



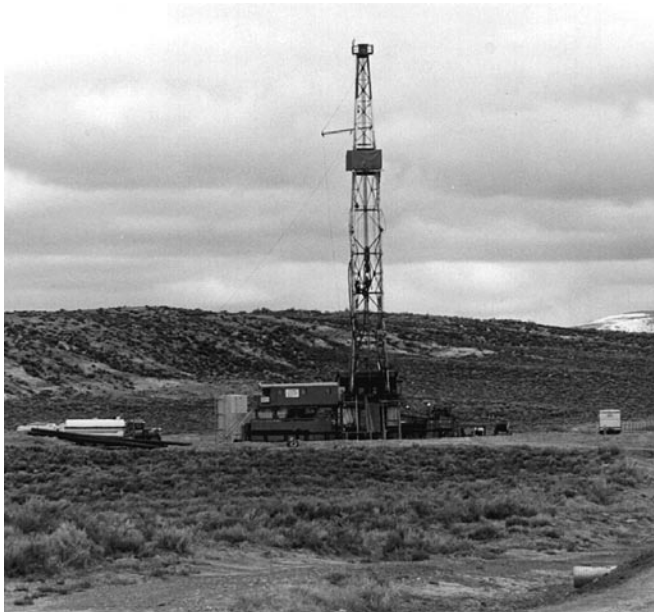
**U.S. Department of the Interior**  
Bureau of Land Management  
Wyoming State Office

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.

## 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 <sub>2</sub> 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 <sub>2</sub>	Nitrogen Dioxide
COA	Condition of Approval	NO <sub>x</sub>	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 <sub>3</sub>	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 <sub>2.5</sub>	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 <sub>2</sub>	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**

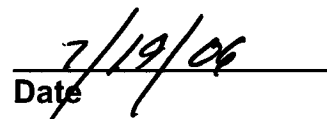
**U.S. Department of the Interior  
Bureau of Land Management  
Rock Springs Field Office  
Rock Springs, Wyoming**

*Prepared by*

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

July 2006

  
State Director

  
Date



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## RECORD OF DECISION

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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
<b>Special Management Areas:</b>		
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"> <li>• One SMA expands the existing Continental Divide National Scenic Trail system by adding a side trail</li> <li>• One SMA identifies management for cultural and heritage resources in the West Sand Dunes Archaeological District</li> </ul>	19,840	Table 4-2

Land Use Allocation	Acres	FEIS Reference
<b>Other Management Areas:</b>		
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
<b>Off Highway Vehicle Management:</b>		
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	
<b>Visual Resource Management:</b>		
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
<b>Minerals and Alternative Energy Resource Management:</b>		
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
<b>Right-of-Way Management:</b>		
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

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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**

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# United States Department of the Interior

## FISH AND WILDLIFE SERVICE

Ecological Services  
4000 Airport Parkway  
Cheyenne, Wyoming 82001

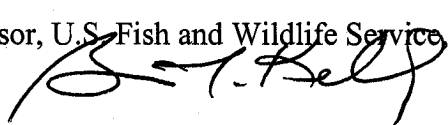


AUG 03 2004

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)

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- U.S. Bureau of Land Management. 1997. Record of Decision and Green River Resource Management Plan. Green River Resource Area. Rock Springs District. Rock Springs, Wyoming. October 1997.
- 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.





**APPROVED COORDINATED ACTIVITY PLAN**

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  
Rock Springs, Wyoming**

*Prepared by*

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

**July 2006**



# APPROVED COORDINATED ACTIVITY PLAN

## 1.0 INTRODUCTION

### 1.1 The JMH CAP Area

The Jack Morrow Hills Coordinated Activity Plan (JMH CAP) area includes the Bureau of Land Management (BLM)-administered lands located north and east of Rock Springs, Wyoming, including portions of Sweetwater, Sublette, and Fremont Counties in southwestern Wyoming (Map 1). The JMH CAP area encompasses the Steamboat Mountain, Greater Sand Dunes, White Mountain Petroglyphs, and Oregon Buttes Areas of Critical Environmental Concern (ACEC); a portion of the South Pass Historic Landscape ACEC; the Oregon Buttes, Honeycomb Buttes, Greater Sand Dunes, Buffalo Hump, Whitehorse Creek, South Pinnacles, and Alkali Draw Wilderness Study Areas (WSA); and three special recreation management areas (SRMA)—Greater Sand Dunes; Continental Peak Side Trail; and the Oregon, Mormon Pioneer, Pony Express, and California National Historic Trails (Map A).

### 1.2 Reader Aid

The decisions contained in the JMH CAP apply only to the public lands and not to lands or minerals within the planning area that are privately owned or owned by the State of Wyoming or local governments (Map 2 and Map 3). In addition, the JMH CAP does not include planning and management decisions for federally owned minerals within the planning area that are overlain by surface administered by other federal agencies. Table 1 summarizes the land surface and mineral ownerships and administrative relationships for the area.

**Table 1. Land and Mineral Ownerships and Administrative Jurisdictions Within the JMH CAP Planning Area**

<b>AREAS THE JMH CAP DECISIONS WILL COVER:</b>	<b>APPROXIMATE ACRES<sup>1</sup></b>
A. Areas where the land surface and mineral estate are both federally owned and are both administered by BLM <sup>2</sup>	567,080
B. Areas where the land surface is federally owned and administered by BLM and the mineral estate is owned and administered by the State of Wyoming <sup>3</sup>	7,720
C. Areas where the land surface is owned and administered by private individuals and all or part of the mineral estate is federally owned and administered by BLM <sup>4</sup>	7,030
D. Areas where the land surface is owned and administered by the State of Wyoming and the mineral estate is federally owned and administered by BLM <sup>4</sup>	720
<b>Total BLM-administered FEDERAL LAND SURFACE covered by JMH CAP decisions (A + B)</b>	574,800
<b>Total BLM-administered FEDERAL MINERAL ESTATE covered by JMH CAP decisions (A + C + D)</b>	574,830
E. Areas where the federal land surface is administered by the Bureau of Reclamation and the federal mineral estate is administered by BLM <sup>5</sup>	1,980
F. Areas where the land surface and minerals are both owned by private individuals and BLM has no administrative authority <sup>6</sup>	8,800

<b>Table 1 (continued)</b>	
<b>AREAS THE JMH CAP DECISIONS WILL NOT COVER:</b>	<b>APPROXIMATE ACRES<sup>1</sup></b>
G. Areas where the land surface and minerals are both owned by the State of Wyoming and BLM has no administrative authority	29,000
<b>Total Land Surface Acres in the JMH CAP Planning Area (All Ownerships)<sup>1</sup></b>	<b>622,330</b>
<p><sup>1</sup> Because of land surface and mineral ownership overlaps and administrative responsibility overlaps, acreage figures are not additive.</p> <p><sup>2</sup> In areas where BLM administers both the federal land surface and federal mineral estate, the JMH CAP decisions will cover both the land surface and the mineral estate.</p> <p><sup>3</sup> In areas where BLM administers the federal land surface and the minerals are privately owned or owned by the State of Wyoming, the JMH CAP decisions will cover only the BLM-administered federal land surface. Although these surface management decisions may have some effect on the ability to manage and develop the non-federally owned minerals, the JMH CAP decisions will not pertain to the non-federal mineral estate. At the same time, surface and minerals management actions and development activities anticipated in these areas will be taken into account for purposes of cumulative impact analysis in the JMH CAP.</p> <p><sup>4</sup> In areas where the land surface is privately owned or owned by the State of Wyoming and the minerals are federally owned, the JMH CAP decisions will cover only the BLM-administered federal mineral estate. Although the land and resource uses and values on the non-federal surface will be taken into account and will affect development of the federal mineral management decisions, these decisions will not pertain to the state-owned and privately owned land surface. At the same time, surface and minerals management actions and development activities anticipated in these areas will be taken into account for purposes of cumulative impact analysis in the JMH CAP.</p> <p><sup>5</sup> In areas where the Bureau of Reclamation administers the federal land surface and BLM administers the federal mineral estate, the land surface planning and management decisions are the responsibility of the Bureau of Reclamation. Any BLM administrative responsibilities on these lands (for example, actions concerning the federal mineral estate) are handled case by case and are guided by the other surface management agencies' policies, procedures, and plans. Thus the JMH CAP will not include management decisions for the federal minerals on these lands. At the same time, surface and minerals management actions and development activities anticipated on these lands will be taken into account for purposes of cumulative impact analysis in the JMH CAP.</p> <p>It is also important to note that, while other BLM responsibilities include surface management of the lands withdrawn for purposes of the Bureau of Reclamation, they are carried out in accordance with an interagency agreement between the two agencies. Administrative jurisdiction (including land use planning) for these lands lies with the Bureau of Reclamation.</p> <p><sup>6</sup> The JMH CAP will not include any management decisions for areas where the land surface and minerals are both privately owned or owned by the State of Wyoming.</p>	

The planning and management decisions in the JMH CAP are selected to meet management objectives and actions that resolve planning issues and provide for sustained multiple use of the public lands and resources. The JMH CAP will amend portions of the Green River Resource Management Plan (RMP). These amendments are in **bold type**. Existing management objectives and actions from the Green River RMP (United States Department of the Interior (USDI) 1997) apply to the planning area and will also be implemented. These Green River RMP decisions are displayed in *italic font*. The Green River RMP maps, tables, and appendices are available on the Internet through the national BLM site ([www.blm.gov](http://www.blm.gov)). Some terminology presented in the Green River RMP is updated in the JMH CAP. For example, the term off-road vehicle (ORV) is being updated in the JMH CAP with the term off-highway vehicle (OHV). These two terms are used interchangeably in this document.

Appendix material provides additional detail on various program policies and practices. Maps show general location and relationships of resources and management actions. More detailed maps are maintained in the Rock Springs Field

Office (RSFO). These maps (and associated acreage figures) are updated as new information is obtained. The tables are incorporated into the text. The page-size maps are located after the literature cited. The two foldout maps are in a pocket inside the back cover.

This document is formatted to reduce duplication between resource categories to the extent possible. Some resource management categories are combined under one heading because of their management interrelationships and to reduce the repetition of text that would occur due to describing similar management actions in each particular section or subcategory. Management prescriptions and guidance for one resource category may also relate or apply to another category; thus, a reference is provided in each resource category to other JMH CAP sections.

Appendices published with the final EIS that do not contain clarifications or modifications are not reprinted with the JMH CAP. These appendices are incorporated by reference and are available in the final EIS or may be obtained from the BLM RSFO. See Appendix 1 for a complete listing of appendices incorporated by reference from the final EIS.

All public land and resource uses in the planning area must conform with the decisions, terms, and conditions of use described in the JMH CAP and the Green River RMP. Projects and uses in the planning area must conform to both the JMH CAP and the Green River RMP. An appropriate level of environmental review will be completed prior to the implementation of projects and approval of specific uses. Likewise, the authorization of specific uses will be based on conformance with JMH CAP and Green River RMP decisions and completion of environmental analyses.

### **1.3 Purpose and Need**

This Plan was prepared because certain decisions in the JMH core area for fluid mineral leasing and locatable mineral development were deferred in the Green River RMP until a more comprehensive plan could be completed. BLM began preparing the JMH CAP in 1998. The original draft EIS was issued in July 2000. Following public comment review and evaluation of new information, BLM prepared an SDEIS. The SDEIS was issued in February 2003. The final EIS and Proposed Plan were released on July 14, 2004. The 30-day Protest Period closed on August 16, 2004. Protest resolution was completed in July 2006. The Record of Decision (ROD) and JMH CAP were approved in July 2006.

The Green River RMP ROD also provided that the direction and purpose of the JMH CAP would be a comprehensive and environmentally adequate management framework that will allow some fluid mineral and locatable mineral activities to occur in the core area and other portions of the planning area in harmony with other important resource and land uses in the planning area. The JMH planning area includes about 622,000 acres surrounding and including the core area. The planning area was delineated because of the interrelationships between the resources inside and outside of the core area. Thus, decisions in this plan amend existing Green River RMP decisions inside and outside the core area. Coordinated activity plans are prepared to address complex and/or controversial management situations in specific areas. They contain a mix of resource allocation decisions typical of resource

management plans and activity-level decisions typical of implementation plans. For more information on the Bureau land use planning process and various decision types, see BLM Manual Handbook H-1610-1.

## **1.4 Planning Process Summary**

The process for the development, approval, maintenance, and amendment or revision of resource management plans was initiated under the authority of Section 202(f) of the Federal Land Policy and Management Act of 1976 (FLPMA) and Section 202(c) of the National Environmental Policy Act of 1969 (NEPA). The process is guided by BLM planning regulations in Title 43 of the Code of Federal Regulations, Part 1600 (43 CFR 1600), and the Council on Environmental Quality (CEQ) regulations in 40 CFR 1500.

Development of a resource management plan represents the land use planning tier, the first of the two-tiered BLM planning process. As such, the resource management plan prescribes the allocation of and general future management direction for the resource and land uses of the BLM-administered public lands in the entire planning area covered by a resource management plan. In turn, the resource management plan guides the second tier of the planning process: the more site-specific activity or implementation planning tier and daily operations.

Activity or implementation planning extends the resource management plan resource and land use decisions into site-specific management decisions for smaller geographic units of public lands within the planning area. Activity planning includes such elements as allotment management plans, habitat management plans, and interdisciplinary or coordinated activity plans issuing various land and resource use authorizations, identification of specific mitigation needs, and development and implementation of other similar plans and actions. The JMH CAP effort involves making decisions at both the resource management plan and the activity planning tiers (Tiers I and II) of the planning process because of the mineral development decisions that were deferred at the resource management plan level, the potential refinement of other management decisions in the planning area, and the needed site-specific management decisions for all other resource and land uses in the JMH CAP area.

The EIS for the JMH CAP was prepared with cooperating agencies and included substantial public involvement. Cooperating agencies include the State of Wyoming, Sublette County, Fremont County, Sweetwater County, Popo Agie Conservation District, Sublette County Conservation District, and Sweetwater County Conservation District.

## **1.5 Relationships to Federal, State, Local, and Tribal Government Plans**

The JMH CAP/Green River RMP Amendment is consistent with officially adopted plans, programs, and policies of other federal agencies and state and local governments including those of the Department of the Interior and BLM.

The Wyoming Governor's Office reviewed the Proposed Plan for consistency with state plans. The Wyoming Governor did not identify any inconsistency and raised the following issues:

- The final EIS did not contain adequate protections for greater sage-grouse.
- Inadequate consideration is given to buy-back of existing producing mineral leases.
- It is suggested that the number of wells be capped at 255.
- There is concern whether big game crucial habitat protection is adequate given language expressed in Appendix 4 of the final EIS regarding enforcement of big game winter range seasonal stipulations and inclusion of conditions of approval (COA).

The BLM interdisciplinary team reviewed county and local government land use plans to ensure consistency. Meetings were held with the respective county and local government representatives to promote greater understanding of the goals, objectives, and resources of the counties, local governments, and BLM. Counties and local governments participated as cooperating agencies in the EIS preparation.

## **1.6 Overall Vision**

The JMH CAP is an integrated activity plan; it focuses on a balanced level of resource use and resource protection for the BLM-administered public lands in the JMH CAP planning area. This activity plan provides the appropriate level and practices for all land and resource uses in the planning area. These uses include sustainability of crucial big game habitat, air and water quality, scenic quality, vegetative cover and soil stability, recreational activities, livestock grazing and range improvement activities, mineral development, and other important resource concerns.

The JMH CAP provides specific management direction for the planning area and prevents or addresses conflicts among development of energy resources, recreational activities, and other resource uses. The JMH CAP also provides management direction to protect certain resources (e.g., elk and other big game habitat, unique sand dune-mountain shrub habitat, and unstabilized-stabilized sand dunes) while allowing appropriate levels of recreational activities, leasing and development of mineral resources, livestock grazing, and other activities.

## **2.0 PLAN DECISIONS**

### **2.1 Relationship of the JMH CAP to the Green River RMP**

The Green River RMP provides the framework for managing BLM-administered public lands and resources and for allocating uses for the BLM-administered public lands in the RSFO area. The JMH CAP plan is an integrated activity plan directed toward specifying a balanced level of resource use and resource protection for the BLM-administered public lands in the JMH CAP planning area. The JMH CAP makes fluid mineral-related decisions that were deferred in the Green River RMP. Other objectives of this planning effort included determining the appropriate levels and timing of mineral leasing and development and development of other energy sources

while sustaining land and resource uses in the planning area. These decisions amend the Green River RMP.

Green River RMP decisions amended by this coordinated activity plan apply only to the JMH CAP planning area. Other management decisions for the JMH CAP planning area include some refinement of designations of roads, grazing practices, recreational activities and facilities, identification of rights-of-way corridors and concentration areas, and prescriptions for managing wildlife habitat. Some of these decisions amend the Green River RMP. The decisions that amend the RMP are identified in **bold type**.

## **2.2 Management Actions Common to All Resource or Land Use Programs**

### **2.2.1 Implementation, Monitoring, and Evaluation Management Process**

**An implementation, monitoring, and evaluation process, including an interdisciplinary monitoring plan, will evaluate the overall effectiveness of implementing the management decisions for the planning area and will be used as a basis for making management adjustments.** The implementation, monitoring, and evaluation process will apply to all land and resource programs in the Approved JMH CAP.

The primary aspects of the process are an implementation strategy, a monitoring plan, and a list of 12 sensitive resources (Table 2). The implementation, monitoring, and evaluation process will determine what, where, when, and under what conditions areas should be open to surface disturbing or disruptive activities. See Appendix 2 for a detailed description of the management strategy.

**Table 2. 12 Sensitive Resources**

1. Active (unstabilized) sand dunes
2. Slopes greater than 20 percent
3. Special management area values (visual, recreation opportunities, health and safety, cultural/historical, etc.)
4. Integrity of the core area wildlife habitat
5. Key habitat (unique vegetation and plant communities)
6. Key habitat (e.g., escape cover and birthing areas)
7. Cultural/Native American-respected places and historic values
8. Connectivity area (migratory corridor)
9. Inaccessible areas (overlapping resource concerns, i.e., sensitive resources 1 to 8 above)
10. Special status plant and animal species' habitats
11. Stabilized dunes
12. Visual values (VRM Class I and II areas)



Monitoring resource indicators will track adverse and beneficial effects of actions. Changes to these indicators will identify the need to take action to prevent significant adverse effects to sensitive resources. Actions may include the application of mitigation measures and, where applicable, control of the timing, sequencing, and location of some development activities.

**Resource indicators, developed as part of the planning area management strategy of the implementation, monitoring, and evaluation process, will provide measurements of authorized activity effects on resource values.** Consideration will be given to other factors that may influence the resource indicators such as weather, disease, drought, hunting pressure, introduction of nonnative species, and recreation activities. Monitoring data will be evaluated and an interdisciplinary BLM team, in coordination with the working group, stakeholders, and other public entities, will determine changes in management as part of the implementation, monitoring, and evaluation process. Timing and sequencing for approving all actions and use authorizations will be applied where feasible, but could be excepted if indicators show effects on resources are within acceptable limits.

Monitoring and evaluation will incorporate information from the elk study conducted in the JMH CAP planning area, application of the Wyoming Standards for Healthy Rangelands (USDI 1997a), proper functioning condition (PFC) determinations for riparian areas, and observations of activities and uses impacts inside and outside the planning area. Appropriate mitigation will be applied to meet planning area management objectives. If it is determined that planning area management objectives are not being met, management will be adapted to address the situation.

Map B presents three management areas defined by the relative resource value within the planning area. Area 1, Area 2, and Area 3 have been identified to guide management analysis and decisions. Identification of these areas combines many factors (e.g., wildlife usage, presence of crucial habitat, plant species distribution, historic or cultural importance, and general sensitivity to the impact of surface activities) into a single quantity. The area designations provide a general guide to reviewing proposed surface use activities in the planning area. For example, Area 3 has the highest relative ranking and so proposed surface use activities located here will be subject to the most stringent mitigation (Table 3).

**Table 3. Approximate Acreage in Areas 1, 2, and 3**

Area 1	154,200 acres
Area 2	96,000 acres
Area 3	215,700 acres

## **2.2.2 Surface Use Activities**

Surface use activities create surface disturbance or disruption of areas and resources. Examples of these activities include construction and use associated with roads, pipelines, power lines, reservoirs, staging areas, parking areas, and facility construction.

### **2.2.2.1 Rationale**

The BLM is required by the National Environmental Policy Act (NEPA) to promote efforts which will prevent or eliminate damage to the environment and biosphere.

BLM is required by the Federal Land Policy Management Act (FLPMA) to manage public lands based upon multiple use and sustained yield. Controls on surface uses are necessary to meet resource objectives and to protect certain sensitive resources and areas from adverse effects of surface disturbing and disruptive activities and human presence. These restrictions include management actions in the approved JMH CAP and the Green River RMP. These restrictions apply to all activities involving surface disturbance or human presence impacts and are applied in accordance with the guidelines described in the Wyoming BLM Standard Mitigation Guidelines for Surface-Disturbing Activities (Appendix 5 in the final EIS). Additional restrictions may be identified through site-specific analyses and may be placed on surface disturbing or disruptive activities as necessary. Clarification of the relationships of surface disturbing and disruptive activity restrictions to stipulations and mitigation for oil and gas activity is provided in this section and in the Fluid Mineral Leasing Management section.

### 2.2.2.2 Management Actions for Surface Use Activities

**Portions of crucial habitats and other areas of sensitive or important resources will be open to further consideration for various multiple-use activities so long as 1) the activity is beneficial to the resource, or 2) crucial habitats and other sensitive or important resources will be protected from significant or irreversible adverse effects, and 3) the activity meets resource management objectives. Other portions are closed to some multiple-use activities. The areas with sensitive and important resources are described in Table 4 and shown on Maps 4 through 16, Map A, and Map B.**

**Table 4. Surface Disturbance/Disruptive Activity Limitation Area<sup>1</sup>**

NO SURFACE DISTURBANCE OR DISRUPTIVE ACTIVITIES <sup>2</sup>	SURFACE DISTURBANCE OR DISRUPTIVE ACTIVITIES LIMITATIONS
Oregon Buttes ACEC South Pass Historic Landscape ACEC (visible portion) Greater Sand Dunes ACEC (developed recreation sites and OHV parking lot) White Mountain Petroglyphs vista Boars Tusk Crookston Ranch + 100-foot buffer Indian Gap (Native American respected places) Tri-Territory Marker Pinnacles Geologic Proper Special status plants Raptor nest sites (active) Other sensitive resource values	Wetlands, riparian areas, and 100-year floodplains + 500-foot buffer Areas adjacent to WSAs Portion of White Mountain West Sand Dunes Archaeological District ACECs (except Oregon Buttes ACEC) Steamboat Mountain Management Area South Pass Historic Landscape ACEC (portion not visible) Pinnacles Geologic Feature (except Proper) Historic Trails + ¼-mile buffer Indian Gap (Native American respected places) Slopes greater than 20 percent Greater sage-grouse leks + ¼-mile buffer Greater sage-grouse winter concentration area <sup>3</sup> Potential greater sage-grouse nesting habitat <sup>4</sup> Red Desert Watershed Management Area Special status plants potential habitat Other sensitive resource values

<b>Table 4. (continued)</b>	
<b>SEASONAL SURFACE DISTURBANCE OR DISRUPTIVE ACTIVITIES LIMITATIONS</b>	
Elk crucial winter habitat	November 15 – April 30
Deer crucial winter habitat	November 15 – April 30
Antelope crucial winter habitat	November 15 – April 30
Elk birthing areas	May 1 – June 30
Deer birthing areas	May 1 – June 30
Raptor nest sites + ½- to 1-mile buffer	February 1 – July 31
Greater sage-grouse leks + ¼-mile buffer	March 1 – May 15
Greater sage-grouse winter concentration area <sup>3</sup>	November 15 – March 14
Greater sage-grouse potential nesting habitat <sup>4</sup>	March 15 – July 15
Mountain plover aggregation areas + ¼-mile buffer	April 10 – July 10
<sup>1</sup> All areas reflect those identified in Table 5. They are shown here to show clarification for their application to surface use activities other than oil and gas.	
<sup>21</sup> Areas are closed to surface disturbing or disruptive activities unless, through site-specific analysis, they are opened based on the following criteria: 1) the activity is beneficial to the resources, or 2) <b>crucial habitats and other sensitive or important resources will be protected from significant or irreversible adverse effects, and 3) the activity meets resource management objectives.</b>	
<sup>3</sup> Only sagebrush vegetation is expected to be suitable habitat.	
<sup>4</sup> Only 50 percent of the area is expected to be suitable nesting habitat.	

Surface disturbing and disruptive activities will be subject to extensive review and mitigation that will allow appropriate levels of activity while meeting objectives and safeguarding sensitive resources in the following areas: portions of Steamboat Mountain ACEC, Greater Sand Dunes ACEC, the White Mountain and Split Rock areas, the core and connectivity areas, and other areas of sensitive resource values. Monitoring and evaluation will determine the effectiveness of the management prescriptions and mitigation measures. Adjustments can be made to ensure that further activity will not cause fragmentation and abandonment of habitat and will still meet stated management objectives, safeguard sensitive resources, and not result in significant or irreversible adverse effects. This determination will be based on the effects on elk and their movement patterns and use of habitat, other wildlife species and habitats, public health and safety, watershed condition, and other sensitive resources.

Application of restrictions and mitigation measures will be accomplished through an implementation strategy that will include case-by-case review of all proposals including evaluation of the 12 sensitive resources (Table 2). Management prescriptions and mitigation measures, including controlled location and timing of the various activities and related reclamation, may also be considered to meet area objectives. For example, satisfactory reclamation of surface disturbance may be required before additional surface disturbing activities are allowed in big game crucial ranges, migration routes, and birthing areas.

Restrictions that can be applied to protect sensitive resources are summarized in Table 4. Surface disturbing and disruptive activities may be allowed if they will not result in significant or irreversible adverse effects. Surface disturbing and disruptive

activities could include those associated with rights-of-way, fencing, power lines, pipelines, long-term and permanent structures or facilities, rangeland improvements, land treatments, and long-term and permanent land and resource use commitments or allocations.

Rights associated with existing oil and gas leases in the planning area would be recognized. Exploration and development activities on these leases would be allowed in accordance with lease terms and after completion of site-specific analysis; however, intensive mitigation may be required to minimize adverse impacts to sensitive resources (Appendices 2, 3, 4, 5, and 7). Examples of intensive mitigation might include—

- Transportation planning;
- Remote control of fluid mineral production facilities to limit travel;
- Multiple-well pads to limit surface disturbances;
- Limiting the number of pads per section in sensitive areas;
- Use of directional drilling to minimize disturbance of sensitive areas;
- Clustering or centrally locating ancillary facilities;
- Shrub reclamation (containerized stock, transplanting, etc.) to restore, rehabilitate, or replace habitat;
- Application of geotechnical material for construction; or
- Potential unitization prior to exploration and development.

More information on the types of restrictions that apply to oil and gas activities is found in the Leasable Fluid Minerals Management section of this document.

Other project proposals could expect similar indepth consideration and may require similar mitigation measures. If analysis shows that sensitive resources will not be adversely impacted, or through mitigation the impacts are deemed acceptable or insignificant, the surface disturbing or disruptive activity could be allowed. Surface disturbing activities will meet the reclamation goals and objectives listed in Appendix 3 and employ the standard and best management practices listed in Appendix 5.

See other resource management sections in this document (Implementation, Monitoring, and Evaluation Process; Air Resources; Heritage Resources; Land and Water Resources; Minerals and Alternative Energy Resources; Recreation Resources; Travel, Access, and Realty; Visual Resources; and Special Management Areas and Other Management Areas) for other prescriptions and guidance that apply to management of surface disturbing activities.

## **3.0 PLAN DECISIONS BY RESOURCE**

### **3.1 Air Resources Management**

#### **3.1.1 Management Objective(s) for Air Resources Management**

[Same as Green River RMP] *The objectives for management of air quality are to: 1) maintain and, where possible, enhance present air quality levels; 2) protect public health and safety and sensitive natural resources; and 3) within the scope of BLM's authority, minimize emissions which may add to acid rain, cause violations of air quality standards, or reduce visibility.*

### **3.1.2 Rationale**

The Clean Air Act (CAA) requires federal agencies to comply with all federal, state, and local air pollution requirements. The CAA also requires each state to develop a state implementation plan to ensure that the national ambient air quality standards are attained and maintained for the criteria pollutants. The Wyoming Department of Environmental Quality (DEQ) is the agency responsible for management of air quality in Wyoming.

The national ambient air quality standards are described in the CAA and have been established for six pollutants. These pollutants and related standards are described in Appendix 6.

The supplemental air quality analyses for the Jonah Infill draft EIS estimated air quality impacts in the years 2006 and 2017 from both the proposed Jonah Infill project and regional emission sources, including the oil and gas fields near Pinedale (Jonah, Pinedale Anticline, South Piney, Riley Ridge, and JMH) (USDI 2005). In both 2006 and 2017, potential impacts to concentrations and atmospheric deposition and visibility from the JMH proposed project alone are negligible. Potential impacts from regional sources to visibility in Class I areas and communities near Pinedale are substantial. The modeling estimates potential impacts that may occur in the future. Air quality monitoring is ongoing in and around Pinedale, and monitoring may be enhanced further in the future.

### **3.1.3 Management Actions for Air Quality Management**

Best management practices (BMP) will be used whenever practical to reduce general air quality impacts and visibility impacts. Application of special requirements (including BMPs) is identified on a case-by-case basis. The rationale for BMPs is identified and documented in site-specific NEPA or other analyses. BMPs are applied as stipulations, conditions of approval, and terms and conditions in the authorizing document. When practicable, projects will be designed to reduce affects to sensitive airsheds. Design considerations include use of Best Available Control Technology (BACT), timing, sequencing, and placement of facilities. See Appendix 5 for specific guidance for applying air quality protection measures.

See other resource management sections in this document (Implementation, Monitoring, and Evaluation Process; Surface Use Activities; Heritage Resources; Land and Water Resources; Minerals and Alternative Energy Resources; Recreation Resources; Travel, Access, and Realty; Visual Resources; and Special Management Areas and Other Management Areas) for other prescriptions and guidance that apply to Air Resources Management.

### **3.1.4 Existing Green River RMP Decisions for Air Quality Resources Management**

Other management objectives and actions for Air Resources Management in the planning area will be implemented consistent with the land use decisions of the Green River RMP. These are summarized here for easy reference. Maps and tables referenced in this section refer to those in the Green River RMP, not those in the JMH CAP.

*Special requirements (e.g., use authorization stipulations, mitigation measures, conditions of approval, etc.) to alleviate air quality impacts will be identified on a case-by-case basis and included in use authorizations (including mineral leases). Examples of such requirements would include: limiting emissions, spacing of source densities, requiring the collection of meteorological and/or air quality data, covering conveyors at mine sites (to lower dust emissions), and placing restrictions on flaring of natural gas (to reduce sulfur emissions). See Appendix 5-1 for specific guidance for applying air quality protection measures.*

*Surface disturbing activities will be managed to prevent violation of air quality regulations. BLM will coordinate with state and local agencies, having regulatory authority, to control dust generated from construction and travel on unimproved roads.*

*BLM will continue to participate with other agencies in the collection of air quality data and air quality pollution analysis.*

*The State of Wyoming has the authority and responsibility to regulate air quality impacts within the state, including Class I areas. The BLM will continue to cooperate and coordinate with the USDA–Forest Service, U.S. Environmental Protection Agency, and the State of Wyoming in managing and monitoring air resources.*

*Cooperation to develop and apply visibility standards and guidelines is encouraged. BLM will cooperate with Wyoming DEQ on review of air quality regulations which may impact BLM-managed activities.*

## **3.2 Heritage Resources Management**

### **3.2.1 Management Objective(s) for Heritage Resources Management**

The planning area (Map 5) will be managed to expand the opportunities for scientific study and educational and interpretive uses of cultural and paleontological resources, protect and preserve important cultural and paleontological resources and/or their historic record for future generations, resolve conflicts between cultural/paleontological resources and other resource uses, and foster opportunities for Native Americans to use heritage resources.

### **3.2.2 Rationale**

The BLM is required by law, regulations, and Executive Orders to manage cultural resources in such a fashion that they will be preserved and protected from destruction and that the appropriate uses will be made of such resources. Law, regulations, and Executive Orders further require that such management be coordinated with the appropriate Native American tribes and individuals. Specifically, the agency must comply with the National Historic Preservation Act (36 CFR 800.106, .110), the Native American Graves Protection and Repatriation Act (NAGPRA), the American Indian Religious Freedom Act (AIRFA), and Executive Order 13007 (Sacred Sites).

The BLM is required by law to preserve and protect significant paleontological resources (43 CFR 3600, 3622, 8365). Protective measures for paleontological resources and cultural resources may depend on the nature of the resource and will

be determined through site-specific analysis. Making the public aware of these resources and needed management will help these resources be better appreciated and better protected from vandalism.

### **3.2.3 Management Actions for Heritage Resources Management**

Heritage resources will be managed pursuant to the National Historic Preservation Act (NHPA); the Archeological Resources Protection Act (ARPA); and other pertinent laws, regulations, and policies. The Wyoming State Historic Preservation Office must be consulted concerning eligibility of resources for the National Register of Historic Places (NRHP) and concerning any potential effects that could result from BLM supported, authorized, or assisted undertakings. Sites that are not eligible for the NRHP will be managed on a case-by-case basis according to their values. Sites that are listed or eligible for listing on the NRHP will be managed for their local, regional, and national significance in accordance with the NHPA and the ARPA. Sites will be managed to ensure against adverse effects through proper mitigation if disturbance or destruction is not avoidable. Mitigation may include scientific information retrieval as well as other measures such as interpretation and improved public appreciation of the heritage resource.

#### **3.2.3.1 Heritage Resources Protection**

Heritage resources in special management areas will remain protected through specific and general management actions (mitigation requirements and site-specific management prescriptions) including those associated with designated ACECs, WSAs, and National Historic Trails.

#### **3.2.3.2 Protection of Scientific Values**

Management of heritage resources will include inventories and mitigation as needed for specific projects. An appropriate level of analysis of all surface disturbing activities will be conducted to determine the potential effect of the activity on the resource and its eligibility for listing on the NRHP. Site stewardship and public education aspects of the Heritage Resource Program will continue to be implemented. Sites eligible for inclusion in the NRHP because of their scientific value will be protected. Preservation of the scientific information will be the preferred mitigation method should avoidance of such sites not be possible.

The paleosol deposition area, including the Finley, Krmpotich, and Eden-Farson archaeological sites and geological deposits in the area, has been identified as an important heritage resource area:

- **The paleosol deposition area will be designated the West Sand Dunes Archaeological District Special Management Area to be managed for scientific study, education, and interpretation (Map A).**
- **Site locations will be kept confidential, and surface disturbance will be limited in the vicinity.**
- **Heritage resource inventories in this area will be required to include analysis of subsurface deposits to ascertain whether they include important archaeological materials.**

- **Subsurface inventory will be required using remote sensing techniques, hand-dug test excavations, or mechanical testing prior to issuing any surface disturbing authorizations in the West Sand Dunes Archaeological District.** The testing strategy should be appropriate to meet the goal of finding buried paleosols and evaluating their potential association with archaeological materials.
- **Subsurface testing will require an approved testing plan and BLM–State Historic Preservation Officer (SHPO) consultation. Mitigation may include research-oriented data recovery excavation.**

The Finley site will be nominated to the NRHP under the Register’s History of American Archaeology context and the Earliest Americans context.

The Krmpotich site will be nominated to the NRHP under the Register’s Earliest Americans context.

### **3.2.3.3 Special Significance Heritage Resources**

Sites Eligible Under NRHP Criteria A, B, or C: All National Register-eligible historic sites will be protected through provisions of the NHPA and ARPA. Sites eligible under Criteria A, B, or C will be protected and mitigation measures will be developed on a case-specific basis depending on site values and proposed activity. Scientific data recovery may not be the appropriate mitigation strategy for these sites. See Appendix 7 in the final EIS for a description of Criteria A, B, and C and guidance for potential mitigation. Sites eligible for inclusion in the NRHP under Criterion D because of their scientific information content will be surrounded by a minimum 100-foot avoidance area, pursuant to the Protocol Agreement between BLM and SHPO (Appendix 7 in the final EIS). Eligible sites may be nominated to the NRHP. BLM may work with partners to fund preparation of NRHP nominations on a case-by-case basis.

Native American Sites: **When activity is proposed in the vicinity of Traditional Cultural Places (TCP), sacred sites, and/or respected places, management will be developed through consultation with Tribal leaders, SHPO, and the activity proponent based on the characteristics of the site and the proposed activity. Mitigation may include siting activity in such a way as to protect the foreground viewshed of the area of concern, if appropriate.** Areas located on Steamboat Mountain, Steamboat Rim, White Mountain Rim, Essex Mountain, Monument Ridge, Joe Hay Rim, and the Indian Gap Trail have been identified as respected places, which may include Native Americans’ sacred sites or TCPs.

Indian Gap Trail: The Indian Gap Trail will be researched, and a trail interpretive plan will be developed.

Objectives for management of the Indian Gap Trail (both inside and outside the expanded Steamboat ACEC and the Greater Sand Dunes ACECs): The objective is to continue to investigate and interpret the historical record associated with the Indian Gap Trail and to document, preserve, and protect the physical integrity of extant portions of the Trail.



**The Indian Gap will be managed as part of the Steamboat Mountain ACEC. A portion of Indian Gap will be closed to surface disturbing and disruptive activities. The remainder of Indian Gap will be open to consideration of surface disturbing and disruptive activities with mitigation to protect resource values (Table 4 and Map 4).**

Early Historic Contact Sites: Historic and archaeological sites within the context of early contact between Native Americans and Euro-American peoples have been identified, but they are understood only in general terms. The historical context of these sites will continue to be developed, and an interpretive program will be developed to improve public appreciation of these locations. Some or all of these sites may be nominated to the NRHP and/or included in the Backcountry Byways program.

Expansion Era Roads and Associated Sites: Expansion Era roads will be managed in a manner similar to that of the historic trails covered in the Oregon/Mormon Pioneer National Historic Trails Management Plan (BLM 1986), with prescriptions from that plan applied, although the ¼-mile protective setback might not always be applicable. Management actions will include development of activity plans with the objective of preserving the historical integrity of significant NRHP contributing segments of the historic roads. Activity plans may include NRHP nomination of those Expansion Era roads that qualify.

Historic Livestock Management Sites: **NRHP-eligible historic livestock management sites will be protected from surface disturbing activities within a minimum area of 100 feet.** Numerous livestock tending campsites and other pastoral agricultural sites have been identified throughout the JMH CAP planning area. Some of these locations may be eligible for inclusion in the NRHP within the context of the development of pastoral agriculture in Wyoming and the Rocky Mountain region.

Tri-Territory Marker: The Tri-Territory Marker will be an exclusion area for rights-of-way and will continue to be closed to surface disturbing activities. The Tri-Territory Marker will be withdrawn from mineral location and closed to coal and sodium exploration. The Tri-Territory Marker will be open for consideration of activities such as fencing, interpretive signs, or barriers to ensure protection of the area.

#### **3.2.3.4 Paleontological Sites**

Documented significant fossil sites will be avoided to protect scientific and educational values. Management guidelines included in BLM Handbook 8270-1 will apply. If impacts are unavoidable, a BLM-approved paleontologist will evaluate the site (a paleontological survey may also be required) and will coordinate with BLM in developing a mitigation plan. The mitigation plan may include activity monitoring, fossil documentation, recovery, and storage in a federally approved repository.

#### **3.2.3.5 Unique Geologic Features**

The Boars Tusk area will continue to be closed to surface disturbing activities, mineral material sales, and use of explosives and blasting. The area within a ½-mile radius of Boars Tusk (including Boars Tusk) will be closed to blasting and explosive charges. The Boars Tusk area will be open to consideration of activities such as

fencing, interpretive signs, or transportation barriers to ensure protection of the site; however, facilities will be prohibited from being developed on the geologic feature. The Boars Tusk area will be a right-of-way avoidance area.

The Boars Tusk and approximately 1,400 acres of BLM-administered public lands in the surrounding area will be closed to any surface mining activity, but open to consideration of subsurface mining methods. Activities or ancillary facilities related to subsurface mining will be prohibited (Map 36 in the Green River RMP, USDI 1997).

**The Pinnacles Geologic Feature (about 1,345 acres) will be an exclusion area for rights-of-way. Surface use will also be controlled. The use of explosives on and within ½ mile of the Pinnacles Geologic Feature will be prohibited. The visual resource management (VRM) classification for the Pinnacles Geologic Feature will be Class II. Vehicular travel within ½ mile of the Pinnacles Geologic Feature, and including the features, will be limited to designated roads and trails. The Pinnacles proper will be closed to surface disturbance.**

Mineral leasing and mineral location actions will be as described in Section 3.10.

See other resource management sections in this document (Implementation, Monitoring, and Evaluation Process; Surface Use Activities; Air Resources; Land and Water Resources; Minerals and Alternative Energy Resources; Recreation Resources; Travel, Access, and Realty; Visual Resources; and Special Management Areas and Other Management Areas) for other prescriptions and guidance that apply to Heritage Resources.

### **3.2.4 Existing Green River RMP Decisions for Heritage Resources Management**

Other management objectives and actions for Heritage Resources Management in the planning area will be implemented consistent with the Green River RMP land use decisions. These are summarized here for easy reference. Maps and tables referenced in this section refer to those in the Green River RMP, not those in the JMH CAP. Also see the Green River RMP decision for the South Pass Historic Landscape ACEC.

*The BLM will cooperate with the National Park Service in implementing the “Oregon/Mormon Pioneer National Historic Trails Management Plan.”*

*Motorized vehicles, such as those used for geophysical exploration, or large heavy vehicles such as buses used in recreational tours, or similar activities, could cross and drive down the trails, provided a site specific analysis determines that no adverse effects will occur.*

*Geophysical activities such as shotholes, blasting, and vibroseis locations could, generally, be allowed, provided they are at least 300 feet from the trail, do not occur directly on the trail, and a site specific analysis determines that visual intrusions and adverse effects will not occur.*

*No blading will be allowed on any historic trail unless necessary to protect life or property. Historic trails are not available for use as industrial access roads (e.g., oil and gas drilling access roads, or as haul roads for heavy truck traffic).*

*Management of historic roads and trails that are eligible for the NRHP but are not Congressionally designated will generally be the same as for designated trails including a ¼-mile protective setback on either side of the trails.*

*Various Expansion Era (i.e., 1870-1940) roads will be managed according to their historical context.*

*The Freighter Springs Station will be managed for the preservation of cultural and historical values.*

*Five significant rock art sites and their surrounding viewshed (within 1/2 mile) will be managed to protect their cultural and historical values.*

*The Cedar Canyon, LaBarge Bluffs, Sugarloaf, Tolar, and White Mountain rock art sites are exclusion areas, and are closed to surface disturbing activities that could adversely affect rock art resources. These sites are closed to: 1) the location of mining claims and entry under the land laws (withdrawals will be pursued as necessary and the existing Sugarloaf and White Mountain withdrawals will be retained; 2) mineral material sales for sand, gravel, or other types of construction or building materials; 3) the use of explosives and blasting; and 4) the use of fire retardant chemicals containing dyes. Off-road vehicular use, including vehicles used for geophysical exploration activities, are limited to designated roads and trails.*

*The vistas surrounding these five significant rock art sites (i.e., the actual area that can be seen from the rock art sites, within 1/2 mile) is an avoidance area for surface disturbing activities and visual intrusions. Most surface disturbing and other activities visible within the vista will be prohibited if they would adversely affect rock art site values.*

*If other significant rock art sites are identified in the future, they will be managed in the same manner as the above five significant sites.*

*All other rock art sites will be managed on a case-by-case basis according to resource values.*

*The Tri-Territory Marker is an exclusion area and is closed to: 1) surface disturbing activities that could adversely affect it; and 2) exploration and development of locatable minerals. A withdrawal will be pursued. The site will be open for consideration of activities such as fencing, interpretive signs, or barriers to ensure protection of the area.*

*The Eden-Farson, Finley, Krmpotich, and Morgan archaeological sites, and similar sites identified in the future, will be managed to protect their important scientific values.*

*All known human burial sites will be protected regardless of their ethnic affiliation.*

*Known burial areas will be closed to surface disturbing activities that could adversely affect them.*

*Exchanges for acquisition and cooperative agreements will be pursued to enhance management of cultural resources.*

*Management needs for other cultural sites will be determined on a case-by-case basis according to their resource values.*

### **3.3 Land and Water Resources — Common Management**

This section contains the resource management direction for fire, livestock grazing, vegetation, water resources, wild horses, and wildlife habitat management. These resource management categories are combined under one heading because of their management interrelationships and to reduce the repetition of text that would occur due to describing similar management actions in each particular section or subcategory.

#### **3.3.1 Management Objectives for Land and Water Resources**

**The planning area will be managed to maintain or enhance land and water resources using ecological principles and science-based performance criteria.**

#### **3.3.2 Rationale**

FLPMA Section 102(8) states that “the public lands be managed in a manner that will protect the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource, and archeological values; that, where appropriate, will preserve and protect certain public lands in their natural condition; that will provide food and habitat for fish and wildlife and domestic animals; and that will provide for outdoor recreation and human occupancy and use.”

The Wyoming Standards for Healthy Rangelands (USDI 1997a) provide direction for overall rangeland health. Specifically, Standard #2 states, “Riparian and wetland vegetation has structural, age, and species diversity characteristic of the stage of channel succession and is resilient and capable of recovering from natural and human disturbance to provide forage and cover, capture sediment, dissipate energy, and provide for groundwater recharge.” Standard #3 states, “Upland vegetation on each ecological site consists of plant communities appropriate to the site that is resilient, diverse, and able to recover from natural and human disturbance.” Standard #4 states, “Rangelands are capable of sustaining viable populations and a diversity of native plant and animal species appropriate to the habitat. Habitats that support or could support threatened species, endangered species, species of special concern, or sensitive species will be maintained or enhanced.”

#### **3.3.3 General Management Actions That Apply to the Entire Land and Water Resources Category**

The following general land and water resource management actions apply to this entire section of all land and water resources categories (i.e., fire management, livestock grazing management, vegetation management, water resources management, wild horses management, and wildlife habitat management). They are presented here rather than repeated in all the sections within the Land and Water Resources category to reduce duplication.

### 3.3.3.1 Healthy Rangelands

The Wyoming Standards for Healthy Rangelands (USDI 1997a) will apply to all resource uses on BLM-administered lands. These standards are the minimal acceptable conditions that address the health, productivity, and sustainability of the rangeland. The standards describe healthy rangelands rather than rangeland by-products.

Achievement of a standard is determined through observing, measuring, and monitoring appropriate indicators. An indicator is a component of a system whose characteristics (e.g., presence, absence, quantity, and distribution) can be observed, measured, or monitored based on sound scientific principles. The standards will direct the management of public lands and focus the implementation of this activity plan toward the maintenance or attainment of healthy rangelands.

### 3.3.3.2 Proper Functioning Condition

Riparian areas will be managed to attain and/or maintain a PFC minimum standard, which is the minimum acceptable level of ecological condition for riparian areas. The PFC for different types of riparian-wetland systems is fully defined in Technical Reference (TR) 1737-15, A User Guide to Assessing Proper Functioning Condition and the Supporting Science for Lotic Areas, and TR 1737-16, A User Guide to Assessing Proper Functioning Condition and the Supporting Science for Lentic Areas. PFC can be summarized as the minimum acceptable level of ecological status where vegetation, landform, and/or woody debris create a level of inherent resiliency that allows the stream or wetland system to be protected from erosive forces, capture sediment, provide for infiltration, and create appropriate habitat.

Riparian areas will be maintained, improved, or restored to enhance forage conditions, provide wildlife habitat, and improve stream and water quality. To achieve PFC, riparian areas will be managed to maintain dominance by species capable of stabilizing soils and stream banks. Riparian areas will be assessed as needed to determine existing condition and whether specific management actions are needed for improvement.

Site-specific activity and implementation plans will be prepared where needed to identify methods to achieve or maintain proper functioning condition as a minimum. Plans could include measures to reduce erosion and sediment yield, promote ground cover, and enhance water quality.

### 3.3.3.3 Desired Plant Community

Upland and riparian vegetation will be managed to achieve desired plant community (DPC) objectives.

**The DPC objectives will emphasize wildlife habitat, livestock grazing, watershed, and biological diversity values while maintaining or enhancing habitat for special status species.**

A DPC is a plant community that produces the kind, proportion, and amount of vegetation necessary for meeting or exceeding the land use plan requirements. DPC objectives for upland and riparian areas will be established for the planning area

through individual site-specific activity and implementation planning and as updated ecological site inventory data become available. Particular attention will be given to mountain shrub, basin big sagebrush/lemon scurfpea, aspen, and other unique or important vegetation types. An interdisciplinary team, usually comprising specialists in soil, vegetation, hydrology, and biology, determines site-specific DPC objectives. The team determines desired vegetative conditions for an area by considering ecological potential, current and anticipated resource uses, applicable publications, and professional judgment.

#### **3.3.3.4 Vegetation Treatments**

**Vegetation treatments will be used to abate, alter, or transform vegetation communities in an effort to achieve DPC objectives, protect water quality, dissipate erosion, and conform to requirements to protect or enhance special status plant and/or wildlife species and associated habitats (Appendix 5).**

Vegetative treatments will be designed on a case-by-case basis. Activities may include seeding, reseeding, fence construction, weed control, and enhancement of fish and wildlife habitat. Activities may also include manual or mechanical manipulation, chemical treatments, and prescribed burns (Appendix 8 in the final EIS).

Prescribed burns will be the preferred method of vegetation manipulation to convert stands of shrubs to grasslands and to promote regeneration of aspen stands and/or shrub species. Prescribed burns will generally be conducted in areas having greater than 35 percent sagebrush composition and 20 percent desirable grass composition and more than 10 inches of precipitation. Low-intensity burns during periods of high soil moisture will be the preferred method/times in mountain shrub communities. Prescribed burns will be restricted or prohibited in areas with coal or other fossil fuel outcrops to prevent ignition of coal or fossil fuels. All vegetation treatments should be designed to be irregular in shape for edge effect, cover, and visual aesthetics.

**Areas proposed for treatment with prescribed burns will be rested 1 full year prior to treatment (unless vegetation cover prior to burning has adequate fine fuels to carry the fire) and 24 months after treatment, unless an onsite analysis determines that this time frame should be expanded or reduced.** Treatments in aspen communities may be fenced on a case-by-case basis.

Herbicide loading sites will be prohibited within 500 feet of water sources, floodplains, riparian areas, and special status plant locations and will be used in accordance with the guidelines in Appendix 8 in the final EIS.

#### **3.3.3.5 Fences**

Where documented wildlife conflicts with fencing on public lands occur, fences will be modified, reconstructed, or, if necessary, removed. Herding control of livestock will be encouraged as an alternative to fencing. Fence construction will be in accordance with BLM design standards and located so as not to overly impede wildlife movement. Consideration will also be given to special status species and wild horse movement.

### **3.3.3.6 Watershed Health Assessments**

Watershed health assessments will be initiated to determine the condition of riparian areas and will be prioritized based on levels of development, rangeland standards, PFC, and other available data. Watersheds with more sensitive baseline conditions will be the focus for increased monitoring efforts and mitigation.

### **3.3.3.7 Native Vegetation**

Native vegetation will be managed to allow natural plant succession to continue, with emphasis on mountain shrub, basin big sagebrush/lemon scurfpea, aspen, and other unique or important vegetation types as appropriate to meet desired plant community objectives.

See other resource management sections in this document (Implementation, Monitoring, and Evaluation Process; Surface Use Activities; Air Resources; Heritage Resources; Land and Water Resources; Minerals and Alternative Energy Resources; Recreation Resources; Travel, Access, and Realty; Visual Resources; and Special Management Areas and Other Management Areas) for other prescriptions and guidance that apply to land and water resource issues.

## **3.3.4 Existing Green River RMP Decisions for Land and Water Management**

Other management objectives and actions for Land and Water Management in the planning area will be implemented consistent with the Green River RMP land use decisions. These are summarized here for easy reference. Maps and tables referenced in this section refer to those in the Green River RMP, not those in the JMH CAP.

*MANAGEMENT ACTIONS: The "Standards for Healthy Rangelands and Guidelines for Livestock Grazing Management for Public Lands Administered by the Bureau of Land Management in the State of Wyoming" were approved by the Secretary of the Interior on August 12, 1997. They have been included in the appendix materials with the Green River Resource Management Plan and referenced in the Green River RMP.*

*The minimum management goal for riparian areas is to achieve proper functioning condition. This is considered the first priority for vegetation management. Desired plant communities must meet the criteria for proper functioning condition.*

*Desired plant community objectives for upland and riparian areas will be established for the planning area through individual site specific activity and implementation planning and as updated ecological site inventory data become available. All activity and implementation plans will incorporate desired plant community objectives. Native plant communities are the preferred species identified when establishing desired plant community objectives (EO-11098 [sic], BLM Manual 1745) (see Riparian Vegetation Guidelines for additional guidance).*

*Riparian habitat in proper functioning condition is the minimum acceptable status or level within the Green River Resource Area (see Glossary). Under this Green River RMP, 75 percent of the riparian areas should, within 10 years, have activity and*

*implementation plans in various states of implementation that will allow riparian areas to achieve or maintain proper functioning condition.*

*Management toward proper functioning condition or desired future condition of riparian areas will be implemented.*

*Vegetation treatments will be designed to help meet and be consistent with all management objectives for the area.*

*Vegetation manipulation projects will be conducted to reach multiple use objectives and will involve site specific environmental analysis and coordination.*

*Vegetation treatments will be designed to be compatible with special status plant species. For example, spraying, burning, mechanical disturbances, etc. will not be allowed to adversely affect these plant species.*

*Vegetation treatment projects will be designed to protect water quality and dissipate erosion.*

*Construction of fences may be considered to meet management objectives. Fence construction in big game use areas and known migration routes will require site specific analysis. Fences on public lands will be removed, modified, or reconstructed if documented wildlife or wild horse conflicts occur.*

*Fencing in wild horse herd management areas will be restricted to those situations where multiple-use values will be enhanced. All fences will be constructed to minimize restriction of wild horse movement.*

*Activity and implementation plans for other land and resource uses and areas will include general watershed management directives and will incorporate sediment reduction and water quality improvement objectives.*

### **3.4 Land and Water Resources — Fire Management**

#### **3.4.1 Management Objectives for Fire Management**

*[Same as Green River RMP] The objectives for fire management are to: 1) use prescribed fire as a management tool to help meet multiple use resource management goals; and 2) provide cost-effective protection from wildfire to life, property, and resource values.*

#### **3.4.2 Rationale**

The BLM is required by law and regulations to manage fire to restore or maintain natural ecosystems while providing for firefighter and public safety and to protect natural and cultural resources and human developments from unwanted wildland fire. Fire is a critical natural process and will be integrated into land and resource management plans and activities on a landscape scale crossing agency boundaries.



### **3.4.3 Management Actions for Fire Management**

#### **3.4.3.1 Fire Management Plan**

Fire management in the planning area will be implemented through the “Fire Management Plan Southwestern Zone Wyoming BLM” (2004). The plan emphasizes protecting natural resources and property while recognizing the essential role fire plays in restoring and maintaining the health of the public lands. The primary objectives and management considerations of the plan include the use of fire management activities, including prescribed fire, as a management tool to help meet multiple-use resource management goals; provide cost-effective protection from wildland fire to life, property, and resource values; allow fire to function in its ecological role when appropriate for the site and situation; and work collaboratively with partners in fire and resource management. The plan will be reviewed and updated as necessary to be consistent with federal wildland fire policy and the National Fire Plan.

#### **3.4.3.2 Fire Suppression**

**Appropriate management response to protect the basin big sagebrush/lemon scurfs plant communities will be applied.**

Wildland and prescribed fires will be managed in all vegetation types to maintain or improve biological diversity and the overall health of the public lands. In particular, plant species and age class diversity will be a priority; thus, appropriate management response for all wildland fires will be identified and implemented depending on the resources and management objectives for the area.

Suppression techniques and hazardous fuels reduction activities will be identified to reduce wildland fire severity and occurrence on portions of the landscape where fire could cause undesirable changes in plant community composition and structure. A site-specific analysis will be prepared for sensitive resource areas, such as special status plant species sites, heritage sites, historic trails, and ACECs, to determine the type of fire suppression activity that will be acceptable. Fire equipment and fire suppression techniques, such as vegetation clearing, will be limited to existing roads and trails in special status plant species habitat. As appropriate, the Fire Management Plan will be updated to reflect the appropriate suppression activity in sensitive resource areas.

See other resource management sections in this document (Implementation, Monitoring, and Evaluation Process; Surface Use Activities; Air Resources; Heritage Resources; Land and Water Resources; Minerals and Alternative Energy Resources; Recreation Resources; Travel, Access, and Realty; Visual Resources; and Special Management Areas and Other Management Areas) for other prescriptions and guidance that apply to Fire Management.

#### **3.4.4 Existing Green River RMP Decisions for Fire Management**

Other management objectives and actions for fire management in the planning area will be implemented consistent with the Green River RMP land use decisions. These are summarized here for easy reference. Maps and tables referenced in this section refer to those in the Green River RMP, not those in the JMH CAP.

*MANAGEMENT ACTIONS: Ambient air quality standards will be maintained during prescribed fire operations.*

*Heavy equipment or actions that will cause surface disturbance will be used only after a site specific analysis has been performed and approved. Activities that cause surface disturbance will be considered on a case-by-case basis.*

*Use of chemical fire suppression agents is prohibited in rock art sites. Wildfires occurring in forested areas will be appropriately suppressed in accord with resource values threatened, as determined on a case-by-case basis.*

*Wildfires occurring in or directly threatening a developed or active timber sale will receive priority suppression control action.*

### **3.5 Land and Water Resources — Livestock Grazing Management**

#### **3.5.1 Management Objectives for Livestock Grazing Management**

The JMH CAP planning area (Map 17) will be managed to maintain and/or improve forage production and ecological conditions for the benefit of livestock use while providing for other resource values.

[Same as Green River RMP] *The objectives for livestock grazing management are to: 1) improve forage production and ecological conditions for the benefit of livestock use, wildlife habitat, watershed, and riparian areas; 2) maintain, improve, or restore riparian habitat to enhance forage conditions, wildlife habitat, and stream quality; and 3) achieve proper functioning condition or better on riparian areas (this is the first priority for vegetation management).*

#### **3.5.2 Rationale**

The Taylor Grazing Act of 1934 is the legislative authority providing for livestock grazing on and protection of public land. FLPMA and other acts direct the management of public land for multiple use and sustained yield. Rangeland management strategies will provide for the maintenance or restoration of watershed function, nutrient cycling and energy flow, water quality, habitat for special status species, and habitat quality for populations and communities of native plants and animals. These management strategies have been supported by development of the Wyoming Standards for Healthy Rangelands (USDI 1997a).

The development and application of these standards and guidelines are to achieve the four fundamentals of rangeland health outlined in the grazing regulations (43 CFR 4180.1). The four fundamentals are expressed as the following circumstances: 1) watersheds are functioning properly; 2) water, nutrients, and energy are cycling properly; 3) water quality meets state standards; and 4) habitat for special status species is protected.

Rangeland standards address the health, productivity, and sustainability of the BLM-administered public rangelands and represent the minimum acceptable conditions for these public rangelands. The standards apply to all resource uses on public lands.

Guidelines provide for and guide the development and implementation of reasonable, responsible, and cost-effective management practices at the grazing allotment and watershed level.

### **3.5.3 Management Actions for Livestock Grazing Management**

#### **3.5.3.1 Guidelines for Livestock Grazing Management**

The Wyoming Standards for Healthy Rangelands (USDI 1997a) apply to all livestock grazing activities on public lands. These standards and guidelines address management practices at the grazing allotment management plan (AMP) and watershed levels and are intended to maintain desirable conditions or improve undesirable rangeland conditions within reasonable time frames. If livestock grazing is determined to be a factor in not meeting the Wyoming Standards for Healthy Rangelands (USDI 1997a), appropriate management actions will be implemented, as determined through cooperation among BLM, livestock operators, and interested members of the public. Achieving the standards or making significant progress toward achievement of the standards will be the first priority for all grazing allotments.

#### **3.5.3.2 Rangeland and Riparian Habitat**

Implementation of grazing management systems will assist in improving or maintaining the desired range condition. Approved AMPs, or other activity plans intended to serve as the functional equivalent to an AMP, for each of the designated grazing allotments will provide the necessary guidance for achieving grazing management objectives.

Appropriate actions for improving degraded rangeland and riparian habitat (i.e., meeting Wyoming Standards for Healthy Rangelands (USDI 1997a)) could include, but will not be limited to, reduction of permitted animal unit months (AUM), modified turnout dates, livestock water developments, range improvements, modified grazing periods, growing season rest, riparian pastures, exclosures, implementation of forage utilization levels, and livestock conversions. These improvements will be considered individually using the method outlined in Appendix 2 to ensure conformance with management objectives for the planning area and other resource values.

#### **3.5.3.3 Forage Utilization Levels**

Forage utilization levels for upland and riparian species will be in accordance with individual AMPs or other activity plans intended to serve as the functional equivalent of an AMP. Determination of forage utilization levels will be based on PFC guidelines, BLM reference handbooks, and professional judgment.

#### **3.5.3.4 Livestock Water Developments and Range Improvements**

Livestock water developments and range improvements will be considered to maintain or improve resource conditions, enhance livestock distribution, or both. Compatibility with special status plant species will be required. **Water developments and/or range improvements proposed in sensitive areas (Map 4) will be considered only if wildlife habitat and resource conditions are maintained or improved and no significant or irreversible adverse effects will occur.**

### 3.5.3.5 Salt or Mineral Supplements

Salt or nutritional supplements will be prohibited within 500 feet of riparian habitat and National Historic and Scenic Trails unless analysis shows that these resources would not be adversely affected. These supplements also will be prohibited on areas inhabited by special status plant species. **Placement of supplements at least 500 feet away from wells, troughs, and other human-made water sources will be encouraged to better distribute livestock.**

See other resource management sections in this document (Implementation, Monitoring, and Evaluation Process; Surface Use Activities; Air Resources; Heritage Resources; Land and Water Resources; Minerals and Alternative Energy Resources; Recreation Resources; Travel, Access, and Realty; Visual Resources; and Special Management Areas and Other Management Areas) for other prescriptions and guidance that apply to Livestock Grazing Management.

### 3.5.4 Existing Green River RMP Decisions for Livestock Grazing Management

Other management objectives and actions for Livestock Grazing Management in the planning area will be implemented consistent with the Green River RMP land use decisions. These are summarized here for easy reference. Maps and tables referenced in this section refer to those in the Green River RMP, not those in the JMH CAP.

*MANAGEMENT ACTIONS: Authorized grazing use will not exceed the recognized permitted active AUMs (318,647 AUMs in the Green River RMP planning area). Public lands will be made available for livestock grazing while considering the needs of other resources.*

*The kinds and seasons of livestock grazing use will continue to be licensed until monitoring, negotiation, consultation, or a change in resource conditions indicate that a modification is needed. Monitoring will be continued or initiated following adjustments in grazing use to assure that grazing and other management objectives are being met. Allotments are placed in one of three selective management categories identified as improve (I), maintain (M), or custodial (C). Livestock grazing will be managed on 31 I category allotments, 18 M category, and 29 C category Allotments, and one allotment may not be categorized.*

*The authorized active livestock use and existing forage reservations for wildlife and wild horses will be maintained. Historic levels and types of rangeland monitoring will continue and additional levels and types of monitoring or evaluation may be initiated, as necessary, to determine any need for forage allocation adjustment.*

*Interdisciplinary monitoring studies will be conducted at a level sufficient to detect changes in grazing use, trend, and range conditions and to determine if vegetation objectives will be met for all affected resource values and uses (livestock grazing, wild horses, wildlife, watershed, etc.).*

*The Palmer Draw area (970 acres) and special management exclosures are closed to livestock grazing. AUMs currently authorized in these areas will be suspended.*

*All developed and some semi-developed recreation areas are closed to livestock grazing and will be fenced to reduce conflicts between uses.*

*Authorized grazing preference may be reduced in areas with excessive soil erosion and poor range condition, if allotment evaluation warrants such a change, or to provide forage for wildlife, wild horse, and recreational uses.*

*Management will be implemented in "I" category allotments to maintain or improve wild horse, wildlife, watershed, vegetation, and soils resource conditions. Management in "M" category allotments will be directed toward maintenance of resource conditions. Management in "C" allotments will be directed towards monitoring resource conditions.*

*All AMPs will incorporate desired plant community objectives and riparian objectives where such resources exist. Grazing systems will be designed to maintain or improve plant diversity and will be implemented on all I category allotments. AMPs will be written or modified for I category allotments. AMPs for M category allotments will not be modified unless monitoring and evaluation indicate a change in management is needed or riparian objectives need to be included. Riparian objectives will also be developed for C category allotments where riparian values exist).*

*Management actions identified in the Rangeland Program Summary Update (1990) will continue to be implemented, as appropriate, through site specific activity planning.*

*Cooperative allotment management plans prepared in coordination with other agencies, such as the Forest Service and Natural Resource Conservation Service, will be consistent with this land use plan.*

*Site specific analyses will be conducted where necessary to help determine how to alleviate conflicts between wildlife use, livestock grazing, and development activities. A site specific plan that considers wildlife needs will be developed for the Pine Canyon, Long Canyon, Cedar Canyon, and Table Mountain area to alleviate conflicts between oil and gas production and exploration, wildlife needs, and livestock grazing.*

*Unallotted forage on public lands will be appropriately allocated to wildlife, wild horses, livestock grazing, and for watershed improvement on a case-by-case basis.*

*Range improvements will be directed at resolving or reducing resource concerns, improvement of wetland/riparian areas, and overall improvement of vegetation/ground cover (see Vegetation section). New range improvements may be implemented in "I" and "M" category allotments. Maintenance of range improvements will be required in accordance with the BLM Rangeland Improvement Policy.*

*Water sources may be developed in crucial wildlife winter ranges only when consistent with wildlife habitat needs. Such sources will be designed to benefit livestock, wild horses, and wildlife. Alternative water supplies or facilities for livestock may be provided to relieve livestock grazing pressure along stream bottoms and improve livestock distribution.*

*Construction of fences may be considered to meet management objectives. Fence construction in big game use areas and known migration routes will require site specific analysis. Fences on public lands will be removed, modified, or reconstructed if documented wildlife or wild horse conflicts occur. Introduction of herder control will be encouraged as an alternative to fencing. All constructed fences will follow construction standards and design (BLM Manual 1740) and will be located and designed to not impede wild horse movement.*

*Combining and splitting allotments will be considered when such action will help meet Green River RMP objectives.*

*Requests for conversions of kinds of livestock and changes in seasons of grazing use will be considered on a case-by-case basis through an environmental analysis. Such changes will be consistent with wildlife, wild horse, watershed, and riparian objectives. Special status plant species and vegetation objectives must be considered before allowing livestock conversions, and all conversions will be consistent with available forage.*

*Noxious weed infestations will be controlled through livestock management or by environmentally acceptable mechanical, chemical, or biological means. BLM will cooperate and coordinate with County weed and pest districts.*

## **3.6 Land and Water Resources — Vegetation Management**

### **3.6.1 Management Objectives for Vegetation Management**

*[Same as Green River RMP] The objectives for management of vegetation are to: 1) maintain or enhance vegetation community health, composition, and diversity in order to meet watershed, wild horse, wildlife, and livestock grazing resource management objectives; and 2) provide for plant diversity (desired plant communities).*

*The objectives for management of special status plant and animal species are to: 1) maintain or enhance essential and important habitat and prevent destruction or loss of the species' communities and important habitat; 2) provide opportunities for enhancing or expanding the habitat; and 3) prevent the need for listing these species as threatened or endangered.*

*The objectives for management of forests and woodlands are to: 1) provide for healthy forest resources and primarily to meet multiple resource objectives (i.e., improved watershed, soils, recreation, and wildlife habitat values); 2) maintain and enhance biological diversity; 3) provide a long-range view of desired plant community concepts at the landscape level; 4) identify old growth areas; and 5) in commercial forests, provide for production of forest products in balance with these other resource management objectives. (Long-term stand structure development will be an integral part of all forest management.)*

### **3.6.2 Rationale**

FLPMA and the Wyoming Standards for Healthy Rangelands (USDI 1997a) direct BLM to manage vegetation resources toward the maintenance or restoration of the physical function and biological health of vegetative ecosystems. Objectives will

maintain and improve the condition and trend in plant communities that provide wildlife habitat, recreation, forage, scientific, scenic, ecological, and water and soil conservation benefits for consumptive and non-consumptive uses.

The basin big sagebrush/lemon scurfpea community could be adversely affected by surface disturbing activities. Providing protection for this unique vegetation association, which stabilizes the sandy soils and provides habitat and forage for wildlife, will ensure this plant community remains healthy and productive. Measures to protect this plant community include avoidance of these areas, intensive mitigation measures, and reclamation of any disturbed area (Appendix 3).

Surface disturbing activities associated with actions such as the construction of linear rights-of-way (ROW) for pipelines, transmission lines, communication lines, and roads, could adversely impact vegetation resources. Some original plant communities, particularly shrub communities and stabilized sand dunes, likely would not be reestablished to predisturbance structure and density for more than 20 years. The basin big sagebrush/lemon scurfpea community likely would take 70 years or more to reach the structure and density of predisturbance conditions. Little success with reclamation of special status plant species has been accomplished to date.

### **3.6.3 Management Actions for Vegetation Management**

#### **3.6.3.1 Special Status Plant Species**

Special status plants (Map 6) are those species federally listed as threatened or endangered, proposed for listing, or candidates for listing under the Endangered Species Act. They also include species designated by each BLM State Director as sensitive and any species designated by a state agency in a category implying potential endangerment or extinction. The State of Wyoming does not have an official list of designated sensitive, threatened, or endangered plant species. Surveys will be conducted of potential habitat for federally listed, proposed, or candidate threatened and endangered plant species before any surface is disturbed. Should any such species be found, all disruptive activities will be halted until species-specific protective measures are developed and implemented. For listed species, protective measures will be coordinated with the U.S. Fish and Wildlife Service (USFWS).

Specific management actions related to known locations of special status species habitat include closing locations to surface disturbing activities or any disruptive activity that could adversely affect the plants or their habitat and closing locations of special status species to location of new mining claims, mineral material sales, OHV use including vehicles used for geophysical exploration activities and surveying, and use of explosives and blasting. Known locations of special status plant species will be open to consideration for fluid mineral leasing with a no surface occupancy stipulation.

Special status plant species potential habitat areas will be areas of controlled surface use (CSU) for surface disturbing activities related to oil and gas activities. Surface disturbing activities for other uses or projects may also be restricted or prohibited based on site-specific analysis as outlined in Section 2.2.2 and Appendix 2.

### **3.6.3.1.1 Rights-of-Way Limitations**

Areas where Wyoming BLM sensitive plant species are known to exist and/or have potential habitat will be right-of-way avoidance areas (Map 15). The Authorized Officer could grant exceptions if analysis shows that there is no adverse impact to the plant populations.

### **3.6.3.1.2 Fire Suppression**

A site-specific analysis will be prepared for all fire management actions around special status plant species sites to determine the appropriate fire management response. Fire equipment and fire suppression techniques such as vegetation clearing will be limited to existing roads and trails in special status plant species habitat.

### **3.6.3.1.3 Threatened and Endangered Plant Species**

Surveys will be conducted of potential habitat for federally listed, proposed, or candidate threatened and endangered plant species before any surface is disturbed or water sources are depleted. If such a species is located, formal consultation with USFWS will occur. Management prescriptions to provide, maintain, or improve habitat will be developed on a case-by-case basis.

### **3.6.3.2 Other Sensitive Plant Resources**

**Some basin big sagebrush/lemon scurfpea areas along the base of Steamboat Mountain will be provided protection by controlling surface use or implementing other intense mitigation to preserve the character of vegetation communities.** Map 6 and Map 4 show sensitive plant resource areas of various types. Implementation of healthy rangeland standards will ensure the viability of vegetation resources. Water developments will be considered only if the resource conditions are maintained or improved.

### **3.6.3.3 Invasive Species**

An invasive species is one that is nonnative to a particular ecosystem and its introduction is likely to cause harm to the economy, environment, or human health. Federal agencies are directed under Executive Order 13112 to expand and coordinate efforts to prevent the introduction and spread of invasive species. Preventing the introduction and proliferation of invasive species will be accomplished through close monitoring and containment of infestations and through implementation of best management practices for all surface disturbing activities (Appendix 5). Public education regarding invasive species and the means to address them will also be promoted.

### **3.6.3.4 Forest and Woodland Health**

Management of conifer and aspen communities (Map 6) will be designed to promote forest and woodland health. Old, decadent trees may be left standing or downed to provide cover or other habitat for wildlife.

See other resource management sections in this document (Implementation, Monitoring, and Evaluation Process; Surface Use Activities; Air Resources; Heritage Resources; Land and Water Resources; Minerals and Alternative Energy Resources;



Recreation Resources; Travel, Access, and Realty; Visual Resources; and Special Management Areas and Other Management Areas) for other prescriptions and guidance that apply to Vegetation Management.

### **3.6.4 Existing Green River RMP Decisions for Vegetation Management**

Other management objectives and actions for Vegetation Management in the planning area will be implemented consistent with the Green River RMP land use decisions. These are summarized here for easy reference. Maps and tables referenced in this section refer to those in the Green River RMP, not those in the JMH CAP.

### **Special Status Plant Species Management**

*Only management of candidate, sensitive, and threatened and endangered plant species is addressed here. Management of candidate, sensitive, and threatened and endangered animal and fish species are addressed in the Wildlife Management and Special Management Area section. Should other species and their essential habitats be identified in the planning area in future, appropriate management decisions will be developed for such species and their essential habitats. If necessary, the Green River RMP will be amended.*

*Special Status species are those plant and animal species which are proposed for listing, officially listed (threatened and endangered), or candidates for listing as threatened or endangered by the Secretary of the Interior under the provisions of the Endangered Species Act; those listed or proposed for listing by a state in a category implying potential endangerment or extinction; and those designated by each BLM State Director as sensitive.*

*The management actions for special status species apply only to BLM-administered public lands. Emphasizing management of these species on public lands and preventing these species from being listed as threatened or endangered would benefit all parties within the Green River Resource Area. When species are listed as threatened and endangered, by law they become more universally protected on private, and state-owned lands, in addition to Federal lands.*

### **Candidate, Sensitive, and Threatened and Endangered Plant Species Management**

*MANAGEMENT ACTIONS: Any management actions on potential habitat of special status plant species communities on federal land or on split estate lands (i.e., non-federal land surface ownership with BLM-administered federal minerals ownership) will require searches for the plant species prior to project or activity implementation to determine the locations of special status plant species and essential and/or important habitats. Special status plant populations are closed to activities that could adversely affect these species and their habitat. Management requirements in habitat areas may include prohibiting or limiting motorized vehicle use, surface uses, and explosive charges or any other surface disturbing or disruptive activity that may cause adverse effects to the plants.*

*Known locations of special status plant species communities will be protected and closed to: 1) surface disturbing activities or any disruptive activity that could adversely affect the plants or their habitat; 2) the location of new mining claims (withdrawal from mineral location and entry under the land laws will be pursued); 3) mineral material sales; 4) all off-road vehicular use, including those vehicles used for geophysical exploration activities, surveying, etc.; and 5) the use of explosives and blasting.*

*Locations of special status plant species are open to consideration for mineral leasing with a no surface occupancy requirement.*

*On essential and important special status plant species habitat, all fire suppression activities are limited to existing roads and trails. A site specific analysis will be prepared for all fire management activities (e.g., prescribed fires, fire suppression) around special status plant species sites to determine the appropriate fire management response.*

*Activities such as fencing, interpretive signs, or barriers to ensure protection to the special status plant species and their habitat will be considered on a case-by-case basis.*

*Should new special status plant species be identified, they will be managed under the same prescriptions described above for the known species. This may result as new information about vegetation types and communities is acquired.*

*Management prescriptions for threatened and endangered species and proposed threatened and endangered species will be developed on a case-by-case basis in consultation with the U.S. Fish and Wildlife Service.*

*Known locations of special status species will be evaluated on a case-by-case basis to determine if they meet the relevance and importance criteria to be considered for ACEC designation. If appropriate, such locations will be proposed for ACEC designation and the Green River RMP will be amended, as necessary (see the section on Special Designation Management Areas).*

## **Vegetation Management**

*MANAGEMENT ACTIONS: Riparian habitat will be maintained, improved, or restored to provide wildlife and fish habitat, improve water quality, and enhance forage conditions. Where possible, acquisition of additional riparian area acreage will be pursued to enhance riparian area management.*

*The minimum management goal for riparian areas is to achieve proper functioning condition. This is considered the first priority for vegetation management. Desired plant communities must meet the criteria for proper functioning condition.*

*Desired plant community objectives for upland and riparian areas will be established for the planning area through individual site specific activity and implementation planning and as updated ecological site inventory data become available. All activity and implementation plans will incorporate desired plant community objectives. Native*

*plant communities are the preferred species identified when establishing desired plant community objectives (EO-11098 [sic], BLM Manual 1745).*

*Prescribed fire will generally be the preferred method of vegetation manipulation to convert stands of brush to grasslands and to promote regeneration of aspen stands and/or shrub species. Low intensity burns during periods of high soil moisture will be the preferred methods/times in mountain shrub communities.*

*Prescribed burns may be conducted in crucial big game winter ranges if habitat values will be improved for these species. Prescribed fire is the preferred method of vegetation manipulation, and spring burns are preferred to regenerate shrubs. Chemical treatment will be used only where national guidelines can be exercised to prevent unwanted effects or harm to desirable fauna or flora and to prevent transportation of chemicals to other areas by water or air movement.*

*Approximately 26,700 acres of vegetative treatment will be designed to increase forage, while about 41,000 acres will primarily be designed to improve wildlife habitat. Treatment methods available include mechanical, biological, chemical, and prescribed fire.*

*Prescribed burns generally will be conducted in areas having greater than 35 percent sagebrush composition, 20 percent desirable grass composition, and greater than 10 inches of precipitation. Other vegetation manipulation methods will be considered on a case-by-case basis depending on objectives and cost benefits. All treated areas will be rested a minimum of 2 growing seasons from livestock grazing. Burn areas will be fenced from livestock and big game animals if necessary. Prescribed fire will be restricted in areas with surface coal or other fossil fuel outcrops.*

*Vegetation manipulation projects will be conducted to reach multiple use objectives and will involve site specific environmental analysis and coordination. Funds for vegetation manipulation in I category allotments will be provided by the BLM, other state or federal agencies, and private sources.*

*All vegetation manipulation projects will involve site specific environmental analysis; coordination with affected livestock operators and the WGFD; and will include multiple use objectives for resource uses including livestock grazing, wildlife, recreation, and watershed.*

*Vegetation treatments will be designed to be compatible with special status plant species. For example, spraying, burning, mechanical disturbances, etc. will not be allowed to adversely affect these plant species.*

*All vegetation treatments will be designed on a case-by-case basis and will be irregular in shape for edge effect, cover, and visual esthetics.*

*Vegetation treatment projects will be designed to protect water quality and dissipate erosion. This generally means accomplishing vegetation treatments in a mosaic pattern and leaving sufficient untreated vegetation to buffer riparian areas and intermittent and ephemeral drainages from erosion. Specific treatment designs for erosion control will be determined on a case-by-case basis.*

## **Riparian Vegetation Management Actions**

*Riparian habitat in proper functioning condition is the minimum acceptable status or level within the Green River Resource Area (see Glossary). Under this Green River RMP, 75 percent of the riparian areas should, within 10 years, have activity and implementation plans in various states of implementation that will allow riparian areas to achieve or maintain proper functioning condition.*

*The Green River Resource Area uses BLM Technical Reports on Proper Functioning Condition (TR 1737-9 and TR 1737-11) to guide the effort in classifying or rating all lotic (moving water) and lentic (still water) riparian areas.*

*Site specific activity and implementation plans will be used to identify methods to achieve or maintain proper functioning condition in riparian areas.*

*Methods applied where grazing occurs include (but are not limited to) fencing, establishment of pastures and exclosures, off-site water development, off-site salt or mineral supplement placement, timing and seasons of use, establishment of allowable use levels for key riparian species, herding, grazing systems, etc. Methods applied where surface disturbing activities occur include (but are not limited to) distance restrictions, timing constraints, sediment containment and control design, and reclamation practices.*

*The next step beyond basic proper functioning condition of riparian areas is the achievement of desired plant communities. Desired plant community objectives will be developed on riparian areas based on any of several different methods, including Ecological Site Inventory, comparison areas (comparison areas would have similar soils, aspect, vegetation, and precipitation), and estimating the structural component that can be achieved in the short term. Desired plant community objectives can be short and long term. Desired plant community objectives take into consideration all uses of the riparian area which can include livestock grazing, wildlife, recreation, fisheries, flood control, etc.*

*While the desired plant community establishes objectives for the riparian area or upland plant community, the Desired Future Condition establishes goals for entire watersheds (or larger blocks of land) involving all activities and resources. Achieving proper functioning condition and a desired plant community are integral steps in the process of establishing and achieving the Desired Future Condition of an area.*

## **Forests and Woodlands Management**

*Noncommercial forest lands (woodlands) will be managed to optimize cover and enhance habitat for wildlife, protect soil and watershed values, and complement recreation uses.*

### **Woodland Forests - Juniper, Aspen, and Limber Pine**

*Woodland forest areas will be managed using silvicultural practices that promote stand viability. Treatments could include thinning, harvesting, chaining, and burning. The vegetative material resulting from these treatments will normally be sold through public demand sales.*

Woodland forest acreage will be maintained. Treatments may be implemented that influence successional stages, but such treatments will not permanently convert the areas to another vegetation type. Old aspen stands may be replaced by stands of sprouting aspen by various treatment methods (e.g., burning). Old decadent trees may be left standing or downed to provide cover or other habitat for wildlife (e.g., Animal Inn), and juniper stands may be replaced where they are encroaching into other vegetation types.

Silvicultural treatments in mature timber stands will be designed to improve wildlife habitat and watershed condition, i.e., create small openings to provide forage for wildlife and accumulate snow drifts to increase moisture.

Cottonwood trees are not available for any harvesting.

Firewood cutting for camping purposes will be limited to designated areas (this mainly applies to the area around developed recreation sites).

### **3.7 Land and Water Resources — Water Resources Management**

#### **3.7.1 Management Objectives for Water Resources Management**

[Same as Green River RMP] *The objectives for watershed/soils management are to: 1) stabilize and conserve soils; 2) increase vegetative production; 3) maintain or improve surface and groundwater quality; and 4) protect, maintain, or improve wetlands, floodplains, and riparian areas.*

#### **3.7.2 Rationale**

BLM, through the Clean Water Act of 1987 as amended (33 U.S.C. 1251), establishes objectives to restore and maintain the chemical, physical, and biological integrity of the nation's water. Protection of Wetlands (Executive Order 11990) requires federal agencies to take action to minimize the destruction, loss, or degradation of wetlands and to preserve and enhance the natural and beneficial values of wetlands.

Floodplain Management (Executive Order 11988) provides for the restoration and preservation of national and beneficial floodplain values and enhancement of the natural and beneficial values of wetlands in carrying out programs affecting land use.

#### **3.7.3 Management Actions for Water Resources Management**

##### **3.7.3.1 Water Quality**

All surface disturbing activities will be required to adopt design strategies that serve to reduce erosion and maintain or improve water quality. The area within 500 feet of wetlands, riparian areas, and 100-year floodplains and the area within 100 feet of the edge of the inner gorge of intermittent and large ephemeral drainages are avoidance areas for surface disturbing activities. Activities could be allowed if a site-specific analysis determines that no adverse impacts will occur to floodplains, wetlands, perennial streams, or water quality and a plan to mitigate impacts to water quality is approved.

### **3.7.3.2 Permanent Facilities**

Permanent facilities, such as storage tanks and structure pits, are not allowed in 100-year floodplains, wetlands, or riparian areas. **However, structures that will enhance the protection and management of 100-year floodplains, wetlands, and riparian areas could be considered.** Proposals for linear crossings in these areas will be considered on a case-by-case basis.

### **3.7.3.3 Erosion Control**

Areas with highly erodible soils will be avoidance areas for all surface disturbing activities. Activities could be allowed if a site-specific analysis determines that no adverse impacts will occur to areas with highly erodible soils and a plan to mitigate those impacts is approved. When applicable, erosion control plans will be required as part of surface disturbing project proposals.

### **3.7.3.4 Colorado River Salinity Control**

BLM will continue to participate with federal, state, and local government agencies to develop and implement salinity control plans for the Colorado River Basin and maintain existing and future applicable water quality plans.

### **3.7.3.5 Wetlands and Floodplains**

Wetlands and floodplains will be managed in accordance with Executive Orders 11988 and 11990 and Section 404 of the Clean Water Act. In addition, projects to improve the ecological integrity of the dunal ponds will be considered.

### **3.7.3.6 Riparian Management Enclosures**

Riparian enclosures can be maintained and/or modified based on site-specific analysis. Where site-specific analysis determines they no longer serve their purpose, they can also be removed. New enclosures can be developed if they will benefit in meeting the management objectives outlined in Section 2.7.1. Riparian enclosures are used to protect degraded riparian areas from further impacts associated with livestock grazing and to ensure reclamation of vegetation communities and ecological processes. Most of the enclosures in the planning area were created for mitigation for converting sheep grazing to cattle grazing. Enclosures will remain closed to livestock grazing, and AUMs in these enclosures are not available for livestock use.

### **3.7.3.7 Surface Water Depletion**

Hydrogeologic investigations will be required where there is a reasonable expectation that surface water features are connected with geologic formations being dewatered. Such investigations will serve to determine the extent of the potential impact and provide information that could assist in mitigation of undesirable effects related to development. Attributes that could trigger a hydrogeologic investigation include, but are not limited to:

- Preexisting designation of an area as a recharge zone.
- Similar water chemistry between surface waters and proximity of a proposed project to ground water, shallow water tables, and springs and/or seeps.

- Wetlands, streams, or water courses.
- Underlying lithology that suggests surface/ground water communication, such as dipping geologic beds, fractures in the underlying rocks, and shallow producing zones. Mitigation requirements will also be implemented as needed to protect surface waters.

Appropriate measures will be applied to protect ground water quality and prevent commingling of aquifers (Appendix 5).

### **3.7.3.8 Aquifer Recharge Areas**

Aquifer recharge areas will be managed to maintain or enhance recharge volume and ground water quality by limiting road density and surface occupancy to maintain a healthy recharge area. Studies will be conducted in relation to specific projects to better define aquifer recharge area boundaries.

See other resource management sections in this document (Implementation, Monitoring, and Evaluation Process; Surface Use Activities; Air Resources; Heritage Resources; Land and Water Resources; Minerals and Alternative Energy Resources; Recreation Resources; Travel, Access, and Realty; Visual Resources; and Special Management Areas and Other Management Areas) for other prescriptions and guidance that apply to Water Resources Management.

### **3.7.4 Existing Green River RMP Decisions for Water Resources Management**

Other management objectives and actions for Water Resources Management in the planning area will be implemented consistent with the Green River RMP land use decisions. These are summarized here for easy reference. Maps and tables referenced in this section refer to those in the Green River RMP, not those in the JMH CAP.

*MANAGEMENT ACTIONS: Land uses and surface disturbing activities will be designed to reduce erosion and to maintain or improve water quality. Management in damaged wetland and riparian areas will be directed toward restoration to pre-disturbance conditions.*

*Management in the planning area will emphasize:*

- *reduction of sediment, phosphate, and salinity load in drainages where possible;*
- *-maintaining and improving drainage channel stability; and*
- *-restoring damaged wetland areas.*

*Areas where the soils are highly erodible or difficult to reclaim will receive increased attention, and are avoidance areas for surface disturbing activities.*

*Activity and implementation plans will be designed with measures to reduce phosphate loading to Fontenelle and Flaming Gorge Reservoirs and the Green River.*

*Site specific activity and implementation plans (to reduce erosion and sediment yield, promote ground cover, enhance water quality) will be prepared for areas where needed.*

*Activity and implementation plans for other land and resource uses and areas will include general watershed management directives and will incorporate sediment reduction and water quality improvement objectives.*

*Wetlands and floodplains within the planning area will be managed in accordance with Executive Orders 11988 and 11990.*

*The 100-year floodplains, wetlands, and riparian areas are closed to any new permanent facilities (e.g., storage tanks, structure pits, etc.). Proposals for linear crossings in these areas will be considered on a case-by-case basis.*

*Surface disturbing and construction activities (e.g., mineral exploration and development activities, pipelines, powerlines, roads, recreation sites, fences, wells, etc.) that could adversely affect water quality, and wetland and riparian habitat, will avoid the area within 500 feet of or on 100-year floodplains, wetlands, or perennial streams and within 100 feet of the edge of the inner gorge of intermittent and large ephemeral drainages. Proposals for linear crossings in these areas will be considered on a case-by-case basis.*

*Practices, determined on a case-by-case basis, will be implemented as needed to protect groundwater and prevent soil contamination.*

*Aquifer recharge areas will be managed to protect groundwater quality and to ensure continued ability for recharging aquifers.*

*BLM will cooperate with the State of Wyoming on the Wyoming State 208 water quality plan, and will coordinate the development of water quality plans consistent with BLM programs and Green River RMP recommendations and decisions.*

*Areas may be considered for acquisition under a willing seller/willing buyer situation to enhance BLM management of watershed resources.*

## **3.8 Land and Water Resources — Wild Horse Management**

### **3.8.1 Management Objectives for Wild Horse Management**

The JMH CAP planning area (Map 18) will be managed to 1) protect, maintain, and control viable, healthy herds of wild horses in the Great Divide Basin Herd Management Area (HMA) at appropriate management levels (AML) while retaining their free-roaming nature; 2) provide adequate habitat for free-roaming wild horses through management consistent with principles of multiple use and environmental protection; and 3) provide opportunity for the public to view wild horses.

[Management Objectives from Green River RMP] *The objectives for management of wild horses are to: 1) protect, maintain, and control viable, healthy herds of wild horses while retaining their free-roaming nature; 2) provide adequate habitat for free-roaming wild horses through management consistent with principles of multiple use*



and environmental protection; and 3) provide opportunity for the public to view wild horses.

### **3.8.2 Rationale**

The BLM is required by law, regulations, and Executive Orders to manage wild free-roaming horses and burros in a manner designed to achieve and maintain a thriving natural ecological balance on the public lands.

### **3.8.3 Management Actions for Wild Horse Management**

#### **3.8.3.1 Wild Horse Herd Management Area Boundaries and Appropriate Management Levels**

Wild horse populations will be managed within the Great Divide Basin HMA at an AML of 415 to 600 horses. The Great Divide Basin HMA boundaries will remain unchanged from those identified in the Green River RMP (1997).

#### **3.8.3.2 Activity and Monitoring Plans**

Land use decisions and site-specific activity planning will focus on ensuring that adequate forage is available to support the AML. Site-specific activity planning will be implemented to support herd management decisions throughout the entire Great Divide Basin HMA. Annual monitoring data will be collected to evaluate progress toward meeting management goals and objectives.

#### **3.8.3.3 Water Developments**

Water developments will be provided as needed to improve wild horse herd distribution and manage forage utilization. **Water developments within sensitive wildlife habitats will be considered only if wildlife habitat and resource conditions will be improved or maintained.** Compatibility with special status plant species will be required.

#### **3.8.3.4 Gather Planning**

A gather plan incorporating the national selective removal policy will be developed and implemented to remove excess horses from inside and outside the HMA to maintain the existing AMLs. The scheduling of gathers will vary according to HMA objectives, resource conditions, and need. Fertility control will be initiated only if deemed appropriate by a site-specific analysis.

#### **3.8.3.5 Public Education**

Public education and enjoyment of wild horse herds is an important component of the National Wild Horse and Burro Program. Portions of this program will be implemented in the Great Divide Basin HMA by providing interpretive signs and access sites for viewing horses.

See other resource management sections in this document (Implementation, Monitoring, and Evaluation Process; Surface Use Activities; Air Resources; Heritage Resources; Land and Water Resources; Minerals and Alternative Energy Resources; Recreation Resources; Travel, Access, and Realty; Visual Resources; and Special

Management Areas and Other Management Areas) for other prescriptions and guidance that apply to Wild Horse Management.

### **3.8.4 Existing Green River RMP Decisions for Wild Horse Management**

Other management objectives and actions for wild horse management in the planning area will be implemented consistent with the Green River RMP land use decisions. These are summarized here for easy reference. Maps and tables referenced in this section refer to those in the Green River RMP, not those in the JMH CAP.

*MANAGEMENT ACTIONS: An appropriate management level will be maintained.*

*The site specific activity plans for the five wild horse herd management areas in the planning area will be maintained to conform with Green River RMP objectives for vegetation management and implemented.*

*Specific habitat objectives for herd management areas will be developed.*

*Water developments will be provided if necessary, to improve herd distribution and manage forage utilization.*

*Water developments on crucial winter ranges could be allowed if they conform with wildlife objectives and do not result in adverse impacts to the crucial winter range.*

*Wild horse herd management will be directed to ensure that adequate forage will be available to support appropriate management levels in the herd units and that herds maintain appropriate age, sex, and color ratios.*

*Selective gathering programs will be implemented in each of the wild horse herd management areas. Gathering plans will be prepared for removal of excess horses from inside and outside the wild horse herd management areas.*

*Fencing in wild horse herd management areas will be restricted to those situations where multiple-use values will be enhanced. All fences will be constructed to minimize restriction of wild horse movement.*

*Opportunity for public education and enjoyment of wild horse herds will be provided by placing interpretive signs, providing interpretive sites, and providing access to the herd areas.*

*Other resource uses will be maintained and protected consistent with those resource management objectives while maintaining viable, healthy wild horse herds and appropriate herd management levels. Wild horse herd management areas will be managed in a natural, healthy state and for an ecological balance among wild horses and land and resource uses.*

## 3.9 Land and Water Resources — Wildlife Habitat Management

### 3.9.1 Management Objectives for Wildlife Habitat Management

The JMH CAP planning area will be managed to maintain, improve, or enhance the biological diversity of wildlife species while ensuring healthy ecosystems and to restore disturbed or altered habitat. Objectives include attaining desired native plant communities while providing for wildlife needs and soil stability and, to the extent possible, providing suitable wildlife habitat and forage to support the Wyoming Game and Fish Department (WGFD) strategic plan population objectives.

[Same as Green River RMP] *The objectives for management of wildlife and fish habitat are to: 1) maintain, improve, or enhance the biological diversity of plant and wildlife species while ensuring healthy ecosystems; and 2) restore disturbed or altered habitat with the objective to attain desired native plant communities, while providing for wildlife needs and soil stability.*

*The objective for management of threatened, endangered, special status, and sensitive plant and animal species is to provide, maintain, or improve habitat through vegetative manipulation, mitigation measures, or other management actions including habitat acquisition and easements.*

*The objectives for management of wetlands/riparian areas are to: 1) achieve a healthy and productive condition for long-term benefits and values in concert with range, watershed, and wildlife needs; and 2) enhance or maintain riparian habitats by managing for deep-rooted native herbaceous or woody vegetation.*

### 3.9.2 Rationale

FLPMA Section 102(8) states that “the public lands be managed in a manner...that will provide food and habitat for fish and wildlife and domestic animals; and that will provide for outdoor recreation and human occupancy and use.” Wyoming rangeland health standards also provide direction for rangeland health including standard #4, “Rangelands are capable of sustaining viable populations and a diversity of native plant and animal species appropriate to the habitat. Habitats that support or could support threatened species, endangered species, species of special concern, or sensitive species will be maintained or enhanced.” As BLM statewide policy, the standards will also directly guide development of the site-specific objectives and the methods and practices used to implement the land use plan decisions.

In addition to FLPMA, numerous laws, regulations, policies, executive orders, and memorandums of understanding and agreements direct BLM to manage its riparian/wetland areas for biological diversity, productivity, and sustainability for the benefit of the Nation and its economy. Wildlife need food, water, cover, and space. Accessibility to these habitat features is also important as with migratory corridors. Providing for habitat needs of the various species found in the JMH planning area includes consideration of such measures as habitat improvement, restoration, continued monitoring of habitats, and limiting actual habitat loss.

All federal agencies are required under Section 7(a)(1) of the Endangered Species Act to use their authorities in furtherance of the Act's purpose by carrying out programs for the conservation of endangered and threatened species. Federal agencies under Section 7(a)(2) of the Act must also use their authorities to conserve listed species and ensure that actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of species listed as threatened or endangered (or proposed) or adversely modify or destroy their designated (or proposed) critical habitat.

Manual 6840, Special Status Species Management, provides policy and guidance, consistent with appropriate laws, for the conservation of special status species of plants and animals and the ecosystems upon which they depend. The objectives of the special status species policy are to conserve listed species and the ecosystems on which they depend and to ensure that actions requiring BLM authorization or approval are consistent with the conservation needs of special status species and do not contribute to the need to list any special status species, either under provisions of the Endangered Species Act or other provisions of this policy.

BLM Manual 6840.06 (E), states, "The protection provided by the policy for candidate species shall be used as the minimum level of protection for BLM sensitive species." Section 6840.06 (C) also states, "Consistent with existing laws, the BLM shall implement management plans that conserve candidate (sensitive) species and their habitats and shall ensure that actions authorized, funded, or carried out by the BLM do not contribute to the need for the species to become listed.

BLM also has a policy and the responsibility to cooperate with state agencies to accommodate species management goals to the extent they are consistent with the principles of multiple-use management.

Although the final Comprehensive Conservation Strategy for Wyoming (WGFD 2005) was not approved until July 2005, the Wyoming BLM sensitive species list was developed using many of the same sources and criteria. In accordance with WO IM-2004-256, dated September 24, 2004, BLM will continue to cooperate with the WGFD in matters of species conservation.

### **3.9.3 Management Actions for Wildlife Habitat Management**

#### **3.9.3.1 Habitat Management Plan**

Habitat management plans (HMP) will be prepared as needed to meet area management objectives. An HMP identifies management actions to be implemented to achieve specific objectives related to land use planning decisions. An HMP focuses on priority species and their habitats; therefore, the plan is generally limited to a specific geographic area. Plans include habitat expansion efforts, threatened and endangered species reintroduction, and population goals and objectives (in coordination with the WGFD). These plans will guide BLM in managing and rehabilitating wildlife habitat in site-specific locations within the planning area. To the extent possible, suitable wildlife habitat and forage will be provided to support the WGFD Strategic Plan objectives (Memorandum of Understanding (MOU) WY-131). Changes in the WGFD planning objective levels will be considered based on habitat capability, availability, and site-specific analysis.

### **3.9.3.2 Water Developments**

Wildlife water developments will be considered on a case-by-case basis to maintain or improve wildlife habitat and resource conditions.

### **3.9.3.3 Special Status Wildlife Species**

Special status wildlife species (Map 8 and Map 9) are those species federally listed as threatened or endangered, proposed for listing, or candidates for listing under the Endangered Species Act of 1973 as amended. They also include species designated by each BLM State Director as sensitive and any species designated by a state agency in a category implying potential endangerment or extinction.

BLM will consult or conference (for proposed species) with USFWS to determine whether its actions may affect any listed or proposed species and to document its determinations in a Biological Assessment (Appendix 3 in the final EIS) as directed by the Endangered Species Act. Land use decisions will be implemented with appropriate conservation measures and/or reasonable and prudent alternatives to avoid jeopardizing any species, causing the need to list a species, or destroying or adversely modifying designated or proposed critical habitat.

Surveys or searches will be conducted in potential habitat for federally listed, proposed, candidate, and sensitive species before any surface is disturbed. At any time a listed, proposed, or candidate species is found, all disruptive activities will be halted until protective measures developed with the USFWS are implemented. BLM will take proactive measures to improve habitat character as needed in accordance with Section 7 of the Endangered Species Act and BLM Manual 6840 policy.

### **3.9.3.4 Sensitive Habitat**

Crucial winter range or sensitive habitats (such as birthing areas, the connectivity area (migration corridor), nesting sites, greater sage-grouse breeding habitats and winter concentration areas, and sensitive fisheries habitats) will be managed (Maps 9 and 10) by maintaining habitat or reducing habitat loss or alteration, improving habitat where possible, and applying appropriate mitigation requirements (e.g., distance and seasonal limitations and rehabilitation) to all appropriate activities. Exceptions can be provided on a case-by-case basis should exception criteria (Appendix 4) be met. See also the Surface Use Activities section of the JMH CAP for actions relating to surface disturbing and disruptive activities.

Seasonal limitations for wildlife habitat will be applied as necessary to protect sensitive wildlife areas from development and/or disruptive activities during sensitive time periods in animals' life cycles, such as nesting, birthing, and wintering. Wildlife seasonal stipulations will not close an area to development but will protect wildlife species if weather or other habitat needs dictate that it is necessary (Appendix 5 in the final EIS). The BLM Authorized Officer may decide to grant, or not grant exceptions to seasonal limitations based on recommendations from the wildlife biologist, in coordination with the WGFD. Criteria for exceptions are outlined in Appendix 4.

### **3.9.3.5 Maintenance and Operational Activities in All Greater Sage-Grouse Habitats**

**In greater sage-grouse habitats, surface disturbing maintenance and/or operational activities will require mitigation measures or development plans.** These mitigation measures and/or development plans will be based on local situations on a case-by-case basis.

### **3.9.3.6 Greater Sage-Grouse Sensitive Habitats (Leks, Nesting, Early Brood-Rearing, and Winter Concentration Areas)**

**The management practices in greater sage-grouse sensitive habitats will be designed to limit direct loss of habitat and prevent habitat degradation. Surface disturbing and disruptive activities will avoid these habitats (Map 8 and Map 9). Measures will be taken to improve habitat character as needed in conformance with BLM Manual 6840 policy and, to the extent possible, with the Wyoming Greater Sage-Grouse Conservation Plan (WGS-GCP).** See also the Surface Use Activities and Fluid Minerals Management sections of this document.

Site-specific field reviews will be conducted, as needed, prior to approval of any surface disturbing or disruptive activities (including prior to issuing an oil and gas lease) in greater sage-grouse breeding (leks, nesting, and early brood-rearing) and winter concentration areas. Activities in these habitats will be restricted or prohibited. New oil and gas leases that contain these habitats will be given a controlled surface use stipulation and timing limitations as appropriate. See the Leasable Fluid Minerals Management section and Appendix 7 for related information on oil and gas lease stipulations and practices.

Avoidance areas may vary depending on natural topographic barriers, terrain, type of activity, line-of-sight distance, vegetation structure and cover, habitat needs, and other such factors. Exceptions to avoidance areas and seasonal limitations could be provided on a case-by-case basis provided appropriate mitigation could be implemented (Appendix 5 provides examples) and the exception criteria (Appendix 4) have been met. The actual area to be avoided and appropriate time frames will be determined on a case-by-case basis dependent on applicable scientific research and site-specific analysis.

Mitigation of adverse effects (e.g., noise and traffic) on all habitats will be determined and applied on a case-by-case basis.

#### **3.9.3.6.1 Greater Sage-Grouse Leks, Nesting, and Early Brood-Rearing Habitat**

Before surface disturbing or disruptive activities are approved, site-specific evaluations will be conducted for breeding habitat (leks, nesting, and early brood-rearing) as expeditiously as possible after receiving a completed application/proposal for an activity. Field searches conducted as part of these evaluations will determine if the site has the scientifically accepted habitat variables (i.e., vegetation composition, height, cover, etc.) necessary to support greater sage-grouse breeding activities (Appendices 4 and 5, and Appendix 5 in the final EIS). These variables (in Appendix 5) may change as new information becomes available.

Surface occupancy (long-term or permanent aboveground facilities) will be prohibited within  $\frac{1}{4}$  mile of the perimeter of greater sage-grouse leks unless adverse impacts can be mitigated. Distances will be subject to change on a case-by-case basis dependent on applicable scientific research and site-specific analysis.

Disruptive activities will also avoid occupied greater sage-grouse leks during appropriate evening and early morning hours, 8 p.m. to 8 a.m. daily. The actual area to be avoided and appropriate time frame (typically March 1 to May 15) will be determined and applied on a case-by-case basis.

**No disruptive activities are allowed in nesting and early brood-rearing habitats (March 15 to July 15) (Map 4). These limitations will be determined and applied on a case-by-case basis. In addition, nesting and early brood-rearing habitats will be protected from habitat degradation, and measures will be taken to improve habitat quality within the areas identified on Map 4 and Map 9.**

#### **3.9.3.6.2 Greater Sage-Grouse Winter Concentration Areas**

**Disruptive activities will be prohibited in greater sage-grouse winter concentration areas typically from November 15 to March 14 (Table 4, Table 5, Map 4, Map 8, Map 9, Map 11, and Appendix 4).** These areas and/or dates are subject to change based on new data and scientific information.

#### **3.9.3.7 Big Game Winter Range**

Disruptive activities will be prohibited in big game crucial winter range between November 15 and April 30 (Map 4, Map 10, and Map 11). Seasonal limitations may be excepted, provided criteria in Appendix 4 can be met and appropriate mitigation can be implemented (as determined by BLM). Mitigation of adverse effects (e.g., noise and traffic) on all habitats will be determined and applied on a case-by-case basis.

#### **3.9.3.8 Big Game Birthing Areas**

Surface disturbing and disruptive activities are prohibited in big game birthing areas from May 1 to June 30. To meet management objectives, the amount of habitat disturbed in these areas will also be limited (see Sensitive Habitat discussion). Mitigation of adverse effects (e.g., noise and traffic) on all habitats will be determined and applied on a case-by-case basis.

#### **3.9.3.9 Black-Footed Ferret**

Surveys for black-footed ferrets will be completed according to current USFWS protocol within 1 year prior to conducting any surface disturbing or disruptive activities in all or portions of potential ferret habitat areas (prairie dog colonies 200 acres or greater in size) because of the close association of the two species (Appendix 3 in the final EIS). White-tailed prairie dog towns that have been block-cleared by the USFWS may not require surveys. The USFWS has established survey protocols for the black-footed ferret (listed as endangered under the Endangered Species Act). At any time a ferret is found, all disruptive activities will be halted until protective measures developed with the USFWS are implemented. Surface disturbing activities can proceed provided the surveys' result indicates no presence of black-footed ferrets.

BLM will cooperate with USFWS and WGFD on any black-footed ferret reintroduction within the JMH CAP planning area.

Measures will be taken, as appropriate, to reduce potential raptor perches in and around prairie dog towns and colonies, such as constructing anti-perch devices on power poles.

### **3.9.3.10 Mountain Plover**

Mountain plover surveys will be required prior to authorizing any surface disturbing or disruptive activities in potential plover habitat. Surveys will be conducted within suitable mountain plover habitat by a qualified biologist using protocol determined by the Rock Springs BLM biologist. Active mountain plover nesting aggregation areas (Map 8) will be avoidance areas for surface disturbing and disruptive activities (Map 4) within ¼ mile of the area from April 10 to July 10.

Traffic speeds on BLM roads during the brood-rearing period (June and July) will be limited within ¼ mile of nesting aggregation areas as necessary to avoid nesting birds. Exceptions or other mitigation measures could be applied on a case-by-case basis, as determined by BLM. Mitigation of adverse effects (e.g., noise and traffic) on all habitats will be determined and applied on a case-by-case basis.

Measures (e.g., avoidance, burying power lines, installation of anti-perch devices, and exclusion for artificial nest structures) will be taken to limit hunting perches or artificial nest sites for avian predators within ¼ mile of nesting aggregation areas.

### **3.9.3.11 Game Fish and Special Status Fish Species**

Seasonal limitations for surface disturbing activities to protect game and special status fish species during spawning will be applied (Table 4).

### **3.9.3.12 Raptor Nesting Sites**

Active and historic raptor nesting sites (Map 8) will be protected and managed (e.g., through distance restrictions) (Map 4) for continued nesting activities. Different species of raptors may require different types of protective measures. Permanent or high-profile structures (e.g., power lines or other structures that may negatively impact raptors) will be prohibited within a specified distance of active raptor nests. Distance will be determined on a case-by-case basis and will depend on the raptor species involved, natural topographic barriers, line-of-sight distances, and other such factors. Temporary disturbances associated with placement of facilities such as pipelines and other actions such as seismic activities can be allowed within ½ to 1 mile of active raptor nests.

Disruptive activities will be seasonally restricted within a ½- to 1-mile radius of occupied raptor nesting sites. Raptor nest surveys will be conducted within a 1-mile radius or linear distance of proposed surface uses or activities during raptor nesting season (Table 4; dates vary by species). Seasonal limitations may be excepted, provided criteria in Appendix 4 can be met and appropriate mitigation can be implemented (as determined by BLM). Mitigation of adverse effects (e.g., noise and traffic) on all habitats will be determined and applied on a case-by-case basis.



### 3.9.3.13 Animal Damage Control

BLM will continue to coordinate with Animal and Plant Health Inspection Service-Wildlife Services (APHIS-WS) and review its annual management plan for animal damage control activities on public lands. **Proposed animal damage control activities not compatible with BLM planning and management prescriptions or objectives for other resource activities and uses will be identified on a case-by-case basis.** BLM will determine appropriate planning strategies with input from APHIS-WS.

**The JMH CAP planning area will be designated as a “restricted control area” for animal control in coordination with APHIS-WS.** Restricted control areas are public land areas where animal damage management may be planned, but control activities may be limited to certain methods or times of the year to achieve management objectives. Emphasis will be placed on non-lethal methods. Control techniques and methods will be discussed at the annual management meeting between BLM and APHIS-WS.

### 3.9.3.14 Introduction and Reintroduction of Species

BLM will cooperate with the WGFD in studies for the introduction and reintroduction of native and nonnative (game) wildlife and fish species.

BLM will cooperate with the USFWS in studies for, and reintroduction of, special status species.

See other resource management sections in this document (Implementation, Monitoring, and Evaluation Process; Surface Use Activities; Air Resources; Heritage Resources; Land and Water Resources; Minerals and Alternative Energy Resources; Recreation Resources; Travel, Access, and Realty; Visual Resources; and Special Management Areas and Other Management Areas) for other prescriptions and guidance that apply to Wildlife Management.

## 3.9.4 Existing Green River RMP Decisions for Wildlife Management

Other management objectives and actions for Wildlife Management in the planning area will be implemented consistent with the Green River RMP land use decisions. These are summarized here for easy reference. Maps and tables referenced in this section refer to those in the Green River RMP, not those in the JMH CAP.

*Habitat management plans will be developed, where needed, particularly for highly developed and disturbed areas to mitigate wildlife habitat losses.*

*Livestock and wild horse water developments in crucial habitat could be allowed if they conform with wildlife objectives and do not result in adverse impacts to the crucial habitat.*

*High value wildlife habitats will be maintained or improved by reducing habitat loss or alteration and by applying appropriate distance and seasonal restrictions and rehabilitation standards to all appropriate activities. These habitats include crucial winter habitat, parturition areas, sensitive fisheries habitat, etc.*

*Big game crucial winter ranges and parturition areas will be protected to ensure continued usability by limiting activities during critical seasons of use and by limiting the amount of habitat disturbed.*

*Grouse breeding and nesting areas will be protected.*

*Needed special management and riparian management exclosures will be developed and/or maintained, and exclosure plans will be implemented for enhancement of wildlife habitat.*

*Exclosures are closed to livestock grazing use and no AUMs in these areas will be available for livestock use.*

*Aquatic, wetland, and riparian habitat are not suitable for disposal unless opportunities exist for land exchange for lands of equal or better value.*

*Management toward proper functioning condition or desired future condition of riparian areas will be implemented.*

*The BLM will continue to coordinate and to annually review with APHIS - Wildlife Services (WS), their annual wildlife damage management plan for animal damage control activities on public lands. Areas where proposed animal damage control activities (all or specific methods) are not compatible with BLM planning and management prescriptions or objectives for other resource activities and users, will be identified on a case-by-case basis, and APHIS-WS will be requested to amend or adjust proposed animal damage control activities accordingly.*

### **3.10 Minerals and Alternative Energy Resources Management**

#### **3.10.1 Management Objectives for Minerals and Alternative Energy Resources Management**

*[Same as Green River RMP] The planning area (Map 3) will be managed to maintain or enhance opportunities for mineral exploration and development while providing for other resource values.*

*The objective for management of saleable minerals (mineral materials, e.g., sand, gravel) is to provide mineral materials in convenient locations for users while protecting other resources.*

*The objective for management of locatable minerals is to provide opportunities to explore, locate, and develop mining claims while protecting other resource values.*

#### **3.10.2 Rationale**

The Mineral Leasing Act of 1920, as amended, provides the opportunity for the public to explore for, develop, and produce publicly owned leasable minerals. The Mining and Minerals Policy Act of 1970 declares that it is the continuing policy of the Federal Government to foster and encourage private enterprise in the development of domestic mineral resources. The Federal Onshore Oil and Gas Leasing Reform

Act of 1987 provided for revisions to the federal oil and gas regulations in 43 CFR 3100.

The Energy Policy Act of 2005 encourages energy efficiency and conservation; promotes alternative and renewable energy sources; reduces dependence on foreign sources of energy; increases domestic production; modernizes the electrical grid; and encourages the expansion of nuclear energy.

FLPMA Section 102 directs that public land will be managed in a manner that recognizes the Nation's need for domestic sources of minerals and other commodities from the public lands while managing these lands in a manner that will protect scientific, scenic, historic, archaeological, ecological, environmental, air and atmospheric, and hydrologic values.

The Materials Act of 1947, as amended, authorizes the disposal of mineral materials such as sand, gravel, stone, clay, and cinders. The Mining and Minerals Policy Act of 1970 declares that it is the continuing policy of the Federal Government to foster and encourage private enterprise in the development of domestic mineral resources.

The Mining Law of 1872 gives the public the right to locate and develop mining claims on public land. It also declares that all valuable mineral deposits in lands belonging to the United States are free and open to exploration and purchase by citizens of the United States and those who have declared their intention to become such.

### **3.10.3 Management Actions for Minerals and Alternative Energy Resources Management**

All minerals and energy resource management actions will recognize valid existing rights and ensure compliance with existing legal and regulatory requirements. These include leases issued under the Mineral Leasing Act of 1920 and Amendments, mining claims filed under the Mining Act of 1872, and existing sale contracts and free use permits for mineral materials.

#### **3.10.3.1 Leasable Fluid Minerals Management**

##### **3.10.3.1.1 Oil and Gas Leases**

Fluid mineral leasing, exploration, and development will be allowed in portions of the planning area with necessary mitigation.

**The JMH CAP area is divided into three implementation management areas (Map B). Area 1 is open to fluid mineral leasing with appropriate stipulations applied to protect sensitive resources in Area 1 (Table 3).**

**As leases expire within Area 1, they will be considered for subsequent lease offerings. Stipulations for subsequent lease offerings identified in Table 5, those identified through monitoring as described in Appendix 2, and the Lease Stipulations paragraphs (Section 3.10.3.1.2) will be applied if deemed necessary.**

**Table 5. Areas of Fluid Mineral Lease Conditional Requirements by Hydrocarbon Potential (Approximate Acres)<sup>1</sup>**

Area	Hydrocarbon Potential <sup>2</sup>			Total
	High	Moderate	Low	
<b>GENERAL JMH CAP PLANNING AREA</b>				
<b>NO LEASE<sup>3</sup></b>				
Area 3 minus the NSO areas (Appendix 7)	125,270	34,500	18,490	178,260
Sensitive resources	14,200	7,350	7,020	28,570
<b>Total Affected Area (in acres)<sup>4</sup></b>	<b>125,280</b>	<b>36,020</b>	<b>18,500</b>	<b>179,800</b>
<b>NO SURFACE OCCUPANCY<sup>5,6</sup></b>				
Indian Gap + 100-foot buffer	750	0	0	750
Greater Sand Dunes ACEC (developed recreation sites and OHV parking lot)	50	0	0	50
Crookston Ranch + 100-foot buffer	60	0	0	60
South Pass Historic Landscape ACEC (visible portion)	270	5,610	16,060	21,940
Special status plants <sup>7</sup>	2,760	0	110	2,870
Raptor nest sites (active)	140	240	10	390
Sensitive resources	23,510	5,620	2,660	31,790
Area 3 NSO areas (Appendix 2)	17,000	14,530	4,520	36,050
<b>Total Affected Area (in acres)<sup>4</sup></b>	<b>20,390</b>	<b>19,910</b>	<b>18,470</b>	<b>58,770</b>
<b>CONTROLLED SURFACE USE<sup>5,6</sup></b>				
Wetlands, riparian areas, and 100-year floodplains + 500-foot buffer	49,670	27,230	8,550	85,450
National Historic Trails + ¼-mile buffer	130	2,130	7,370	9,630
Slopes > 20 percent	36,920	9,370	8,680	54,970
ACECs + expansions	66,380	12,640	32,560	111,580
Steamboat Mountain Management Area	88,300	0	0	88,300
Areas adjacent to WSAs	23,750	32,370	16,040	72,160
Portion of White Mountain	0	2,740	0	2,740
West Sand Dunes Archaeological District	0	18,710	0	18,710
Special status plants potential habitat <sup>8</sup>	0	0	1,150	1,150
Greater sage-grouse potential nesting habitat <sup>9,10</sup>	92,900	100,360	40,870	234,130
Greater sage-grouse winter concentration area <sup>9,11</sup>	57,740	9,460	0	67,200
Sensitive resources	12,220	8,900	40	21,160
Red Desert Watershed Management Area	20,440	0	25,720	46,160
<b>Total Affected Area (in acres)<sup>4</sup></b>	<b>98,830</b>	<b>72,550</b>	<b>25,870</b>	<b>197,250</b>
<b>SEASONAL LIMITATIONS<sup>5,6</sup></b>				
Elk crucial habitat	117,810	7,660	0	125,470
Deer crucial habitat	39,280	0	0	39,280
Antelope crucial habitat	12,950	41,030	0	53,980
Elk birthing areas	71,370	8,440	4,690	84,500
Deer birthing areas	24,590	320	3,930	28,840
Raptor nest sites + ½- to 1-mile buffer	9,780	15,590	1,290	26,660
Greater sage-grouse leks + ¼-mile buffer	820	2,080	720	3,620
Greater sage-grouse potential nesting habitat <sup>9,10</sup>	92,840	100,090	40,870	233,800
Greater sage-grouse winter concentration area <sup>9,11</sup>	57,740	9,460	0	67,200
Mountain plover aggregation areas + ¼-mile buffer <sup>9</sup>	1,340	0	0	1,340
<b>Total Affected Area (in acres)<sup>4</sup></b>	<b>215,360</b>	<b>115,070</b>	<b>41,970</b>	<b>372,400</b>

Table 5. (continued)				
Area	Hydrocarbon Potential <sup>2</sup>			Total
	High	Moderate	Low	
<b>JMH CAP CORE AREA</b>				
<b>NO LEASE<sup>3</sup></b>				
Area 3 minus NSO areas (Appendix 7)	58,370	0	0	58,370
Sensitive resources	12,900	0	0	12,900
<b>Total Affected Area (in acres)</b>	<b>58,370</b>	<b>0</b>	<b>0</b>	<b>58,370</b>
<b>NO SURFACE OCCUPANCY<sup>5,6</sup></b>				
Crookston Ranch + 100-foot buffer	60	0	0	60
Indian Gap + 100-foot buffer	750	0	0	750
Greater Sand Dunes ACEC (developed recreation sites and OHV parking lot)	50	0	0	50
Raptor nest sites (active)	60	0	0	60
Sensitive resources	13,320	0	0	13,320
Area 3 NSO areas (Appendix 2)	4,150	0	0	4,150
<b>Total Affected Area (in acres)<sup>4</sup></b>	<b>5,940</b>	<b>0</b>	<b>0</b>	<b>5,940</b>
<b>CONTROLLED SURFACE USE<sup>5,6</sup></b>				
Wetlands, riparian areas, and 100-year floodplains + 500-foot buffer	15,530	0	0	15,530
Slopes > 20 percent	22,100	0	0	22,100
ACECs + expansions	63,060	0	0	63,060
Areas adjacent to WSAs	5,540	0	0	5,540
Steamboat Mountain Management Area	63,780	0	0	63,780
Greater sage-grouse potential nesting habitat <sup>9,10</sup>	1,510	0	0	1,510
Greater sage-grouse winter concentration area <sup>9,11</sup>	2,980	0	0	2,980
Sensitive resources	4,730	0	0	4,730
<b>Total Affected Area (in acres)<sup>4</sup></b>	<b>18,500</b>	<b>0</b>	<b>0</b>	<b>18,500</b>
<b>SEASONAL LIMITATIONS<sup>5,6</sup></b>				
Elk crucial habitat	69,580	0	0	69,580
Deer crucial habitat	21,630	0	0	21,630
Elk birthing areas	48,920	0	0	48,920
Deer birthing areas	24,570	0	0	24,570
Raptor nest sites + ½- to 1-mile buffer	2,330	0	0	2,330
Greater sage-grouse leks + ¼-mile buffer <sup>9</sup>	20	0	0	20
Greater sage-grouse potential nesting habitat <sup>9,10</sup>	1,510	0	0	1,510
Greater sage-grouse winter concentration area <sup>9,11</sup>	2,980	0	0	2,980
Mountain plover aggregation areas + ¼-mile buffer <sup>9</sup>	250	0	0	250
<b>Total Affected Area (in acres)<sup>4</sup></b>	<b>72,420</b>	<b>0</b>	<b>0</b>	<b>72,420</b>
<sup>1</sup> Lease parcels are designed on aliquot parts. The actual acreage for the lease may vary. <sup>2</sup> See Appendix 13 in the final EIS. <sup>3</sup> Although closed to leasing and related oil and gas activity, any other surface disturbing or disrupting use will follow the surface disturbance prescriptions (see Table 4-8 in the final EIS and Table 4 of the JMH CAP). <sup>4</sup> Acres may not add because of overlapping land resources and land use restrictions. Acres only reflect proposed fluid mineral lease stipulations. <sup>5</sup> All activities will be subject to intensive mitigation based on site-specific analysis. Activities can include offsite placement of facilities; remote control monitoring; restricted or prohibited surface use, including road construction; multiple wells from a single pad; central tank batteries/facilities; pipelines and power lines concentrated in specific areas; etc. <sup>6</sup> Refer to Appendix 5 in the final EIS. These requirements apply to all surface disturbing activities. <sup>7</sup> As new populations are identified, their locations will be added to this total. <sup>8</sup> Number of acres will change as floristic inventories identify actual areas with potential. <sup>9</sup> A lease stipulation is applied to all leases for protection of special status species and their habitats. <sup>10</sup> Only 50 percent of the area is expected to be suitable nesting habitat. <sup>11</sup> Only sagebrush vegetation is expected to be suitable habitat.				

**Area 2 is open to leasing considering such factors as operational need, resource recovery, geology, and ability to mitigate impacts and with stipulations applied to protect sensitive resources in Area 2 (Table 3). BLM may request potential lessees to share data (such as reservoir data or geologic data) or plans related to the development of the potential oil and gas resource prior to leasing; sharing of these data is voluntary.**

**As leases expire within Area 2, they will be considered for subsequent lease offerings. Stipulations identified in Table 5 and those identified through monitoring as described in the implementation, monitoring, and evaluation management strategy (Appendix 2) and the Lease Stipulations paragraphs (Section 3.10.3.1.2) will be applied to new leases if deemed necessary.**

**Approximately 35,500 acres along the perimeter of Area 3 are available for leasing with an NSO stipulation. This acreage represents a distance of ½ mile within portions of the boundary of Area 3 (Map 11). Although current technologies suggest that the ½-mile distance is adequate at this time, these NSO areas may be expanded to include additional adjacent acreage provided the planning area resource objectives can be met.**

**The remainder of Area 3 is closed to oil and gas leasing (about 92,000 acres). This closure is established to meet the resource goals and objectives for the planning area. These objectives include providing adequate habitat as well as opportunity for the use of crucial winter range, calving/fawning areas, migration corridors, etc. and protection of sensitive resources and public health and safety (Table 5, Map A, and Map B). Area 3 includes portions of the Steamboat Mountain ACEC, Greater Sand Dunes ACEC, White Mountain Petroglyphs ACEC, Oregon Buttes ACEC, South Pass Historic Landscape ACEC, the White Mountain and Split Rock areas, and the core and connectivity areas.**

**As existing leases expire in Area 3, they will not be reoffered for lease (approximately 88,200 acres) (Table 3) unless they are within the 35,500 acres along the perimeter of Area 3 identified above.**

**Oil and gas leases within the planning area that were suspended during preparation of the JMH CAP will be reinstated within 3 years of signing the Record of Decision or earlier with an approved development plan. Should new lease suspensions become necessary, they will be considered on a case-by-case basis (see Appendix 14 in the final EIS).**

**Buyout or exchange of existing leases from willing sellers may be considered on a case-by-case basis. Congressional legislation will be required to authorize and fund lease buyouts.**

**Areas that cannot be offered for lease include WSAs (about 119,000 acres) and other areas where fluid mineral leasing and development would not be in compliance with other laws or with land use planning decisions that prohibit fluid mineral leasing and development in certain areas (Map B and Table 5).**

### 3.10.3.1.2 Lease Stipulations

**Lease stipulations are identified in Table 5.** The lease stipulations will notify the leaseholder that development activities may be limited, prohibited, or implemented with mitigation measures to protect specific resources. The stipulations will allow the leaseholder's development activities while providing BLM with the authority for substantial delay or site changes or the denial of operations with the terms of the lease contract. The types of lease stipulations include (Map 11) CSU through limitation on the amount and type of surface disturbance, CSU through avoidance of other resources, timing limitations (TL) on development activity, and NSO. Standard lease terms and conditions may also apply. Appendix 7 contains additional information about lease stipulations and the standard lease form (Form 3100-11).

An interdisciplinary BLM team, in coordination with the working group, stakeholders, and other members of the public, will evaluate monitoring data and determine changes in management. **The lease stipulations in Table 5 may be adjusted or clarified based on these data. Twelve basic sensitive resources and uses will be used to evaluate these lands and ensure that the appropriate mitigation is provided. These sensitive resources and uses may change or be added to in the future based on the implementation, monitoring, and evaluation strategy (Appendix 2). If an evaluation concludes that planning area management objectives are not being met, the analysis of actions will include application of strategies that ensure continuity between activities and the land use plan. Any changes to the lease stipulations identified in Table 5 will be applied to new leases only.**

Monitoring of sensitive resource indicators will determine the effectiveness of lease stipulations and COAs and provide guidance for adopting new or modified stipulations, exception criteria, or COAs needed to meet resource objectives. Indicators could include, but are not limited to, wildlife population trends, reproduction rates, observed ranges, and habitat integrity (Appendix 2). Development levels may be adjusted or new stipulations may be applied to new leases when offered. COAs may be applied to proposed activities as appropriate and necessary to protect resource values. Adjustments could be made to ensure that further activity will not cause fragmentation and abandonment of habitat and will still meet stated management objectives, safeguard sensitive resources, and not result in significant or irreversible adverse effects. Proposed changes will be analyzed in subsequent NEPA or other documents (such as site-specific NEPA analysis for well sites) in accordance with law and policy. Changes will be based on several factors including the following:

- Data trends for indicators on the viability of potentially impacted wildlife and other sensitive resources, including impacts from other causes such as disease, drought, hunting pressure, introduction of nonnative species, and recreation activities.
- Fragmentation of habitat and migration pathways due to development activities.
- Net amount of surface disturbance, including approved development activities that will be implemented in nearby areas and planned reclamation of existing surface disturbances.

- Amount and location of actual land use activity.

### **3.10.3.1.3 Application for Permit to Drill**

**Any surface disturbing and disruptive activities involved with development of existing leases will be subject to extensive review and mitigation that will allow appropriate levels of activity while meeting resource objectives and protecting sensitive resources in the area.** BLM specialists will review sensitive resources with lease operators to develop and implement measures to allow for effective development operations where impacts could be avoided or mitigated. BLM has and will continue to apply and enforce necessary COAs identified through a site-specific NEPA or other analysis (see Maps 4 through 16 and Appendix 5).

COAs attached to an Application for Permit to Drill (APD) will be based on site-specific NEPA or other analysis and will establish specific, necessary mitigation measures not covered by stipulations for resource and environmental protection. Some areas will need more intensive mitigation measures to protect sensitive resources and provide for public health and safety. These intensive mitigation measures or COAs will mostly apply to areas with overlapping sensitive resources (e.g., Areas 2 and 3, see Appendix 2). Examples of intensive mitigation that can apply to all activities based on site-specific analysis include offsite placement of facilities, remote control monitoring, restricted or prohibited surface use including road construction, multiple wells from a single pad, central tank batteries/facilities, and pipelines and power lines concentrated in specific areas. In addition, refer to Section 3.12.3 for additional mitigation measures that may apply as part of the transportation plan (Table 4 and Appendix 2).

Exceptions to lease stipulations and COAs will be allowed when site-specific analyses shows impacts to sensitive resources are within acceptable limits. Timing of activities will be considered where consistent with lease rights. See Appendix 4 for criteria for exceptions in areas with wildlife timing limitations (seasonal restrictions) and Appendix 7. See also Appendix 5 and Appendix 14 in the final EIS. In addition, see Section 3.12.3 for additional mitigation measures that may apply as part of the transportation plan.

Well spacing requirements for oil and gas resource protection will defer to the Wyoming Oil and Gas Conservation Commission guidance, with consideration for surface resource values. The Wyoming Oil and Gas Commission is responsible for establishing down-hole spacing for the State of Wyoming, which does not include an assessment of surface resources. BLM is responsible for managing all aspects of the public lands under its jurisdiction, including the appropriate surface use or “spacing,” giving consideration to the design, location, and placement of well sites and facilities and potential impacts on surface resources. Surface spacing for wells will be evaluated based on appropriate NEPA or other analysis that considers impacts to all resources. The resultant surface spacing may not be the same as the down-hole spacing established by the Wyoming Oil and Gas Commission.

### **3.10.3.2 Leasable Solid Minerals Management**

#### **3.10.3.2.1 Exploration**

Most of the planning area will be open to coal exploration activities, with avoidance and mitigation requirements needed to protect the resources (Map 19, Map 20, and



Table 6). Areas currently closed to coal exploration activities (i.e., WSAs and Steamboat Mountain ACEC outside the area of coal occurrence and development potential) will remain closed. In addition, Steamboat Mountain Management Area (outside the area of coal occurrence and development potential) will also be closed.

**Table 6. Areas Closed to Coal and Sodium Exploration**

DESIGNATION AND AREA	TOTAL ACRES
CLOSED TO EXPLORATION	319,830
WSAs Oregon Buttes ACEC (included in WSA) Steamboat Mountain ACEC (outside area of coal occurrence and development potential) Steamboat Mountain Management Area (outside area of coal occurrence and development potential) South Pass Historic Landscape ACEC (visible portion) White Mountain Petroglyphs vista Boars Tusk Crookston Ranch Tri-Territory Marker Wetlands, riparian areas, and 100-year floodplains + 500-foot buffer Special status plants Raptor nest sites (active) Greater sage-grouse leks + ¼-mile buffer	

### 3.10.3.2.2 Leasing

Lands within the Coal Occurrence and Development Potential Area (Map 20) have been identified as having a known or assumed potential for coal development. These lands were reviewed against 20 criteria to determine whether they were suitable for development (43 CFR 3461). These criteria considered existing resource values, such as heritage resources, scenic values, wildlife, threatened and endangered species, natural landmarks, and watersheds. The coal planning decisions made in the Green River RMP apply.

Areas closed to coal leasing (unsuitable) include the western portion of Greater Sand Dunes ACEC, which includes the Sand Dunes WSA (Map 20 and Table 7).

**Table 7. Coal Occurrence and Development Potential**

DESIGNATION AND AREA	TOTAL ACRES <sup>1</sup>
CLOSED TO FEDERAL COAL LEASING CONSIDERATION	4,960
Sand Dunes WSA Greater Sand Dunes ACEC (western portion-WSA)	
OPEN TO FEDERAL COAL LEASING CONSIDERATION BY SUBSURFACE MINING METHODS ONLY	70
Boars Tusk Crookston Ranch	

DESIGNATION AND AREA	TOTAL ACRES <sup>1</sup>
OPEN TO FEDERAL COAL LEASING CONSIDERATION FOR SUBSURFACE MINING WITH CONTROLS ON SURFACE ACTIVITIES AND FACILITIES	20,590
Greater Sand Dunes ACEC (eastern portion) Steamboat Mountain ACEC + expansion Steamboat Mountain Management Area Tri-Territory Marker Raptor nest sites + ½- to 1-mile buffer	
<i><sup>1</sup> Acres are only those within the coal occurrence and development potential area; the remainder of the planning area is not available for coal leasing consideration.</i>	

Important geological, ecological, and historic resources will be open to consideration for coal leasing and development by subsurface mining methods only. Areas acceptable for coal leasing and development by subsurface mining methods only with no surface operations include Boars Tusk and Crookston Ranch. Areas acceptable for coal development by subsurface mining methods only and controls on placement of surface facilities include Steamboat Mountain ACEC, the eastern part of Greater Sand Dunes ACEC, Tri-Territory Marker, and raptor nest sites with a ½- to 1-mile buffer. The portions of the Steamboat Mountain Management area within the Coal Occurrence and Development Potential Area will also be acceptable for leasing and development by subsurface mining methods with appropriate mitigation to protect these resources (similar to CSU). Big game crucial winter ranges and birthing areas are open to further consideration for federal coal leasing and development with a provision for maintaining a balance between coal leasing and development and adequate crucial winter range and birthing area habitats.

Areas outside the coal occurrence and development potential area but within the planning area may also be considered for leasing for coal development, but will have to be reviewed through the site-specific application of the coal screening process and will have to meet the suitability criteria for coal leasing. Restrictions on mining activity, such as no surface facilities or subsurface mining with controls on surface facilities, will be required on coal leases where needed for resource protection. See the Green River RMP for more information relating to coal management.

### 3.10.3.3 Locatable Minerals Management

#### 3.10.3.3.1 Locatable Mineral Withdrawals

**Withdrawals from mineral location will be pursued in the northern elk calving areas (aspen stands plus adjacent, potential aspen habitat), the potential diamond development area of the Steamboat Mountain ACEC, and the Pinnacles Geologic Feature.** Proposed withdrawals from locatable minerals identified in the Green River RMP will be pursued (Map 21). Other withdrawals could be pursued as necessary.

Withdrawals will be revoked for lands classified as prospectively valuable for oil shale (oil shale is a leasable mineral). Upon revocation, the area will be open to the filing of mining claims, exploration, and development of locatable minerals. The White Mountain Petroglyphs ACEC, located in the oil shale classification lands, will be withdrawn from mineral location prior to the revocation. Other areas that will be withdrawn from mineral location prior to the revocation of the coal classification

include Greater Sand Dunes ACEC (western portion), special status plant sites, Crookston Ranch, public water reserves, Tri-Territory Marker, and South Pass Summit.

Valid existing rights to develop locatable mineral claims under the Mining Act of 1872 will be recognized (Map 21 and Table 8).

**Table 8. Withdrawals**

DESIGNATION AND AREA	ACRES
WITHDRAWN FROM ALL MINERAL LOCATION	155,190 <sup>1</sup>
Oil shale classification lands (to be revoked)	125,660
White Mountain Petroglyphs ACEC	20
Greater Sand Dunes ACEC (western portion)	25,250
Steamboat Mountain diamonds	960
South Pass Summit	5,260
Tri-Territory Marker	10
Crookston Ranch	40
Pinnacles Geologic Feature	1,344
Public water reserves	6,740
Special status plants	3,240
Elk birthing areas (northern)	5,228
WITHDRAWN FROM NON-METALLIC MINERAL LOCATION	345,740
Coal classification lands (to be revoked)	345,740

<sup>1</sup>Acres are not additive due to overlaps.

Surface disturbing exploration activities of 5 acres or less on mining claims will require a notice to BLM. A plan of operations will be required for exploration-related surface disturbances greater than 5 acres; all mining-related surface disturbances greater than casual use; and disturbances of any size in ACECs, WSAs, areas closed to OHV use, and any lands or waters known to contain federally proposed or listed threatened or endangered species or their proposed or designated critical habitat. A plan of operations will specify how the operator intends to manage the mining operation and location of surface disturbing activities, including pits, adits or shafts, placement of waste rock and mine tailings, mills, conveyors, and surface impoundments (43 CFR 3809).

### 3.10.3.4 Saleable Minerals Management

#### 3.10.3.4.1 Mineral Material Disposals

The planning area will be open to mineral material disposals where required to meet planning objectives, such as construction and maintenance of roads in the approved transportation plan, construction of recreational facilities, or other construction related to approved development activities (Map 12 and Table 9). Mining and reclamation plans will be prepared for each use of saleable mineral materials to provide protection for sensitive resources and to restore disturbed areas.

**Table 9. Closed to Mineral Material Disposals**

DESIGNATION AND AREA	TOTAL ACRES
CLOSED TO MINERAL MATERIAL DISPOSALS	490,540
WSAs Oregon Buttes ACEC White Mountain Petroglyphs ACEC Greater Sand Dunes ACEC Steamboat Mountain ACEC + expansion <sup>1</sup> Steamboat Mountain Management Area <sup>1</sup> Lava rock portion of Steamboat Mountain South Pass Historic Landscape ACEC (visible portion) South Pass Summit <sup>2</sup> Pinnacles Geologic Feature Boars Tusk Crookston Ranch Raptor nest sites (active) Greater sage-grouse leks + ¼-mile buffer Potential greater sage-grouse nesting habitat <sup>3</sup> Special status plants	
<sup>1</sup> Steamboat Mountain Management Area (minus the lava rock portion) could be open to mineral material disposals when required to meet other planning objectives within JMH. The objectives for the Steamboat Mountain ACEC and the Steamboat Mountain Management Area must also be met. <sup>2</sup> Applies to approximately 5,200 acres at the summit of South Pass. See Green River RMP. <sup>3</sup> Only 50 percent of the area is expected to be suitable nesting habitat.	

**Areas currently closed to mineral material disposals will remain closed.** These include Crookston Ranch, Oregon Buttes ACEC, Native American burial sites, Boars Tusk, White Mountain Petroglyphs, Greater Sand Dunes ACEC, South Pass Historic Landscape ACEC (visible portion), South Pass summit (5,260 acres), raptor nesting sites, WSAs, and special status plant species. **Other areas closed to mineral materials disposals will include the lava rock portion of Steamboat Mountain ACEC, the Pinnacles Geologic Feature, and greater sage-grouse leks and ¼ mile around the lek perimeter.**

**The remainder of Steamboat Mountain ACEC and the Steamboat Mountain Management Area will be available for saleable mineral development only when required to meet other planning objectives within the planning area. The objectives for the Steamboat Mountain ACEC and the Steamboat Mountain Management Area must also be met.**

**Greater sage-grouse nesting habitat will be open to mineral material disposals only if related disturbance and reclamation can occur during one field season (August 1 to November 15) and the site could be returned (through reclamation efforts) to a condition usable by greater sage-grouse prior to the next strutting season.** Nesting habitat reclamation would require stockpiling and redistribution of top soil and planting of containerized stock (sagebrush, grass, forbs) of sufficient size and density to meet the nesting requirements of the birds (see Table 3-14 in the final EIS).

Existing sales contracts and free use permits for mineral materials, such as sand and gravel, will be recognized. Mining of mineral materials will comply with applicable regulatory requirements (43 CFR 3600) and air and water quality protection regulations. A site-specific analysis will be performed before any exploration or extraction activity to identify and locate resource elements that will require protection or mitigation measures. Mineral material disposals that pose impacts to identified cultural and historic resources and other sensitive resources that cannot be adequately mitigated will not be allowed. Development will be allowed as long as sensitive resources are protected from unacceptable impacts.

### **3.10.3.5 Alternative Energy Management**

**The planning area will be open to alternative energy development projects, such as wind or solar farms, consistent with the resource protection requirements and the transportation plan. Permits or leases that will allow these developments to occur will include mitigation requirements to protect sensitive resources and will meet the location requirements for utility lines and roads required in the transportation plan (see Maps 4 through 16 and Map 23). Site-specific assessments will be required to identify potential impacts from construction activity and operation noise on wildlife, heritage resources, and visual resources.**

See other resource management sections in this document (Implementation, Monitoring, and Evaluation Process; Surface Use Activities; Air Resources; Heritage Resources; Land and Water Resources; Recreation Resources; Travel, Access, and Realty; Visual Resources; and Special Management Areas and Other Management Areas) for other prescriptions and guidance that apply to Minerals and Alternative Energy Resources Management.

### **3.10.4 Existing Green River RMP Decisions for Minerals and Alternative Energy Resources Management**

Other management objectives and actions for Minerals and Alternative Energy Resources Management in the planning area will be implemented consistent with the Green River RMP land use decisions. These are summarized here for easy reference. Maps and tables referenced in this section refer to those in the Green River RMP, not those in the JMH CAP.

#### **Leasable Fluid Minerals**

*MANAGEMENT ACTIONS: BLM-administered public lands not specifically closed are open to consideration of oil and gas leasing.*

*The remainder of the public lands in the planning area are open to consideration for oil and gas leasing with appropriate mitigation measures.*

*Where maximum protection of resources is necessary, a No Surface Occupancy requirement will be imposed.*

*Timing limitations (seasonal restrictions) will be applied when activities occur during crucial periods or would adversely affect crucial or sensitive resources.*

*Where controlled use or restrictions on specific activities are needed but do not necessarily exclude activities, controlled surface use or surface disturbance restrictions will be designed to protect those resources.*

*Development actions will be analyzed on a case-by-case basis to identify mitigation needs to meet Green River RMP objectives, provide for resource protection, and provide for logical development. Limitations on the amount, sequence, timing, or level of development may occur. This may result in transportation planning and in limitations in the number of roads and drill pads, or deferring development in some areas until other areas have been restored to previous uses.*

*To the extent that laws and regulations allow, the areas closed to oil and gas leasing will remain closed to leasing of oil and gas unless drainage results in a loss of Federal minerals through production on adjacent private or State lands (drainage). At such time, the no lease prescription will be re-evaluated. Actions such as drainage agreements will also be considered\*.*

*(\*In the JMH CAP area, up to an estimated 51,000 acres could be affected and subsequently re-evaluated. Leasing with an NSO stipulation would be considered as part of any re-evaluation.)*

### **Leasable Solid Minerals**

*MANAGEMENT OBJECTIVE: The objective for management of the federal coal resources in the planning area is to provide for both short- and long-range development of federal coal, in an orderly and timely manner, consistent with the policies of the federal coal management program, environmental integrity, national energy needs, and related demands.*

*MANAGEMENT ACTIONS: With appropriate limitations and mitigation requirements for the protection of other resource values, all BLM-administered public lands and Federal coal lands in the Green River planning area, except for those lands identified as closed, are open to coal resource inventory and exploration to help identify coal resources and their development potential.*

*Federal coal lands within the Coal Occurrence and Development Potential area (about 422,000 acres) are open to further consideration for coal leasing and development (i.e., new competitive leasing, emergency leasing, lease modifications, and exchange proposals, under the Federal Coal Management Program) with appropriate and necessary conditions and requirements for protection of other land and resource values and uses.*

*The Coal Occurrence and Development Potential area is subject to continued field investigations, studies, and evaluations to determine if certain methods of coal mining can occur without having a significant long-term impact on wildlife, cultural, and watershed resources, in general, and on threatened and endangered plant and animal species and their essential habitats.*

*Big game crucial winter ranges and birthing areas are open to further consideration for federal coal leasing and development with a provision for maintaining a balance between coal leasing and development, and adequate crucial winter range and birthing area habitats to prevent significant adverse impacts to important big game species. This will be accomplished through controlled timing and sequencing of Federal coal leasing and development in these areas.*

*For the protection of important rock art sites, other important cultural resource values, and important geologic and ecologic features, Federal coal lands with these important values are open to consideration for further leasing and development by subsurface mining methods only.*

*In general, cultural sites on Federal coal lands are avoidance areas for surface disturbing activities. As avoidance areas, cultural sites are open to consideration for coal leasing and development with appropriate measures to protect these resources.*

*Active grouse leks (sage- and sharp-tailed grouse) and the area within a 1/4 mile radius of active leks are avoidance areas for surface disturbing activities and are open to consideration for Federal coal leasing and development.*

*Grouse nesting areas (sage- or sharp-tailed grouse) are open to consideration for Federal coal leasing and development, with certain requirements.*

*Wetland and riparian areas on Federal coal lands are avoidance areas for surface disturbing activities and are open to consideration for coal leasing and development.*

### **Areas of BLM-Administered Public Land Surface Overlying State-Owned Coal**

*BLM-administered public land surface overlaying state-owned coal are open to further consideration for coal development with appropriate and necessary conditions and requirements for protection of the public land surface and surface resource values and uses, including big game crucial winter range, grouse leks, cultural values, geologic features, and rights-of-way (about 28,000 acres).*

*These lands are subject to continued field investigations, studies, and evaluations to determine if certain methods of coal mining can occur without having a significant long-term impact on wildlife, in general, and on threatened and endangered plant and animal species and their essential habitats.*

### **Sodium/Trona**

*The remainder of the planning area is open to sodium prospecting except for areas that are closed to mineral leasing, surface mining, or mechanical prospecting type activities (areas closed to drilling, off-road vehicle use, and explosive charges).*

## **Other Leasables**

*MANAGEMENT ACTIONS: Leasing of other leasable minerals will be considered on a case-by-case basis and is subject to appropriate mitigation.*

## **Saleable Minerals**

*MANAGEMENT ACTIONS: Most of the planning area is open to consideration of mineral material sales and activity except for areas where such activity would cause unacceptable impacts.*

*As sale areas, community pits, and localized common use areas become established to provide for sales of mineral materials, such as moss rock and sand, their use and management will be in conformance with other resource objectives.*

*Establishment of mineral material sites will be evaluated on a case-by-case basis.*

*No topsoil sale areas will be established.*

## **Locatable Minerals**

*MANAGEMENT ACTIONS: With the exception of lands withdrawn from mineral location, the planning area is open to filing of mining claims and exploration for and development of locatable minerals.*

*The mineral classification withdrawals in the Green River RMP planning area (phosphate, coal, oil shale) will be revoked. In some areas, these classification withdrawals will remain in effect until replaced with an appropriate withdrawal for other, appropriate purposes (see Special Management Area section). Other withdrawals from mineral location will be pursued to provide protection to important resource values.*

## **3.11 Recreation Resources Management**

### **3.11.1 Management Objectives for Recreation Resources Management**

*[Same as Green River RMP] The objectives for recreation management are to: 1) ensure the continued availability of outdoor recreational opportunities sought by the public while protecting other resources; 2) meet legal requirements for the health and safety of visitors; and 3) mitigate conflicts between recreation and other types of resource uses. Information provided by the Recreation Opportunity Spectrum will aid in identifying the types of recreation uses occurring on public lands (Map 22).*

### **3.11.2 Rationale**

The BLM is required by law, regulations, and Executive Orders to manage recreation resources. FLPMA provides for recreation use of public land as an integral part of multiple-use management. In accordance with FLPMA, the “BLM’s Priorities for Recreation and Visitor Services” (USDI 2003) sets recreation policy on the national level. This strategy shifts the management emphasis of the recreation program from an activity-based approach to one that focuses on recreation experiences and quality of life social benefits.



### **3.11.3 Management Actions for Recreation Resources Management**

Management of recreation resources (Map 14) will comply with applicable regulations (43 CFR 8300, et al.) for functions and activities, such as OHV, visitor services, special recreation use permits, and commercial operations. All management actions and recreation uses will focus on the health and safety of the user and provide for recreational opportunities and experiences while protecting sensitive resources.

#### **3.11.3.1 Backcountry Byways**

An interpretive prospectus and sign plan will be developed for the Backcountry Byways program (Tri-Territory Loop and Red Desert) and will include interpretive and directional signs. The location of these signs will be coordinated with state and local governments and other interested parties for the Red Desert viewpoint from the dugway of Steamboat Mountain, the Chicken Springs overlook, Steamboat Mountain, Oregon Buttes, Honeycomb Buttes, and Indian Gap.

#### **3.11.3.2 Recreation Project Plans**

Recreation project plans and interpretive prospectuses will be developed as needed to address public demand and use of the Crookston Ranch historic site, Boars Tusk, wild horse viewing areas, Oregon Buttes, Honeycomb Buttes, Steamboat Mountain, National Historic Trails, White Mountain Petroglyphs, Indian Gap, and other Native American sites.

A recreation site plan will be implemented that will expand the parking area and camping facilities in the Greater Sand Dunes Recreation Area. This plan addresses public health and safety, resolving user conflict, and protecting adjoining resources.

#### **3.11.3.3 Camping**

Overnight camping will be allowed throughout the planning area, including WSAs, in accordance with BLM guidelines. Dispersed camping will be allowed within 200 feet of a water source except where necessary to protect water quality and wildlife and livestock watering areas. Areas will be closed to camping if resource damage occurs. Camping designations are a discretionary action approved by a BLM Authorized Officer.

#### **3.11.3.4 Special Recreation Use Permits**

Special recreation use permits for managed activities that occur in the JMH CAP planning area will be reviewed and subject to recommendations made by the RSFO. This will allow the RSFO to track the amount, location, and timing of organized activity occurring within the planning area to monitor resource pressure. The permit evaluation process will consider the nature of the event, potential impacts to resources, conflicts with other events, and impacts to the quality of other visitors' experiences. Mitigation measures necessary to protect the resources will be included in any permit issued. A plan of operation will be required for all commercial recreational operators and outfitters. The plan will describe the type, extent, and location of the recreation use and the mechanisms by which the operator/outfitter will prevent impacts to environmental resources. Any requests in special recreation use

permit applications to remove natural resources will be evaluated on a case-by-case basis after an environmental analysis process.

### **3.11.3.5 Recreational Prospecting, Gold Panning, and Other Similar Activity**

Recreational activities involving gold panning or casual use relating to prospecting and other similar activity will be allowed in those parts of the planning area that are not withdrawn from mineral location or where such withdrawals will not be pursued. Withdrawn areas include the White Mountain Petroglyphs ACEC. Withdrawals will be pursued for the Steamboat Mountain diamond potential area, the western portion of the Greater Sand Dunes ACEC, South Pass Summit, Tri-Territory Marker, Crookston Ranch, Pinnacles Geologic Feature, Public Water Reserves, special status plant species locations, and the northern elk birthing areas.

Recreation permits as described in 3.11.3.4 above may be required where activity is greater than that allowed under the definition of casual use.

Public lands under mining claims cannot be worked without the permission of the mining claim holder.

### **3.11.3.6 Continental Peak/South Pass Connecting Side Trail**

**The Continental Peak/South Pass Connecting Side Trail will be managed as a side trail to the existing Continental Divide National Scenic Trail (CDNST).** Management will be as described for the CDNST (BLM 1999). Existing primitive two-track roads, BLM roads that provide legal public access through certain private lands, segments of cross-country travel on BLM-administered public land, and an existing trail will be used as CDNST components. The existing primitive two-track roads and BLM road segments will continue to be open to motorized use. Cross-country travel routes will not be open to motorized use.

See other resource management sections in this document (Implementation, Monitoring, and Evaluation Process; Surface Use Activities; Air Resources; Heritage Resources; Land and Water Resources; Minerals and Alternative Energy Resources; Travel, Access, and Realty; Visual Resources; and Special Management Areas and Other Management Areas) for other prescriptions and guidance that apply to Recreation Resources Management.

### **3.11.4 Existing Green River RMP Decisions for Recreation Resources Management**

Other management objectives and actions for Recreation Resources Management in the planning area will be implemented consistent with the Green River RMP land use decisions. These are summarized here (*in italics*) for easy reference. Maps and tables referenced in this section refer to those in the Green River RMP, not those in the JMH CAP.

*MANAGEMENT ACTIONS: Most public lands in the planning area are open to consideration of all individual, commercial, and competitive outdoor recreation uses.*

*Developed recreation sites will be managed to assure public health and safety.*

*Undeveloped recreation sites and other recreation use areas will be managed with priority consideration for air quality, cultural resources, watershed protection, wildlife values, and public health and safety.*

*A 14-day camping limit is established on all BLM-administered public lands.*

*Dispersed camping is prohibited near water sources in designated areas where it is necessary to protect water quality and wildlife and livestock watering areas. Camping in other riparian areas is allowed within 200 feet of water. Areas will be closed to camping if resource damage occurs.*

*Special recreation permits will be considered on a case-by-case basis.*

*Suitable wild horse herd viewing area(s) may be developed to enhance public viewing of horses. Viewing areas plus a 1/2 mile distance surrounding them are closed to long-term or permanent intrusions and surface disturbing activities that could interfere with opportunities to view horses (e.g., structures, mineral activities, powerlines, roads, etc.). Short-term intrusions within the 1/2 mile distance and actions that will blend with the landscape or will benefit the intent of the wild horse herd viewing areas will be considered on a case-by-case basis.*

*The Oregon Buttes, Honeycomb Buttes, Steamboat Mountain, Leucite Hills, Red Creek, Pine Mountain, Little Mountain, and Cedar Canyon areas will be managed to assure their continuing value for recreational opportunities.*

*The Continental Divide National Scenic Trail, Continental Divide Snowmobile Trail, the Green River, and the Wind River Front are designated special recreation management areas (SRMAs) to place management emphasis on enhancing recreation opportunities and to focus management on areas with high recreation values or areas where there are conflicts between recreation and other uses. The former SRMA designations (Killpecker Sand Dunes and Oregon and Mormon Pioneer National Historic Trails) are retained.*

*The remainder of the planning area will be managed as an extensive recreation management area (ERMA).*

*Mountain bike trail opportunities will be explored.*

*The Green River, Sweetwater River, Big Sandy River, and the Bitter Creek segment between the towns of Rock Springs and Green River will be managed for recreation values.*

*Five backcountry byways are designated and will include consideration for mountain bike use. They are Tri-Territory Loop, the Lander Road, Red Desert, Fort LaCledé Loop, and the Firehole-Little Mountain Loop.*

*Additional travel routes that meet the criteria will be considered for designation as backcountry byways on a case-by-case basis.*

*Cutting of trees and firewood for camping purposes in developed recreation sites is limited to designated areas.*

*Recreation site development projects and access routes along intensively used streams and reservoirs will be managed to maintain or improve wetland habitat conditions.*

*Development of permanent recreation sites and facilities in undeveloped recreation use areas will be considered, provided proper mitigation and exceptions to Executive Order 11988 apply. The area within 500 feet of riparian areas and floodplains is an avoidance area for recreation site facilities.*

*Vegetation buffer strips will be maintained between developed recreational facilities and surface water.*

*The natural values of Boars Tusk, Pilot Butte, and Emmons Cone will be protected. Surface occupancy and surface disturbing activities are prohibited in these areas, unless such activity would enhance management of these geologic features.*

*Surface disturbing activities are prohibited within 1/4 mile of recreation sites unless such activities are determined to be compatible with or are done for meeting recreation objectives for the area.*

*Posting informational and directional signs will be necessary in some areas.*

## **3.12 Travel, Access, and Realty Management**

This section contains the resource management direction for travel, access, and realty management. These resource management categories are combined under one heading because of their management interrelationships and to reduce the repetition of text that would occur due to describing similar management actions in each particular section or subcategory.

### **3.12.1 Management Objectives for Travel, Access, and Realty Management**

The public lands in the planning area will be managed to support the goals and objectives of other resource programs, respond to public demand for land use authorizations, and acquire administrative and public access where necessary.

[Same as Green River RMP] *The objective for management of geophysical exploration activities is to provide opportunity for exploration of mineral resources and collection of geophysical data, while protecting other resource values.*

*The objective for off-road vehicle (ORV) management is to provide opportunity for off-road vehicle use in conformance with other resource management objectives.*

### **3.12.2 Rationale**

Rights-of-way and other land uses are recognized as major uses of the public lands and are authorized pursuant to FLPMA Sections 302 and 501. Designation of avoidance areas—those areas that will be avoided by new rights-of-way unless there are no other options—will provide early notice to potential applicants when they are planning rights-of-way or other land use projects. Only facilities and uses will be permitted in avoidance areas that are consistent with the objectives associated with

that area. Designation of exclusion areas—those areas where no new rights-of-way will be allowed—will provide protection of lands and resources that have values that are not compatible with rights-of-way or other land uses.

Access is necessary for the public enjoyment of the area and for BLM personnel to administer the various resource management programs on public lands. Roads on BLM-administered lands are used by permitted users such as oil and gas operators and livestock operators. Roads are also heavily used by recreationists for dispersed recreation activities such as hunting, camping, rock-hounding, OHV driving, and sightseeing. Providing and maintaining access to the public lands while providing for sensitive resource values is an important public service provided by BLM. Current use of roads in the area is limited in the winter months; however, this may change as all-weather roads are constructed and used year-round to access facilities such as those associated with oil and gas production or communication sites. Transportation planning will consider the best combination of access needs and related sensitive resource values to meet resource objectives.

BLM is also required to provide access to non-federally owned lands surrounded by BLM-administered lands. Such access will be designed to meet area resource objectives.

FLPMA Section 102 requires that public land be retained in federal ownership unless disposal of a particular parcel will serve the national interest. Land acquisition to consolidate ownership patterns will provide for more efficient land management and administration for both public and private landowners. Retention and acquisition of land containing significant resource values will provide for long-term protection and management of those values.

FLPMA Section 204, Withdrawals, gives the Secretary of the Interior the authority to make, modify, extend, or revoke withdrawals and mandates periodic review of existing withdrawals.

Federal regulations (43 CFR 8340) and BLM planning guidance require BLM to designate all BLM-administered land as either open, limited, or closed in regard to off-road vehicle (now termed off-highway vehicle, or OHV) use. These designations are designed to help meet public demand for OHV activities, protect natural resources, ensure public safety, and minimize conflicts among users.

### **3.12.3 Management Actions for Travel, Access, and Realty Management**

#### **3.12.3.1 Transportation Planning**

A transportation plan for the JMH CAP planning area will be developed in coordination with local governments, users, and other members of the public. The transportation plan could include mitigation measures (such as offsite placement of facilities, remote control monitoring, restricted or prohibited surface use including road construction, multiple wells from a single pad, central tank batteries/facilities, and pipelines and power lines concentrated in specific areas, all based on site-specific analysis) in areas subject to seasonal limitations and use restrictions such as CSU and NSO stipulations for oil and gas development.

Transportation planning will provide for access to achieve multiple-use goals while providing maximum protection for crucial habitats and sensitive resources and will consider:

- Limiting points of access for all activities to minimize disruption.
- Closing and rehabilitating unused roads and trails and those causing resource damage. This will be subject to county review of existing rights-of-way needs. The transportation plan and affected maps will be corrected to reflect closed roads and trails.
- Avoiding construction of stream or riparian area crossings in sensitive areas and closing unnecessary crossings. Exceptions may be granted if crossings will reduce adverse effects, benefit area objectives, and reduce miles of road and/or frequency of use. Bridges (versus culverts) will be required for perennial stream crossings.
- Limiting development zones to be accessed by designated routes.

### **3.12.3.2 Travel Management Plan**

In conjunction with the overall transportation planning for JMH, travel management plans (Map 23) will be developed for the two northern calving areas and the Steamboat Mountain, White Mountain, and Essex Mountain areas to control access in these areas.

### **3.12.3.3 Road Installations**

Proposed road installations and improvements will follow the JMH CAP and Green River RMP management objectives and applicable BLM guidelines until a JMH transportation plan is prepared and approved. Exceptions to the plan will address site-specific conditions to minimize impacts on natural and cultural resource values. Proposed roads and improvements for Steamboat Mountain and White Mountain will follow the guidelines specified in Appendix 12 in the final EIS.

### **3.12.3.4 Geophysical Activities**

**Geophysical exploration (vehicles and detonation) activities will be prohibited within ½ mile of the Pinnacles Geologic Feature.** Areas of sensitive heritage resources and geologic features, such as Boars Tusk, White Mountain Petroglyphs, special status plant species, WSAs, and historic trails, will remain closed. Receiver lines may be laid using foot traffic within these areas. Exceptions to these restrictions may be granted on a case-by-case basis subject to appropriate site-specific analysis and mitigation requirements.

The remainder of the planning area will be open to geophysical exploration, with application of appropriate mitigation (Table 4). Rights-of-way limitations in the planning area apply to on- and off-road vehicle traffic used for geophysical activities (Map 15 and Table 10). Exploration activities will be allowed in sensitive resource areas only if they can be performed with acceptable mitigation of impacts.

**Table 10. Rights-of-Way Limitations**

DESIGNATION AND AREA	TOTAL ACRES <sup>1</sup>
EXCLUSION AREAS	40,200
Face of Steamboat Mountain White Mountain Petroglyphs ACEC Oregon Buttes ACEC South Pass Historic Landscape ACEC (visible portion) Pinnacles Geologic Feature Tri-Territory Marker Indian Gap	
AVOIDANCE AREAS	434,330
Boars Tusk Crookston Ranch Steamboat Mountain ACEC + expansion area Steamboat Mountain Management Area South Pass Historic Landscape ACEC (portion not visible) Greater Sand Dunes ACEC + 1-mile buffer White Mountain Petroglyphs vista West Sand Dunes Archaeological District National Historic Trails + ¼-mile buffer Expansion Era Roads + ¼-mile buffer Greater sage-grouse potential nesting habitat <sup>1</sup> Connectivity area Special status plants Special status plants potential habitat	
<sup>1</sup> Only 50 percent of the area is expected to be suitable nesting habitat.	

**3.12.3.5 Rights-of-Way**

The planning area, with the exception of defined exclusion and avoidance areas, will be open to considering grants of rights-of-way if area objectives can be met (Table 10). Exclusion areas are closed to rights-of-way. Avoidance and special management areas not identified as exclusion areas will be open to consideration only after site-specific analysis demonstrates area objectives can be met (see glossary).

**The extent of right-of-way exclusion and avoidance areas, based on the location of specific sensitive resources, is shown on Map 15 and Table 10.**

Development levels may be adjusted and/or additional mitigation may be applied to proposed activities as appropriate and necessary to protect resource values. Adjustments could be made to ensure that additional rights-of-way will not cause fragmentation and abandonment of wildlife habitat and will still meet stated management objectives, safeguard sensitive resources, and not result in significant or irreversible adverse effects (Appendix 2). Proposals will be analyzed in subsequent NEPA or other documents (such as site-specific NEPA analysis for well sites) in accordance with law and policy. Changes will be based on consideration of several factors including:

- Data trends for indicators on the viability of potentially impacted wildlife and other sensitive resources, including impacts on indicators from other causes such as disease, drought, or hunting.
- Fragmentation of habitat and migration pathways due to surface disturbance.
- Net amount of surface disturbance, including approved development activities or rights-of-way that will be implemented in nearby areas, and planned reclamation of existing surface disturbances.
- Amount and location of actual land use activity.

The transportation plan also applies to the transport of gas, condensate, or water via pipelines and electric power transmission (buried power lines) within the planning area. Pipelines and buried power lines generally will be located adjacent to roads to reduce new surface disturbance. Appendix 12 in the final EIS includes additional information for transportation planning that will assist in the reduction of impacts due to rights-of-way actions and other surface disturbances.

Buried pipelines, waterlines, and other facilities often are a temporary disturbance that ends with successful reclamation within a few years. Actions such as the construction of oil or gas locations, roads, and reservoirs often affect a larger area for longer periods of time and therefore are more difficult to mitigate. These types of disturbances cause greater consequences for the resources present. The resources present, management objectives, and multiple uses in the area help guide which types of surface disturbances might be compatible with the management goals for the planning area (Appendix 3).

The JMH area is not expected to be a major corridor for transmission lines, transportation, or large-scale developments (industrial or otherwise) because of the large number and high frequency of sensitive resources within the planning area boundaries. Routes for these facilities have been identified in other portions of the RSFO in the Green River RMP.

#### **3.12.3.5.1 Linear Rights-of-Way**

To the extent possible, utility and transportation rights-of-way will be located to coincide with existing roads, trails, and other right-of-way or easement concentration areas where they will not create safety hazards or conflict with other resource objectives. Linear rights-of-way will be considered as part of transportation planning and included as part of travel management plans (see Appendix 12 in the final EIS).

#### **3.12.3.5.2 Access**

Access to public, state, and private land will be evaluated on a case-by-case basis, provided throughout the planning area, and restricted only where necessary to protect public health and safety and sensitive resources. Access will be guaranteed across public lands to land owners whose private land is landlocked and to state lands consistent with the guidelines and objectives set forth in the FLPMA. Access decisions will be consistent with existing regulatory requirements and will provide for the reasonable use and enjoyment of inholdings.



### 3.12.3.6 Winter Access

Winter access will be subject to seasonal road closures. Where winter access on roads other than those identified for winter access in the transportation plan is necessary, routes will be determined on a case-by-case basis in accordance with transportation planning requirements. Plowing of roads will be considered on a case-by-case basis.

### 3.12.3.7 Off-Highway Vehicle Management

**The Pinnacles Geologic Feature will be closed to OHV use, and OHV use will be limited to designated roads and trails in the South Pass Historic Landscape ACEC (portion not visible), cushion plant community, and Steamboat Mountain Management Area.** The remaining public lands in the JMH CAP planning area will remain open, limited, or closed to OHV use (see Glossary for definitions) as previously described in the Green River RMP (Map 13 and Table 11). The OHV management prescriptions identified in the Green River RMP will be implemented.

Management of OHV activities will be in accordance with Executive Order 11644, as amended by Executive Order 11989, and applicable regulations (43 CFR 8340) that address the use of OHVs on public lands. Designation and authorization of OHV use will be controlled to protect resource values, promote users' safety, and minimize conflict among various public lands uses. In areas where roads have not been assessed and road designations not completed, management will be the same as that for "existing roads and trails" until the assessment can be completed.

Specific roads and trails may be closed or seasonally closed to OHV use as needed for public health and safety reasons, restoration or remediation actions, habitat protection, or other valid reasons as determined by BLM (Map 13).

The Authorized Officer may grant exceptions to closed or limited OHV designations in consideration of such factors as scientific purposes and emergency access needs.

**Table 11. Off-Highway Vehicle Use Designations**

DESIGNATION (AND AREA)	TOTAL ACRES
OPEN	10,020
Greater Sand Dunes Recreation Area	
CLOSED	123,940
WSAs Oregon Buttes ACEC White Mountain Petroglyphs ACEC Crookston Ranch Boars Tusk Pinnacles Geologic Feature Special status plants	

<b>Table 11. (Continued)</b>	
LIMITED TO DESIGNATED ROADS AND TRAILS	213,810
Red Desert Watershed Management Area Steamboat Mountain ACEC + expansion area Steamboat Mountain Management Area South Pass Historic Landscape ACEC	
LIMITED TO EXISTING ROADS AND TRAILS	274,570
Remainder of the planning area not designated as Open, Closed, or Limited to Designated Roads and Trails	
LIMITED TO SEASONAL ACCESS <sup>1</sup>	476,750
Elk crucial habitat Deer crucial habitat Antelope crucial habitat Elk birthing areas Mule deer birthing areas Raptor nest sites + ½- to 1-mile buffer Greater sage-grouse winter concentration area <sup>2</sup> Greater sage-grouse leks + ¼-mile buffer Greater sage-grouse potential nesting habitat <sup>3</sup> Mountain plover aggregation areas + ¼-mile buffer Steamboat Mountain	
<sup>1</sup> Seasonal access limitations for the JMH CAP would be implemented on an as-needed basis. <sup>2</sup> Only sagebrush vegetation is expected to be suitable habitat. <sup>3</sup> Only 50 percent of the area is expected to be suitable nesting habitat.	

### 3.12.3.8 Over-the-Snow Vehicles

Travel by over-the-snow vehicles will be limited to the OHV designations and BLM trails designated for snow vehicle access. Any travel off existing routes will be considered on a case-by-case basis.

### 3.12.3.9 Land Withdrawals and Exchanges

Public lands will be retained in federal ownership unless it is determined to be in the best public interest to dispose of some of them.

Land withdrawals identified in the Green River RMP will be pursued. **New withdrawals in addition to those identified in the Green River RMP include the top of Steamboat Mountain, the Pinnacles Geologic Feature, and two northern elk calving areas (Table 8, Map 21, and the Minerals section 3.10.3.3).**

Exchanges will conform to the JMH planning objectives and actions. BLM land acquisition will be considered to facilitate various resource management objectives. The preferred method for acquisition will be through exchange. Land exchanges are considered discretionary and voluntary real estate transactions between the willing parties involved. Exchanges for state lands in WSAs and other special management areas will be considered to ensure easier and consistent management in these

areas. Exchanges will be considered to acquire state or private lands that hold high cultural and historical value; that hold important resource values, such as habitat for threatened and endangered species; and that will facilitate resource management objectives, such as preventing habitat fragmentation.

### **3.12.3.10 Ownership Adjustments**

Aquatic, wetland, and riparian habitat will not be suitable for disposal unless opportunities exist for land exchanges of equal or greater value (including monetary and functional resource values).

See other resource management sections in this document (Implementation, Monitoring, and Evaluation Process; Surface Use Activities; Air Resources; Heritage Resources; Land and Water Resources; Minerals and Alternative Energy Resources; Recreation Resources; Visual Resources; and Special Management Areas and Other Management Areas) for other prescriptions and guidance that apply to Travel, Access, and Realty Management.

### **3.12.4 Existing Green River RMP Decisions for Travel, Access, and Realty Management**

Other management objectives and actions for Travel, Access, and Realty Management in the planning area will be implemented consistent with the Green River RMP land use decisions. These are summarized here for easy reference. Maps and tables referenced in this section refer to those in the Green River RMP, not those in the JMH CAP.

#### **Land Ownership Adjustment**

*MANAGEMENT ACTIONS: Public lands will be retained in federal ownership with the exception of those lands which have potential for disposal. Lands currently identified as meeting the FLPMA disposal criteria are described in Appendix 8-1. The preferred method of disposal will be by land exchanges. Other lands will be considered for disposal on a case-by-case basis.*

*Acquisition of lands will be considered to facilitate various resource management objectives. The preferred method for acquisition will be through exchange. Land exchanges are considered discretionary and voluntary real estate transactions between parties involved. Lands considered will include private/State lands along upper stream reaches of the Big Sandy River; State inholdings in WSAs; other lands with important resource values. Consideration will be given to exchanges for state lands in special management areas such as ACECs.*

#### **Utility/Transportation Systems**

*Public lands will be made available throughout the planning area for rights-of-way, permits, and leases.*

*The planning area, with the exception of defined exclusion and avoidance areas, will be open to the consideration of granting rights-of-way.*

Areas are designated for avoidance or exclusion to rights-of-way where these uses are incompatible with management of sensitive resources and/or would have unacceptable impacts. Five windows have been identified: 2 east-west, 3 north-south. Other areas will be considered for rights-of-way on a case-by-case basis.

Right-of-way corridors will not be designated due to the predominate checkerboard private land pattern in the planning area.

Areas designated as utility windows, rights-of-way concentration areas, and existing communication sites will be preferred locations for future grants.

The ROD and Federal Register notice for the Green River RMP will meet the criteria for public notification for linear or site rights-of-way within floodplains as required by BLM Manual 7221, except for those associated with perennial streams. The BLM will solicit public comment on site facilities or major linear rights-of-way along perennial streams unless another agency (federal, state, or local) already had solicited such comments.

### **Withdrawals/Classifications**

Some locatable mineral decisions are deferred in the Jack Morrow Hills (JMH) core area. In addition, determining where withdrawals from mineral location (i.e., filing of mining claims) and related mining activities will be pursued is also deferred in the core area until completion of the activity plan.

Withdrawals and classifications will be processed to protect important resource values.

Withdrawals which no longer serve the purpose for which they were established will be revoked.

Prior to revocation, withdrawn lands will be reviewed to determine if any other resource values require withdrawal protection.

Public Water Reserves will be terminated where no longer needed, and acquired where the need exists.

### **Desert Land Entries**

No BLM-administered public lands within the planning area are available for agricultural entry under Desert Land Entry (43 CFR 2520) due to one or more of the following factors: unsuitable soils, salinity contributions into the Colorado River System, lack of water supplies, rugged topography, lack of access, small parcel size, and presence of sensitive resources.

### **Access**

Access to public lands will be provided throughout the planning area. Where necessary and consistent with ORV designations, access will be closed, or restricted in specific areas to protect public health and safety, and to protect significant resource values.

## **Geophysical Exploration**

*MANAGEMENT ACTIONS: Most of the planning area is open to consideration of geophysical activities except where off-road vehicle use or explosive charges would cause unacceptable impacts.*

*Geophysical activities will generally be required to conform to the ORV designations and ORV management prescriptions for the planning area (see Off-Road Vehicle Management). However, geophysical exploration has been and will continue to be routinely granted site specific authorization for off-road vehicle use subject to appropriate limitations to protect various resources identified during analysis of proposed actions.*

*Geophysical activities will be restricted or prohibited within 1/4 mile or visual horizon of historic trails (whichever is closer) to protect trail integrity. Vehicles used for geophysical exploration or similar activities could be allowed to cross and drive down historic trails, provided a site specific analysis determines that no adverse effects would occur.*

*Generally, shotholes and vibroseis activity will be restricted or disallowed within 300 feet of historic and recreational trails; however, exceptions may be allowed if supported by a site specific analysis.*

*Geophysical travel through developed and semi-developed recreation sites is restricted to existing roads and trails.*

**Locatable Minerals** (See discussion in Section 3.10.4 in the JMH CAP.)

## **Off-Road Vehicle Management**

*MANAGEMENT ACTIONS: Areas for ORV rallies, cross-country races, and outings may be provided on a permit basis.*

*Approximately 119,890 acres are closed to off-road vehicle use to protect naturalness and outstanding opportunities for solitude, or primitive and unconfined recreation.*

*In areas designated as either "limited" to designated roads and trails or "limited" to existing roads and trails for off-road vehicle use, motorized vehicles must stay on designated or existing roads and trails, unless allowed an exception by the authorized officer. This limitation applies to all activities involving motorized vehicles. Except for areas that are closed to off-road vehicle travel, some types of off-road motor vehicle use may be allowed by the authorized officer provided resource damage does not occur.*

*Vehicular travel in crucial and important wildlife habitats and during crucial and important periods will be restricted seasonally, as necessary (strutting grounds, spawning beds, big game ranges, calving/fawning periods, etc.).*

*Vehicular travel is restricted to designated roads in sensitive watersheds and in cultural site management areas.*

*Generally, over-the-snow vehicle use is subject to the prescriptions described in Table 13 unless a site specific analysis determines that exceptions can be allowed.*

*The existing open area in the Killpecker Sand Dunes would remain open. No new open areas would be established.*

*OHV implementation plans will be prepared as necessary and will reflect the OHV designations made in the Green River RMP. OHV implementation planning will also be a part of comprehensive activity planning efforts.*

### **3.13 Visual Resources Management**

#### **3.13.1 Management Objective for Visual Resources Management**

[Same as Green River RMP] *The objectives for management of visual resources are to: 1) maintain or improve scenic values and visual quality; and 2) establish priorities for managing the visual resources in conjunction with other resource values.*

#### **3.13.2 Rationale**

The BLM is required by law, regulations, and Executive Orders to manage visual resources. FLPMA Section 102(8) declares that public land will be managed to protect the quality of scenic values and, where appropriate, to preserve and protect certain public land in its natural condition. NEPA Section 101(b), requires federal agencies to "... assure for all Americans ... esthetically pleasing surroundings." NEPA Section 102 requires agencies to "... utilize a systematic, interdisciplinary approach which will ensure the integrated use of ... Environmental Design Acts in the planning and decision making ..." process. Guidelines for the identification of VRM classes on public land are contained in BLM Manual Handbook 8410-1, Visual Resource Inventory (USDI/BLM 1986c).

#### **3.13.3 Management Actions for Visual Resources Management**

Projects will be designed, sited, screened, or painted to reduce visual impacts regardless of the VRM classification. The VRM classes provide the design standards for all surface disturbing projects (Map 16).

Visual resource classes will be retained or modified to enhance other resource objectives such as heritage resources, recreation uses, wild horse viewing, and special management areas. Projects will be designed to meet established visual classifications objectives, and appropriate mitigation will be applied.

The four VRM classes (I, II, III, IV) set standards for planning, designing, and evaluating projects by identifying various permissible levels of landscape alteration while protecting overall regional scenic quality. The approved VRM class objectives provide the visual management standards for the design and development of future projects and rehabilitation of existing projects. Visual design considerations are incorporated into all surface disturbing projects regardless of size or potential impact. The VRM class objectives range from very limited management activity (Class I) to activity allowing major landscape modifications (Class IV). Refer to the Glossary for a full description of the objective of each VRM class. VRM classes for the JMH CAP are shown in Table 12 and Map 16.

### 3.13.3.1 VRM Class I Areas

The WSAs are managed as VRM Class I areas to preserve the natural setting and existing character of the landscape. As a result, the Oregon Buttes ACEC and the western portion of the Greater Sand Dunes ACEC are managed as VRM Class I areas (Table 12).

**Table 12. Visual Resource Management Classifications**

DESIGNATION AND AREA	TOTAL ACRES
VRM CLASS I	119,340
WSAs Oregon Buttes ACEC (included in WSA) Western portion of Greater Sand Dunes ACEC (included in WSA)	
VRM CLASS II	199,980
ACECs + expansions (except Oregon Buttes ACEC) Steamboat Mountain Management Area Areas adjacent to WSAs West Sand Dunes Archaeological District Portion of White Mountain Pinnacles Geologic Feature	
VRM CLASS III	67,240
Red Desert Watershed Management Area Portion of White Mountain Split Rock (portion not Class II) Eden Valley	
VRM CLASS IV	235,780
Remainder of the planning area not designated as VRM Class I, Class II, or Class III	

### 3.13.3.2 VRM Class II Areas

Management actions on lands classified as VRM Class II will be designed to retain the existing character of the landscape.

A visual transition area of 1 mile adjacent to each Class I area (WSA) will be managed as Class II to retain the existing character of the Class I areas (WSA) and surrounding landscapes.

A low level of change will be acceptable to the characteristic landscapes of the ACECs, thus the eastern portion of the Greater Sand Dunes ACEC, South Pass Historic Landscape ACEC, and White Mountain Petroglyphs ACEC will be managed as VRM Class II areas.

Steamboat Mountain ACEC, Steamboat Mountain Management Area (includes Split Rock), and unique geological features and landforms, including portions of White Mountain, Pinnacles Geological Feature, and the West Sand Dunes Archaeological District, will also be managed as VRM Class II areas.

### **3.13.3.3 VRM Class III Areas**

Eden Valley, portions of White Mountain, a portion of the Red Desert Watershed within the planning area (not already designated as Class I or II), and Joe Hay Rim will be managed as VRM Class III.

### **3.13.3.4 VRM Class IV Areas**

All areas not managed as VRM Class I, II, or III will be managed as VRM Class IV.

See other resource management sections in this document (Implementation, Monitoring, and Evaluation Process; Surface Use Activities; Air Resources; Heritage Resources; Land and Water Resources; Minerals and Alternative Energy Resources; Recreation Resources; Travel, Access, and Realty; and Special Management Areas and Other Management Areas) for other prescriptions and guidance that apply to Visual Resources Management.

### **3.13.4 Existing Green River RMP Decisions for Visual Resources Management**

Other management objectives and actions for Visual Resources Management in the planning area will be implemented consistent with the Green River RMP land use decisions. These are summarized here for easy reference. Maps and tables referenced in this section refer to those in the Green River RMP, not those in the JMH CAP.

*MANAGEMENT ACTIONS: Visual resource classes will be retained or modified to enhance other resource objectives such as those for cultural resource and recreation management, wild horse viewing, and special management areas.*

*Projects and facilities will be designed to meet the objectives of the established visual classifications and appropriate mitigation will be included.*

*Management actions on public lands with a Class II visual resource management classification must be designed to blend into and retain the existing character of the natural landscape.*

*Management actions on public lands with a Class III visual resource management classification must be designed to partially retain the existing character of the landscape.*

*Management actions on public lands with a Class IV visual resource management classification could result in major modification of the character of the landscape.*

*All surface disturbing actions, regardless of the visual resource management class, are required to be mitigated to reduce visual impacts.*

*Management actions in areas classified as rehabilitation areas will be designed to reclaim and improve visual resource values to achieve a higher classification.*

*The scenic values along Highway 28 within Fremont County will be protected. All proposed lands actions and other activities within view of the highway will be evaluated for impacts and will require mitigation to protect the scenic and historic*



values of this area. Class II visual resource management classifications on public lands will be retained.

Suitable wild horse herd viewing area(s) may be developed to enhance public viewing of horses. Viewing areas plus a 1/2 mile distance surrounding them will be closed to long-term or permanent intrusions and surface disturbing activities that could interfere with opportunities to view horses (e.g., structures, mineral activities, powerlines, roads, etc.). Short-term intrusions that will blend with the landscape or will benefit the intent of the wild horse herd viewing areas will be considered on a case-by-case basis.

### 3.14 Management of Special Management Areas and Other Management Areas

#### 3.14.1 Management Objectives for the Management of Special Management Areas and Other Management Areas

Special management areas will be managed to maintain or enhance the resource values and characteristics for which these areas were designated as special management areas.

#### 3.14.2 Management Actions for the Management of Special Management Areas and Other Management Areas

Special management areas will continue to be managed to preserve and protect the integrity and character of the specific areas in accordance with ACEC policies and WSA interim management policies. The Steamboat Mountain ACEC is expanded to include the highest concentration and overlap of unique habitat features, natural systems, and cultural values; the West Sand Dunes Archaeological District is designated a special management area; and the Steamboat Mountain Management Area is established (Map A, Table 13, and Appendix 8). Also see the Recreation section of this document for a discussion of the Continental Peak/South Pass connecting side trail.

**Table 13. Special Management and Other Management Area Designations**

DESIGNATION (AND AREA)	TOTAL ACRES
ACEC EXPANSIONS (Steamboat Mountain ACEC expansion)	3,980
OTHER SPECIAL MANAGEMENT AREA DESIGNATIONS (West Sand Dunes Archaeological District)	19,840
OTHER MANAGEMENT AREA DESIGNATIONS (Steamboat Mountain Management Area)	88,290

Management for proposed actions in ACECs is guided by the Green River RMP and the JMH CAP and is designed to protect the important values, resources, or natural hazards for which the area was designated. Management of the Wilderness Study Areas in the JMH CAP planning area will be in accordance with the "Interim Management Policy and Guidelines for Lands Under Wilderness Review" until Congress acts on designation.

### 3.14.2.1 Special Management Areas

The management objectives and management actions identified here apply only to BLM-administered public lands and federal minerals. Private and state lands and minerals and federal lands administered by other federal agencies are not covered by these actions. The owners or administrators of lands not administered by BLM determine the actions on those lands. Access to private and state lands, where surrounded by BLM-administered lands, will be provided following appropriate analysis (see the Green River RMP).

#### Wilderness Study Areas

Management of the Wilderness Study Areas in the JMH CAP planning area will be in accordance with the "Interim Management Policy and Guidelines for Lands Under Wilderness Review" until the Congress either acts to designate them as wilderness or releases them for other management activities. Wilderness management recommendations and alternatives for this area are addressed in the *Rock Springs District Final Wilderness EIS*. Where the prescribed management in these areas is more stringent than either the Interim Management Policy or wilderness policy for designated wilderness areas, it is addressed here.

Geophysical Activities: Geophysical vehicles and explosive charges (detonation activities) remain prohibited in these areas.

OHV Use: These areas remain closed to OHV use (Table 11).

Leasable Fluid Minerals: These areas remain non-discretionary closure areas for fluid minerals leasing (Table 5).

Leasable Solid Minerals: These areas remain closed to leasable solid minerals exploration and leasing (Tables 6 and 7).

Saleable Minerals: These areas remain closed to mineral material sales (Table 9).

Locatable Minerals: A plan of operations is required for all activities greater than casual use (Table 8).

VRM: These areas are managed as VRM Class I areas to preserve the natural setting and existing character of the landscape (Table 12).

#### Existing Green River RMP Decisions for Wilderness Management

Other management objectives and actions for Wilderness Management in the planning area will be implemented consistent with the Green River RMP land use decisions. These are summarized here for easy reference. Maps and Tables referenced in this section refer to those in the Green River RMP, not those in the JMH CAP.

*MANAGEMENT OBJECTIVE: The objective for management of the wilderness resource is to retain the wilderness quality and manage the Wilderness Study Areas in the Green River RMP planning area in accordance with the "Interim Management Policy and Guidelines for Lands Under Wilderness Review," until Congress acts on designation.*

*MANAGEMENT ACTIONS: Wilderness management plans will be prepared for those WSAs designated by Congress as wilderness.*

*Discretionary uses within or adjacent to WSAs will be reviewed to ensure they do not create conflicts with management and preservation of wilderness values.*

*Should Congress designate the WSAs in the planning area (partially or wholly) as wilderness, the management of the designated areas will be for wilderness values, either as described in the appropriate wilderness EIS or as directed by Congress.*

*Should Congress not designate areas (partially or wholly) as wilderness, the management of the nondesignated areas will be in accordance with the approved Green River RMP or as otherwise directed by Congress.*

*If necessary, in the course of incorporating the wilderness decisions into the Green River RMP, it will be amended.*

### **ACEC — Greater Sand Dunes ACEC**

The Greater Sand Dunes ACEC designation and boundaries will remain unchanged (Map A).

#### **General Area**

Management Actions: **Portions of crucial habitats and other areas of sensitive or important resources will be open to further consideration for various multiple-use activities, so long as crucial habitats and other sensitive or important resources will be protected from irreversible adverse effects and the objectives for the ACEC can be met. Portions of the ACEC will also be closed to some activities if they will result in irreversible adverse effects** (Table 4, Map 4, Map B, and Table 3).

Heritage/Cultural: The Indian Gap Trail will be researched and a trail interpretive plan will be developed. See the Heritage Resources Management section of this document for other management prescriptions for heritage and cultural resources that apply to the area.

Rights-of-Way: The ACEC will be managed as a right-of-way avoidance area (including those lands within 1 mile or the visual horizon, whichever is closer).

Saleable Minerals: The ACEC will be closed to mineral material sales.

#### **Additional or Different Items Specific to the Western Portion of the Greater Sand Dunes Area**

See the Green River RMP decisions summarized at the end of this section *in italics* for a description of the western portion of the ACEC.

Leasable Solid Minerals: The western portion of the ACEC is closed to leasable solid minerals exploration and leasing.

Locatable Minerals: Withdrawals from mineral location will be pursued in the western portion of the ACEC.

OHV Use: The western portion of the ACEC is closed to OHV use (Map 13).

VRM: The western portion of the ACEC will be managed consistent with a Class I VRM classification (Map 16). VRM Class I objectives are to maintain a landscape setting that appears unaltered by humans.

### **Additional or Different Items Specific to the Eastern Portion of the Greater Sand Dunes Area**

See the Green River RMP decisions summarized at the end of this section *in italics* for a description of the eastern portion of the ACEC.

Leasable Fluid Minerals: These leasable fluid mineral decisions apply to the eastern portion of the Greater Sand Dunes ACEC. The ACEC lies within Implementation Management Areas 2 and 3.

**Area 2 (about 8,630 acres) is open to leasing considering such factors as operational need, resource recovery, geology, and ability to mitigate impacts and with stipulations applied to protect sensitive resources in Area 2** (Map A, Map B, and Table 5). BLM may request potential lessees to share data (such as reservoir data or geologic data) or plans related to the development of the potential oil and gas resource prior to leasing; sharing of these data is voluntary. The information will be used to ensure that impacts resulting from development interest will remain within the acceptable level of impacts analyzed (see Appendix 2).

**As leases expire within Area 2, they will be considered for subsequent lease offerings on a case-by-case basis based upon such factors as operational need, resource recovery, geology, and ability to mitigate impacts.**

**Stipulations identified in Table 5 and those identified through monitoring as described in the implementation, monitoring, and evaluation management strategy (Appendix 2 and leasable fluid minerals section) will be applied to new leases as deemed necessary.** Stipulations could include but are not limited to NSO and CSU requirements and timing of development activity (Map 4).

**Area 3 (about 6,750 acres) within the Greater Sand Dunes ACEC is closed to future oil and gas leasing (Map 11 and Appendix 2).**

**As leases expire in the 6,750 acres of Area 3 that are closed to future leasing, they will not be considered for subsequent lease offerings.**

For oil and gas projects, mitigation actions could include surface disturbance conditional requirements (Table 5); transportation planning before initiating any activity with the objective of managing travel in areas of crucial access; remote control and monitoring of fluid mineral production facilities to limit travel; multiple-well pads to limit surface disturbances; limiting the number of pads per section in sensitive areas; use of directional drilling to minimize disturbance of sensitive areas; clustering or centrally locating ancillary facilities; shrub reclamation (e.g., containerized stock and transplanting) to restore, rehabilitate, or replace habitat; application of geotechnical material for construction; and potential unitization prior to exploration and development (Appendix 3).

Lease suspensions will be lifted within 3 years of signing the ROD.

Leasable Solid Minerals: The eastern portion of the ACEC within the coal occurrence and development potential area will be open to leasable solid minerals exploration and leasing using subsurface mining methods only and controls on surface facilities.

OHV Use: The eastern portion of the ACEC containing the Greater Sand Dunes Recreation Area is open to OHV use (Map 13). The remainder of the eastern portion of the ACEC will be limited to existing roads and trails for OHV use.

Recreation: A recreation project plan will be prepared for expansion of the parking area and camping facilities at the Greater Sand Dunes Recreation Area. The plan will address public health and safety, resolving user conflicts, and protecting adjoining resources.

Rights-of-Way: In the basin big sagebrush/lemon scurfpea plant community area, future linear projects and the associated surface disturbance will be analyzed and, if found to be necessary and acceptable, will to the extent practicable follow an existing right-of-way and keep disturbance to a minimum. Appropriate mitigation will be applied. Paralleling, consolidation, or rerouting may be necessary to minimize cumulative surface disturbance and to meet transportation planning objectives.

Surface Use Activities: Because the ACEC contains a high concentration of sensitive resource values, proposals for all surface activity will be closely examined. Users requiring approval are charged with showing that resource development activities are needed and will result in acceptable impacts. This action may mean proposing novel methods, systems, and technologies for BLM consideration. APDs and other use applications may require stringent conditions of approval and mitigation measures to address specific issues related to impacts. Other surface use proposals and projects (e.g., rangeland improvement, grazing, access, and recreation) can expect to undergo an in-depth comprehensive review. Field data and observations, cumulative impacts of likely and foreseeable competing uses, understanding of impacts, conditions within the ACEC, and management goals will be employed during the decision-making process (Table 4 and Map 4).

Wherever sensitive values exist, the review and approval process will consider mitigation measures commensurate with the anticipated impacts, the resource values of the area, and any substantive comments or information gathered through public participation. Resource projects or proposals can expect a similar in-depth consideration of mitigation measures to safeguard the affected resource values as described for leasable fluid minerals above.

Vegetation: **Some basin big sagebrush/lemon scurfpea areas along the base of Steamboat Mountain will be provided protection by controlling surface use (closed or limited) or by implementing other intense mitigation to preserve the character of vegetation communities (Map 6). Full fire suppression for basin big sagebrush/lemon scurfpea plant communities will be applied.**

VRM: The eastern portion of the ACEC will be managed consistent with a Class II VRM classification (Map 16). The VRM Class II objective is to retain the existing character of the landscape. Facilities (either in place or new), including linear rights-

of-way, will be screened, painted, or designed to blend with the surrounding landscape.

See other resource management sections in this document (Implementation, Monitoring, and Evaluation Process; Surface Use Activities; Air Resources; Heritage Resources; Land and Water Resources; Minerals and Alternative Energy Resources; Recreation Resources; Travel, Access, and Realty; Visual Resources; and Special Management Areas and Other Management Areas) for other prescriptions and guidance that apply to management of the Greater Sand Dunes ACEC.

### **Existing Green River RMP Decisions for the Greater Sand Dunes ACEC Management**

Other management objectives and actions for the Greater Sand Dunes ACEC in the planning area will be implemented consistent with the Green River RMP land use decisions. These are summarized here for easy reference. Maps and tables referenced in this section refer to those in the Green River RMP, not those in the JMHCAP.

*Greater Sand Dunes ACEC (38,650 acres of BLM-administered public lands).*

*The ACEC designation for the BLM-administered public lands in the Greater Sand Dunes ACEC area is retained.*

*MANAGEMENT OBJECTIVE: The management objective for the BLM-administered public lands in the Greater Sand Dunes ACEC is to preserve and protect the integrity of the unique values in the area for future public use and enjoyment. These values include the unusual geological features associated with the sand dunes and the Boars Tusk; the biological interrelationships supported by the dunes, especially the Steamboat desert elk herd, mule deer herd, and other dependent plants and animals; and a variety of recreation uses.*

### **General Area**

*MANAGEMENT ACTIONS: The BLM-administered public lands in the ACEC will be managed consistent with the Class II visual resource management classification. Management actions on the BLM-administered public lands classified as Class II visual resource management lands will be designed to retain the existing character of the landscape.*

*The visual impacts of facilities (e.g., producing wells) or other visual intrusions in the area will be evaluated and mitigated to the extent reasonable.*

*The BLM-administered public lands in the Greater Sand Dunes area and those within 1 mile or the visual horizon (whichever is closer) of the area are avoidance areas for new rights-of-way (approximately 70,850 acres)).*

*Any surface disturbing activities within the Wasatch and Green River Formations require paleontological clearance.*

*The BLM-administered public lands in the area are closed to mineral material sales.*

*Livestock grazing objectives would be evaluated, and as needed, modified to be consistent with the management objectives for the area.*

*Grazing systems will be designed to achieve desired plant communities and proper functioning condition of watersheds (upland and riparian)). Maintenance and use of existing rangeland improvements on the BLM-administered public lands is allowed. Proposed rangeland improvements must be part of an allotment management plan, and be consistent with the management objectives for the area. Environmental analyses of such improvements will be conducted to consider the effects on resource values from rangeland improvement construction and maintenance activities and equipment used for these activities.*

*Materials used for improvements must be compatible with the natural character of the area to reduce intrusive visual effects on the natural environment.*

*Wild horse use in the area will be consistent with the Great Divide Basin Wild Horse Herd Management Plan and the management objectives for the area. No wild horse traps will be constructed within the area.*

*To support and improve the diversity of wildlife species within the area, wildlife habitat on the BLM-administered public lands will be protected, maintained, or enhanced. Crucial elk winter range in the area will be maintained as an essential component of the Steamboat Mountain-Sands elk habitat.*

*Projects to improve the interdunal ponds for bird, amphibian, and mammal habitat will be considered and evaluated for development on the BLM-administered public lands.*

*Interpretive materials and educational programs may be developed to describe wildlife, cultural, and other values in the area.*

*Native vegetation will be maintained and protected on the BLM-administered public lands to allow natural plant succession to continue. Revegetation of disturbed areas with big sagebrush and other adaptable shrubs will be required to maintain and/or improve big game habitat.*

*A diversity of non-motorized recreation uses, including hiking, bird-watching, photography, sightseeing, and hunting, will be encouraged. Appropriate recreation facilities will be developed and maintained on BLM-administered public lands to provide for a diversity of motorized and non-motorized recreation uses.*

*Two roads that pass through or adjacent to the area will be designated as part of the Tri-Territory backcountry byway.*

*Camping is restricted to the BLM 14-day limit, and subject to "Pack In-Pack Out" requirements for trash, etc.*

### **Additional or Different Items Specific to the Western Portion of the Greater Sand Dunes Area**

*The western portion of the Greater Sand Dunes area is bounded on the east by the Sand Dunes WSA boundary and on the west by the Greater Sand Dunes ACEC boundary.*

*Management of the portion of the Greater Sand Dunes area that overlaps the Buffalo Hump and Sand Dunes WSAs (25,250 acres in the western portion of the Sand Dunes area) is directed by the "Interim Management Guidelines for Lands Under Wilderness Review." The prescribed management in this overlap area is more stringent than either the interim management policy or wilderness policy for designated wilderness areas; therefore, it is addressed here. Wilderness management recommendations and alternatives for this area are addressed in the Rock Springs District Final Wilderness EIS.*

*The portion of the area that overlaps the WSAs is closed to off-road vehicles, including over-the-snow vehicles, and some mechanized vehicles to maintain the unique naturalness, solitude, and primitive and unconfined recreational opportunities.*

*This overlap portion will also be closed to mineral location, entry under the land laws, and geophysical activities. The oil shale withdrawal will remain in effect until a comprehensive study is completed for the area and, if necessary, lands could be identified to be withdrawn for protection of their resource values.*

*The approximate 4,360 acres of Federal coal lands in the area are closed to further consideration for coal leasing and development.*

*Exchanges for acquisition will be pursued to enhance the management of resources in the area (1,920 acres).*

### **Additional or Different Items Specific to the Eastern Portion of the Greater Sand Dunes Area**

*The eastern portion of the Greater Sand Dunes area is bounded on the west by the Sand Dunes WSA and on the east by the ACEC boundary.*

*Activities in the area will be required to conform with visual resource management classifications and prescriptions.*

*Geophysical activity, including off-road vehicle travel, is allowed, provided resource damage is minimized and the activities conform with ORV designations and transportation plans for the area.*

*The relatively pristine portion of the eastern area that has no developments (approximately 8,800 acres), including the base of Steamboat Rim, will be managed to protect big game habitat, vegetation communities, and visual and recreation resources.*

*Road construction and new access may not be feasible for much of the entire eastern portion. To prevent conflicts with big game, recreation users, and other*



resource and land use activities, alternative access methods may be needed (use of existing or designated roads or pads, seasonal travel requirements or restrictions, use of helicopters, etc.).

Activities will not be permitted to disrupt access to or use of developed and semi-developed recreation sites. Activities that are incompatible with recreation sites will be managed to avoid these sites.

Approximately 9,840 acres of Federal coal lands in the area are closed to coal leasing and development by surface mining methods and related surface facilities and activities. This area is open to consideration for coal leasing by subsurface mining methods with placement of surface facilities extremely limited.

Surface disturbing activities, geophysical activities, and oil and gas exploration and development activities are restricted seasonally on crucial big game winter ranges and big game birthing areas. Exceptions to this restriction may be approved for activities such as oil and gas development, rights-of-way, construction, and range improvement development, if conditions described in Appendix 7 (of the Green River RMP) apply. Once an operation starts (such as oil and gas drilling/completion), it would be allowed to be completed into or through the winter. Decision points for shutdown due to unacceptable winter conditions occur between exploration or development stages, such as pad construction and drilling startup, and between drilling/completion and production facility installation.

Surface water, soils, and shallow aquifers will be protected from contamination by practices such as closed drilling systems or installation of pit liners. Pit liners will be removed prior to reserve pit reclamation.

Dune ponds will not be used as water sources for development activities.

This portion of the ACEC is an avoidance area for rights-of-way. Some facilities could be allowed if analysis indicates that the management objectives for the area could be met. New linear facilities such as pipelines and powerlines in areas of ongoing development may be laid on the surface, or buried adjacent to access roads or within existing concentration areas containing such lines. Pipelines in the stabilized dune areas will be installed as surface lines to avoid unnecessary disturbance of vegetation. Surface gas pipelines will be monitored by the operators to identify potential hazards to ORV users. Identified hazards will be marked to improve visibility. A recreation user map will be developed in cooperation with oil and gas operators to show the location of aboveground facilities (e.g., pipelines, well production facilities, snow fences, etc.).

Any proposed activity or use that involves surface disturbance will require appropriate engineering design, geotechnical analysis, mitigation planning, etc.

Abandoned pipelines and other unnecessary facilities (e.g., snow fence) in unstabilized dune areas will be removed.

About 10,500 acres are designated open to off-road vehicle travel on the active sand dunes. Off-road vehicle travel on about 5,810 acres of stabilized dune areas is limited to existing roads and trails.

## **Crookston Ranch and Boars Tusk**

*The Crookston Ranch site will be managed to preserve its historic features and for the interpretation of ranching history in the area. About 500 acres of BLM-administered public lands surrounding the site (the area within a 1/2 mile radius) will be managed to preserve the setting of the historic ranch.*

*The Crookston Ranch and surrounding 500-acre area are closed to surface mining activities such as coal mining, and to the placement of related surface facilities.*

*The Crookston Ranch site (about 40 acres) is closed to: 1) surface disturbing activities; 2) mineral material sales; and 3) use of explosives and blasting.*

*The Crookston Ranch area is open to consideration of activities such as fencing, interpretive signs, or transportation barriers to ensure protection of the sites. Facilities are prohibited from being developed on site. Either a protective right-of-way or withdrawal for the Crookston Ranch will be pursued to accomplish this.*

*Fires in the Crookston Ranch area will be immediately suppressed if there is any potential of the structures being burned.*

*Off-road vehicle use is limited to designated roads and trails in this area.*

*The Boars Tusk will be managed to preserve its value as a geologic feature.*

*The Boars Tusk area (about 90 acres) is closed to: 1) surface disturbing activities; 2) mineral material sales; and 3) use of explosives and blasting.*

*The area within a 1/2 mile radius of Boars Tusk (including Boars Tusk) is closed to blasting and explosive charges (about 500 acres).*

*The Boars Tusk area is open to consideration of activities such as fencing, interpretive signs, or transportation barriers to ensure protection of the site. Facilities are prohibited from being developed on the actual geologic feature.*

*Off-road vehicle use is limited to designated roads and trails in this area. The road around the Boars Tusk is closed.*

*The Boars Tusk and about 1,400 acres of BLM-administered public lands in the surrounding area will be managed to retain natural and geologic values. The area is closed to any surface mining activity such as coal mining and any related surface facilities. The area is open to consideration of coal leasing by subsurface mining methods only. Any activities or ancillary facilities related to subsurface mining are prohibited.*

## **ACEC — Oregon Buttes ACEC**

The Oregon Buttes ACEC designation and boundaries will remain unchanged (Map A).

Geophysical Activities: Geophysical vehicles and explosive charges (detonation activities) are prohibited within the ACEC.

Rights-of-Way: The ACEC is managed as a right-of-way exclusion area.

OHV Use: The ACEC is closed to motorized vehicle travel, including those used for seismographic operations.

Recreation: Location of interpretive and directional signs along backcountry byways along the ACEC boundary will be coordinated with state and local governments and other interested parties for Oregon Buttes.

A recreation activity plan and interpretive prospectus will be prepared and implemented for Oregon Buttes.

Leasable Fluid Minerals: The ACEC is closed to consideration of fluid minerals leasing (Map B).

The ACEC is closed to surface disturbing activities that could adversely affect the resource values in the area.

Leasable Solid Minerals: The ACEC is closed to leasable solid minerals exploration and leasing.

Saleable Minerals: The ACEC is closed to mineral material disposals for sand, gravel, or other types of construction or building materials.

Locatable Minerals: A plan of operations will be required for all activities greater than casual use.

Surface Use Activities: The ACEC is closed to surface disturbing activities that could adversely affect the resource values in the area.

VRM: The ACEC will be managed as a VRM Class I area.

See other resource management sections in this document (Implementation, Monitoring, and Evaluation Process; Surface Use Activities; Air Resources; Heritage Resources; Land and Water Resources; Minerals and Alternative Energy Resources; Recreation Resources; Travel, Access, and Realty; Visual Resources; and Special Management Areas and Other Management Areas) for other prescriptions and guidance that apply to management of the Oregon Buttes ACEC.

### **Existing Green River RMP Decisions for the Oregon Buttes ACEC**

Other management objectives and actions for the Oregon Buttes ACEC in the planning area will be implemented consistent with the Green River RMP land use decisions. These are summarized here for easy reference. Maps and tables referenced in this section refer to those in the Green River RMP, not those in the JMH CAP.

*The ACEC designation for 3,450 acres of BLM-administered public lands in the area is retained.*

**MANAGEMENT OBJECTIVES:** *The management objectives for the Oregon Buttes ACEC are to: 1) protect and enhance the scenic integrity as an historic landmark; and 2) protect the significant wildlife values that are found in the area.*

**MANAGEMENT ACTIONS:** *The ACEC is within the boundaries of three Wilderness Study Areas. Wilderness management recommendations and alternatives for this area are addressed in the Rock Springs District Final Wilderness EIS. The prescribed management in this overlap area is more stringent than either the Interim Management Policy or wilderness policy for designated wilderness areas; therefore, it is addressed here.*

*The ACEC is closed to: 1) surface disturbing activities that could adversely affect the resource values in the area; 2) mineral material sales for sand, gravel, or other types of construction or building materials; and 3) motorized vehicle travel, including those utilized for seismograph operations (Table 2 and Table 7).*

*The ACEC is open to consideration of such activities as fencing, interpretive signs, or construction of barriers to ensure protection to the area. Restrictions for raptors and big game parturition areas apply (see Wildlife section and Table 8).*

*Livestock grazing objectives and management practices will be evaluated and, as needed, modified to be consistent with the management objectives for this area. Grazing systems will be designed to achieve desired plant communities and proper functioning condition of watersheds (upland and riparian) (Appendix 9-3).*

### **ACEC — South Pass Historic Landscape ACEC**

The South Pass Historic Landscape ACEC designation and boundaries will remain unchanged (Map A).

Leasable Fluid Minerals: Portions of the South Pass Historic Landscape ACEC (about 36,560 acres in Area 1) are open to fluid minerals leasing consideration with stipulations to protect sensitive resources.

**Lease stipulations for Area 1 in the ACEC are included in Table 5.** The existing stipulations established in the Green River RMP will also still apply to the areas open to leasing. Stipulations include but are not limited to NSO requirements, controlled surfaced use, and timing of development activity.

**As leases expire in the area open to leasing consideration, they will be considered for subsequent lease offerings on a case-by-case basis with lease stipulations to protect sensitive resources (Table 5).**

**Approximately 4,470 acres in the ACEC along the perimeter of Area 3 (Map 11) will be open to leasing consideration with an NSO stipulation. This acreage represents a distance of ½ mile along and within portions of the perimeter boundary of Area 3. Although current technologies suggest that the ½-mile distance is adequate at this time, these NSO areas may be expanded to include additional adjacent acreage provided the planning area resource objectives can be met.**

**The remainder of Area 3 within the South Pass Historic Landscape ACEC (about 7,230 acres) is closed to fluid mineral leasing (Map B).**

**Leases that expire within the portion of Area 3 that is closed to fluid mineral leasing will not be considered for subsequent lease offerings.**

For oil and gas projects, mitigation actions could include conditional requirements for surface disturbance (Table 5); transportation planning before initiating any activity with the objective of managing travel in areas of crucial access; remote control and monitoring of fluid mineral production facilities to limit travel; multiple-well pads to limit surface disturbances; limiting the number of pads per section in sensitive areas; use of directional drilling to minimize disturbance of sensitive areas; clustering or centrally locating ancillary facilities; shrub reclamation (e.g., containerized stock and transplanting) to restore, rehabilitate, or replace habitat; application of geotechnical material for construction; and potential unitization prior to exploration and development (Appendix 3).

**Oil and gas leases within the ACEC that were suspended during preparation of the JMH CAP will be reinstated within 3 years of signing the Record of Decision or in less than 3 years with an approved development plan. If new lease suspensions become necessary, they will be considered on a case-by-case basis (see Appendix 14 in the final EIS).**

**Locatable Minerals: Withdrawal from mineral location will be pursued for the northern elk calving areas in part of the South Pass Historic Landscape ACEC.** Withdrawal from mineral location will also be pursued on South Pass Summit as identified in the Green River RMP (Map 21).

**OHV Use: OHV use within the entire ACEC is limited to designated roads and trails.**

**Surface Use Activities:** Portions of the ACEC will be open to some activities if they will not result in irreversible adverse effects (Table 4 and Map A). Because the ACEC contains a high concentration of sensitive resource values, proposals for all surface activity will be closely examined. Users are charged with showing that resource development activities are needed and will result in acceptable impacts. This action may mean proposing novel methods, systems, and technologies for BLM consideration. APDs and other use applications may require stringent conditions of approval and mitigation measures to address specific issues related to impacts. Surface use proposals and projects (e.g., rangeland improvement, grazing, access, and recreation) can expect to undergo an in-depth, comprehensive review. Field data and observations, cumulative impacts of likely and foreseeable competing uses, understanding of impacts, conditions within the ACEC, and management goals will be employed during the decision-making process (Map 4 and Table 4).

The ACEC lies within implementation Area 1 and Area 3. Wherever sensitive values exist, and particularly in Area 3, the review and approval process will consider mitigation measures commensurate with the anticipated impacts, the resource values of the area, and any substantive comments or information gathered through public participation. Resource projects or proposals can expect a similar in-depth

consideration of mitigation measures to safeguard the affected resource values as described for leasable fluid minerals above.

VRM: The entire ACEC will be managed as a VRM Class II area.

The South Pass Historic Landscape ACEC viewshed will be maintained from approximately 3 miles either side of the Oregon, California, Mormon Pioneer, and Pony Express National Historic Trails. Intrusions within the viewshed area could be allowed provided the results of a visual analysis (as part of a site-specific analysis) indicate they are not visible from the trail routes or that they can be mitigated.

Summary of Actions Unique to the Portion of the ACEC That Is Visible From the Historic Trails (Viewshed): About 25,925 acres surrounding the trails and visible from the trails are closed to surface disturbing activities that could adversely affect the viewshed. **This portion of the ACEC will continue to be managed as a right-of-way exclusion area for any right-of-way action that will adversely affect the viewshed (such as major transmission facilities or high-profile facilities).** An NSO lease stipulation will apply to all oil and gas leases. This area is closed to solid leasable minerals and exploration and to saleable mineral activities (mineral material sales).

Summary of Actions Unique to the Portion of the ACEC That Is Not Visible From the Historic Trails: About 20,000 acres that are shielded by topography and not visible from the trail are open to development activities if they are subordinate to the landform and not visible from the historic trails and provided that environmental analysis indicates that the visual integrity of the area can be maintained. The portion of the ACEC shielded by topography and not visible from the trail is open to consideration of mineral material sales provided that effects to visual, cultural, and other sensitive resource values can be mitigated. Rights-of-way will be managed to avoid this area, and this area will not be considered as a preferred route for linear facilities. Rights-of-way applications will be examined for necessity. Paralleling, consolidation, or rerouting may be necessary to minimize cumulative surface disturbance and to meet transportation planning objectives.

See other resource management sections in this document (Implementation, Monitoring, and Evaluation Process; Surface Use Activities; Air Resources; Heritage Resources; Land and Water Resources; Minerals and Alternative Energy Resources; Recreation Resources; Travel, Access, and Realty; Visual Resources; and Special Management Areas and Other Management Areas) for other prescriptions and guidance that apply to management of the South Pass Historic Landscape ACEC.

### **Existing Green River RMP Decisions for the South Pass Historic Landscape ACEC**

Other management objectives and actions for the South Pass Historic Landscape ACEC in the JMH CAP planning area will be implemented consistent with the Green River RMP land use decisions. These are summarized here for easy reference. Maps and tables referenced in this section refer to those in the Green River RMP, not those in the JMH CAP.

*The 53,780 acres of BLM-administered public lands in the South Pass Historic Landscape area are designated the South Pass Historic Landscape ACEC. The*

*ACEC will be evaluated to determine if it meets the criteria for nomination to the National Register of Historic Places.*

*MANAGEMENT OBJECTIVES: The management objective for the ACEC is to protect the visual and historical integrity of the historic trails and surrounding viewscape.*

*MANAGEMENT ACTIONS: The South Pass Historic Landscape encompasses the viewshed along the Oregon, Mormon Pioneer, California, and Pony Express trails and the Lander Cutoff (about 16.42 miles of trail with a 6-mile wide corridor along the Oregon, Mormon Pioneer, and California trails, and a 2-mile wide corridor along the Lander Cutoff).*

*The landscape is open to consideration for mineral material sales, provided that effects to the visual and cultural resource values could be mitigated.*

*Most of the ACEC is also open to exploration and development of locatable minerals. A plan of operations is required to address measures to mitigate effects to the viewshed before any mining claim activity is allowed. A withdrawal of about 5,260 acres from mineral location and entry under public land laws will be pursued, if necessary.*

*A right-of-way grant for Altamont Pipeline Company will not be issued and this pipeline cannot be built across public lands through the South Pass Historic Landscape Area.*

*The Altamont Pipeline grant will not be issued, resulting in no one-time right-of-way authorization through the South Pass Historic Landscape Area. Future rights-of-way across public lands through this area (for linear utilities, transmission lines, communication sites, roads and highways, etc.), that could adversely affect the values of the historic landscape are prohibited. In addition, the Altamont Pipeline will not be built, the South Pass Historic Landscape Area will be closed to any subsequent right-of-way proposal, that could either replace or substitute for the Altamont Pipeline, or any similar future proposed action across public lands in the area.*

*About 33,700 acres surrounding the trails and visible from the trails are closed to surface disturbing activities that could adversely affect the viewshed. This is an exclusion area for all rights-of-way.*

*Off-road vehicle travel is limited to designated roads and trails in the areas that are visible from the historic trails.*

*About 20,080 acres that are shielded by topography and not visible from the trail are open to development activities if they are subordinate to the landform and not visible from the historic trails, and provided that environmental analysis indicates that the visual integrity of the area can be maintained. Rights-of-way will be managed to avoid this area, and this area will not be considered as a preferred route for linear facilities. Small feeder lines could be allowed if analysis indicates that the visual integrity of the area will not be compromised. Rights-of-way along roads in the area*

could also be allowed if they did not compromise the visual integrity of the area. The prescriptions for the management of historic trails will also apply to this area.

All activities for the ACEC will be managed consistent with the Class II visual resource management classification. All management actions will be designed and located to blend into the natural landscape and to not be visually apparent to the casual viewer. The scenic values of the Highway 28 visual corridor (3 linear miles) will be protected.

### **ACEC — Special Status Plants ACEC**

The Special Status Plants ACEC will not be expanded into the JMH CAP planning area. The ACEC could be expanded in the future if the criteria identified in the Green River RMP are met (more of the four identified special status (candidate) plant species or their essential habitat areas are found on BLM-administered public lands). Should other special status plant species be determined to need the additional management actions as designated for the Special Status Plants ACEC, and they meet the requirements for inclusion, they may be included in the ACEC and managed under the same prescriptions as described in the Green River RMP for the ACEC.

Known locations of special status plant species would be open to consideration for mineral leasing with NSO stipulations **unless the special status plant species occur within Area 3 which is closed to future oil and gas leasing.**

See other resource management sections in this document (Implementation, Monitoring, and Evaluation Process; Surface Use Activities; Air Resources; Heritage Resources; Land and Water Resources; Minerals and Alternative Energy Resources; Recreation Resources; Travel, Access, and Realty; Visual Resources; and Special Management Areas and Other Management Areas) for other prescriptions and guidance that apply to management of the Special Status Plant Species ACEC.

### **Existing Green River RMP Decisions for Special Status Plant ACEC Management**

Should the Special Status Plant ACEC be expanded into the JMH CAP planning area in the future, the management objectives and actions for the Special Status Plant ACEC Management in the planning area will be implemented consistent with the Green River RMP land use decisions. These are summarized here for easy reference. Maps and tables referenced in this section refer to those in the Green River RMP, not those in the JMH CAP.

*MANAGEMENT OBJECTIVES: The management objectives for special status (candidate) plant species are to: 1) prevent destruction or loss of special status (candidate) plant communities and important habitat; 2) provide opportunities for enhancing or expanding habitat; and 3) provide sufficient protection to prevent listing as threatened and endangered species.*

*MANAGEMENT ACTIONS: The BLM-administered public land areas occupied by four special status (candidate) plant species are included in the ACEC designation (making up about 58 sites involving about 900 acres of BLM-administered public lands). Management and protection to actual plant locations is provided for Arabis pusilla, Astragalus proimanthus, Descurainia torulosa, and Thelesperma pubescens.*



The ACEC is closed to: 1) direct surface disturbing activities or any disrupting activities (e.g., off-site dust, air pollutants, etc.) that could adversely affect the special status plant species and their habitat; 2) the location of mining claims (withdrawal from mineral location and entry under the land laws will be pursued); 3) surface occupancy and surface disturbing activities (such as leasable mineral exploration and development activities or construction of long-term placement of facilities or structures); 4) mineral material sales; and 5) the use of explosives and blasting.

Known locations of special status (candidate) plant species communities are closed to off-road vehicle travel. Off-road vehicle travel in the remainder of the ACEC is limited to designated roads and trails.

While ensuring the maximum protection to the plant species, mineral lease parcels will be designed prior to lease issuance, with the intent of providing access to mineral resources, where possible.

Searches will be conducted to identify any additional areas where special status (candidate) plant species are located.

Searches for special status (candidate) plant species will be required on potential habitat areas prior to implementing surface disturbing activities or projects.

Special status (candidate) plant species population areas are closed to any surface disturbing fire suppression activities unless necessary for species survival. The use of fire suppression ground vehicles will be consistent with ORV designations in these areas.

Livestock grazing objectives and management practices will be evaluated and, as needed, modified to be consistent with the management objectives for this area. Grazing systems will be designed to achieve desired plant communities and proper functioning condition of watersheds (upland and riparian) (Appendix 9-3).

Wild horse management in the area will be consistent with wild horse herd management plans and management objectives for this area. No wild horse traps will be constructed within this area.

BLM will attempt to acquire approximately 1,900 acres on Pine Butte to enhance management for the mountain tansymustard (*Descurainia torulosa*) (Appendix 8-3).

Activities that meet or that do not conflict with the objectives for the ACEC could be allowed.

### **ACEC — Steamboat Mountain ACEC**

**Steamboat Mountain ACEC will be expanded to include the highest concentration and overlap of unique habitat features, natural systems, and cultural values.** These include a portion of the sand dunes stabilized by the basin big sagebrush/lemon scurfpea plant community, the Native American respected places of Indian Gap, and portions of the Indian Gap Trail (Map A). The basin big sagebrush/lemon scurfpea plant community area will be closed to surface disturbing activities (see exception for right-of-way in the Rights-of-Way paragraph of this

ACEC section) unless the activity is beneficial to the resource and meets resource management objectives.

**Portions of the ACEC will be closed to some activities if these activities will result in irreversible adverse effects (Table 4 and Map 4). Portions of crucial habitats and other areas of sensitive or important resources will be open to further consideration for various multiple-use activities as long as crucial habitats and other sensitive or important resources will be protected from irreversible adverse effects and the objectives for the ACEC can be met.**

Heritage/Cultural: See the Heritage Resources Management section of this document for management of heritage and cultural resources that apply to the ACEC.

Indian Gap Trail: The Indian Gap Trail will be researched, and a trail interpretive plan will be developed.

Objectives for management of the Indian Gap Trail: The objective is to continue to investigate and interpret the historical record associated with the Indian Gap Trail and to document, preserve, and protect the physical integrity of extant portions of the Trail.

**A portion of Indian Gap will be closed to surface disturbing and disruptive activities. The remainder of Indian Gap will be open to consideration of surface disturbing and disruptive activities with mitigation to protect resource values (Table 4 and Map 4).**

Leasable Fluid Minerals: The ACEC lies within Area 2 and Area 3.

**Area 2 (about 4,105 acres) is open to leasing considering such factors as operational need, resource recovery, geology, and ability to mitigate impacts and with stipulations applied to protect sensitive resources in Area 2 (Map B and Map A).** BLM may request potential lessees to share data (such as reservoir data or geologic data) or plans related to the development of the potential oil and gas resource prior to leasing; sharing of these data is voluntary. The information will be used to ensure that impacts resulting from development remain within the acceptable level of impacts analyzed (see Appendix 2).

**As leases expire within Area 2, they will be considered for subsequent lease offerings on a case-by-case basis based on such factors as operational need, resource recovery, geology, and ability to mitigate impacts.**

**Stipulations identified in Table 5 and those identified through monitoring as described in the implementation, monitoring, and evaluation management strategy (Appendix 2) will be applied to new leases as deemed necessary.** Stipulations can include but are not limited to NSO and CSU requirements and timing of development activity (Map 4).

**Approximately 15,855 acres along the perimeter of Area 3 are available for leasing with an NSO stipulation. This acreage represents a distance of ½ mile along and within portions of the perimeter boundary of Area 3 (Map 11).**

**Although current technologies suggest that the 1/2-mile distance is adequate at this time, this NSO area may be expanded to include additional adjacent acreage provided the planning area resource objectives can be met.**

**The remainder of Area 3 (about 28,250 acres) within the Steamboat Mountain ACEC is closed to future oil and gas leasing (Map 11 and Appendix 2).**

**As leases expire in the 28,250 acres of Area 3 that are closed to future leasing, they will not be considered for subsequent lease offerings.**

For oil and gas projects, mitigation actions could include surface disturbance conditional requirements (Table 5); transportation planning before initiating any activity with the objective of managing travel in areas of crucial access; remote control and monitoring of fluid mineral production facilities to limit travel; multiple-well pads to limit surface disturbances; limiting the number of pads per section in sensitive areas; use of directional drilling to minimize disturbance of sensitive areas; clustering or centrally locating ancillary facilities; shrub reclamation (e.g., containerized stock and transplanting) to restore, rehabilitate, or replace habitat; application of geotechnical material for construction; and potential unitization prior to exploration and development (Appendix 3).

Leasable Solid Minerals: The portions of Steamboat Mountain ACEC within the coal occurrence and development potential area will be open to leasable solid minerals exploration and leasing by subsurface mining methods only and with controls on surface facilities (Map 20).

Those portions outside the coal occurrence and development potential area will be closed to leasable solid minerals exploration and leasing (Map 19 and Map 20).

Saleable Minerals: **The lava portion of the ACEC will be closed to mineral material disposals. The remainder of the ACEC will be open only when required to meet other objectives within the JMH CAP planning area. The objectives for the Steamboat Mountain ACEC must also be met (Map 12 and Table 9).** Sale of materials in conjunction with project development such as road construction or upgrading of existing roads could be considered if it is in accordance with transportation planning. These actions will be included in the development of travel management plans and overall transportation planning. The area is not open for such things as large material sites or community pits. Some maintenance and construction of facilities may become necessary to meet the ACEC objectives, including providing material for roads in conformance with the transportation plan and watershed stabilization.

Locatable Minerals: **Withdrawal from mineral location will be pursued in the potential diamond development area of the Steamboat Mountain ACEC (Map 21 and Table 8).**

OHV Use: OHV use (motorized vehicles) will be limited to designated roads and trails.

Recreation: Location of interpretive and directional signs along backcountry byways will be coordinated with state and local governments and other interested parties for Steamboat Mountain and the ACEC.

**A recreation activity plan and interpretive prospectus will be prepared and implemented for Steamboat Mountain.**

Rights-of-Way: The ACEC will be managed as a right-of-way avoidance area. The basin big sagebrush/lemon scurfpea plant community area will remain an avoidance area for rights-of-way. Future linear projects and the associated surface disturbance will be analyzed and, if found to be necessary and acceptable, will follow an existing right-of-way and be kept to the minimum disturbance necessary with appropriate mitigation. Rights-of-way applications will be examined for necessity. Paralleling, consolidation, or rerouting may be necessary to minimize cumulative surface disturbance and to meet transportation planning objectives.

Communication Sites: Communication sites are prohibited in Steamboat Mountain ACEC.

Surface Use Activities: Because the ACEC contains a high concentration of sensitive resource values, proposals for all surface activity will be closely examined. Users requiring approval are charged with showing that resource development activities are needed and will result in acceptable impacts. This action may mean proposing novel methods, systems, and technologies for BLM consideration. APDs and other use applications may require stringent conditions-of-approval and mitigation measures to address specific issues related to impacts. Other surface use proposals and projects (e.g., rangeland improvement, grazing, access, and recreation) can expect to undergo an in-depth, comprehensive review. Field data and observations, cumulative impacts of likely and foreseeable competing uses, understanding of impacts, conditions within the ACEC, and management goals will be employed during the decision-making process (Table 4 and Map 4).

Wherever sensitive values exist, the review and approval process will consider mitigation measures commensurate with the anticipated impacts, the resource values of the area, and any substantive comments or information gathered through public participation. Resource projects or proposals can expect a similar in-depth consideration of mitigation measures to safeguard the affected resource values as described for leasable fluid minerals above.

Vegetation Management: **Some basin big sagebrush/lemon scurfpea areas along the base of Steamboat Mountain will be provided protection by controlling surface use (closed or limited) or by implementing other intense mitigation to preserve the character of vegetation communities (Map 6). Full fire suppression for basin big sagebrush/lemon scurfpea plant communities will be applied.**

VRM: **The entire ACEC will be managed as a VRM Class II area.**

See other resource management sections in this document (Implementation, Monitoring, and Evaluation Process; Surface Use Activities; Air Resources; Heritage Resources; Land and Water Resources; Minerals and Alternative Energy Resources;

Recreation Resources; Travel, Access, and Realty; Visual Resources; and Special Management Areas and Other Management Areas) for other prescriptions and guidance that apply to management of the Steamboat Mountain ACEC.

### **Existing Green River RMP Decisions for the Steamboat Mountain ACEC Management**

Other management objectives and actions for the Steamboat Mountain ACEC in the planning area will be implemented consistent with the land use decisions of the Green River RMP. These are summarized here for easy reference. Maps and Tables referenced in this section refer to those in the Green River RMP, not those in the JMH CAP.

*The Steamboat Mountain area (about 43,270 acres of BLM-administered public lands) is designated an ACEC.*

*MANAGEMENT OBJECTIVES: The management objectives for this ACEC are to: 1) enhance and maintain the water quality, vegetation, soil, and wildlife resources to ensure biological diversity and a healthy ecosystem; 2) maintain 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; and 3) provide suitable habitat to maintain the continued existence of the Steamboat elk herd and other big game populations.*

*MANAGEMENT ACTIONS: All activities will be designed to place priority consideration on elk habitat over conflicting land uses to ensure continued elk use of the area. Steamboat Rim and the base of the rim will be managed to protect big game habitat, vegetation communities, and visual and recreation resources.*

*Leasing and development of federal coal in the area will be considered for subsurface mining methods only. Development or mine plans will be required to ensure adequate measures are taken to protect and maintain the elk herd and habitat. The location of surface facilities relating to subsurface mining will be considered on a case-by-case basis. Approximately 9,810 acres of federal coal lands with development potential occur within the Steamboat Mountain ACEC.*

*The ACEC is open to actions that will enhance the management objectives for the area. Actions that may be considered include such things such as fencing, interpretive signs, or construction of vehicle barriers.*

*Seasonal restrictions will be applied to land and resource uses as needed, to protect elk and deer during severe winter conditions and during birthing periods.*

*The ACEC is an avoidance area for rights-of-way. Communication sites are prohibited in the ACEC. Linear rights-of-way and geophysical activities are allowed if impacts to the elk and the unique habitats can be mitigated (Table 2).*

*Motorized vehicle travel is limited to designated roads and trails. Seasonal road and trail closures may be implemented as necessary to protect elk and deer during critical winter and birthing periods. Transportation planning will be completed to identify the designated roads and trails. The May 10-July 1 seasonal closure for*

*vehicular travel in the area remains in effect to protect big game calving and fawning activity.*

*All management actions will be designed and located to blend into the natural landscape and to not be visually apparent to the casual viewer.*

*The unique geological and ecological features in the ACEC will be protected by limiting or prohibiting intrusions and facilities, and by providing public interpretation of these features.*

*Vegetation management will be designed to maintain, preserve, or enhance biological diversity while providing big game forage and cover requirements. Fire management activities will be designed to meet these objectives. Management of conifer communities will be limited to activities designed to control insects and disease. Dead standing trees will be managed under the "Animal Inn" program to help maintain biological diversity. Reseeding and reforestation within the ACEC will be done with native species. Shrub species may be included in all seed mixes.*

*Acquisitions will be pursued to improve manageability of the ACEC (see Lands and Realty Management section and Appendix 8-3).*

*Livestock grazing objectives and management practices will be evaluated and, as needed, modified to be consistent with the management objectives for the ACEC. Grazing systems will be designed to achieve desired plant communities and proper functioning condition of watersheds (upland and riparian) (Appendix 9-3).*

*Any additional forage that becomes available in the ACEC will be allocated to wildlife use.*

*Management of an area where crucial elk winter range and parturition area overlap will be addressed in the JMH CAP for the Steamboat and Greater Sand Dunes areas. Progressive or sequential timing of development (disturbance of only one or two small areas at any given time) may be required. The vegetation and habitat management objectives described for the Steamboat ACEC will apply. These objectives are to: enhance and maintain the water quality, vegetation, soil, and wildlife resources to ensure biological diversity and a healthy ecosystem; maintain 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; and provide suitable habitat to maintain the continued existence of the Steamboat elk herd and other big game populations. This important habitat overlap area is within the elk herd unit (about 27,000 acres) but lies outside and adjacent to the ACEC.*

### **ACEC — White Mountain Petroglyphs ACEC**

The White Mountain Petroglyphs ACEC designation and boundaries will remain unchanged (Map A).

OHV Use: The ACEC is closed to motorized vehicle (OHV) use outside of identified access and designated parking areas.

**Leasable Fluid Minerals: The ACEC, which is within Area 3, is closed to fluid minerals leasing consideration (Map B).**

Leasable Solid Minerals: White Mountain Petroglyphs Vista (the area within a ½-mile radius of the rock art site) is closed to coal and sodium exploration.

Locatable Minerals: The ACEC is closed to the location of mining claims and entry under the land laws (the existing withdrawal will be retained).

Saleable Minerals: The ACEC is closed to mineral material sales for sand, gravel, or other types of construction or building materials.

Surface Use Activities: The ACEC is closed to surface disturbing activities that could adversely affect resource values in the area, as well as to explosives and blasting.

Recreation: A recreation project plan and interpretive prospectus will be prepared and implemented.

Rights-of-Way: The ACEC is managed as a right-of-way exclusion area.

VRM: The ACEC is a VRM Class II area.

See other resource management sections in this document (Implementation, Monitoring, and Evaluation Process; Surface Use Activities; Air Resources; Heritage Resources; Land and Water Resources; Minerals and Alternative Energy Resources; Recreation Resources; Travel, Access, and Realty; Visual Resources; and Special Management Areas and Other Management Areas) for other prescriptions and guidance that apply to management of the White Mountain Petroglyphs ACEC.

### **Existing Green River RMP Decisions for the White Mountain Petroglyphs ACEC**

Other management objectives and actions for the White Mountain Petroglyphs ACEC in the planning area will be implemented consistent with the land use decisions of the Green River RMP. These are summarized here for easy reference. Maps and Tables referenced in this section refer to those in the Green River RMP, not those in the JMH CAP.

*The ACEC designation for the 20 acres of BLM-administered public lands in the White Mountain Petroglyphs area is retained.*

*MANAGEMENT OBJECTIVES: The management objectives of the White Mountain Petroglyphs ACEC are to: 1) protect cultural resource values from degradation; and 2) provide for wildlife and scenic values, and Native American concerns.*

*MANAGEMENT ACTIONS: The ACEC is open to consideration of such activities as fencing, interpretive signs, or construction or placement of barriers to ensure protection of the site.*

*The ACEC is an exclusion area for: 1) surface disturbing activities that could adversely affect the resource values in the area; 2) the location of mining claims and entry under the land laws (the existing withdrawal will be retained); 3) mineral*

material sales for sand, gravel, or other types of construction or building materials; 4) the use of explosives and blasting; and 5) rights-of-way.

The ACEC will be managed consistent with the Class II visual resource management classification.

Vibroseis activities are prohibited within 300 feet of the rock art site.

Lands visible within 1/2 mile radius of the rock art site (vista) will be an avoidance area and are open for consideration of such activities as fencing, interpretive signs, or construction and placement of trail and off-road vehicle barriers to ensure protection to the rock art. Most surface disturbing activities visible within the vista are prohibited. Some activities within 1/2 mile of the rock art but not visible from the panels will be allowed, if they do not affect the rock art site.

The ACEC is closed to off-road vehicle travel including vehicles used for geophysical exploration activities and to the use of fire retardant chemicals containing dyes.

Off-road vehicle travel, including vehicles used for geophysical exploration and fire suppression activities, within that part of the vista that lies outside of the ACEC is limited to designated roads and trails.

Human activity, recreation use, etc., is restricted seasonally (usually from February 1 through July 31) to protect nesting raptors.

Livestock grazing objectives will be evaluated and, as needed, modified to be consistent with the management objectives for this area. Grazing systems will be designed to achieve desired plant communities and proper functioning condition of watersheds (upland and riparian).

### **West Sand Dunes Archaeological District**

The paleosol deposition area will be designated a special management area called the West Sand Dunes Archaeological District (18,650 acres of BLM-administered public lands) to be managed for scientific study, education, and interpretation (Map A).

**Heritage/Cultural:** Heritage resource inventories in this area will be required, including analysis of subsurface deposits to ascertain whether they include important archaeological materials.

Site locations will be kept confidential, and surface disturbance will be limited in the vicinity.

Subsurface inventory will be required by remote sensing techniques, hand-dug test excavations, or mechanical testing prior to issuing any surface disturbing authorizations in the West Sand Dunes Archaeological District. The testing strategy should be appropriate to meet the goal of finding buried paleosols and evaluating their potential association with archaeological materials.

Subsurface testing will require an approved testing plan and BLM-SHPO consultation.



**Mitigation may include research-oriented data recovery excavation.**

The Finley site will be nominated to the NRHP under the Register's History of American Archaeology context and under the Earliest Americans context.

The Krmopotich site will be nominated to the NRHP under the Register's Earliest Americans context.

**Leasable Fluid Minerals: Approximately 12,300 acres in Area 1 (Map A and Map B) will be open to consideration for fluid minerals leasing, with requirements to protect sensitive resources.**

**Lease stipulations for Area 1 are included in Table 5.** They include, but are not limited to, NSO requirements, controlled surfaced use, and timing of development activity.

**As leases expire in the area open to leasing consideration, they will be considered for subsequent lease offerings case-by-case, with lease stipulations to protect sensitive resources (Table 5).**

**Approximately 2,100 acres along the perimeter of Area 3 (Map 11) will be open to leasing consideration with an NSO stipulation. This acreage represents a distance of ½ mile along and within portions of the Area 3 perimeter boundary. Although current technologies suggest that the ½-mile distance is adequate at this time, these NSO areas may be expanded to include additional adjacent acreage provided the planning area resource objectives can be met.**

**Approximately 4,250 acres in Area 3 will be closed to fluid mineral leasing (Map A and Map B).**

**Leases that expire within the portion of Area 3 that is closed to fluid mineral leasing will not be considered for subsequent lease offerings.**

For oil and gas projects, mitigation actions could include conditional requirements for surface disturbance (Table 5). See the Heritage/Cultural discussion in this section.

**Oil and gas leases in the area that were suspended during preparation of the JMH CAP will be reinstated within three years of signing the Record of Decision, or in less than three years with an approved development plan. Should new lease suspensions become necessary, they will be considered case-by-case (see Appendix 14 in the final EIS).**

**OHV Use:** OHV use is limited to existing roads and trails.

**Rights-of-Way: The area will be managed as a right-of-way avoidance area.**

See other resource management sections in this document (Implementation, Monitoring, and Evaluation Process; Surface Use Activities; Air Resources; Heritage Resources; Land and Water Resources; Minerals and Alternative Energy Resources; Recreation Resources; Travel, Access, and Realty; Visual Resources; and Special

Management Areas and Other Management Areas) for other prescriptions and guidance that apply to management of the West Sand Dunes Archaeological District.

### **Existing Green River RMP Decisions for the West Sand Dunes Archaeological District**

Other management objectives and actions for the West Sand Dunes Archaeological District in the planning area will be implemented consistent with the land use decisions of the Green River RMP. These are summarized here for easy reference. Maps and Tables referenced in this section refer to those in the Green River RMP, not those in the JMH CAP.

*MANAGEMENT OBJECTIVES: The objectives for management of the cultural and paleontological resources are to: 1) expand the opportunities for scientific study, and educational and interpretive uses of cultural and paleontological resources; 2) protect and preserve important cultural and paleontological resources and/or their historic record for future generations; and 3) resolve conflicts between cultural/paleontological resources and other resource uses. Of particular concern are significant sites of historic or prehistoric human habitation, sites demonstrating unique ethnic affiliation, places having traditional cultural significance to Native Americans, and vertebrate fossil localities.*

*MANAGEMENT ACTIONS: Sites eligible for or listed on the National Register of Historic Places (NRHP) will be managed for their local, regional, and national significance, under the guidelines of the National Historic Preservation Act (especially sections 106 and 110) and the Archeological Resources Protection Act (ARPA). These sites will be managed to ensure against adverse effects through proper mitigation, if disturbance or destruction is not avoidable. Management prescriptions for sites that are not eligible for the NRHP will be determined on a case-by-case basis according to values involved.*

*The Eden-Farson, Finley, Krmopotich, and Morgan archaeological sites, and similar sites identified in the future, will be managed to protect their important scientific values. No public interpretive efforts will be initiated at these sites. These sites will be managed according to Sections 106 and 110 of the NHPA and their locations will be kept confidential pursuant to NHPA regulations. Periodic law enforcement patrol and other efforts will be instituted to ensure that the ARPA is enforced and that these sites are protected.*

*All known human burial sites will be protected regardless of their ethnic affiliation. Management of Native American burial sites will take into account recommendations from appropriate tribes. Data recovery will not be the preferred method for mitigation of adverse effects to any burial location.*

*Known burial areas will be closed to surface disturbing activities that could adversely affect them. Consultation with appropriate Native American tribes concerning areas of concern to them for traditional cultural purposes will be in accordance with the American Indian Religious Freedom Act and BLM Manual 8160-1 Handbook. Native American consultation would occur within the context of specific development proposals, but will also be an ongoing process between BLM and affected Indian tribes and traditional cultural leaders.*

*Interpretive materials will be prepared describing the cultural resources of the area, their significance, and BLM's responsibility to manage them. Historical aspects of BLM programs will be interpreted as appropriate for public appreciation.*

*Exchanges for acquisition and cooperative agreements will be pursued to enhance management of cultural resources.*

### **3.14.2.2 Other Management Areas**

#### **Red Desert Watershed Management Area**

The Red Desert Watershed (97,935 acres in JMH CAP planning area) contains extensive cultural resources, portions of six wilderness study areas, portions of the Oregon Buttes ACEC, Joe Hay Rim, wildlife habitat including nesting and birthing areas, and some special status plant species populations. Surface disturbing or disruptive activities such as road or reservoir construction would be considered with intense mitigation. The Pinnacles Geographic Area, including the Pinnacles Geographic feature, is within the Red Desert Management Area (Map A).

Leasable Fluid Minerals: Portions of the Red Desert Watershed Management Area (about 7,280 acres in Area 1) are open to fluid minerals leasing consideration with stipulations to protect sensitive resources (Map A).

**Lease stipulations for Area 1 in the Red Desert Watershed are included in Table 5 and Map 11.** Stipulations will be applied to leases to protect sensitive resources and could include but are not limited to NSO requirements, controlled surfaced use, and timing of development activity. New stipulations may be identified through monitoring as described in the implementation, monitoring, and evaluation management strategy (Appendix 2) and would be applied to new leases as deemed necessary.

**As leases expire in Area 1, they will be considered for subsequent lease offerings on a case-by-case basis with lease stipulations to protect sensitive resources (Table 5).**

**Area 2 (about 39,550 acres) is open to leasing considering such factors as operational need, resource recovery, geology, and ability to mitigate impacts and with stipulations applied to protect sensitive resources in Area 2 (Map A and Map B).** BLM may request potential lessees to share data (such as reservoir data or geologic data) or plans related to the development of the potential oil and gas resource prior to leasing; sharing of these data is voluntary. The information will be used to ensure that impacts resulting from development interest would remain within the acceptable level of impacts analyzed (Appendix 2).

**Stipulations identified in Table 5 and those identified through monitoring as described in the implementation, monitoring, and evaluation management strategy (Appendix 2) will be applied to new leases as deemed necessary.** Stipulations could include but are not limited to NSO and CSU requirements and timing of development activity (Map 4).

**As leases expire within Area 2, they will be considered for subsequent lease offerings on a case-by-case basis based upon such factors as operational need, resource recovery, geology, and ability to mitigate impacts.**

**Approximately 8,510 acres along the perimeter of Area 3 are available for leasing with a No Surface Occupancy stipulation. This acreage represents a distance of ½ mile along and within portions of the perimeter boundary of area 3 (Map 11). Although current technologies suggest that the ½-mile distance is adequate at this time, this NSO area may be expanded to include additional adjacent acreage provided the planning area resource objectives can be met.**

**Approximately 42,595 acres will be closed to fluid mineral leasing (Area 3, Map B). Leases that expire in the area identified as closed to fluid mineral leasing will not be considered for subsequent lease offerings.**

OHV Use: OHV use will be limited to designated roads and trails except for those areas identified as closed (WSA, Pinnacles Geologic Feature) (Table 11).

Surface Use Activities: **Portions of the area will be open to activities if they will not result in irreversible adverse effects (see Table 4).**

Wherever sensitive values exist, the review and approval process will consider mitigation measures commensurate with the anticipated impacts, the resource values of the area, and any substantive comments or information gathered through public participation. Other resource projects or proposals can expect a similar in-depth consideration of mitigation measures to safeguard the affected resource values as described in the fluid minerals section.

VRM: **The area will be managed consistent with the Class I, Class II, and Class III visual resource management classifications. The portions of the Red Desert Watershed Management Area not managed as VRM Class I or II will be managed as a VRM Class III area (Map 16).** VRM Class I objectives are to maintain a landscape setting that appears unaltered by humans. The VRM Class II objective is to retain the existing character of the landscape. Facilities (either in place or new), including linear rights-of-way, etc., would be screened, painted, or designed to blend with the surrounding landscape. VRM Class III objectives are to design proposed alterations so as to partially retain the existing character of the landscape.

### **Pinnacles Geographic Area**

The Pinnacles Geographic Area (8,950 acres) will continue to be managed as part of the Red Desert Watershed Management Area.

Leasable Fluid Minerals: **The Pinnacles Geographic Area is entirely within area 3 which is closed to fluid minerals leasing consideration (Map B). A portion along the perimeter of the Pinnacles Geographic Area (Map 11) will be considered for leasing with an NSO stipulation (approximately 1,200 acres).**

### **Pinnacles Geologic Feature**

The Pinnacles Geologic Feature (approximately 1,345 acres of BLM-administered public land) will continue to be managed as part of the Red Desert Watershed Management Area. The Pinnacles Geologic Feature is entirely within the Pinnacles

Geographic Area and contains the actual Pinnacle monoliths, identified as the Pinnacles Proper (about 600 acres) (Map 4).

**Geophysical Activities: Geophysical exploration vehicles and detonation activities will be prohibited within ½ mile of the Pinnacles Geologic Feature.**

**Leasable Fluid Minerals: The area will be closed to fluid minerals leasing consideration. The Pinnacles Geographic Area is entirely within area 3 which is closed to fluid minerals leasing consideration (Map B).**

**Saleable Minerals: The area will be closed to mineral material sales.**

**Locatable Minerals: A withdrawal from mineral location will be pursued.**

**OHV Use: The area will be closed to OHV use.**

**Rights-of-Way: The area will be managed as a right-of-way exclusion area.**

**VRM: The area will be managed as a VRM Class II area.**

See other resource management sections in this document (Implementation, Monitoring, and Evaluation Process; Surface Use Activities; Air Resources; Heritage Resources; Land and Water Resources; Minerals and Alternative Energy Resources; Recreation Resources; Travel, Access, and Realty; Visual Resources; and Special Management Areas and Other Management Areas) for other prescriptions and guidance that apply to management of the Red Desert Watershed.

### **Existing Green River RMP Decisions for the Red Desert Watershed Management Area**

Other management objectives and actions for the Red Desert Watershed Management Area in the JMH CAP planning area will be implemented consistent with the land use decisions of the Green River RMP. These are summarized here for easy reference. Maps and Tables referenced in this section refer to those in the Green River RMP, not those in the JMH CAP.

*The Red Desert Watershed area was not found to contain values that meet the relevance and importance criteria; therefore, it is not recommended for ACEC designation.*

*MANAGEMENT OBJECTIVE: The management objective for the Red Desert Watershed Area is to manage for all resource values in the Red Desert area with emphasis on protection of visual resources, watershed values, and wildlife resources and to provide large areas of unobstructed views for enjoyment of scenic qualities. This will be accomplished through facility design and placement and using topography to shield activities, using neutral colors so facilities blend with the landscape, identification of backcountry byways, and providing viewing points for the public.*

*The Red Desert Watershed Area includes BLM-administered public lands north of the checkerboard boundary within the Great Divide Basin.*

*A portion of the Red Desert Watershed Area encompasses portions of six wilderness study areas (Alkali Draw, Alkali Basin-East Sand Dunes, Honeycomb Buttes, Oregon Buttes, Red Lake, and South Pinnacles). Wilderness management recommendations and alternatives are addressed in the Rock Springs District Wilderness Final EIS.*

*Portions of the Oregon Buttes ACEC and some special status plant species are located within the Red Desert Watershed Area. Specific management prescriptions for those areas may be found in their respective sections of this document.*

*MANAGEMENT ACTIONS: The Red Desert Watershed Area will be managed to ensure developments and activities conform with the concepts of open space. Site specific visual resource reviews (inventories) will be conducted prior to allowing activities that may affect these values.*

*Surface disturbing activities, mineral exploration and development, and seismic activities will continue where acceptable subject to the management guidelines provided in the Minerals section. Approximately 2,500 acres are closed to surface disturbing activities to protect special status plant species and to protect relevant and important resource values in the Oregon Buttes ACEC).*

*Restrictions for protection of raptors, big game crucial winter range, and big game calving/fawning areas will apply (see Wildlife section and Table 8). Exceptions to these restrictions may be approved if conditions and criteria described in Appendix 7 apply.*

*Approximately 2,860 acres of Federal coal lands with development potential in the area are open to consideration of coal leasing and development (see Coal Decisions). Most of the area is open to consideration of saleable minerals activities and mineral location.*

*The coal and stock driveway withdrawals will be revoked.*

*The preferred route for rights-of-way in the management area is the east-west window described in the Lands and Realty Management section. Other areas will be considered if in conformance with wildlife, watershed, cultural, and scenic resource management objectives. Overhead powerlines are prohibited in the area.*

*Approximately 95,580 acres are closed to off-road vehicle travel, and the remainder of the area is limited to designated roads and trails. Access for motorized vehicle travel will be managed to provide access opportunities in conformance with other resource objective.*

*Recreational activities, opportunities, and uses will be maintained. A Tri-Territory Loop and Red Desert backcountry byway will be established.*

*Livestock grazing objectives will be evaluated and, as needed, modified to be consistent with the management objectives for this area. Grazing systems will be designed to achieve desired plant communities and proper functioning condition of watersheds (upland and riparian).*

*Wild horse management in the area will be consistent with the Great Divide Basin Wild Horse Herd Management Plan and the management objectives for the area.*

*Vegetation resources in the area will be managed for continued livestock grazing, and wild horse and wildlife uses in accordance with the management objectives for those resource values.*

### **Steamboat Mountain Management Area**

**The area is not designated as an ACEC, but will be maintained as a geographic management unit.** The Steamboat Mountain Management Area (88,290 acres of BLM-administered public lands) is a geographic area which includes the Steamboat Mountain ACEC including the Steamboat Mountain ACEC expansion, and additional area containing other important Native American cultural values, Indian Gap, important watershed values, unique wildlife habitat features, and crucial and overlapping big game habitat. Specific management prescriptions for the Steamboat Mountain ACEC may be found in that section of this document.

Heritage/Cultural: The combination of sensitive resources in the Indian Gap area can best be maintained by use of intense limitation of surface disturbing or disruptive activities. Proposals will be considered on a site specific basis as outlined in Appendix 2.

See also the Heritage Resources Management section of this document for management of heritage and cultural resources that apply to the area.

Leasable Fluid Minerals: The Management Area lies within areas 2 and 3 (Map B).

**Area 2 (about 10,965 acres) is open to leasing considering such factors as operational need, resource recovery, geology, and ability to mitigate impacts and with stipulations applied to protect sensitive resources in Area 2 (Map A).** BLM may request potential lessees to share data (such as reservoir data or geologic data) or plans related to the development of the potential oil and gas resource prior to leasing; sharing of these data is voluntary. The information will be used to ensure that impacts resulting from development would remain within the acceptable level of impacts analyzed (Appendix 2).

**As leases expire in Area 2, they will be considered for subsequent lease offerings on a case-by-case basis, based on such factors as operational need, resource recovery, geology, and ability to mitigate impacts.**

**Stipulations identified in Table 5 and those identified through monitoring as described in the implementation, monitoring, and evaluation management strategy (Appendix 2) will be applied to new leases as deemed necessary.** Stipulations could include, but are not limited to, NSO and CSU requirements and timing of development activity (Map 4).

**Approximately 5,810 acres along the perimeter of Area 3 are available for leasing with a No Surface Occupancy stipulation. This acreage represents a distance of ½ mile along and within portions of the perimeter boundary of Area 3 (Map 11). Although current technologies suggest that the ½-mile distance is**

**adequate at this time, this NSO area may be expanded to include additional adjacent acreage provided the planning area resource objectives can be met.**

**The remainder of Area 3 (about 71,515 acres) within the Steamboat Mountain Management Area is closed to future oil and gas leasing (Map 11, Appendix 2).**

**As leases expire in the 71,515 acres of Area 3 that is closed to future leasing, they will not be considered for subsequent lease offerings.**

For oil and gas projects, mitigation actions could include surface disturbance conditional requirements (Table 5), transportation planning before initiating any activity with the objective of managing travel in areas of crucial access, remote control and monitoring of fluid mineral production facilities to limit travel, multiple-well pads to limit surface disturbances, limiting number of pads per section in sensitive areas, use of directional drilling to minimize disturbance of sensitive areas, clustering or centrally locating ancillary facilities, shrub reclamation (e.g., containerized stock, transplanting) to restore, rehabilitate or replace habitat, application of geotechnical material for construction, and potential unitization prior to exploration and development (Appendix 3).

Leasable Solid Minerals: The portions of Steamboat Mountain Management Area within the coal occurrence and development potential area will be open to leasable solid minerals exploration and leasing by subsurface mining methods only, and with controls on surface facilities (Map 20).

Portions outside the coal occurrence and development potential area will be closed to leasable solid minerals exploration and leasing (Map 19 and Map 20).

Saleable Minerals: **The Steamboat Mountain Management Area will be open only when necessary to meet other objectives within the JMH CAP planning area. The objectives for Steamboat Mountain Management Area must also be met.** Sale of materials in conjunction with project development such as road construction or upgrading of existing roads could be considered if in accordance with transportation planning. These actions would be included in the development of travel management plans and overall transportation planning. The area is not open for such things as large material sites or community pits. Some maintenance and construction of facilities may become necessary to meet the management area objectives, including providing material for roads in conformance with the transportation plan, and for watershed stabilization.

Locatable Minerals: **Withdrawal from mineral location will be pursued in the potential diamond development area of the Steamboat Mountain ACEC (Map 21 and Table 8).**

OHV Use: **OHV use will be limited to designated roads and trails.**

Rights-of-Way: **The Steamboat Mountain Management Area will be managed as a right-of-way avoidance area.** The basin big sagebrush/lemon scurfpea plant community area will remain an avoidance area for rights-of-way. Future linear projects, and the associated surface disturbance, will be analyzed. If found to be



necessary and acceptable, the projects will follow an existing right-of-way and be kept to the minimum disturbance necessary with appropriate mitigation.

Rights-of-way applications will be examined for necessity. Paralleling, consolidation, or rerouting may be necessary to minimize cumulative surface disturbance and to meet transportation planning objectives.

**Surface Use Activities: Portions of the Management Area will be closed to some activities if they will result in irreversible adverse effects (Table 4 and Map 4). Portions of crucial habitats and other areas of sensitive or important resources will be open to further consideration for various multiple-use activities, so long as crucial habitats and other sensitive or important resources will be protected from irreversible adverse effects and the objectives for the area can be met.**

Because the management area contains a high concentration of sensitive resource values, proposals for all surface activity will be closely examined. Users requiring approval are charged with showing that resource development activities will result in acceptable impacts and are needed. This action may mean proposing novel methods, systems, and technologies for BLM consideration. APDs and other use applications may require stringent conditions-of-approval and mitigation measures to address specific issues related to impacts. Other surface use proposals and projects (e.g., rangeland improvement, grazing, access, and recreation) can expect to undergo an in-depth, comprehensive review. Field data and observations, cumulative impacts of likely and foreseeable competing uses, understanding of impacts, conditions within the management area, and management goals will be employed during the decision-making process (Table 4 and Map 4).

Wherever sensitive values exist, the review and approval process will consider mitigation measures commensurate with the anticipated impacts, the resource values of the area, and any substantive comments or information gathered through public participation. Other resource projects or proposals can expect a similar in-depth consideration of mitigation measures to safeguard the affected resource values as described in the fluid minerals section.

**Vegetation Management: Some basin big sagebrush/lemon scurfpea areas along the base of Steamboat Mountain will be provided protection by controlling surface use (closed or limited) or by implementing other intense mitigation to preserve the character of vegetation communities (Map 6). Full fire suppression for basin big sagebrush/lemon scurfpea plant communities will be applied.**

**VRM: The Steamboat Mountain Management Area will be managed as a VRM Class II area.**

See other resource management sections in this document (Implementation, Monitoring, and Evaluation Process; Surface Use Activities; Air Resources; Heritage Resources; Land and Water Resources; Minerals and Alternative Energy Resources; Recreation Resources; Travel, Access, and Realty; Visual Resources; and Special Management Areas and Other Management Areas) for other prescriptions and guidance that apply to the Steamboat Management Area.

## **Existing Green River RMP Decisions for the Steamboat Mountain Management Area**

Other management objectives and actions for the Steamboat Mountain Management Area will be consistent with the land use decision of the Green River RMP. See also the summary section for the Steamboat Mountain ACEC.

## **4.0 IMPLEMENTATION**

The JMH CAP/Green River RMP Amendment will be implemented over time, as funding allows. Most of the plan decisions are effective upon approval of the ROD. However, many decisions will require a number of years to implement. The implementation, monitoring, and evaluation process (Appendix 2) provides a framework in which plan decisions will be implemented and evaluated. Plan monitoring will show which decisions have been implemented, and when. Effectiveness monitoring will show which decisions or actions are achieving management goals and which ones are not. Adaptive management principles will be used to modify those changes that are not achieving management goals.

### **4.1 Public Involvement**

BLM has a long-standing policy to encourage the public to participate or involve themselves in the agency's day-to-day activities. The JMH CAP management strategy encourages this level of interest. Comments, suggestions, concerns, and issues may be provided or raised at any time. Involvement of the public, industry, and other agencies will aid in the development of successful management of the planning area.

Some of the decisions contained in the JMH CAP will require detailed, project-level NEPA analyses prior to implementation. Tribal consultation and public involvement opportunities, including further protest or appeal opportunities, may be provided at that time. Other decisions have been addressed to a sufficient level of detail to be implemented over time without further NEPA analysis.

Public meetings are a necessary and valuable component of the JMH CAP management strategy, as they provide an excellent opportunity for BLM and public interaction. Public meetings are planned semiannually for the first three years following the signing of the ROD. An initial, informational meeting will be held within three months of the ROD signing, and will focus on the management approach and its implementation in the planning area. Following meetings will primarily provide a forum for dissemination of information. A "town hall" format will be used to allow interested individuals to express opinions or concerns about management of the planning area. BLM, however, will not request or receive input during these forums on pending actions or decisions in compliance with the Federal Advisory Committee Act (FACA). Other avenues are available through which the public can more directly affect management of the planning area, such as the NEPA process (if invoked) or the JMH CAP Working Group.

Refer to the Communication and Participation section of Appendix 2 for further details regarding public involvement in the JMH CAP implementation process.

## 4.2 JMH CAP Implementation Strategy

Appendix 2 provides details on the resource management strategy that will be used to implement the JMH CAP. It provides an overall strategy for implementing plan decisions, monitoring resources and uses, collecting data, and evaluating plan decisions.

The implementation strategy recognizes valid existing rights (such as oil and gas leases) and needs (such as grazing) involving public lands, as well as the need to maintain or enhance the natural values in the planning area. To accomplish this, the planning area is divided into three areas that represent the relative importance of the contained resource values. Surface disturbing or disruptive activities will be tightly controlled in areas where the greatest concentration of sensitive resources occur. The planning area division allows different policies or practices to be adopted, their effectiveness evaluated, and changes to be made to increase their effectiveness in achieving the resource objectives and the management vision.

The following list shows key elements of the Implementation, Monitoring, and Evaluation Process:

- Employing field data and observations in the evaluation of projects and proposals;
- Considering the condition of all resources (as shown by the indicators) before allowing further surface disturbing or disruptive activity;
- Improving understanding and ability to predict impacts associated with the uses of the various resources in the planning area;
- Allowing judicious testing of assumptions, practices, policies, and mitigation measures; and
- Applying best management practices, mitigation, and conditions of approval developed through the monitoring and evaluation process.

As part of the Implementation, Monitoring, and Evaluation Process, resource indicator data will be collected to assess the condition and level of use of the various resources and provide information for project or proposal evaluation and development of the most effective mitigation measures. This process will allow management actions and decisions of the JMH CAP to be tracked and evaluated to determine their effectiveness and whether the objectives of the JMH CAP are being met. If evaluation indicates that the JMH CAP decisions are not working as expected or needed, or if situations in the resource area change, it may become necessary to modify, amend, or revise the JMH CAP.

In implementing the JMH CAP, BLM will act in concert with state, tribal, and local governments. Though BLM remains the final decision maker on the use of public lands, the varied viewpoints represented by a diverse group of users will help to develop and maintain an appropriate management approach. Outside agencies will be called upon as necessary for their particular expertise in data analysis and resource knowledge. To aid BLM in management of the planning area, a JMH CAP

Working Group will be formed. This non-FACA chartered group will act in an advisory capacity and provide better access to outside sources of data or expertise.

## **5.0 PLAN EVALUATION**

The BLM planning regulations (43 CFR 1610.4-9) call for monitoring of resource management plans on a continual basis, with a formal plan evaluation at regular intervals. Proposed future activity plan decisions would be evaluated to ensure consistency with the JMH CAP objectives.

Plan evaluation is a major component of the Implementation, Monitoring, and Evaluation Process (Appendix 2). As part of this process, decisions of the JMH CAP will be tracked and evaluated to determine their effectiveness and to determine if the objectives of the JMH CAP are being met. If evaluation indicates that the JMH CAP decisions are not working as expected or needed, or if situations in the resource area change, it may become necessary to modify, amend, or revise the JMH CAP. Refer to the JMH CAP Management Process section of the Implementation, Monitoring and Evaluation Process (Appendix 2) for further details regarding plan evaluation.

As part of the evaluation process, other government agencies may be asked to review the implementation of the JMH CAP and advise BLM of consistency with their current plans, programs, and policies. Upon completion of periodic evaluations, the Field Manager will determine whether any changes are necessary to ensure that management actions are consistent with management goals.

Formal plan evaluation will occur at intervals no greater than five years and will evaluate:

- Whether management actions are resulting in satisfactory progress toward objectives;
- Whether actions are consistent with current policy;
- Whether original assumptions were correctly applied and impacts correctly predicted;
- Whether mitigation measures are satisfactory;
- Whether the JMH CAP is consistent with the plans and policies of state and local government, other federal agencies, and Native American tribes;
- Whether new data are available that would require alteration of the plan; and
- Whether the JMH CAP is still valid or needs to be amended or revised.

# GLOSSARY

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**ACTIVE DUNE.** A hill or accumulation of sand shaped by wind. A dune is active when constantly changing form under wind currents. Generally, an active dune is bare of vegetation.

**ACTIVE RAPTOR NESTING SITE.** An active raptor nest is one that has been occupied within the past 3 years.

**ACTIVE USE.** The current authorized use, including livestock grazing and conservation use. Active use may constitute a portion or all of the permitted use. Active use does not include temporary nonuse or suspended use of forage within all or a portion of an allotment.

**ADAPTIVE MANAGEMENT.** A systematic process for continually improving management policies and practices by learning from the outcomes of actions over time. It employs management programs designed to continuously compare selected policies or practices, and is an integrated method of addressing uncertainty that focuses on implementing actions, thoroughly monitoring results, and modifying actions when warranted. It recognizes that the complex interrelationships of physical, biological, and social components of the ecosystem and how they would react to land management practices are often not fully understood when land-use management plans are developed.

**ALLOTMENT.** An area allocated for livestock use by one or more qualified grazing permittees, including prescribed numbers and kinds of livestock under one plan of management.

**ANIMAL INN.** An information and education program focused on the value of dead, dying, and hollow trees for wildlife and fish. Animal Inn is an awareness-building program, not a regulatory program.

**ANIMAL UNIT MONTH (AUM).** The amount of forage needed to sustain one mature cow or the equivalent, based on an average daily forage consumption of 26 pounds of dry matter per day. The equivalent animal units for other ungulate species, based on a weight conversion (3 percent body weight per day), are 10.5 for antelope, 7.6 for deer,

2.1 for elk, 1.2 for moose, 0.9 for wild horses, and 5.2 for sheep.

**APPROPRIATE MANAGEMENT LEVEL (AML).** The optimum number of wild horses that provides a thriving natural ecological balance on the public range.

**AQUIFER.** A saturated, permeable sediment or rock that can transmit significant quantities of water under hydraulic gradients.

**AREA OF CRITICAL ENVIRONMENTAL CONCERN (ACEC).** Areas within public lands where special management attention is required (when such areas are developed or used or where no development is required) to protect and prevent irreparable damage to 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. The identification of a potential ACEC shall not, of itself, change or prevent change of the management or use of public lands.

**AVOIDANCE AREA (for Rights-of-Way).** Areas on public lands where future rights-of-way may be granted only when no feasible alternative route or designated right-of-way corridor is available.

**AVOIDANCE AREA.** An area where the preferred strategy for managing surface disturbing and disruptive activities is to avoid sensitive resources. Activities would be relocated. Where avoidance is determined not to be feasible, intensive mitigation to prevent adverse effects to the sensitive resource would be required. The extent of avoidance areas may vary, depending on the sensitive resources involved.

**BADLAND.** Surface features characterized by sharp erosional scar sculpture of weak rocks, forming steep, furrowed, and fantastically shaped hills, labyrinth-like drainage patterns, and normally dry watercourses.

**BIODIVERSITY.** See Biological Diversity.

**BIOLOGICAL DIVERSITY.** The variety of life and its processes, including the variety of living organisms, the genetic differences among them, and the communities and ecosystems in which they occur.

**CANDIDATE SPECIES.** A plant or animal species whose numbers are declining so rapidly that official listing as threatened or endangered pursuant to Section 4 of the Endangered Species Act may become necessary as a conservation measure. Declines may be due to one or more factors, including: destruction, modification, or curtailment of the species' habitat or range; over-utilization for commercial, sporting, scientific, or educational purposes; disease or predation; inadequacy of existing regulatory mechanisms; or other factors.

**CASUAL USE.** Casual use means activities ordinarily resulting in no or negligible disturbance of the public lands or resources. For example --

(1) Casual use generally includes the collection of geochemical, rock, soil, or mineral specimens using hand tools; hand panning; or non-motorized sluicing. It may include use of small portable suction dredges. It also generally includes use of metal detectors, gold spears and other battery-operated devices for sensing the presence of minerals, and hand and battery-operated drywashers. Operators may use motorized vehicles for casual use activities provided the use is consistent with the regulations governing such use (part 8340 of this title), off-road vehicle use designations contained in BLM land-use plans, and the terms of temporary closures ordered by BLM.

(2) Casual use does not include use of mechanized earth-moving equipment, truck-mounted drilling equipment, motorized vehicles in areas when designated as closed to "off-road vehicles" as defined in § 8340.0-5 of this title, chemicals, or explosives. It also does not include "occupancy" as defined in § 3715.0-5 of this title or operations in areas where the cumulative effects of the activities result in more than negligible disturbance. (43 CFR 3809)

**CHECKERBOARD LAND PATTERN.** Alternating sections of federally owned lands and private or state lands on either side of the Union Pacific railroad in southwestern Wyoming. This pattern of land ownership looks like a checkerboard on maps, using different colors to show land status.

**CHERRYSTEMMED.** Term describing a WSA boundary that is drawn around a dead end road or other linear feature to exclude it from the WSA.

**COALBED GAS (OR COALBED METHANE).**

Adsorbed gas stored in micropores, cleats, and the molecular structure within coal beds. In coalbed gas accumulations, hydrostatic pressure exerted on the adsorbed gas is a primary trapping mechanism. The gas itself is predominantly methane and commonly contains small amounts of other hydrocarbons, hydrogen, carbon monoxide, carbon dioxide, and nitrogen.

**CONDITIONS OF APPROVAL (COA).**

Conditions or provisions (requirements) under which a site-specific surface disturbing or human presence activity (e.g., application for permit to drill (APD), sundry notice, ROW) is approved. COAs must be reasonable and consistent with lease rights.

**CONNECTIVITY AREA.** A key wildlife habitat area that connects and includes crucial big game habitats. The area includes topographic relief for escape cover, important year-round forage, crucial winter range, and birthing areas for a majority of the deer and elk populations. The area allows for free movement of animals among the various habitat components and provides an important migratory corridor throughout the year.

**CONSUMPTIVE USE.** Recreation activities that consume natural resources. Hunting and fishing are regarded as consumptive recreation because wildlife species are consumed. Rockhounding is consumptive because nonrenewable resources are removed.

**CONTROL LINE.** Comprehensive term for all constructed or natural barriers and treated fire edges used to control a fire.

**CONTROLLED SURFACE USE (CSU).** An oil and gas stipulation that allows use and occupancy (unless restricted by another stipulation), but that requires special operational constraints that may modify the lease rights, for identified resource values. Controlled surface use serves as operating guidance, not as a substitute for the NSO or timing limitation stipulations. This term is also applied to surface use activities other than oil and gas.

**CRITICAL HABITAT.** Official designation by the Secretary of the Interior to protect habitat necessary for the survival of a threatened or endangered species.

**CRUCIAL HABITAT (RANGE).** Can describe any particular seasonal range or habitat component (often winter or winter/yearlong range in Wyoming) that has been documented as the determining factor in a population's ability to maintain itself at a certain level (theoretically at or above the population objective) over the long term. For example, the total crucial winter range for an elk herd unit should be available, relatively intact, and allow a population at objective to survive the winter in adequate body condition and to maintain average reproductive rates 8 out of 10 years.

**CURRENT ANNUAL GROWTH.** The amount of forage produced by a plant in one growing season.

**DESIRED FUTURE CONDITION.** A future land or resource condition that achieves a set of compatible multi-resource goals and objectives.

**DESIRED PLANT COMMUNITY.** The plant community that provides the vegetation attributes required for meeting or exceeding RMP vegetation objectives. The desired plant community must be within an ecological site's capability to produce these attributes through natural succession, management action, or both (BLM Wyoming Instruction Memorandum 91-290, 5/29/91).

**DISRUPTIVE ACTIVITIES.** The physical presence, sounds, and movements of people and their activities (on, below, or above the land surface) that may cause displacement of or excessive stress to wildlife during critical life stages (breeding, nesting, birthing, winter) or during periods of severe weather conditions. Examples of disruptive activities include noise, traffic, human presence, well drilling, and seismic and other exploration activity.

**DISTURBANCE ZONE.** Area of influence around a disturbance causing a change in animal behavior such as leaving the area, increased stress, abandoning young, not breeding, and aberrant behavior. Examples of disturbances include road construction and road use, facility construction and placement, pipeline construction, field facility maintenance, rights-of-way construction, and range improvement construction.

**DROUGHT.** A prolonged chronic shortage of water, compared with the norm, often associated with high temperatures and winds during spring, summer, and fall or a period

without precipitation during which the soil water content is reduced to such an extent that plants suffer from lack of water.

**ECOLOGICAL CONDITION.** See Ecological Status.

**ECOLOGICAL STATUS.** As defined in the BLM's monitoring manuals, "the present state of vegetation of a range site in relation to the potential natural community for the site. Ecological status is use independent. It is an expression of the relative degree to which the kinds, proportions, and amounts of plants in a plant community resemble that of the potential natural community. The four ecological status classes correspond to 0–25, 26–50, 51–75, or 77–100 percent similarity to the potential natural community and are called early seral, mid seral, late seral, and potential natural community, respectively (this replaces range condition)."

**EOLIAN ICE-CELLS.** Perennial ice formed from snowfall and insulated from summer heat by a cover of windblown sands. This ice feeds small ponds (flockets) within the dunes.

**EPHEMERAL STREAM.** A stream that flows only in direct response to precipitation, and whose channel is above the water table at all times. See Intermittent Stream and Perennial Stream.

**ERODIBILITY.** The tendency of a soil to erode as influenced by texture under specified salts, structure, or slope.

**EXCEPTION.** A case-by-case, one-time exemption from a lease stipulation for a specified portion of a leasehold. The stipulation continues to apply to all other sites within the leasehold to which the restrictive criteria apply. Exceptions are approved by the authorized officer (Field Office) in coordination with the Wyoming Game and Fish Department, other agencies and interested parties.

**EXCLOSURE.** Study or experimental plot rested from livestock grazing. A portion of land rested from livestock grazing. Exclosures may be established as study or experimental areas or as protection for key habitats.

**EXCLUSION AREA.** Areas where future rights-of-way may be granted only when mandated by law.

**EXISTING ROADS AND VEHICLE ROUTES.**

Routes existing prior to the date of designation, constructed or created by the frequent passage of motor vehicles, and receiving regular and continuous use. Additional vehicle routes may be authorized, as need dictates.

**EXTIRPATION.** Elimination from an area.

**FINE FUELS.** Fast-drying dead fuels, generally characterized by a comparatively high surface area-to-volume ratio, which are less than 1/4 inch in diameter and have a time lag of 1 hour or less. These fuels (i.e., grass, leaves, needles, etc.) ignite readily and are consumed rapidly by fire when dry.

**FIRE MANAGEMENT PLAN.** Statement, for a specific area, of fire policy, objective, and prescribed action; may include maps, charts, tables, and statistical data.

**FIRE SUPPRESSION.** All work and activities associated with fire-extinguishing operations, beginning with discovery and continuing until the fire is completely extinguished.

**FLOCKETS.** A local term for the ponds and associated wet meadows created in the sand dunes from melting eolian ice cells.

**FLUID MINERAL.** Oil, gas, and geothermal resources.

**FORAGE.** Vegetation of all forms available and of a type used for animal consumption.

**FORBS.** Any broad-leafed herbaceous plant, other than grasses, sedges, and rushes. These are generally flowering plants with tap roots, broad leaves, netlike veins, and solid non-joint stems.

**FOREGROUND.** A view, usually from a heritage-based key observation point, such as a traditional cultural property or respected place, that takes in about a 270-degree span of influence. Topography, vegetation, and intrusions and barriers (both manmade and natural) are considered in identifying the viewshed area and are taken into consideration in development and analysis of appropriate measures.

**FUEL LOAD.** Oven-dry weight of fuel per unit area (usually expressed in tons/acre).

**FUEL TREATMENT.** Any manipulation or removal of fuels to reduce the likelihood of

ignition and/or to lessen potential damage and resistance to control (e.g., lopping, chipping, crushing, piling, and burning).

**FULL-TIME EQUIVALENT (FTE).** A measurement of employment that is not equal to jobs or persons, but is instead based on hours worked (e.g., one person full time or two people half time both equal one FTE).

**FUNCTIONAL—AT RISK.** Riparian-wetland areas that are in functional condition, but an existing soil, water, or vegetation attribute makes them susceptible to degradation (Prichard, et al., 1993). In addition, see Non-Functional and Proper Functioning Condition.

**GAS WELL DENSITY.** As defined in the Wyoming Oil and Gas Conservation Commission rules, Chapter 3. Section 2. (b), "any gas wells drilled in the area described as Township 12 North through Township 28 North and Range 89 West through Range 121 West shall be located in the center of a one hundred-sixty (160) acre subdivision, or lot or tract or combination of lots or tracts substantially equivalent thereto, not closer than one thousand one hundred-twenty feet (1,120') to the exterior boundaries of the quarter section. All areas subject to existing orders for drilling and spacing units in the above described area shall be exempt from the aforesaid gas well location requirements. Further, this rule is vacated for all federal exploratory units in the above described area provided that no gas well will be drilled closer than one thousand one hundred-twenty feet (1,120') to the exterior boundaries of the unit nor to any uncommitted acreage within the unit. Upon unit contraction, lands deleted from the unit shall thereafter be subject to this rule."

**GREATER SAGE-GROUSE LEK DEFINITIONS.**

**Lek.** A traditional courtship display area attended by male greater sage-grouse in or adjacent to sagebrush dominated habitat. Designation of the site as a lek requires observation of two or more male greater sage-grouse engaged in courtship displays. In addition, new leks must be confirmed by a survey conducted during the appropriate time of day and during the strutting season. Observation of sign of strutting activity can also be used to confirm a suspected lek.



**Lek Complex.** A group of leks in close proximity between which male greater sage-grouse may be expected to interchange from one day to the next. A specific distance criteria does not yet exist.

**Lek Count.** A census technique that documents the actual number of male greater sage-grouse observed on a particular lek or complex of leks using the methods described below.

**Lek Survey.** A monitoring technique designed primarily to determine whether leks are active or inactive and obtaining accurate counts of the numbers of males attending is secondary.

**Annual status—Each year a lek will be determined to be in one of the following status categories:**

**Active.** Any lek that has been attended by male greater sage-grouse during the strutting season. Presence can be documented by observation of birds using the site or by signs of strutting activity.

**Inactive.** Leks where it is known that there was no strutting activity through the course of a strutting season. A single visit, or even several visits, without strutting grouse being seen is not adequate documentation to designate a lek as inactive. This designation requires either an absence of birds on the lek during multiple ground visits under ideal conditions throughout the strutting season or a ground check of the exact lek site late in the strutting season that fails to find any sign (droppings/feathers) of strutting activity.

**Unknown.** Leks that have not been documented either active or inactive during the course of a strutting season.

**Based on annual status a lek may be put into one of the following categories for management purposes:**

**Occupied Lek.** A lek that has been active during at least one strutting season within the last 10 years. Management protection will be afforded to occupied leks.

**Unoccupied Lek.** (Formerly termed “historical lek.”) There are two types of

unoccupied leks – “destroyed” or “abandoned.” Management protection will not be afforded to unoccupied leks.

**Destroyed Lek.** A formerly active lek site and surrounding sagebrush habitat that has been destroyed and no longer capable of supporting greater sage-grouse breeding activity. A lek site that has been strip-mined, paved, converted to cropland or undergone other long-term habitat type conversion is considered destroyed. Destroyed leks do not require monitoring unless the site is reclaimed to suitable greater sage-grouse habitat.

**Abandoned Lek.** A lek in otherwise suitable habitat that has not been active during a consecutive ten-year period. Before a lek is designated “abandoned” it must be confirmed as “inactive” (see above criteria) in at least four non-consecutive strutting seasons spanning the 10 years. Once designated “abandoned,” the site should be surveyed at least once every 10 years to determine whether or not the lek has been reoccupied.

**Undetermined Lek.** Any lek that has not been documented as being active in the last 10 years but does not have sufficient documentation to be designated unoccupied. Management protection will be afforded to undetermined leks until their status has been documented as unoccupied.

**Winter Concentration Area.** An area where large numbers of greater sage-grouse have been documented to consistently use specific landscapes for winter habitat. Habitat characteristics include sagebrush that is generally 10-14 inches (25-36 cm) above the snow and sagebrush canopy cover above the snow that ranges from 10 to 30 percent. Topography tends to be on flat to generally southwest facing slopes or on ridges where sagebrush height may be less than 10 inches (25 cm) but the snow is routinely blown clear by wind. Winter concentration areas do not include all winter habitats used by greater sage-grouse, nor are they limited to more narrowly defined “severe winter relief” habitats. Delineation of these concentration areas is based on determination of the presence of winter habitat characteristics confirmed by repeated observations and sign of large

numbers of greater sage-grouse. The definition of "large" is dependent on whether the overall population is large or small. In core population areas frequent observations of groups of 50+ greater sage-grouse meet the definition while in marginal populations group size may be 25+. Consultation and coordination with the WGFD is required when delineating winter concentration areas.

**GREATER SAND DUNES RECREATION AREA.** The active sand dunes in the eastern portion of the Greater Sand Dunes ACEC. This area (10,020 acres) is open to off-highway vehicle use.

**GROWING SEASON.** In temperate climates, that portion of the year when temperature and moisture are usually most favorable for plant growth.

**HABITAT.** A specific set of physical conditions in a geographic area(s) that surrounds a single species, a group of species, or a large community. In wildlife management, the major components of habitat are food, water, cover, and living space.

**HAZARDOUS MATERIAL.** A comprehensive term adopted by BLM to include a wide range of hazardous and toxic substances and hazardous wastes that require special management.

**HERBICIDE LOADING.** The process of transferring, mixing, and other processing of chemicals and associated cleaning of equipment; does not include the actual application procedures used in accordance with label instructions.

**HERITAGE RESOURCES.** Physical remains of human activity (i.e., artifacts, ruins, burial mounds, petroglyphs, etc.) having scientific, prehistoric, or social values.

**HISTORIC LANDSCAPE.** A geographic area, including both historic and natural features, associated with an event, person, activity, or design style that is significant in American history.

**HISTORIC RAPTOR NESTING SITE.** An area of high topographic relief, particularly cliff areas, known to have supported concentrations of nesting raptors, such as Cedar Canyon, Four-J Basin, and Kinney Rim.

**HUMAN-CAUSED FIRE.** Any fire caused directly or indirectly by person(s).

**HUNTER-DAY.** A unit of measure defined as the presence of one person in an area for the purpose of engaging in a hunting activity during all or part of one calendar day.

**HYDRIC SOIL.** A soil that is saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions in the upper part.

**HYDROPHOPIC SOILS.** Water-repellant soils.

**HYDROPHYTE.** Any plant that grows in water or on a substrate that is at least periodically deficient in oxygen as a result of excessive water content; plants typically found in wetlands and other aquatic habitats.

**HYDROPHYTIC VEGETATION.** Plant life growing in water or on a substrate that is at least periodically deficient in oxygen as a result of excessive water content.

**IMPACT.** Synonymous with effect. Includes ecological, aesthetic, historic, cultural, economic, social, or health, whether direct, indirect, or cumulative. Impacts may also include those resulting from actions that may have both beneficial and detrimental (adverse) effects. Impacts may be considered as direct, indirect, or cumulative:

**Direct:** Impacts caused by an action that occur at the same time and place as the action itself.

**Indirect:** Impacts caused by the action that occur later in time or farther removed in distance, but are still reasonably foreseeable.

**Cumulative:** Impacts that result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such other actions.

**INACCESSIBLE AREAS.** An area with multiple overlapping resources that may make the area inaccessible to development.

**INHOLDING.** A non-federal parcel of land that is completely surrounded by federal land.

**INTERDISCIPLINARY TEAM (IDT).** Any necessary combination of BLM staff,

consultants, contractors, other governmental personnel, and advisors to achieve an interdisciplinary approach.

**INTERMITTENT STREAM.** A stream that flows only at certain times of the year when it receives water from springs or from some surface source such as melting snow in mountainous areas. See Ephemeral Stream and Perennial Stream.

**INVASIVE.** A non-native plant or animal species (with respect to a particular ecosystem) whose introduction does or is likely to harm the economy, environment, or human health.

**JEOPARDIZE.** To engage in an action that reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival or recovery of listed species in the wild by reducing the reproduction, number, or distribution of a listed species or otherwise adversely affecting the species.

**LEASABLE MINERALS.** Minerals subject to lease by the Federal Government; include oil and gas, coal, phosphate, sodium, potash, and oil shale, as well as geothermal resources.

**LEASE NOTICE.** Notices (not to be confused with Notices to Lessees) attached to leases and providing detailed information concerning limitations that already exist in law, lease terms, regulations, or operational orders. A Lease Notice also addresses special items the lessee should consider when planning operations but does not impose new or additional restrictions.

**LOCATABLE MINERALS.** Minerals subject to disposal and development through the Mining Law of 1872 (as amended). Generally includes metallic minerals such as gold and silver and other materials not subject to lease or sale.

**MANAGEMENT BY MONITORING AND ADJUSTING.** A management strategy employed in many resource areas to adjust resource usage to conditions and impacts. The condition of the planning area resources is evaluated to determine whether additional use is compatible with achieving management goals or objectives. The impacts of the new or expanded use are acceptable or require mitigation.

**MECHANIZED VEHICLES.** Mechanical transport designed to replace human labor and/or human physical capabilities. Mechanized vehicles include mountain bikes, horse-drawn wagons, big game carriers, handcarts, and hang gliders.

**MINIMUM HEIGHTS.** The amount of plant material remaining during the grazing season.

**MODIFICATION.** Fundamental change to the provisions of a lease stipulation, either temporarily or for the period of the lease. A modification may, therefore, include an exemption from, or alteration to, a stipulated requirement. Depending on the specific modification, the stipulation may or may not apply to all other sites within the leasehold to which the restrictive criteria applied. Modifications are approved by the authorized officer (State Office) in coordination with the Wyoming Game and Fish Department, other agencies, and interested parties.

**MOSAIC.** A landscape composed of patches of discrete ecological sites and/or seral stages in a variety of sizes and shapes.

**MOUNTAIN PLOVER AGGREGATION AREA.** An area with two or more observations, (within 2 miles of each other during one breeding season) of one of the following: territorial adults nests, adult distraction displays, or broods.

**MULTIPLE USE.** As defined in section 103 of the FLPMA, "... management of the public lands and their various resource values so that they are utilized in the combination that will best meet the present and future needs of the American people; making the most judicious use of the land for some or all of these resources or related services over areas large enough to provide sufficient latitude for periodic adjustments in use to conform to changing needs and conditions; the use of some land for less than all the resources; a combination of balanced and diverse resource uses that takes into account the long-term needs of future generations for renewable and nonrenewable resources, including but not limited to, recreation, range, timber, minerals, watershed, wildlife and fish, and natural scenic, scientific, and historical values; and harmonious and coordinated management of the various resources without permanent impairment of the productivity of the land and the quality of the environment with relative consideration

being given to the relative values of the resources and not necessarily to the combination of uses that will give the greatest return or the greatest unit output.”

**NATIONAL REGISTER OF HISTORIC PLACES.** A list of districts, sites, buildings, structures, and objects significant in American history, architecture, archaeology, and culture.

**NATIVE AMERICAN RESPECTED PLACE.** A term used by Eastern Shoshone representatives to describe places that are of interest to individual tribal members and should be respected. The term encompasses a wide range of features including stone cairns, alignments such as Medicine Wheels, rock art sites, and sometimes much less complex features such as small piles of rocks. For some Shoshone, the term would apply to any place with evidence of ancient habitation. Sometimes a “respected place” may indicate where a Native American, at some time in the distant past, made a prayer or an offering, or it may mark the location of a significant event in this individual’s life. Respected places are not always significant to the entire tribe; however, upon seeing the feature, tribal members would “respect” the place because it was important to the individual who created it. Respected places often would not qualify as sacred sites or traditional cultural properties, although at times they may meet the regulatory definitions of those property types.

**NATURALNESS.** In section 2(c) of the Wilderness Act, the wilderness characteristic in which an area “generally appears to have been affected primarily by the forces of nature, with the imprint of man’s work substantially unnoticeable.”

**NON-CONSUMPTIVE RECREATION.** Wildlife-associated recreation that is not fishing, hunting, or trapping. Non-harvesting activities, such as feeding, photographing, and observing fish and other wildlife, picnicking, camping, etc., are non-consumptive wildlife activities.

**NON-FUNCTIONAL.** Describes riparian-wetland areas that clearly are not providing adequate vegetation, landform, or large woody debris to dissipate stream energy associated with high flows and thus are not reducing erosion, improving water quality, etc., as listed under Proper Functioning Condition.

**NO SURFACE OCCUPANCY (NSO).** An oil and gas lease stipulation for an area where no surface disturbing activities or surface disturbance, of any nature or for any purpose, will be allowed.

**NOTICE TO LESSEES (NTL).** A written order issued by the authorized officer to implement regulations and operating orders. It serves as instructions on specific item(s) of importance within a state, district, or area.

**NOXIOUS WEEDS.** Weeds, seeds, or other plant parts considered detrimental, destructive, injurious, or poisonous, either by virtue of their direct effect or as carriers of diseases or parasites that exist within Wyoming, and are on their designated list.

**OCCUPIED HABITAT.** Habitat that has a species present at some time of the year. This can include yearlong habitat, winter ranges, and movement corridors.

**OCCUPIED RAPTOR NESTING SITE.** An area that contains raptors or raptor eggs or on which nest building is actively occurring.

**OFF-HIGHWAY VEHICLE (OHV).** Any motorized vehicle capable of, or designated for, travel on or immediately over land, water, or other natural terrain, excluding: (1) any non-amphibious registered motorboat; (2) any military, fire, emergency, or law enforcement vehicle while used for emergency purposes; (3) any vehicle whose use is expressly cleared by the authorized officer, or otherwise officially approved; (4) vehicles in official use; and (5) any combat or combat support vehicle when used in times of national defense emergencies (43 CFR 8340.0-5(a)).

**OFF-HIGHWAY VEHICLE MANAGEMENT DESIGNATIONS.** Designations applied to all off-road vehicles regardless of the purposes for which they are being used. Emergency vehicles are excluded. The OHV designation definitions have been developed in cooperation with representatives of the U.S. Forest Service, U.S. Park Service, and BLM state and district personnel. BLM recognizes the differences between off-highway vehicles and over-the-snow vehicles in terms of use and impact. Therefore, travel by over-the-snow vehicles will be permitted off existing routes and in all open or limited areas (unless otherwise specifically limited or closed to over-the-snow vehicles) if they are operated in a responsible manner without

damaging the vegetation or harming wildlife. Designations include—

**Closed:** Designation for areas in which vehicle travel is prohibited. Access by means other than motorized vehicle is permitted.

**Open:** Designation permitting vehicle travel in the area (both on and off roads) if the vehicle is operated responsibly in a manner not causing, or unlikely to cause significant, undue damage to or disturbance of the soil, wildlife, wildlife habitat, improvements, cultural, or vegetative resources or other authorized uses of the public lands.

**Limited:**

- a. Designation permitting vehicle travel only on existing roads and vehicle routes that were in existence prior to the date of designation in the *Federal Register*. Vehicle travel off of existing vehicle routes is permitted only to accomplish necessary tasks and only if such travel does not result in resource damage. Random travel from existing vehicle routes is not allowed. Creation of new routes or extensions and/or widening of existing routes is not allowed without prior written agency approval.
- b. Vehicle travel is permitted only on roads and vehicle routes designated by BLM. In areas where final designation has not been completed, vehicle travel is limited to existing roads and vehicle routes as described above. Designations are posted as follows:
  1. Vehicle route is open to vehicular travel.
  2. Vehicle route is closed to vehicular travel.
- c. Vehicle travel is limited by number or type of vehicle. Designations are posted as follows:
  1. Vehicle route limited to four-wheel drive vehicles only.
  2. Vehicle route is limited to motorbikes only.

3. Area is closed to over-the-snow vehicles.

d. Vehicle travel is limited to licensed or permitted use.

e. Vehicle travel is limited to time or season of use. Posted as follows:

Seasonal closure to all motor vehicles (the approximate dates of closure are indicated).

f. Where specialized restrictions are necessary to meet resources management objectives, other limitations may also be developed. Posted as follows:

Recreational OHV play areas.

**OFF-ROAD VEHICLE (ORV).** Interchangeable with off-highway vehicle.

**PALEOSOL.** A term used by archeologists and geologists to refer to an ancient soil deposit. Paleosols are particularly important because they often contain evidence about some of the earliest cultures to inhabit North America.

**PERENNIAL STREAM.** A stream that flows continuously. Perennial streams are generally associated with a water table in the localities through which they flow.

**PERMANENT FACILITY.** Any structure that exists on location for 1 year or more.

**PERMITTED USE.** The forage allocated by, or under the guidance of, an applicable land use plan for livestock grazing in an allotment under a permit or lease and is expressed in AUMs.

**POTENTIAL HABITAT.** An area that displays similar environmental characteristics (such as plants, elevation, soil type, precipitation, associated species, slope, and aspect) as the known habitat of the subject species.

**PRECIPITATION.** Any or all forms of water particles, liquid or solid, that fall from the atmosphere and reach the ground.

**PRESCRIBED BURNING.** Controlled application of fire to wildland fuels in either their natural or modified state, under specified environmental conditions that allow the fire to be confined to a predetermined area and at the same time to produce the fire

line intensity and rate of spread required to attain planned resource management objectives.

**PRESCRIBED FIRE.** A fire burning within prescription, resulting from planned or unplanned ignition.

**PRESCRIPTION.** Written statement defining objectives to be attained as well as temperature, humidity, wind direction and wind speed, fuel moisture content, and soil moisture under which a fire will be allowed to burn, generally expressed as acceptable ranges of the various indices, and the limit of the geographic area to be covered.

**PROPER FUNCTIONING CONDITION.** A designation describing riparian-wetland areas that contain adequate vegetation, landform, or large woody debris to dissipate stream energy associated with high water flows, thereby reducing erosion and improving water quality; filter sediment, capture bedload, and aid floodplain development; improve flood-water retention and ground-water recharge; develop root masses that stabilize stream banks against cutting action; develop diverse ponding and channel characteristics to provide the habitat and the water depth, duration, and temperature necessary for fish production, waterfowl breeding, and other uses; and support greater biodiversity. The functioning condition of riparian-wetland areas is a result of interaction among geology, soil, water, and vegetation. See also Functional-At Risk, Nonfunctional. (Prichard, et al., 1993)

**PUBLIC LAND.** Land administered by the Bureau of Land Management.

**RANGELAND IMPROVEMENTS.** Any activity or program on or relating to rangelands that is designed to improve forage production, change vegetation composition, control patterns of use, provide water, stabilize soil and water conditions, and enhance habitat for livestock, wildlife, and wild horses and burros. Rangeland improvements include land treatments (e.g., chaining, seeding, burning, etc.), stockwater developments, fences, and trails.

**RANGE READINESS.** Stage of plant development at which grazing may begin in an area, pasture, or allotment without damage to vegetation or soil.

**RAPTOR.** A bird of prey, such as an eagle, hawk, or owl.

**RARE SPECIES.** Wildlife species whose populations are consistently small and widely dispersed, or whose ranges are restricted to a few localities, such that any appreciable reduction in numbers, habitat availability, or habitat condition might lead toward extinction.

**RFD (REASONABLY FORESEEABLE DEVELOPMENT).** The RFD is:

- 1) a long-term projection of oil and gas exploration, development, production, and reclamation activity. The RFD covers oil and gas activity in a defined area for a specified period of time (for the JMH CAP a 20-year time frame was used);
- 2) a technical report typically referenced in the National Environmental Policy Act (NEPA) document. It is also the mechanism to analyze the effects that discretionary management decisions have on oil and gas activity and provides basic information that is analyzed in the NEPA document under various alternatives. For example, the RFD for the JMH CAP considered numerous potential restrictions that could reduce development levels for each alternative. Some potential restrictions considered include infrastructure, especially the lack of developed roads and pipelines, sensitive resource values that limit well pad location, and the closure of certain areas to oil and gas leasing; and
- 3) as such, the RFD is neither a planning decision nor the "No Action Alternative" in the NEPA document. The RFD is not intended to be a land use planning decision or prescribe the number of wells to be allowed in the planning area (a full definition can be found in Washington Office Instruction Memorandum No. 2004-089 "Policy for Reasonably Foreseeable Development (RFD) Scenarios for Oil and Gas").

**RECHARGE AREA.** The surface area where water enters an aquifer to recharge the water-bearing strata in a groundwater system.

**RECLAMATION.** The reconstruction of disturbed sites by returning the land to a condition approximate or equal to that which existed prior to disturbance, or to a stable and productive condition compatible with the land use plan. The immediate goal of reclamation is to stabilize disturbed areas and protect both disturbed and adjacent

undisturbed areas from unnecessary degradation.

**RECREATION OPPORTUNITY SPECTRUM.**

A planning tool that provides a framework for defining classes of outdoor recreation environments, activities, and experience opportunities. The settings, activities, and opportunities for experiences are arranged along a continuum or spectrum of six classes: primitive, semi-primitive non-motorized, semi-primitive motorized, roaded natural, rural, and urban. The resulting analysis defines specific geographic areas on the ground, each of which encompasses one of the six classes.

**RECREATION VISITOR DAY.** Any recreational activity taking place within a 24-hour period, or portion thereof, for each individual recreating on public lands.

**RESTRICTED CONTROL AREA.** Public land areas where control activities may be planned for the designated control period, but control authorization may be limited to certain methods or times of the year. Restrictions placed on control are for multiple-use considerations, including, but not limited to, safety of humans and their pets; wilderness study areas; bird hunting areas; dog sledding areas; or other sites frequented by dogs; protection of threatened or endangered wildlife; unique recreation values; and avoidance of repetitive disturbance of wintering big game herds, wintering bald eagles, and raptor nesting concentration areas.

**RIPARIAN.** Situated on or pertaining to the bank of a river, stream, spring, or other body of water. Normally used to refer to the plants of all types that grow rooted in the water table or streams, ponds, springs, etc.

**SACRED SITE.** A specific, discrete, narrowly delineated location on federal land that has been identified by an Indian tribe, or by an appropriate representative of an Indian religion, as sacred by virtue of its established religious significance to, or ceremonial use by, an Indian religion. An Indian tribe or religious authority must inform the federal agency of the existence of the site for protections to be afforded to the location (from the American Indian Religious Freedom Act and Executive Order 13007).

**SALABLE (or SALEABLE) MINERALS.**

Minerals that may be sold under the Minerals Act of 1947, as amended. Included are

common varieties of sand, stone, gravel, and clay.

**SALINITY.** The concentration of dissolved salts in water. It is used to indicate the existence of saline soils. The electrical conductivity (EC) of a saturated extract is the standard measure of salinity and is expressed as mmhos/cm. Classes of salinity and their electrical conductivity level: non-saline—less than 2; very slightly saline—2–4; slightly saline—4–8; moderately saline—8–16; strongly saline—greater than 16.

**SEASONAL UTILIZATION.** The amount of utilization that occurs within a growing season.

**SEASON-LONG USE.** Grazing throughout the growing period, with little or no effort to control the amount of distribution of livestock use in area/pasture/allotments; also referred to as passive, continuous grazing.

**SECTION 7 CONSULTATION.** All Federal Agencies must consult or confer with the USFWS or NMFPS to determine whether actions authorized, funded, carried out or controlled in some way by the federal agency (e.g., BLM) will impact species federally listed, proposed, or candidate species, or designated critical habitat. These impacts can occur on federal or private lands provided there is a federal nexus.

**SECTION 106 CONSULTATION.** Also known as the 36 CFR 800 process. Discussions between a federal agency official and the Advisory Council on Historic Preservation, State Historic Preservation Officer, and other interested parties concerning historic properties that could be affected by a specific undertaking. Section 106 is the portion of the National Historic Preservation Act that outlines the procedure. The procedure is codified in 36 CFR 800.

**SEEDLINGS.** A tree grown from seed that has not reached a height of 3 feet or a diameter of 2 inches.

**SENSITIVE RESOURCES.** Sensitive resources for the JMH CAP planning area are as follows:

1. Wilderness Study Areas
2. Active (unstabilized) sand dunes
3. Slopes > 20 percent
4. ACEC values (visual, recreation opportunities, health and safety, cultural/historical)

5. Integrity of core area wildlife habitat (limiting fragmentation)
6. Key habitat (unique vegetation and plant communities)
7. Key habitat (e.g., escape cover, parturition areas)
8. Cultural/Native American respected places, historical values
9. Connectivity Area
10. Inaccessible areas (overlapping resource concerns, i.e., 1–8 above)
11. Special status plant species
12. Stabilized dunes
13. Visual values (VRM Class II areas).

**SERIAL STAGE.** The relatively transitory communities that develop under plant succession generally described as early, mid, and late seral stages. The mix of seral or successional stages on the landscape can be the result of disturbances, topography and soil, climate, uses of the land, management prescriptions, vegetation classification categories, and evaluation procedures.

**SOLID WASTE.** Any solid, liquid, or contained gaseous material that is no longer used and is either disposed of, incinerated, recycled, or stored until needed again. Excluded from this definition of solid wastes (by 40 CFR 261.2) are: a) domestic sewage, b) industrial wastewater discharges from point sources, c) irrigation return flow, and d) in-situ mining materials.

**SPECIAL MANAGEMENT AREAS.** An area containing one or a combination of unique resources or values that receive more intensive management (e.g., ACECs, Special Recreation Management Areas, Wild & Scenic Rivers, etc.).

**SPECIAL RECREATION MANAGEMENT AREA.** BLM administrative units established to direct recreation program priorities, including the allocation of funding and personnel, to those public lands where a commitment has been made to provide specific recreation activity and experience opportunities on a sustained yield basis. This includes a long-term commitment to manage the physical, social, and managerial settings to sustain these activity and experience opportunities. Delineation is based on administrative/management criteria, including the existence of congressional designations; similar or interdependent recreation values; homogenous or

interrelated recreation uses; land tenure and use patterns; transportation systems; administrative efficiency; intensity of use; high resource values; public concerns; or interagency considerations. These areas usually require a high level of recreation investment and/or management. They include recreation sites, but recreation sites alone do not constitute a special recreation management area.

**SPECIAL STATUS SPECIES.** Wildlife and plant species that are federally listed or proposed for listing as endangered, threatened, or candidate; State of Wyoming listed; Wyoming BLM listed "Sensitive" species; or BLM-determined priority species.

**STABILIZED DUNE.** A sand dune protected from wind action by a cover of vegetation.

**STANDARD LEASE TERMS AND CONDITIONS (for Oil and Gas leases).** The requirements included on the standard oil and gas lease form 3100-11.

**STIPULATION.** A restriction placed on an oil and gas lease or other use authorization to protect other resources (e.g., a seasonal restriction to protect big game in their winter range or in their calving areas). The restriction precludes or restricts activities.

**SURFACE DISTURBANCE.** Describes any action created through mechanized or mechanical means that would cause soil mixing or result in alteration or removal of soil or vegetation and expose the mineral soil to erosive processes. Used in the literal context of actual, physical disturbance and movement or removal of the land surface and vegetation. Examples of surface disturbance include construction of well pads, pits, reservoirs, pipelines, and facilities (parking lot, tanks). See also the definition of disruptive activities.

**SURFACE DISTURBANCE AVOIDANCE AREAS.** Areas where the preferred strategy for managing surface disturbing and disruptive activities is to avoid sensitive resources. Activities would be relocated. Where avoidance is determined not to be feasible, intensive mitigation to prevent adverse effects to the sensitive resource would be implemented.

**SUSTAINED YIELD.** The achievement and maintenance in perpetuity of a high-level annual or regular periodic output of the



various renewable resources of the public lands consistent with multiple use.

**TLS-TIMING LIMITATION (SEASONAL RESTRICTION).** Prohibits surface use during specified time periods to protect identified resource values. When used as an oil and gas lease stipulation, it does not apply to the operation and maintenance of production facilities unless the findings of analysis demonstrate the continued need for such mitigation and that less stringent, project-specific mitigation measures would be insufficient. This term is also applied to surface use activities other than those associated with oil and gas.

**THREATENED AND ENDANGERED SPECIES.** As defined by the Endangered Species Act of 1973 as amended (P.L. 93-205; 87 Stat. 884), an endangered species means "any species which is in danger of extinction throughout all or a significant portion of its range" and a threatened species means "any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range."

**TRADITIONAL CULTURAL PROPERTY.** A category of historic property within the regulations implementing the National Historic Preservation Act. A place associated with cultural practices or beliefs of a living community that is rooted in that community's history and is important in maintaining the continuing cultural identity of the community (from USDI, 1998C). Continuity of use of the place is implicit in the regulations.

**TREAD LIGHTLY!** A land-use ethics program that encourages individuals and groups to minimize their direct impact on an area.

**TRONA.** A naturally occurring sodium sesquicarbonate that was formed in ancient saline lakes. It is generally honey or light brown in color, depending upon the impurities present. It is the major natural source of soda ash.

**UTILIZATION.** The portion of forage that has been consumed (or destroyed) by livestock, wild horses, wildlife, and insects during a specified period. The term is also used to refer to the pattern of such use (43 CFR 4100.0-5).

**VEGETATION TREATMENTS.** Land treatment projects designed to improve the growth of

more desirable plant species. Biological, chemical, or mechanical methods of vegetation removal, including prescribed burns, are used.

**VISUAL RESOURCE MANAGEMENT (VRM) CLASS.** The following are the definitions of the four VRM classes from BLM Manual H-8410-1.

**Class I.** The objective of this class is to preserve the existing character of the landscape. This class provides for natural ecological changes; however, it does not preclude very limited management activity. The level of change to the characteristic landscape should be very low and must not attract attention.

**Class II.** The objective of this class is to retain the existing character of the landscape. The level of change to the characteristic landscape should be low. Management activities may be seen, but should not attract the attention of the casual observer. Any changes must repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape.

**Class III.** The objective of this class is to partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate. Management activities may attract attention but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominate natural features of the characteristic landscape.

**Class IV.** The objective of this class is to provide for management activities which require major modification of the existing character of the landscape. The level of change to the characteristic landscape can be high. Management activities may dominate the view and be the focus of viewer attention. However, every attempt should be made to minimize the impact of these activities through careful location, minimal disturbance, and repeating the basic elements.

**WAIVER.** Permanent exemption from a lease stipulation. A waiver removes the stipulation from the entire lease. Waivers require the approval of the authorized officer (State Office) in coordination with the Wyoming

Game and Fish Department, other agencies and interested parties.

**WATERSHED.** All land and water within the confines of a drainage divide.

**WETLAND.** Lands where at least periodic inundation or saturation with water (either from the surface or subsurface) is the dominant factor determining the nature of soil development and the types of plant and animal communities living there. These include the entire zones associated with streams, lakes, ponds, springs, canals, seeps, wet meadows, and some aspen stands. Wetlands support all fish. They also support more species of wildlife (in higher densities) than any other habitat type in the planning area. They comprise less than 1 percent of the public land acreage.

Wetlands are lands that are transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. For purposes of this document, wetlands must have one or more of the following three attributes: (1) at least periodically, the land supports predominantly hydrophytes; (2) the substrate is predominantly undrained hydric soil; and (3) the substrate is non-soil and is saturated with water or covered by shallow water at some time during the growing season of each year.

**WILDERNESS STUDY AREA (WSA).** Areas under study for possible inclusion as a Wilderness Area in the National Wilderness Preservation System.

**WILDFIRE.** Any fire occurring on wild land that neither meets management objectives nor occurs within a prescribed fire area, and thus requires a suppression response.

**WILDLAND URBAN INTERFACE (WUI).** Location where human structures meet or intermix with wildland vegetation.

**WILDLIFE.** Any undomesticated, non-feral animal living in a natural state. This includes mammals, birds, amphibians, reptiles, fish, insects, and arachnids.

**WITHDRAWAL.** Removal or withholding of public lands, by statute or Secretarial order, from operation of some or all of the public land laws. A mineral withdrawal includes public lands potentially valuable for leasable minerals, precluding the disposal of the lands except with a mineral reservation clause unless the lands are found not to contain a valuable deposit of minerals. A mineral withdrawal is the closing of an area to mineral location and development activities.

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