan/Proposed Green River Resource Management Plan Amendment. Department of the Interior. U.S. Bureau of Land Management. Rock Springs, Wyoming. Volumes 1 & 2 + Appendices.

