

# Chapter 2

## Alternatives

### Introduction

Chapter 2 details five alternatives for managing the HiLine District to meet the purpose and need, the vision and management goals, and to address the issues discussed in Chapter 1. Each alternative represents a reasonable set of objectives and actions to guide future management of the planning area. This chapter is presented in three sections:

- Current Management and Alternatives (including Decisions Common to All Alternatives)
- Alternatives Considered but Not Analyzed in Detail
- Comparison of Alternatives

The Bureau of Land Management (BLM) complied with the National Environmental Policy Act of 1969 (NEPA) and the Council on Environmental Quality (CEQ) implementing regulations in developing alternatives, including seeking public input and analyzing a reasonable range of alternatives. Where necessary to meet the planning criteria, to address issues and comments from the public and cooperating agencies, or to provide a reasonable range of alternatives, the alternatives include management options for the planning area that would modify or amend decisions made in the West HiLine and Judith-Valley-Phillips Resource Management Plans (RMPs). Some decisions from the West HiLine and Judith-Valley-Phillips RMPs remain acceptable and reasonable; in these instances, there is limited need to develop alternative management prescriptions. In some cases, management actions are the same across all alternatives or may reflect only a decision to implement or not implement an action.

Public input received during the scoping process was considered to ensure that all the issues and concerns would be addressed, as appropriate, in developing the alternatives. Many comments addressed management of oil and gas development and other resources including travel planning, designating special management areas, and hunting and angling areas of interest. The scoping and public comment processes are summarized in Chapter 5.

Many of the decisions from the existing RMPs have been implemented. In some cases, implementation of these decisions established valid existing rights or other obligations that are important considerations in preparing the HiLine RMP. For example, many of the oil and gas resources in the planning area are leased. The presence of these valid existing rights influences, and sometimes limits, management choices. Specific to the oil and gas program, the alternatives address the availability and allocation of lands for future oil and gas leasing, potential lease stipulations, and additional mitigation to be considered and applied during the Application for Permit to Drill (APD) process.

The guidance found in the Decisions Common to All Alternatives sections has been carried forward from existing laws, regulations, policy, and previous planning efforts, primarily the West HiLine RMP (BLM 1988, 1992b) and the Judith-Valley-Phillips RMP (BLM 1994a).

All of the alternatives presented herein have been analyzed by a BLM interdisciplinary team. The alternative which contains the most desired combination of potential planning decisions, and meets the multiple use and sustained yield mandates of Section 103(c) of the Federal Land Policy and Management Act (FLPMA) (43 U.S.C. 1702(c)), is identified in this Draft RMP and Environmental Impact Statement (EIS) as the preferred alternative. Following public review and comment on the Draft RMP/EIS, and any subsequent revisions, the HiLine District Manager will recommend a preferred alternative to the State Director in the Proposed RMP/Final EIS. The State Director must approve the selection of the preferred alternative along with the other alternatives under consideration.

Upon completion of this process, the Decisions Common to All Alternatives, combined with the preferred alternative selected by the State Director (either the current management alternative or any of the other alternatives, or a combination thereof) will form the management plan for the HiLine District.

## Implementation and Monitoring

The implementation and monitoring process for the planning area involves four major steps: planning; implementing; monitoring; evaluating and adjusting as necessary through planning. Planning involves a great amount of time and resources to identify issues and management opportunities to address those issues. During the planning process, the scope of the issue is identified and management goals, objectives and actions are defined to address the issues. Once the planning process is completed, decisions are implemented, monitored, and evaluated over a period of time to determine if goals are being met and if management actions are achieving the desired objective or standard. Results of monitoring are documented and communicated to appropriate parties, and management objectives and actions are modified, if necessary, based on results.

The BLM will review monitoring results on a periodic basis, and any management objectives or actions that may need to be changed or adjusted will be open to public review and comment before decisions are made through an environmental review process. Appendix A provides more information on implementation and monitoring. Appendix R provides specific guidance for monitoring sage-grouse and sagebrush habitats. Through implementation an adaptive management approach may also be used for specific activities in the planning area, if appropriate, consistent with Secretarial Order 3270 (Adaptive Management). Adaptive management would require activity level planning, environmental review, and public involvement.

All proposed actions in the future must conform to the HiLine RMP and Record of Decision when completed (43 CFR 1601.0-5(b)). Proposed actions on or affecting BLM land must also be reviewed for National Environmental Policy Act (NEPA) compliance. Proposed actions fall into one of five categories: (1) actions that are exempt from NEPA; (2) actions that are categorically excluded; (3) actions that are covered by an existing NEPA environmental document; (4) actions that require preparation of an environmental assessment (EA) to determine if an environmental impact statement (EIS) is needed; or (5) actions that require preparation of an EIS. The NEPA procedural, documentation, and public involvement requirements are different for each category. However, all proposed actions must be in conformance with the approved resource management plan. For additional information, please refer to BLM Handbook H-1790-1 available at most BLM offices or on the BLM website at: [http://www.blm.gov/pgdata/etc/medialib/blm/ak/aktest/planning/planning\\_general.Par.2116.File.dat/Handbook.NEPA.H-1790-1.2k8.01.30\[1\].pdf](http://www.blm.gov/pgdata/etc/medialib/blm/ak/aktest/planning/planning_general.Par.2116.File.dat/Handbook.NEPA.H-1790-1.2k8.01.30[1].pdf)

### Adaptive Management

Adaptive management [is a decision process that] promotes flexible decision making that can be adjusted in the face of uncertainties as outcomes from management actions and other events become better understood. Careful monitoring of these outcomes both advances scientific understanding and helps adjust policies or operations as part of an iterative learning process. Adaptive management also recognized the importance of natural variability in contributing to ecological resilience and productivity. It is not a 'trial and error' process, but rather emphasizes learning while doing. Adaptive management does not represent an end in itself, but rather a means to more effective decisions and enhanced benefits. Its true measure is in how well it helps meeting environmental, social, and economic goals, increases scientific knowledge, and reduces tensions among stakeholders.

Source: Williams, B.K., R.C. Szaro, and C.D. Shapiro. 2007. Adaptive Management: The U.S. Department of the Interior Technical Guide. Adaptive Management Working Group, U.S. Department of the Interior, Washington, DC.

## Current Management and Alternatives

The following sections provide a detailed description of the five alternatives for the planning area. In order to improve the readability of this document and to enable the reader to easily locate referenced tables/sections, the resource discussions are organized alphabetically. The resource sections are noted in the document footers, along with the chapter and page numbers. Each resource section includes Decisions Common to All Alternatives along with the description by alternative if applicable. Not all resource sections have a range of alternatives because management of the resource would be the same for each alternative.

## Air Resources

### Goals

*Minimize the impact of management actions on air quality.*

*Implement management actions to improve air quality as practicable.*

## Objectives

Comply with national and state air quality standards and protect existing air quality and air quality related values (AQRVs).

## Decisions Common to All Alternatives

The BLM will not authorize management actions that would exceed applicable Montana and Federal Ambient Air Quality Standards (MAAQS, NAAQS).

Actions authorized on BLM land and federal minerals will comply with the Clean Air Act requirements, including the State of Montana Air Quality Implementation Plan, through the use of best management practices (BMPs) (Appendix C) and the Air Resource Management Plan (Appendix B).

To ensure actions authorized by the BLM comply with air quality regulations, requirements and implementation plans, the BLM will evaluate effects to air quality at the activity planning level, and prepare detailed monitoring and mitigation prescriptions for proposals that could degrade air quality.

The BLM will coordinate with the Montana/Idaho Airshed Group, Smoke Monitoring Unit and the appropriate airshed zone coordinator to ensure that prescribed fires comply with smoke management rules and regulations. The BLM will use timing and atmospheric dispersal to control particulate emissions and record and review data on fire prescriptions and mitigation measures (location, size, and date of burns).

For oil and gas operations, venting or flaring of hydrocarbon gas requires approval under provisions of Notice to Lessee – 4A (NTL-4A). The Montana Department of Environmental Quality (DEQ), Air Quality Protection Division, monitors this activity for compliance. The use of green or flareless well completions as a BMP for oil and gas operations will be encouraged.

### **Air Quality Standards**

Primary standards are designed to protect human health, including sensitive populations, such as people with asthma and emphysema, children, and senior citizens. Primary standards were designed for the immediate protection of public health, with an adequate margin of safety, regardless of the cost.

Secondary standards are designed to protect public welfare, including soils, water, crops, vegetation, buildings, property, animals, wildlife, weather, visibility, and other economic, aesthetic, and ecological values, as well as personal comfort and well-being. Secondary standards were established to protect the public from known or anticipated effects of air pollution.

## Cultural Resources

### Goal

*Protect, preserve and interpret the cultural resources within the planning area and ensure they are available for appropriate uses by present and future generations.*

## Objectives

Manage important archaeological and historical sites, or areas where concentrations of cultural resources occur, for their use based on the nature of the cultural resource and relative preservation value.

Reduce imminent threats from natural or human-caused deterioration, and/or reduce potential conflicts with other resource uses.

Promote stewardship, conservation, and appreciation of cultural resources through educational and public outreach programs in accordance with the BLM Heritage Education Program.

## Decisions Common to All Alternatives

Protection for all cultural resources will occur according to federal laws and BLM regulations and agreements. The BLM must evaluate all proposed actions, initiated or authorized by the BLM, to determine potential effects to historic properties. This evaluation process occurs under Section 106 of the National Historic Preservation Act (NHPA). The BLM must determine, based on inventory and evaluation data, whether the proposed action could impact important cultural resources and, if necessary, take steps to avoid or mitigate possible impacts.

The BLM will mitigate impacts to cultural resources from authorized uses through project abandonment, redesign, and if necessary, data recovery investigations in accordance with the national Programmatic Agreement among the BLM, Advisory Council on Historic Preservation, and National Conference of State Historic Preservation Officers (BLM 2012); and the State Protocol Agreement between the BLM Montana State Director and the Montana State Historic Preservation Office (BLM 1998a).

Several steps are available to mitigate an occurrence of a potential adverse impact to cultural resources, including a requirement for on-the-ground inventory prior to proposed projects that include surface-disturbing activities; avoidance or modification of the proposed project; and if effective modification cannot be reached, excavation for archaeological information retrieval and/or consultation with the State Historic Preservation Office and the Advisory Council on Historic Preservation. Further, consultation with knowledgeable tribal elders is used to identify important cultural properties which might otherwise be missed by a standard archaeological inventory.

To consider potential effects to historic properties where a federal action is occurring, the BLM will comply with Section 106 of the NHPA. Commonly, a Class III survey (inventory) is required prior to surface disturbance to identify significant cultural properties.

The BLM will consult with Indian tribes when its actions have the potential to affect areas of concern to the practitioners of traditional religions. The activities of concern are those that might degrade the visual or aesthetic nature of an area, or cause the loss of plant species or other resources important to traditional uses. The BLM is required to consult with traditional religious practitioners on policies and procedures to ensure they are considered when implementing agency actions. This includes consultations with federally recognized Indian tribes as sovereign nations in a government-to-government relationship with the United States.

Potential effects to the Little Rocky Mountains and Sweet Grass Hills Traditional Cultural Properties (TCPs) will be avoided, if possible, or mitigated (Figure 2.1). Specific management for the TCPs is addressed under the alternatives section below.

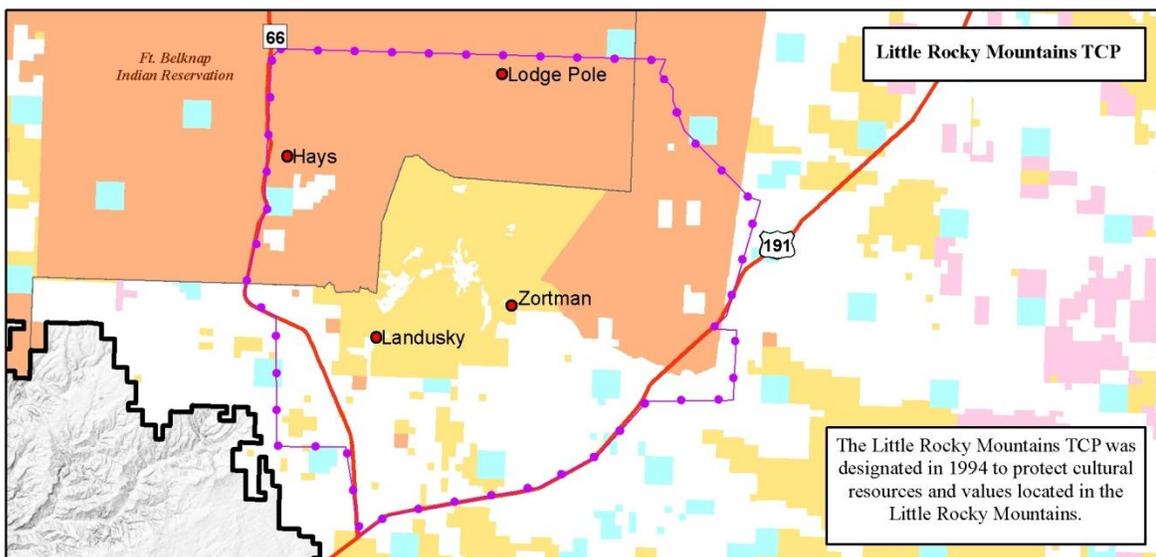
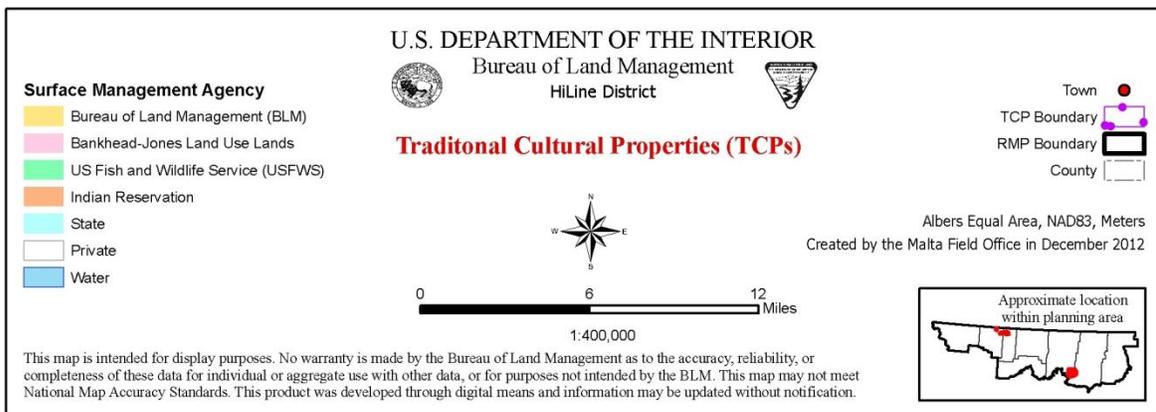
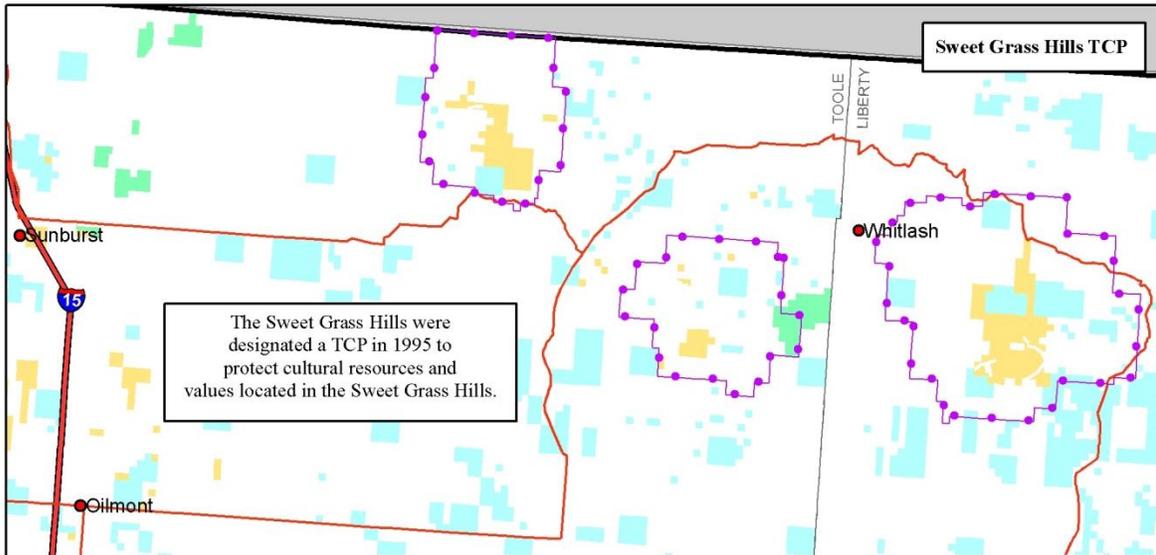
### Class III - Intensive Field Survey

A Class III – Intensive field survey is a continuous, intensive survey of an entire target area, aimed at locating and recording all archaeological properties that have surface indications, by walking close-interval parallel transects until the area has been thoroughly examined. Class III methods vary geographically, conforming to the prevailing standards for the region involved.

The survey describes the distribution of properties in an area; determines the number, location and condition of properties; determines the types of properties actually present within the area; permits classification of individual properties; and records the physical extent of specific properties.

Because Class III survey is designed to produce a total inventory of the cultural properties observable within the target area, once it has been completed no further survey work should be needed in the target area as long as the current standards are met. Areas with a high probability of containing buried cultural materials or known cultural materials may require additional work of professional monitoring and/or data recovery excavations. Areas that require additional work are analyzed on a case-by-case basis, depending on the proposed action and the types of cultural resources present in the project area.

**Figure 2.1  
Traditional Cultural Properties**



To promote the appreciation of cultural resources the BLM will continue to provide traveling museum exhibits consisting of replica artifacts from local sites. These exhibits will provide outreach and local identification with cultural resources across the planning area.

The BLM will monitor cultural sites to ensure that sites retain integrity and are not being vandalized or degraded through other processes.

The Big Bend of the Milk River, Kevin Rim, and Sweet Grass Hills Areas of Critical Environmental Concern (ACECs), along with the potential Little Rocky Mountains ACEC, contain diverse cultural resources and historic sites of significance. Special management for these areas is addressed in the Special Designations section of Chapter 2.

## National Register of Historic Places

Cultural sites with characteristics that make them eligible for the National Register of Historic Places (NRHP) require additional attention beyond recordation. The NRHP sites will be categorized for use allocations based on their nature and relative preservation value, and appropriately managed.

Pursuant to Section 110 of the National Historic Preservation Act, the BLM will identify other cultural resources in the planning area by defining priority geographic areas for new field inventory based on a probability for unrecorded significant resources. Any new National Register eligible sites recorded will be categorized in use allocations and specific management will be prescribed.

### Use Allocation Categories

Cultural resources within the planning area are diverse, extensive and rich in history. Sacred sites consist of vision quest sites, graves, ceremonial sites and spiritual sites. Prehistoric cultural sites consist of habitation/camp sites such as stone circle sites, bison kill sites, cairns, lithic scatters, quarries, animal processing sites, etc. Historic sites range from early railroads, homestead sites, early farming and ranching infrastructure, town sites, building foundations, and dumps, to sites associated with early mining.

Categorizing cultural resources according to their potential uses is the culmination of the identification process and the bridge to protection and utilization decisions. Use categories establish what needs to be protected, and when or how use should be authorized. All cultural resources have uses, but not all should be used in the same way (BLM 8110 Manual, 2004).

All recorded cultural resources will be assessed according to six use categories for prehistoric and historic resources, as identified below:

- **Scientific Use:** This category applies to any cultural property determined to be available for consideration as the subject of scientific or historical study at the present time, using currently available research techniques. Study includes methods that would result in the property's physical alteration or destruction. This category applies almost entirely to prehistoric and historic archaeological properties, where the method of use is generally archaeological excavation, controlled surface collection, and/or controlled recordation (data recovery). Recommendations to allocate individual properties to this use must be based on documentation of the kinds of data the property is thought to contain and the data's importance for pursuing specified research topics. Properties in this category need not be conserved in the face of a research or data recovery (mitigation) proposal that would make adequate and appropriate use of the property's research importance. Scientific Use properties include:
  - **Beaucoup Site (24PH188/189).** This site complex is important because it contains a bison kill site, extensive drive lines, stone circle sites and unusual ceremonial features. The site is part of the Big Bend of the Milk River ACEC.
  - **Fantasy Complex (24PH1206).** This site is a kill site complex indicating use over several time periods.

- Kevin Rim (Toole County). This site complex consists of extensive prehistoric stone feature sites and drive lines with potential bison kill sites located on a unique geological bluff.
- Laundry Springs (24VL1679). This site has buried features and is located next to a natural spring. Evidence shows that the site was much larger at one time before early homesteading and farming.
- Lonesome Lake Complex (Chouteau County). This site is important because it contains over 1,000 stone circles along with other stone features and prehistoric sites.
- **Public Use:** This category may be applied to any cultural property found to be appropriate for use as an interpretive exhibit in place, or for related educational and recreational uses by members of the general public. The category may also be applied to buildings suitable for continued use or adaptive use, for example as staff housing or administrative facilities at a visitor contact or interpretive site. Public Use properties include:
  - Henry Smith (24PH794). This site complex is important because it contains a bison kill site, extensive drive lines, stone circle features and unique stone effigies. The site is part of the Big Bend of the Milk River ACEC.
  - Little Rocky Mountains Ranger Station (24PH2151). The Little Rocky Mountains Ranger Station was built in 1908 by the Forest Service as a Fire Lookout in the Little Rocky Mountains. It is the only station of its kind in the HiLine District. The cabin was also used as an administrative site for the BLM Fire Program.
- **Conservation for Future Use:** This category is reserved for any unusual cultural property which, because of scarcity, a research potential that surpasses the current state of the art, singular historic importance, cultural importance, architectural interest, or comparable reasons, is not currently available for consideration as the subject of scientific or historical study that would result in its physical alteration. A cultural property included in this category is deemed worthy of segregation from all other land or resource uses, including cultural resource uses that would threaten the maintenance of its present condition or setting, as pertinent, and will remain in this use category until specified provisions are met in the future. Conservation for Future Use properties include:
  - Grouse Gulch Cave (24PH1121). This cave is unique for its petroglyph images.
  - Lookout Cave (24PH402). This cave is unique as it has yielded a wealth of information from excavations. The cave is also unique for its petroglyph images.
  - Two Hands Cave (24PH404). This cave is unique for its petroglyph images.
- **Experimental Use:** This category may be applied to a cultural property judged well-suited for controlled experimental study, to be conducted by the BLM or others concerned with the techniques of managing cultural properties, which would result in the property's alteration, possibly including loss of integrity and destruction of physical elements. Committing cultural properties or the data they contain to loss must be justified in terms of specific information that would be gained and how it would aid in the management of other cultural properties. Experimental study should aim toward understanding the kinds and rates of natural or human-caused deterioration, testing the effectiveness of protection measures, or developing new research or interpretation methods and similar kinds of practical management information. It should not be applied to cultural properties with strong research potential, traditional cultural importance, or good public use potential, if it would significantly diminish those uses. No Experimental Use properties have been identified at this time.
- **Traditional Use:** This category is to be applied to any cultural resource known to be perceived by a specified social and/or cultural group as important in maintaining the cultural identity, heritage, or well-being of the group. Cultural properties assigned to this category are to be managed in ways that recognize the importance ascribed to them and seek to accommodate their continuing traditional use. Traditional Use properties include:

- Little Rocky Mountains TCP (24PH3197/24BL1341). This area was determined eligible for the National Register of Historic Places as a Traditional Cultural Property based on significance derived from the role the property plays in a community's historically rooted beliefs, customs, and practices.
- Sweet Grass Hills TCP (24TL771/24LT171). The Sweet Grass Hills was determined eligible for the National Register of Historic Places as a Traditional Cultural Property based on significance derived from the role the property plays in a community's historically rooted beliefs, customs, and practices.
- Medicine Rock (24PH1008). This is a large petroglyph boulder located on the prairie. The boulder is an erratic left by the retreating glaciers several thousand years ago. Native Americans often leave offerings at this site.
- **Discharged from Management:** This category is assigned to cultural properties that have no remaining identifiable use. Most often these are prehistoric and historic archaeological properties, such as small surface scatters of artifacts or debris, whose limited research potential is effectively exhausted as soon as they have been documented. Also, more complex archaeological properties that have had their salient information collected and preserved through mitigation or research may be discharged from management, as should cultural properties destroyed by any natural event or human activity. Properties discharged from management remain in the inventory, but they are removed from further management attention and do not constrain other land uses. Particular classes of unrecorded cultural properties may be named and described in advance as dischargeable upon documentation, but specific cultural properties must be inspected in the field and recorded before they may be discharged from management. No Discharged from Management properties have been identified at this time.

## Alternative A (Current Management)

### Little Rocky Mountains Traditional Cultural Property

Oil and gas leasing would be subject to existing requirements under the National Historic Preservation Act (NHPA), American Indian Religious Freedom Act, and Native American Graves Protection and Repatriation Act, E.O. 13007.

### Sweet Grass Hills Traditional Cultural Property

The area would be open to oil and gas leasing with a No Surface Occupancy (NSO) stipulation.

The area is currently withdrawn from locatable mineral entry under the Mining Law until 2017. The BLM would review the withdrawal prior to expiration.

## Alternative B

### Little Rocky Mountains Traditional Cultural Property

The area would be open to oil and gas leasing with an NSO stipulation (38,102 acres).

The area would be an exclusion area for wind energy rights-of-way (30,648 acres).

The area would be closed to solid mineral leasing (e.g., coal) (37,403 acres).

The BLM would recommend a 20-year withdrawal from locatable mineral entry under the Mining Law to protect the TCP (37,387 acres).

### Sweet Grass Hills Traditional Cultural Property

The area would be open to oil and gas leasing with an NSO stipulation (21,275 acres).

The area would be an exclusion area for wind energy rights-of-way (7,718 acres).

The area would be closed to solid mineral leasing (e.g., coal) (19,665 acres).

The area is currently withdrawn from locatable mineral entry under the Mining Law until 2017. The BLM would recommend a 20-year extension of the current withdrawal to protect the TCP (19,671 acres).

## **Alternative C**

### **Little Rocky Mountains Traditional Cultural Property**

The area would be open to oil and gas leasing with an NSO stipulation (38,102 acres).

The area would be an exclusion area for wind energy rights-of-way (30,648 acres).

The area would be closed to solid mineral leasing (e.g., coal) (37,403 acres).

### **Sweet Grass Hills Traditional Cultural Property**

The area would be open to oil and gas leasing with an NSO stipulation (21,275 acres).

The area would be an exclusion area for wind energy rights-of-way (7,718 acres).

The area would be closed to solid mineral leasing (e.g., coal) (19,665 acres).

The area is currently withdrawn from locatable mineral entry under the Mining Law until 2017. The BLM would recommend a 20-year extension of the current withdrawal to protect the TCP (19,671 acres).

## **Alternative D**

### **Little Rocky Mountains Traditional Cultural Property**

The area would be open to oil and gas leasing with an NSO stipulation (38,102 acres).

The area would be an exclusion area for wind energy rights-of-way (30,648 acres).

The area would be closed to solid mineral leasing (e.g., coal) (37,403 acres).

The area would be closed to solid mineral material sales (e.g., sand and gravel) (37,403 acres).

### **Sweet Grass Hills Traditional Cultural Property**

The area would be open to oil and gas leasing with an NSO stipulation (21,275 acres).

The area would be an exclusion area for wind energy rights-of-way (7,718 acres).

The area would be closed to solid mineral leasing (e.g., coal) (19,665 acres).

The area is currently withdrawn from locatable mineral entry under the Mining Law until 2017. The BLM would not recommend an extension of the current withdrawal.

The area would be closed to solid mineral material sales (e.g., sand and gravel) (19,665 acres).

## **Alternative E (Preferred Alternative)**

### **Little Rocky Mountains Traditional Cultural Property**

A portion of the TCP would be closed to oil and gas leasing (32,166 acres). The remaining area (5,936 acres) would be open to leasing with an NSO stipulation.

Through vegetation management or forest health treatments the BLM may restore natural meadows to enhance traditional uses and viewsheds.

The area would be an avoidance area for rights-of-way (30,648 acres).

The area would be an exclusion area for wind energy rights-of-way (30,648 acres).

A portion of the TCP would be closed to solid mineral leasing (e.g., coal) (32,058 acres). The remaining area would be open.

A portion of the TCP would be limited to those mineral material uses necessary for reclamation activities and maintenance of the existing road system (32,058 acres).

### **Sweet Grass Hills Traditional Cultural Property**

The area would be closed to oil and gas leasing (21,275 acres).

The area would be an avoidance area for rights-of-way (7,718 acres).

The area would be an exclusion area for wind energy rights-of-way (7,718 acres).

The area would be closed to solid mineral leasing (e.g., coal) (19,665 acres).

The area is currently withdrawn from locatable mineral entry under the Mining Law until 2017. The BLM would recommend a 20-year extension of the current withdrawal to protect the TCP (19,671 acres).

The area would be closed to solid mineral material sales (e.g., sand and gravel) (19,665 acres).

## **Fire Management and Ecology**

### Goal

*Manage fire and fuels to protect life and property and to protect or enhance resource values.*

### **Objectives**

Provide guidance to develop strategies to manage wildfires with an emphasis on firefighter and public safety.

Use fire to protect, maintain, and enhance resources; and to function in its ecological role where appropriate.

Integrate fire and fuels management across landscape, agency, federal, and international boundaries.

### **Decisions Common to All Alternatives**

The BLM's 2008 Interim Fire Planning Manual Guidance (M-9211) and Fire Planning Handbook (Interim Guidance) (H-9211-1); and Chapter 09 of the Interagency Standards for Fire and Fire Aviation Operations (NIFC 2010), and the

BLM’s Updated Policy for Implementation of Federal Wildland Fire Management Policy (IM No. 2009-112) summarize national fire policy, regulations, guidance documents, and BLM fire planning policy. The key points of this policy and guidance are:

- Firefighter and public safety is the first priority in every fire management activity.
- Fire management programs and activities are economically viable, based upon values to be protected, costs, and land and resource management objectives.
- Federal, state, tribal, local, interagency, and international coordination and cooperation are essential.
- Federal agencies and local communities collaborate, particularly when Community Wildfire Protection Plans are prepared.
- The role of wildland fire as an essential ecological process and natural change agent will be incorporated into the planning process.
- Fire Management Plans (FMPs), programs, and activities support land and resource management plans and their implementation.
- Fire regime condition class methodology will be utilized for project planning, prioritization, and monitoring.

The BLM prioritizes fire management activities by risk to life and property, commensurate with fire management costs. Mechanical, prescribed fire and other appropriate treatments will be used to restore and maintain fire regimes, land health, and to reduce hazardous fuels accumulations.

The BLM uses Fire Management Units (FMUs), fire management categories, and the Fire Management Plan (FMP) (BLM 2004a) to summarize guidance for fire and fuels management actions on BLM lands (FMPs are updated annually). The planning area includes seven FMUs: Sweet Grass Hills, Havre Prairie Potholes, Malta Prairie Potholes, Bears Paw, Little Rockies, Malta Breaks, and Sun Prairie (Table 2.1 and Map 2.1, which is located at the end of Chapter 2). The BLM assigns a fire management category to each FMU; the categories range from Category A where fire (including prescribed fire) is not desired at all, to Category D where fire is desired and no constraints are placed on its use. All FMUs in the planning area are assigned to either Category B or C. The BLM periodically assesses FMUs and the FMP to determine whether they reflect appropriate and suitable strategies to protect high value areas; or where appropriate, to enhance resource conditions and achieve desired vegetation conditions.

**Fire Management Categories**

**Category A:** Fire is not desired at all. (No lands in the planning area are assigned to this category.)

**Category B:** Unplanned fire is likely to cause negative effects.

**Category C:** Fire is desired to manage ecosystems, but current conditions create constraints on use.

**Category D:** Fire is desired; no constraints on its use. (No lands in the planning area are assigned to this category.)

Appendix D, Fire and Emergency Stabilization and Rehabilitation (ES&R), provides full definitions of the fire management categories.

The BLM Montana/Dakotas State Office has developed a database of landscape-level fire and disturbance regimes. This database is used to assess the condition of plant communities and systems relative to their regimes. Fire regime/condition class (FRCC) methodology and other land health assessments will be used by the BLM to monitor vegetation treatment effects and other changes to landscape health and fire behavior. This information will be used to provide feedback for FMU strategies and management possibilities. With social and political constraints considered, new fire management strategies could be developed including use of wildfire for resource benefit in Category C areas.

Initial action by the BLM and cooperators on BLM wildfires is suppression, including direct and indirect tactics. If monitoring indicates the strategy could be revised in Category C areas to include use of wildfire for resource benefit, changes would be developed and implemented through coordination with state, local, tribal, and other federal agencies. The FMP would be updated, and operations plans would be developed as necessary. To coordinate fire management actions across government and ownership boundaries, the BLM will use existing or new cooperative agreements and

memoranda of understanding (MOUs). Currently, these include initial attack exchanges with Blaine, Hill, Phillips, and Valley Counties.

The BLM coordinates with state and adjacent federal land management agencies to implement fire prevention orders such as restrictions and/or closures; and maintains a current Fire Restriction and Closure Plan as an appendix to the Fire Management Plan. The BLM will develop and maintain a Wildland Fire Prevention, Mitigation, and Education Plan (BLM 2010a); and coordinate with counties to develop, update, or implement Community Wildfire Protection Plans.

Vegetation and fuels treatments on BLM lands will be planned and prioritized based on values at risk and land health assessments, including fire regime condition class assessments. In conjunction with forestry, wildlife, riparian, and range management priorities, mechanical and prescribed fire treatments may be used in all of the FMUs. The highest wildland urban interface (WUI) priority fuels treatment areas include the Zortman and Landusky Communities at Risk and areas identified by Community Wildfire Protection Plans and the Tribal Forest Protection Act.

The BLM will protect the wilderness characteristics of land within the National Wilderness Preservation System and in Wilderness Study Areas (WSAs). This includes the Burnt Lodge and Bitter Creek WSAs. Fire management-related activities, including prescribed fire, should preserve or enhance the natural character of wilderness areas and avoid unnecessary impairment of a WSA's suitability for preservation as wilderness. The use of ground-disturbing equipment during wildfire suppression and rehabilitation requires authorization, and should be avoided to protect wilderness characteristics. The use of motorized vehicles and mechanical equipment during mop-up should be minimized, and fire camps should be located outside WSAs. Suppression methods, prescribed fire implementation, and emergency stabilization/rehabilitation (ES&R) projects may include the use of power tools, aircraft, motorboats, and motorized firefighting equipment, and may require authorization prior to use.

The BLM will protect sensitive status species habitat (such as sage-grouse) during suppression and prescribed fire activities as described in the Interagency Standards for Fire and Fire Aviation Operations and the current fire management plan. Fire management-related activities, including prescribed fire, should preserve or enhance the habitat quality for sage-grouse and other sensitive status species, especially in priority habitat areas, and would be subject to mitigation measures and conservation actions for greater sage-grouse habitat (Appendix M). Where applicable, the BLM will use best management practices to design fuels treatment objectives to protect existing sagebrush ecosystems, modify fire behavior, restore native plants, and create landscape patterns which benefit sage-grouse habitat (WO IM No. 2011-138). The use of heavy equipment during wildfire suppression and rehabilitation is allowable in sage-grouse habitat although cross-country travel should be limited through these areas. Wildfire suppression facilities shall be located to the extent possible in areas that minimize disturbance to high quality sage-grouse habitat.

The BLM will implement ES&R in a cost-effective manner to minimize negative effects of fire on soil, vegetation, and water resources (Appendix D).

Prior to approval of vegetation treatment activities, an interdisciplinary environmental review would be required. For other BLM resources, site inventories or assessments will provide guidance for project planning so that activities will meet the objectives of those programs. Livestock grazing could be considered as a vegetation management tool to reduce hazardous fuel loads. The BLM will design post fuels management projects to ensure long-term persistence of seeded or pre-treatment native plants. Post-treatment land uses, such as livestock grazing rest periods, will be determined at the activity level.

The Montana DEQ has the primary responsibility for attaining and maintaining air quality standards through coordination with the Environmental Protection Agency (EPA). Prescribed fire projects must comply with state and federal air quality regulations, and the BLM must obtain burn permits from the Montana DEQ. The BLM is a member of the Montana/Idaho Airshed Group which manages smoke impacts to the region by monitoring and scheduling interagency burn activities. The entire planning area is within Montana/Idaho Airshed 9, a geographic area which has excellent smoke dispersal and is rarely denied activity by the Montana/Idaho State Airshed Group. At the project level, the BLM manages smoke impacts to sensitive areas such as towns, WSAs and wilderness areas by constraining wind direction and/or smoke dispersal height in the burn plan prescription. In addition, the BLM coordinates and obtains burn permits as necessary from county and local agencies and tribal partners.

**Alternative A (Current Management)**

Most of the FMUs are managed as Category B (Table 2.1 and Map 2.1), where unplanned fire is likely to cause negative effects, but prescribed fire treatments may be used to reduce fuels, improve land health, and restore fire regimes. Suppression of unplanned ignitions (wildfire) is required in Category B areas. Prevention and education activities are emphasized in this category as well as fuels reduction treatments.

The Malta Breaks FMU is managed as Category C (Table 2.1 and Map 2.1), where fire is desired to manage ecosystems; but ecological, social, or political conditions create constraints on use of wildfire for resource benefit. Suppression may be required in Category C areas. The emphasis in this category is to reduce hazardous fuels accumulations and to restore or maintain land health and fire regimes. Prevention and education activities target recreation areas and Wildland Urban Interface (WUI) areas.

| <b>Table 2.1<br/>Fire Management Units and Categories by Alternative</b> |                  |   |                                |  |
|--|------------------|---|--------------------------------|--|
| <i>Fire Management Unit</i>  | <i>BLM Acres</i> | <i>Fire Management Category</i>               |                                |  |
|  |                  | <i>Alternative A<br/>(Current Management)</i> | <i>Alternatives B, C and D</i> | <i>Alternative E<br/>(Preferred Alternative)</i> |
| Bears Paw  | 123,055          | B   | B                              | B  |
| Havre Prairie Potholes   | 247,834          | B   | B                              | B  |
| Little Rockies   | 32,216           | B   | C                              | B  |
| Malta Breaks   | 193,046          | C   | C                              | C  |
| Malta Prairie Potholes   | 854,221          | B   | C                              | C  |
| Sun Prairie  | 962,899          | B   | C                              | B  |
| Sweet Grass Hills  | 24,204           | B   | B                              | B  |

**Alternatives B, C, and D**

The Bears Paw, Havre Prairie Potholes, and Sweet Grass Hills FMUs would be managed as Category B (Table 2.1 and Map W.0), where unplanned fire is likely to cause negative effects but prescribed fire treatments may be used to reduce fuels, improve land health, and restore fire regimes. Prevention and education activities are emphasized in this category as well as fuels reduction treatments.

The Little Rockies, Malta Breaks, Malta Prairie Potholes, and Sun Prairie FMUs would be managed as Category C (Table 2.1 and Map W.0), where fire is desired to manage ecosystems but ecological, social, or political conditions create constraints on the use of wildfire for resource benefit. Suppression may be required in Category C areas. The emphasis in this category is to reduce hazardous fuels accumulations and to restore or maintain land health and fire regimes. Prevention and education activities target recreation areas and Wildland Urban Interface (WUI) areas.

Wildfires would be suppressed in both Category B and C areas. If the conditions described above change in Category C areas, suppression strategies would be reevaluated to include use of wildfire for resource benefit. Changes would be developed and implemented through coordination with state, local, tribal, and other federal agencies.

**Alternative E (Preferred Alternative)**

The Bears Paw, Havre Prairie Potholes, Little Rockies, Sun Prairie, and Sweet Grass Hills FMUs would be managed as Category B (Table 2.1 and Map 2.1), where unplanned fire is likely to cause negative effects but prescribed fire treatments may be used to reduce fuels, improve land health, and restore fire regimes. Prevention and education activities are emphasized in this category as well as fuels reduction treatments.

The Malta Breaks and Malta Prairie Potholes FMUs would be managed as Category C (Table 2.1 and Map 2.1), where fire is desired to manage ecosystems but ecological, social, or political conditions create constraints on the use of wildfire for resource benefit. Suppression may be required in Category C areas. The emphasis in this category is to reduce hazardous fuels accumulations and to restore or maintain land health and fire regimes. Prevention and education activities target recreation areas and Wildland Urban Interface (WUI) areas.

Wildfires would be suppressed in both Category B and C areas. If the conditions described above change in Category C areas, suppression strategies would be reevaluated to include use of wildfire for resource benefit. Changes would be developed and implemented through coordination with state, local, tribal, and other federal agencies.

## **Fish**

### Goals

*Ensure habitat for aquatic species is of sufficient quantity and quality to enhance biological diversity and sustain ecological, economic and social values.*

*Ensure proposed land uses initiated or authorized by the BLM maintain or improve aquatic habitats.*

*Promote public awareness, appreciation, and understanding of fisheries conservation, management, and ecology.*

## **Objectives**

The necessary habitat, biological processes, and disturbance regimes would be present to maintain, enhance, or restore priority fisheries populations. Land use would maintain habitat quality and large, intact reaches of aquatic habitat.

Use individual species management strategies and/or known habitat associations to design aquatic habitat for as many aquatic species as possible.

Manage priority fish habitats using multi-scale assessments to identify current conditions, risks and opportunities.

Identify restoration activities to provide improved aquatic and riparian habitat.

## **Decisions Common to All Alternatives**

Management activities would be designed and implemented consistent with current adopted strategies including Montana's Comprehensive Fish and Wildlife Conservation Strategy (MFWP 2005) and currently accepted science.

Most management actions would be directed at maintaining habitat and the processes that provide habitat diversity in the planning area. Where species-specific management can improve individual special status species habitats or populations, those actions would be considered as long as they are also compatible with long-term persistence of other habitats and species.

The BLM will cooperate with state and federal agencies to establish programs that are consistent with ecologically sound and sustainable practices, conserve and enhance high quality aquatic habitat, protect native aquatic species, and enhance game fishing opportunities.

If species which occur on BLM lands in the planning area are added to the Threatened and Endangered list in the future, management actions would be developed to conserve, enhance and protect the species in accordance with the Endangered Species Act.

The BLM will continue to manage aquatic habitats in the planning area according to existing federal and state laws, regulations, and BLM policies including BMPs and Montana Streamside Management Zone (SMZ) guidelines. Habitat management includes maintaining water quality and quantity, and riparian and wetland habitat conditions.

The BLM will protect aquatic resources occurring on BLM land through implementation of responsible and appropriate land management activities. The BLM will continue to implement, review, and update as necessary the Prairie Pothole Waterfowl and Fisheries Habitat Management Plan (HMP) of North Central Montana (BLM 1978) and the Whitewater Lake Waterfowl Habitat Development Project HMP (BLM 1970a). The BLM management approach includes the development of activity plans showing how site-specific actions accomplish goals and objectives. Some examples of activity plans include allotment management plans, recreation plans, habitat management plans, cultural resource management plans, oil and gas plans of development, and use authorizations. These plans will include the implementation of appropriate BMPs for activities directed by or permitted by the BLM to support the integrity of ecological processes, protect identified beneficial water uses, and meet state water quality standards.

The BLM will provide maintenance to all aquatic habitat improvement/fisheries projects as needed to ensure proper function.

### **Alternative A (Current Management)**

All high value fisheries would be evaluated to determine the need for fencing to promote riparian vegetation establishment.

An aquatic resource survey and monitoring plan would be developed to identify areas for special management to protect and/or improve aquatic habitats.

The BLM would encourage increased opportunities for recreational fishing (i.e., access, reservoir development, habitat improvement).

### **Alternatives B, C, D, and E (Preferred Alternative)**

Any new reservoirs would be analyzed for fish habitat potential. Priority consideration would be given to reservoirs near communities and access routes. The BLM would maintain and/or improve new and existing designated fishing reservoirs through fencing, aeration, and fish habitat improvement projects. All fishing reservoirs would be maintained as fisheries as long as the BLM and Montana Fish, Wildlife and Parks (MFWP) determine that they are viable fisheries opportunities. Fish stocking would be coordinated with MFWP.

The BLM would develop an aquatic resource survey and monitoring plan to identify areas for management to protect and/or improve aquatic habitats. Fish-bearing stream reaches would be surveyed/monitored as conditions warrant. Fishing reservoirs would be surveyed/monitored as needed for fish populations, riparian condition, emergent vegetation, reservoir condition, water quality, water depth, signage and condition of access. This inventory and monitoring would be crucial to sustaining a viable fishing reservoir.

The BLM would reduce effects of the transportation system on fisheries resources. To the extent possible, roads would be located, designed and maintained to reduce sedimentation, identify and remove unnatural barriers, eliminate fish passage barriers (when desired), and maintain or restore riparian vegetation. Culverts and other stream crossings would be analyzed for fish passage and would be made passable as opportunities arise.

The BLM would encourage increased opportunities for fisheries (i.e., access, reservoir development, habitat improvement). This would include coordination with MFWP (e.g., signage and pond levels), public schools and/or the general public on the development of fisheries opportunities through activities such as the development of a yearly fishing access and pond fishing guide for public use, public fishing days, and aquatic educational programs (e.g., uses of the fish resource other than for recreational fishing).

## Fluid Minerals

### Goal

*Ensure dependable and environmentally responsible production of leasable minerals by identifying lands appropriate for lease and development.*

### Objective

Provide opportunities for responsible development of oil and gas.

### Decisions Common to All Alternatives

The BLM planning process determines availability of federal minerals for oil and gas leasing. Federal oil and gas resources administered by the BLM are categorized into one of four groups:

- lands open to leasing with only standard lease terms;
- lands open to leasing subject to moderate constraints, such as a seasonal Timing Limitation Stipulation (TLS) or Controlled Surface Use (CSU);
- lands open to leasing subject to major constraints, such as No Surface Occupancy (NSO); and
- lands closed to leasing.

In areas with only standard lease terms, the BLM's 200 meter/60-day rule provides that conditions of approval are deemed consistent with lease rights provided that they do not require relocation of proposed operations by more than 200 meters, mandate that operations be sited off the leasehold, or prohibit new surface-disturbing activities for a period of more than 60 days in an lease year (43 CFR 3101.1-2).

In areas with a timing limitation stipulation (TLS), surface use is prohibited during specific time periods to protect identified resource values. This stipulation 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.

In areas with a controlled surface use (CSU) stipulation, use and occupancy is allowed (unless restricted by another stipulation), but identified resource values require special operational constraints that may modify the lease rights. CSU is used for operating guidance, not as a substitute for no surface occupancy or timing limitation stipulation.

In areas with a no surface occupancy (NSO) stipulation, use or occupancy of the land surface for fluid mineral exploration or development is prohibited to protect identified resource values.

In areas closed to leasing, federal minerals are not available for future oil and gas leasing. Existing oil and gas leases will continue according to the respective stipulations until they expire. Where oil or gas is being drained from lands otherwise unavailable for leasing, the BLM may issue new leases with an NSO stipulation (43 CFR 3100.0-3(d)) with appropriate exception, waiver, and modification criteria.

In some areas, additional planning and analysis may be necessary prior to new oil and gas leasing because of changing circumstances, updated policies, and new information. A Master Leasing Plan (MLP) is a mechanism for completing the additional planning, analysis, and decisionmaking that may be necessary for areas that meet specific criteria (Washington Office Instruction Memorandum (WO IM) No. 2010-117). Four areas were considered for an MLP but none of the areas met all the specific criteria (Appendix E.1). A master development plan, the Bowdoin Natural Gas Development Project, Phillips and Valley Counties, Montana Environmental Assessment, was completed in December 2008 (BLM 2008a).

An oil and gas lease grants the lessee the right to explore for, extract, remove, and dispose of the oil and gas deposits that may be found on the leased lands. The lessee may exercise the rights conveyed by the lease, subject to lease terms and any lease stipulations, and permit approval requirements. Oil and gas operations are described in detail in Appendix E.1.

The BLM Montana State Office issues all federal oil and gas leases for the planning area, including those involving split estate ownership. Competitive lease auctions are held where the public can nominate any federal lands with unleased federal minerals and/or any split estate lands overlying unleased federal minerals. For those parcels determined as appropriate for oil and gas leasing, but where other resource concerns or conflicts exist, stipulations based on the approved resource management plan are placed on the parcels. Prior to the lease auction, parcels with stipulations are posted for a 45-day review period in accordance with current regulations and policy.

The existing oil and gas leases (803,656 acres) will continue according to the respective stipulations until they expire. As these leases expire, the areas will come under the management guidelines of the approved resource management plan. New surface use stipulations (including TLS, CSU, and NSO) cannot be applied to existing oil and gas leases or other existing valid use authorizations such as rights-of-way. Site-specific actions such as APDs and rights-of-way in areas with existing oil and gas leases will be allowed, subject to surface use stipulations and best management practices (Appendix E.2).

Stipulations may be changed by application of waivers, exceptions, or modifications. Waivers are a permanent exception from a lease stipulation. This occurs when the resource does not require the stipulation. Exceptions are granted on a case-by-case basis. Each time the lessee applies for an exception, the resource objective of the stipulation must be met. Modifications are fundamental changes to the provisions of a lease stipulation either temporarily or for the term of the lease. The decision whether to grant waivers, exceptions, or modifications generally occurs during the APD approval process. If the authorized officer determines the change to be substantial, the change would be subject to a 30-day public review period.

Additional information can be provided to the lessee in the form of Onshore Orders (1, 2, 3, 5, and 7) and Notice to Lessees 3A and 4A. The Onshore Orders and Notices provide information about applicable laws and regulations, and the requirements for additional information to be supplied by the lessee.

After lease issuance, the lessee may conduct lease operations with an approved permit. Proposed drilling and associated activities must be approved before beginning operations. The operator must file an APD or Sundry Notice that must be approved according to lease stipulations, Onshore Oil and Gas Orders, and appropriate regulations. Subsequent well operations are set forth in 43 CFR 3162.3-2.

New information may lead to changes in existing resource inventories. New areas and resource locations, or areas and resource locations that are no longer valid, may be identified. These usually cover small areas requiring the same protection or mitigation as stated in this plan. Identification of new areas or removal of old areas that no longer have those resource values would result in the use of the same lease stipulation identified in this plan. These areas would be added to the existing data inventory through plan maintenance. In cases where the changes constitute a change in resource allocation outside the scope of this plan, a plan amendment will be required.

On Bureau of Reclamation lands (131,364 acres), in addition to the resource-specific stipulations under each alternative, stipulations and conditions are provided in accordance with that agency’s planning guidance (Appendix E.3).

|  |
|--|
| <b>Subsequent Well Operations</b>  |
| A proposal for further well operations must be approved by the authorized officer prior to commencing operations to redrill, deepen, perform casing repairs, plug-back, alter casing, perform nonroutine fracturing jobs, recomplete in a different interval, perform water shut off, commingling production between intervals and/or conversion to injection. |
| Unless additional surface disturbance is involved and if the operations conform to the standard of prudent operating practice, prior approval is not required for routine fracturing or acidizing jobs, or recompletion in the same interval.  |
| No prior approval or a subsequent report is required for well cleanout work, routine well maintenance, or bottom hole pressure surveys.  |

Regulations at part 43 CFR 3100.0-3(d), the Secretary’s general authority to prevent the waste and dissipation of public property, and the Attorney General’s Opinion of April 2, 1941 (Vol. 40 Op. Atty. Gen 41) allow the BLM to lease lands that are otherwise unavailable for leasing if oil and gas is being drained from such lands. Unavailable lands will be leased only if a state or fee well is proposed or completed within the same spacing unit, or if the lands are within a producing unit. These lands would be leased with a no surface occupancy and no subsurface occupancy stipulation with no waiver, modification, or exception provisions. This would only be a paper transaction with no physical impacts on the unavailable lands. No exploration or development (drilling or production) within the unavailable lands would occur.

After issuance of a lease, the lease would be committed to a communitization agreement and the United States would then receive revenue in proportion to its acreage interest.

The Creedman Coulee National Wildlife Refuge includes two areas of private surface/federal minerals (640 acres) that are under an easement with the private surface owners. Both areas are currently leased to protect from drainage.

All lands would be open to geophysical exploration, subject to appropriate resource surveys, surface protection measures, adequate bonding, and adherence to State of Montana standards (ARM, 36.22.5) for geophysical operations.

## Alternative A (Current Management)

Approximately 282,062 acres (8%) of federal minerals would be open to leasing subject to major constraints (NSO), 2,649,241 acres (76%) would be open to leasing subject to minor constraints (TLS and CSU), and 457,849 acres (13%) would be open to leasing subject to standard lease terms only (Table 2.2 and Map 2.2, which is located at the end of Chapter 2). The federal minerals available for leasing would be subject to the stipulations which are summarized in Table 2.3. The complete stipulations (Form 3109-1 – Standard Stipulations) are located in Appendix E.4.

Approximately 102,298 acres (3%) of federal minerals would be closed to leasing (Table 2.2 and Map 2.2). This includes the Bitter Creek WSA, Burnt Lodge WSA, and the Little Rocky Mountains.

|                            | <i>Alternative A<br/>(Current<br/>Management)</i> | <i>Alternative B</i> | <i>Alternative C</i> | <i>Alternative D</i> | <i>Alternative E<br/>(Preferred<br/>Alternative)</i> |
|----------------------------|---|----------------------|----------------------|----------------------|--|
| Open – NSO                 | 282,062   | 258,560              | 1,291,160            | 357,456              | 1,711,378  |
| <i>Leased</i>              | 28,954  | 78,469               | 338,636              | 33,504               | 182,060  |
| <i>Unleased</i>            | 253,108   | 180,091              | 952,524              | 323,952              | 1,529,318  |
| Open – TLS/CSU             | 2,649,241   | 3,291                | 1,681,990            | 2,461,652            | 1,460,097  |
| <i>Leased</i>              | 578,195   | 1,544                | 341,765              | 545,301              | 561,866  |
| <i>Unleased</i>            | 2,071,046   | 1,747                | 1,340,226            | 1,916,351            | 898,230  |
| Open – Standard Terms Only | 457,849   | 55,962               | 299,713              | 597,668              | 167,274  |
| <i>Leased</i>              | 196,508   | 15,978               | 123,255              | 224,851              | 57,306   |
| <i>Unleased</i>            | 261,341   | 39,983               | 176,458              | 372,817              | 109,967  |
| Closed                     | 102,298   | 3,173,637            | 218,586              | 74,674               | 152,702  |
| <i>Leased</i>              | 0   | 707,665              | 0                    | 0                    | 2,424  |
| <i>Unleased</i>            | 102,298   | 2,465,972            | 218,586              | 74,674               | 150,278  |

## Alternative B

Approximately 258,560 acres (7%) of federal minerals would be open to leasing subject to major constraints (NSO); 3,291 acres (<1%) would be open to leasing subject to minor constraints (TLS and CSU); and 55,962 acres (2%) would be open to leasing subject to standard lease terms only (Table 2.2 and Map 2.2). The federal minerals available for leasing would be subject to the stipulations which are summarized in Table 2.3. The complete stipulations, including the objectives, exceptions, modifications, and waivers, are located in Appendix E.4.

Approximately 3,173,637 acres (91%) of federal minerals would be closed to leasing (Table 2.2 and Map 2.2). This includes the Bitter Creek WSA, Burnt Lodge WSA, a parcel adjacent to the Bear Paw Battlefield, Azure Cave ACEC, areas with important wildlife habitat, and areas with wilderness characteristics.

## Alternative C

Approximately 1,291,160 acres (37%) of federal minerals would be open to leasing subject to major constraints (NSO); 1,681,990 acres (48%) would be open to leasing subject to minor constraints (TLS and CSU); and 299,713 acres (9%) would be open to leasing subject to standard lease terms only (Table 2.2 and Map 2.3, which is located at the end of Chapter 2). The federal minerals available for leasing would be subject to the stipulations which are summarized in Table 2.3. The complete stipulations, including the objectives, exceptions, modifications, and waivers, are located in Appendix E.4.

Approximately 218,586 acres (6%) of federal minerals would be closed to leasing (Table 2.2 and Map 2.3). This includes the Bitter Creek WSA, Burnt Lodge WSA, a parcel adjacent to the Bear Paw Battlefield, Azure Cave ACEC, and areas with wilderness characteristics.

## Alternative D

Approximately 357,456 acres (10%) of federal minerals would be open to leasing subject to major constraints (NSO); 2,461,652 acres (71%) would be open to leasing subject to minor constraints (TLS and CSU); and 597,668 acres (17%) would be open to leasing subject to standard lease terms only (Table 2.2 and Map 2.3). The federal minerals available for leasing would be subject to the stipulations which are summarized in Table 2.3. The complete stipulations, including the objectives, exceptions, modifications, and waivers, are located in Appendix E.4.

Approximately 74,674 acres (2%) of federal minerals would be closed to leasing (Table 2.2 and Map 2.3). This includes the Bitter Creek WSA, Burnt Lodge WSA, and Azure Cave ACEC.

## Alternative E (Preferred Alternative)

Approximately 1,711,378 acres (49%) of federal minerals would be open to leasing subject to major constraints (NSO); 1,460,097 acres (42%) would be open to leasing subject to minor constraints (TLS and CSU); and 167,274 acres (5%) would be open to leasing subject to standard lease terms only (Table 2.2 and Map 2.4, which is located at the end of Chapter 2). The federal minerals available for leasing would be subject to the stipulations which are summarized in Table 2.3. The complete stipulations, including the objectives, exceptions, modifications, and waivers, are located in Appendix E.4.

Approximately 152,702 acres (4%) of federal minerals would be closed to leasing (Table 2.2 and Map 2.4). This includes the Bitter Creek WSA, Burnt Lodge WSA, Sweet Grass Hills TCP, a portion of the Little Rocky Mountains TCP, and the Azure Cave ACEC.



Stevens Compressor in Southern Blaine County

BLM Photo

**Table 2.3  
Oil and Gas Lease Stipulations by Alternative**

| <i>Stipulation</i>   | <i>Alternative A<br/>(Current Management)</i>   | <i>Alternative B</i>  | <i>Alternative C</i>  | <i>Alternative D</i>                             | <i>Alternative E<br/>(Preferred Alternative)</i>  |
|--|---|---|---|--|---|
| <i>Please note: This is a summary only. The complete stipulations, including the objectives, exceptions, modifications, and waivers, are located in Appendix E.4</i> |   |   |   |  |   |
| <b>Cultural Resources</b>  |   |   |   |  |   |
| <i>NRHP Eligible Properties/Districts</i>  | NSO on a case-by-case basis.  | NSO   |   |  | NSO   |
| <i>Little Rocky Mountains TCP</i>  |   |   |   |  | Higher elevations of the Little Rocky Mountains (above 3,600 feet) would be closed to leasing. The remaining area would be open with NSO stipulation. |
| <i>Sweet Grass Hills TCP</i>   | NSO within the Sweet Grass Hills ACEC and standard lease terms only (200 meters and 60 days) in the remaining area. |   |   |  | Closed to leasing.  |
| <i>Cultural Resource Survey (NTL-MSO-1-85)</i>   | Cultural resource survey required.  |   |   |  |   |
| <i>Cultural Resources Tribal Consultation</i>  | Consultation may be required under NHPA (Washington Office IM No. 2005-003).  |   |   |  |   |
| <b>Little Rocky Mountains Watershed</b>  | Closed to leasing.  | Appropriate resource stipulations.  |   |  |   |
| <b>National Park Service Bear Paw Battlefield</b>  | Standard lease terms only.  | Closed to leasing for the parcel adjacent to the Bear Paw Battlefield identified as T30N R19E, Sec. 12, SWNE.   | NSO for the parcel adjacent to the Bear Paw Battlefield identified as T30N R19E, Sec. 12, SWNE. |  |   |
| <b>Paleontological Resources</b>   | NSO in critical paleontological sites (3 acres).  | NSO in designated paleontological sites.  |   |  |   |
| <i>Paleontological Notice (LN 14-12)</i>   | A paleontological inventory may be required.  | Prior to any surface-disturbing activity in areas known to have a high potential (Class 4 and 5) for containing significant paleontological resources, the lessee shall be required to conduct a paleontological inventory. |   |  |   |
| <b>Recreation Sites</b>  | NSO - 300 feet from developed and undeveloped recreation sites/trails.  | NSO within 1/4 mile of recreation sites.  | NSO within and 500 feet from recreation sites.  | NSO within 300 feet of recreation sites.         | NSO within and 500 feet from recreation sites.  |
| <b>National Historic Trails</b>  | NSO - 300 feet from developed and   | NSO within 1/4 mile of National Historic Trails.  | NSO within and 500 feet from National Historic  | NSO within 300 feet of National Historic Trails. | NSO within 1/4 mile of National Historic Trails.  |

**Table 2.3  
Oil and Gas Lease Stipulations by Alternative**

| <i>Stipulation</i>   | <i>Alternative A<br/>(Current Management)</i>   | <i>Alternative B</i>   | <i>Alternative C</i>   | <i>Alternative D</i>                                | <i>Alternative E<br/>(Preferred Alternative)</i>   |
|--|---|--|--|---|--|
| <i>Please note: This is a summary only. The complete stipulations, including the objectives, exceptions, modifications, and waivers, are located in Appendix E.4</i> |   |  |  |   |  |
|  | undeveloped recreation trails.  |  | Trails.  |   |  |
| <b>Residential Structures</b>  | NSO - 300 feet from occupied buildings.   | NSO within 1/4 mile of incorporated city limits or residential structures.             | NSO within 500 feet of incorporated city limits or residential structures.   | NSO within 300 feet of residential structures.      | NSO within and 500 feet of incorporated city limits or residential structures.   |
| <b>Soils</b>   | CSU - On slopes over 30%, or 20% on extremely erodible or slumping soils.   | NSO on sensitive soils, badlands, rock outcrop, or slopes susceptible to mass failure. | CSU – Prior to any surface disturbance on sensitive soils a reclamation plan must be approved by the authorized officer. The plan must demonstrate that no other practicable alternatives exist for relocating the activity.<br><br>NSO on badlands, rock outcrop, and slopes susceptible to mass failure. | Standard lease terms only (200 meters and 60 days). | CSU – Prior to any surface disturbance on sensitive soils a reclamation plan must be approved by the authorized officer. The plan must demonstrate that no other practicable alternatives exist for relocating the activity.<br><br>NSO on badlands, rock outcrop, and slopes susceptible to mass failure. |
| <b>Special Designations</b>  |   |  |  |   |  |
| <i>Azure Cave ACEC</i>   | Closed to leasing.  |  |  |   |  |
| <i>Big Bend of the Milk River ACEC</i>   | NSO   |  |  |   |  |
| <i>Bitter Creek ACEC</i>   | If the Bitter Creek WSA is released by Congress, the area would remain closed to leasing until an ACEC management plan is completed that would address oil and gas leasing. |  |  |   |  |
| <i>Frenchman ACEC</i>  | NA*   |  | NSO (39,700 acres).  | NSO (57,784 acres).                                 | NSO (39,700 acres).  |
| <i>Grassland Bird/Greater Sage-Grouse Priority Areas ACEC</i>  | NA*   | Closed to leasing.   | NA*  |   |  |
| <i>Greater Sage-Grouse Protection Priority Area ACEC</i>   | NA*   | Closed to leasing.   | NA*  |   |  |
| <i>Kevin Rim ACEC</i>  | NSO within 3 miles of identified active raptor nests and NSO for cultural resources on a case-by-   | NSO  |  |   |  |

**Table 2.3  
Oil and Gas Lease Stipulations by Alternative**

| <i>Stipulation</i>   | <i>Alternative A<br/>(Current Management)</i>  | <i>Alternative B</i>  | <i>Alternative C</i>   | <i>Alternative D</i>   | <i>Alternative E<br/>(Preferred Alternative)</i>  |
|--|--|---|--|--|---|
| <i>Please note: This is a summary only. The complete stipulations, including the objectives, exceptions, modifications, and waivers, are located in Appendix E.4</i> |  |   |  |  |   |
|  | case basis.  |   |  |  |   |
| <i>Little Rocky Mountains ACEC</i>   | NA*  |   |  | NSO  | NA*   |
| <i>Malta Geological ACEC</i>   | NA*  | CSU – Prior to any surface-disturbing activity the lessee shall be required to conduct a paleontological inventory. |  |  |   |
| <i>Mountain Plover ACEC</i>  | TLS - April 1 to July 31.  | NSO   |  |  | Closed to leasing.  |
| <i>Prairie Dog Towns within the 7km Complex ACEC</i>   | NSO - 1/4 mile from identified essential habitat of state and federal sensitive species.   | NA*   |  |  |   |
| <i>Sweet Grass Hills ACEC</i>  | NSO  |   |  |  | Closed to leasing.  |
| <i>Woody Island ACEC</i>   | NA*  | NSO (15,804 acres).   |  |  | NSO (24,083 acres).   |
| <i>Zortman/Landusky Mine Reclamation ACEC</i>  | NA*  | NSO   |  | NA*  | Closed to leasing.  |
| <i>Wilderness Study Areas (Bitter Creek and Burnt Lodge WSAs)</i>  | Closed to leasing.   |   |  |  |   |
| <b>Water, Riparian, Wetland, and Floodplains</b>   | CSU - 500 feet from lakes, reservoirs, ponds and intermittent ephemeral or small perennial streams or, when necessary, within the 25 year floodplains; or 1,000 feet from larger perennial streams, rivers, and domestic water supplies or, when necessary, within the 100-year floodplains. | NSO within and 1/4 mile from lentic or lotic riparian areas.  | NSO within and 500 feet from lentic or lotic riparian areas. | CSU within and 300 feet from lentic or lotic riparian areas. | NSO within perennial or intermittent streams (as indicated by obligate wetland species or hydric soils); lakes, ponds, and reservoirs; floodplains; wetlands; and riparian areas.<br><br>CSU – Surface occupancy and use would be controlled within 300 feet of riparian and/or wetland areas. Surface-disturbing activities would require a plan with design features that demonstrate how all |
| <i>Dibbler and Whitewater</i>  | NSO within the Dibbler and Whitewater waterbodies.<br><br>CSU - 500 feet from the  |   |  |  |   |

**Table 2.3  
Oil and Gas Lease Stipulations by Alternative**

| <i>Stipulation</i>   | <i>Alternative A<br/>(Current Management)</i>  | <i>Alternative B</i>  | <i>Alternative C</i>  | <i>Alternative D</i>   | <i>Alternative E<br/>(Preferred Alternative)</i>  |
|--|--|---|---|--|---|
| <i>Please note: This is a summary only. The complete stipulations, including the objectives, exceptions, modifications, and waivers, are located in Appendix E.4</i> |  |   |   |  |   |
|  | Dibbler and Whitewater waterbodies.  |   |   |  | actions would maintain and/or improve the functionality of riparian/wetland areas.  |
| <i>Lonesome Lake</i>   | NSO within riparian areas, waterbodies, and ephemeral wetlands.                          |   |   |  |   |
| <b>Wilderness Characteristics</b>  |  |   |   |  |   |
| <i>Eastern Breaks and Badlands</i>   | NA**   | Closed to leasing.  | Closed to leasing.  | NA**   | NSO   |
| <i>Island Mountain Range</i>   | NA**   | Closed to leasing.  | Closed to leasing.  | NA**   | NA**  |
| <i>Prairie Grasslands</i>  | NA**   | Closed to leasing.  | NSO   | NA**   | NA**  |
| <i>Sagebrush Grasslands</i>  | NA**   | Closed to leasing.  | Closed to leasing.  | NA**   | NA**  |
| <i>Western Breaks and Badlands</i>   | NA**   | Closed to leasing.  | NA**  | NA**   | NA**  |
| <b>Wildlife</b>  |  |   |   |  |   |
| <i>Bald Eagle</i>  | NSO - 1/4 mile from identified essential habitat of state and federal sensitive species. | Closed to leasing within 1/2 mile of bald eagle nest sites and winter roost sites active within the last 7 years. | NSO within 1/4 mile of bald eagle nest sites active within the last 7 years.  | TLS – Surface occupancy and use is prohibited within 1/2 mile of bald eagle nest sites active within the last 7 years, from January 1 through August 31. | NSO within 1/2 mile of bald eagle nest sites active within the preceding 5 breeding seasons.  |
| <i>Bighorn Sheep Lambing</i>   | Standard lease terms only (200 meters and 60 days).                                      | Closed to leasing.  | NSO   | TLS - Surface occupancy and use is prohibited within bighorn sheep lambing areas from May 1 through June 30.   | NSO   |
| <i>Bighorn Sheep Range</i>   | Standard lease terms only (200 meters and 60 days).                                      | Closed to leasing.  | CSU - Surface-disturbing or disruptive activities within bighorn sheep range would require a plan to avoid or minimize habitat loss from direct and indirect impacts. The plan would be approved by the authorized officer. | Standard lease terms only (200 meters and 60 days).  | CSU - Prior to surface-disturbing or disruptive activities a plan to maintain bighorn sheep habitat would be prepared by the proponent and implemented upon approval by the authorized officer. |

**Table 2.3  
Oil and Gas Lease Stipulations by Alternative**

| <i>Stipulation</i>   | <i>Alternative A<br/>(Current Management)</i>  | <i>Alternative B</i>  | <i>Alternative C</i>   | <i>Alternative D</i>  | <i>Alternative E<br/>(Preferred Alternative)</i>   |
|--|--|---|--|---|--|
| <i>Please note: This is a summary only. The complete stipulations, including the objectives, exceptions, modifications, and waivers, are located in Appendix E.4</i> |  |   |  |   |  |
| <i>Black-footed Ferret</i>   | NSO - 1/4 mile from identified essential habitat of state and federal sensitive species. | Closed to leasing within 1/2 mile of black-footed ferret habitat.   | NSO within 1/4 mile of black-footed ferret habitat.                    | NSO within black-footed ferret habitat.   | NSO within 1/4 mile of black-footed ferret habitat.  |
| <i>Black-tailed Prairie Dog</i>  | NSO - 1/4 mile from identified essential habitat of state and federal sensitive species. | Closed to leasing within 1/2 mile of black-tailed prairie dog habitat.  | NSO within 1/4 mile of black-tailed prairie dog habitat.               | NSO within black-tailed prairie dog habitat.  | NSO within 1/4 mile of black-tailed prairie dog habitat.   |
| <i>Colonial Waterbirds (Surface Occupancy)</i>   | NSO within 1/4 mile of a waterbird nesting colony.                                       | Closed to leasing within 1/2 mile of a waterbird nesting colony.  | NSO within 1/2 mile of a waterbird nesting colony.                     | NSO within 1/4 mile of a waterbird nesting colony.  | NSO within 1/4 mile of a waterbird nesting colony.   |
| <i>Colonial Waterbirds (Timing Limits)</i>   | Standard lease terms only (200 meters and 60 days).                                      | TLS - Surface occupancy and use is prohibited within 1 mile of a waterbird nesting colony from April 1 through July 15. |  | TLS - Surface occupancy and use is prohibited within 1/2 mile of a waterbird nesting colony from April 1 through July 15.   | TLS - Surface occupancy and use is prohibited within 1/2 mile of a waterbird nesting colony from April 1 through July 15.  |
| <i>Crucial Elk Winter Range (South Valley County)</i>  | NSO  | Closed to leasing.  | NSO - Surface occupancy and use is prohibited in crucial winter range. | CSU - Surface-disturbing or disruptive activities within crucial winter range would require a plan to maintain functionality of habitat and avoid or minimize habitat loss. This plan would limit the number of disturbed areas (well pads) within crucial winter range to less than 2 well disturbances per 640 acres of crucial winter range. The plan would be approved by the authorized officer. | CSU - Prior to surface-disturbing or disruptive activities a plan to maintain functionality of crucial winter range for big game and/or greater sage-grouse will be prepared by the proponent and implemented upon approval by the authorized officer. Within crucial winter range surface-disturbing or disruptive activities would be restricted or prohibited within 0.6 miles from any existing surface-disturbing or disruptive activity. |
| <i>Crucial Winter Range (antelope, elk, mule deer)</i>   | TLS - December 1 to May 15.  |   |  |   |  |
| <i>Elk Calving Grounds</i>   | TLS - May 1 to June 30.  | Closed to leasing.  | Standard lease terms only (200 meters and 60 days).                    |   |  |

**Table 2.3  
Oil and Gas Lease Stipulations by Alternative**

| <i>Stipulation</i>   | <i>Alternative A<br/>(Current Management)</i>   | <i>Alternative B</i>                                   | <i>Alternative C</i>  | <i>Alternative D</i>  | <i>Alternative E<br/>(Preferred Alternative)</i>  |
|--|---|--|---|---|---|
| <i>Please note: This is a summary only. The complete stipulations, including the objectives, exceptions, modifications, and waivers, are located in Appendix E.4</i> |   |  |   |   |   |
| <i>Endangered Species Act Section 7 Consultation</i>   | The BLM may recommend modifications to or disapprove a proposed activity that would contribute to a need to list plants, animals, or their habitats determined to be threatened, endangered, or other special status species, or that is likely to jeopardize the continued existence of a proposed or listed species or its habitat (Washington Office IM No. 2002-174). |  |   |   |   |
| <i>Grassland Bird/Greater Sage-Grouse Priority Areas</i>   | Appropriate resource stipulations.  | Closed to leasing.                                     | CSU - Prior to surface-disturbing or disruptive activities a plan to maintain functionality of grassland bird/greater sage-grouse habitat will be prepared by the proponent and implemented upon approval by the authorized officer. Within the priority areas surface-disturbing or disruptive activities will be restricted or prohibited within 0.6 miles from any existing surface-disturbing or disruptive activity. | Appropriate resource stipulations.  | NSO within priority areas.  |
| <i>Greater Sage-Grouse Leks (General Habitat)</i>  | NSO - 1/4 mile from identified essential habitat of state and federal sensitive species.  | Closed to leasing within 2 miles of a sage-grouse lek. | NSO within 1 mile of a sage-grouse lek.   | NSO within 0.6 miles of a sage-grouse lek.  | NSO within 1 mile of a sage-grouse lek.   |
| <i>Greater Sage-Grouse Leks (Lonesome Lake)</i>  | TLS - Surface occupancy and use prohibited within 1/4 mile of grouse leks March 15 to June 15.  |  |   |   |   |
| <i>Greater Sage-Grouse Nesting Habitat (General Habitat)</i>   | TLS - Avoid nesting areas March 1 to June 15.   | Closed to leasing.                                     | CSU - Surface-disturbing or disruptive activities would require specific actions to prevent or minimize disturbance to sage-grouse or their habitat outside of the greater sage-grouse protection priority area.  | TLS - Surface occupancy and use is prohibited within 1 mile of leks from March 1 through June 15. | CSU - Surface-disturbing or disruptive activities may be restricted or prohibited. Prior to such activities a plan to maintain functionality of greater sage-grouse habitat will be prepared by the proponent and implemented upon approval by the authorized |

**Table 2.3  
Oil and Gas Lease Stipulations by Alternative**

| <i>Stipulation</i>   | <i>Alternative A<br/>(Current Management)</i>  | <i>Alternative B</i>   | <i>Alternative C</i>   | <i>Alternative D</i>  | <i>Alternative E<br/>(Preferred Alternative)</i>   |
|--|--|--|--|---|--|
| <i>Please note: This is a summary only. The complete stipulations, including the objectives, exceptions, modifications, and waivers, are located in Appendix E.4</i> |  |  |  |   |  |
|  |  |  |  |   | officer.   |
| <i>Greater Sage-Grouse<br/>Protection Priority Area</i>  | Appropriate resource stipulations.   | Closed to leasing.   | CSU - Prior to surface-disturbing or disruptive activities a plan to maintain functionality of greater sage-grouse habitat will be prepared by the proponent and implemented upon approval by the authorized officer. Within the protection priority area surface-disturbing or disruptive activities will be restricted or prohibited within 0.6 miles from any existing surface-disturbing or disruptive activity. | Appropriate resource stipulations.  | NSO within the protection priority area.   |
| <i>Greater Sage-Grouse<br/>Winter Range</i>  | TLS - December 1 to May 15.  | Closed to leasing.   | TLS – Surface occupancy and use is prohibited within winter range from December 1 through May 15.  | TLS - Surface occupancy and use is prohibited within winter range from December 1 through March 31. |  |
| <i>Interior Least Tern</i>   | NSO - 1/4 mile from identified essential habitat of state and federal sensitive species. | Closed to leasing within 1/2 mile of interior least tern occupied habitat.   | NSO within 1/2 mile of interior least tern occupied habitat.   | NSO within 1/4 mile of interior least tern occupied habitat.  |  |
| <i>Mountain Plover<br/>(Surface Occupancy)</i>   | NSO - 1/4 mile from identified essential habitat of state and federal sensitive species. | Closed to leasing within 1/4 mile of mountain plover habitat.  | NSO within mountain plover habitat.  |   |  |
| <i>Mountain Plover<br/>(Timing Limit)</i>  | Standard lease terms only (200 meters and 60 days).                                      | TLS - Surface occupancy and use is prohibited within 1/2 mile of mountain plover habitat from April 1 through July 15. | TLS - Surface occupancy and use is prohibited within 1/4 mile of mountain plover habitat from April 1 through July 15.   | Standard lease terms only (200 meters and 60 days).   | TLS - Surface occupancy and use is prohibited within 1/4 mile of mountain plover habitat from April 1 through July 15. |

**Table 2.3  
Oil and Gas Lease Stipulations by Alternative**

| <i>Stipulation</i>   | <i>Alternative A<br/>(Current Management)</i>   | <i>Alternative B</i>  | <i>Alternative C</i>  | <i>Alternative D</i>   | <i>Alternative E<br/>(Preferred Alternative)</i>   |
|--|---|---|---|--|--|
| <i>Please note: This is a summary only. The complete stipulations, including the objectives, exceptions, modifications, and waivers, are located in Appendix E.4</i> |   |   |   |  |  |
| <i>Pallid Sturgeon</i>   | The BLM may recommend modifications to or disapprove a proposed activity that would contribute to a need to list plants, animals, or their habitats determined to be threatened, endangered, or other special status species, or that is likely to jeopardize the continued existence of a proposed or listed species or its habitat. |   |   |  | CSU - Prior to surface-disturbing or disruptive activities occurring in or within 1/2 mile of river or stream shorelines identified as pallid sturgeon habitat, a plan to maintain pallid sturgeon habitat would be prepared by the proponent and implemented upon approval by the authorized officer. |
| <i>Peregrine Falcon</i>  | NSO - 1/4 mile from identified essential habitat of state and federal sensitive species.  | Closed to leasing within 1/2 mile of peregrine falcon nests active within the past 7 years. | NSO within 1/4 mile of peregrine falcon nests active within the past 7 years. | CSU – Surface-disturbing or disruptive activities within 1/4 mile of peregrine falcon nests active within the past 7 years would require a plan to maintain the functionality of the nest, avoid or minimize habitat loss, and minimize disturbances to peregrine falcons. | NSO within 1 mile of peregrine falcon nests active within the preceding 7 breeding seasons.  |
| <i>Piping Plover</i>   | NSO - 1/4 mile from identified essential habitat of state and federal sensitive species.  | Closed to leasing within 1/2 mile of piping plover habitat.                                 | NSO within 1/4 mile of piping plover habitat.                                 | TLS – Surface occupancy and use is prohibited within 1/4 mile of piping plover habitat from May 15 through July 31.  | NSO within 1/4 mile of piping plover habitat.  |
| <i>Raptors</i>   | NSO - 1/4 mile from identified essential habitat of state and federal sensitive species.  | Closed to leasing within 1/2 mile of raptor nests active within the past 7 years.           | NSO within 1/4 mile of raptor nests active within the past 7 years.           | CSU – Surface-disturbing or disruptive activities within 1/4 mile of raptor nests active within the past   | NSO within 1/4 mile of raptor nests active within the past 7 years.  |

**Table 2.3**  
**Oil and Gas Lease Stipulations by Alternative**

| <i>Stipulation</i>   | <i>Alternative A<br/>(Current Management)</i>  | <i>Alternative B</i>  | <i>Alternative C</i>  | <i>Alternative D</i>   | <i>Alternative E<br/>(Preferred Alternative)</i>  |
|--|--|---|---|--|---|
| <i>Please note: This is a summary only. The complete stipulations, including the objectives, exceptions, modifications, and waivers, are located in Appendix E.4</i> |  |   |   |  |   |
| <i>Raptors - Ferruginous Hawk (Lonesome Lake)</i>  | Surface occupancy and use is prohibited within 1/2 mile of known ferruginous hawk nest sites which have been active within the past 2 years. |   |   | 7 years would require a plan to maintain the functionality of the nest, avoid or minimize habitat loss, and minimize disturbances to raptors.  |   |
| <i>Raptors - Peregrine Falcon</i>  | NSO - 1/4 mile from identified essential habitat of state and federal sensitive species.   |   |   |  |   |
| <i>Raptors - Special Status Species</i>  | NSO - 1/4 mile from identified essential habitat of state and federal sensitive species.   |   |   |  |   |
| <i>Raptors (Kevin Rim and Sweet Grass Hills)</i>   | NSO - 3 miles from identified active raptor nests.   |   |   |  |   |
| <i>Raptors (Surface Occupancy)</i>   | Standard lease terms only (200 meters and 60 days).  |   |   |  |   |
| <i>Raptors (Timing Limits)</i>   | NSO - 1/4 mile from identified essential habitat of state and federal sensitive species.   | TLS - Surface occupancy and use is prohibited from March 1 through September 1 within 1 mile of active raptor nest sites. | TLS - Surface occupancy and use is prohibited from March 1 through July 31 within 1/2 mile of active raptor nest sites. | TLS - Surface occupancy and use is prohibited from March 1 through July 31 within 1/4 mile of active raptor nest sites.  | TLS - Surface occupancy and use is prohibited from March 1 through July 31 within 1/2 mile of active raptor nest sites. |
| <i>Sharp-tailed Grouse (leks)</i>  | NSO - 500 feet from strutting grounds.   | Closed to leasing within 1/2 mile of sharp-tailed grouse leks.  | NSO within 1/4 mile of sharp-tailed grouse leks.  | CSU – Surface-disturbing or disruptive activities within 1/4 mile of sharp-tailed grouse leks would require a plan to maintain the functionality of the lek, avoid or minimize habitat loss, and minimize disturbances to sharp-tailed grouse. | NSO within 1/4 mile of sharp-tailed grouse leks.  |
| <i>Sharp-tailed Grouse (nesting habitat)</i>   | TLS - March 1 to June 30 within 500 feet of a sharp-   | TLS - Surface occupancy and use is prohibited from  | TLS - Surface occupancy and use is prohibited from  | TLS - Surface occupancy and use is prohibited from   | TLS - Surface occupancy and use is prohibited from  |

**Table 2.3  
Oil and Gas Lease Stipulations by Alternative**

| <i>Stipulation</i>   | <i>Alternative A<br/>(Current Management)</i>  | <i>Alternative B</i>   | <i>Alternative C</i>  | <i>Alternative D</i>  | <i>Alternative E<br/>(Preferred Alternative)</i>   |
|--|--|--|---|---|--|
| <i>Please note: This is a summary only. The complete stipulations, including the objectives, exceptions, modifications, and waivers, are located in Appendix E.4</i> |  |  |   |   |  |
|  | tailed grouse nest.  | March 15 through June 30 within 1 mile of sharp-tailed grouse leks.  | March 15 through June 30 within 1/2 mile of sharp-tailed grouse leks.                             | March 15 through June 30 within 1/4 mile of sharp-tailed grouse leks.                               | March 15 through June 30 within 1/2 mile of sharp-tailed grouse leks.  |
| <i>Special Status Species</i>  | NSO - 1/4 mile from identified essential habitat of state and federal sensitive species. | NSO within 1/4 mile of essential habitat of special status species unless other species-specific stipulations apply. |   |   | CSU - BLM may recommend modifications to exploration and development proposals to further its conservation and management objective to avoid activities that would contribute to a need to list such a species or their habitat. |
| <i>Sprague's Pipit</i>   | Standard lease terms only (200 meters and 60 days).                                      | Closed to leasing within Sprague's pipit habitat.  | Standard lease terms only (200 meters and 60 days).   |   | TLS – Surface occupancy and use is prohibited from April 15 through July 15 in Sprague's pipit habitat.  |
| <i>Swift Fox (Lonesome Lake)</i>   | CSU - 1/2 mile from swift fox dens.  | Standard lease terms only (200 meters and 60 days).  |   |   |  |
| <i>Winter Range (antelope, elk, mule deer)</i>   | TLS - December 1 to May 15.  | Closed to leasing.   | TLS – Surface occupancy and use is prohibited within winter range from December 1 through May 15. | TLS - Surface occupancy and use is prohibited within winter range from December 1 through March 31. | TLS - Surface occupancy and use is prohibited within winter range from December 1 through May 15.  |

\* The area would not be designated an ACEC under this alternative.

\*\* The areas would not be managed for wilderness characteristics under this alternative.

## Forests and Woodlands

### Goal

*Promote healthy forests that are biologically and structurally diverse, relatively fire tolerant, and dominated by not only vigorous conifer trees but also native grasses, forbs and shrubs, and hardwoods.*

## Objectives

Emphasize healthy forest conditions through treatments and management activities that would include the role of fire as a change agent necessary for the development of healthy forests and woodlands.

Provide for local economic opportunities through offerings of forest products while being responsive to developing markets dependent upon non-traditional forest byproducts (e.g., biomass).

## Decisions Common to All Alternatives

All forest and woodland health treatments will be clearly defined through written silvicultural prescriptions based on the latest available science. At a minimum, prescriptions will require a current stand description, the desired future conditions to achieve a healthy forest ecosystem, and the recommended steps to achieve forest health. The BLM will consult with MFWP and seek concurrence regarding the anticipated benefits and/or impacts of any forest or woodland treatments that may impact wildlife habitat.

The BLM will look for opportunities to utilize all material that is treated through offerings of forest products including sawtimber and minor products such as Christmas trees, fuel wood and post and pole sales. Permits will be issued for minor products on a demand basis unless specifically prohibited. No sale of forest products will be made at less than the appraised market value. Sales of commercial wood products would be coordinated with adjacent landowners. Mitigation measures applied to all treatments will include Water Quality Best Management Practices for Montana Forests (Logan 2001). Post-treatment activities will consider the use of prescribed fire as a means to further reduce debris and provide site preparation for establishment or resprouting of native vegetation.

The BLM will continue a collaborative effort to identify high priority treatment areas and implementation schedules, and will establish baseline data utilizing the Forest Vegetation Information System (FORVIS) or the current standard. Data would be used to establish acres of forest and woodlands that are outside the historical range of variance and would help prioritize land treatments. Isolated parcels will be treated on a case-by-case basis.

## Alternative A (Current Management)

The BLM would offer forest products as opportunities arise. The annual sale of timber would not exceed the allowable sale quantity (ASQ) of 350 MBF per year (3.5 MMBF per decade).

The BLM would utilize commercial thinning as a silvicultural practice focusing on stands less than 90 years old.

The Burnt Lodge WSA, Bitter Creek WSA, and Sweet Grass Hills ACEC would not be available for the sale of commercial wood products.

Wildland fire managed for resource benefit would not be considered. All wildfire would be fully suppressed.

### Forest Product Sale Quantities

**Allowable Sale Quantity (ASQ):** The maximum volume of timber that may be sold on a sustained-yield basis from the area of suitable land covered by the resource management plan for a time period specified in the plan. This volume is usually expressed on an annual basis as the average annual allowable sale quantity.

**Probable Sale Quantity (PSQ):** A best assessment of the average amount of timber likely to be available for sale annually in a planning area.

## Alternatives B, C, D, and E (Preferred Alternative)

The BLM would offer forest products as opportunities arise. The annual sale of timber would not exceed the probable sale quantity (PSQ) of 650 MBF per year along with 4,000 tons of biomass per year. Management of old growth stands would follow the Old-Growth Forest Types of the Northern Region (USFS 1992) for overall guidance and direction.

The Burnt Lodge and Bitter Creek WSAs would not be available for the sale of wood products. This includes personal use wood products (e.g., Christmas trees, firewood, post and poles).

The BLM would allow for a full range of forest health treatments in the Sweet Grass Hills ACEC that may include the sale of wood products. Landscape-level projects that focus on forest health rather than product quantity allow for an array of silvicultural treatments that mimic ecological processes. The sale of wood products resulting from forest health treatments would be a secondary benefit and would not be a reason for undertaking the treatments. The ACEC would not be open for incidental personal use wood products.

As forest health treatments and/or natural disturbances take place that reduce the risk of dangerous and high severity fire events, management may adjust suppression strategies to become more cost effective. Additionally, as forest treatments occur that result in conditions approaching historical fire regimes, natural fire may be managed for the benefit of the forested resource.

## Lands and Realty

### Land Ownership Adjustment

*Goal*  
*Improve resource management efficiency and provide public benefits as opportunities arise.*

#### Objectives

Retain lands with high resource values and adjust land ownership to improve land pattern and management efficiency, enhance public access and resource values, and/or meet public and community needs.

#### Decisions Common to All Alternatives

Section 102(a)(1) of FLPMA provides that "... the public lands be retained in Federal ownership, unless as a result of the land use planning procedure provided for in this Act, it is determined that disposal of a particular tract will serve the national interest..." Management of land ownership adjustments will be based on three categories of BLM land as described below.

- **Category 1 (Retention):** BLM lands in Category 1 are identified for retention and include lands with high resource values. These lands tend to be fairly well blocked in terms of land pattern. Included in this category are areas such as Wilderness Study Areas, National Historic Trails, and ACECs. Acquisition of lands or interests in lands will receive priority if located within and/or adjacent to BLM land in Category 1 provided the lands meet one or more of the acquisition criteria found in Appendix F.1, Land Ownership Adjustment Criteria.
- **Category 2 (Retention-Limited Disposal):** BLM lands in Category 2 are generally identified for retention in public ownership. Category 2 includes BLM lands that are fairly well blocked as well as some smaller, isolated parcels as long as they are larger than a quarter-section or its equivalent or half-section or its equivalent. Limited disposal actions involving BLM lands within this category could occur.

BLM lands designated as Category 2 will not be available for sale. However, BLM lands within this category could be exchanged for lands or interests in lands located anywhere in Montana. In addition, parcels of BLM land within Category 2 may be identified for transfer under the Recreation and Public Purposes (R&PP) Act. Such recreation or public purpose use could be considered on a case-by-case basis for such facilities as schools or other public administration, parks or recreation areas, or historic preservation. Also, BLM land within Category 2 could be considered for airport purposes under the Airport and Airway Improvement Act, for public agency jurisdictional transfer, or for State Indemnity Selections on a case-by-case basis.

BLM lands in Category 2 may contain significant resource values protected by law or policy, and any disposal action is contingent upon prior review and approval. If actions cannot be taken to adequately mitigate impacts from disposal of those lands, the parcels would be retained. Acquisition of lands or interests in lands located in or adjacent to Category 2 will be considered in accordance with the acquisition criteria found in Appendix F.1, Land Ownership Adjustment Criteria.

- **Category 3 (Disposal):** BLM lands in Category 3 are identified for disposal through any method, including sale. These lands generally are surrounded by private land with no legal access, or have been selected for disposal by the BLM due to management issues. BLM land parcels in this category are relatively smaller in size. These parcels usually comprise up to a half-section or its equivalent, or up to a quarter-section or its equivalent.

BLM lands in Category 3 will be available for disposal through exchange for lands or interests in lands located anywhere within Montana. Those parcels which meet the sale criteria of section 203(a)(1) of FLPMA could be made available for sale. However, disposal of Category 3 lands by exchange will have priority over disposal by sale. In addition, parcels of BLM land within Category 3 may be identified for transfer under the R&PP Act. Such recreation or public purpose use could be considered on a case-by-case basis for such facilities as schools or other public administration, parks or recreation areas, or historic preservation. Also, BLM land within Category 3 could be considered for airport purposes under the Airport and Airway Improvement Act, for public agency jurisdictional transfer, or for State Indemnity Selections on a case-by-case basis.

Some BLM lands in Category 3 may contain significant resource values protected by law or policy and any disposal action is contingent upon prior review and approval. If actions cannot be taken to adequately mitigate impacts from disposal of those lands, the parcels would be retained.

All land ownership adjustment proposals, whether land exchange, acquisition of land or interests in land, or disposal, will be subject to environmental review including all biological reports, cultural and paleontological inventories, and hazardous materials assessments, as well as water rights documentation and minerals appraisal, if the mineral estate is included in the proposal.

Exchange will be the preferred method of land ownership adjustment. In accordance with policy, all lands to be exchanged must be within Montana (43 CFR §2200.0(d) (2008)). If the BLM disposal parcels contain public access routes, the access rights would be reserved to the United States in the conveyance.

Disposal will be considered on a case-by-case basis through sale (by competitive, modified competitive, or direct methods). Applications for R&PP, jurisdictional transfer to other federal agencies, Color-of-Title, Desert Land Entry, Indian Allotment, Carey Act Grant, State Grant, Railroad Grants, and Airport Grants would be considered and reviewed on a case-by-case basis.

#### **Recreation and Public Purposes (R&PP) Act**

The Act authorizes the sale or lease of BLM lands for recreational or public purposes to State and local governments and to qualified nonprofit organizations. Examples of typical uses under the Act are historic monument sites, campgrounds, schools, fire houses, law enforcement facilities, municipal facilities, landfills, hospitals, parks, and fairgrounds.

Department of the Interior regulations for the R&PP Act are found in Title 43 of the Code of Federal Regulations (43 CFR), Parts 2740 (Sales) and 2912 (Leases).

Acquisition will primarily be accomplished through purchase of land or interests in land (conservation easements) from willing landowners using the Federal Land Transaction Facilitation Act (FLTFA) account if available, the Land and Water Conservation Fund (LWCF), or other funding sources. Acquisition of land may also be accomplished through donations to the BLM by nonfederal landowners. The BLM may acquire conservation easements to preserve open space, enhance public access, and protect important resource values.

Land acquired adjacent to special management areas such as Wilderness Study Areas or ACECs will be subject to the management guidance for that area. Acquired land, or interests in land, will be subject to the management guidance for the adjoining area.

**Alternative A (Current Management)**

Land ownership adjustments would be considered on a case-by-case basis, primarily based on identified disposal parcels and on current acquisition, disposal and retention criteria.

Approximately 90,000 acres were previously identified for disposal in the planning area (Table 2.4) (BLM 1988 and BLM 1994a). Disposals may be made through exchange or the sale of specifically identified parcels if they meet sale criteria found in section 203(a) of FLPMA. Lands on the disposal list or that meet the disposal criteria would be available for State Indemnity Selections, airport leases, and R&PP Act conveyances on a case-by-case basis.

During any purchase or exchange action, the BLM would attempt to maintain the respective county tax base and allow no overall net gain in BLM land over the life of this plan. The BLM would monitor land tenure adjustments to identify potential problems in achieving this objective. BLM land may be sold to facilitate a purchase or exchange action or maintain the respective county tax base.

**Federal Land Transaction Facilitation Act (FLTFA) and Land and Water Conservation Fund (LWCF)**

**FLTFA:** FLTFA monies accrue from disposal of BLM lands by sale. 20% of the fund covers administrative costs and the remaining 80% is designated for acquisition. Of that 80%, BLM gets 60%, Forest Service 20%, National Park Service 10%, and Fish and Wildlife Service 10%. FLTFA requires that 80% remain in state (i.e., of the 80% designated for acquisition, 80% must be spent in-state).

**LWCF:** LWCF monies come from the Outer Continental Shelf oil and gas leasing royalties, GSA surplus property sales, and federal motorboat fuel tax, and are used for the purchase of land which meets the established criteria. Congress annually appropriates the funds between competing proposals submitted from the BLM, Fish and Wildlife Service, Forest Service, and National Park Service.

**Table 2.4  
BLM Land by Land Adjustment Category (Acres)**

| <i>Category</i>                    | <i>Alternative A<br/>(Current Management)</i> | <i>Alternative B</i> | <i>Alternative C</i> | <i>Alternative D</i> | <i>Alternative E<br/>(Preferred Alternative)</i> |
|------------------------------------|---|----------------------|----------------------|----------------------|--|
| 1 – Retention                      | NA  | 609,678              | 484,127              | 332,283              | 296,881  |
| 2 – Retention/<br>Limited Disposal | 90,114  | 1,813,668            | 1,939,218            | 2,074,881            | 2,126,465  |
| 3 – Disposal                       |   | 14,129               | 14,129               | 30,310               | 14,129   |

**Alternatives B and C**

All lands within special management areas (WSAs, ACECs, etc.) and areas managed for wilderness characteristics would be designated as Category 1 (retention) lands. Table 2.4 shows by alternative the BLM lands designated as Category 1.

BLM land designated as Category 3 (disposal) is shown by alternative in Table 2.4 and Appendix F.2 provides the legal description of the disposal parcels. Maps F.1 through F.8 in Appendix F.2 show the disposal parcels for Alternative E, the Preferred Alternative. The remaining BLM land would be designated as Category 2.

Lands or interests in lands brought forward by willing landowners would be considered for acquisition provided they meet one or more of the acquisition criteria listed in Appendix F.1, Land Ownership Adjustment Criteria. The offered lands surrounded by or adjacent to BLM lands in Category 1 would be considered acquisition priorities over lands surrounded by or adjacent to BLM lands in Category 2. Newly acquired lands that meet retention criteria (Category 1) would be designated as retention lands; all other acquired lands would be designated as Category 2. No lands meeting Category 3 criteria would be considered for acquisition.

The need to protect newly acquired lands would be considered as part of the environmental review prior to acquisition and, if withdrawn, the lands would be managed under the terms and conditions of the withdrawal.

Federal minerals underlying nonfederal surface would generally be retained in federal ownership. However, an exchange of this type of mineral estate may be considered on a case-by-case basis if found to be in the public interest. The sale of this type of mineral interest under section 209(b) of FLPMA could be considered only if the requirements of this same section were met. Conversely, the acquisition of patented mining claims would also be addressed on a case-by-case basis.

Land tenure adjustments would follow BLM guidance and policies for acquisitions and disposals. It is not the intention of the BLM to have a net gain in federal ownership, but rather to provide exceptional national public lands that are accessible to the public.

### **Alternative D**

All lands within special management areas (WSAs, ACECs, etc.) would be designated as Category 1 (retention) lands. Table 2.4 shows the BLM lands designated as Category 1 by alternative.

BLM land designated as Category 3 (disposal) is shown in Table 2.4 by alternative and Appendix F.2 provides the legal description of the disposal parcels. Maps F.1 through F.8 in Appendix F.2 show the disposal parcels for Alternative E, the Preferred Alternative. The remaining BLM land would be designated as Category 2.

Lands or interests in lands brought forward by willing landowners would be considered for acquisition provided they meet one or more of the acquisition criteria listed in Appendix F.1, Land Ownership Adjustment Criteria. The offered lands surrounded by or adjacent to BLM lands in Category 1 would be considered acquisition priorities over lands surrounded by or adjacent to BLM lands in Category 2. Newly acquired lands that meet retention criteria (Category 1) would be designated as retention lands; all other acquired lands would be designated as Category 2. No lands meeting Category 3 criteria would be considered for acquisition.

The need to protect newly acquired lands would be considered as part of the environmental review prior to acquisition and, if withdrawn, the lands would be managed under the terms and conditions of the withdrawal.

Federal minerals underlying nonfederal surface would generally be retained in federal ownership. However, an exchange of this type of mineral estate may be considered on a case-by-case basis if found to be in the public interest. The sale of this type of mineral interest under section 209(b) of FLPMA could be considered only if the requirements of this same section were met. Conversely, the acquisition of patented mining claims would also be addressed on a case-by-case basis.

Land tenure adjustments would follow BLM guidance and policies for acquisitions and disposals. It is not the intention of the BLM to have a net gain in federal ownership, but rather to provide exceptional national public lands that are accessible to the public.

### **Alternative E (Preferred Alternative)**

All lands within special management areas (WSAs, ACECs, etc.) would be designated as Category 1 (retention) lands. Table 2.4 shows by alternative the BLM lands designated as Category 1.

Lands with wilderness characteristics would be identified for retention or very limited disposal (Category 2). The BLM land in these areas would not be disposed of other than by exchange and only when necessary to further protect or enhance the wilderness characteristics.

BLM land designated as Category 3 (disposal) is shown by alternative in Table 2.4 and Appendix F.2 provides the legal description of the disposal parcels. Maps F.1 through F.8 in Appendix F.2 show the disposal parcels for Alternative E, the Preferred Alternative. The remaining BLM land would be designated as Category 2.

Lands or interests in lands brought forward by willing landowners would be considered for acquisition provided they meet one or more of the acquisition criteria listed in Appendix F.1, Land Ownership Adjustment Criteria. The offered lands surrounded by or adjacent to BLM lands in Category 1 would be considered acquisition priorities over lands surrounded by or adjacent to BLM lands in Category 2. Newly acquired lands that meet retention criteria (Category 1) would be designated as retention lands; all other acquired lands would be designated as Category 2. No lands meeting Category 3 criteria would be considered for acquisition.

The need to protect newly acquired lands would be considered as part of the environmental review prior to acquisition and, if withdrawn, the lands would be managed under the terms and conditions of the withdrawal.

Federal minerals underlying nonfederal surface would generally be retained in federal ownership. However, an exchange of this type of mineral estate may be considered on a case-by-case basis if found to be in the public interest. The sale of this type of mineral interest under section 209(b) of FLPMA could be considered only if the requirements of this same section were met. Conversely, the acquisition of patented mining claims would also be addressed on a case-by-case basis.

Land tenure adjustments would follow BLM guidance and policies for acquisitions and disposals. It is not the intention of the BLM to have a net gain in federal ownership, but rather to provide exceptional national public lands that are accessible to the public.

## Access

### Goal

*Address public and administrative access needs across nonfederal lands.*

## Objective

Acquire or retain access to BLM land in cooperation with private landowners; state, local and tribal governments; and other federal agencies in order to improve efficiency of multiple use management and to facilitate public enjoyment of these lands.

## Decisions Common to All Alternatives

All available methods will be used to acquire the legal rights for public and administrative access across nonfederal land to BLM land. Easement acquisition through donation or purchase will be the preferred method of acquiring legal access. Reciprocal rights, exchanges, fee purchases, and reserving public access in disposal actions are other appropriate methods of securing access. As a last resort, the Secretary of the Interior may exercise the power of eminent domain only if necessary to secure access to BLM lands, and then only if the lands so acquired are confined to as narrow a corridor as is necessary to serve such purpose (43 U.S.C. 1715).

### **Perpetual Exclusive Easement**

A perpetual exclusive easement is a perpetual right acquired by the United States to use land of another for a particular purpose, such right being acquired exclusively by the United States and excluding others from enjoying the same privilege unless specifically authorized by the United States. An exclusive road easement grants control to the United States and may allow it to authorize third party use and set road use rules. (BLM Handbook H-2100-1)

When obtaining a road easement, the BLM's preferred option is to gain an exclusive easement in order to obtain the right for the general public to use and access the road.

The BLM will acquire on behalf of the United States and its assigns permanent, exclusive, unrestrictive, and assignable rights of access. This allows the BLM to maintain the road or trail and control commercial uses for road maintenance purposes. Any proposed commercial uses will require that a right-of-way application be submitted and approved prior to use. A standard 60-foot-wide easement will be acquired unless road design or resource management necessitates a different width.

The BLM will promote the concept of Respected Access is Open Access through educational opportunities and signage.

### **Alternative A (Current Management)**

Legal public or administrative access would be obtained from willing landowners on a case-by-case basis as the need or opportunity arises. Access acquisition efforts would be concentrated on areas with important resource values, larger blocks of BLM land, areas with high public demand for access, and in areas with substantial BLM improvements. Easement acquisition would be focused in areas with completed route analyses.

### **Alternatives B, C, D, and E (Preferred Alternative)**

Legal public or administrative access would be pursued from willing landowners on a case-by-case basis as the need or opportunity arises. Acquisition efforts would be focused on Category 1 and 2 lands where no legal public access exists or where additional access is necessary to meet management objectives.

## **Facilities**

### Goal

*Provide and manage adequate administrative and other facilities based on public and agency needs.*

### **Objective**

Ensure facilities are maintained to meet public health and safety requirements.

### **Decisions Common to All Alternatives**

Recreation sites, administrative sites, buildings and communication towers will be maintained within Bureau standards to reduce deferred maintenance costs and meet public health and safety requirements. Comprehensive condition assessments will be conducted for all maintained facilities and maintenance actions would be implemented if necessary. These activities will be coordinated with other federal, state, and local government agencies, private landowners and the general public as needed.

Existing and new facilities will be managed through FAMS. Directional and informative signs would be installed based on public need and available funding. All signs will conform to BLM policy.

## **Rights-of-Way, Leases and Permits**

### Goals

*Consider all requests for rights-of-way, land use permits, and leases.*

*Designate transportation and utility corridors, as well as avoidance and/or exclusion areas.*

### **Objective**

Address the needs of industry, utilities, the public, or government entities for land use authorizations while minimizing adverse impacts to other resource values.

## Decisions Common to All Alternatives

Requests for land use authorizations (rights-of-way, leases or permits) will be analyzed and mitigation measures applied on a case-by-case basis through the environmental review process. Terms and conditions for rights-of-way, corridors, and development areas (oil and gas) will incorporate applicable BMPs, current professional practice, and recent scientific findings. All rights-of-way would comply with Streamside Management Zone restrictions and guidelines where applicable. In accordance with current policy, land use authorizations will not be issued for uses which involve the disposal or storage of materials which could contaminate the land (e.g., hazardous waste disposal sites, landfills, rifle ranges, etc.).

Nonfederal landowners who are surrounded by BLM land will be allowed a degree of access that will provide for the reasonable use and enjoyment of the nonfederal land (BLM Manual 2801).

Applications for rights-of-way from holders of valid, existing mining claims in the Sweet Grass Hills would be considered on a case-by-case basis with appropriate mitigation.

New right-of-way facilities will be located within or adjacent to existing rights-of-way, or corridors, to the extent practical, in order to minimize adverse environmental impacts and the proliferation of separate rights-of-way. New rights-of-way would include appropriate BMPs and mitigation (Appendix C and Appendix M). The latest version of Suggested Practices for Avian Protection on Power Lines (APLIC 2006) and the BMPs established by the BLM Wind Energy Development Programmatic EIS and Record of Decision (BLM 2006c) would be implemented in the construction and operation of right-of-way facilities.

### Communication Sites

New communication site users will be grouped into suitable existing sites to reduce impacts and expedite application processing. Communication site management plans will be completed prior to authorizing communication site uses in new areas. The following communication sites are designated: Mount Royal (Sweet Grass Hills), Sheep Coulee, Kevin Rim, Harlem, Antoine Butte, Saco Hills, Larb Hills, Loring, Whitewater, and Rose Hill. In the Little Rocky Mountains, communication sites will be located only on Antoine Butte. In the Sweet Grass Hills, communication sites will not be allowed on West and Middle Buttes. The use of alternative energy sources will be considered where electric power is not available.

### Revised Statute 2477

Revised Statute (R.S.) 2477, which provided that “[t]he right of way for the construction of highways over public lands, not reserved for public uses, is hereby granted,” was repealed on October 21, 1976, by the Federal Land Policy and Management Act. FLPMA did not terminate valid rights-of-way established under R.S. 2477 prior to its repeal.

Current guidance is contained in WO IM No. 2006-159: Non-Binding Determinations of R.S. 2477 Right-of-Way Claims. Briefly, this guidance states that the BLM does not have the authority to make binding determinations on the validity of R.S. 2477 right-of-way claims. The BLM may, however, make informal, non-binding determinations for its own land use planning and management purposes. A non-binding determination that the right-of-way exists is required before completing consultation with states or counties on any proposed improvements to a claimed R.S. 2477 right-of-way (i.e., any work beyond routine maintenance). It may also be appropriate before taking action to close or otherwise restrict the use of a claimed R.S. 2477 right-of-way.

## Alternative A (Current Management)

### Corridors

The Northern Border Corridor, designated in 1979 (44 FR 175, pp. 52341-52342), would be retained as a transportation and utility corridor with a width of 4 1/2 miles. This corridor would include 63,371 acres of BLM land (Table 2.5 and Map W.1, which is available at <http://blm.gov/8qkd>).

**Table 2.5  
Corridors by Alternative (Width and Acres)**

|                             | <i>Alternative A<br/>(Current<br/>Management)</i> | <i>Alternative B</i>   | <i>Alternative C</i>    | <i>Alternative D</i> | <i>Alternative E<br/>(Preferred<br/>Alternative)</i> |
|-----------------------------|---|------------------------|-------------------------|----------------------|--|
| Northern Border Corridor    | 4 1/2 miles<br>63,371 acres                       | 1 mile<br>9,119 acres  | 2 miles<br>25,688 acres | NA                   | NA   |
| State Secondary Highway 24  | NA  | NA                     | NA                      | NA                   | 1 mile<br>761 acres                                  |
| State Secondary Highway 325 | NA  | 1 mile<br>12 acres     | 2 miles<br>179 acres    | NA                   | 1 mile<br>12 acres                                   |
| State Secondary Highway 537 | NA  | 1 mile<br>3,048 acres  | 2 miles<br>6,686 acres  | NA                   | NA   |
| U.S. Highway 2              | NA  | 1 mile<br>5,091 acres  | 2 miles<br>12,238 acres | NA                   | 1 mile<br>5,091 acres                                |
| U.S. Highway 87             | NA  | NA                     | NA                      | NA                   | 1 mile<br>287 acres                                  |
| U.S. Highway 191            | NA  | 1 mile<br>13,808 acres | 2 miles<br>31,339 acres | NA                   | 1 mile<br>13,733 acres                               |

**Exclusion Areas**

The Bitter Creek and Burnt Lodge WSAs would be exclusion areas (74,420 acres) (Table 2.6). If these WSAs are not designated by Congress as wilderness areas, Bitter Creek and Burnt Lodge would become avoidance areas.

**Avoidance Areas**

The BLM would designate two avoidance areas for the issuance of rights-of-way (11,976 acres) (Table 2.6). In these areas, efforts would be made to reroute a proposal. A right-of-way may be allowed if no reasonable alternative is found; however, special mitigation measures may be required to protect sensitive resource values. Rights-of-way may also be allowed if they support or promote other management objectives for the area.

Riparian and wetland areas would be avoidance areas in the western (West HiLine RMP) portion of the planning area.

**Alternative B**

**Corridors**

Five utility and transportation corridors would be designated: Northern Border Corridor; U.S. Highway Nos. 2 and 191; and State Secondary Highway Nos. 325 and 537 (Table 2.5 and Map W.1, which is available at <http://blm.gov/8qkd>). The corridors would be available for all uses (e.g., powerlines, pipelines). The corridor width would be restricted to one mile, or one-half mile from the centerline. These corridors would include 31,078 acres of BLM land.

The Northern Border Corridor would not include the Bitter Creek WSA. Within the WSA, management would be subject to the guidance that protects the resource values for which the WSA was designated.

Applicants for new utility and transportation rights-of-way would be encouraged to locate their facilities within one of these corridors.

**Corridors, Exclusion Areas and Avoidance Areas**

*Designated right-of-way corridor:* a parcel of land with specific boundaries identified by law, Secretarial order, the land-use planning process, or other management decision, as being a preferred location for existing and future rights-of-way and facilities. The corridor may be suitable to accommodate more than one type of right-of-way use or facility or one or more right-of-way uses or facilities which are similar, identical, or compatible (43 CFR 2801.5(b)(9)).

*Exclusion Areas:* Areas which are not available for location of rights-of-way under any conditions (BLM Land Use Planning Handbook, Appendix C).

*Avoidance Areas:* Areas to be avoided but may be available for location of rights-of-way with special stipulations (BLM Land Use Planning Handbook, Appendix C).

| <b>Table 2.6<br/>Rights-of-Way Exclusion and Avoidance Areas by Alternative (Acres)*</b> |   |                      |                      |                      |  |
|--|---|----------------------|----------------------|----------------------|--|
|  | <i>Alternative A<br/>(Current<br/>Management)</i> | <i>Alternative B</i> | <i>Alternative C</i> | <i>Alternative D</i> | <i>Alternative E<br/>(Preferred<br/>Alternative)</i> |
| <b>Exclusion Areas</b>   |   |                      |                      |                      |  |
| Bitter Creek WSA   | 60,693  | 60,693               | 60,693               | 60,693               | 60,693   |
| Burnt Lodge WSA  | 13,727  | 13,727               | 13,727               | 13,727               | 13,727   |
| Grassland Bird/Greater Sage-Grouse Priority Areas ACEC                                   | NA**  | 461,220              | NA**                 | NA**                 | NA**   |
| Greater Sage-Grouse Protection Priority Area ACEC  | NA**  | 930,265              | NA**                 | NA**                 | NA**   |
| Wilderness Characteristics Areas   | NA  | 0                    | 51,055               | 0                    | 0  |
| <b>Avoidance Areas</b>   |   |                      |                      |                      |  |
| Azure Cave ACEC  | 0   | 141                  | 141                  | 141                  | 141  |
| Big Bend of the Milk River ACEC  | 0   | 1,972                | 1,972                | 1,972                | 1,972  |
| Bitter Creek ACEC  | 0   | 60,693               | 60,693               | 60,693               | 60,693   |
| Crucial Winter Range (antelope, elk, mule deer, greater sage-grouse)                     | 0   | 8,383                | 62,577               | 0                    | 66,034   |
| Recreation Sites   | NA  | 936                  | 59,572               | 25,155               | 61,803   |
| Frenchman ACEC   | NA**  | NA**                 | 42,020               | 63,482               | 42,020   |
| Grassland Bird/Greater Sage-Grouse Priority Areas  | NA**  | 0                    | 298,772              | NA**                 | 298,772  |
| Greater Sage-Grouse Protection Priority Area   | NA**  | 0                    | 930,265              | NA**                 | 930,265  |
| Kevin Rim ACEC   | 4,557   | 4,557                | 4,557                | 4,557                | 4,557  |
| Little Rocky Mountains ACEC  | NA**  | NA**                 | NA**                 | 27,177               | NA**   |
| Little Rocky Mountains TCP   | 0   | 0                    | 0                    | 0                    | 30,648   |
| Malta Geological ACEC  | NA**  | 6,153                | 6,153                | 6,153                | 6,153  |
| Mountain Plover ACEC   | 0   | 24,762               | 24,762               | 24,762               | 24,762   |
| National Historic Trails   | 0   | 20,141               | 9,005                | 4,365                | 8,970  |
| Sweet Grass Hills ACEC   | 7,419   | 7,419                | 7,419                | 7,419                | 7,419  |
| Sweet Grass Hills TCP  | 0   | 0                    | 0                    | 0                    | 7,718  |
| VRM Class I  | NA  | 90,032               | 74,506               | 74,506               | 74,506   |
| VRM Class II   | 0   | 977,396              | 0                    | 0                    | 0  |
| Wilderness Characteristics   | NA  | 386,428              | 177,340              | 0                    | 10,714   |
| Winter Range (antelope, elk, mule deer, greater sage-grouse)                             | 0   | 583,341              | 0                    | 0                    | 0  |
| Woody Island ACEC  | NA**  | NA**                 | 22,411               | 22,411               | 32,869   |
| Zortman/Landusky Mine Reclamation ACEC   | NA**  | 3,609                | 3,609                | NA**                 | 2,682  |

\* Acreage totals may overlap (e.g., Greater Sage-Grouse Protection Priority Areas and winter range).

\*\* The area would not be designated an ACEC or managed as a priority area under this alternative.

## **Exclusion Areas**

The Bitter Creek WSA, Burnt Lodge WSA, Grassland Bird/Greater Sage-Grouse Priority Areas ACEC, and Greater Sage-Grouse Protection Priority Area ACEC would be exclusion areas (1,465,906 acres) (Table 2.6), subject to the existing Northern Border Pipeline right-of-way within the Bitter Creek WSA. If the WSAs are not designated by Congress as wilderness areas, Bitter Creek and Burnt Lodge would remain exclusion areas.

## **Avoidance Areas**

The BLM would designate 15 avoidance areas (2,175,998 acres) for the issuance of rights-of-way (Table 2.6). In these areas, efforts would be made to reroute a proposal. A right-of-way may be allowed if no reasonable alternative is found; however, special mitigation measures may be required to protect sensitive resource values. Rights-of-way may also be allowed if they support or promote other management objectives for the area.

During site-specific planning, riparian areas with unique values (i.e.; where water quality habitat for special status species is an issue) would be treated as avoidance areas for rights-of-way (installation of infrastructure that require surface disturbance and/or permanent surface occupancy).

## **Alternative C**

### **Corridors**

Five utility and transportation corridors would be designated: Northern Border Corridor; U.S. Highway 191; U.S. Highway 2; and State Secondary Highway Nos. 325 and 537 (Table 2.5 and Map W.2, which is available at <http://blm.gov/8qkd>). The corridors would be available for all uses (e.g., powerlines, pipelines). The corridor width would be restricted to two miles, or one mile from the centerline. These corridors would include 76,130 acres of BLM land.

Within the Bitter Creek WSA, management of the Northern Border Corridor would be subject to guidance that protects the resource values for which the WSA was designated. Within the Frenchman ACEC, management of the Northern Border Corridor would be subject to guidance that protects the resource values of the area.

Applicants for new utility and transportation rights-of-way would be encouraged to locate their facilities within one of these corridors.

### **Exclusion Areas**

The Bitter Creek WSA, Burnt Lodge WSA, and three areas with wilderness characteristics would be exclusion areas (125,475 acres) (Table 2.6), subject to the existing Northern Border Pipeline right-of-way within the Bitter Creek WSA. If the WSAs are not designated by Congress as wilderness areas, Bitter Creek and Burnt Lodge would become avoidance areas.

### **Avoidance Areas**

The BLM would designate 17 avoidance areas for the issuance of rights-of-way (1,796,664 acres) (Table 2.6). In these areas, efforts would be made to reroute a proposal. A right-of-way may be allowed if no reasonable alternative is found; however, special mitigation measures may be required to protect sensitive resource values. Rights-of-way may also be allowed if they support or promote other management objectives for the area.

During site-specific planning, riparian areas with unique values (i.e.; where water quality habitat for special status species is an issue) would be treated as avoidance areas for rights-of-way (installation of infrastructure that require surface disturbance and/or permanent surface occupancy).

## **Alternative D**

### **Corridors**

The BLM would not designate corridors.

### **Exclusion Areas**

The Bitter Creek and Burnt Lodge WSAs would be exclusion areas (74,420 acres) (Table 2.6). If the Bitter Creek WSA is not designated by Congress as wilderness, the area would remain an exclusion area. If the Burnt Lodge WSA is not designated by Congress as wilderness, the area would become an avoidance area.

### **Avoidance Areas**

The BLM would designate 13 avoidance areas for the issuance of rights-of-way (322,792 acres) (Table 2.6). In these areas, efforts would be made to reroute a proposal. A right-of-way may be allowed if no reasonable alternative is found; however, special mitigation measures may be required to protect sensitive resource values. Rights-of-way may also be allowed if they support or promote other management objectives for the area.

During site-specific planning, riparian areas with unique values (i.e.; where water quality habitat for special status species is an issue) would be treated as avoidance areas for rights-of-way (installation of infrastructure that require surface disturbance and/or permanent surface occupancy).

## **Alternative E (Preferred Alternative)**

### **Corridors**

Five utility and transportation corridors would be designated: U.S. Highway 2, U.S. Highway 87; U.S. Highway 191; and State Secondary Highway Nos. 24 and 325 (Table 2.5 and Map 2.5, which is located at the end of Chapter 2). The corridor for U.S. Highway 191 would exclude the Big Bend of the Milk River ACEC. The corridors would be available for all uses (e.g., powerlines, pipelines). The corridor width would be restricted to one mile, or one-half mile from the centerline. These corridors would include 19,884 acres of BLM land. Applicants for new utility and transportation rights-of-way would be encouraged to locate their facility within one of these corridors.

Within the Bitter Creek WSA, management of the Northern Border Pipeline right-of-way would be subject to guidance that protects the resource values for which the WSA was designated. Within the Frenchman ACEC, management of the Northern Border Pipeline right-of-way would be subject to guidance that protects the resource values of the area.

### **Exclusion Areas**

The Bitter Creek and Burnt Lodge WSAs would be exclusion areas (74,420 acres) (Table 2.6 and Map 2.5). If the Bitter Creek WSA is not designated by Congress as wilderness, the area would remain an exclusion area. If the Burnt Lodge WSA is not designated by Congress as wilderness, the area would become an avoidance area.

### **Avoidance Areas**

The BLM would designate 19 avoidance areas for the issuance of rights-of-way (1,672,698 acres) (Table 2.6 and Map 2.5). In these areas, efforts would be made to reroute a proposal. A right-of-way may be allowed if no reasonable alternative is found; however, special mitigation measures may be required to protect sensitive resource values. Rights-of-way may also be allowed if they support or promote other management objectives for the area.

During site-specific planning, riparian areas with unique values (i.e.; where water quality habitat for special status species is an issue) would be treated as avoidance areas for rights-of-way (installation of infrastructure that requires surface disturbance and/or permanent surface occupancy).

## Unauthorized Use

### Decisions Common to All Alternatives

The HiLine District attempts to reduce trespass through prevention, detection, and resolution. The priority for resolving trespass in an area is accorded to newly discovered ongoing uses, developments, or occupancies where resource damage is occurring and/or where there is a significant loss of revenue to the United States. In such cases, resolution is needed to halt and prevent further environmental degradation or revenue loss. Historic trespass cases where little or no resources damage is occurring are resolved as workloads permit.

## Withdrawals

### Goal

*Protect significant resources or significant government investment.*

### Objective

Utilize withdrawal actions with the least restrictive measures and of the minimum size necessary to accomplish the required purpose.

### Decisions Common to All Alternatives

New withdrawals will be pursued where other agency actions are inadequate to protect critical resource values or federal investments. Examples of such resource values include cultural or historic sites, crucial habitat for threatened and endangered species, or scenic values. Federal investments that may need the protection of a withdrawal could include administrative sites or extensively developed recreation areas. New withdrawals would include only the minimum area required to meet the purpose of the withdrawal.

New withdrawal proposals that result in a transfer of jurisdiction to another federal agency will be considered on a case-by-case basis. Other agency requests for new withdrawals, or modification, extension, or revocation of existing withdrawals will be considered.

Existing withdrawals will be reviewed prior to their expiration to determine if a need exists to extend and/or modify the withdrawal. Should the review indicate that the purpose for which the lands were withdrawn is no longer valid, the withdrawal would be allowed to expire. If the purpose remains valid for a portion of the withdrawn lands, the withdrawal would be modified and extended.

Existing and new proposed mineral withdrawals are addressed under the Solid Minerals – Locatables section in Chapter 2.

If lands are returned to BLM management through the withdrawal process, they will be managed consistent with adjacent public lands.

#### **Unauthorized Use, Occupancy, and Development**

**Unauthorized Use** – Activities that do not appreciably alter the physical character of BLM land or vegetative resources. Some examples of unauthorized use include the abandonment of property or trash, enclosures, and use of existing roads, primitive roads and trails for purposes which require a use fee or right-of-way.

**Unauthorized Occupancy** – Activities which result in full or part-time human occupancy or use. An example would be the construction, placement, occupancy, or assertion of ownership of a facility or structure (cabin, house, natural shelter, trailer, etc.) on BLM land.

**Unauthorized Development** – An activity that physically alters the character of BLM land or vegetative resources. Examples include cultivation of the land and road or trail construction/realignment.

## Livestock Grazing

### Goal

*Provide opportunities on the public rangelands for a sustainable level of livestock grazing consistent with multiple use and sustained yield.*

### Objective

Manage livestock grazing to provide a sustained flow of local economic benefits and protect resource values.

### Decisions Common to All Alternatives

Livestock will continue to be allocated approximately 386,600 animal unit months (AUMs) of forage each year from BLM land in the planning area (Appendix G). Approximately 2,390,000 acres will be open to livestock grazing and 47,000 acres will be closed to livestock grazing except as needed for resource management.

Actions consistent with achieving or maintaining the Standards for Rangeland Health and Guidelines for Livestock Grazing Management for Montana, North Dakota, and South Dakota (BLM 1997a and Appendix H) will continue to be incorporated into livestock grazing permits and leases and will apply to all livestock grazing activities. Under the grazing regulations if Standards are not met the authorized officer will take appropriate action as soon as practical but not later than the start of the next grazing season upon determining that grazing management needs to be modified to ensure progress toward conformance with the guidelines (43 CFR 4180.2(c)(3)). A no grazing alternative will be considered in all environmental assessments prepared as part of the grazing permit renewal process (IM No. MT-2012-042).

Flexibility is authorized in grazing permits to allow for livestock management needs and fluctuating climatic conditions. Flexibility afforded to livestock management practices includes adjustment of on/off dates and livestock numbers, but management must be within the overall terms of the grazing permit, the permitted season of use and the established carrying capacity of the allotment. Any deviations from the terms and conditions of the grazing permit should be applied for beforehand and would require environmental review.

All allotments have been assigned to a management category depending on the resources and problems contained in the allotment. The three categories of Improve (**I**), Maintain (**M**) and Custodial (**C**) reflect resource conditions, resource potential and economic considerations for each allotment. The terms improve, maintain and custodial relate to resource objectives for the allotment (i.e., whether conditions need to be improved or maintained, or if custodial management is appropriate because of relatively limited resources and resource problems). The BLM's allotment categorization system will continue to determine priorities for processing grazing authorizations, implementing grazing activity plans, spending range improvement funds and monitoring. Allotments will be subject to recategorization based on changes in resource conditions as determined through monitoring and land health evaluations consistent with BLM policy. Future changes in allotment categories will be documented through plan maintenance.

Developed recreation sites will not be allocated for livestock grazing.

Existing Allotment Management Plans (AMPs) will continue to be implemented including associated range improvement projects. AMPs will be updated and revised in response to monitoring and/or permit transfers. New AMPs will be developed and implemented to direct site-specific management of livestock grazing after completion of rangeland health assessments.

Livestock grazing will be managed through monitoring of AMPs or similar grazing plans and supervision of grazing use as provided under the grazing regulations. Adjustments to livestock management practices or livestock numbers including increases or decreases would be made based on results of monitoring studies, rangeland health assessments, allotment evaluations, and through an environmental review process. Where opportunities occur, cooperative efforts to utilize permittee/lessee monitoring and integrated ranch planning will be emphasized.

If monitoring data demonstrate that livestock use on an allotment in a priority greater sage-grouse area is adversely affecting greater sage-grouse or their habitat, the terms and conditions of grazing permits may be modified (43 CFR 4130.3, 4130.3-1, 4130.3-2), or changes in active use (43 CFR 4110.3-3) could be considered in order to meet the standards for rangeland health as described in 43 CFR 4180 and the Lewistown Standards for Rangeland Health and Guidelines for Livestock Grazing Management or to otherwise manage, maintain, or improve sage-grouse habitat.

Appropriate indicators and measurements specific to habitat for greater sage-grouse, or any other wildlife species of concern, would be evaluated as part of standards and guidelines assessment (43 CFR 4180) and any necessary and appropriate habitat objectives specific to meeting the wildlife health standard for the site would be identified and incorporated into AMPs or the terms and conditions (43 CFR 4130.3, 4130.3-1, 4130.3-2) of livestock grazing permits.

## Alternative A (Current Management)

Most unallocated parcels would remain available for livestock grazing. The Little Rocky Mountains and Whitewater Lake areas would remain closed to livestock grazing. The Cree Crossing Allotment No. 05302 adjacent to the Milk River would remain closed to livestock grazing for recreation values. The Dry Gulch Allotment No. 05602 and Montana Gulch Allotment No. 05603 would continue to be authorized under a temporary grazing permit following the procedure in 43 CFR 4130.6-2.

Grazing allocations on newly acquired land would be based on management needs and objectives for the acquisition. The allocation may range from zero to full capacity and would be monitored after completion of an activity plan to adjust grazing as needed to meet objectives.

Yearling factors would be considered through individual AMPs.

## Alternative B

Most unpermitted parcels would remain available for livestock grazing. The Little Rocky Mountains Allotment No. 05630 and the Whitewater Lake Allotment No. 05068 would remain closed to livestock grazing except as needed for resource management. The Cree Crossing Allotment No. 05302 adjacent to the Milk River would remain closed to livestock grazing for recreation values. The 15 Mile Trailing Allotment No. 06237 would be closed to livestock grazing except as needed for livestock trailing purposes.

Allotments within the Greater Sage-Grouse Protection Priority Area ACEC and the Grassland Bird/Greater Sage-Grouse Priority Areas ACEC would be high priority for reassessment of land health standards and processing grazing permit renewals as detailed in Appendix M, Mitigation Measures and Conservation Actions for Greater Sage-Grouse Habitat.

If a permittee submits a relinquishment of grazing privileges for an allotment within these ACECs, retirement of grazing privileges would be considered in a site-specific environmental analysis that addresses the potential impacts (both positive and negative) to greater sage-grouse. If the analysis does not support closing the allotment to grazing for the benefit of sage-grouse, the allotment would remain available for livestock grazing and would be designated as a reserve common allotment.

In cases where the use would differ from that authorized in the previous grazing permit/lease, other factors have developed to change the management circumstances, or land health standards are not being met because of livestock grazing, a new site-specific interdisciplinary environmental analysis would be undertaken prior to transferring or renewing a grazing permit/lease.

Newly acquired lands would be evaluated to determine if they should be designated as reserve common allotments, allocated for grazing, or designated as unavailable for livestock grazing in consideration of the management needs and objectives for the acquisition, with the exception of lands covered under 43 CFR 4110.1-1 (e.g., where lands have been

### Grazing Relinquishment versus Retirement of Grazing Privileges

*Grazing Relinquishment:* The voluntary and permanent surrender by an existing permittee or lessee, (with concurrence of any base property lienholder(s)), of their priority (preference) to use a livestock forage allocation on public land as well as their permission to use this forage. Relinquishments do not require the consent or approval of the BLM. The BLM's receipt of a relinquishment is not a decision to close areas to livestock grazing.

*Retirement:* Ending livestock grazing on a specific area of land.

acquired through purchase or exchange, and an agreement provides that the BLM would honor existing grazing permits or leases).

Allotments where grazing preference is relinquished or cancelled that are outside of priority sage-grouse habitat would remain available for livestock grazing and would be designated as reserve common allotments.

An activity plan would be developed that identifies how the reserve common allotment would be managed to maintain rangeland health and the procedures for selecting an applicant for using the allotment.

Yearling factors would not be considered.

## **Alternative C**

Most unpermitted parcels would remain available for livestock grazing. The Little Rocky Mountains Allotment No. 05630 and Whitewater Lake Allotment No. 05068 would remain closed to livestock grazing except as needed for resource management. The Cree Crossing Allotment No. 05302 adjacent to the Milk River would remain closed to livestock grazing for recreation values. The 15 Mile Trailing Allotment No. 06237 would be closed to livestock grazing except as needed for livestock trailing purposes.

Allotments within the Greater Sage-Grouse Protection Priority Area and the Grassland Bird/Greater Sage-Grouse Priority Areas would be high priority for reassessment of land health standards and processing grazing permit renewals as detailed in Appendix M, Mitigation Measures and Conservation Actions for Greater Sage-Grouse Habitat.

In cases where the use would substantially differ from that authorized in the previous grazing permit/lease, other factors have developed to change the management circumstances, or land health standards are not being met because of livestock grazing, a site-specific interdisciplinary environmental review would be undertaken.

Newly acquired lands would be evaluated to determine if they should be designated as reserve common allotments, allocated for grazing, or designated as unavailable for livestock grazing in consideration of the management needs and objectives for the acquisition, with the exception of lands covered under 43 CFR 4110.1-1 (e.g., where lands have been acquired through purchase or exchange, and an agreement provides that the BLM would honor existing grazing permits or leases).

Allotments where grazing preference is relinquished or cancelled would remain available for livestock grazing and would be evaluated in a site-specific NEPA document to determine if they should be designated as reserve common allotments or reassigned.

An activity plan would be developed that identifies how the reserve common allotment would be managed to maintain rangeland health and the procedures for selecting an applicant to use the allotment.

Yearling factors would be considered according to the framework laid out in Appendix I.

## **Alternative D**

Most unpermitted parcels would remain available for livestock grazing. The Little Rocky Mountains Allotment No. 05630 and Whitewater Lake Allotment No. 05068 would remain closed to livestock grazing except as needed for resource management. The Cree Crossing Allotment No. 05302 adjacent to the Milk River would remain closed to livestock grazing for recreation values. The 15 Mile Trailing Allotment No. 06237 would be closed to livestock grazing except as needed for livestock trailing purposes.

In cases where the use would substantially differ from that authorized in the previous grazing permit/lease, other factors have developed to change the management circumstances, or land health standards are not being met because of livestock grazing, a site-specific interdisciplinary environmental review would be undertaken.

All newly acquired lands would be allocated for grazing.

Allotments where grazing preference is relinquished or cancelled during the life of the plan would be made available for qualified applicants.

Yearling factors would be considered according to the framework laid out in Appendix I.

## **Alternative E (Preferred Alternative)**

Most unpermitted parcels would remain available for livestock grazing. The Little Rocky Mountains Allotment No. 05630 and Whitewater Lake Allotment No. 05068 would remain closed to livestock grazing except as needed for resource management. The Cree Crossing Allotment No. 05302 adjacent to the Milk River would remain closed to livestock grazing for recreation values. The 15 Mile Trailing Allotment No. 06237 would be closed to livestock grazing except as needed for livestock trailing purposes.

Allotments within the Greater Sage-Grouse Protection Priority Area and the Grassland Bird/Greater Sage-Grouse Priority Areas would be high priority for reassessment of land health standards and processing grazing permit renewals as detailed in Appendix M, Mitigation Measures and Conservation Actions for Greater Sage-Grouse Habitat.

Allotments within priority habitat areas for sage-grouse where grazing preference is relinquished or cancelled would be evaluated in a site-specific NEPA document to determine if they should be closed to grazing, designated as reserve common allotments, or reassigned.

In cases where the use would substantially differ from that authorized in the previous grazing permit/lease, other factors have developed to change the management circumstances, or land health standards are not being met because of livestock grazing, a site-specific interdisciplinary environmental review would be undertaken.

Newly acquired lands would be evaluated to determine if they should be designated as reserve common allotments, allocated for grazing, or designated as unavailable for livestock grazing in consideration of the management needs and objectives for the acquisition, with the exception of lands covered under 43 CFR 4110.1-1 (e.g., where lands have been acquired through purchase or exchange, and an agreement provides that the BLM would honor existing grazing permits or leases).

Allotments outside of priority sage-grouse habitat where grazing preference is relinquished or cancelled would remain in active use as defined under 43 CFR 4100.0-5 and available for livestock grazing. These specific allotments could be evaluated to determine if they should be designated as reserve common allotments to provide livestock forage to permittees whose allotment(s) undergo rest or improvements, and might be used when drought, fire, flood, or other unplanned needs make normal allotments unusable. If a reserve common allotment is designated, an activity plan would be developed that identifies how the allotment would be managed to maintain rangeland health and the procedures for selecting an applicant to use the allotment.

Yearling factors would be considered according to the framework laid out in Appendix I.



Cattle grazing on BLM land

BLM Photo

## Noxious Weeds and Other Invasive Non-Native Species

### Goal

*Prevent the introduction and spread of noxious weeds and invasive species through cooperative Integrated Pest Management practices.*

### Objectives

Reduce the rate of spread for widely established invasive species, and prevent the establishment or spread of new invasive species.

### Decisions Common to All Alternatives

Montana state and county-designated noxious weeds will be managed according to the principles of integrated pest management found in Partners Against Weeds: An Action Plan for the Bureau of Land Management (BLM 1996c), Vegetation Treatments on Bureau of Land Management Lands in 17 Western States Programmatic Environmental Impact Statement (BLM 2007b); Montana Weed Management Plan (MWMP 2008); County Weed Control Act (MDA 2003); Noxious Weed Management Plan, Lewistown District (BLM 1992c); or the most current noxious weed management plan(s) developed within the planning area. These plans outline the principles of integrated pest management which would continue to be followed. The basic principles of integrated pest management include:

- education and awareness for staff, cooperators, and the public;
- prevention, early detection and rapid response for all noxious weed species;
- inventory of public and cooperator lands for noxious weeds;
- control of noxious weeds by various methods that include cultural, physical, biological, and chemical controls or other land practices; and
- monitoring of treatment areas.

The State of Montana currently has 34 designated noxious weeds, of which 20 are found in the planning area. An invasive plant attains a noxious status by legislation only. This designation usually places the burden to control, contain, or inhibit reproduction of a listed species on the owner of an infested parcel. It also prohibits the sale and distribution of listed species. Montana law allows for the petition and review of invasive plants for inclusion on its Noxious Weed List, making the list a dynamic document. Montana State Noxious Weeds are divided into five priorities based on the distribution and abundance of a given species across the state. This priority system helps determine the management strategy for a given species on the list.

- **Priority 1A** - These weeds are not present in Montana. Management criteria will require eradication if detected; education and prevention.
- **Priority 1B** - These weeds have limited presence in Montana. Management criteria will require eradication or containment and education.
- **Priority 2A** - These weeds are common in isolated areas of Montana. Management criteria will require eradication or containment where less abundant.
- **Priority 2B** - These weeds are abundant in Montana and widespread in many counties. Management criteria will require eradication or containment where less abundant.
- **Priority 3** – Regulated Plants. These plants have the potential to have significant negative impacts. These plants may not be intentionally spread or sold other than as a contaminant in agricultural products.

In addition, under the County Noxious Weed Control Act and Administrative Rules of Montana, each county is allowed to designate plant species as noxious within that county. The BLM also maintains a list of exotic invasive species for the land it administers (Table 3.33 in Chapter 3).

The BLM will continue cooperative agreements with county and state entities. Management efforts will be coordinated with other federal, state, and county agencies, weed management areas, and private landowners and organizations. Development of cooperative weed management areas where all the landowners are cooperatively working to contain or eradicate noxious weeds within designated areas will be encouraged.

Treatment methods include chemical, cultural, physical, and biological. Invasive species such as cheatgrass will be evaluated in site-specific projects associated with the watershed analysis. Perennial vegetation will be reestablished in a timely manner to rehabilitate disturbance areas. Native species will be used for rehabilitation and reclamation unless site-specific evaluations indicate that nonnative species are needed to ensure success or rapid vegetative reestablishment.

Weed seed free forage will be used on BLM land. Forage subject to this rule includes hay, grains, cubes, pelletized feeds, straw, and mulch (BLM 1997b). Reclamation/stabilization and maintenance materials used will be from weed seed free sources to the extent practicable.

Other resource programs would assist in invasive species management through project planning and program implementation. This would include integrating prevention measures in program activities to reduce the spread of invasive species, and supplying resources to mitigate and manage invasive species issues with on-the-ground project implementation. In general, mitigation measures are established to reduce the potential for introduction of invasive species and to minimize any adverse effect their presence may cause. These measures are found in stipulations, conditions of approval, standard operating procedures, etc. that require clean equipment, seed and forage for use in projects, and place the burden on the consumer for control of invasive species in some instances. Standard operating procedures and mitigation measures for integrated weed management treatments have also been developed to mitigate non-target effects of different procedures. These measures are outlined in the Record of Decision for Vegetation Treatments Using Herbicides on BLM Lands in 17 Western States Programmatic Environmental Impact Statement (BLM 2007c).

Grasshopper/Mormon cricket outbreaks are managed as outlined in a BLM Memorandum of Understanding (MOU WO-220-2009-06) in cooperation with the U.S. Department of Agriculture's Animal and Plant Health Inspection Service-Plant Protection and Quarantine (APHIS-PPQ 09-8011-087-MU) (BLM 2003b).

The State of Montana has developed a management plan to address invasive species (animals, plants, and pathogens) associated with waterbodies. The BLM will coordinate with MFWP to address prevention of and potential infestations of Aquatic Nuisance Species (ANS) and follow actions outlined in the Montana Aquatic Nuisance Species Management Plan (MANS 2002). Aquatic Nuisance Species are categorized into the following classes to help implement proper management and prevention for each species:

- **Priority Class 1** - These species are not known to be present in Montana, but have a high potential to invade and there are limited or no known management strategies for these species. Appropriate management for this class includes prevention of introductions and eradication of populations.
- **Priority Class 2** - These species are present and established in Montana and have the potential to spread, and there are limited or no known management strategies for these species. These species can be managed through actions that involve mitigation of impact, control of population size, and prevention of dispersal to other waterbodies.
- **Priority Class 3** - These species are not known to be established in Montana and have a high potential for invasion, and appropriate management techniques are available. Appropriate management for this class includes prevention of introductions and eradication of pioneering populations.
- **Priority Class 4** - These species are present and have the potential to spread in Montana, but there are management strategies available for these species. These species can be managed through actions that involve mitigation of impact, control of population size, and prevention of dispersal to other waterbodies.

Pest management including the use of pesticides in the interest of public health and safety and other resource management objectives is conducted on a case-by-case basis consistent with required NEPA analysis. Examples include

flea control to prevent plague transmission in support of black-footed ferret recovery, ground squirrel and prairie dog management, mosquito control to minimize West Nile virus transmission, and pheromone traps for pine bark beetle management.

## Off-Highway Vehicle Use and Travel and Transportation Management

### Goals

*In coordination with other federal agencies, state, and local governments, and private landowners, plan and manage motorized and nonmotorized travel to provide recreational experiences while maintaining or protecting resource values.*

*Create travel networks that are logical and sustainable, as well as meet the increasingly diverse transportation, access and recreational needs of the public, while maintaining or protecting resource values in coordination with other federal agencies, state and local governments, and private landowners and using an interdisciplinary approach.*

### Objectives

Designate all lands managed by the BLM within the HiLine District as “open” or “limited to existing roads, primitive roads, and trails” or “closed” to OHV use, and identify Travel Management Areas to frame transportation issues and help delineate travel networks that address specific uses and resource concerns. These travel management areas will be prioritized as high, medium, and low for completion of travel management planning after the Record of Decision for this RMP.

Identify areas for motorized and nonmotorized travel to provide opportunities for a variety of recreation experiences with minimal resource impacts and conflicts of use.

Ensure adequate implementation of road management guidelines for road planning, design and maintenance.

### Decisions Common to All Alternatives

Completion of comprehensive travel management plans will involve moving from an interim designation of “limited to existing roads, primitive roads and trails,” to a designation of “limited to designated roads, primitive roads and trails” and establishing objectives for each route.

Route objectives and regulations at 43 CFR 8340 through 43 CFR 8342.3 will be applied in identifying route-specific management, such as maintenance intensities (Table 2.7), where activity-level plan decisions are made for specific travel routes.

#### Area Designations

**Open:** An area where all types of vehicle use is permitted at all times, anywhere in the area subject to the operating regulations and vehicle standards set forth in 43 CFR 8341 and 8342.

**Limited:** An area restricted at certain times, in certain areas, and/or to certain vehicular use. These restrictions may be of any type, but can generally be accommodated within the following type of categories: Numbers of vehicles; types of vehicles; time or season of vehicle use; permitted or licensed use only; use on existing roads, primitive roads and trails; use on designated roads, primitive roads and trails; and other restrictions.

**Closed:** An area where motorized vehicle use off road is prohibited. Use of off-road vehicles in closed areas may be allowed for certain reasons; however, such use shall be made only with the approval of the authorized officer.

| <b>Table 2.7<br/>BLM Road Maintenance Intensities</b>   |  |
|---|--|
| <i>Maintenance Description</i>  | <i>Maintenance Objectives</i>  |
| Level 0 – Existing routes that will no longer be maintained or declared as routes. Routes identified as Level 0 are identified for removal from the Transportation System entirely.   | <ul style="list-style-type: none"> <li>• No planned annual maintenance.</li> <li>• Meet identified environmental needs.</li> <li>• No preventive maintenance or planned annual maintenance activities.</li> </ul>  |
| Level 1 – Routes where minimal (low intensity) maintenance is required to protect adjacent lands and resource values. These roads may be impassable for extended periods of time or only accessible with high-clearance four-wheel-drive vehicles.  | <ul style="list-style-type: none"> <li>• Low (Minimal) maintenance intensity.</li> <li>• Emphasis is given to maintaining drainage and runoff patterns as needed to protect adjacent lands. Grading, brushing, or slide removal is not performed unless route bed drainage is being adversely affected, causing erosion.</li> <li>• Meet identified resource management objectives.</li> <li>• Perform maintenance as necessary to protect adjacent lands and resource values.</li> <li>• No preventive maintenance.</li> <li>• Planned maintenance activities limited to environmental and resource protection.</li> <li>• Route surface and other physical features are not maintained for regular traffic.</li> </ul>   |
| Level 2 – <i>Reserved for Possible Future Use</i>   |  |
| Level 3 – Routes requiring moderate maintenance because of low-volume use (e.g., seasonally or year-round for commercial, recreational, or administrative access). Maintenance intensities may not provide year-round access but are intended to generally provide resources appropriate for keeping the route in use for the majority of the year. | <ul style="list-style-type: none"> <li>• Medium (Moderate) maintenance intensity.</li> <li>• Drainage structures will be maintained as needed. Surface maintenance will be conducted to provide a reasonable level of riding comfort at prudent speeds for the route conditions and intended use. Brushing is conducted as needed to improve sight distance when appropriate for management uses. Landslides adversely affecting drainage receive high priority for removal; otherwise, they will be removed on a scheduled basis.</li> <li>• Meet identified environmental needs.</li> <li>• Generally maintained for year-round traffic.</li> <li>• Perform annual maintenance necessary to protect adjacent lands and resource values.</li> <li>• Perform preventive maintenance as required to generally keep the route in acceptable condition.</li> <li>• Planned maintenance activities should include environmental and resource protection efforts, annual route surface.</li> <li>• Route surface and other physical features are maintained for regular traffic.</li> </ul> |
| Level 4 - <i>Reserved for Possible Future Use</i>   |  |
| Level 5 – Route for high (Maximum) maintenance because of year-round needs, high-volume traffic, or significant use. Also may include route identified through management objectives as requiring high intensities of maintenance or to be maintained open year-round and are generally accessible with two-wheel-drive, low clearance vehicles.    | <ul style="list-style-type: none"> <li>• High (Maximum) maintenance intensity.</li> <li>• The entire route will be maintained at least annually. Problems will be repaired as discovered. These routes may be closed or have limited access because of weather conditions but are generally intended for year-round use.</li> <li>• Meet identified environmental needs.</li> <li>• Generally maintained for year-round traffic.</li> <li>• Perform annual maintenance necessary to protect adjacent lands and resource values.</li> <li>• Perform preventive maintenance as required to generally keep the route in acceptable condition.</li> <li>• Planned maintenance activities should include environmental and resource protection efforts, annual route surface.</li> <li>• Route surface and other physical features are maintained for regular traffic.</li> </ul>   |

The BLM will coordinate with MFWP in the block management program as appropriate. Motorized travel adjacent to block management areas could conform to seasonal limitations, as determined by the authorized officer on a case-by-case basis through environmental review and public involvement.

Motorized wheeled cross-country travel for lessees and permittees is limited to the administration of a federal lease or permit (OHV ROD, 2003). Any authorized or permitted activity, such as a grazing permit or special recreation permit (SRP), that involves motorized access to public lands must describe how access will be managed, both on and off the existing or designated route system, as part of the permit or authorization. Area-specific limitations or needs will be addressed in more detail during subsequent travel management planning and incorporated into the associated permits/leases.

Roads, primitive roads and trails will be maintained in accordance with the following: BLM policy; the assigned maintenance intensity (Table 2.7); consideration of resource issues; mitigation and BMPs (Appendix C and Appendix M); and available funding. All roads will be maintained in accordance with standards and guidelines in BLM Manuals 9113, 9114, 9115 and associated handbooks. Roads would be inspected on an established schedule in accordance with the Bureau's Condition Assessment guidance.

New permanent roads, primitive roads and trails will be constructed subject to environmental review and approved engineering standards, following criteria described in this section. Consideration will be given to use demands, location, safety, and resource constraints when determining the level of road necessary (BLM Manuals 9113, 9114, 9115 and associated handbooks). If an existing road, primitive road or trail is substantially contributing to resource impacts, the road will be considered for redesign, re-routing, decommissioning or closure to minimize the adverse impacts. Existing BLM roads, primitive roads, and trails will be managed through the Facility Asset Management System (FAMS) and Ground Transportation Linear Feature (GTLF) geospatial database (BLM Manual 1626).

The BLM will pursue opportunities to conduct restoration of roads, primitive roads and trails not designated during travel management planning, with priority given to areas with special management concerns. This includes primitive routes that have not been designated as "primitive routes" within WSAs and those that have been closed within areas that are being managed to protect or enhance wilderness characteristics or special status species such as the greater sage-grouse. Restoration activities will be done in accordance with guidelines described in Appendix J, Reclamation. Applicable requirements such as specific seed mixes or transplanting recommendations will also be applied where special status species or issues are a concern (e.g., mitigation for greater sage-grouse).

## Off-Highway Vehicle Use

OHV use will be managed consistent with the definitions and prescriptions identified in the Record of Decision for the Off-Highway Vehicle EIS and Proposed Plan Amendment for Montana, North Dakota and South Dakota (BLM 2003c), unless stated otherwise in the alternatives section. In the interim, until travel management planning has been completed, all motorized wheeled travel is restricted to existing roads, primitive roads and trails; however, several exceptions apply:

- any military, fire, search and rescue, or law enforcement vehicle for emergency operations;
- official BLM administrative business (prescribed fire, noxious weed control, range management, etc.);
- other government agency business (surveying, animal damage control, etc.);
- administration of a federal lease or permit (e.g., a livestock permittee maintaining a fence, an oil or gas company performing routine maintenance on a well, etc.);
- for dispersed camping within 300 feet of an existing open road. Site selection must be completed by nonmotorized means, and accessed by the most direct route causing the least damage.

Motorized travel in the Bitter Creek WSA (60,701 acres) and Burnt Lodge WSA (13,727 acres) will continue to be limited to identified primitive routes under all alternatives.

BLM regulations (43 CFR 8341.2 and 8364.1) allow for area or road closures where off-highway vehicles are causing or will cause considerable adverse impacts on soil, vegetation, wildlife, threatened or endangered species, wildlife habitat, cultural resources, other authorized uses, public safety, or other resources. The authorized officer can immediately close the area or road affected until the impacts are eliminated and measures are implemented to prevent future recurrence.

## Travel Management Areas

Travel management areas are an optional planning tool to frame transportation issues and help delineate motorized and nonmotorized travel networks that address specific uses and resource concerns. These areas are identified and prioritized as high, moderate and low in this RMP, but site-specific route designations will be made during subsequent travel management planning in accordance with BLM Handbook H-8342-1. For the high priority areas, this planning will be done within five years of the Record of Decision while planning for areas prioritized as moderate to low will be completed within the life of this RMP.

Before any site-specific travel management planning occurs, the following baseline information and actions should be completed:

- Road condition assessments will be completed for each area prior to travel management planning;
- Legal access needs for easements to BLM lands and rights-of-way to private lands will be identified; and
- Baseline road inventory maps will be printed and made available to the general public for their review utilizing open houses, the Internet, and other means of communication.

### Travel Management Planning Criteria

Through analysis and activity-level planning, the BLM will collaborate with affected and interested parties to evaluate the designated road and trail network.

The network will be evaluated for active OHV management suitability and for envisioning potential changes in the existing system or the addition of new trails that would help meet land use plan objectives. In conducting such evaluations, the following factors would be considered:

- measures needed to avoid on-site and off-site effects on current and future land uses and important natural resources, including issues such as noise and air pollution, erodible soils, stream sedimentation, nonpoint source water pollution, listed and sensitive species habitats, historic and archeological sites, wildlife, special management areas, grazing operations, public safety, needs of nonmotorized recreationists, and recognition of property rights for adjacent landowners;
- trails suitable for different categories of OHVs including dirt bikes, ATVs, and 4-wheel drive touring vehicles, or nonmotorized means of travel such as mountain biking and hiking as well as opportunities for joint trail use;
- need for parking, trailheads, informational and directional signs, mapping and profiling, and development of brochures or other materials for public dissemination; and
- opportunities to connect existing or planned trail networks.

### Travel Management Criteria for Making Road and Trail Selections

Existing and/or new individual roads, primitive roads and trails will be chosen with the transportation network goals in mind rather than just using all of the inherited roads, primitive roads and trails. Most existing roads, primitive roads and trails on BLM land were created by use over time, rather than planned and constructed for specific activities or needs. Instead of simply using this process as a way of deciding which individual roads, primitive and trails should be closed or left open, the BLM will consider a broader range of possibilities for management of individual roads, primitive roads and trails, including reroutes, reconstruction or new construction, and closures. These management considerations can be

#### Elements of a Comprehensive Travel and Transportation Management Plan

- Identify existing roads, primitive roads, trails, and related structures.
- Indicate changes in the status of existing routes and areas.
- Address needed improvements, signing, trailheads, and staging areas.
- Identify maintenance intensities and legal access needs.
- Address all modes of transportation and primary use.
- Identify desired future conditions.
- Use an interdisciplinary approach to identify the resource effects.
- Seek active public involvement throughout the planning process.
- Produce a map depicting the final decisions.
- Address the strategy informing/educating the public.
- Develop a sign plan.
- Develop a monitoring plan.

used to develop a high-quality travel system. A well-designed travel system can direct use away from sensitive areas and still provide high-quality recreational activities and access for commercial and recreational needs.

An interdisciplinary team and cooperating agencies will be used for special expertise in identifying the resources, land ownership, public demand, access needs, conflicts of use and benefits of various routes. This process will include public involvement.

The BLM will emphasize management of the transportation system to reduce impacts to natural resources from authorized roads, primitive roads and trails (Appendix C and Appendix M). The BLM will also consider through travel management planning closing and restoring unauthorized user created roads, primitive roads and trails to prevent resource damage.

Resource considerations will be assessed in determining designation criteria. All designations will be based on the protection of resources, safety of all users, and the minimization of conflicts among various uses (43 CFR 8342.1). The following elements to be considered during route selection fall within the designation criteria:

- administrative access for the BLM and BLM-authorized activities
- areas of critical environmental concern
- at-risk watersheds
- cultural resources
- current maintenance agreements
- desired future condition
- elimination of route redundancy
- energy development
- erodible soils
- forest resources
- low bearing strength soils (saline)
- paleontological resources
- potential for adverse or positive economic effects
- prescriptions for land use allocations including special recreation management areas
- public health and safety; emergency services
- recreation opportunities, experiences, settings, benefits
- riparian resources, assessment of proper functioning condition
- rights-of-way, easements and inholdings
- Standards for Rangeland Health and Guidelines for Livestock Grazing Management
- user preferences and conflicts of use
- vegetation
  - at-risk vegetative sites
  - relic vegetation
- visual resources
- watershed resources
- wilderness characteristics
- wilderness study areas
- wildlife resources
  - greater sage-grouse habitat
  - raptor nesting locations
  - sensitive species habitats
  - winter range

The BLM will pursue opportunities to conduct restoration of roads, primitive roads and trails not designated during travel management planning, with priority given to areas with special management concerns (see Transportation and Facilities Management for more information).

**Schedule**

Travel management areas are prioritized into high, moderate and low categories. The high category areas will normally have travel management planning completed within five years of the signing of the Record of Decision as funding and staffing allow. The moderate and low category areas will have travel management plans completed within the life of the RMP. Prioritization of travel management areas will be an ongoing process and priorities for travel planning can change through implementation and monitoring based on resource needs, special status species including greater sage-grouse, funding, and staffing.

**Alternative A (Current Management)**

**OHV Area Designations**

The Fresno OHV area north of Havre (84 acres) and the OHV area north of Glasgow (40 acres) would remain designated open to OHV use off roads, primitive roads and trails.

The Sweet Grass Hills ACEC (7,429 acres) would be closed to OHV use.

The remaining BLM land (2,429,930 acres) would be designated as limited. In these areas travel would be on existing roads, primitive roads, and trails. See Table 2.8 and Map 2.6, which is located at the end of Chapter 2.

No motorized game retrieval off road would be allowed in limited or closed areas. Through subsequent site-specific planning, options for big game retrieval could be considered (BLM 2003c).

| <b>Table 2.8<br/>OHV Area Designations by Alternative (Acres)</b> |   |                      |                      |                      |  |
|---|---|----------------------|----------------------|----------------------|--|
|   | <i>Alternative A<br/>(Current Management)</i> | <i>Alternative B</i> | <i>Alternative C</i> | <i>Alternative D</i> | <i>Alternative E<br/>(Preferred Alternative)</i> |
| Open  | 124   | 0                    | 0                    | 305                  | 165  |
| Limited   | 2,429,930                                     | 2,429,971            | 2,429,930            | 2,437,169            | 2,429,889  |
| Closed  | 7,419   | 7,504                | 7,544                | 0                    | 7,419  |

**Travel Management Areas**

Fifteen travel management planning areas (see Map 2.7, which is located at the end of Chapter 2) would be prioritized as follows:

**High:**

- An area northwest of Glasgow (80 acres) (includes the 40 acre Glasgow OHV area plus additional BLM lands in the vicinity)
- Little Rocky Mountains (27,449 acres)

**Moderate:**

- Bears Paw to Breaks area (89,369 acres)
- Kevin Rim area (16,325 acres)
- Missouri Breaks area (402,349 acres)
- Northwest Blaine County (170,631 acres)
- Sweet Grass Hills area (7,879 acres)
- Vimy area (8,182 acres)

**Low:**

- Lonesome Lake area (121 acres)
- Lower Marias River area (12,014 acres)
- Northeast Bears Paw Breaks area (4,351 acres)
- Upper Marias River area (8,908 acres)
- Wayne Creek area (29,792 acres)
- Woody Island area (53,436 acres)
- Remaining BLM lands (1,606,688 acres)

## Alternative B

### OHV Area Designations

No areas would be designated as open to off-road travel (Table 2.8).

The Fresno OHV area (84 acres) and Sweet Grass Hills ACEC (7,419 acres) would be closed to OHV use (Map W.3, which is available at <http://blm.gov/8qkd>).

The remaining BLM land (2,429,971 acres) would be designated as limited. In these areas travel would be on existing roads, primitive roads, and trails (Map W.3, which is available at <http://blm.gov/8qkd>).

The use of motorized vehicles, including OHVs, to retrieve game off-road would not be allowed and would not be considered during subsequent site-specific travel management planning. Individual permits authorizing off-road game retrieval for persons with disabilities will not be issued, regardless of possession of a Montana Disabled Hunting License.

Over-snow vehicle use in the planning area (including snowmobiles) would be allowed, except in the Grassland Bird/Greater Sage Grouse Priority Areas ACEC, the Greater Sage-Grouse Protection Priority Area ACEC, and crucial winter range areas.

### Travel Management Areas

Site-specific travel planning within the Grassland Bird/Greater Sage-Grouse Priority Areas ACEC and Greater Sage-Grouse Protection Priority Area ACEC would be completed within a five (5) year period after the ROD is signed.

Seven travel management areas would be prioritized into the following categories for travel management planning (Map W.4, which is available at <http://blm.gov/8qkd>):

**High:**

- Grassland Bird/Greater Sage Grouse Priority Areas ACEC and Frenchman (490,477 acres)
- Greater Sage-Grouse Protection Priority Area ACEC (997,338 acres)
- Little Rocky Mountains (27,688 acres)

**Moderate:**

- Marias River area (19,032 acres)
- North Missouri Breaks (101,523 acres)
- Prairie Grasslands area (149,681 acres)

**Low:**

- Remaining BLM lands (651,735 acres)

## Alternative C

### OHV Area Designations

No areas would be designated as open to off-road travel (Table 2.8).

The Fresno OHV area (84 acres), the Glasgow OHV area (40 acres) and the Sweet Grass Hills ACEC (7,419 acres) would be closed to OHV use (Map W.3, which is available at <http://blm.gov/8qkd>).

The remaining BLM lands (2,429,930 acres) would be designated as limited to existing roads, primitive roads and trails (Map W.3, which is available at <http://blm.gov/8qkd>).

Motorized game retrieval off road would be allowed during the big game hunting season on BLM lands east of Highway 191 and south of the Dry Fork Road in Phillips County; and south of the Willow Creek Road and south of the Stonehouse Road in South Valley County except in the Burnt Lodge WSA. Figure 2.2 shows the location of the 387,118 acre game retrieval area. Motorized game retrieval off road would be allowed between the hours of 10:00 a.m. and 2:00

p.m. to retrieve a big game animal that is in possession, in a minimum timeframe utilizing the most direct route and avoiding resource damage.

## Travel Management Areas

Seven travel management areas would be prioritized into the following categories for travel management planning (Map W.4, which is available at <http://blm.gov/8qkd>):

### High:

- Frenchman/Rock Creek area (190,174 acres)
- Little Rocky Mountains (27,688 acres)
- Marias River area (19,032 acres)

### Moderate:

- North Missouri Breaks (101,523 acres)
- South Phillips County (575,917 acres)
- South Valley County (584,820 acres)

### Low:

- Remaining BLM lands (938,321 acres)

## Alternative D

### OHV Area Designations

The Fresno OHV area (84 acres) and Glasgow OHV area (40 acres) would remain designated open, and the Thirty Mile area (181 acres) would be designated open to OHV use off roads, primitive roads and trails (Table 2.8 and Map W.3, which is available at <http://blm.gov/8qkd>).

The BLM would continue to evaluate moderately sized open acres during travel management planning.

The remaining BLM land (2,437,169 acres) would be designated as limited. In these areas travel would be on existing roads, primitive roads, and trails.

#### Thirty Mile OHV Area

The proposed Thirty Mile OHV area (181 acres) is located 1.75 miles north of U.S. Highway 2 on the Thirty Mile Creek Road, about 3 miles from Harlem, Montana. The location is on the east side of the road. This area is shown on Map W.3 on the HiLine RMP web site at <http://blm.gov/8qkd>.

Motorized game retrieval off road would be allowed during the big game hunting season on all BLM lands in the planning area except in the following areas (Figure 2.2):

- Big Bend of the Milk River ACEC (1,972 acres)
- Bitter Creek WSA (60,701 acres) and Burnt Lodge WSA (13,727 acres)
- Frenchman ACEC (63,482 acres)
- Kevin Rim ACEC (4,557 acres)
- Malta Geological ACEC (6,153 acres)

Game retrieval would be allowed between the hours of 10:00 a.m. and 2:00 p.m. to retrieve a big game animal that is in possession, in a minimum timeframe utilizing the most direct route while minimizing resource damage.

## Travel Management Areas

Seven travel management areas would be prioritized into the following categories for travel management planning (Map W.4, which is available at <http://blm.gov/8qkd>):

### High:

- Frenchman/Rock Creek area (190,174 acres)
- Little Rocky Mountains (27,688 acres)
- Marias River area (19,032 acres)

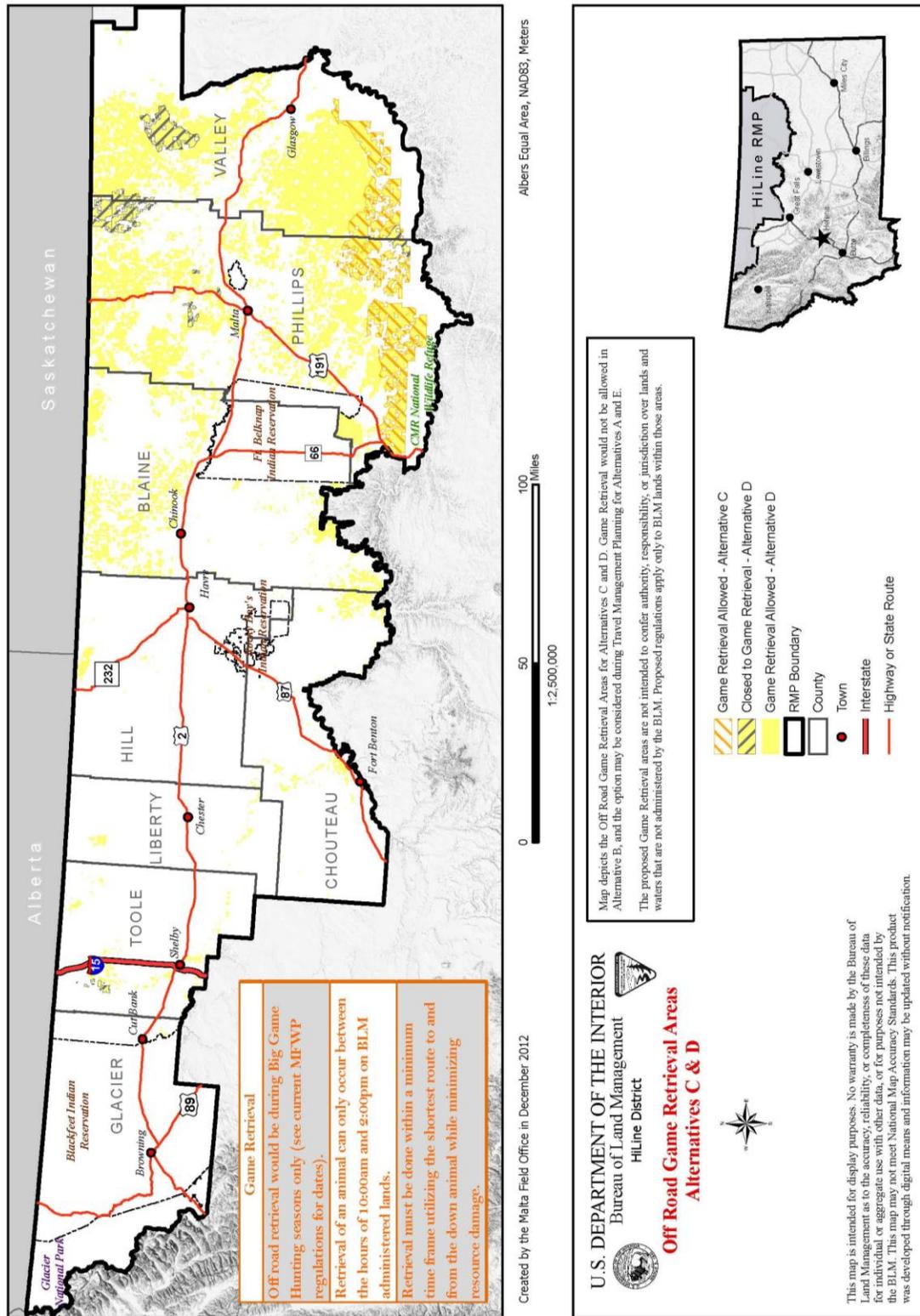
### Moderate:

- North Missouri Breaks (101,523 acres)
- South Phillips County (575,917 acres)
- South Valley County (584,820 acres)

### Low:

- Remaining BLM lands (938,321 acres)

**Figure 2.2**  
**Off-Road Game Retrieval Areas**  
**Alternatives C and D**



## Alternative E (Preferred Alternative)

### OHV Area Designations

The Glasgow OHV area (40 acres) would remain designated open to OHV use off roads, primitive roads and trails.

The Fresno OHV area (125 acres) would remain designated open to OHV use off roads, primitive roads and trails. The boundary of the OHV area would be increased from 84 acres to 125 acres to more closely follow topography of the area and incorporate the existing system of trails. Through travel management planning the BLM would address the need for seasonal restrictions, and/or the need to fence the boundary of the OHV area to address resource values and conflicts of use on surrounding lands. A paleontological inventory would be conducted to determine appropriate access points, fence placement, and need for parking areas.

The Sweet Grass Hills ACEC (7,419 acres) would be closed to OHV use (Map 2.6).

The remaining BLM land (2,429,889 acres) would be designated as limited. In these areas travel would be on existing roads, primitive roads, and trails. See Table 2.8.

Cross-country over-snow vehicle use in the planning area (including snowmobiles) would be allowed, except in crucial winter range areas (110,040 acres, see the Wildlife section of Chapter 3, Figure 3.13). Over-snow vehicles would be subject to the following management guidelines: avoid locations where wind or topographic conditions may have reduced snow depth and created situations where damage to vegetation or soils could occur, or where the majority of vegetation is taller than the protective snow cover. Sensitive areas could be closed to motorized snow vehicle travel if resource damage is found to be occurring in these areas.

The use of motorized vehicles, including OHVs, to retrieve game off road would not be allowed, regardless of individual possession of a Montana Disabled Hunting License, in limited or closed areas unless designated through travel management planning. Options for off-road game retrieval could include designating the types of vehicles that may be used, times of day, limited motorized off-road travel or motorized travel on closed roads and would apply to all individuals with a legally taken game animal.

### Travel Management Areas

Site-specific travel planning within the Grassland Bird/Greater Sage-Grouse Priority Areas and Greater Sage-Grouse Protection Priority Area would be completed within a five (5) year period after the ROD is signed.

Nine travel management areas (Map 2.7) would be prioritized into the following categories for travel management planning:

#### **High:**

- Grassland Bird/Greater Sage Grouse Priority Areas and Frenchman (415,875 acres)
- Greater Sage-Grouse Protection Priority Area and Eastern Breaks and Badlands (997,338 acres)
- Little Rocky Mountains (27,688 acres)

#### **Moderate:**

- Fresno area (885 acres; includes the 125 acre OHV area plus additional BLM lands in the vicinity)
- Marias River area (19,032 acres)
- North Missouri Breaks (101,523 acres)

#### **Low:**

- Remaining BLM lands (875,133 acres)

# Paleontological Resources

### Goal

*Manage, preserve, and protect paleontological resource values for present and future generations.*

## Objectives

Ensure that proposed land uses initiated or authorized by the BLM avoid inadvertent damage to significant paleontological resources.

Promote the stewardship, conservation, and appreciation of paleontological resources through appropriate educational and public outreach programs.

## Decisions Common to All Alternatives

The BLM will identify and prioritize high probability paleontological locations for paleontological inventories and information attained will guide management decisions in those areas. Through this process the BLM will:

- maintain a database of paleontological sites and localities;
- require permits for individuals or institutions conducting paleontological investigations for vertebrate fossils;
- coordinate with other state and federal agencies’ permitting processes to eliminate confusion among permittees when working in multiple jurisdictions;
- ensure that significant fossils remain in federal ownership;
- establish a long-term monitoring program at known paleontological locales to assess potential adverse impacts and develop mitigation as appropriate; and
- coordinate with law enforcement to provide monitoring and protection against looting and vandalism of paleontological resources.

Paleontological assessments will be completed for all projects proposed on federal lands. These assessments will determine the need for further paleontological inventories. The inventories would evaluate the effects of the project on paleontological resources and would recommend appropriate mitigation measures to protect these resources. The BLM will avoid impacts to significant paleontological remains through project redesign, project abandonment, and/or mitigation of adverse impacts through scientific recovery and analysis.

The BLM will develop a resource awareness program designed to enhance the public appreciation of paleontological resource values. This includes coordination with permitted universities and museums in furthering the paleontological research potential across the HiLine and identifying and conserving areas of paleontological interest for future use. When practical, public use areas would be developed in the form of invertebrate collection areas or interpretation kiosks. Paleontological research and education opportunities will be pursued for high priority areas.

### **Significant Paleontological Resources**

Any paleontological resource that is considered to be of scientific interest, including most vertebrate fossil remains and traces, and certain rare or unusual invertebrate and plant fossils. A significant paleontological resource is considered to be scientifically important because it is a rare or previously unknown species, it is of high quality and well-preserved, it preserves a previously unknown anatomical or other characteristic, provides new information about the history of life on earth, or has identified educational or recreational value. Paleontological resources that may be considered to not have paleontological significance include those that lack provenience or context, lack physical integrity because of decay or natural erosion, or that are overly redundant or are otherwise not useful for research.

Vertebrate fossil remains and traces include bone, scales, scutes, skin impressions, burrows, tracks, tail drag marks, vertebrate coprolites (feces), gastroliths (stomach stones), or other physical evidence of past vertebrate life or activities.

Lands within the planning area exhibiting the highest site density and/or high Potential Fossil Yield Classification (PFYC), as reported by Hanna (2007), will be used to establish priorities for paleontological inventory.

Preliminarily, the priority inventory locations are northcentral Phillips County, northern Hill County, and eastern Liberty County. These locations may change or be modified with the addition of new information. These inventories will provide additional information about BLM-managed paleontological resources and will assist the BLM in allocating resources (time, money, staffing, etc.) and managing/protecting significant paleontological resources. Monitoring and completion of site assessments for known paleontological sites will occur routinely and site stabilization will be completed as deemed necessary.

The collection of petrified wood and invertebrate fossils for personal use will be allowed as limited by the regulations (43 CFR 3620 and 8365) in areas not specifically closed.

#### **Potential Fossil Yield Classification**

Occurrences of paleontological resources are closely tied to the geologic units that contain them. The probability for finding paleontological resources can be broadly predicted from the geologic units present at or near the surface. Therefore, geologic mapping can be used for assessing the potential for the occurrence of paleontological resources.

Using the Potential Fossil Yield Classification (PFYC) system, geologic units are classified based on the relative abundance of vertebrate fossils or scientifically significant invertebrate or plant fossils and their sensitivity to adverse impacts, with a higher class number indicating a higher potential. The five classes range from Class 1 – Very Low to Class 5 – Very High.

## **Public Safety**

### Goals

*Reclaim abandoned mine land (AML) sites on BLM land to improve water quality, plant communities, and diverse fish and wildlife habitat.*

*Provide and manage adequate hazard class dams based on public safety and agency need.*

*Mitigate threats and reduce risks to the public and environment from hazardous materials.*

## **Abandoned Mine Lands**

### **Objective**

Assess the level of risk at AML sites and prioritize for reclamation based on standardized risk assessment.

### **Decisions Common to All Alternatives**

The closure of dangerous inactive and abandoned mine sites will be designed to reduce the risks to human health and safety, restore the environment, and protect geological and cultural resources. Reclamation will be implemented at the highest risk sites first. Where deemed appropriate, the BLM will restore severely impacted soils and watersheds as close as possible to pre-disturbed conditions that support productive plant communities and ensure properly functioning watersheds.

Restoration and reclamation activities and repositories will be monitored to determine effectiveness of reclamation practices.

## Hazard Class Dams

### Objective

Ensure hazard class dams are maintained to meet public health and safety requirements.

### Decisions Common to All Alternatives

Construction and maintenance priorities for hazard class dams will be in conformance with applicable laws and regulations, and BLM policy. Condition assessments and Emergency Action Planning will be performed as required by the latest version of the 9177 (Dam Safety) manual section and associated handbooks. The results of the condition assessments will be reviewed to determine the need for reconstruction, maintenance or disposal.

## Hazardous Materials

### Objective

Ensure the protection of BLM lands and facilities from hazardous materials to meet public and BLM employee health and safety requirements.

### Decisions Common to All Alternatives

The BLM will comply with all federal environmental and safety laws and regulations governing storage, handling, and use of hazardous materials and governing disposal of hazardous waste. The BLM will also comply with state hazardous materials laws and regulations as required.

Disposal of hazardous materials on public lands will generally not be permitted. When the use or storage of hazardous materials is authorized (i.e., in mining operations, pesticide application or other types of commercial activities) special stipulations will be applied to comply with appropriate laws, regulations, and policies. In the event of hazardous materials incidents on public land, standard operating procedures will be used to respond. Cleanups and reclamation will be conducted in accordance with the National Oil and Hazardous Substances Pollution Contingency Plan and the NEPA or Removal Site Evaluation (RSE) / Engineering Evaluation Cost Analysis (EECA) decision.

The BLM will promote and support the appropriate use and recycling of hazardous materials in public facilities and on public land to prevent or minimize the generation and disposal of hazardous wastes.

Environmental site assessments will be conducted for land acquisitions, land disposals, and for rights-of-way if applicable. Land uses will be authorized and managed to reduce the occurrence and severity of hazardous materials incidences on public land.

The BLM will assess level of risk at hazard sites and conduct remediation at highest priority sites that are the greatest risks to the public and environment.



Bears Paw Mountain in Chouteau County

Photo by Craig Miller

## Recreation

### Goal

*Provide a diverse array of recreational opportunities and visitor experiences while maintaining healthy BLM land resources.*

## Recreation Opportunity Spectrum

### Objectives

Establish, manage, and maintain quality recreation sites and facilities to meet a broad range of public needs subject to resource constraints.

Manage commercial, competitive, or special events with special recreation permits that eliminate or minimize impacts on resources and conflicts with other users.

Manage recreation opportunities and visitor experiences to provide a sustained flow of local economic benefits and protect non-market economic values.

Manage recreation settings and opportunities by their specific recreation opportunity spectrum (ROS) class description for desired recreation opportunities, experience levels, facility developments, and other resource uses.

### Decisions Common to All Alternatives

The BLM recognizes that natural resource-based recreation is a significant economic contributor in most communities adjacent to BLM land. Priorities for Recreation and Visitor Services (BLM 2003d) states, “Our multiple-use mission is to serve the diverse outdoor recreation demands of visitors while helping to maintain the sustainable conditions needed to conserve their lands and their recreation choices.” The three primary goals for the HiLine District based on the *national* recreation program are:

- *Improve access to appropriate recreation opportunities on BLM-managed or partnered lands and waters;*
- *Ensure a quality experience and enjoyment of natural resources on BLM-managed or partnered lands and waters; and*
- *Provide for and receive fair value in recreation.*

A majority of BLM lands have recreational opportunities that can be appropriately provided for in conjunction with the other resource demands sanctioned by the BLM’s multiple-use mission. With this in mind, along with the goals described above, the HiLine District will manage its recreation opportunities and visitor experiences under the management actions described below.

BLM lands provide multiple opportunities for all publics, including those with disabilities. The BLM seeks to make these opportunities available through the use of universal design principles in the planning, construction, and renovation of facilities and in the provision of accessible programs and services to the public. The BLM’s mandate of multiple-use management and its role as provider of a wide variety of dispersed recreation opportunities in vast open spaces present unique challenges in implementing recreation programs and activities accessible to persons with disabilities. The BLM will consider the proposed Accessibility Guidelines for Outdoor Developed Areas (Access Board 2009) for camping facilities, picnic facilities, viewing areas, and outdoor recreation access routes and trails.

The recreation opportunity spectrum (ROS) is a means of classifying and managing recreational opportunities based on physical, social, and managerial settings. Recreation opportunities in the HiLine District have been broken down into the following seven ROS classes based on a combination of the activities, settings and experiences available to the public: primitive, semi-primitive nonmotorized, semi-primitive motorized, roaded natural, roaded modified, rural and urban (Table 2.9). These classifications can be broken down further or expressed in more detail as more data are gathered through development of supplemental plans such as travel management plans.

While the BLM will manage to support these different recreation settings and opportunities, ROS classifications will not ultimately restrict or authorize future management actions, but will (1) provide guidance on what types of actions and mitigation measures are appropriate on BLM land when comprehensively examined along with other resource allocations; and (2) disclose to the public the potential impacts to recreational conditions during the environmental review process for future proposed actions.

The BLM will manage for a variety of quality recreational opportunities and visitor experiences (i.e. hunting, fishing, sightseeing, off-highway vehicle use, horseback riding, mountain biking, hiking, rafting, rock hounding, etc.) consistent with other resource management objectives.

Comparable, cost effective and value based fee systems will be established for services and facilities provided to public users in accordance with BLM directives and the Federal Lands Recreation Enhancement Act.

| <b>Table 2.9<br/>Recreation Opportunity Spectrum (ROS) Classes</b> |  |
|--|--|
| <i>ROS Class</i>   | <i>Class Description</i>   |
| Primitive  | Opportunity for isolation from man-made sights, sounds, and management controls in an unmodified natural environment. Only facilities essential for resource protection are available. A high degree of challenge and risk are present. Visitors use outdoor skills and have minimal contact with other users or groups. Motorized use is prohibited.  |
| Semi-Primitive<br>Nonmotorized                                     | Some opportunity for isolation from man-made sights, sounds, and management controls in a predominantly unmodified environment. Opportunity to have a high degree of interaction with the natural environment, to have moderate challenge and risk and to use outdoor skills. Concentration of visitors is low, but evidence of users is often present. On-site managerial controls are subtle. Facilities are provided for resource protection and the safety of users. Motorized use is prohibited.                      |
| Semi-Primitive<br>Motorized  | Some opportunity for isolation from man-made sights, sounds, and management controls in a predominantly unmodified environment. Opportunity to have a high degree of interaction with the natural environment, to have moderate challenge and risk and to use outdoor skills. Concentration of visitors is low, but evidence of users is often present. On-site managerial controls are subtle. Facilities are provided for resource protection and the safety of users. Motorized use is permitted.                       |
| Roaded Natural   | Mostly equal opportunities to affiliate with other groups or be isolated from sights and sounds of man. The landscape is generally natural with modifications moderately evident. Concentration of users is low to moderate, but facilities for group activities may be present. Challenge and risk opportunities are generally not important in this class. Opportunities for both motorized and nonmotorized activities are present. Construction standards and facility design incorporate conventional motorized uses. |
| Roaded Modified  | Similar to the Roaded Natural setting, except this area has been or could be heavily modified by roads from activities including oil and gas development and/or off-road vehicle use. This class still offers opportunity to have a high degree of interaction with the natural environment and to have moderate challenge and risk and to use outdoor skills.   |
| Rural  | Area is characterized by a substantially modified natural environment. Opportunities to affiliate with others are prevalent. The convenience of recreation sites and opportunities are more important than a natural landscape or setting. Sights and sounds of man are readily evident, and the concentration of users is often moderate to high. Developed sites, roads, and trails are designed for moderate to high uses.  |
| Urban  | Area is characterized by a substantially urbanized environment, although the background may have natural appealing elements. High levels of human activity and concentrated development including recreation opportunities are prevalent. Developed sites, roads and other recreation opportunities are designed for high use.   |

Recreation users will be limited to 14-day camping stays at developed campgrounds. No variances to the 14-day camping limit will be allowed. Personal property of recreational users cannot be left unattended in developed campgrounds for more than 24 hours. Developed campgrounds are those that provide a majority of the following amenities: tent or trailer spaces, picnic tables, drinking water, access roads, refuse containers, toilet facilities, fee collection, reasonable visitor protection and campfire rings.

Recreation users will also be limited to 16-day camping stays on undeveloped lands (dispersed camping) (75 FR 30850-30852), or as determined by any supplementary rules published in the Federal Register. This does not apply to locations that contain structures or capital improvements (such as boat launch sites, picnic areas, and interpretive centers) and that are used primarily by the public for recreational purposes such as developed campgrounds, designated recreation areas, and special recreation management areas. The BLM regulates the use and occupancy at such developed locations in accordance with 43 CFR 8365.2–3.

The BLM will establish and maintain information kiosks with brochures, interpretive and educational information, site maps and regulations, and important contacts.

Periodic accessibility, safety, and condition assessments will be conducted in accordance with Bureau policy at developed recreation sites and prioritized available funds to resolve deferred and corrective maintenance needs.

The “Leave No Trace” and “Tread Lightly” practices will be promoted to enhance the sustainability of resource-based activities.

The BLM will work cooperatively with other agencies (e.g., Montana Fish, Wildlife and Parks) to identify and sign BLM lands to provide more recreational opportunities in areas with limited public access and/or confusing ownership boundaries. Signs must be placed according to current boundary marking standards (BLM Manual 9130).

### Alternative A (Current Management)

A ROS inventory for the planning area was completed in 2008 and was based on professional determinations of the physical (remoteness, naturalness, and facilities), social (contacts, group size, and evidence of use) and administrative (mechanized use, management controls, and visitor services) attributes of BLM land. The ROS inventory represents the existing recreational settings and opportunities currently available on BLM land (Table 2.10 and Map 2.8, which is located at the end of Chapter 2). The planning area does not include any lands in the primitive and urban ROS classes.

The BLM would not allocate permits or specific use areas for outfitters and guides. All BLM land is available at the discretion of the Field Manager as long as permittees maintain a special use permit and meet the BLM regulation requirements.

Recreation emphasis would be to develop and maintain opportunities for dispersed recreational activities such as hunting, scenic and wildlife viewing, and driving for pleasure.

The BLM would not construct undeveloped or developed recreation sites based strictly on local use, unless these sites can be realized through partnerships with other government entities, local service organizations, etc.

**Table 2.10**  
**Recreation Opportunity Spectrum (ROS) Classes by Alternative (Acres)**

|                             | <i>Alternative A<br/>(Current<br/>Management)</i> | <i>Alternative B</i> | <i>Alternative C</i> | <i>Alternative D</i> | <i>Alternative E<br/>(Preferred<br/>Alternative)</i> |
|-----------------------------|---|----------------------|----------------------|----------------------|--|
| Semi-Primitive Nonmotorized | 7,481   | 7,566                | 136,276              | 0                    | 7,481  |
| Semi-Primitive Motorized    | 91,872  | 474,217              | 187,503              | 91,872               | 102,586  |
| Roaded Natural              | 2,336,762   | 1,916,104            | 2,060,410            | 2,095,626            | 2,111,311  |
| Roaded Modified             | 125   | 38,353               | 52,051               | 248,742              | 214,861  |
| Rural                       | 1,234   | 1,234                | 1,234                | 1,234                | 1,234  |

## Alternative B

The BLM would modify the existing ROS classifications to accommodate the other proposed resource allocations under Alternative B. Table 2.10 and Map W.5 shows the acreages and ROS classes the BLM would manage under Alternative B. Map W.5 is available on the Internet at <http://blm.gov/8qkd>.

The BLM would issue special recreation permits (SRPs) as appropriate for commercial, competitive, and special events subject to guidelines in BLM Handbook 2930, resource capabilities, social conflict concerns, professional qualifications, public safety, and public needs. New permits would not be authorized that directly conflict with permitted uses and existing permits would be given preference. Through plan implementation, changes in demand for permits and resulting impacts would be monitored and thresholds identified that could lead to limits in the number of permits to minimize impacts to the resources, public safety, and overall visitor satisfaction.

Recreation sites and facilities would be maintained and managed to promote resource value protection, public safety and health, quality facilities, visitor experiences, management efficiency, and value-based returns. Expansion of existing sites and development of new sites would take into consideration public demand, resource constraints, and management capabilities through an environmental review process. Priority would be given to new sites that have partnership funding strategies and are consistent with established management guidelines.

The BLM would work cooperatively with other agencies (e.g., MFWP) to identify and sign BLM lands to provide more recreational opportunities in areas with limited public access and/or confusing ownership boundaries. Signs must be placed according to current boundary marking standards (BLM Manual 9130).

## Alternatives C, D, and E (Preferred Alternative)

The BLM would modify the existing ROS classifications to accommodate the other proposed resource allocations under the range of alternatives. Table 2.10 and Map 2.8 shows the acreages and ROS classes the BLM would manage under Alternative E (Preferred Alternative). Alternatives C and D are shown on Map W.5, which is available at <http://blm.gov/8qkd>.

The BLM would issue SRPs as appropriate for commercial, competitive, and special events subject to guidelines in BLM Handbook 2930, resource capabilities, social conflict concerns, professional qualifications, public safety, and public needs. For example, applications for SRPs in greater sage-grouse priority habitat areas would be denied if approval of the permit would adversely impact sage-grouse or sage-grouse habitat. New permits would not be authorized that directly conflict with other permitted uses and existing permits would be given preference. Through plan implementation, changes in demand for permits and resulting impacts would be monitored and thresholds identified that could lead to limits in the number of permits to minimize impacts to the resources, public safety, and overall visitor satisfaction. All SRP applications and renewals would be reviewed on a case-by-case basis and site-specific analysis would be done for each proposed operating area.

Recreation sites and facilities would be maintained and managed to promote resource value protection, public safety and health, quality facilities, visitor experiences, management efficiency, and value-based returns. Expansion of existing sites and development of new sites would take into consideration public demand, resource constraints, and management capabilities through an environmental review process. Priority would be given to new sites that have partnership funding strategies and are consistent with established management guidelines.

The BLM would work cooperatively with other agencies (e.g., MFWP) to identify and sign BLM lands to provide more recreational opportunities in areas with limited public access and/or confusing ownership boundaries. Signs must be placed according to current boundary marking standards (BLM Manual 9130).

## Recreation Management Areas

### Objectives

Establish a three-tier system of lands managed for recreation where special recreation management areas (SRMAs) that would be given management priority to provide quality recreation opportunities and visitor experiences and extensive

recreation management areas (ERMAs) would also require specific management consideration but commensurate with the management of other resources and resource uses. All remaining lands will be managed as public lands not designated as recreation management areas (LND), which would generally be managed only to address basic recreation and visitor services and resource stewardship needs such as visitor safety and use, and user conflicts.

Provide for primarily undeveloped, dispersed recreational opportunities while maintaining the prescribed recreation settings (ROS classes), protecting resources, ensuring public health and safety, and working toward resolving conflicts of use.

Incorporate outcomes-focused recreation management principles per WO IM No. 2011-004 (BLM 2011). Outcomes-focused management varies from the traditional “activity-based” recreation management approach, which primarily focused on specific activities and the associated facilities needed to support such uses. Outcomes-focused recreation focuses management on primary activities within recreation management zones. These primary activities provide the public with certain types of experiences on BLM lands. Providing these experiences then produces a variety of personal, community, economic, and environmental benefits.

## Decisions Common to All Alternatives

Where the nature of the resource attracts concentrated or intensive recreational use, BLM lands may be managed as a SRMA. These are areas where the BLM focuses specific management, funding, and planning to provide for the best possible recreation experience while protecting, sustaining, and enhancing the environmental resources of these areas.

Within each SRMA, the BLM may also allocate recreation management zones (RMZs). An RMZ represents BLM lands with a distinctive recreation setting (activities, experiences, and benefits) within each SRMA. The BLM would focus management, funding, and planning within RMZs to implement and maintain proposed ROS classes, recreation management objectives, and management actions.

Where the nature of the resource attracts concentrated recreational use but is not the specific focus of management, the area will be managed as an ERMA. Other resources and resource uses are considered in the management of these areas and some recreation activities may be restricted or constrained to achieve interdisciplinary objectives.

BLM lands outside of SRMAs and ERMAs are managed as LNDs. Recreation management within LNDs would be limited to custodial actions, which are primarily reactive in order to manage dispersed activities, visitor health and safety, and user and resource conflicts. LNDs are generally managed directly through RMP decisions and do not require additional activity-level planning.

The majority of lands within the planning area will be managed as an LND for dispersed recreational experiences associated with hunting, fishing, wildlife viewing, pleasure driving, camping and picnicking. The BLM will manage this area in a custodial manner to ensure quality of experience and enjoyment of natural and cultural resources.

The existing recreation facilities (fishing reservoirs and watchable wildlife areas) within the LND will be maintained in a custodial manner and enhanced only as needed to meet recreational demands that are associated with resource protection, and public health and safety requirements. New recreation facilities could be considered but should be a lower priority for implementation than those proposed for SRMAs and ERMAs and should resolve specific conflicts of use.

### Recreation Management Areas

**Special Recreation Management Area (SRMA):** An administrative unit where the existing or proposed recreation opportunities and recreation setting characteristics are recognized for their unique value, importance and/or distinctiveness, especially as compared to other areas used for recreation. These areas are managed to protect and enhance a targeted set of activities, experiences, benefits, and desired recreation setting characteristics.

**Extensive Recreation Management Area (ERMA):** An administrative unit that requires specific management consideration in order to address recreation use, demand or recreation and visitor services program investments. These areas are managed to support and sustain the principal recreation activities and the associated qualities and conditions of the ERMA.

**Public Lands Not Designated as Recreation Management Areas (LND):** All lands not designated as a SRMA or ERMA. These lands are managed to meet basic recreation and visitor services and resource stewardship needs. Recreation is not emphasized; however, recreation activities may occur as long as they are not in conflict with the primary uses of these lands.

The Bitter Creek Watchable Wildlife Area will continue to be managed under BLM Manual 6330-Management of BLM Wilderness Study Areas until such time as Congress decides whether or not to designate the area as Wilderness. If released by Congress, the Bitter Creek WSA would be managed as an ACEC and a management plan would be developed to provide semi-primitive, motorized recreation opportunities. Until the management plan is developed, management of the area would continue to be guided by BLM Manual 6330 as an ERMA.

**Alternative A (Current Management)**

The BLM would retain the five SRMAs and three ERMAs (Table 2.11 and Map 2.9, which is located at the end of Chapter 2). These recreation management areas do not utilize the new three-tier recreation outcomes-focused management approach of community, destination or undeveloped market strategies.

| <b>Table 2.11<br/>Recreation Management Areas<br/>Alternative A (Current Management)<br/>(Acres)</b> |             |             |
|--|-------------|-------------|
| <i>Management Area</i>   | <i>SRMA</i> | <i>ERMA</i> |
| Havre  |             | 275,538     |
| Little Rocky Mountains   | 27,688      |             |
| North Missouri Breaks  | 109,891     |             |
| Phillips   |             | 425,845     |
| South Phillips   | 575,924     |             |
| South Valley   | 584,901     |             |
| Sweet Grass Hills  | 9,337       |             |
| Valley   |             | 428,351     |
| Total Lands Designated   | 1,307,741   | 1,129,734   |

**Alternative B**

The BLM would manage the entire planning area as an LND (Table 2.12 and Map W.6, which is available at <http://blm.gov/8qkd>).

**Alternative C**

The BLM would manage one SRMA (Little Rocky Mountains) and nine ERMAs (BR-12 Watchable Wildlife Area, Cottonwood Riparian Protection Area, Faraasen Park Recreation Area, Fresno OHV Area, Glasgow OHV Area, Marias River, Paulo Fishing Reservoir, South Phillips Recreation Complex, and Troika Fishing Reservoir) (Table 2.12 and Map 2.9). The remainder of the planning area would be managed as an LND.

The BLM would not allocate recreation management zones within the Little Rocky Mountains SRMA.

Objectives and management actions for the individual SRMAs and ERMAs are identified in Appendix S.

**Alternative D**

The BLM would manage twelve SRMAs (BR-12 Watchable Wildlife Area, Cottonwood Riparian Protection Area, Faraasen Park Recreation Area, Fresno OHV Area, Glasgow OHV Area, Little Rocky Mountains, Marias River, Paulo Fishing Reservoir, South Phillips Recreation Complex, Sweet Grass Hills ACEC, Thirty Mile OHV Area, and Troika Fishing Reservoir) and two ERMAs (Timber Creek Ridge and Wards Dam Watchable Wildlife Area) (Table 2.12 and Map W.6, which is available at <http://blm.gov/8qkd>). The remainder of the planning area would be managed as LND. Objectives and management actions for the individual SRMAs and ERMAs are identified in Appendix S.

**Table 2.12**  
**Recreation Management Areas (RMAs)**  
**Alternatives B, C, D, and E**  
**(Acres)**

| <i>RMA</i>                          | <i>Alternative B</i> |             | <i>Alternative C</i> |             | <i>Alternative D</i> |             | <i>Alternative E<br/>(Preferred Alternative)</i> |             |
|-------------------------------------|----------------------|-------------|----------------------|-------------|----------------------|-------------|--|-------------|
|                                     | <i>SRMA</i>          | <i>ERMA</i> | <i>SRMA</i>          | <i>ERMA</i> | <i>SRMA</i>          | <i>ERMA</i> | <i>SRMA</i>                                      | <i>ERMA</i> |
| BR-12 Watchable Wildlife Area       |                      |             |                      | 246         | 246                  |             |  | 363         |
| Cottonwood Riparian Protection Area |                      |             |                      | 42          | 42                   |             |  | 42          |
| Faraasen Park Recreation Area       |                      |             |                      | 10          | 10                   |             |  | 10          |
| Fresno OHV                          |                      |             |                      | 84          | 84                   |             |  | 125         |
| Glasgow OHV                         |                      |             |                      | 40          | 40                   |             | 40   |             |
| Little Rocky Mountains              |                      |             | 27,688               |             | 27,688               |             | 27,688   |             |
| Marias River                        |                      |             |                      | 19,032      | 19,032               |             |  | 19,032      |
| Paulo Fishing Reservoir             |                      |             |                      | 74          | 74                   |             |  | 74          |
| South Phillips Recreation Complex   |                      |             |                      | 42,217      | 42,217               |             |  | 42,217      |
| Sweet Grass Hills ACEC              |                      |             |                      |             | 7,419                |             |  | 7,419       |
| Thirty Mile OHV Area                |                      |             |                      |             | 181                  |             |  |             |
| Timber Creek Ridge                  |                      |             |                      |             |                      | 67          |  | 67          |
| Troika Fishing Reservoir            |                      |             |                      | 56          | 56                   |             |  | 56          |
| Wards Dam Watchable Wildlife Area   |                      |             |                      |             |                      | 177         |  |             |
| Total Lands Designated              | 0                    | 0           | 27,688               | 61,800      | 97,088               | 244         | 27,728   | 69,405      |
| Lands Not Designated (LND)          | 2,437,474            |             | 2,347,986            |             | 2,340,142            |             | 2,340,341  |             |

The BLM would allocate three recreation management zones (RMZs) within the Little Rocky Mountains SRMA, as described below.

The primary recreation management strategy for the Little Rocky Mountains SRMA (Map 2.9) would be to target the demonstrated community tourism market. Residents of local communities are the primary visitors of the area who come to hike, camp, fish, hunt, and ride horses and OHVs. These recreation opportunities would be sustained and enhanced through the implementation of identified recreation management objectives and the maintenance of prescribed ROS classes.

**Zortman Recreation Management Zone (1,108 acres)**

- Recreation Setting: Provides full service facility-based camping in a ponderosa pine rural setting near the small rural community of Zortman.
- Primary Activities: Overnight developed camping, day use picnicking, wildlife viewing, recreational gold panning, hiking, horseback riding, and OHV and ATV use.
- Recreation Management Objective: Maintain and enhance the facilities at the Camp Creek Campground (Figure 2.3), Horse Corral Campground, and Buffington Day Use Picnic Area as needed to meet recreational demands and comply with public health and safety requirements. Specific areas within this zone could be set aside for recreational gold panning through coordination and/or partnership with the local community.

**Gold Panning**

Gold panning is considered a casual use under the mining regulations (43 CFR 3809), which is described in detail in the Solid Minerals – Locatable section.

The BLM does have unpatented mining claims in the planning area. The mining claim provides the right of the claimant to search for and develop minerals. The recreational panner should not go onto another person’s claim for panning without the claimant’s permission.

**Landusky Recreation Management Zone (107 acres)**

- Recreation Setting: Provides small facility-based camping in a ponderosa pine rural setting near the very small rural community of Landusky.
- Primary Activities: Overnight developed camping, wildlife viewing, hiking, and OHV and ATV use.
- Recreation Management Objective: Maintain and enhance the facilities at the Montana Gulch Campground (Figure 2.3) as needed to meet recreational demands and comply with public health and safety requirements.

**Little Rockies Recreation Management Zone (26,473 acres)**

- Recreation Setting: Provides an excellent back country experience for dispersed camping, wildlife viewing, hiking, horseback riding, and OHV and ATV use opportunities in a ponderosa pine roaded natural setting.
- Primary Activities: Dispersed camping, hiking, horseback riding, hunting, fishing, OHV and ATV use.
- Recreation Management Objective: Provide for dispersed back country experiences for both nonmotorized and motorized recreational activities. Emphasize the “Leave No Trace” and “Tread Lightly” programs to aid in minimizing the conflicts of use between motorized and nonmotorized BLM land users.

In addition to the three RMZs for the Little Rocky Mountains SRMA, the BLM would allocate three RMZs within the Marias River SRMA.

The primary recreation management strategy for the Marias River SRMA would be to target the demonstrated community tourism market. Residents of local communities are the primary visitors of the area who come to float, fish, camp and picnic on or along the Marias River. These recreation opportunities would be sustained and enhanced through the implementation of identified recreation management objectives and the maintenance of prescribed ROS classes.

**Upper Marias River Recreation Management Zone (6,573 acres)**

- Recreation Setting: Provides for floating, fishing and camping opportunities in an undeveloped semi-primitive motorized setting on and along the Marias River.
- Primary Activities: Raft, canoe and kayak floating, fishing, dispersed camping and day use picnicking.
- Recreation Management Objective: Ensure that the area continues to provide undeveloped water-based recreation opportunities.

### **Middle Marias River Recreation Management Zone (1,850 acres)**

- **Recreation Setting:** Provides for floating, fishing, camping and picnicking opportunities with some developed recreational facilities in a roaded natural setting on and along the Marias River.
- **Primary Activities:** Raft, canoe, and kayak floating, fishing, swimming, camping and day use picnicking.
- **Recreation Management Objective:** Maintain and enhance the recreation facilities at the Pugsley Bridge and Moffat Bridge boat launch and take out areas as needed to meet recreational demands and comply with public health and safety requirements.

### **Lower Marias River Recreation Management Zone (10,608 acres)**

- **Recreation Setting:** Provides for floating, fishing, and dispersed camping opportunities in an undeveloped isolated rugged canyon and semi-primitive setting with very little motorized access along the Marias River.
- **Primary Activities:** Raft, canoe, and kayak floating, fishing and dispersed camping.
- **Recreation Management Objective:** Ensure that the area continues to provide undeveloped water-based recreation opportunities.

### **Alternative E (Preferred Alternative)**

The BLM would manage two SRMAs (Glasgow OHV and Little Rocky Mountains) and ten ERMAs (BR-12, Cottonwood Riparian Area, Faraasen Park, Fresno OHV, Marias River, Paulo Fishing Reservoir, South Phillips Recreation Complex, Sweet Grass Hills ACEC, Timber Creek Ridge, and Troika Fishing Reservoir) (Table 2.12 and Map 2.9). The remainder of the planning area would be managed as an LND.

The BLM would allocate three RMZs within the Little Rocky Mountains SRMA, as described in Alternative D.

Due to its limited size (40 acres) and uniformity in recreational opportunities throughout, the Glasgow OHV SRMA would not be divided into management zones.

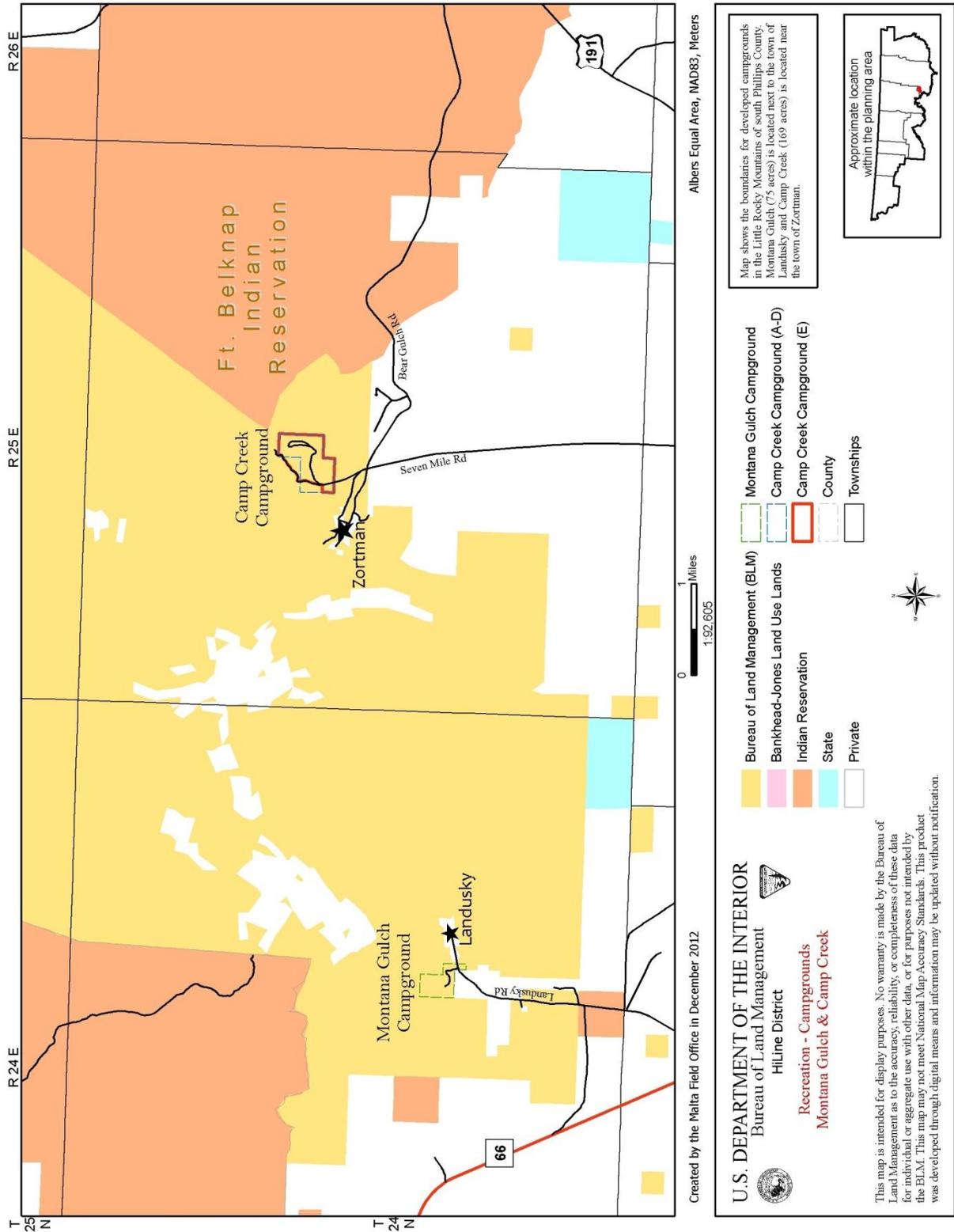
Objectives and management actions for the individual SRMAs and ERMAs are identified in Appendix S.



Glasgow OHV Area

Photo by Kathy Tribby

**Figure 2.3**  
**Montana Gulch and Camp Creek Campgrounds**



## Recreation Sites

### Alternative A (Current Management)

The BLM would continue to manage the existing recreation sites and facilities (72 sites) that are shown in Table 2.13 and displayed on Map 2.10, which is located at the end of Chapter 2.

| <b>Table 2.13<br/>BLM-Managed Recreation Sites and Facilities</b> |   |   |
|---|---|---|
| <i>Recreation Site Name</i>                                       | <i>Alternative A<br/>(Current Management)</i> | <i>Alternatives B, C, D and<br/>E (Preferred Alternative)</i> |
| <b>Blaine County</b>  |   |   |
| Anita Fishing Reservoir   | ✓   | ✓   |
| BR-12 Watchable Wildlife Reservoir                                | ✓   | ✓   |
| Bus Fishing Reservoir   | ✓   |   |
| Don Fishing Reservoir   | ✓   | ✓   |
| Floyd Flynn Fishing Reservoir                                     | ✓   | ✓   |
| FR Fishing Reservoir  | ✓   | ✓   |
| North Faber Fishing Reservoir                                     | ✓   | ✓   |
| Reser Fishing Reservoir   | ✓   | ✓   |
| Ridge Fishing Reservoir   | ✓   |   |
| Salmo Fishing Reservoir   | ✓   | ✓   |
| South Cassidy Fishing Reservoir (BR-19)                           | ✓   | ✓   |
| Thirty Mile OHV   |   | ✓<br>(Alternative D only)                                     |
| <b>Glacier County</b>   |   |   |
| Sullivan Bridge Boat Take Out Area                                | ✓   | ✓   |
| <b>Hill County</b>  |   |   |
| Fresno OHV  | ✓   | ✓   |
| Gauging Station Boat Take Out Area                                | ✓   | ✓   |
| <b>Liberty County</b>   |   |   |
| Moffat Bridge Boat Take Out Area                                  | ✓   | ✓   |
| Pugsley Bridge Recreation Area                                    | ✓   | ✓   |
| <b>Phillips County</b>  |   |   |
| Batosh Fishing Reservoir  | ✓   | ✓   |
| Bell Ridge Fishing Reservoir                                      | ✓   |   |
| Bison Bone Fishing Reservoir                                      | ✓   |   |
| Bresaylor Fishing Reservoir                                       | ✓   |   |
| Buddy Fishing Reservoir   | ✓   |   |
| Buffington Day Use Picnic Area                                    | ✓   | ✓   |
| Camp Creek Campground/Watchable Wildlife Area                     | ✓   | ✓   |
| Compton Fishing Reservoir   | ✓   |   |
| Cottonwood Riparian Protection Area                               | ✓   | ✓   |
| Current Fishing Reservoir   | ✓   | ✓   |
| Dogtown Fishing Reservoir   | ✓   |   |
| Douchette Fishing Reservoir (PR-132)                              | ✓   |   |
| Flake Fishing Reservoir   | ✓   |   |
| Karsten Coulee Fishing Reservoir                                  | ✓   | ✓   |
| King Fishing Reservoir  | ✓   | ✓   |

| <b>Table 2.13<br/>BLM-Managed Recreation Sites and Facilities</b> |   |   |
|---|---|---|
| <i>Recreation Site Name</i>                                       | <i>Alternative A<br/>(Current Management)</i> | <i>Alternatives B, C, D and<br/>E (Preferred Alternative)</i> |
| Lark Fishing Reservoir  | ✓   | ✓   |
| Loader Fishing Reservoir  | ✓   |   |
| Montana Gulch Campground  | ✓   | ✓   |
| Paleface Fishing Reservoir  | ✓   | ✓   |
| Plutz Fishing Reservoir   | ✓   | ✓   |
| PR-109A Fishing Reservoir   | ✓   |   |
| PR-16 Fishing Reservoir   | ✓   |   |
| PR-18 Fishing Reservoir   | ✓   | ✓   |
| PR-20 Fishing Reservoir   | ✓   | ✓   |
| PR-22 Fishing Reservoir   | ✓   |   |
| PR-54 Fishing Reservoir   | ✓   | ✓   |
| Rebate Fishing Reservoir  | ✓   | ✓   |
| Rotator Cup Fishing Reservoir                                     | ✓   |   |
| Sagebrush Fishing Reservoir                                       | ✓   | ✓   |
| Sentinel Fishing Reservoir  | ✓   | ✓   |
| Shallow Fishing Reservoir   | ✓   | ✓   |
| Shoulder Blade Fishing Reservoir                                  | ✓   |   |
| Spanky Fishing Reservoir  | ✓   |   |
| Taint Fishing Reservoir   | ✓   | ✓   |
| Thunder Cloud Fishing Reservoir                                   | ✓   | ✓   |
| Wapiti Fishing Reservoir  | ✓   |   |
| Wedding Fishing Reservoir   | ✓   |   |
| Whiteface Fishing Reservoir                                       | ✓   | ✓   |
| Wrangler Fishing Reservoir  | ✓   | ✓   |
| <b>Valley County</b>  |   |   |
| Atlas Fishing Reservoir   | ✓   | ✓   |
| Big Fishing Reservoir   | ✓   | ✓   |
| Bitter Creek WSA/Watchable Wildlife Area                          | ✓   | ✓   |
| Faraasen Park Recreation Area                                     | ✓   | ✓   |
| Gay Fishing Reservoir   | ✓   |   |
| Glasgow OHV   | ✓   | ✓   |
| Helen Fishing Reservoir   | ✓   | ✓   |
| Hose Fishing Reservoir  | ✓   | ✓   |
| Langen Fishing Reservoir  | ✓   | ✓   |
| Lunch Fishing Reservoir   | ✓   |   |
| Paulo Fishing Reservoir   | ✓   | ✓   |
| Shoot Fishing Reservoir   | ✓   |   |
| Snow Fishing Reservoir  | ✓   |   |
| Timber Creek Ridge  |   | ✓<br>(Alternatives D and E only)                              |
| Triple Crossing Fishing Reservoir                                 | ✓   |   |
| Troika Fishing Reservoir  | ✓   | ✓   |
| Valley Fishing Reservoir  | ✓   | ✓   |
| Wards Dam Watchable Wildlife Area                                 | ✓   | ✓   |

## Alternatives B and C

The BLM would manage 48 recreation sites and facilities (Table 2.13 and Map 2.10). Some of the existing fishing reservoir recreation sites (24 sites) would not be managed due to poor habitat and/or insufficient water capacity. Those reservoirs that lack water during dry periods would be considered for fish stocking in good water years.

Recreation sites and facilities would be maintained and managed to promote resource value protection, public safety and health, quality facilities, visitor experiences, management efficiency, and value-based returns. New sites could be developed commensurate with public demand, resource constraints, and management capabilities. Priority would be given to new sites that have partnership funding strategies and are consistent with established management guidelines.

## Alternative D

The BLM would manage 50 recreation sites and facilities (Table 2.13 and Map 2.10). Some of the existing fishing reservoir recreation sites (24 sites) would not be managed due to poor habitat and/or insufficient water capacity. Those reservoirs that lack water during dry periods would be considered for fish stocking in good water years. In addition to the 48 sites under Alternatives B and C, Timber Creek Ridge and Thirty Mile OHV would also be managed as recreation sites.

Recreation sites and facilities would be maintained and managed to promote resource value protection, public safety and health, quality facilities, visitor experiences, management efficiency, and value-based returns. New sites could be developed commensurate with public demand, resource constraints, and management capabilities. Priority would be given to new sites that have partnership funding strategies and are consistent with established management guidelines.

## Alternative E

The BLM would manage 49 recreation sites and facilities (Table 2.13 and Map 2.10). Some of the existing fishing reservoir recreation sites (24 sites) would not be managed due to poor habitat and/or insufficient water capacity. Those reservoirs that lack water during dry periods would be considered for fish stocking in good water years. In addition to the 48 sites under Alternatives B and C, Timber Creek Ridge would also be managed as a recreation site.

Recreation sites and facilities would be maintained and managed to promote resource value protection, public safety and health, quality facilities, visitor experiences, management efficiency, and value-based returns. New sites could be developed commensurate with public demand, resource constraints, and management capabilities. Priority would be given to new sites that have partnership funding strategies and are consistent with established management guidelines.

## Renewable Energy Resources

### Goal

*Provide opportunities for the development of renewable energy from resources such as biomass, geothermal, solar and wind, while minimizing adverse impacts to other resource values.*

## Objective

Work with local communities, state and local government, and other federal agencies in building a clean energy future by providing sites for environmentally sound development of renewable energy on BLM land.

## Decisions Common to All Alternatives

Although no areas are specifically designated for renewable energy development, opportunities for development will be provided to the extent consistent with other goals, objectives, and requirements of this plan.

Renewable energy projects on BLM land may include biomass, geothermal, solar, and wind projects, and the siting of transmission facilities needed to deliver the produced power to the consumer.

Solar and wind energy exploration and development authorization would be subject to the same laws, regulations, and guidelines as other commercial rights-of-way. Terms and conditions for authorizations including site testing, monitoring and development will incorporate applicable BMPs, current professional practice, and recent scientific findings.

**Biomass**

The BLM will explore opportunities to provide a reliable and sustainable supply of woody biomass that may be made available from BLM land in the planning area. Biomass can be used to produce bio-energy and/or bio-based products such as plastics, ethanol, and diesel. Biomass can also be used to produce the full range of wood products including lumber, composites, paper and pulp, furniture, housing components, and round wood.

**Biomass**  
Woody biomass is defined as the trees and woody plants, including limbs, tops, needles, leaves, and other woody parts grown in a forest, woodland, or rangeland environment, that are the byproducts of forest management.

**Geothermal**

BLM lands in the planning area will be available for geothermal leasing, unless located within the Burnt Lodge or Bitter Creek WSAs or in instances where it is determined that issuing the lease would cause unnecessary or undue degradation to BLM lands or resources. No Known Geothermal Resource Areas (KGRAs) are located in the planning area. (A region identified by the U.S. Geological Survey as containing geothermal resources. New leasing regulations no longer use KGRAs as a basis for the leasing process.)

Stipulations for oil and gas leases will be applied to geothermal leases; however, the stipulations may need to be modified through further environmental review since geothermal exploration and production activity is different than oil and gas.

Geothermal projects will be designed and developed in accordance with the Geothermal Leasing in the Western United States Programmatic EIS (BLM and USFS 2008). A site-specific environmental analysis will be prepared for any proposed exploration or development of geothermal resources. The analysis will address the application of stipulations and develop any additional mitigation measures over and above the lease stipulations required.

**Solar**

Opportunities for solar development will be provided consistent with the other goals, objectives, and requirements of this plan. Applications for solar energy projects will be processed and authorized as rights-of-way under Title V of FLPMA. Utility-scale concentrating solar power or photovoltaic electric generating facilities must comply with the BLM’s planning, environmental, and right-of-way application requirements as established by BLM guidance (WO IM No. 2011-003) or additional Bureau guidance and/or policy.

**Solar Insolation**  
Insolation is a measure of solar radiation energy received on a given surface area in a given time. It is commonly expressed as average irradiance in watts per square meter (W/m<sup>2</sup>) or kilowatt-hours per square meter per day (kWh/m<sup>2</sup>/day).

Solar energy on BLM land is currently being studied in a six-state area in the southwest (Arizona, California, Colorado, Nevada, New Mexico, and Utah). The BLM and U.S. Department of Energy released a Draft Programmatic EIS for the six-state area in December 2010 (BLM and DOE 2010). The study includes BLM lands with solar insolation levels greater than 6.5 kWh/m<sup>2</sup>/day and slopes of less than 5%. Solar insolation levels in the planning area range from about 4.13 kWh/m<sup>2</sup>/day to 5.02 kWh/m<sup>2</sup>/day. Due to the unlikelihood of commercial solar development in the planning area, allocations for solar development are not addressed further in this planning document.

## Wind

BLM land that is designated as an exclusion area (e.g., WSAs) will not be available for wind energy rights-of-way. As a result, these areas will be closed to commercial wind energy development. This includes wind energy site monitoring and testing.

The use of wind turbines at the Zortman/Landusky mine reclamation area to lower the cost of electricity needed to operate the pumps and water treatment plants was approved under the Final Engineering Evaluation/Cost Analysis (EE/CA) for Water Management at the Zortman and Landusky Mines (BLM 2006d), and is not discussed or analyzed further in this document.

Wind energy projects will be designed and developed in accordance with the Wind Energy Development on BLM-Administered Lands in the Western United States Final Programmatic EIS (BLM 2005) and BLM wind energy development policy (WO IM No. 2009-043) and subsequent policy and guidance issued by BLM. Implementation of any proposed management action would ensure that potential adverse impacts to natural and cultural resources would be minimal to negligible through the use of BMPs (Appendix C). Areas available for wind energy development will include mitigation for surface-disturbing and disruptive activities consistent with the stipulations outlined in the Fluid Minerals section of Chapter 2 and Appendix E. This mitigation may restrict wind energy development in some areas.

Prior to authorizing any wind energy projects, a site-specific environmental review will be conducted to determine project feasibility, and to address and mitigate impacts. This environmental review will include the appropriate level of public involvement.

### Alternative A (Current Management)

About 92% of the planning area (2,248,336 acres) would be open to wind energy rights-of-way with minor constraints (standard terms/conditions and BMPs) (Table 2.14). Mitigation measures would be applied on a case-by-case basis during project level planning if an evaluation of the project area indicates the presence of important resources.

Exceptions may be granted by the authorized officer if an environmental review demonstrates that effects could be mitigated to an acceptable level.

About 8% of the planning area would be exclusion areas for wind energy rights-of-way (189,138 acres) (Table 2.14). This includes the Bitter Creek and Burnt Lodge WSAs, large reservoirs and waterfowl complexes, developed recreation sites, and National Historic Trails. The exclusion areas are shown in Table 2.15 and Map 2.11, which is located at the end of Chapter 2.

### Alternative B

Less than 1% of the planning area (6,637 acres) would be open to wind energy rights-of-way with minor constraints (standard terms/conditions and BMPs), and about 10% of the planning area (239,014 acres) would be avoidance areas (Table 2.14). Avoidance areas include mitigation for cultural and paleontological resources, visual resources, soils, riparian areas, and wildlife consistent with the stipulations outlined in the Fluid Minerals section of Chapter 2 for surface-disturbing and disruptive activities. Mitigation measures would be applied on a case-by-case basis during project level planning if an evaluation of the project area indicates the presence of important resources. Exceptions may be granted by the authorized officer if an environmental review demonstrates that effects could be mitigated to an acceptable level.

About 90% of the planning area (2,191,823 acres) would be exclusion areas for wind energy rights-of-way (Table 2.14). This includes the Bitter Creek and Burnt Lodge WSAs, Little Rocky Mountains and Sweet Grass Hills TCPs, VRM Class I and II areas, ACECs, large reservoirs and waterfowl complexes, most wildlife habitat, developed recreation sites, National Historic Trails, and lands with wilderness characteristics. The exclusion areas are shown in Table 2.15 and Map W.7, which is available at <http://blm.gov/8qkd>.

**Table 2.14**  
**Open, Avoidance, and Exclusion Areas for Commercial Wind Energy Development by Alternative**

|                 | <i>Alternative A<br/>(Current Management)</i> |                               | <i>Alternative B</i> |                               | <i>Alternative C</i> |                               | <i>Alternative D</i> |                               | <i>Alternative E<br/>(Preferred Alternative)</i> |                               |
|-----------------|---|-------------------------------|----------------------|-------------------------------|----------------------|-------------------------------|----------------------|-------------------------------|--|-------------------------------|
|                 | <i>Acres</i>                                  | <i>% of<br/>Planning Area</i> | <i>Acres</i>         | <i>% of<br/>Planning Area</i> | <i>Acres</i>         | <i>% of<br/>Planning Area</i> | <i>Acres</i>         | <i>% of<br/>Planning Area</i> | <i>Acres</i>                                     | <i>% of<br/>Planning Area</i> |
| Open Areas      | 2,248,336                                     | 92%                           | 6,637                | <1%                           | 106,182              | 4%                            | 231,961              | 10%                           | 33,119   | 1%                            |
| Avoidance Areas | 0   | 0%                            | 239,014              | 10%                           | 821,335              | 34%                           | 1,912,095            | 78%                           | 885,661  | 36%                           |
| Exclusion Areas | 189,138                                       | 8%                            | 2,191,823            | 90%                           | 1,509,958            | 62%                           | 293,418              | 12%                           | 1,518,695  | 62%                           |

**Table 2.15**  
**Specific Exclusion Areas for Commercial Wind Energy Development by Alternative\***

| <i>Specific Area</i>  | <i>Alternative A<br/>(Current Management)</i> | <i>Alternative B</i>                          | <i>Alternative C</i>                         | <i>Alternative D</i>                           | <i>Alternative E<br/>(Preferred Alternative)</i> |
|---|---|---|--|--|--|
| <b>Cultural Resources</b>                                     |   |   |  |  |  |
| <i>Little Rocky Mountains TCP</i>                             |   | Exclusion Area (30,648 acres).                |  |  |  |
| <i>Sweet Grass Hills TCP</i>                                  |   | Exclusion Area (7,718 acres).                 |  |  |  |
| <b>Recreation and Visual Resource Management</b>              |   |   |  |  |  |
| <i>Developed Recreation Sites</i>                             | Exclusion Area within 1 mile (70,345 acres).  | Exclusion Area within 2 mile (147,375 acres). | Exclusion Area within 1 mile (47,876 acres). | Exclusion Area within 1/2 mile (15,299 acres). | Exclusion Area within 1 mile (47,576 acres).     |
| <i>VRM Class I Areas</i>                                      |   | Exclusion Area (90,032 acres).                | Exclusion Area (74,506 acres).               |  |  |
| <i>VRM Class II Areas</i>                                     |   | Exclusion Area (977,396 acres).               |  |  |  |
| <b>Special Designations</b>                                   |   |   |  |  |  |
| <i>Azure Cave ACEC</i>  |   | Exclusion Area (141 acres).                   |  |  |  |
| <i>Big Bend of the Milk River ACEC</i>                        |   | Exclusion Area (1,972 acres).                 |  |  |  |
| <i>Bitter Creek ACEC and WSA</i>                              | Exclusion Area (60,693 acres).                |   |  |  |  |
| <i>Frenchman ACEC</i>   | NA**  |   | Exclusion Area (42,020 acres).               | Exclusion Area (63,482 acres).                 | Exclusion Area (42,020 acres).                   |
| <i>Grassland Bird/Greater Sage-Grouse Priority Areas ACEC</i> | NA**  | Exclusion Area (461,220 acres).               | NA**   | NA**   | NA**   |
| <i>Greater Sage-Grouse Protection Priority Area ACEC</i>      | NA**  | Exclusion Area (930,265 acres).               | NA**   | NA**   | NA**   |
| <i>Kevin Rim ACEC</i>   |   | Exclusion Area (4,557 acres).                 |  |  |  |
| <i>Little Rocky Mountains ACEC</i>                            | NA**  |   |  | Exclusion Area (27,177 acres).                 | NA**   |

| <i>Specific Area</i>  | <i>Alternative A<br/>(Current Management)</i>  | <i>Alternative B</i>                          | <i>Alternative C</i>                        | <i>Alternative D</i>                          | <i>Alternative E<br/>(Preferred Alternative)</i> |
|---|--|---|---|---|--|
| <i>Malta Geological ACEC</i>  | NA**   | Exclusion Area (6,153 acres).                 |   |   |  |
| <i>Mountain Plover ACEC</i>   |  | Exclusion Area (24,762 acres).                |   |   |  |
| <i>Sweet Grass Hills ACEC</i>                                       |  | Exclusion Area (7,419 acres).                 |   |   |  |
| <i>Woody Island ACEC</i>  | NA**   | Exclusion Area (22,411 acres).                |   |   | Exclusion Area (32,869 acres).                   |
| <i>Zortman/Landusky Mine Reclamation ACEC</i>                       | NA**   | Exclusion Area (3,609 acres).                 |   | NA**  | Exclusion Area (2,682 acres).                    |
| <i>National Historic Trails</i>                                     | Exclusion Area within 1 mile (9,004 acres).  | Exclusion Area within 2 miles (20,141 acres). | Exclusion Area within 1 mile (9,005 acres). | Exclusion Area within 1/2 mile (4,365 acres). | Exclusion Area within 1 mile (8,970 acres).      |
| <i>Burnt Lodge WSA</i>  | Exclusion Area (13,727 acres)  |   |   |   |  |
| <b>Wilderness Characteristics</b>                                   |  |   |   |   |  |
| <i>Eastern Breaks and Badlands</i>                                  | NA***  | Exclusion Area (10,714 acres)                 |   | NA***   | Exclusion Area (10,714 acres)                    |
| <i>Prairie Grasslands</i>   | NA***  | Exclusion Area (139,654 acres)                | Exclusion Area (92,599 acres)               | NA***   | NA***  |
| <i>Sagebrush Grasslands</i>   | NA***  | Exclusion Area (203,715 acres)                | Exclusion Area (131,854 acres)              | NA***   | NA***  |
| <i>Island Mountain Range</i>  | NA***  | Exclusion Area (4,118 acres)                  |   | NA***   | NA***  |
| <i>Western Breaks and Badlands</i>                                  | NA***  | Exclusion Area (28,262 acres)                 | NA***                                       | NA***   | NA***  |
| <b>Wildlife</b>   |  |   |   |   |  |
| <i>Crucial Winter Range (mule deer)</i>                             |  | Exclusion Area (8,383 acres).                 | Exclusion Area (62,577 acres)               |   | Exclusion Area (66,034 acres).                   |
| <i>Grassland Bird/Greater Sage-Grouse Priority Areas</i>            | NA**   | Exclusion Area (Same acres as ACEC).          | Exclusion Area (298,772 acres).             | NA**  | Exclusion Area (298,772 acres).                  |
| <i>Greater Sage-Grouse Protection Priority Area</i>                 | NA**   | Exclusion Area (Same acres as ACEC).          | Exclusion Area (930,265 acres).             | NA**  | Exclusion Area (930,265 acres).                  |
| <i>Large Reservoirs and Waterfowl Complexes</i>                     | Exclusion Area within 2 miles of large reservoirs and waterfowl complexes; Fort Peck Lake, Nelson, Tiber, Fresno, Whitewater, Dibbler, and Bowdoin (42,900 acres). |   |   |   |  |
| <i>Winter Range (antelope, elk, mule deer, greater sage-grouse)</i> |  | Exclusion Area (583,341 acres).               |   |   |  |

\* Acreage totals may overlap (e.g., greater sage-grouse protection priority areas and winter range).

\*\* The area would not be designated an ACEC or managed as a priority area under this alternative.

\*\*\* The BLM would manage other multiple uses as a priority over protecting wilderness characteristics.

## Alternative C

About 4% of the planning area (106,182 acres) would be open to wind energy rights-of-way with minor constraints (standard terms/conditions and BMPs) and 34% of the planning area (821,335 acres) would be avoidance areas (Table 2.14). Avoidance areas include mitigation for cultural and paleontological resources, visual resources, soils, riparian areas, and wildlife consistent with the stipulations outlined in the Fluid Minerals section of Chapter 2 for surface-disturbing and disruptive activities. Mitigation measures would be applied on a case-by-case basis during project level planning if an evaluation of the project area indicates the presence of important resources. Exceptions may be granted by the authorized officer if an environmental review demonstrates that effects could be mitigated to an acceptable level.

About 62% of the planning area would be exclusion areas for wind energy rights-of-way (1,509,958 acres) (Table 2.14). This includes the Bitter Creek and Burnt Lodge WSAs, Little Rocky Mountains and Sweet Grass Hills TCPs, VRM Class I areas, ACECs, large reservoirs and waterfowl complexes, some wildlife habitat, developed recreation sites, and National Historic Trails. The exclusion areas are shown in Table 2.15 and Map W.7, which is available at <http://blm.gov/8qkd>.

## Alternative D

About 10% of the planning area (231,961 acres) would be open to wind energy rights-of-way with minor constraints (standard terms/conditions and BMPs) and 78% of the planning area (1,912,095 acres) would be avoidance areas (Table 2.14). Avoidance areas include mitigation for cultural and paleontological resources, visual resources, soils, riparian areas, and wildlife consistent with the stipulations outlined in the Fluid Minerals section of Chapter 2 for surface-disturbing and disruptive activities. Mitigation measures would be applied on a case-by-case basis during project level planning if an evaluation of the project area indicates the presence of important resources. Exceptions may be granted by the authorized officer if an environmental review demonstrates that effects could be mitigated to an acceptable level.

About 12% of the planning area (293,418 acres) would be exclusion areas for wind energy rights-of-way (Table 2.14). This includes the Bitter Creek and Burnt Lodge WSAs, Little Rocky Mountains and Sweet Grass Hills TCPs, VRM Class I areas, ACECs, large reservoirs and waterfowl complexes, developed recreation sites, and National Historic Trails. The exclusion areas are shown in Table 2.15 and Map W.7, which is available at <http://blm.gov/8qkd>.

## Alternative E (Preferred Alternative)

About 1% of the planning area (33,119 acres) would be open to wind energy rights-of-way with minor constraints (standard terms/conditions and BMPs) and 36% of the planning area (885,661 acres) would be avoidance areas (Table 2.14). Avoidance areas include mitigation for cultural resources, paleontological resources, visual resources, soils, riparian areas, and wildlife consistent with the stipulations outlined in the Fluid Minerals section of Chapter 2 for surface-disturbing and disruptive activities. Mitigation measures would be applied on a case-by-case basis during project level planning if an evaluation of the project area indicates the presence of important resources.

Exceptions may be granted by the authorized officer if an environmental review demonstrates that effects could be mitigated to an acceptable level.

About 62% of the planning area would be exclusion areas for wind energy rights-of-way (1,518,695 acres) (Table 2.14). This includes the Bitter Creek and Burnt Lodge WSAs, Little Rocky Mountains and Sweet Grass Hills TCPs, ACECs, large reservoirs and waterfowl complexes, some wildlife habitat, developed recreation sites, and National Historic Trails. The exclusion areas are shown in Table 2.15 and Map 2.11.

## Soil Resources

### Goal

*Maintain, improve or restore soil quality, and prevent or minimize erosion and compaction while supporting multiple use management.*

### Objectives

Incorporate soil protection consistent with soil resource capabilities in management actions and objectives for other resources/uses.

Achieve and maintain Standards for Rangeland Health and Guidelines for Livestock Grazing Management.

### Decisions Common to All Alternatives

The BLM will evaluate the effects of a proposed surface-disturbing activity to the soil resource using USDA Natural Resources Conservation Service (NRCS) Soil Survey data/interpretations and/or through an onsite investigation; and will apply mitigation measures/BMPs if necessary, relocate the activity to a more suitable soil type, or deny the authorization.

Authorized surface-disturbing activities will include plans for reclamation. Site-specific reclamation actions should reflect the complexity of the project, environmental concerns, and the reclamation potential of the site (Appendix J).

Authorization could be denied in areas where erosion cannot be effectively controlled/mitigated and reclamation to BLM program-specific standards would likely be unsuccessful.

If a surface-disturbing activity is proposed on a prime farmland, special attention will be required during construction and reclamation to ensure there would be no unnecessary and irreversible conversion of prime farmland to nonagricultural uses (30 U.S.C. 1260, P.L. 95-87, Section 510(d)(1)).

The BLM will use soil survey data/interpretations to predict soil behavior, limitation, or suitability for a given activity or action. Soil interpretations are developed by the cooperators in the National Cooperative Soil Survey (NCSS) and maintained by the NRCS. Soil data and interpretations are ever evolving; therefore, as new or updated soil data and interpretations become available they would supersede prior data and interpretations. Soil interpretations do not preclude activities or actions, but rather provide a reasonable guide to the risk, limitations, and probable outcome of a particular use or practice. The information is not site-specific and does not eliminate the need for onsite investigation of the soil. An example of a criteria-based interpretation that may be used is the Potential Erosion Hazard (Road/Trail).

## Solid Minerals

### Leasable

### Goal

*Provide opportunities for exploration and development of solid leasable minerals consistent with other resource goals.*

### Objective

Provide for solid minerals leasing in accordance with existing laws and regulations (43 CFR 3400 and 3500).

## **Decisions Common to All Alternatives**

The BLM will consider proposals for developing leasable minerals (coal, sulfur, and solid and semi-solid bituminous rock) on a case-by-case basis. Site-specific environmental review will be required to lease these minerals. No areas have been identified with economic reserves to support future leasing analysis.

Area wide terms, conditions or other special considerations needed to protect other resources or values would be implemented through coal screen criteria during the leasing stage (43 CFR 3461).

For solid mineral leasing other than coal and oil shale, prospecting permits will be available for all land not closed to mineral leasing in conformance with 43 CFR 3500. Permits will be issued after appropriate environmental review to assess effects and develop mitigation measures. Terms and conditions will be applied to non-energy leasable projects to meet land health standards for uplands, riparian areas and wetlands, water quality, air quality, and native plant and animal species (Appendix C and Appendix M). Discovery of a valuable mineral deposit, within the terms of the prospecting permit, entitles the prospecting permit holder to a preference right lease for mineral development and mining operations.

### **Alternative A (Current Management)**

The BLM would protect sensitive areas by closing them to mineral leasing (76,477 acres) (Table 2.16 and Map 2.12, which is located at the end of Chapter 2). Sensitive areas include WSAs, and rare and intact important archaeological sites.

### **Alternative B**

The BLM would protect sensitive areas by closing them to mineral leasing (1,667,506 acres) (Table 2.16). Sensitive areas include WSAs, rare and intact important archaeological sites, essential breeding and nesting areas for raptors, a critical bat hibernaculum, significant paleontological areas, priority habitat for grassland birds, and protection priority areas for greater sage-grouse.

### **Alternative C**

The BLM would protect sensitive areas by closing them to mineral leasing (1,534,100 acres) (Table 2.16). Sensitive areas include WSAs, rare and intact important archaeological sites, essential breeding and nesting areas for raptors, a critical bat hibernaculum, significant paleontological areas, priority habitat for grassland birds, and protection priority habitat for greater sage-grouse.

### **Alternative D**

The BLM would protect sensitive areas by closing them to mineral leasing (243,635 acres) (Table 2.16). Sensitive areas include WSAs, rare and intact important archaeological sites, essential breeding and nesting areas for raptors, a critical bat hibernaculum, significant paleontological areas, and priority habitat for grassland birds.

### **Alternative E (Preferred Alternative)**

The BLM would protect sensitive areas by closing them to mineral leasing (1,571,333 acres) (Table 2.16 and Map 2.12). Sensitive areas include WSAs, rare and intact important archaeological sites, essential breeding and nesting areas for raptors, a critical bat hibernaculum, significant paleontological areas, priority habitat for grassland birds, and protection priority habitat for greater sage-grouse.

| <b>Table 2.16</b>   |   |  |                           |                        |   |
|---|---|--|---------------------------|------------------------|---|
| <b>Areas Closed to Solid Mineral Leasing by Alternative</b>   |   |  |                           |                        |   |
|   | <i>Alternative A<br/>(Current Management)</i> | <i>Alternative B</i>   | <i>Alternative C</i>      | <i>Alternative D</i>   | <i>Alternative E<br/>(Preferred Alternative)</i>  |
| <b>Cultural Resources</b>                                     |   |  |                           |                        |   |
| <i>Little Rocky Mountains TCP</i>                             | Open.   | Closed (37,403 acres).   |                           |                        | Higher elevations of the Little Rocky Mountains (above 3,600 feet) would be closed to leasing (32,058 acres). The remaining area would be open. |
| <i>Sweet Grass Hills TCP</i>                                  | Open.   | Closed (19,665 acres).   |                           |                        |   |
| <b>Special Designations</b>                                   |   |  |                           |                        |   |
| <i>Azure Cave ACEC</i>  | Open.   | Closed (included within the Little Rocky Mountains TCP) (143 acres). |                           |                        |   |
| <i>Big Bend of the Milk River ACEC</i>                        | Closed (1,972 acres).                         |  |                           |                        |   |
| <i>Frenchman ACEC</i>   | NA*   |  | Closed (39,692 acres).    | Closed (57,589 acres). | Closed (39,692 acres).  |
| <i>Grassland Bird/Greater Sage-Grouse Priority Areas ACEC</i> | NA**  | Closed (471,945 acres).  | NA**                      | NA**                   | NA**  |
| <i>Greater Sage-Grouse Protection Priority Area ACEC</i>      | NA**  | Closed (1,023,068 acres).  | NA**                      | NA**                   | NA**  |
| <i>Kevin Rim ACEC</i>   | Open.   | Closed (4,567 acres).  |                           |                        |   |
| <i>Little Rocky Mountains ACEC</i>                            | NA*   |  |                           | Closed (26,958 acres). | NA*   |
| <i>Malta Geological ACEC</i>                                  | NA*   | Closed (6,153 acres).  |                           |                        |   |
| <i>Mountain Plover ACEC</i>                                   | Open.   | Closed (24,723 acres).   |                           |                        |   |
| <i>Sweet Grass Hills ACEC</i>                                 | Open.   | Closed (included within the Sweet Grass Hills TCP) (6,226 acres).    |                           |                        |   |
| <i>Woody Island ACEC</i>                                      | NA*   |  | Closed (16,049 acres)     |                        | Closed (24,345 acres).  |
| <i>Zortman/Landusky Mine Reclamation ACEC</i>                 | NA*   | Closed (3,492 acres).  |                           | NA*                    | Closed (2,568 acres).   |
| <i>Bitter Creek WSA</i>                                       | Closed (60,733 acres).                        |  |                           |                        |   |
| <i>Burnt Lodge WSA</i>  | Closed (13,773 acres).                        |  |                           |                        |   |
| <b>Wildlife</b>   |   |  |                           |                        |   |
| <i>Grassland Bird/Greater Sage-Grouse Priority Areas</i>      | Open.   | Closed (Same acres as ACEC).   | Closed (317,197 acres).   | Open.                  | Closed (317,197 acres).   |
| <i>Greater Sage-Grouse Protection Priority Area</i>           | Open.   | Closed (Same acres as ACEC).   | Closed (1,023,068 acres). | Open.                  | Closed (1,023,068 acres).   |
| <b>Zortman Cemetery</b>                                       | Open.   | Closed (3 acres).  |                           |                        |   |

\* The area would not be designated an ACEC under this alternative.

## Locatable

### Goal

*Provide land use opportunities contributing to economic benefits while protecting or minimizing adverse impacts to other resources.*

## Objective

Provide for locatable mineral entry in accordance with existing laws and regulations (43 CFR 3700 and 3800).

## Decisions Common to All Alternatives

Administration of locatable minerals (gold, copper, lead, zinc, silver, bentonite and diamond/kimberlite) on BLM lands will continue as required by law and regulation by taking the following steps:

- Review and process notices to ensure the proposed actions do not create unnecessary or undue degradation of the environment.
- Review and process plans of operation to ensure the proposed actions do not create unnecessary or undue degradation of the environment (43 CFR 3809).
- Conduct at a minimum, annual compliance inspections on each active notice and plan of operation.
- Allow casual use where work is done by hand and no explosives are used. Refer inquiries to appropriate agencies for further guidance on other permit requirements. Casual use does not require a permit or prior authorization. However, if necessary, the BLM could monitor casual use to prevent unnecessary and undue degradation.

The BLM will coordinate with the Montana DEQ during the review, approval, inspection and reclamation of mining operations. Requirements of all state and federal laws will be met in the management of mining operations.

Terms and conditions (Appendix P) will be applied to mining activities (within the constraints of the mining law) to meet land health standards for uplands, riparian areas and wetlands, water quality, air quality, and native plant and animal species (Appendix M).

In areas withdrawn from mineral entry, plans of operations will not be approved unless the Department of the Interior has determined that the mining claims covered by the plan of operations are valid under the Surface Management Regulations at 43 CFR 3809.100.

## Alternative A (Current Management)

The BLM would protect sensitive areas by continuing four mineral withdrawals (19,914 acres) and recommending two new withdrawals (1,991 acres) (Table 2.17 and Map 2.13, which is located at the end of Chapter 2). Sensitive areas include a critical bat hibernaculum, developed recreation sites, and rare and intact important archaeological sites.

The BLM would continue the withdrawal for Azure Cave to protect a critical bat hibernaculum and the withdrawal for the Sweet Grass Hills TCP. The purpose of the withdrawal for the Sweet Grass Hills is to preserve areas of traditional

### 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 also include use of small portable suction dredges. It also generally includes use of 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, off-road vehicle use designations contained in BLM land use plans, and the terms of temporary closures ordered by the 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, chemicals, or explosives. It also does not include occupancy or operations in areas where the cumulative effects of the activities result in more than negligible disturbance. (43 CFR 3809.5)

importance to Native Americans, aquifers in the area that provide potable water to local residents, high value habitat for peregrine falcons, and seasonally important elk and deer habitat. The BLM would review the withdrawal prior to expiration (2017).

The BLM would continue the withdrawals for the Camp Creek Campground and Montana Gulch Campground.

The BLM would recommend revoking the withdrawals for the Landusky Town Site, Landusky Recreation Site, and Zortman Town Site. The withdrawal for the Zortman/Landusky mine reclamation project would be allowed to expire.

The following new withdrawals would be proposed to segregate the areas from locatable mineral entry:

- A withdrawal of 20 acres to protect the Zortman Cemetery.
- A withdrawal of 1,972 acres in Phillips County (Big Bend of the Milk River ACEC) to protect rare and intact archaeological sites.

## **Alternative B**

The BLM would protect sensitive areas by continuing four mineral withdrawals (20,058 acres) and recommending nine new withdrawals (1,674,298 acres) (Table 2.17). Sensitive areas include a critical bat hibernaculum, rare and intact important archaeological sites, developed recreation sites, essential breeding habitat for mountain plovers and nesting areas for raptors, significant paleontological areas, priority habitat for grassland birds, and protection priority habitat for greater sage-grouse.

The BLM would continue the withdrawal for Azure Cave to protect a critical bat hibernaculum and recommend a 20-year extension for the Sweet Grass Hills withdrawal. The purpose of the withdrawal for the Sweet Grass Hills is to preserve areas of traditional importance to Native Americans, aquifers in the area that provide potable water to local residents, high value habitat for peregrine falcons, and seasonally important elk and deer habitat.

The BLM would recommend that the withdrawals for the Camp Creek and Montana Gulch campgrounds be modified to include the entire recreation sites.

The BLM would recommend revoking the withdrawals for the Landusky Town Site, Landusky Recreation Site, and Zortman Town Site.

The following new withdrawals would be proposed to segregate the areas from locatable mineral entry:

- A withdrawal of 20 acres to protect the Zortman Cemetery.
- A withdrawal of 3,505 acres at the Zortman/Landusky mine reclamation area (upon expiration of the existing withdrawal in 2015) to promote successful reclamation, protect associated infrastructure, and ensure public safety on BLM lands affected by prior mining activities.
- A withdrawal of 37,387 acres in Phillips County (Little Rocky Mountains TCP) to preserve areas of traditional importance to Native Americans.
- A withdrawal of 24,672 acres in south Valley County (Mountain Plover ACEC) to protect essential breeding habitat for mountain plovers.
- A withdrawal of 60,717 acres in north Valley County (Bitter Creek ACEC) to protect significant scenic, wildlife, and cultural values.
- A withdrawal of 469,916 acres in north Valley County to protect priority habitat for grassland birds/greater sage-grouse (Grassland Bird/Greater Sage-Grouse Priority Areas ACEC).

| <b>Table 2.17</b>   |  |  |                      |  |  |
|---|--|--|----------------------|--|--|
| <b>Existing and Proposed Mineral Withdrawals by Alternative</b> |  |  |                      |  |  |
|   | <i>Alternative A<br/>(Current Management)</i>  | <i>Alternative B</i>   | <i>Alternative C</i> | <i>Alternative D</i>                                   | <i>Alternative E<br/>(Preferred Alternative)</i>   |
| <b>Existing Mineral Withdrawals</b>                             |  |  |                      |  |  |
| <i>Azure Cave</i>   | Recommend continuing the withdrawal (143 acres).   |  |                      |  |  |
| <i>Camp Creek Campground</i>                                    | Recommend continuing the withdrawal (40 acres).  | Recommend modifying the withdrawal (169 acres).  |                      |  |  |
| <i>Landusky Recreation Site</i>                                 | Recommend revoking the withdrawal (15 acres).  |  |                      |  | Recommend revoking the withdrawal on a case-by-case basis for the potential sale or exchange of the BLM parcels (15 acres).  |
| <i>Landusky Town Site</i>                                       | Recommend revoking the withdrawal (82 acres).  |  |                      |  | Recommend revoking the withdrawal on a case-by-case basis for the potential sale or exchange of the BLM parcels (82 acres).  |
| <i>Montana Gulch Campground</i>                                 | Recommend continuing the withdrawal (60 acres).  | Recommend modifying the withdrawal (75 acres).   |                      |  |  |
| <i>Sweet Grass Hills TCP</i>                                    | Continue the withdrawal (19,671 acres). BLM would review the withdrawal prior to expiration. | Recommend continuing the withdrawal with a 20-year extension (19,671 acres).                       |                      | Allow the withdrawal to expire in 2017 (19,671 acres). | Recommend continuing the withdrawal with a 20-year extension (19,671 acres).   |
| <i>Zortman Town Site</i>  | Recommend revoking the withdrawal (108 acres).   |  |                      |  | Recommend revoking the withdrawal on a case-by-case basis for the potential sale or exchange of the BLM parcels (108 acres). |
| <i>Zortman/Landusky Mine Reclamation</i>                        | Allow the withdrawal to expire (3,530 acres).  | Propose a new 20-year withdrawal (3,505 acres) upon expiration of the existing withdrawal in 2015. |                      | Allow the withdrawal to expire (3,530 acres).          | Through the withdrawal review process, determine the need for a smaller area (maximum 2,605 acres).                          |

| <b>Table 2.17</b>   |   |  |   |  |  |
|---|---|--|---|--|--|
| <b>Existing and Proposed Mineral Withdrawals by Alternative</b> |   |  |   |  |  |
|   | <i>Alternative A<br/>(Current Management)</i> | <i>Alternative B</i>                         | <i>Alternative C</i>                      | <i>Alternative D</i>   | <i>Alternative E<br/>(Preferred Alternative)</i> |
| <b>Proposed Mineral Withdrawals</b>                             |   |  |   |  |  |
| <i>Big Bend of the Milk River ACEC</i>                          | Recommend a withdrawal (1,972 acres).         | Open.  |   |  |  |
| <i>Bitter Creek ACEC</i>  | Open.   | Recommend a withdrawal (60,717 acres).       |   |  | Open.  |
| <i>Frenchman ACEC</i>   | NA*   |  | Recommend a withdrawal (39,661 acres).    | Recommend a withdrawal (57,540 acres).                           | Open.  |
| <i>Grassland Bird/Greater Sage-Grouse Priority Areas ACEC</i>   | NA  | Recommend a withdrawal (469,916 acres).      | NA  | NA   | NA   |
| <i>Greater Sage-Grouse Protection Priority Area ACEC</i>        | NA  | Recommend a withdrawal (1,067,376 acres).    | NA  | NA   | NA   |
| <i>Grassland Bird/Greater Sage-Grouse Priority Areas</i>        | NA  | Recommend a withdrawal (Same acres as ACEC). | Recommend a withdrawal (316,830 acres).   | NA   | Open.  |
| <i>Greater Sage-Grouse Protection Priority Area</i>             | NA  | Recommend a withdrawal (Same acres as ACEC). | Recommend a withdrawal (1,067,376 acres). | NA   | Open.  |
| <i>Kevin Rim ACEC</i>   | Open.   | Recommend a withdrawal (4,553 acres).        |   |  | Open.  |
| <i>Little Rocky Mountains ACEC</i>                              | NA*   |  |   | Recommend a withdrawal for a portion of the area (15,000 acres). | NA*  |
| <i>Little Rocky Mountains TCP</i>                               | Open.   | Recommend a withdrawal (37,387 acres).       | Open.                                     |  |  |
| <i>Malta Geological ACEC</i>                                    | NA*   | Recommend a withdrawal (6,152 acres).        |   |  | Open.  |
| <i>Mountain Plover ACEC</i>                                     | Open.   | Recommend a withdrawal (24,672 acres).       |   |  |  |
| <i>Woody Island ACEC</i>  | NA*   |  | Recommend a withdrawal (15,804 acres).    |  | Open.  |
| <i>Zortman Cemetery</i>   | Recommend a withdrawal (20 acres).            |  |   |  |  |

\* The area would not be designated an ACEC under this alternative.

- A withdrawal of 1,067,376 acres in southern Phillips and Valley Counties to protect greater sage-grouse protection priority habitat (Greater Sage-Grouse Protection Priority Area ACEC).
- A withdrawal of 4,553 acres in Toole County (Kevin Rim ACEC) to protect rare and intact important archaeological sites and essential breeding and nesting habitat for raptors.
- A withdrawal of 6,152 acres in north Phillips County (Malta Geological ACEC) to protect a nationally significant paleontological area.

## Alternative C

The BLM would protect sensitive areas by continuing four mineral withdrawals (20,058 acres) and recommending ten new withdrawals (1,539,290 acres) (Table 2.17). Sensitive areas include a critical bat hibernaculum, rare and intact important archaeological sites, developed recreation sites, essential breeding habitat for mountain plovers and nesting areas for raptors, significant paleontological areas, priority habitat for grassland birds, and protection priority habitat for greater sage-grouse.

The BLM would continue the withdrawal for Azure Cave to protect a critical bat hibernaculum and recommend a 20-year extension for the Sweet Grass Hills withdrawal. The purpose of the withdrawal for the Sweet Grass Hills is to preserve areas of traditional importance to Native Americans, aquifers in the area that provide potable water to local residents, high value habitat for peregrine falcons, and seasonally important elk and deer habitat.

The withdrawals for the Camp Creek and Montana Gulch campgrounds would be modified to include the entire recreation sites.

The BLM would recommend revoking the withdrawals for the Landusky Town Site, Landusky Recreation Site, and Zortman Town Site.

The following new withdrawals would be proposed to segregate the areas from locatable mineral entry:

- A withdrawal of 20 acres to protect the Zortman Cemetery.
- A withdrawal of 3,505 acres at the Zortman/Landusky mine reclamation area (upon expiration of the existing withdrawal in 2015) to promote successful reclamation, protect associated infrastructure, and ensure public safety on BLM lands affected by prior mining activities.
- A withdrawal of 24,672 acres in south Valley County (Mountain Plover ACEC) to protect essential breeding habitat for mountain plovers.
- A withdrawal of 60,717 acres in north Valley County (Bitter Creek ACEC) to protect significant scenic, wildlife, and cultural values.
- A withdrawal of 4,553 acres in Toole County (Kevin Rim ACEC) to protect rare and intact important archaeological sites and essential breeding and nesting habitat for raptors.
- A withdrawal of 6,152 acres in north Phillips County (Malta Geological ACEC) to protect a nationally significant paleontological area.
- A withdrawal of 15,804 acres in north Blaine County (Woody Island ACEC) to protect essential habitat for grassland birds.
- A withdrawal of 39,661 acres in northeastern Phillips County (Frenchman ACEC) to protect essential habitat for grassland birds.

- A withdrawal of 1,067,376 acres in southern Phillips and Valley Counties to protect greater sage-grouse protection priority habitat.
- A withdrawal of 316,830 acres in north Valley County to protect priority habitat for grassland birds and greater sage-grouse.

### **Alternative D**

The BLM would protect sensitive areas by continuing three mineral withdrawals (387 acres) and recommending eight new withdrawals (184,458 acres) (Table 2.17). Sensitive areas include a critical bat hibernaculum, developed recreation sites, rare and intact important archaeological sites, essential breeding habitat for mountain plovers and nesting areas for raptors, significant paleontological areas, and priority habitat for grassland birds.

The BLM would continue the withdrawal for Azure Cave and modify the withdrawals for the Camp Creek and Montana Gulch campgrounds to include the entire recreation sites. The withdrawals for the Sweet Grass Hills TCP and Zortman/Landusky mine reclamation would be allowed to expire.

The BLM would recommend revoking the withdrawals for the Landusky Town Site, Landusky Recreation Site, and Zortman Town Site.

The following new withdrawals would be proposed to segregate the areas from locatable mineral entry:

- A withdrawal of 20 acres to protect the Zortman Cemetery.
- A withdrawal of 60,717 acres in north Valley County (Bitter Creek ACEC) to protect significant scenic, wildlife, and cultural values.
- A withdrawal of 57,540 acres in northeastern Phillips County (Frenchman ACEC) to protect essential habitat for grassland birds.
- A withdrawal of 4,553 acres in Toole County (Kevin Rim ACEC) to protect rare and intact important archaeological sites and essential breeding and nesting habitat for raptors.
- A withdrawal of 15,000 acres in south Phillips County (a portion of the Little Rocky Mountains ACEC) to protect Native American cultural and historic values.
- A withdrawal of 6,152 acres in north Phillips County (Malta Geological ACEC) to protect a nationally significant paleontological area.
- A withdrawal of 24,672 acres in south Valley County (Mountain Plover ACEC) to protect essential breeding habitat for mountain plovers.
- A withdrawal of 15,804 acres in north Blaine County (Woody Island ACEC) to protect essential habitat for grassland birds.

### **Alternative E (Preferred Alternative)**

The BLM would protect sensitive areas by continuing four mineral withdrawals (20,058 acres) and recommending two new withdrawals (24,692 acres) (Table 2.17 and Map 2.13). Sensitive areas include a critical bat hibernaculum, developed recreation sites, rare and intact important archaeological sites, and essential breeding habitat for mountain plovers.

The BLM would continue the withdrawal for Azure Cave to protect a critical bat hibernaculum and recommend a 20-year extension for the Sweet Grass Hills withdrawal. The purpose of the withdrawal for the Sweet Grass Hills is to

preserve areas of traditional importance to Native Americans, aquifers in the area that provide potable water to local residents, high value habitat for peregrine falcons, and seasonally important elk and deer habitat.

Through the withdrawal review process, the BLM would consider the need for a new withdrawal or right-of-way to promote success for the Zortman/Landusky mine reclamation. The area for the withdrawal or right-of-way would be based on the need to maintain and protect the infrastructure associated with the reclamation activities, and would likely not exceed the boundary of the Zortman/Landusky Mine Reclamation ACEC.

The withdrawals for the Camp Creek and Montana Gulch campgrounds would be modified to include the entire recreation sites.

The BLM would recommend revoking the withdrawals for the Landusky Town Site, Landusky Recreation Site, and Zortman Town Site on a case-by-case basis for the potential sale or exchange of the BLM parcels within the withdrawal boundaries.

The following new withdrawals would be proposed to segregate the areas from locatable mineral entry:

- A withdrawal of 24,672 acres in south Valley County (Mountain Plover ACEC) to protect essential breeding habitat for mountain plovers.
- A withdrawal of 20 acres to protect the Zortman Cemetery.

## **Salable (Mineral Material)**

### Goal

*Provide for the extraction of mineral materials to meet public demand while minimizing adverse impacts to other resource values.*

### **Objective**

Provide for mineral material sales in accordance with existing laws and regulations (43 CFR 3600).

### **Decisions Common to All Alternatives**

The BLM will issue sales contracts for mineral materials (sand, gravel, stone, limestone, and clay) where disposal is deemed to be in the public interest, while providing for reclamation of mined lands and preventing unnecessary or undue impact to other resources. All lands not withdrawn or discretionally closed are available for mineral material disposal. Mineral material permits are considered on a case-by-case basis and issued at the discretion of the authorized officer.

Free use permits may be issued to government agencies or subdivisions and to nonprofit organizations. Materials obtained by a free use permit may not be bartered or sold.

Mineral material sale contracts are valued according to the BLM statewide general appraisal schedule or through individual site-specific appraisals.

Common use areas or community pits will be designated if the level of localized activity warrants. New mineral material sites would be evaluated on a case-by-case basis.

Mineral material sales will be processed on a case-by-case basis. Salable mineral sites will have an approved mining and reclamation plan and an environmental review prior to being opened. Where resource conflicts cannot be adequately mitigated, a permit would be denied. Operating stipulations to protect other resource values will be included in mineral material permits.

| <b>Table 2.18</b><br><b>Areas Closed to Mineral Material Disposal by Alternative</b> |   |                              |                           |                        |   |
|--|---|------------------------------|---------------------------|------------------------|---|
|  | <i>Alternative A</i><br><i>(Current Management)</i> | <i>Alternative B</i>         | <i>Alternative C</i>      | <i>Alternative D</i>   | <i>Alternative E</i><br><i>(Preferred Alternative)</i>  |
| <b>Cultural Resources</b>  |   |                              |                           |                        |   |
| <i>Little Rocky Mountains TCP</i>  | Open.   |                              |                           | Closed (37,403 acres). | Higher elevations of the Little Rocky Mountains (above 3,600 feet) would be limited to those mineral material uses necessary for reclamation activities and maintenance of the existing road system (32,058 acres). |
| <i>Sweet Grass Hills TCP</i>   | Open.   |                              |                           | Closed (19,665 acres). |   |
| <b>Special Designations</b>  |   |                              |                           |                        |   |
| <i>Azure Cave ACEC</i>   | Open.   | Closed (143 acres).          |                           |                        |   |
| <i>Big Bend of the Milk River ACEC</i>   | Open.   |                              |                           | Closed (1,972 acres).  |   |
| <i>Frenchman ACEC</i>  | NA*   |                              | Closed (39,692 acres).    | Closed (57,589 acres). | Closed (39,692 acres).  |
| <i>Kevin Rim ACEC</i>  | Open.   |                              |                           | Closed (4,567 acres).  |   |
| <i>Little Rocky Mountains ACEC</i>   | NA*   |                              |                           | Closed (26,815 acres). | NA*   |
| <i>Malta Geological ACEC</i>   | NA*   | Closed (6,153 acres).        |                           |                        |   |
| <i>Mountain Plover ACEC</i>  | Open.   |                              |                           | Closed (24,723 acres). |   |
| <i>Sweet Grass Hills ACEC</i>  | Open.   |                              |                           | Closed (6,226 acres).  |   |
| <i>Woody Island ACEC</i>   | NA*   |                              | Closed (16,049 acres).    |                        | Closed (24,345 acres).  |
| <i>Zortman/Landusky Mine Reclamation ACEC</i>  | NA*   | Closed (3,505 acres).        |                           | NA*                    | Open.   |
| <i>Grassland Bird/Greater Sage-Grouse Priority Areas ACEC</i>                        | NA*   | Closed (317,197 acres).      | NA*                       | NA*                    | NA*   |
| <i>Greater Sage-Grouse Protection Priority Area ACEC</i>                             | NA*   | Closed (1,023,068 acres).    | NA*                       | NA*                    | NA*   |
| <i>Burnt Lodge WSA</i>   | Closed (13,773 acres).                              |                              |                           |                        |   |
| <i>Bitter Creek WSA</i>  | Closed (60,733 acres).                              |                              |                           |                        |   |
| <b>Wildlife</b>  |   |                              |                           |                        |   |
| <i>Grassland Bird/Greater Sage-Grouse Priority Areas</i>                             | NA  | Closed (Same acres as ACEC). | Closed (317,197 acres).   | NA                     | Open.   |
| <i>Greater Sage-Grouse Protection Priority Area</i>                                  | NA  | Closed (Same acres as ACEC). | Closed (1,023,068 acres). | NA                     | Open.   |
| <b>Zortman Cemetery</b>  | Open.   | Closed (3 acres).            |                           |                        |   |

\* The area would not be designated an ACEC under this alternative.

The collection of petrified wood and invertebrate fossils for personal use will be allowed as limited by the regulations (43 CFR 3620 and 8365) in areas not specifically closed.

### **Alternative A (Current Management)**

The BLM would protect sensitive areas by closing them to mineral material sales (74,506 acres) (Table 2.18 and Map 2.14, which is located at the end of Chapter 2). Sensitive areas include WSAs.

### **Alternative B**

The BLM would protect sensitive areas by closing them to mineral material sales (1,579,309 acres) (Table 2.18). Sensitive areas include WSAs, a critical bat hibernaculum (Azure Cave ACEC), significant paleontological areas (Malta Geological ACEC), Grassland Birds/Greater Sage-Grouse Priority Areas ACEC, and Greater Sage-Grouse Protection Priority Area ACEC.

### **Alternative C**

The BLM would protect sensitive areas by closing them to mineral material sales (1,480,302 acres) (Table 2.18). Sensitive areas include WSAs, a critical bat hibernaculum (Azure Cave ACEC), significant paleontological areas (Malta Geological ACEC), priority habitat for grassland birds, and protection priority habitat for greater sage-grouse.

### **Alternative D**

The BLM would protect sensitive areas by closing them to mineral material sales (242,626 acres) (Table 2.18). Sensitive areas include WSAs, a critical bat hibernaculum (Azure Cave ACEC), rare and intact important archaeological sites (Big Bend of the Milk River ACEC, Little Rocky Mountains TCP and ACEC, and Sweet Grass Hills TCP and ACEC), essential breeding and nesting areas for raptors (Kevin Rim ACEC), and significant paleontological areas (Malta Geological ACEC).

### **Alternative E (Preferred Alternative)**

The BLM would protect sensitive areas by closing them to mineral material sales (227,679 acres) (Table 2.18 and Map 2.14). Sensitive areas include WSAs, a critical bat hibernaculum (Azure Cave ACEC), significant paleontological areas (Malta Geological ACEC), and essential breeding and nesting areas for raptors (Kevin Rim ACEC).

## **Special Designations**

### **Areas of Critical Environmental Concern**

#### Goal

*Protect relevant and important values through ACEC designation and apply special management where standard or routine management is not adequate to protect the values from risks or threats of damage/degradation or to provide for public safety from natural hazards.*

Areas of Critical Environmental Concern (ACECs) are BLM lands where special management attention is needed to protect important and relevant values. To be designated as an ACEC, a nominated area must meet the criteria of relevance and importance as outlined in 43 CFR 1610.7-2 and BLM Manual 1613. If the relevance and importance criteria are met, an area is identified as a potential ACEC and considered for designation and management in the resource planning process. Designation is based on whether or not a potential ACEC requires special management attention. Seven existing ACECs were revisited and twelve new nominations were considered (Appendix K and Maps K.1 through K.19). Seven of the new nominations met the criteria of relevance and importance and are addressed as potential ACECs

in the alternatives. A summary list of existing and potential ACECs is shown in the Special Designations section of Table 2.21, Summary Comparison of Alternatives, which follows Chapter 2.

## ***Existing ACECs***

### **Azure Cave ACEC**

#### **Objective**

Protect the cave and critical bat hibernaculum while ensuring public safety.

#### **Decisions Common to All Alternatives**

The BLM will retain Azure Cave as an ACEC (141 acres) to protect cave resources and potentially the northernmost bat hibernaculum in the United States (Map 2.15, which is located at the end of Chapter 2). The cave will be managed to protect bats during crucial hibernation periods and allow specific use on a limited basis. Any cave access would need to consider appropriate time periods, white nose syndrome, and management activities to protect the bats.

The area will remain closed to oil and gas leasing and the BLM will continue the withdrawal from mineral entry and location.

#### **Alternative A (Current Management)**

The area would be an avoidance area for wind energy rights-of-way.

The area would be open to solid mineral leasing and mineral material sales.

#### **Alternatives B, C, D, and E (Preferred Alternative)**

The area would be an avoidance area for rights-of-way and an exclusion area for wind energy rights-of-way.

To protect the cave and critical bat hibernaculum the area would be closed to solid mineral leasing and mineral material sales.

### **Big Bend of the Milk River ACEC**

#### **Objective**

Protect the diverse cultural resources and historic sites.

#### **Decisions Common to All Alternatives**

The BLM will retain the Big Bend of the Milk River ACEC (1,972 acres) to protect the diverse cultural resources and historic sites representing bison hunting and prehistoric ceremonial use of the Northwestern Plains (Map 2.15, which is located at the end of Chapter 2). Two National Register eligible sites are located within the Big Bend of the Milk River ACEC: Henry Smith and Beaucoup.

The Henry Smith site (1,000 acres) has been allocated for Public Use. The site will be inventoried for cultural resources, and mapping and/or collecting data will be completed as necessary.

The Beaucoup site (1,120 acres) has been allocated for Scientific Use. The site will be inventoried for cultural resources. All resources will be mapped, collected and excavated as necessary for relevant archaeological data.

The area will include an NSO stipulation for oil and gas leasing and the area will remain closed to solid mineral leasing.

### **Alternative A (Current Management)**

The area would be an avoidance area for wind energy rights-of-way.

The BLM would recommend a withdrawal from mineral entry and location. The area would be open to solid mineral material sales.

### **Alternatives B and C**

The area would be an avoidance area for rights-of-way and an exclusion area for wind energy rights-of-way.

The BLM would not recommend a withdrawal from mineral entry and location and the area would be open to solid mineral material sales.

### **Alternatives D and E (Preferred Alternative)**

The area would be an avoidance area for rights-of-way and an exclusion area for wind energy rights-of-way.

The BLM would not recommend a withdrawal from mineral entry and location. The area would be closed to solid mineral material sales.

## **Bitter Creek ACEC**

### **Objective**

Protect the scenic diversity found within the Bitter Creek watershed.

### **Decisions Common to All Alternatives**

The BLM will retain the Bitter Creek ACEC (60,701 acres) to protect the scenic diversity qualities found within the Bitter Creek watershed (Map 2.15, which is located at the end of Chapter 2). If the Bitter Creek WSA is released by Congress, an ACEC management plan would be completed consistent with the management direction as discussed in the alternatives below. Until an ACEC management plan is completed the area would be managed consistent with BLM Manual 6330-Management of BLM Wilderness Study Areas as appropriate.

The area will remain closed to oil and gas leasing until an ACEC management plan is completed that would address leasing (60,717 acres).

### **Alternative A (Current Management)**

The Northern Border Corridor within the ACEC would be a designated right-of-way corridor with a width of 4 1/2 miles.

The area would be an exclusion area for wind energy rights-of-way.

The area would be open to mineral entry and location.

The area would be closed to solid mineral material sales.

### **Alternative B**

The area would be an avoidance area for rights-of-way. The Northern Border Corridor within the ACEC would be a designated right-of-way corridor with a width of 1 mile.

The area would be an exclusion area for wind energy rights-of-way.

The BLM would recommend a withdrawal from solid mineral entry and location.

The area would be closed to solid mineral material sales.

### **Alternative C**

The area would be an avoidance area for rights-of-way. The Northern Border Corridor within the ACEC would be a designated right-of-way corridor with a width of 2 miles.

The area would be an exclusion area for wind energy rights-of-way.

The BLM would recommend a withdrawal from solid mineral entry and location.

The area would be closed to solid mineral material sales.

### **Alternative D**

The area would be an avoidance area for rights-of-way and an exclusion area for wind energy rights-of-way.

The BLM would recommend a withdrawal from mineral entry and location.

The area would be closed to solid mineral material sales.

### **Alternative E (Preferred Alternative)**

The area would be an avoidance area for rights-of-way.

The area would be an exclusion area for wind energy rights-of-way.

The area would be open to solid mineral entry and location.

The area would be closed to solid mineral material sales.

## **Kevin Rim ACEC**

### **Objectives**

Protect the diverse archeological resources and significant raptor values.

### **Decisions Common to All Alternatives**

The BLM will retain the ACEC (4,557 acres) to protect the diverse archeological resources and significant raptor habitat (Map 2.15, which is located at the end of Chapter 2).

The area includes an existing communication site. The ACEC will be an avoidance area for rights-of-way.

### **Alternative A (Current Management)**

The area would include an NSO stipulation for oil and gas leasing within 3 miles of identified active raptor nests. The area would also include an NSO stipulation on a case-by-case basis for cultural resources.

The BLM would not authorize projects within 1/4 mile below the base of the Kevin Rim escarpment unless impacts to the cultural resources could be mitigated.

The BLM would encourage right-of-way locations off the west, rather than the east, side of Kevin Rim. Following a raptor inventory, the BLM would determine where right-of-way facilities (both transmission and distribution) could be located off the east side of the rim.

The area would be an avoidance area for wind energy rights-of-way.

The area would be open to solid mineral leasing, mineral entry and location, and mineral material sales.

### **Alternatives B and C**

The area would include an NSO stipulation for oil and gas leasing.

The area would be an exclusion area for wind energy rights-of-way.

The area would be closed to solid mineral leasing and the BLM would recommend a withdrawal from mineral entry and location. The area would be open to mineral material sales.

### **Alternative D**

The area would include an NSO stipulation for oil and gas leasing.

The area would be an exclusion area for wind energy rights-of-way.

The area would be closed to solid mineral leasing and mineral material sales. The BLM would recommend a withdrawal from mineral entry and location.

### **Alternative E (Preferred Alternative)**

The area would include an NSO stipulation for oil and gas leasing.

New communication facilities should be located at the existing communication site, rather than a new location on Kevin Rim.

The area would be an exclusion area for wind energy rights-of-way.

The area would be closed to solid mineral leasing and mineral material sales.

The area would be open to mineral entry and location.

## **Mountain Plover ACEC**

### **Objective**

Protect mountain plover habitat that is not associated with black-tailed prairie dogs.

### **Decisions Common to All Alternatives**

The BLM will retain the ACEC (24,762 acres) to protect the mountain plover habitat (Map 2.15, which is located at the end of Chapter 2). The ACEC includes two habitat areas for the mountain plover. The primary habitat is the hardpan area on the valley bottoms (12,000 acres). The secondary habitat areas are on the gentle rises on either side of the valleys.

The following mitigation measures will be considered for any oil or gas well completed as a producer:

- Production facilities would be located off the primary habitat (hardpan areas) within the ACEC. Facilities include, for example, the treater and the storage tanks. The pump unit would not be included.
- Pipeline and road construction would not be allowed from April 1 to July 31 in the primary habitat.
- Special projects (e.g., workover rigs, pipeline maintenance) during the period April 1 to July 31 would require an inventory to determine if occupied nesting habitat occurs. The inventory would have to be completed by a qualified biologist using BLM-approved procedures. If occupied nests are within 1/4 mile of the proposed activity, mitigation could include the use of a temporary road or with travel in the early morning or late afternoon, but no travel from 11:00 a.m. to 4:00 p.m. If no occupied nests are within 1/4 mile of the proposed activity, special mitigation measures would not apply.

The following mitigation measures will be considered during the Plan of Operations approval process for bentonite exploration and development. Mitigation measures will be applied to prevent unnecessary or undue degradation:

- Seasonal restrictions would be recommended on surface-disturbing activities from April 1 to July 31 on a case-by-case basis to prevent unnecessary or undue degradation. Proposed surface-disturbing activities during the period April 1 to July 31 would require an inventory to determine if occupied nesting habitat occurs. If occupied nests are within 1/4 mile of the proposed activity, the BLM would work with the operator to relocate the proposed activity or limit the size and duration of the disturbance. If no occupied nests are within 1/4 mile of the proposed activity, special mitigation measures would not apply.
- Alternative location of facilities would be off the primary habitat (hardpan areas) within the ACEC.
- Access route design for exploration and development would minimize surface disturbance to avoid occupied nesting habitat.
- Concurrent reclamation would be emphasized to keep disturbance to a minimum, thereby reducing habitat loss. Concurrent reclamation is the method of reclamation where topsoil removed from an area about to be mined is either directly and immediately reapplied to the adjacent mined area; or the topsoil is applied to the area it was removed from within a short time (1-2 months). Concurrent reclamation provides the greatest opportunity to return the native plant community to the site by preserving the seeds, roots and soil microorganisms. The topsoil material is only about 1-2 inches thick over shale in most places. Within this thin layer are all the ingredients to reestablish the native plant community. If concurrent reclamation is not used, reclamation should be within at least 2 years. The goal of reclamation would be to keep the vegetation short with bare ground.
- Reclamation would utilize native plant species. Preference would be given to plants that are low growing.

All right-of-way grants within the primary habitat will include the following stipulation:

- Construction activity and surface disturbance will be prohibited during the period from April 1 to July 31 for the protection of mountain plover nesting habitat. Any exceptions to this requirement must have prior written approval from the authorized officer, except for emergency actions.

Other mitigation measures will be considered on a case-by-case basis with appropriate stipulations from BLM Manual Handbook H-2801 incorporated into the right-of-way grant.

The BLM will minimize any road construction within the ACEC. Portions of the Beaver Branch and Arrambide roads will be recommended for re-routing to reduce erosion and avoid mountain plover nesting habitat. Any BLM road maintenance during the time period April 1 to July 31 within the ACEC boundaries will be coordinated with a wildlife biologist.

Current management for livestock grazing will continue but any changes or revisions based on Standards for Rangeland Health and Guidelines for Livestock Grazing Management would address mountain plover habitat.

### **Alternative A (Current Management)**

The area would be open to oil and gas leasing with a TLS stipulation from April 1 to July 31.

The area would be an avoidance area for wind energy rights-of-way.

### **Alternatives B and C**

The area would include an NSO stipulation for oil and gas leasing.

The area would be an avoidance area for rights-of-way and an exclusion area for wind energy rights-of-way.

The BLM would recommend a withdrawal from solid mineral entry and location. The area would be closed to solid mineral leasing.

### **Alternative D**

The area would include an NSO stipulation for oil and gas leasing.

The area would be an avoidance area for rights-of-way and an exclusion area for wind energy rights-of-way.

The BLM would recommend a withdrawal from mineral entry and location. The area would be closed to solid mineral leasing and mineral material sales.

### **Alternative E (Preferred Alternative)**

The area would be closed to oil and gas leasing.

The area would be an avoidance area for rights-of-way and an exclusion area for wind energy rights-of-way.

The BLM would recommend a withdrawal from solid mineral entry and location. The area would be closed to solid mineral leasing and mineral material sales.

## **Prairie Dog Towns within the 7km Complex ACEC**

### **Objective**

Provide and protect habitat for prairie dog associated sensitive species.

### **Alternative A (Current Management)**

The BLM would retain the Prairie Dog Towns within the 7km Complex ACEC (16,392 acres) to provide and protect habitat for prairie dog associated sensitive species (Map 2.15, which is located at the end of Chapter 2). In cooperation with the U.S. Fish and Wildlife Service (USFWS) and MFWP, the BLM would maintain the existing prairie dog habitat and distribution on BLM land within the 7km Complex based on a 1988 survey.

The area would include an NSO stipulation for oil and gas leasing of 1/4 mile from identified essential habitat.

## **Alternatives B, C, D, and E (Preferred Alternative)**

The BLM would not retain the Prairie Dog Towns within the 7km Complex ACEC. Management of prairie dog habitat would be consistent with the Wildlife section of this chapter.

## **Sweet Grass Hills ACEC**

### **Objective**

Protect the diverse cultural and historic resource values.

### **Decisions Common to All Alternatives**

The BLM would retain the ACEC (7,419 acres) to protect the diverse archeological resources (Map 2.15, which is located at the end of Chapter 2). Management of the area would primarily focus on preserving areas of traditional spiritual importance to Native Americans, aquifers in the area that provide potable water to local residents, high value habitat for peregrine falcons, and seasonally important elk and mule deer habitat.

### **Alternative A (Current Management)**

The area would include an NSO stipulation for oil and gas leasing. On existing leases, the BLM would work with operators to apply guidelines to any new activity which may threaten areas of traditional spiritual importance to Native Americans or aquifers that provide potable water.

The area would not be available for the sale of commercial wood products.

The area would be closed to OHV use. Off-road travel for administration of a federal lease or permit would be granted, unless specifically prohibited.

The area would be an avoidance area for wind energy rights-of-way.

The BLM would continue the withdrawal from solid mineral entry and location. Part of a Bureau of Reclamation withdrawal (532 acres) was recommended for termination in a withdrawal review effort (May 1993) since the withdrawal is no longer serving the purpose for which it was withdrawn. The remaining 40 acres was recommended for a 20-year term modification (May 1993) since it is serving the purpose for which it was withdrawn by providing for a current and future riprap quarry for Tiber Reservoir. However, under this alternative the 40 acres would be recommended for withdrawal termination since the continued use of the riprap quarry would be incompatible with the resource values being protected by the ACEC.

The area would be open to solid mineral leasing and mineral material sales.

### **Alternatives B and C**

The area would include an NSO stipulation for oil and gas leasing. On existing leases, the BLM would work with operators to apply guidelines to any new activity which may threaten areas of traditional spiritual importance to Native Americans or aquifers that provide potable water.

The BLM would allow for a full range of forest health treatments in the Sweet Grass Hills ACEC that may include the sale of wood products. The ACEC would not be open for incidental personal use wood products.

The area would be an avoidance area for rights-of-way and an exclusion area for wind energy rights-of-way.

The area would be closed to OHV use. Off-road travel for administration of a federal lease or permit would be granted, unless specifically prohibited.

The BLM would recommend a 20-year extension to the withdrawal from mineral entry and location. Part of a Bureau of Reclamation withdrawal (532 acres) was recommended for termination in a withdrawal review effort (May 1993) since the withdrawal is no longer serving the purpose for which it was withdrawn. The remaining 40 acres was recommended for a 20-year term modification (May 1993) since it is serving the purpose for which it was withdrawn by providing for a current and future riprap quarry for Tiber Reservoir. However, under this alternative the 40 acres would be recommended for withdrawal termination since the continued use of the riprap quarry would be incompatible with the resource values being protected by the ACEC.

The area would be closed to solid mineral leasing but open to mineral material sales.

### **Alternative D**

The area would include an NSO stipulation for oil and gas leasing. On existing leases, the BLM would work with operators to apply guidelines to any new activity which may threaten areas of traditional spiritual importance to Native Americans or aquifers that provide potable water.

The BLM would allow for a full range of forest health treatments in the Sweet Grass Hills ACEC that may include the sale of wood products. The ACEC would not be open for incidental personal use wood products.

The area would be an avoidance area for rights-of-way and an exclusion area for wind energy rights-of-way.

The area would be designated as limited for OHV use. Travel would be limited to existing roads, primitive roads and trails.

The BLM would not recommend an extension to the withdrawal from solid mineral entry and location. The withdrawal would be allowed to expire in 2017.

The area would be closed to solid mineral leasing and mineral material sales.

### **Alternative E (Preferred Alternative)**

The area would be closed to oil and gas leasing.

The BLM would allow for a full range of forest health treatments in the Sweet Grass Hills ACEC that may include the sale of wood products. The ACEC would not be open for incidental personal use wood products.

The area would be an avoidance area for rights-of-way and an exclusion area for wind energy rights-of-way.

The area would be closed to OHV use. Off-road travel for administration of a federal lease or permit would be granted, unless specifically prohibited.

The BLM would recommend a 20-year extension to the withdrawal from solid mineral entry and location to preserve areas of traditional spiritual importance to Native Americans, aquifers in the area that provide potable water to local residents, high value habitat for reintroduction of peregrine falcons, and seasonally important elk and deer habitat.

Part of a Bureau of Reclamation withdrawal (532 acres) was recommended for termination in a withdrawal review effort (May 1993) since the withdrawal is no longer serving the purpose for which it was withdrawn. The remaining 40 acres was recommended for a 20-year term modification (May 1993) since it is serving the purpose for which it was withdrawn by providing for a current and future riprap quarry for Tiber Reservoir. However, under this alternative the 40 acres would be recommended for withdrawal termination since the continued use of the riprap quarry would be incompatible with the resource values being protected by the ACEC.

The area would be closed to solid mineral leasing and mineral material sales.

## ***Potential ACECs***

### **Frenchman ACEC**

#### **Objectives**

Maintain the unique landscape and scenic characteristics and protect the fragile watershed and wildlife species from fragmentation due to roads and other surface-disturbing activities.

#### **Alternatives A (Current Management) and B**

The area would not be designated an ACEC.

#### **Alternative C**

The area would be designated an ACEC (42,020 acres) to maintain the unique landscape and scenic characteristics and protect the fragile watershed and wildlife species from fragmentation.

The area would include an NSO stipulation for oil and gas leasing to protect the fragile watershed and crucial winter range.

The area would be an avoidance area for rights-of-way and an exclusion area for wind energy rights-of-way.

The area would be closed to solid mineral leasing and mineral material sales. The BLM would recommend a withdrawal from mineral entry and location.

#### **Alternative D**

The area would be designated an ACEC (63,482 acres) to maintain the unique landscape and scenic characteristics and protect the fragile watershed and wildlife species from fragmentation.

The area would include an NSO stipulation for oil and gas leasing to protect the fragile watershed and crucial winter range.

The area would be an avoidance area for rights-of-way and an exclusion area for wind energy rights-of-way.

The area would be closed to solid mineral leasing and mineral material sales. The BLM would recommend a withdrawal from mineral entry and location.

#### **Alternative E (Preferred Alternative)**

The area would be designated an ACEC (42,020 acres) to maintain the unique landscape and scenic characteristics and protect the fragile watershed and wildlife species from fragmentation (Map 2.15, which is located at the end of Chapter 2).

The area would include an NSO stipulation for oil and gas leasing to protect the fragile watershed and crucial winter range.

The area would be an avoidance area for rights-of-way and an exclusion area for wind energy rights-of-way.

The area would be closed to solid mineral leasing and mineral material sales.

## **Grassland Bird/Greater Sage-Grouse Priority Areas ACEC**

### **Objectives**

Create a public land sagebrush and native grassland reserve to provide high quality habitat for greater sage-grouse, Sprague's pipit and other sagebrush and grassland-dependent species. Maintain these unique habitats and protect them from fragmentation due to anthropogenic disturbances.

### **Alternatives A, C, D, and E (Preferred Alternative)**

The areas would not be designated an ACEC.

### **Alternative B**

The areas would be designated an ACEC (461,220 acres) to maintain the unique habitats and protect them from fragmentation.

The areas would be closed to oil and gas leasing.

The areas would be exclusion areas for all rights-of-way including wind energy.

The areas would be closed to solid mineral leasing and mineral material sales. The BLM would recommend a withdrawal from mineral entry and location.

## **Greater Sage-Grouse Protection Priority Area ACEC**

### **Objectives**

Create a public land sagebrush reserve to provide high quality habitat for greater sage-grouse and other sagebrush-dependent species. Maintain this unique habitat and protect it from fragmentation due to anthropogenic disturbances.

### **Alternatives A, C, D, and E (Preferred Alternative)**

The area would not be designated an ACEC.

### **Alternative B**

The area would be designated an ACEC (930,265 acres) to maintain this unique habitat and protect it from fragmentation.

The area would be closed to oil and gas leasing.

The area would be an exclusion area for all rights-of-way including wind energy.

The area would be closed to solid mineral leasing and mineral material sales. The BLM would recommend a withdrawal from mineral entry and location.

## **Little Rocky Mountains ACEC**

### **Objective**

Protect prehistoric and historic archaeological resources and spiritual and traditional resources.

### **Alternatives A, B, C, and E (Preferred Alternative)**

The area would not be designated an ACEC.

### **Alternative D**

The area would be designated an ACEC (27,177 acres).

The area would include an NSO stipulation for oil and gas leasing to protect prehistoric and historic archaeological resources in the area.

Management of the area could include limitations on some forest health treatments that may affect viewsheds for significant periods of time (20 years or longer).

The area would be an avoidance area for rights-of-way and an exclusion area for wind energy rights-of-way.

The area would be designated as limited for OHV use; through travel management planning some seasonal restrictions may be placed on roads, primitive roads and trails for certain periods to enhance or avoid cultural resource values.

The BLM would recommend a withdrawal from solid mineral entry and location for a portion of the area (15,000 acres). The withdrawal would be the area north and west of the Zortman/Landusky mine reclamation.

The area would be closed to solid mineral leasing and mineral material sales.

The area would be managed as a VRM Class II.

## **Malta Geological ACEC**

### **Objective**

Protect significant paleontological values for scientific study.

### **Alternative A (Current Management)**

The area would not be designated an ACEC. Paleontological resources across the planning area would be protected as provided for in accordance with the BLM 8270 Guidance and Handbook.

### **Alternatives B, C, and D**

The area would be designated an ACEC (6,153 acres) to protect the significant paleontological values (Map 2.15, which is located at the end of Chapter 2) through special management of the ACEC.

The area would include a CSU stipulation for oil and gas leasing.

The area would be an avoidance area for rights-of-way and an exclusion area for wind energy rights-of-way.

The area would be closed to solid mineral leasing and mineral material sales. The BLM would recommend a withdrawal from mineral entry and location.

### **Alternative E (Preferred Alternative)**

The area would be designated an ACEC (6,153 acres) to preserve the significant paleontological values for scientific inquiry. Other uses would be constrained by measures needed to protect paleontological resources for scientific study. Personal collection of common fossils would not be allowed (Public Law 111-11, Section 6304(e)).

The area would include a CSU stipulation for oil and gas leasing.

The area would be an avoidance area for rights-of-way and an exclusion area for wind energy rights-of-way to preserve the shallow subsurface paleontological resources.

The area would be closed to solid mineral leasing and mineral material sales. The BLM would not recommend a withdrawal from mineral entry and location.

## **Woody Island ACEC**

### **Objectives**

Maintain the unique landscape and scenic characteristics, and protect the fragile watershed and wildlife species from fragmentation due to roads and other surface-disturbing activities.

### **Alternatives A (Current Management) and B**

The area would not be designated an ACEC.

### **Alternatives C and D**

The area would be designated an ACEC (22,411 acres) to maintain the unique landscape and scenic characteristics, and protect the fragile watershed and wildlife species from fragmentation.

The area would include an NSO stipulation for oil and gas leasing.

The area would be an avoidance area for rights-of-way and an exclusion area for wind energy rights-of-way.

The area would be closed to solid mineral leasing and mineral material sales. The BLM would recommend a withdrawal from mineral entry and location.

### **Alternative E (Preferred Alternative)**

The area would be designated an ACEC (32,869 acres) to maintain the unique landscape and scenic characteristics, and protect the fragile watershed and wildlife species from fragmentation (Map 2.15).

The area would include an NSO stipulation for oil and gas leasing.

The area would be an avoidance area for rights-of-way and an exclusion area for wind energy rights-of-way.

The area would be closed to solid mineral leasing and mineral material sales. The BLM would not recommend a withdrawal from mineral entry and location.

## **Zortman/Landusky Mine Reclamation ACEC**

### **Objectives**

Promote successful reclamation and ensure public safety on public lands affected by prior surface and underground mining activities.

### **Alternative A (Current Management)**

The area would not be designated an ACEC. The withdrawal in support of reclamation activities at the Zortman and Landusky mines would be allowed to expire.

## Alternatives B and C

The area would be designated an ACEC (3,609 acres) to promote successful reclamation and ensure public safety on BLM lands affected by prior surface and underground mining activities.

The area would include an NSO stipulation for oil and gas leasing to protect the prehistoric and historic archaeological resources in the area.

The area would be an avoidance area for rights-of-way and an exclusion area for wind energy rights-of-way.

The area would be closed to solid mineral leasing and mineral material sales. The BLM would recommend a 20-year withdrawal from mineral entry and location.

## Alternative D

The area would not be designated an ACEC. The withdrawal in support of reclamation activities at the Zortman and Landusky mines would be allowed to expire.

## Alternative E (Preferred Alternative)

The area would be designated an ACEC (2,682 acres) to promote successful reclamation, protect associated infrastructure, and ensure public safety on BLM lands affected by prior mining activities (Map 2.15).

The area, which is within the higher elevations of the Little Rocky Mountains TCP, would be closed to oil and gas leasing to protect the prehistoric and historic archaeological resources in the area.

The area would be an avoidance area for rights-of-way and an exclusion area for wind energy rights-of-way.

The area would be designated closed to off-road vehicles to maintain the reclamation and ensure public safety until such time as the reclamation efforts are completed (this includes travel off road and on roads used for reclamation activities). Travel for administrative purposes or for the administration of a federal lease or permit would be granted, unless specifically prohibited in the lease or permit. Travel on roads would also be allowed for access to private land. When the reclamation efforts are completed the area would be limited to designated roads as determined through the travel plan for the Little Rocky Mountains.

The area is within the existing withdrawal (3,530 acres) in support of the reclamation activities at the Zortman and Landusky mines, which expires in 2015. Through the withdrawal review process, the BLM would consider the need for a new withdrawal or right-of-way to promote successful reclamation. The area for the withdrawal or right-of-way would be based on the need to maintain and protect the infrastructure associated with the reclamation activities, but would not exceed the boundary of the ACEC.

The area would be open to solid mineral material sales associated with the need for reclamation materials and maintenance of the existing roads (5 to 6 miles).

## Back Country Byways

### Goal

*Highlight and interpret scenic, historic archaeological or other interest values associated with the back country byways in partnership with communities, interest groups, and state and federal agencies.*

## Objective

Enhance visitor experiences through interpretation of any established back country byways.

## Alternative A (Current Management)

The following routes would be considered for back country byway status: Frenchman Creek; Cottonwood Creek/Black Coulee; Dry Fork/Willow Creek; a North Phillips route through potholes and wetlands complexes; a north Valley access route from Opheim to Hinsdale; and TC Access Road.

## Alternatives B, C, D, and E (Preferred Alternative)

No back country byways would be designated at this time. If a back country byway is identified in the future, the designation would be addressed through an activity plan.

## National Historic Trails

### Goal

*Assist in cooperative efforts to manage current and future national historic trails to protect values for which they were designated.*

### Objectives

Protect and enhance National Historic Trail values based on trail characteristics.

### Decisions Common to All Alternatives

A portion of the Marias River exploration trail of the Lewis and Clark National Historic Trail crosses approximately 7 miles of BLM land (Map 2.10). The BLM will manage this segment of the Lewis and Clark National Historic Trail in a manner that is consistent with the purposes and provisions of Public Law 90-543 (the National Trails System Act) as amended by Public Law 95-265. The Lewis and Clark National Historic Trail Comprehensive Management Plan (NPS 1982) outlines management objectives, practices, and responsibilities, and emphasizes partnerships in trail administration. Scenic and cultural values will be protected on BLM land along this historic trail.

A portion of the Nez Perce National Historic Trail crosses approximately 3 miles of BLM land north of the Upper Missouri River Breaks National Monument and in the Bears Paw Mountains. The BLM will manage this segment of the Nez Perce National Historic Trail in a manner consistent with the purposes and provisions of Public Law 90-543, as amended by Public Law 99-445 and the comprehensive plan being prepared by the U.S. Forest Service.

## Wild and Scenic Rivers

### Goal

*Identify river segments eligible for inclusion in the National Wild and Scenic Rivers System.*

### Objectives

Fulfill BLM's obligations under Section 5(d) (1) of the Wild and Scenic Rivers Act and complete eligibility and suitability determinations of planning area river segments.

### Decisions Common to All Alternatives

The BLM identified and evaluated various river segments to determine their potential inclusion in the National Wild and Scenic Rivers System per Section 5 (d) of the Wild and Scenic Rivers Act (Appendix L). The river study process is a three-step assessment of eligibility, tentative classification of rivers found to be eligible, and a determination of

suitability. The BLM reviewed rivers/streams within the planning area and found a 1/2 mile segment of the Marias River at the confluence of the Missouri River to be eligible.

### **Alternative A (Current Management)**

No segments would be recommended for inclusion in the National Wild and Scenic Rivers System.

### **Alternatives B**

The 1/2 mile segment of the Marias River at the confluence of the Missouri River would be recommended as suitable. This segment includes about 5 acres of BLM land located within the Upper Missouri River Breaks National Monument. This segment would be classified as recreational and managed consistent with the Upper Missouri River Breaks National Monument Record of Decision and Approved Resource Management Plan (BLM 2008b).

### **Alternatives C, D, and E (Preferred Alternative)**

The 1/2 mile segment of the Marias River at the confluence of the Missouri River would be recommended as nonsuitable due to lack of BLM land ownership, the BLM land that is adjacent to the Marias River is included in the Upper Missouri River Breaks National Monument, and management of the area already provides protection for the values along this segment of the Marias River.

## **Wilderness Study Areas**

### Goal

*Manage Wilderness Study Areas (WSAs) so as not to impair their suitability for preservation as wilderness until such time as Congress either designates them as wilderness or releases them from further study.*

## **Objectives**

Protect and preserve the wilderness characteristics of the existing WSAs (naturalness, solitude, and outstanding opportunities for primitive and unconfined recreation).

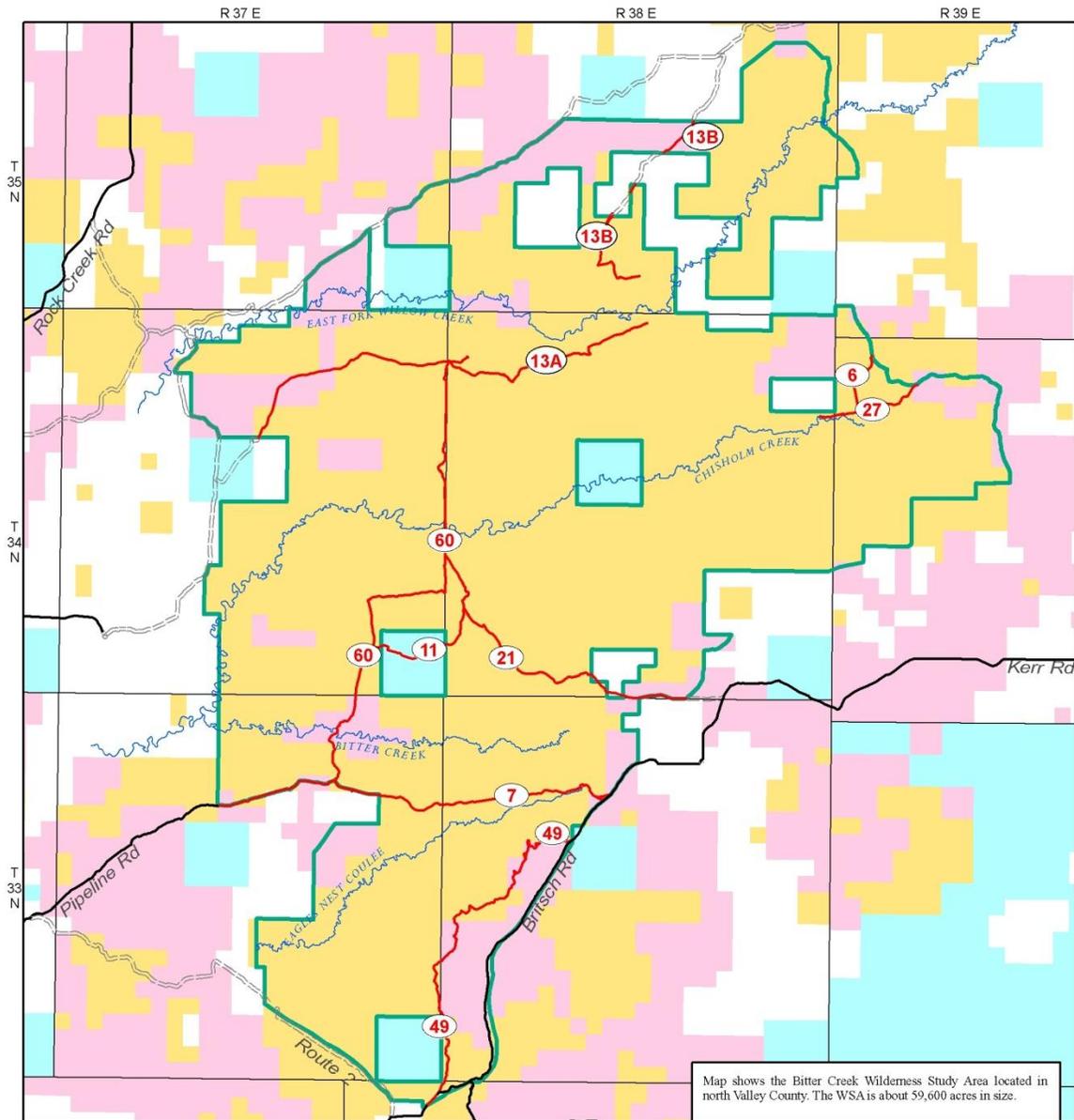
## **Decisions Common to All Alternatives**

The Bitter Creek WSA (Figure 2.4) and Burnt Lodge WSA (Figure 2.5) will be managed according to the BLM Manual 6330-Management of BLM Wilderness Study Areas until such time as Congress acts upon the recommendations. Only Congress can designate or release these lands.

The BLM will prepare a wilderness management plan for any areas designated as wilderness by Congress. The WSAs not designated as wilderness by Congress will subsequently be managed in accordance with guidance for adjacent BLM land unless otherwise specified in this RMP. If released by Congress, the Burnt Lodge WSA would be managed consistent with surrounding BLM land. If released by Congress, the Bitter Creek WSA would be managed as an ACEC and a management plan would be developed to provide semi-primitive, motorized recreation opportunities.

BLM Manual 6330-Management of BLM Wilderness Study Areas describes the policies under which the BLM will manage the WSAs under wilderness review until Congress either designates these lands as wilderness or releases them for other purposes. Section 603(c) of FLPMA tells the BLM how to manage lands under wilderness review, in these words: "During the period of review of such areas and until Congress has determined otherwise, the Secretary shall continue to manage such lands according to his authority under this Act and other applicable law in a manner so as not to impair the suitability of such areas for preservation as wilderness...."

**Figure 2.4**  
**Bitter Creek Wilderness Study Area**



Created by the Malta Field Office in December 2012

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1:153,648

Albers Equal Area, NAD83, Meters

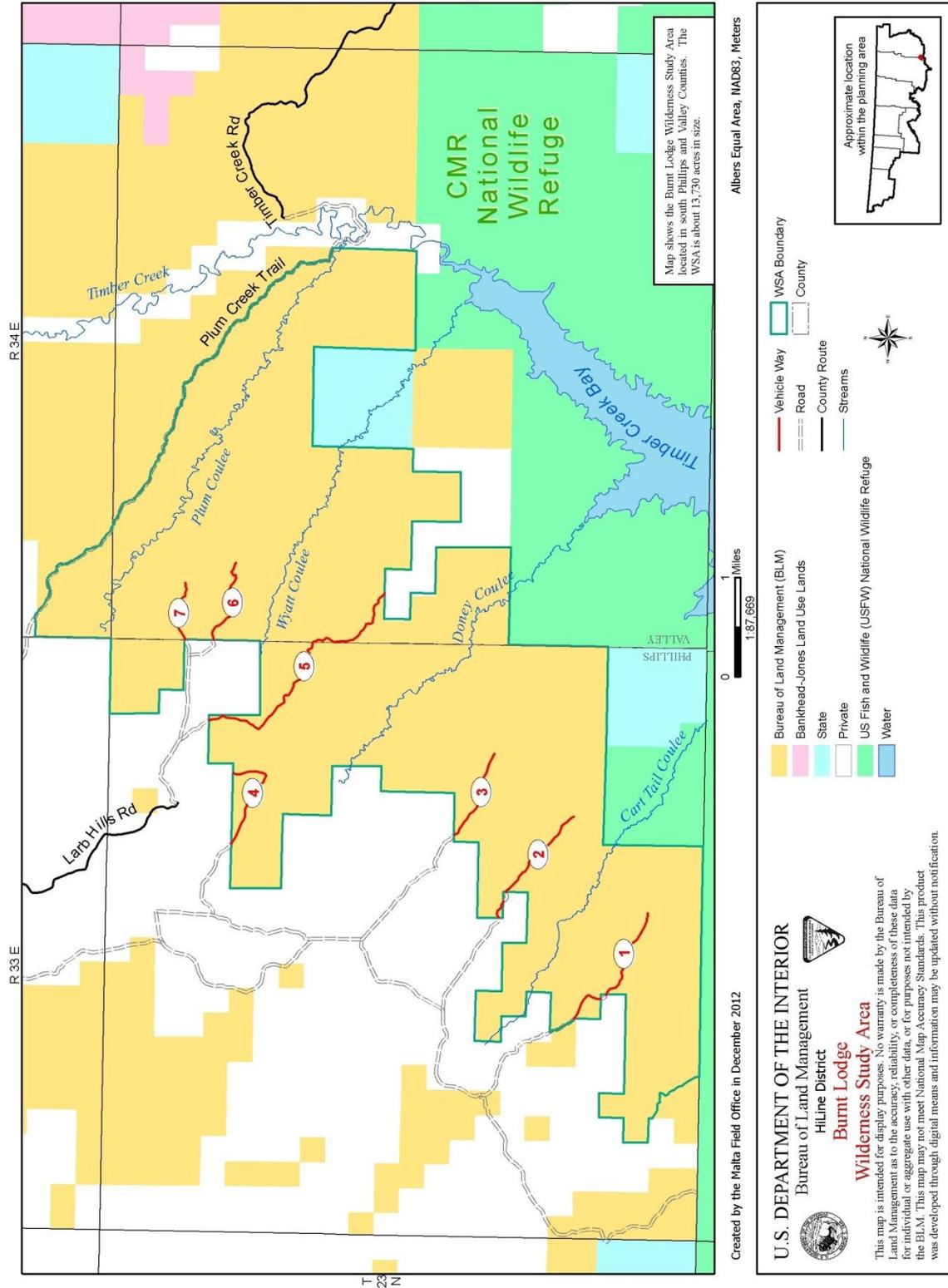
**U.S. DEPARTMENT OF THE INTERIOR**  
Bureau of Land Management  
HiLine District  
**Bitter Creek Wilderness Study Area**

|                                 |              |
|---------------------------------|--------------|
| WSA Boundary                    | Vehicle Way  |
| Bureau of Land Management (BLM) | Road         |
| Bankhead-Jones Land Use Lands   | County Route |
| State                           | Streams      |
| Private                         |              |
| Water                           |              |

Approximate location within the planning area

This map is intended for display purposes. No warranty is made by the Bureau of Land Management as to the accuracy, reliability, or completeness of these data for individual or aggregate use with other data, or for purposes not intended by the BLM. This map may not meet National Map Accuracy Standards. This product was developed through digital means and information may be updated without notification.

**Figure 2.5**  
**Burnt Lodge Wilderness Study Area**



This language is referred to as the “nonimpairment” mandate. The BLM will review all proposals for uses and/or facilities within the WSAs to determine whether the proposal meets the nonimpairment standard. Uses and/or facilities found to be nonimpairing may be permitted on lands under wilderness review. Uses and/or facilities found to be impairing will be denied. The following criteria are referred to as the nonimpairment criteria.

### **Nonimpairment Criteria**

The use, facility, or activity must be temporary. This means a temporary use that does not create surface disturbance or involve permanent placement of facilities may be allowed if such use can easily and immediately be terminated upon wilderness designation. “Temporary” means the use or facility may continue until the date of wilderness designation, at which time the use must cease and/or the facility must be removed. In the WSAs, “surface disturbance” is any new disruption of the soil or vegetation that would necessitate reclamation.

Decisions to allow or deny proposed actions based on the nonimpairment criteria will be included in appropriate decision documents.

When the use, activity, or facility is terminated, the wilderness values must not have been degraded so far as to significantly constrain the Congress’s prerogative regarding suitability of the area for preservation as wilderness.

The only permitted exceptions to the above rules are:

- emergencies such as suppression activities associated with wildfire or search and rescue operations;
- reclamation activities designed to minimize impacts to wilderness values created by violations and emergencies;
- uses and facilities that are considered grandfathered or valid existing rights under FLPMA;
- ensure public safety as remediation for human-caused hazards in the WSA;
- protect or enhance wilderness characteristics or values; and
- other legal requirements.

Any of these activities should be carried out in the least impairing manner practicable.

Some lands under wilderness review may contain minor facilities that were found in the wilderness inventory process to be substantially unnoticeable. For example, these may include primitive vehicle routes (“ways”) and livestock developments. BLM Manual 6330 does not require such facilities to be removed or discontinued. They may be used and maintained as before, as long as this does not cause new impacts that would impair the area’s wilderness suitability.

## **Vegetation – Rangeland**

### Goal

*Manage the vegetative resource to maintain a diversity of ecological conditions on upland vegetation while providing for a variety of multiple uses that are economically and biologically feasible.*

### **Objectives**

Manage uplands to meet health standards and meet or exceed proper functioning condition within site or ecological capability (Appendix H and Appendix M). Where appropriate, fire would be used as a management agent to achieve/maintain disturbance regimes supporting healthy functioning vegetation conditions.

Manage surface-disturbing activities in a manner to minimize degradation to rangelands and soil quality.

## Decisions Common to All Alternatives

The BLM will ensure consistency with achieving or maintaining Standards for Rangeland Health and Guidelines for Livestock Grazing Management for Montana, North Dakota, and South Dakota (BLM 1997a).

Any increase in vegetation allocation will be applied to watershed protection until soils are stabilized to a satisfactory condition as determined by an interdisciplinary team prior to increasing livestock or wildlife allocations.

The BLM will consult with MFWP and seek concurrence regarding the anticipated benefits and/or impacts of any vegetation treatments that may impact wildlife habitat including priority sage-grouse habitat.

## Alternative A (Current Management)

A minimum rest period of two growing seasons would be required after any major disturbance to vegetation communities. More rest may be required depending on the situation. Major disturbances are defined as mechanical manipulation of rangeland (i.e.; seeding, chiseling, and wildfire or prescribed fire). Requirements for rest following fire (wild or prescribed) would depend on a variety of factors including the type of fuel, time of burn, accessibility of the burned area to livestock, and climatic factors post-burn. Specific timing and the type of rest is determined at the site-specific environmental assessment phase for small disturbances.

Grass seed or hay may be sold from BLM land if an interdisciplinary environmental analysis finds it to be in the best interest of the public. Hay or seed cutting may be used as a land treatment to improve production of crested wheatgrass.

Range improvements (primarily reservoirs, fences and land treatments) would be built to support AMPs. Fences would be designed to allow easy passage of wildlife.

In the Prairie Potholes area, one water source per section would be the guideline for water development.

Alternate water developments, springs, wells, pipelines, etc. would be considered before constructing reservoirs greater than 5 acre feet in volume in soil subgroups 3 and 4 due to erosive soils and high siltation rates which shorten reservoir life. An interdisciplinary team would review the placement of water sources on soil subgroups 3 and 4 in areas that historically have not been grazed. Changes in grazing season or AUM reductions would be considered as alternatives to implementing grazing methods that would require water developments on these soils.

The BLM would use land treatments to meet watershed, grazing management and wildlife objectives. Land treatments would only be applied where grazing management alone would not accomplish the desired result. Clubmoss blue grama vegetation, dense clay and claypan ecological sites, dense big sagebrush stands, and dense pine-juniper stands are the soil/vegetation types considered for treatments. These would increase infiltration of water into the soil, improve ecological condition, improve wildlife habitat, and increase vegetation production.

Monitoring would be conducted on a priority watershed basis.

Increased production resulting from land treatments would be allocated toward accomplishing multiple use objectives. When all objectives of the AMP are accomplished, additional forage resulting from land treatments would normally be allocated 75% to watershed and wildlife and 25% to livestock. If private wildlife funding is used to do the treatment, the additional allocation would be to wildlife. Conversely, where there is substantial contribution by the livestock permittee and no conflicts with wildlife objectives, up to 50% of the additional vegetation may be allocated to livestock.

Existing crested wheatgrass seedings would be managed where feasible as spring use pastures to defer native rangeland grazing, except where sagebrush invasion has resulted in important wildlife habitat. Crested wheatgrass seedings may be maintained for maximum livestock forage production with up to 70% of the production allocated to livestock when soils are stabilized to a satisfactory condition. Mechanical treatments and fertilization are management practices which renovate old crested wheatgrass stands to benefit associated native rangeland.

Crested wheatgrass seedings may be used to consolidate existing scattered stands of crested wheatgrass into a manageable unit. New seedings of crested wheatgrass or other species may be used where no other option is available to meet the resource objectives. Reseeding old crested wheatgrass stands to native species is not normally feasible due to the difficulty of eliminating the crested wheatgrass and the cost of native seeds.

The initiating party would be required to rehabilitate surface disturbances greater than one-quarter acre.

Native species in the site's natural plant community would normally be seeded to revegetate all surface disturbances. Some reclamation may involve introduced species if these species are necessary to stabilize the site.

## **Alternative B**

### **Objective**

Manage priority sage-grouse habitats so that discrete anthropogenic disturbances cover less than 3% of the total sage-grouse habitat regardless of ownership to protect priority sage-grouse habitats from anthropogenic disturbances that will reduce distribution or abundance of sage-grouse.

### **Management Actions**

Site-specific sage-grouse habitat and management objectives would be developed for BLM land within the Greater Sage-Grouse Protection Priority Area ACEC and the Grassland Bird/Greater Sage-Grouse Priority Areas ACEC. These objectives would be incorporated into the respective allotment management plans (AMPs) or livestock grazing permits as appropriate.

Rest periods from livestock grazing of less than two growing seasons in vegetation treatment areas may be desirable in some circumstances, and would be determined through site-specific interdisciplinary planning, monitoring, and environmental review. For example, it may be desirable in some cases to use grazing to control weedy or invasive species immediately following a vegetation treatment.

Selling of grass seed or hay from BLM land would not be authorized.

Range improvements would be constructed to manage use of vegetation to support multiple use resource management.

Water developments would be installed and/or maintained to facilitate control of livestock use of vegetation, support other uses, and protect resource values. In order to minimize surface disturbance, have reliable water of better quality and not alter normal surface flow of water, alternative water developments would be emphasized before constructing new pits and reservoirs.

The BLM would use land treatments to achieve and maintain fire regimes, and watershed, grazing management, and wildlife objectives. Within the Greater Sage-Grouse Protection Priority Area ACEC and the Grassland Bird/Greater Sage-Grouse Priority Areas ACEC, only treatments that conserve, enhance or restore greater sage-grouse and/or grassland bird habitat would be allowed.

Rangeland health monitoring and assessments would be conducted within current staffing capabilities. The allotments within the Greater Sage-Grouse Protection Priority Area ACEC and the Grassland Bird/Greater Sage-Grouse Priority Areas ACEC would be high priority for reassessment of land health standards and processing grazing permits as detailed in Appendix M, Mitigation Measures and Conservation Actions for Greater Sage-Grouse Habitat. Rangeland health monitoring plans would be developed and implemented at the field office level.

Increased production resulting from land treatments would be allocated toward accomplishing multiple use objectives. Additional forage resulting from land treatments could be temporarily allocated 75% to watershed and wildlife, and 25% to livestock. Conversely, where there is substantial contribution by the livestock permittee and no conflicts with wildlife objectives, up to 50% of the additional vegetation may be temporarily allocated to livestock.

The BLM would evaluate crested wheatgrass seedings emphasizing conversion to native species on a case-by-case basis. Where native restoration of old crested wheatgrass seedings is considered, farming and herbicide use would be authorized for up to three years in order to help destroy the old crested wheatgrass seed bank and improve the success of the native seeding.

The initiating party would be required to reclaim surface disturbances greater than one-tenth acre. Range improvement pits and reservoirs would be excluded until abandonment.

All surface disturbances would be reseeded/revegetated with native plant species common to the site's natural plant community. Site-specific environmental analysis may warrant the use, on a case-by-case basis, of introduced species where difficult site stabilization or wildlife concerns prevail.

The best available vegetation treatment would be considered for managing cheatgrass and annual bromes, including but not limited to early spring grazing, mid-summer prescribed fire, and herbicide use.

## Alternative C

Site-specific sage-grouse habitat and management objectives would be developed for BLM land within the Greater Sage-Grouse Protection Priority Area and the Grassland Bird/Greater Sage-Grouse Priority Areas. These objectives would be incorporated into the respective allotment management plans (AMPs) or livestock grazing permits as appropriate.

Rest periods from livestock grazing of less than two growing seasons in vegetation treatment areas may be desirable in some circumstances, and would be determined through site-specific interdisciplinary planning, monitoring, and environmental review. For example, it may be desirable in some cases to use grazing to control weedy or invasive species immediately following a vegetation treatment.

Selling of grass seed, hay, or other vegetative products may be authorized. Hay or seed cutting may be used as a land treatment to improve production of crested wheatgrass provided it is not in conflict with wildlife or wildlife habitat values.

Range improvements would be constructed to manage use of vegetation to support multiple use resource management.

Water developments would be installed and/or maintained to facilitate control of livestock use of vegetation, support other uses, and protect resource values. In order to minimize surface disturbance, have reliable water of better quality and not alter normal surface flow of water, alternative water developments would be emphasized before constructing new pits and reservoirs.

The BLM would use land treatments to achieve and maintain fire regimes, and watershed, grazing management, and wildlife objectives. Within the Greater Sage-Grouse Protection Priority Area and the Grassland Bird/Greater Sage-Grouse Priority Areas, only treatments that conserve, enhance or restore greater sage-grouse habitat would be allowed.

Rangeland health monitoring and assessments would be conducted within current staffing capabilities. The allotments within the Greater Sage-Grouse Protection Priority Area and the Grassland Bird/Greater Sage-Grouse Priority Areas would be high priority for reassessment of land health standards and processing grazing permits as detailed in Appendix M, Mitigation Measures and Conservation Actions for Greater Sage-Grouse Habitat. Rangeland health monitoring plans would be developed and implemented at the field office level.

Increased production resulting from land treatments would be allocated toward accomplishing multiple use objectives. Additional forage resulting from land treatments could be temporarily allocated 75% to watershed and wildlife, and 25% to livestock. Conversely, where there is substantial contribution by the livestock permittee and no conflicts with wildlife objectives, up to 50% of the additional vegetation may be temporarily allocated to livestock.

Existing crested wheatgrass seedings would be managed where feasible as spring use pastures to defer native rangeland grazing. Crested wheatgrass seedings would be maintained for maximum livestock forage production with up to 70% of the production allocated to livestock when soils are stabilized to a satisfactory condition. Mechanical treatments and

fertilization are management practices which renovate old crested wheatgrass stands to benefit associated native rangeland. Additional crested wheatgrass seedings may be used to consolidate existing scattered stands of crested wheatgrass into manageable units. Where native restoration of old crested wheatgrass seedings is considered, farming and herbicide use could be authorized for up to three years in order to help destroy the old crested wheatgrass seed bank and improve the success of the native seeding.

The initiating party would be required to reclaim surface disturbances greater than one-tenth acre. Range improvement pits and reservoirs would be excluded until abandonment.

All surface disturbances would be reseeded/revegetated with native plant species common to the site's natural plant community. Site-specific environmental analysis may warrant the use, on a case-by-case basis, of introduced species where difficult site stabilization or wildlife concerns prevail.

The best available vegetation treatment would be considered for managing cheatgrass and annual bromes, including but not limited to early spring grazing, mid-summer prescribed fire, and herbicide use.

## Alternative D

Rest periods from livestock grazing of less than two growing seasons in vegetation treatment areas may be desirable in some circumstances, and would be determined through site-specific interdisciplinary planning, monitoring, and environmental review. For example, it may be desirable in some cases to use grazing to control weedy or invasive species immediately following a vegetation treatment.

Selling of grass seed, hay, or other vegetative products may be authorized. Hay or seed cutting may be used as a land treatment to improve production of crested wheatgrass provided it is not in conflict with wildlife or wildlife habitat values.

Range improvements would be constructed to manage use of vegetation to support multiple use resource management.

In the Prairie Potholes area, one water source per section would be the guideline for water development.

Alternate water developments, springs, wells, pipelines, etc. would be considered before constructing reservoirs greater than 5 acre feet in highly erodible soils with high siltation rates which shorten reservoir life. An interdisciplinary team would review the placement if water sources are on soils that historically have not been grazed. Changes in grazing season or AUM reductions would be considered as alternatives to implementing grazing methods that would require water developments on these soils.

The BLM would use land treatments to achieve and maintain fire regimes, and watershed, grazing management, and wildlife objectives.

Rangeland health monitoring and assessments would be conducted within current staffing capabilities, utilizing a priority allotment basis. Rangeland health monitoring plans would be developed and implemented at the field office level.

Increased production resulting from land treatments would be allocated toward accomplishing multiple use objectives. Additional forage resulting from land treatments could be temporarily allocated 75% to watershed and wildlife, and 25% to livestock. Conversely, where there is substantial contribution (at least 50% of total cost as direct or in-kind contribution) by the livestock permittee and no conflicts with wildlife objectives, up to 50% of the additional vegetation may be temporarily allocated to livestock.

Existing crested wheatgrass seedings would be managed where feasible as spring use pastures to defer native rangeland grazing. Crested wheatgrass seedings would be maintained for maximum livestock forage production with up to 70% of the production allocated to livestock when soils are stabilized to a satisfactory condition. Mechanical treatments and fertilization are management practices which renovate old crested wheatgrass stands to benefit associated native rangeland. Additional crested wheatgrass seedings may be used to consolidate existing scattered stands of crested wheatgrass into manageable units. Where native restoration of old crested wheatgrass seedings is considered, farming

and herbicide use could be authorized for up to three years in order to help destroy the old crested wheatgrass seed bank and improve the success of the native seeding.

The initiating party would be required to reclaim surface disturbances greater than one-tenth acre. Range improvement pits and reservoirs would be excluded until abandonment.

All surface disturbances would be reseeded/revegetated with native plant species common to the site's natural plant community. Site-specific environmental analysis may warrant the use, on a case-by-case basis, of introduced species where difficult site stabilization or wildlife concerns prevail.

The best available vegetation treatment would be considered for managing cheatgrass and annual bromes, including but not limited to early spring grazing, mid-summer prescribed fire, and herbicide use.

## **Alternative E (Preferred Alternative)**

Site-specific sage-grouse habitat and management objectives would be developed for BLM land within the Greater Sage-Grouse Protection Priority Area and the Grassland Bird/Greater Sage-Grouse Priority Areas. These objectives would be incorporated into the respective allotment management plans (AMPs) or livestock grazing permits as appropriate.

Rest periods from livestock grazing of less than two growing seasons in vegetation treatment areas may be desirable in some circumstances, and would be determined through site-specific interdisciplinary planning, monitoring, and environmental review. For example, it may be desirable to use grazing to control weedy or invasive species immediately following a vegetation treatment.

Selling of grass seed, hay, or other vegetative products may be authorized. Hay or seed cutting may be used as a land treatment to improve production of crested wheatgrass provided it is not in conflict with wildlife or wildlife habitat values.

Range improvements would be constructed to manage use of vegetation to support multiple use resource management.

Water developments would be installed and/or maintained to facilitate control of livestock use of vegetation, support other uses, and protect resource values. In order to minimize surface disturbance, have reliable water of better quality and not alter normal surface flow of water, alternative water developments would be emphasized before constructing new pits and reservoirs. The BLM would manage water developments within greater sage-grouse habitat to reduce the spread of West Nile virus (Appendix M).

The BLM would use land treatments to achieve and maintain fire regimes, and watershed, grazing management, and wildlife objectives. Within the Greater Sage-Grouse Protection Priority Area and the Grassland Bird/Greater Sage-Grouse Priority Areas, treatments that conserve, enhance or restore greater sage-grouse habitat would be allowed as well as treatments that benefit other resources and do not adversely affect sage-grouse or their habitat.

Rangeland health monitoring and assessments would be conducted within current staffing capabilities. The allotments within the Greater Sage-Grouse Protection Priority Area and the Grassland Bird/Greater Sage-Grouse Priority Areas would be high priority for reassessment of land health standards and processing grazing permits as detailed in Appendix M, Mitigation Measures and Conservation Actions for Greater Sage-Grouse Habitat. Rangeland health monitoring plans would be developed and implemented at the field office level.

Increased production resulting from land treatments would be allocated toward accomplishing multiple use objectives. Additional forage resulting from land treatments could be temporarily allocated 75% to watershed and wildlife, and 25% to livestock. Conversely, where there is substantial contribution (at least 50% of the total cost as direct or in-kind contribution) by the livestock permittee and no conflicts with wildlife objectives, up to 50% of the additional vegetation may be temporarily allocated to livestock.

Existing crested wheatgrass seedings would be managed where feasible as spring use pastures to defer native rangeland grazing. Crested wheatgrass seedings would be maintained for maximum livestock forage production with up to 70% of

the production allocated to livestock when soils are stabilized to a satisfactory condition. Mechanical treatments and fertilization are management practices which renovate old crested wheatgrass stands to benefit associated native rangeland. Additional crested wheatgrass seedings may be used to consolidate existing scattered stands of crested wheatgrass into manageable units. Where native restoration of old crested wheatgrass seedings is considered, farming and herbicide use could be authorized for up to three years in order to help destroy the old crested wheatgrass seed bank and improve the success of the native seeding.

The initiating party would be required to reclaim surface disturbances greater than one-tenth acre if necessary to protect other resources. Range improvement pits and reservoirs would be excluded until abandonment.

All surface disturbances would be reseeded/revegetated with native plant species common to the site's natural plant community. Site-specific environmental analysis may warrant the use, on a case-by-case basis, of introduced species where difficult site stabilization or wildlife concerns prevail.

Native species needed for reclamation and restoration activities, including the restoration of sage-grouse habitats in the planning area, will be identified and prioritized. Seed that is not available commercially should be collected following the procedures outline in the Seeds of Success Protocol from local sources. Locally collected seed should be used to create sources of native plant materials through increase locally with willing farmers or through work with NRCS Plant Materials Programs or through both. Cleaning and storage of seed until sent for increase must be addressed so that viability is maintained.

The best available vegetation treatment would be considered for managing cheatgrass and annual bromes, including but not limited to early spring grazing, mid-summer prescribed fire, and herbicide use.

## Vegetation – Riparian and Wetland

### Goals

*Manage activities to ensure healthy and proper functioning condition of riparian areas within site or ecological capability.*

### Objectives

Ensure consistency with achieving or maintaining the Standards for Rangeland Health and Guidelines for Livestock Grazing Management for Montana, North Dakota, and South Dakota (BLM 1997a) and, as a minimum, all riparian areas with natural capability would be in proper functioning condition (PFC).

Develop site-specific objectives and management strategies for riparian and wetland areas during the development and implementation of proposed actions and activity plans.

Maintain, restore, or improve riparian areas to achieve a healthy and productive ecological condition that provides benefits and values within site capability.

### Decisions Common to All Alternatives

Wetland and riparian areas are unique and among the most productive and important ecosystems. Although comprising only a small percentage of the BLM lands, they affect most other resources and values. Given the high value of these areas for a variety of resources, all aspects of riparian and wetland area inventory, monitoring, and management will involve a multidisciplinary effort.

Extensive inventories have been conducted across the planning area to locate, quantify, and broadly classify wetland and riparian areas. The proper functioning condition (PFC) methodology is utilized by the BLM to assess the physical functioning of riparian and wetland areas. The term PFC is used to describe both the assessment process and a defined, on-the-ground condition of a riparian or wetland area. The PFC assessment provides a consistent approach for assessing

how well the physical processes are functioning in wetland and riparian areas through consideration of hydrology, vegetation, and soil/landform attributes. An implementation plan will be developed that contains an assessment and monitoring plan for riparian and wetland areas. User guides to assessing proper functioning condition and the supporting science for lotic areas (TR 1737-15) and lentic areas (TR 1737-16) will be adhered to by the BLM's interdisciplinary identification and assessment teams.

The BLM will enhance or restore riparian composition and structure beyond PFC in riparian areas where and when appropriate for other resource values. This may include, but is not limited to, establishing riparian pastures, stream corridor/ shoreline fencing, specialized grazing methods, winter grazing use, a different species of livestock, and rehabilitation protective measures.

The BLM will conserve riparian/wetland habitat by intensifying cooperative efforts among federal, state and private interests and will minimize the destruction, loss or degradation of wetlands.

Wetlands will be protected in accordance with the provisions of Executive Order (EO) No. 11990, Protection of Wetlands. Under the provisions of this EO, the BLM must minimize the destruction, loss or degradation of wetlands when acquiring, managing and disposing of federal lands and facilities.

Riparian protection will be provided by the Montana Streamside Management Zone Law (77-5-301 through 77-5-307 MCA). Streamside Management Zones (SMZs) provide regulation for the protection of water quality. The SMZ encompasses a strip at least 50 feet wide on each side of a stream, lake, or other body of water, measured from the ordinary high water mark, and extends beyond the high water mark to include wetlands and areas that provide additional protection in zones with steep slopes or erodible soils. The SMZ provides the minimum regulatory standards for forest practices in riparian areas.

Ephemeral drainages and some mapped intermittent streams would not be covered by the SMZs under the definitions in the state regulations. These areas, however, would be covered by management stipulations commonly known as BMPs (Appendix C).

Prescribed fire could be used as a management agent to support healthy functioning riparian conditions.

## **Alternative A (Current Management)**

Riparian and wetland areas would be avoidance areas in the western (West HiLine RMP) portion of the planning area.

Range improvements (primarily reservoirs, fences and land treatments) would be built to support AMPs.

Saline seeps would be evaluated on an individual basis to assess the cause (i.e., natural or anthropogenic), understand the purview, and determine how the seeps should be managed. Exclosure of the seep, no action, or complete reclamation of the seep would ensue, depending on the outcome of the evaluation.

All existing and future riparian exclosures would be monitored and evaluated for future removal. At that time, AMPs would be revised to provide management prescriptions to maintain the riparian community condition.

## **Alternatives B and E (Preferred Alternative)**

Riparian areas with unique values (i.e., where water quality habitat for special status species (Appendix M) is an issue) would be treated as avoidance areas for rights-of-way (installation of infrastructure that requires surface disturbance and/or permanent surface occupancy).

Grazing techniques and practices detailed in Appendix M, Mitigation Measures and Conservation Actions for Greater Sage-Grouse Habitat would be implemented to reduce hot season (summer) grazing on riparian and meadow complexes within the Greater Sage-Grouse Protection Priority Area and the Grassland Bird/Greater Sage-Grouse Priority Areas. Alternate water facilities would be installed to relieve grazing impacts on riparian areas inside of priority sage-grouse habitat.

Saline seeps that occur as a result of surface-disturbing activities would be prioritized and reclaimed. Surface-disturbing activities with the potential for producing seep areas would be designed with mitigation measures to minimize development of saline seeps.

Riparian exclosures would be maintained, monitored, evaluated and/or modified for their intended purpose. If they no longer serve a resource management purpose they would be removed.

No pits would be placed in natural wetlands and in some cases pits may be filled in to improve wildlife habitat in natural wetlands (Appendix M). Wetlands that have been drained for water consolidation may be restored by plugging drainage ditches, and alternative water developments may be developed in these areas.

## Alternatives C and D

Alternate water facilities would be installed to relieve grazing impacts on riparian areas.

Saline seeps that occur as a result of surface-disturbing activities would be prioritized and reclaimed. Surface-disturbing activities with the potential for producing seep areas would be designed with mitigation measures to minimize development of saline seeps.

Riparian exclosures would be maintained, monitored, evaluated and/or modified for their intended purpose. If they no longer serve a resource management purpose they would be removed.

## Vegetation – Special Status Plants

### Goal

*Ensure that in meeting the BLM's multiple use mandate, special status plants and plant communities are managed, conserved, and/or restored for future generations.*

## Objectives

Promote the conservation and recovery of BLM special status plant species and their habitats.

## Decisions Common to All Alternatives

The BLM will manage for the conservation of BLM special status plants and their associated habitats and to ensure that actions authorized, funded, or carried out do not contribute to the need to list any species as threatened or endangered. Site-specific prescriptions may include avoidance of special status plant habitat for ROWs, seasonal timing restrictions for grazing (e.g., limited to no grazing during flowering to seed set for a particular species), no salt or water placement within 0.25 miles of a known special status plant species population, seed collection or transplanting of special status plant species for mitigation.

The BLM will inventory lands to determine which BLM special status plant species occur on public lands, the condition of the plant populations and their habitats, and how discretionary BLM actions affect those plant species and their habitats.

The BLM will cooperatively participate in recovery plans, management plans and conservation strategies for special status species plants and will work with federal, tribal, and state agencies as well as private landowners to improve habitat for special status plants.

Through activity plans for other resources (e.g., watershed plans, fire management plans, allotment management plans, etc.) the BLM will design site-specific management prescriptions and projects to benefit individual species habitats and communities. Special status plants will be monitored to assess their condition and trend.

## Visual Resources

### Goal

*Manage scenic values in accordance with the objectives established for visual resource management classes.*

## Objectives

The visual resource management (VRM) classes are based on a process that considers scenic quality, sensitivity to changes in the landscape and distance zone. The four VRM classes are numbered I to IV; the lower the number, the more sensitive and scenic the area. Each class has a management objective which prescribes the level of acceptable change in the landscape. The objectives are guidelines to be used with the visual resource contrast rating system during new project-level planning. The management objectives will not preclude the maintenance of existing structures and range improvements.

The VRM class objectives are defined as follows:

**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 predominant 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. These management activities may dominate the view and be the major 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 of form, line, color, and texture in the natural characteristic landscape.

The degree to which a management activity affects the visual quality depends on the visual contrast created between the project and the existing landscape. The contrast is measured by comparing elements of form, line, color, and texture to describe the visual contrast created by a project. The visual resource contrast rating system determines whether proposed activities meet VRM objectives.

## Decisions Common to All Alternatives

Visual resource design techniques and BMPs will be used to minimize short and long-term visual impacts. Contrast ratings will be completed for all proposed projects in Class I and II areas, and for proposed projects in Class III and IV areas that are high-impact projects or located in highly sensitive areas.

The visual resource contrast rating system will be used during project level planning to determine whether or not proposed activities will meet VRM objectives. The contrast rating system provides a systematic means to evaluate proposed projects and determine whether these projects conform with the approved VRM objectives. The degree to which a management activity affects the visual quality depends on the visual contrast created between the project and the existing landscape. The contrast is measured by comparing elements of form, line, color, and texture to describe the visual contrast created by a project. Mitigation measures would then be identified to reduce visual contrasts, and

rehabilitation plans to address landscape modifications would be prepared on a case-by-case basis. The analysis can then be used as a guide for resolving visual impacts. Once every attempt is made to reduce visual impacts, the project will be re-evaluated for conformance to the VRM Class objectives using the Contrast Rating process. If the project remains out of conformance, the authorized officer may deny the project proposal, attach additional mitigations to bring the proposal into compliance with the existing VRM Class, or pursue a land use plan amendment in order to adjust the VRM Class and objectives for the area.

In VRM Class I, II, III and IV areas the BLM may prohibit surface-disturbing activities if such activities are not designed to meet the intent of the VRM Class objectives.

### Alternative A (Current Management)

Under current management over 80% of the planning area would continue to be managed as a VRM Class IV area and no lands would be managed as VRM Class I (Table 2.19 and Map 2.16, which is located at the end of Chapter 2).

The Bitter Creek WSA would be managed as a VRM Class II and IV area, while the Burnt Lodge WSA would be managed as a VRM Class II area. The following areas would also be managed as VRM Class II:

- an area south of the Willow Creek Road in Valley County and north of the Charles M. Russell National Wildlife Refuge;
- areas along the Milk River;
- Bears Paw area west of the Little Rocky Mountains and south of Highway 2;
- Frenchman area in north Phillips County;
- Little Rocky Mountains including the Azure Cave ACEC; and
- portions of the Sweet Grass Hills ACEC.

In all areas, surface-disturbing activities, semi-permanent and permanent facilities may require special designs (location, painting and camouflage) to blend with the natural surroundings and meet the intent of the VRM Class objectives.

### Alternative B

The Burnt Lodge and Bitter Creek WSAs and adjacent lands, along with the Sweet Grass Hills and Kevin Rim ACECs and adjacent lands, would be managed as VRM Class I areas (90,032 acres) (Table 2.19 and Map W.8, which is available at <http://blm.gov/8qkd>). The following areas would be managed as VRM Class II (977,396 acres):

- an area south of the Dry Fork Road in Phillips County and the area south of the Willow Creek Road in Valley County and north of the Charles M. Russell National Wildlife Refuge;
- areas just north of the Upper Missouri River Breaks National Monument;
- Bears Paw area west of the Little Rocky Mountains and south of Highway 2;
- Frenchman area in north Phillips County;
- Little Rocky Mountains including the Azure Cave and Zortman/Landusky Mine Reclamation ACECs;
- Marias River area; Mountain Plover ACEC and surrounding area; and
- areas managed for wilderness characteristics.

| <i>VRM Class</i> | <i>Alternative A<br/>(Current<br/>Management)</i> | <i>Alternative B</i> | <i>Alternative C</i> | <i>Alternative D</i> | <i>Alternative E<br/>(Preferred<br/>Alternative)</i> |
|------------------|---|----------------------|----------------------|----------------------|--|
| I                | 0   | 90,032               | 74,506               | 74,506               | 74,506   |
| II               | 417,334   | 977,396              | 914,197              | 127,439              | 841,087  |
| III              | 58,213  | 498,298              | 521,322              | 584,113              | 521,868  |
| IV               | 1,961,928   | 871,748              | 927,449              | 1,651,416            | 1,000,013  |

The remaining BLM lands would be managed as VRM Class III (498,298 acres) and VRM Class IV (871,748 acres).

## Alternative C

The Burnt Lodge and Bitter Creek WSAs would be managed as VRM Class I areas (74,506 acres) (Table 2.19 and Map W.8, which is available at <http://blm.gov/8qkd>). The following areas would be managed as VRM Class II (914,197 acres):

- an area south of the Dry Fork Road in Phillips County and the area south of the Willow Creek Road in Valley County and north of the Charles M. Russell National Wildlife Refuge;
- areas just north of the Upper Missouri River Breaks National Monument;
- Frenchman area in north Phillips County;
- Marias River area;
- Mountain Plover ACEC and surrounding area;
- Woody Island, Sweet Grass Hills, and Kevin Rim areas; and
- areas managed for wilderness characteristics.

The remaining BLM lands would be managed as VRM Class III (521,322 acres) and VRM Class IV (927,449 acres).

In VRM Class II areas the BLM would reduce the visual contrast on BLM land in the existing landscape by utilizing proper site selection, reducing soil and vegetative disturbance, choice of color, and over time, returning the disturbed areas to a seamless, natural landscape.

## Alternative D

The Burnt Lodge and Bitter Creek WSAs would be managed as VRM Class I areas (74,506 acres) (Table 2.19 and Map W.8, which is available at <http://blm.gov/8qkd>). The following areas would be managed as VRM Class II (127,439 acres):

- Frenchman area in north Phillips County; and
- Woody Island and Little Rocky Mountains ACECs.

The remaining BLM lands would be managed as VRM Class III (584,113 acres) and VRM Class IV (1,651,416 acres).

In all areas, surface-disturbing activities, semi-permanent and permanent facilities may require special designs (location, painting and camouflage) to blend with the natural surroundings and meet the intent of the VRM Class objectives.

## Alternative E (Preferred Alternative)

The Burnt Lodge and Bitter Creek WSAs would be managed as VRM Class I areas (74,506 acres) (Table 2.19 and Map 2.16). The following areas would be managed as VRM Class II (841,087 acres):

- an area south of the Dry Fork Road in Phillips County and the area south of the Willow Creek Road in Valley County and north of the Charles M. Russell National Wildlife Refuge;
- areas just north of the Upper Missouri River Breaks National Monument;
- Bitter Creek area;
- Frenchman area including the Frenchman ACEC;
- Kevin Rim area;
- Marias River area;
- Sweet Grass Hills area;
- Woody Island area; and
- areas managed for wilderness characteristics.

The remaining BLM lands would be managed as VRM Class III (521,868 acres) and VRM Class IV (1,000,013 acres).

In VRM Class II areas the BLM would reduce the visual contrast on BLM land in the existing landscape by utilizing proper site selection, reducing soil and vegetative disturbance, choice of color, and over time, returning the disturbed areas to a seamless, natural landscape.

## Water Resources

### Goal

*Maintain, improve or restore the chemical, physical, and biological integrity of waters to protect beneficial uses.*

## Objectives

Ensure water quality and availability for authorized beneficial uses and proper watershed, wetland, riparian, and stream channel functions.

Prevent, minimize, and/or remediate contributions of non-point source pollution from BLM land to all receiving waters, including groundwater resources.

## Decisions Common to All Alternatives

Surface and ground water quality will be maintained to state and federal water quality standards, including Standard for Rangeland Health #3 which requires that water quality meets Montana state standards. BMPs (Appendix C) will be used to prevent nonpoint source water pollution, and mitigation measures will be applied on a case-by-case basis. Permits pertaining to projects affecting water quality, wetlands, or streams will be obtained, and outside applicants will be required to provide copies of permits (e.g., 310, 404) prior to BLM authorization.

Projects will be reviewed on a case-by-case basis to minimize impacts to water quality. All proposed reservoirs will be designed with a minimum 15-year life expectancy, and the BLM will evaluate other types of improvements to determine the need for alternate site water facilities (e.g., wells, springs). The BLM will continue to comply with Montana water laws, obtain water rights for all projects, and participate in the water adjudication process.

The State of Montana identifies impaired and non-impaired waters in its 303(d)/305(b) Integrated Report. This report lists all segments known to exceed state water quality standards, lists segments that do not fully support beneficial uses, and identifies the probable causes and sources of any water quality impairment. The State uses all available scientifically credible data including indicators such as dissolved oxygen concentration, pH, turbidity, temperature, fecal coliform, sulfates, nitrates, phosphorus, sodium, and sediment to make beneficial use determinations.

Through an existing memorandum of understanding with the Montana DEQ, the BLM will participate in the development, implementation, and monitoring of water quality restoration plans (WQRPs) and total maximum daily load (TMDL) in watershed planning areas in which the BLM is a significant land manager or water user.

The BLM will use reasonable land, soil, and water conservation practices to prevent harm to public health, recreation, safety, welfare, livestock, birds, fish, or other wildlife prior to the adoption of WQRPs and TMDLs.

The BLM will manage federal lands with reasonable land, soil, and water conservation practices in order to protect waterbodies that currently meet

### **Total Maximum Daily Load (TMDL)**

Montana's Clean Water Act provides guidance for surface water classification, water quality standards, and Total Maximum Daily Load (TMDL) development and implementation where water quality is impaired or threatened.

TMDL is the maximum pollutant load a specific water body can assimilate and still meet water quality standards. The goal of Montana's TMDL program is to produce Water Quality Restoration Plans that meet the U.S. Environmental Protection Agency's (EPA) TMDL criteria.

The State of Montana's Nonpoint Source Management Plan indicates that Water Quality Restoration Plans (WQRP) with TMDL components should be used as guidance for nonpoint source restoration.

state water quality standards and improve water quality where beneficial uses are not fully supported. The BLM manages nonpoint source pollution by controlling the cause and source of pollutants through the use of pollution control measures such as BMPs and soil and water conservation practices. These measures are discussed in detail in the Montana Nonpoint Source Management Plan (MDEQ 2007). The BLM is responsible for monitoring progress and success once pollution control measures are implemented.

Disposal of produced water from any oil and gas fields will be in accordance with Onshore Order No. 7 and EPA guidelines.

### **Alternative A (Current Management)**

The BLM would maintain some of the Willow Creek Basin watershed control structures in south Valley County for wildlife, riparian and access values. Other structures would be abandoned. Contour furrowing and grazing methods to improve ground cover and control erosion, runoff and sedimentation would be applied in the Willow Creek Basin and in other locations with similar soils.

New reservoirs would be evaluated on a case-by-case basis through the environmental review process.

### **Alternative B**

Watershed control structures would be maintained on a case-by-case basis to meet Standards for Rangeland Health.

New reservoirs would not be built where water would inundate highly productive riparian areas and areas of important wildlife habitat, such as buffaloberry thickets.

Water supply sources (e.g., wells, springs, reservoirs, and stream and lake access) for BLM-authorized actions (e.g., grazing, wildlife, recreation, etc.) would comply with Montana water laws.

The BLM would encourage oil and gas operators to develop and implement methods that treat produced water and enable its beneficial use.

### **Alternative C**

Watershed control structures would be maintained on a case-by-case basis to meet Standards for Rangeland Health.

Water supply sources (e.g., wells, springs, reservoirs, and stream and lake access) for BLM-authorized actions (e.g., grazing, wildlife, recreation, etc.) would comply with Montana water laws.

The BLM would avoid the discharge of produced water from point sources to BLM land, including stream channels and uplands, as a means of disposal. Any allowed discharge would be in compliance with DEQ requirements.

### **Alternative D**

Watershed control structures would be maintained on a case-by-case basis to meet Standards for Rangeland Health.

Water supply sources (e.g., wells, springs, reservoirs, and stream and lake access) for BLM-authorized actions (e.g., grazing, wildlife, recreation, etc.) would comply with Montana water laws.

### **Alternative E (Preferred Alternative)**

Watershed control structures would be maintained on a case-by-case basis to meet Standards for Rangeland Health or public safety concerns.

New reservoirs would be considered on a site-specific basis through activity planning and would consider livestock grazing practices, important wildlife habitat, alternate water sources, and the opportunity to replace or repair existing reservoirs.

Water supply sources (e.g., wells, springs, reservoirs, and stream and lake access) for BLM-authorized actions (e.g., grazing, wildlife, recreation, etc.) would comply with Montana water laws.

The BLM would avoid the discharge of produced water from point sources to BLM land, including stream channels and uplands, as a means of disposal. Any allowed discharge would be in compliance with DEQ requirements.

## Wilderness Characteristics

### *Goal*

*Where practical, manage lands with wilderness characteristics for naturalness, solitude, and outstanding opportunities for primitive and unconfined recreation.*

### Objective

Manage specific areas for their wilderness characteristics while providing for multiple uses throughout the planning area.

### Alternative A (Current Management)

The BLM would continue to manage other multiple uses as a priority over protecting wilderness characteristics.

### Alternative B

The BLM would manage all of the areas possessing wilderness characteristics to protect those characteristics as a priority over other multiple uses (26 areas and 386,428 acres) (Table 2.20 and Map W.9, which is available at <http://blm.gov/8qkd>).

The areas would be closed to oil and gas leasing (373,445 acres). The existing oil and gas leases (47,135 acres) would continue according to the respective stipulations until they expire. As these leases expire, the areas would no longer be available for oil and gas leasing.

The areas would be identified for retention and would not be available for sale or exchange (Category 1 lands under Land Ownership Adjustment).

The areas would be avoidance areas for rights-of-way and exclusion areas for wind energy rights-of-way. In avoidance areas, efforts would be made to reroute a proposal. A right-of-way may be allowed if no reasonable alternative is found; however, special mitigation measures may be required to protect sensitive resource values. Rights-of-way may also be allowed if they support or promote other management objectives for the areas.

No changes to livestock grazing or grazing allocations would occur on any lands managed for wilderness characteristics, and all agreements and provisions for maintenance and upkeep of existing range improvements would continue to remain in effect including access to and maintenance of range improvements. New range improvements and land treatments could be allowed provided they meet with the objective of enhancing or restoring those wilderness characteristics being managed for and meet the intent of the visual quality objectives of the VRM class.

These areas would not be available for wind energy rights-of-way. As a result, these areas will be closed to commercial wind energy development, including wind energy site monitoring and testing.

The Island Mountain Range (4,118 acres) would be closed to OHV use and would be a low priority for travel management planning. All the other areas would be limited for OHV use. Five areas (90,997 acres) within the Prairie

Grassland group would be a high priority for travel management planning. The other areas (291,348 acres) would be a moderate priority for travel management planning. In these areas travel would be limited to existing roads, primitive roads and trails until subsequent travel management plans designate a motorized and nonmotorized transportation network after completion of this RMP. High priority areas will normally have travel management planning completed within five years of the signing of the Record of Decision, as funding and staffing allow.

The Island Mountain Range (4,118 acres) would be managed as semi-primitive nonmotorized under the recreation opportunity spectrum (ROS): some opportunity for isolation from man-made sights, sounds, and management controls in a predominantly unmodified environment and motorized use is prohibited. The ROS class for the other areas (382,344 acres) would be semi-primitive motorized: some opportunity for isolation from man-made sights, sounds, and management controls in a predominantly unmodified environment and motorized use is permitted.

| <i>Alternative A<br/>(Current Management)</i>  | <i>Alternative B</i> | <i>Alternative C</i> | <i>Alternative D</i> | <i>Alternative E<br/>(Preferred Alternative)</i> |
|--|----------------------|----------------------|----------------------|--|
| <b>Areas Managed to Protect Wilderness Characteristics As a Priority Over Other Resource Values and Multiple Uses*</b>   |                      |                      |                      |  |
| NA   | 26 areas             | 12 areas             | 0                    | 2 areas  |
| NA   | 386,428 acres        | 228,395 acres        | 0                    | 10,714 acres                                     |
| <b>Acres Managed to Emphasize Other Resource Values and Multiple Uses While Applying Management Restrictions to Reduce Impacts to Wilderness Characteristics**</b> |                      |                      |                      |  |
| NA   | 0                    | 75,327 acres**       | 0                    | 290,865 acres                                    |
| <b>Acres Managed to Emphasize Other Resource Values and Multiple Uses As a Priority Over Protecting Wilderness Characteristics***</b>                              |                      |                      |                      |  |
| NA   | 0                    | 82,706 acres         | 386,428 acres        | 84,849 acres                                     |

\* Management proposed under the Preferred Alternative for these two areas includes:

- Fluid Minerals:* NSO with no Waivers, Exceptions, or Modifications (WEMs).
- Land Ownership Adjustment:* Category 2 -Retention/Limited Disposal (exchange only - no sale).
- Rights-of-Way:* Avoidance Areas.
- OHV Area Designations:* Limited.
- Renewable Energy – Wind:* Exclusion.
- Recreation Opportunity Spectrum:* Semi-Primitive Motorized.
- Visual Resource Management:* VRM Class II.

\*\* Management proposed for other resource drivers including the Sweet Grass Hills TCP, Frenchman ACEC, Grassland Bird/Greater Sage-Grouse Priority Areas, and Greater Sage-Grouse Protection Priority Area is complementary to maintaining wilderness characteristics in these areas. Management proposed under the Preferred Alternative for these areas includes:

- Fluid Minerals:* Closed within the Sweet Grass Hills TCP; NSO with no WEMs within the Frenchman ACEC; and NSO with WEMs within the Grassland Bird/Greater Sage-Grouse Priority Areas.
- Land Ownership Adjustment:* Category 1 – Retention within the Sweet Grass Hills ACEC; Category 2 – Retention/Limited Disposal within all other areas.
- Rights-of-Way:* Avoidance Areas.
- OHV Area Designations:* Closed within the Sweet Grass Hills ACEC; Limited within all other geographic areas.
- Renewable Energy – Wind:* Exclusion
- Recreation Opportunity Spectrum:* Semi-Primitive Nonmotorized within the Sweet Grass Hills ACEC; Semi-Primitive Motorized within the remainder of geographic area.
- Visual Resource Management:* VRM Class I within the Sweet Grass Hills ACEC; VRM Class II within the remainder of the geographic area.

\*\*\* In coordination with the interdisciplinary team and the BLM HiLine District Manager and Field Managers, it was determined that these areas either cannot be effectively managed to protect wilderness characteristics or the management or use of other resources takes precedence over wilderness characteristics. However, BLM-authorized activities associated with all resources and all resource use programs in these areas would be subject to mitigation and minimization guidelines and Best Management Practices (BMPs) in Appendix C.

The Island Mountain Range (4,118 acres) would be managed as VRM Class I and the other areas would be managed as VRM Class II (382,344 acres). In VRM Class I and II areas, the BLM may prohibit surface-disturbing activities if such activities are not designed to meet the intent of the visual quality objectives of the VRM class. In VRM Class I areas the objective is to preserve the existing character of the landscape. In VRM Class II areas the objective is to retain the existing character of the landscape.

## Alternative C

The BLM would manage 12 areas (228,395 acres) to protect wilderness characteristics as a priority over other multiple uses (Table 2.20 and Map W.9, which is available at <http://blm.gov/8qkd>).

Eight of the areas would be closed to oil and gas leasing (143,795 acres) and the other areas (78,281 acres) would be open to leasing with a no surface occupancy (NSO) stipulation. The existing oil and gas leases (766 acres) would continue according to the respective stipulations until they expire. As these leases expire, they would no longer be available for oil and gas leasing.

The areas would be identified for retention and would not be available for sale or exchange (Category 1 lands under Land Ownership Adjustment).

Three of the areas (51,055 acres) would be exclusion areas for all rights-of-way. Exclusion areas are not available for location of rights-of-way under any condition. The other areas (177,340 acres) would be avoidance areas for rights-of-way. In avoidance areas, efforts would be made to reroute a proposal. A right-of-way may be allowed if no reasonable alternative is found; however, special mitigation measures may be required to protect sensitive resource values. Rights-of-way may also be allowed if they support or promote other management objectives for the areas.

No changes to livestock grazing or grazing allocations would occur on any lands managed for wilderness characteristics, and all agreements and provisions for maintenance and upkeep of existing range improvements would continue to remain in effect including access to and maintenance of range improvements. New range improvements and land treatments could be allowed provided they meet with the objective of enhancing or restoring those wilderness characteristics being managed for and meet the intent of the visual quality objectives of the VRM class.

The Island Mountain Range (4,118 acres) would be closed to OHV use and would be a low priority for travel management planning. All the other areas would be limited for OHV use. Four areas (92,599 acres) within the Prairie Grassland group would be a high priority for travel management planning. The other areas (142,568 acres) would be a moderate priority for travel management planning. In these areas travel would be limited to existing roads, primitive roads and trails until subsequent travel management plans designate a motorized and nonmotorized transportation network after completion of this RMP. High priority areas will normally have travel management planning completed within five years of the signing of the Record of Decision, as funding and staffing allow.

Seven of the areas (143,654 acres) would be managed as semi-primitive nonmotorized under the recreation opportunity spectrum (ROS): some opportunity for isolation from man-made sights, sounds, and management controls in a predominantly unmodified environment and motorized use is prohibited. The ROS class for the other areas (95,631 acres) would be semi-primitive motorized: some opportunity for isolation from man-made sights, sounds, and management controls in a predominantly unmodified environment and motorized use is permitted.

These areas would be exclusion areas for wind energy rights-of-way. As a result, these areas will be closed to commercial wind energy development, including wind energy site monitoring and testing.

All of the areas would be managed as VRM Class II. In VRM Class II areas, the BLM may prohibit surface-disturbing activities if such activities are not designed to meet the intent of the visual quality objectives of the VRM class. The objective is to retain the existing character of the landscape.

## Alternative D

The BLM would manage other multiple uses as a priority over protecting wilderness characteristics.

## Alternative E (Preferred Alternative)

The BLM would manage 2 areas (Areas 49B and 53) in the Eastern Breaks and Badlands (10,714 acres) to protect wilderness characteristics as a priority over other multiple uses (Table 2.20 and Figure 2.6).

The areas would be open to oil and gas leasing with a no surface occupancy (NSO) stipulation (10,714 acres).

The areas would be identified for retention or very limited disposal through exchange. The lands would not be available for sale (Category 2 lands under Land Ownership Adjustment). The BLM land would not be disposed of other than by exchange and only when necessary to further protect or enhance the wilderness characteristics.

The areas would be avoidance areas for rights-of-way. In avoidance areas, efforts would be made to reroute a proposal. A right-of-way may be allowed if no reasonable alternative is found; however, special mitigation measures may be required to protect sensitive resource values. Rights-of-way may also be allowed if they support or promote other management objectives for the areas.

No changes to livestock grazing or grazing allocations would occur on any lands managed for wilderness characteristics, and all agreements and provisions for maintenance and upkeep of existing range improvements would continue to remain in effect including access to and maintenance of range improvements. New range improvements and land treatments could be allowed provided they meet with the objective of enhancing or restoring those wilderness characteristics being managed for and meet the intent of the visual quality objectives of the VRM class.

The areas would be limited for OHV use and a high priority for travel management planning. In these areas travel would be limited to existing roads, primitive roads and trails until subsequent travel management plans designate a motorized and nonmotorized transportation network after completion of this RMP.

The areas would be managed as semi-primitive motorized under the recreation opportunity spectrum (ROS): some opportunity for isolation from man-made sights, sounds, and management controls in a predominantly unmodified environment and motorized use is permitted.

These areas would be exclusion areas for wind energy rights-of-way. As a result, these areas will be closed to commercial wind energy development, including wind energy site monitoring and testing.

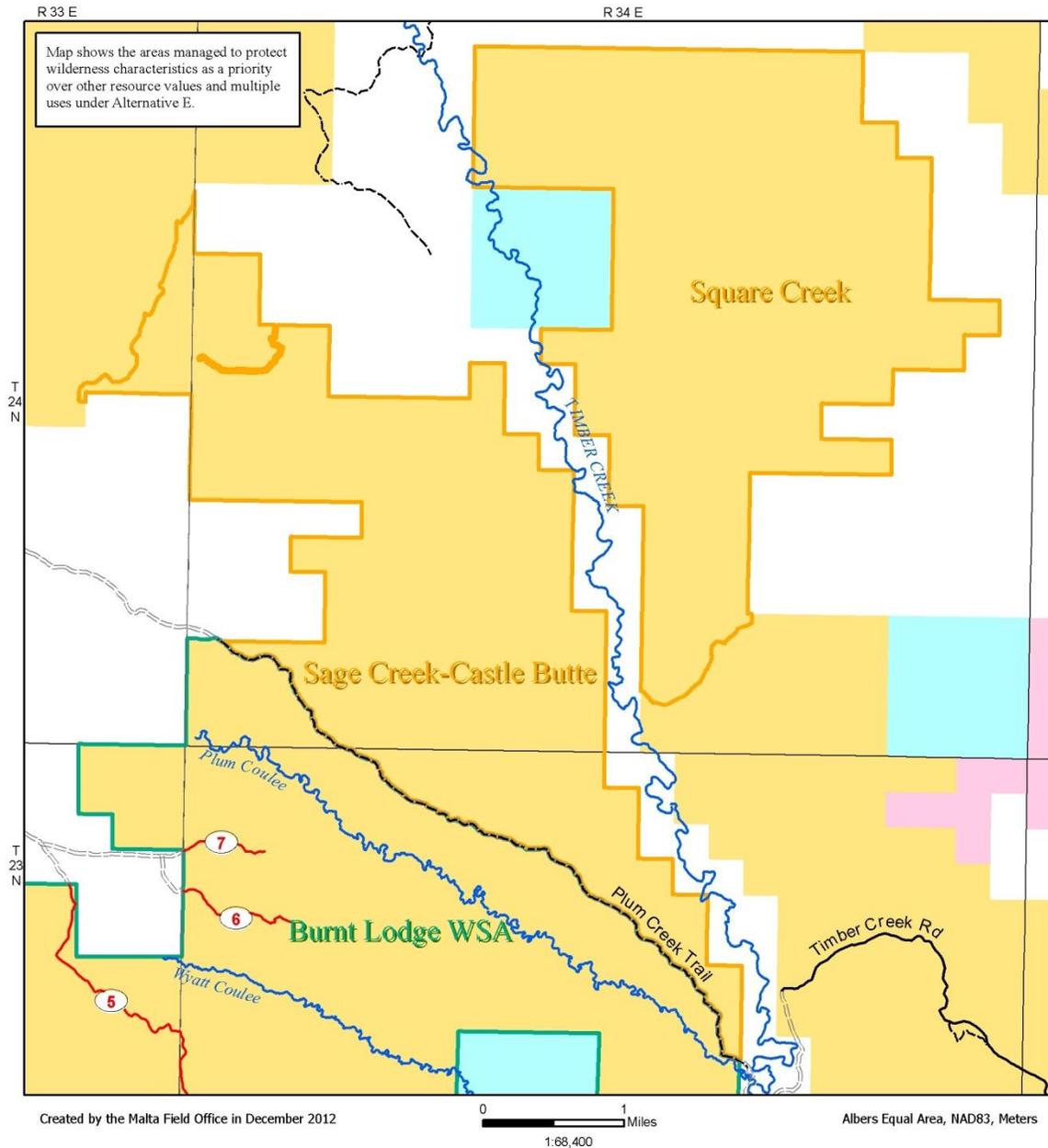
The areas would be managed as VRM Class II (10,714 acres). In VRM Class II areas, the BLM may prohibit surface-disturbing activities if such activities are not designed to meet the intent of the visual quality objectives of the VRM class. In VRM Class II areas the objective is to retain the existing character of the landscape.



Sage Creek Area in Valley County

Photo by Kathy Tribby

**Figure 2.6**  
**Areas Managed for Wilderness Characteristics**  
**Alternative E (Preferred Alternative)**



Created by the Malta Field Office in December 2012 Albers Equal Area, NAD83, Meters

**U.S. DEPARTMENT OF THE INTERIOR**  
 Bureau of Land Management  
 HiLine District

**Areas with Wilderness Characteristics**  
**Alternative E (Preferred)**

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|                                      |              |
|--------------------------------------|--------------|
| Area with Wilderness Characteristics | Vehicle Way  |
| Wilderness Study Area                | Road         |
| Bureau of Land Management (BLM)      | County Route |
| Bankhead-Jones Land Use Lands        |              |
| State                                |              |
| Private                              |              |
| Water                                |              |

## Wildlife

### Goals

*Ensure habitat for native wildlife is of sufficient quantity and quality to enhance biological diversity and sustain ecological, economic and social values.*

*Identify, conserve, enhance and monitor rare, vulnerable, and representative habitats, communities, and ecosystems to ensure self-sustaining persistence of special status species.*

*Ensure that proposed land uses initiated or authorized by the BLM minimize damage to wildlife habitat and populations of special status species.*

*Promote public awareness, appreciation, and understanding of wildlife conservation, management, and ecology.*

*Maintain and/or increase greater sage-grouse abundance and distribution by conserving, enhancing or restoring the sagebrush ecosystem upon which populations depend in cooperation with other conservation partners*

## Objectives

The necessary habitat, biological processes, and disturbance regimes would be present to maintain, enhance, or restore priority wildlife habitat and populations of special status species. Land use would maintain habitat quality and large intact blocks of habitat. Habitat quality and land use would allow wildlife species movements between large blocks of habitat and between seasonal habitats on a localized and landscape scale.

The BLM will maintain and enhance habitat for wildlife species. The emphasis for habitat maintenance and restoration will be placed on present and potential habitat for priority species such as sensitive, threatened and/or endangered species. The BLM would prioritize wildlife habitat improvement projects such as restoration of sagebrush communities through invasive species removal and native shrub reestablishment. Priority will be given to projects that improve habitat conditions in areas where there is the greatest expectation of an increase in wildlife populations or population viability resulting from the restoration enhancement work.



Bighorn Sheep

Photo by Craig Miller

Use individual species management strategies and/or known habitat associations to design habitat management strategies to promote management of as many species as possible.

Implement habitat improvement projects where necessary to restore wildlife habitat and/or to improve unsatisfactory or declining wildlife habitat.

Manage priority wildlife habitat, special status species habitat, and populations using multi-scale assessments to identify current conditions, risks, and opportunities.

Maintain, enhance, or restore habitat availability and condition for special status species, and minimize habitat loss.

Protect priority greater sage-grouse habitats from anthropogenic disturbances that will reduce distribution or abundance of sage-grouse.

Minimize fragmentation of large intact blocks of important wildlife habitat, particularly habitat areas for greater sage-grouse and grassland birds.

## Decisions Common to All Alternatives

### General Wildlife

The BLM will provide ecological conditions that support wildlife species (Appendix Q) over the long term and promote maintenance and recovery of federally listed species and BLM sensitive species (Appendix Q). The planning area provides for the range of habitat requirements for species by managing for the broad level ecosystem desired conditions. This strategy will involve a two-tiered approach:

- The structure, composition, and disturbance processes of ecosystems that maintain habitat are managed for attainable and sustainable desired conditions that meet a variety of management objectives. The historic range of variability of habitat conditions are used for comparison and guidance in order to manage for habitats that sustain a broad range of wildlife species found in the planning area. Changes in land use within the planning area as well as on adjacent lands often preclude the BLM from attaining these goals on all BLM lands.
- Species with conservation concerns are evaluated in order to determine limiting habitats, population influences, and special habitat needs not provided through ecosystem-level management. Species identified may need additional protection as specified in conservation strategies for individual species or species groups. Incorporating design components found in the desired conditions and guidelines detailed in the RMP, species conservation strategies and recovery plans, or species assessments based on the best available science will maintain or enhance key habitat and habitat effectiveness in order to provide diversity components and maintain wildlife sustainability. Species and management actions identified for this level of management are mostly addressed in the Special Status Species section.

New fences would follow BLM specifications to allow for wildlife passage, except for fences built specifically to keep wildlife out of an area. Fences would also be placed and marked, or modified, to reduce wildlife collisions or entanglements.

Powerlines and substations constructed on BLM land would comply with the most current raptor protection standards (currently Suggested Practices for Avian Protection on Power Lines: The State of the Art 2006 (APLIC 2006)). Existing powerlines that have been identified as having problems with collision or electrocution of wildlife and do not meet APLIC standards will be corrected and modified to prevent future wildlife collision threats or electrocution. Powerlines that are in good working order will be maintained and upgraded as deemed necessary.

Wildlife mortality at water tanks on BLM land will be minimized, primarily through the use of functional wildlife escape ramps. All new tanks will have effective escape ramps built in and existing tanks will have effective escape ramps installed.

**Mitigation Measures and  
Conservation Actions  
For  
Surface-Disturbing and Disruptive Activities**

Mitigation measures and conservation actions are Best Management Practices (BMPs), operating procedures, or design features that have been developed to avoid, minimize, rectify, reduce, or compensate for potentially significant adverse environmental impacts associated with surface-disturbing or disruptive activities.

For the purposes of applying mitigation measures, surface-disturbing and disruptive activities are defined below.

**Surface-Disturbing Activities:** The physical disturbance or removal of land surface and vegetation. Some examples of surface-disturbing activities include, but are not limited to, construction of roads, well pads, pipelines, powerlines, pits/reservoirs, facilities, recreation sites, and mining. Vegetation renovation treatments that involve soil penetration and/or substantial mechanical damage to plants (plowing, chiseling, chopping, etc.) are also surface-disturbing activities.

**Disruptive Activities:** Those resource uses and activities that are likely to alter the behavior of, displace, or cause excessive stress to wildlife populations occurring at a specific location and/or time. In this context, disruptive activity(ies) refers to those actions that alter behavior or cause the displacement of wildlife such that reproductive success is negatively affected, or the physiological ability to cope with environmental stress is compromised. This term does not apply to the physical disturbance of the land surface, vegetation, or features. Examples of disruptive activities may include fence construction, noise, vehicle traffic, or other human presence regardless of the activity. The term is used in conjunction with protecting wildlife during crucial life stages (e.g., breeding, nesting, birthing, etc.), although it could apply to any resource value.

These definitions are not intended to prohibit all activities or authorized uses. For example, emergency activities (e.g., fire suppression, search and rescue), rangeland monitoring, routine maintenance associated with an approved authorization, dispersed recreational activities (e.g., hunting, hiking) and livestock grazing are not considered surface-disturbing or disruptive activities.

Mitigation for migratory birds will be considered during activity level planning because the number of species, variety of habitats, and variation in seasonal movements limit the ability to provide effective mitigation for all species at the resource management planning level.

Management activities will consider current adopted strategies including Montana's Comprehensive Fish and Wildlife Conservation Strategy (MFWP 2005) and currently accepted science. The BLM will continue to implement, review, and update as necessary the Prairie Pothole Waterfowl and Fisheries Habitat Management Plan (HMP) of North Central Montana (BLM 1978), Whitewater Lake Waterfowl Habitat Development Project HMP (BLM 1970a), and Milk River Hills Pronghorn Winter Range HMP (BLM 1970b).

Implementation and consistent and effective monitoring of outcomes for habitat and species will provide the impetus toward the desired conditions. Monitoring will provide necessary data to evaluate RMP management decisions and will help identify needs for changes in management practices. Monitoring to track changing conditions in key areas and for specific species (Appendix R) is an important step in accomplishing objectives and achieving desired conditions.

Coordination and partnerships with state and federal agencies, tribal governments, commercial interests, interested organizations and individuals will serve as an important way to achieve desired conditions throughout the planning area, particularly for wildlife species and populations that span administrative and legal boundaries.

The BLM will work with local organizations, schools and other agencies to provide educational programs, information brochures, interpretive sites, etc. to promote public awareness, appreciation, and understanding of wildlife conservation, management, and ecology.

### **Special Status Species**

The BLM will ensure habitat is provided for special status species (Tables 3.51 and 3.52 in Chapter 3). Proposed actions will not jeopardize the continued existence of a threatened or endangered species, or cause its habitat to be adversely modified or destroyed.

The BLM will continue cooperative participation in recovery plans, management plans and conservation strategies for special status species.

Fragmentation of large intact blocks of important wildlife habitat will be minimized, particularly protection priority areas for greater sage-grouse and priority habitat for grassland birds.

## **Alternative A (Current Management)**

### **General Wildlife**

New and replacement fences would follow BLM specifications to allow easy passage of wildlife such as pronghorn, deer, elk and bighorn sheep.

**Bighorn Sheep:** No changes in livestock class from cows to domestic sheep would be allowed in areas occupied by bighorn sheep in the West HiLine planning area. In the Judith-Valley-Phillips planning area domestic sheep grazing would not be allowed to overlap bighorn sheep habitat.

**Migratory Birds:** Migratory bird habitat would be managed on a case-by-case basis through the environmental review of other resource activities.

**Waterfowl:** In the West HiLine planning area all high value waterfowl and fisheries would be evaluated to determine the need for fencing to promote riparian vegetation establishment. In the Judith-Valley-Phillips planning area the BLM would implement livestock grazing formulas to improve waterfowl nesting cover on allotments with existing or potential water production.

### **Special Status Species**

**Black-tailed Prairie Dog:** The BLM, in cooperation with the USFWS and MFWP, would maintain the existing prairie dog habitat and distribution on BLM land within the 7km Complex based on a 1988 survey. The BLM would also support cooperative agreements for prairie dog towns on the Charles M. Russell National Wildlife Refuge (CMR), lands administered by Montana DNRC, and private land within the 7km Complex. The 7km Complex contains approximately 26,000 acres of prairie dog towns (16,392 BLM acres, 5,800 CMR acres, 2,012 Montana DNRC acres, and 5,821 private acres). Management actions would be directed to cooperatively maintain this amount of prairie dog habitat. Prairie dogs on BLM land outside the 7km Complex are nonessential to black-footed ferret recovery and would be maintained at the existing level (1988 survey) or controlled based on values other than the ferret.

The BLM would monitor prairie dog towns for expansion, and all allotments within the 7km Complex with prairie dog towns would be categorized as "I" (Improved). The BLM would control prairie dog expansion on BLM lands within the 7km Complex when the acreage exceeds the existing level (based on a 1988 survey). The BLM would maintain the prairie dog towns on BLM lands outside the 7km Complex at the existing level. The BLM may reduce or eradicate some small, isolated prairie dog towns.

Prairie dog reduction methods may include using EPA-registered toxicants or nontoxic methods for prairie dog control (i.e., barriers, water, vegetation enhancement, prairie dog sterilization, biological control, etc.).

When poisoning is scheduled on a prairie dog town which includes state and private land, a cooperative effort would be made to control the entire town. The cost of poisoning for state and private land would be the responsibility of the private landowner or the state land permittee.

The loss of prairie dog habitat on private land may be compensated for by developing additional habitat on BLM land in the vicinity of the habitat loss. Prairie dog expansion within the 7km Complex above the level recorded in the 1988 survey would not be allowed on BLM land without AUM mitigation. Any loss of livestock forage due to prairie dog habitat increases on BLM lands above the 1988 level would be mitigated through land treatments (mechanical, fire, etc.).

The BLM would manage firearm discharge on BLM land before and after ferret reintroduction. The BLM would respond to requests for information, prepare maps, sign prairie dog towns, and manage the towns to provide for recreational shooting. Firearm discharge may temporarily be prohibited on prairie dog towns where black-footed ferret reintroduction is occurring. However, recreational shooting would be managed on these towns and towns subsequently occupied by the ferret, unless impacts from shooting are shown to be detrimental.

**Greater Sage-Grouse:** The national and Montana greater sage-grouse conservation strategies would be used as the basis to address sage-grouse needs during the watershed planning process and project level analysis.

**Mountain Plover:** The following management actions would apply to protect mountain plover habitat and maintain regional mountain plover populations:

- Mountain plover habitat would include an NSO stipulation for oil and gas leasing: surface occupancy and use would be prohibited within 1/4 mile of essential habitat (Appendix E.4).
- Activities for existing oil and gas leases would be managed according to BMPs (Appendix E.2).

**Piping Plover:** The following management actions would apply to protect piping plover habitat and maintain regional piping plover populations:

- Piping plover habitat would include an NSO stipulation for oil and gas leasing: surface occupancy and use would be prohibited within 1/4 mile of essential and critical habitat (Appendix E.4).
- Activities for existing oil and gas leases would be managed according to BMPs (Appendix E.2).

**Sprague's Pipit:** The following management actions would apply to protect Sprague's pipit habitat:

- Mitigation for oil and gas activities would occur as timing limits in the conditions of approval for APDs when proposed wells are located in appropriate habitat. The timing condition would avoid well development from April 15 through July 15.

## Alternative B

### General Wildlife

Fences identified as potential barriers to wildlife movement or representing significant hazards for wildlife on BLM land would be inventoried. Fences would be prioritized for replacement or modification based on wildlife resource values.

**Bighorn Sheep:** No new sheep or goat allotments would be allowed in bighorn sheep habitat. New sheep/goat allotments or conversion from cows to sheep/goats would not be allowed within 20 miles of occupied wild bighorn sheep habitat. Exact distances between domestic sheep and bighorn sheep would be based on habitat and movement potential.

**Migratory Birds:** The BLM would follow the Prairie Pothole Joint Venture Implementation Plan (PPJV 2005) to analyze site-specific proposed actions and determine whether BLM lands are meeting rangeland health standards. The BLM would use the following management actions to integrate the goals of the PPJV into programmatic and site-specific management decisions:

- Emphasize maintenance and restoration of habitats that sustain sensitive species; and
- Enhance or restore habitat composition and structure beyond PFC in riparian habitats, where and when appropriate, for migratory bird habitat.

**Waterfowl:** Upland and emergent vegetation in pastures surrounding reservoirs established or rebuilt for waterfowl values would be managed to provide adequate nesting and brood rearing cover for waterfowl.

## Special Status Species

### Objective

Manage priority sage-grouse habitats so that discrete anthropogenic disturbances cover less than 3% of the total sage-grouse habitat regardless of ownership to protect priority sage-grouse habitats from anthropogenic disturbances that will reduce distribution or abundance of sage-grouse.

### Management Actions

Mitigation of surface-disturbing or disruptive activities would be applied where needed to minimize impacts of human activities on important seasonal special status species habitats consistent with the wildlife stipulations outlined in the Fluid Minerals section of Chapter 2 and Appendix M, Mitigation Measures and Conservation Actions for Greater Sage-Grouse Habitat. Mitigation measures would be applied on a case-by-case basis during activity level planning if an evaluation of the project area indicates the presence of important wildlife species. Exceptions may be granted by the authorized officer if an environmental review demonstrates that effects could be mitigated to an acceptable level, habitat for the species is not present in the area, or portions of the area could be occupied without affecting a particular species. Exceptions may also be granted where the short-term effects would be mitigated by the long-term benefits (e.g., prescribed fire or forest health treatments).

**Black-tailed Prairie Dog:** The BLM would adopt the MFWP Region 6 Prairie Dog Abundance and Distribution Objectives Plan (MFWP 2006a) and would commit to achieving prairie dog objectives outlined in the plan.

#### Prairie Dog Abundance and Distribution Objectives (MFWP 2006a)

Maintain abundance and distribution of black-tailed prairie dogs. Acreages of active prairie dog towns would range between 30,500 and 41,400 acres (36,000 acres plus or minus 15%) in the planning area for the next 20 years and would consist of:

- One Category 1 complex of 5000+ acres of active prairie dog towns spaced no more than 1.5 km (1 mile) apart. This complex will not be actively managed to exceed 10,000 acres;
- Six to eight Category 2 complexes of 1,000 or more acres of active prairie dog towns. Two or three of these complexes would follow the 1.5 km rule and the remainder would follow the 7km rule; and
- Category 3 prairie dog towns would be scattered throughout the historic prairie dog range in the planning area.

**Grassland Bird/Greater Sage-Grouse Priority Areas:** To minimize habitat fragmentation, four areas with BLM surface ownership would be managed as an ACEC to retain intact blocks of native vegetation. One of these areas is also a sage-grouse core area identified by MFWP. These four areas would include 461,220 acres of BLM surface (Map 2.17, which is located at the end of Chapter 2). The following management actions would apply to the four areas:

- The areas would be closed to oil and gas leasing (471,989 acres of federal minerals). The area would not be available for geophysical exploration except to obtain exploratory information for areas outside of and adjacent to the Priority Areas. Existing leases would be allowed to expire and would not be renewed.
- Exploration and development activities for existing oil and gas leases would be managed according to BMPs (Appendix E.2), or other mitigation measures, through conditions of approval in authorizing APDs or plans of development. Consistent with surface use rights granted, the existing lease may be subject to “restrictions deriving from specific, nondiscretionary statutes; and such reasonable measures as may be required by the authorized officer to minimize adverse impacts to other resource values, land uses or users not addressed in the lease stipulations at the time operations are proposed” (43 CFR 3101.1-2).

Overall consideration shall be given to minimizing the impact to sage-grouse through a project design that avoids, minimizes, reduces, rectifies, and/or adequately compensates for direct and indirect impacts to sage-grouse habitat or use and includes applicable and technically feasible conditions of approval (Appendix M). Selection and application of these measures shall be based on current science and research on the effects to important breeding, nesting, brood-rearing, and wintering areas.

- The areas would be exclusion areas for the issuance of rights-of-way except within designated corridors. The BLM would consider opportunities to remove, bury, or modify existing powerlines (e.g., burying, anti-perching devices or line location).
- Where leases or rights-of-way have some level of development (e.g., road, fence, well, etc.) that are no longer in use, the site would be reclaimed by removing the features and restoring the habitat. Upon project completion or right-of-way expiration, roads built and maintained for commercial use across BLM land would be reclaimed, unless based on site-specific analysis, the route provides specific benefits to the public and the continued public use does not contribute to resource conflicts.
- The areas would remain available for livestock grazing. Site-specific grassland bird and/or greater sage-grouse habitat and management objectives would be developed for BLM land and incorporated into the respective allotment management plans (AMPs) or livestock grazing permits as appropriate.
- Existing range improvements, including the location of supplements, would be evaluated and if necessary modified to conserve, enhance or restore sage-grouse habitat.
- The areas would be exclusion areas for wind energy rights-of-way.
- The areas would be recommended for withdrawal from locatable mineral entry (469,916 acres) and closed to leasable (471,945 acres) and salable minerals (317,197 acres). The areas would not be available for other withdrawal proposals unless the land management is consistent with greater sage-grouse conservation measures.
- The areas would be limited to existing mineral material disposal permits, which could be renewed with limited expansion.

#### Grassland Bird/Greater Sage-Grouse Priority Areas

Areas containing substantial and high quality grasslands that support large populations of a suite of special status grassland bird species. This suite of species includes the following species of concern: Sprague's pipit, chestnut-collared longspur, McCown's longspur, Baird's sparrow, and long-billed curlew. Management actions would emphasize the conservation and enhancement of sustainable grassland bird habitats. Areas are delineated by using survey results, predictive models of species distributions, and land ownership patterns.

These areas also include core area for greater sage-grouse identified by MFWP. Sage-grouse core areas are habitats associated with 1) Montana's highest densities of sage-grouse, based on male counts and/or 2) sage-grouse lek complexes and associated habitat important to sage-grouse distribution.

**General Greater Sage-Grouse Habitat Areas:** The BLM would use the national and Montana greater sage-grouse conservation strategies as standards in the planning area except for habitat standards, which would be derived from regional standards.

Consideration would be given to incorporating site-specific greater sage-grouse habitat and management objectives as appropriate to the area into AMPs or livestock grazing permits.

Greater sage-grouse habitat suitability determinations would be based upon existing guidelines modified with data from recent habitat inventories and assessments in the planning area. Relevant range-wide research findings would also be included in habitat suitability determinations.

The BLM would emphasize restoration and rehabilitation of sagebrush in areas that are capable of, but no longer support sagebrush to contribute to the distribution and connectivity of habitat patches.

Greater sage-grouse habitats associated with silver sagebrush north of the Milk River would be enhanced to improve habitat conditions for nesting and brood rearing. Specific management actions would be derived from the results of ongoing research and best available science.

All new powerlines on BLM land within 1 mile of greater sage-grouse leks would be buried.

The BLM would coordinate with MFWP or other interested parties to highlight special status species information and BLM management of habitats for special status species. The BLM would also provide outreach materials for the general public.

**Greater Sage-Grouse Protection Priority Area:** To minimize wildlife habitat fragmentation, an area with BLM surface ownership greater than 50% would be managed as an ACEC to retain intact blocks of native vegetation where contiguous acreage of greater than 10,000 acres is present. This would include 930,265 acres of BLM surface (Map 2.17, which is located at the end of Chapter 2) on which the following management actions would apply:

- The area would be closed to oil and gas leasing (1,028,661 acres of federal minerals). The area would not be available for geophysical exploration except to obtain exploratory information for areas outside of and adjacent to the protection priority area. Existing leases would be allowed to expire and would not be renewed.
- Exploration and development activities for existing oil and gas leases would be managed according to BMPs (Appendix E.2), or other mitigation measures, through conditions of approval in authorizing APDs or plans of development. Consistent with surface use rights granted, the existing lease may be subject to “restrictions deriving from specific, nondiscretionary statutes; and such reasonable measures as may be required by the authorized officer to minimize adverse impacts to other resource values, land uses or users not addressed in the lease stipulations at the time operations are proposed” (43 CFR 3101.1-2). Overall consideration shall be given to minimizing the impact to sage-grouse through a project design that avoids, minimizes, reduces, rectifies, and/or adequately compensates for direct and indirect impacts to sage-grouse habitat or use and includes applicable and technically feasible conditions of approval (Appendix M). Selection and application of these measures shall be based on current science and research on the effects to important breeding, nesting, brood-rearing, and wintering areas.
- The area would be an exclusion area for the issuance of rights-of-way except within designated corridors. Rights-of-way and similar facilities would be located adjacent to other facilities in a corridor where practical. The BLM would consider opportunities to remove, bury, or modify existing powerlines (e.g., burying, anti-perching devices or line location).
- Where leases or rights-of-way have some level of development (e.g., road, fence, well, etc.) that are no longer in use the site would be reclaimed by removing the features and restoring the habitat. Upon project completion or right-of-way expiration, roads built and maintained for commercial use across BLM land would be reclaimed, unless based on site-specific analysis, the route provides specific benefits to the public and the continued public use does not contribute to resource conflicts.
- The area would remain available for livestock grazing. Site-specific greater sage-grouse habitat and management objectives would be developed for BLM land and incorporated into the respective allotment management plans (AMPs) or livestock grazing permits as appropriate.
- Existing range improvements, including the location of supplements, would be evaluated and if necessary modified to conserve, enhance or restore sage-grouse habitat.
- The area would be an exclusion area for wind energy rights-of-way.

**Greater Sage-Grouse  
Protection Priority Area**

An area with limited impacts containing substantial and high quality greater sage-grouse habitat that supports high density greater sage-grouse populations. Management actions would emphasize the conservation and enhancement of sustainable greater sage-grouse habitat. The area is delineated by using “key,” “core” and connectivity data/maps, land ownership patterns, and other resource information.

- The area would be recommended for withdrawal from locatable mineral entry (1,067,376 acres) and closed to leasable (1,023,068 acres) and salable minerals (1,023,068 acres). The area would not be available for other withdrawal proposals unless the land management is consistent with greater sage-grouse conservation measures.
- The area would be limited to existing mineral material disposal permits which could be renewed with limited expansion.

**Mountain Plover:** The following management actions would apply to protect mountain plover habitat and maintain regional mountain plover populations:

- Mountain plover habitat would be closed to oil and gas leasing. A timing stipulation would also apply: surface occupancy and use would be prohibited within 1/2 mile of mountain plover habitat from April 1 through July 15 (Appendix E.4).
- Activities for existing oil and gas leases would be managed according to BMPs (Appendix E.2).
- Road maintenance in mountain plover habitat would not occur between April 1 and July 15 unless the road is surveyed prior to maintenance activities for plover presence and avoidance measures are implemented.

**Piping Plover:** The following management actions would apply to protect piping plover habitat and maintain regional piping plover populations:

- The area would be closed to oil and gas leasing within 1/2 mile of piping plover habitat.
- Road maintenance in piping plover habitat would not occur between April 1 and July 31 unless the road is surveyed prior to maintenance activities for plover presence and avoidance measures are implemented.

**Sprague's Pipit:** The following management actions would apply to protect Sprague's pipit habitat:

- Sprague's pipits would be protected through management actions for the Grassland Bird/Greater Sage-Grouse Priority Areas ACEC.
- Mitigation for oil and gas activities would occur as timing limits in the conditions of approval for APDs when proposed wells are located in appropriate habitat. The timing condition would avoid well development from April 15 through July 15.

## Alternative C

### General Wildlife

Fences identified as potential barriers to wildlife movement or representing significant hazards for wildlife on BLM land would be inventoried. Fences would be prioritized for replacement or modification to maintain resource values including wildlife movements.

**Bighorn Sheep:** No new sheep or goat allotments would be allowed in bighorn sheep habitat. Allotments in current bighorn sheep range would be reclassified to eliminate sheep grazing. Allotments between current bighorn sheep range and current sheep allotments would be reviewed and reclassified based on habitat, movement potential, and current science and guidelines to minimize contact between domestic sheep and bighorn sheep.

**Migratory Birds:** The BLM would follow the Prairie Pothole Joint Venture Implementation Plan (PPJV 2005) to analyze site-specific proposed actions and determine whether BLM lands are meeting rangeland health standards. The BLM would use the following management actions to integrate the goals of the PPJV into programmatic and site-specific management decisions:

- The BLM would emphasize maintenance and restoration of habitats that sustain sensitive species.
- The BLM would enhance or restore habitat composition and structure beyond PFC in riparian habitats, where and when appropriate, for migratory bird habitat.

**Waterfowl:** Upland and emergent vegetation in pastures surrounding reservoirs established or rebuilt for waterfowl values would be managed to provide adequate nesting and brood rearing cover for waterfowl.

## Special Status Species

Mitigation of surface-disturbing or disruptive activities would be applied where needed to minimize impacts of human activities on important seasonal special status species habitats consistent with the wildlife stipulations outlined in the Fluid Minerals section of Chapter 2 and Appendix M. Mitigation measures would be applied on a case-by-case basis during activity level planning if an evaluation of the project area indicates the presence of important wildlife species. Exceptions may be granted by the authorized officer if an environmental review demonstrates that effects could be mitigated to an acceptable level, habitat for the species is not present in the area, or portions of the area can be occupied without affecting a particular species. Exceptions may also be granted where the short-term effects are mitigated by the long-term benefits (e.g., prescribed fire or forest health treatments).

The BLM would coordinate with MFWP or other interested parties to highlight special status species information and BLM management of habitats for special status species. The BLM would also provide outreach materials for the general public.

**Black-tailed Prairie Dog:** The BLM would adopt the MFWP Region 6 Prairie Dog Abundance and Distribution Objectives Plan (MFWP 2006a) and would commit to achieving prairie dog objectives outlined in the plan.

**Grassland Bird/Greater Sage-Grouse Priority Areas:** To minimize habitat fragmentation, two areas with BLM surface ownership would be managed to retain intact blocks of native vegetation. One of these areas is also a sage-grouse core area identified by MFWP. These two areas would include 298,772 acres of BLM surface (Map 2.17). The following management actions would apply to the two areas:

- The areas would include a controlled surface use stipulation for oil and gas leasing (318,143 acres): surface-disturbing and disruptive activities may be restricted or prohibited within the priority areas (Appendix E.4). Prior to surface-disturbing or disruptive activities a plan to maintain functionality of grassland bird/greater sage-grouse habitat would be prepared by the proponent and implemented upon approval by the authorized officer. Within the priority areas surface-disturbing or disruptive activities would be restricted or prohibited within 6/10 of a mile from any existing surface-disturbing or disruptive activity. The plan should address how short-term and long-term direct and indirect effects to important breeding (leks), nesting, brood-rearing, and wintering areas would be mitigated based on current science and research (Appendix E.5). The plan would also include a monitoring protocol (Appendix R).
- Exploration and development activities for existing oil and gas leases would be managed according to BMPs (Appendix E.2), or other mitigation measures, through conditions of approval in authorizing APDs or plans of development. Consistent with surface use rights granted, the existing lease may be subject to “restrictions deriving from specific, nondiscretionary statutes; and such reasonable measures as may be required by the authorized officer to minimize adverse impacts to other resource values, land uses or users not addressed in the lease stipulations at the time operations are proposed” (43 CFR 3101.1-2).

Overall consideration shall be given to minimizing the impact to sage-grouse through a project design that avoids, minimizes, reduces, rectifies, and/or adequately compensates for direct and indirect impacts to sage-grouse habitat or use and includes applicable and technically feasible conditions of approval (Appendix M). Selection and application of these measures shall be based on current science and research on the effects to important breeding, nesting, brood-rearing, and wintering areas.

- The areas would be avoidance areas for the issuance of rights-of-way except within designated corridors. The BLM would consider opportunities to remove, bury, or modify existing powerlines (e.g., burying, anti-perching devices or line location).
- Where leases or rights-of-way have some level of development (e.g., road, fence, well, etc.) that are no longer in use, the site would be reclaimed by removing the features and restoring the habitat. Upon project completion or right-of-way expiration, roads built and maintained for commercial use across BLM land would be reclaimed, unless based on site-specific analysis, the route provides specific benefits to the public and the continued public use does not contribute to resource conflicts.
- The areas would remain available for livestock grazing. Site-specific grassland bird and/or greater sage-grouse habitat and management objectives would be developed for BLM land and incorporated into the respective allotment management plans (AMPs) or livestock grazing permits as appropriate.
- Existing range improvements, including the location of supplements, would be evaluated and if necessary modified to conserve, enhance or restore sage-grouse habitat.
- The areas would be exclusion areas for wind energy rights-of-way.
- The areas would be recommended for withdrawal from locatable mineral entry (316,830 acres) and closed to leasable (317,197 acres) and salable minerals (317,197 acres).
- The areas would be limited to existing mineral material disposal permits, which could be renewed with limited expansion.

**General Greater Sage-Grouse Habitat Areas:** The BLM would use the national and Montana greater sage-grouse conservation strategies as standards in the planning area except for habitat standards, which would be derived from regional standards.

Consideration would be given to incorporating site-specific greater sage-grouse habitat and management objectives as appropriate to the area into AMPs or livestock grazing permits.

Greater sage-grouse habitat suitability determinations would be based upon existing guidelines modified with data from recent habitat inventories and assessments in the planning area. Relevant range-wide research findings would also be included in habitat suitability determinations.

The BLM would emphasize restoration and rehabilitation of sagebrush in areas that are capable of, but no longer support sagebrush to contribute to the distribution and connectivity of habitat patches.

Greater sage-grouse habitats associated with silver sagebrush north of the Milk River would be enhanced to improve habitat conditions for nesting and brood rearing. Specific management actions would be derived from the results of ongoing research and best available science.

All new powerlines on BLM lands within 1 mile of greater sage-grouse leks would be buried.

Fragmentation of large intact blocks of important wildlife habitat would be minimized, particularly in habitat protection areas for greater sage-grouse and grassland birds.

**Greater Sage-Grouse Protection Priority Area:** To minimize wildlife habitat fragmentation, an area with BLM surface ownership greater than 50% would be managed to retain intact blocks of native vegetation where contiguous acreage of greater than 10,000 acres is present. This would include 930,265 acres of BLM surface (Map 2.17). The following management actions would apply to the area:

- The area would include a controlled surface use stipulation for oil and gas leasing (1,028,661 acres): surface-disturbing and disruptive activities may be restricted or prohibited within the protection priority area (Appendix E.4). Prior to surface-disturbing or disruptive activities a plan to maintain functionality of greater

sage-grouse habitat would be prepared by the proponent and implemented upon approval by the authorized officer. Within the protection priority area surface-disturbing or disruptive activities would be restricted or prohibited within 6/10 of a mile from any existing surface-disturbing or disruptive activity. The plan should address how short-term and long-term direct and indirect effects to important breeding (leks), nesting, brood-rearing, and wintering areas would be mitigated based on current science and research (Appendix E.5). The plan would also include a monitoring protocol (Appendix R).

- Exploration and development activities for existing oil and gas leases would be managed according to BMPs (Appendix E.2), or other mitigation measures, through conditions of approval in authorizing APDs or plans of development. Consistent with surface use rights granted, the existing lease may be subject to “restrictions deriving from specific, nondiscretionary statutes; and such reasonable measures as may be required by the authorized officer to minimize adverse impacts to other resource values, land uses or users not addressed in the lease stipulations at the time operations are proposed” (43 CFR 3101.1-2).

Overall consideration shall be given to minimizing the impact to sage-grouse through a project design that avoids, minimizes, reduces, rectifies, and/or adequately compensates for direct and indirect impacts to sage-grouse habitat or use and includes applicable and technically feasible conditions of approval (Appendix M). Selection and application of these measures shall be based on current science and research on the effects to important breeding, nesting, brood-rearing, and wintering areas.

- The area would be an avoidance area for the issuance of rights-of-way except within designated corridors. Rights-of-way and similar facilities would be located adjacent to other facilities in a corridor where practical. The BLM would consider opportunities to remove, bury, or modify existing powerlines (e.g., burying, anti-perching devices or line location).
- Where leases or rights-of-way have some level of development (e.g., road, fence, well, etc.) that are no longer in use, the site would be reclaimed by removing the features and restoring the habitat. Upon project completion or right-of-way expiration, roads built and maintained for commercial use across BLM land would be reclaimed, unless based on site-specific analysis, the route provides specific benefits to the public and the continued public use does not contribute to resource conflicts.
- The area would remain available for livestock grazing. Site-specific greater sage-grouse habitat and management objectives would be developed for BLM land and incorporated into the respective allotment management plans (AMPs) or livestock grazing permits as appropriate.
- Existing range improvements, including the location of supplements, would be evaluated and if necessary modified to conserve, enhance or restore sage-grouse habitat.
- The area would be an exclusion area for wind energy rights-of-way.
- The area would be recommended for withdrawal from locatable mineral entry (1,067,376 acres) and closed to leasable (1,023,068 acres) and salable minerals (1,023,068 acres).
- The area would be limited to existing mineral material disposal permits, which could be renewed with limited expansion.

**Mountain Plover:** The following management actions would apply to protect mountain plover habitat and maintain regional mountain plover populations:

- Mountain plover habitat would include an NSO stipulation for oil and gas leasing: surface occupancy and use would be prohibited within mountain plover habitat (Appendix E.4).
- A timing stipulation would also apply: surface occupancy and use would be prohibited within 1/4 mile of mountain plover habitat from April 1 through July 15 (Appendix E.4).
- Activities for existing oil and gas leases would be managed according to BMPs (Appendix E.2).

- For surface-disturbing or disruptive activities other than oil and gas, mitigation would be applied where needed to minimize impacts of human activities on mountain plover habitat consistent with the oil and gas surface use restrictions. The BLM would avoid permanent above-ground structures that may provide perches for avian predators or deter plover from using preferred habitat. Mitigation measures would be applied on a case-by-case basis during activity level planning if an evaluation of the project area indicates the presence of mountain plovers. This would include surveys for mountain plovers in all suitable habitat, as well as avoidance of nesting areas from April 1 through July 15. Exceptions may be granted by the authorized officer if an environmental review demonstrates that effects could be mitigated to an acceptable level.

**Piping Plover:** The following management actions would apply to protect piping plover habitat and maintain regional piping plover populations:

- Piping plover habitat would include an NSO stipulation for oil and gas leasing: surface occupancy and use would be prohibited within 1/4 mile of essential and critical habitat (Appendix E.4).
- Road maintenance in piping plover habitat would not occur between April 1 and July 31 unless the road is surveyed prior to maintenance activities for plover presence and avoidance measures are implemented.

**Sprague's Pipit:** The following management actions would apply to protect Sprague's pipit habitat:

- Sprague's pipits would be protected through management actions for the Grassland Bird/Greater Sage-Grouse Priority Areas.
- Mitigation for oil and gas activities would occur as timing limits in the conditions of approval for APDs when proposed wells are located in appropriate habitat. The timing condition would avoid well development from April 15 through July 15.

## Alternative D

### General Wildlife

Fences identified as barriers to wildlife movement or representing significant hazards for wildlife on BLM land would be modified on a case-by-case basis as problems are identified.

**Bighorn Sheep:** No new sheep or goat allotments would be allowed in bighorn sheep habitat. New sheep/goat allotments or conversion from cows to sheep/goats would not be allowed within 5 miles of occupied wild bighorn sheep habitat.

**Migratory Birds:** Migratory bird habitat would be managed on a case-by-case basis through the environmental review of other resource activities.

**Waterfowl:** Upland and emergent vegetation in pastures surrounding reservoirs established or rebuilt for waterfowl values would be managed to provide adequate nesting and brood rearing cover for waterfowl.

### Special Status Species

Mitigation of surface-disturbing or disruptive activities would be applied where needed to minimize impacts of human activities on important seasonal special status species habitats consistent with the wildlife stipulations outlined in the Fluid Minerals section of Chapter 2 and Appendix M. Mitigation measures would be applied on a case-by-case basis during activity level planning if an evaluation of the project area indicates the presence of important wildlife species. Exceptions may be granted by the authorized officer if an environmental review demonstrates that effects could be mitigated to an acceptable level, habitat for the species is not present in the area, or portions of the area can be occupied without affecting a particular species. Exceptions may also be granted where the short-term effects are mitigated by the long-term benefits (e.g., prescribed fire or forest health treatments).

**Black-tailed Prairie Dog:** Prairie dog colonies would be managed on a case-by-case basis at the project level.

**Greater Sage-Grouse:** The BLM would use the national and Montana greater sage-grouse conservation strategies as the basis to address greater sage-grouse needs during the watershed planning process and project level analysis.

Greater sage-grouse habitat suitability determinations would be based upon existing guidelines modified with data from recent habitat inventories and assessments in the planning area. Relevant range-wide research findings would also be included in habitat suitability determination.

All powerlines on BLM land within 1 mile of greater sage-grouse leks would be fitted with anti-raptor perching devices.

Fragmentation of large intact blocks of important wildlife habitat would be minimized, particularly in habitat protection areas for greater sage-grouse and grassland birds.

**Mountain Plover:** The following management actions would apply to protect mountain plover habitat and to maintain regional mountain plover populations:

- Mountain plover habitat would include an NSO stipulation for oil and gas leasing: surface occupancy and use would be prohibited within mountain plover habitat (Appendix E.4).
- Activities for existing oil and gas leases would be managed according to BMPs (Appendix E.2).
- For surface-disturbing or disruptive activities other than oil and gas, mitigation would be applied where needed to minimize impacts of human activities on mountain plover habitat. Mitigation measures would be applied on a case-by-case basis during activity level planning if an evaluation of the project area indicates the presence of mountain plovers. Exceptions may be granted by the authorized officer if an environmental review demonstrates that effects could be mitigated to an acceptable level.
- Road maintenance in mountain plover habitat would not occur between April 1 and July 15 unless the road is surveyed prior to maintenance activities for plover presence and avoidance measures are implemented.

**Piping Plover:** The following management actions would apply to protect piping plover habitat and maintain regional piping plover populations:

- A timing stipulation for oil and gas activities would apply: surface occupancy and use would be prohibited within 1/4 mile of piping plover habitat from May 15 through July 31 (Appendix E.4).
- Road maintenance in piping plover habitat would not occur between April 1 and July 31 unless the road is surveyed prior to maintenance activities for plover presence and avoidance measures are implemented.

**Sprague's Pipit:** The following management actions would apply to protect Sprague's pipit habitat:

- Mitigation for oil and gas activities would occur as timing limits in the conditions of approval for APDs when proposed wells are located in appropriate habitat. The timing condition would avoid well development from April 15 through July 15.

## Alternative E (Preferred Alternative)

### General Wildlife

Fences identified as potential barriers to wildlife movement or representing significant hazards for wildlife on BLM land would be inventoried. Fences would be prioritized for replacement or modification to maintain resource values including wildlife movements.

**Bighorn Sheep:** No new grazing permits authorizing sheep or goat allotments would be allowed in bighorn sheep range. Sheep and goat allotments in areas with risk of contact with bighorn sheep and domestic sheep and/or goats in the planning area would be reviewed and managed, or reclassified if necessary, to achieve effective separation (both

temporal and/or spatial) between domestic sheep and/or goats and bighorn sheep. Contact risk would be based on habitat, distance between bighorn sheep range (current and anticipated), sheep and goat allotments, movement potential, and current science and guidelines. Domestic sheep/goats would not be allowed within bighorn sheep range unless mechanisms are in place to achieve effective separation from wild sheep.

**Migratory Birds:** The BLM would follow the Prairie Pothole Joint Venture Implementation Plan (2005) to analyze site-specific proposed actions and determine whether BLM lands are meeting rangeland health standards. The BLM would integrate the goals of the PPJV into programmatic and site-specific management decisions through the following management actions:

- Emphasize maintenance and restoration of habitats that sustain sensitive species.
- Strive to enhance or restore migratory bird habitat composition and structure in riparian habitats, where and when appropriate.

**Waterfowl:** Upland and emergent vegetation in pastures surrounding reservoirs established or rebuilt for waterfowl values would be managed to provide adequate nesting and brood rearing cover for waterfowl.

### Special Status Species

Mitigation measures for all resources are included in Appendix C, BMPs, and Appendix M, Mitigation Measures and Conservation Actions for Greater Sage-Grouse Habitat. The BLM may add additional mitigation measures as deemed necessary by further environmental analysis and as developed through consultation with other federal, state, and local regulatory and resource agencies.

The BLM will apply appropriate mitigation measures and conservation actions to BLM-authorized activities to avoid, minimize, rectify, reduce, or compensate for impacts if an evaluation of the project area indicates the presence of important wildlife species, seasonal wildlife habitat, or other resource concerns. The sequence of mitigation action will be:

*Step 1. Avoid* - Adverse impacts to resources are to be avoided and no action shall be permitted if there is a practicable alternative with less adverse impact.

*Step 2. Minimize* - If impacts to resources cannot be avoided, appropriate and practicable steps to minimize adverse impacts must be taken.

*Step 3. Compensate* - Appropriate and practicable compensatory mitigation is required for unavoidable adverse impacts which remain. The amount and quality of compensatory mitigation may not substitute for avoiding and minimizing impacts.

Even after avoiding and minimizing impacts, projects that will cause adverse impacts to resources typically require some type of compensatory mitigation. Compensatory mitigation refers to the restoration, establishment, enhancement, or in certain circumstances preservation of resources for the purpose of offsetting unavoidable adverse impacts. The BLM will determine the appropriate form and amount of compensatory mitigation required. Methods of compensatory mitigation include restoration, establishment, enhancement and preservation.

- *Restoration:* Re-establishment or rehabilitation of a resource with the goal of returning natural or historic functions and characteristics to a currently degraded area. Restoration may result in a gain in function or acres, or both.
- *Establishment (Creation):* The development of a resource where that resource did not previously exist through manipulation of the physical, chemical and/or biological characteristics of the site. Successful establishment results in a net gain in acres and function.
- *Enhancement:* Activities conducted within existing resources that heighten, intensify, or improve one or more functions. Enhancement is often undertaken for a specific purpose such as to improve water quality, flood

water retention or wildlife habitat. Enhancement results in a gain in function, but does not result in a net gain in acres.

- *Conservation:* The permanent protection of ecologically important resources through the implementation of appropriate legal and physical mechanisms (i.e. conservation easements, title transfers). Preservation may include protection of areas adjacent to resource locations as necessary to ensure protection or enhancement of the ecosystem. Preservation does not result in a net gain of acres and may only be used in certain circumstances, including when the resources to be preserved contribute significantly to ecological sustainability.

There are times when mitigating project impacts through onsite mitigation alone, may not be possible or sufficient to adequately mitigate impacts and achieve resource objectives. In these cases, it may be appropriate to consider offsite mitigation as a feature of one or more of the alternatives in the impact analysis. Offsite mitigation is generally appropriate when the authorized officer determines that impacts cannot be mitigated to an acceptable level on site and it is expected that the land use authorization as submitted would not be consistent with the BLM's resource objectives. The BLM may expressly condition its approval of an action on the applicant's commitment to take actions, and the BLM may, if necessary, seek appropriate enforcement action to ensure the terms of the contract are met (BLM Instruction Memorandum No. 2012-xxx).

Because of site-specific circumstances, some mitigation measures and conservation actions may not apply to some activities (e.g., a resource or conflict is not present on a given site) and/or may require slight variations from what is described in Appendix M. Proposed variations will be addressed as site-specific mitigation applied in the permitting process. All variations in mitigation measures and conservation actions will require appropriate analysis and disclosure as part of activity authorization. It is anticipated that variations in the mitigation measures and conservation actions will be approved in very limited circumstances and only in coordination with state wildlife management agencies. Mitigation measures and conservation actions selected for implementation will be identified in the Record of Decision (ROD) or Decision Record (DR) for those activities. The proponent must implement those identified mitigations because they are commitments made as part of the BLM decision. Because these decisions create a clear obligation for the BLM to ensure any proposed mitigation adopted in the environmental review process is performed, there is assurance that mitigation will lead to a reduction of environmental impacts in the implementation stage and include binding mechanisms for enforcement (CEQ Memorandum for Heads of Federal Departments and Agencies 2011). The determination of adequate application of the mitigation measures and conservation actions for specific projects will remain with the BLM's Authorized Officer.

Fragmentation of large intact blocks of habitat for special status species would be minimized, particularly in habitat protection areas for greater sage-grouse and grassland birds.

The BLM would coordinate with MFWP or other interested parties to highlight special status species information and BLM management of habitats for special status species. The BLM would also provide outreach materials for the general public.

**Black-tailed Prairie Dog:** The BLM would adopt the MFWP Region 6 Prairie Dog Abundance and Distribution Objectives Plan (MFWP 2006a) and would contribute to achieving prairie dog objectives on BLM land as outlined in the plan.

#### **Prairie Dog Abundance and Distribution Objectives (MFWP 2006a)**

Maintain abundance and distribution of black-tailed prairie dogs. Acreages of active prairie dog towns would range between 30,500 and 41,400 acres (36,000 acres plus or minus 15%) in the planning area for the next 20 years and would consist of:

- One Category 1 complex of 5000+ acres of active prairie dog towns spaced no more than 1.5 km (1 mile) apart. This complex will not be actively managed to exceed 10,000 acres;
- Six to eight Category 2 complexes of 1,000 or more acres of active prairie dog towns. Two or three of these complexes would follow the 1.5 km rule and the remainder would follow the 7km rule; and
- Category 3 prairie dog towns would be scattered throughout the historic prairie dog range in the planning area.

**Grassland Bird/Greater Sage-Grouse Priority Areas:** To minimize habitat fragmentation, two areas with BLM surface ownership would be managed to retain intact blocks of native vegetation. One of these areas is also a sage-grouse core area identified by MFWP. These two areas would include 298,772 acres of BLM surface (Map 2.17). The following management actions would apply to the two areas:

- The areas would include a no surface occupancy (NSO) stipulation for oil and gas leasing (318,143 acres).
- Exploration and development activities for existing oil and gas leases would be managed according to BMPs (Appendix E.2), or other mitigation measures, through conditions of approval in authorizing APDs or plans of development. Consistent with surface use rights granted, the existing lease may be subject to “restrictions deriving from specific, nondiscretionary statutes; and such reasonable measures as may be required by the authorized officer to minimize adverse impacts to other resource values, land uses or users not addressed in the lease stipulations at the time operations are proposed” (43 CFR 3101.1-2).

Overall consideration shall be given to minimizing the impact to sage-grouse through a project design that avoids, minimizes, reduces, rectifies, and/or adequately compensates for direct and indirect impacts to sage-grouse habitat or use and includes applicable and technically feasible conditions of approval (Appendix M). Selection and application of these measures shall be based on current science and research on the effects to important breeding, nesting, brood-rearing, and wintering areas.

- The areas would be avoidance areas for the issuance of rights-of-way except within designated corridors. Rights-of-way and similar facilities would be located adjacent to other facilities in a corridor where practical. The BLM would consider opportunities to remove, bury, or modify existing powerlines (e.g., burying, anti-perching devices or line location).
- Where leases or rights-of-way have some level of development (e.g., road, fence, well, etc.) that are no longer in use, the site would be reclaimed by removing the features and restoring the habitat. Upon project completion or right-of-way expiration, roads built and maintained for commercial use across BLM land would be reclaimed, unless based on site-specific analysis, the route provides specific benefits to the public and the continued public use does not contribute to resource conflicts.
- The areas would remain available for livestock grazing. Site-specific grassland bird and/or greater sage-grouse habitat and management objectives would be developed for BLM land and incorporated into the respective allotment management plans (AMPs) or livestock grazing permits as appropriate.
- Existing range improvements, including the location of supplements, would be evaluated and if necessary modified to conserve, enhance or restore sage-grouse habitat.
- The areas would be exclusion areas for wind energy rights-of-way.
- Mineral materials sales within these areas would require a plan to maintain functionality of habitat, avoid or minimize habitat loss, and minimize disturbances to grassland birds.
- The areas would be closed to leasable minerals (317,197 acres).
- Withdrawal proposals would be evaluated at the project level and would not be approved unless the land management is consistent with maintaining and protecting BLM resource values (Appendix M).

#### **Grassland Bird/Greater Sage-Grouse Priority Areas**

Areas containing substantial and high quality grasslands that support large populations of a suite of special status grassland bird species. This suite of species includes the following species of concern: Sprague’s pipit, chestnut-collared longspur, McCown’s longspur, Baird’s sparrow, and long-billed curlew. Management actions would emphasize the conservation and enhancement of sustainable grassland bird habitats. Areas are delineated by using survey results, predictive models of species distributions, and land ownership patterns.

These areas also include core area for greater sage-grouse identified by MFWP. Sage-grouse core areas are habitats associated with 1) Montana’s highest densities of sage-grouse, based on male counts and/or 2) sage-grouse lek complexes and associated habitat important to sage-grouse distribution.

- New road construction would be limited to realignments of existing roads, if that realignment has a minimal impact on greater sage-grouse habitat, eliminates the need to construct a new road, or is necessary for public safety. New road construction would include appropriate mitigation and BMPs (Appendix M).
- Existing roads, or realignments, would be used to access valid existing rights. If valid existing rights cannot be accessed via existing roads, then any new road would be constructed to the absolute minimum standard necessary with appropriate mitigation and BMPs (Appendix M).

**General Greater Sage-Grouse Habitat Areas:** Sagebrush habitats would be managed so that mid-scale (i.e. landscape level) shrub cover should include a mix of height classes with herbaceous understory adequate for meeting greater sage-grouse requirements as well as habitat requirements for other sage-associated species such as mule deer and pronghorn.

Consideration would be given to incorporating site-specific greater sage-grouse habitat and management objectives as appropriate to the area into AMPs or livestock grazing permits.

Greater sage-grouse habitat suitability determinations would be based upon existing guidelines modified with data from recent habitat inventories and assessments in the planning area. Relevant range-wide research findings would also be included in habitat suitability determinations.

The BLM would emphasize restoration and rehabilitation of sagebrush in areas that are capable of, but no longer support sagebrush to contribute to the distribution and connectivity of habitat patches.

New distribution powerlines on BLM land within 1 mile of greater sage-grouse leks would be buried.

**Greater Sage-Grouse Protection Priority Area:** To minimize wildlife habitat fragmentation, an area with BLM surface ownership greater than 50% would be managed to retain intact blocks of native vegetation where contiguous acreage of greater than 10,000 acres is present. This area includes 930,265 acres of BLM surface (Map 2.17) on which the following management actions would apply:

- The area would include a no surface occupancy (NSO) stipulation for oil and gas leasing (1,028,661 acres of federal minerals).
- Exploration and development activities for existing oil and gas leases would be managed according to BMPs (Appendix E.2), or other mitigation measures, through conditions of approval in authorizing APDs or plans of development. Consistent with surface use rights granted, the existing lease may be subject to “restrictions deriving from specific, nondiscretionary statutes; and such reasonable measures as may be required by the authorized officer to minimize adverse impacts to other resource values, land uses or users not addressed in the lease stipulations at the time operations are proposed” (43 CFR 3101.1-2). Overall consideration shall be given to minimizing the impact to sage-grouse through a project design that avoids, minimizes, reduces, rectifies, and/or adequately compensates for direct and indirect impacts to sage-grouse habitat or use and includes applicable and technically feasible conditions of approval (Appendix M). Selection and application of these measures shall be based on current science and research on the effects to important breeding, nesting, brood-rearing, and wintering areas.
- The area would be an avoidance area for the issuance of rights-of-way except within designated corridors. Rights-of-way and similar facilities would be located adjacent to other facilities in a corridor where practical. The BLM would consider opportunities to remove, bury, or modify existing powerlines (e.g., burying, anti-perching devices or line location).
- Where leases or rights-of-way have some level of development (e.g., road, fence, well, etc.) that are no longer in use, the site would be reclaimed by removing the features and restoring the habitat. Upon project completion or right-of-way expiration, roads built and maintained for commercial use across BLM land would be

**Greater Sage-Grouse  
Protection Priority Area**

An area with limited impacts containing substantial and high quality greater sage-grouse habitat that supports high density greater sage-grouse populations. Management actions would emphasize the conservation and enhancement of sustainable greater sage-grouse habitat. The area is delineated by using “key,” “core” and connectivity data/maps, land ownership patterns, and other resource information.

reclaimed, unless based on site-specific analysis, the route provides specific benefits to the public and the continued public use does not contribute to resource conflicts.

- The area would remain available for livestock grazing. Site-specific greater sage-grouse habitat and management objectives would be developed for BLM land and incorporated into the respective allotment management plans (AMPs) or livestock grazing permits as appropriate.
- Existing range improvements, including the location of supplements, would be evaluated and if necessary modified to conserve, enhance or restore sage-grouse habitat.
- The area would be an exclusion area for wind energy rights-of-way (930,265 acres).
- The area would be closed to leasable minerals (1,023,068 acres).
- Mineral material sales within this area would require a plan to maintain functionality of habitat, avoid or minimize habitat loss, and minimize disturbances to greater sage-grouse protection priority areas. The plan would include appropriate monitoring and mitigation, based on current science and research, for effects to important breeding (leks), nesting, brood-rearing, and wintering areas.
- Withdrawal proposals would be evaluated at the project level and would not be approved unless the land management is consistent with maintaining and protecting BLM resource values (Appendix M).
- New road construction would be limited to realignments of existing roads, if that realignment has a minimal impact on greater sage-grouse habitat, eliminates the need to construct a new road, or is necessary for public safety. New road construction would include appropriate mitigation and BMPs (Appendix M).
- Existing roads, or realignments, would be used to access valid existing rights. If valid existing rights cannot be accessed via existing roads, then any new road would be constructed to the absolute minimum standard necessary with appropriate mitigation and BMPs (Appendix M).



Greater Sage-Grouse

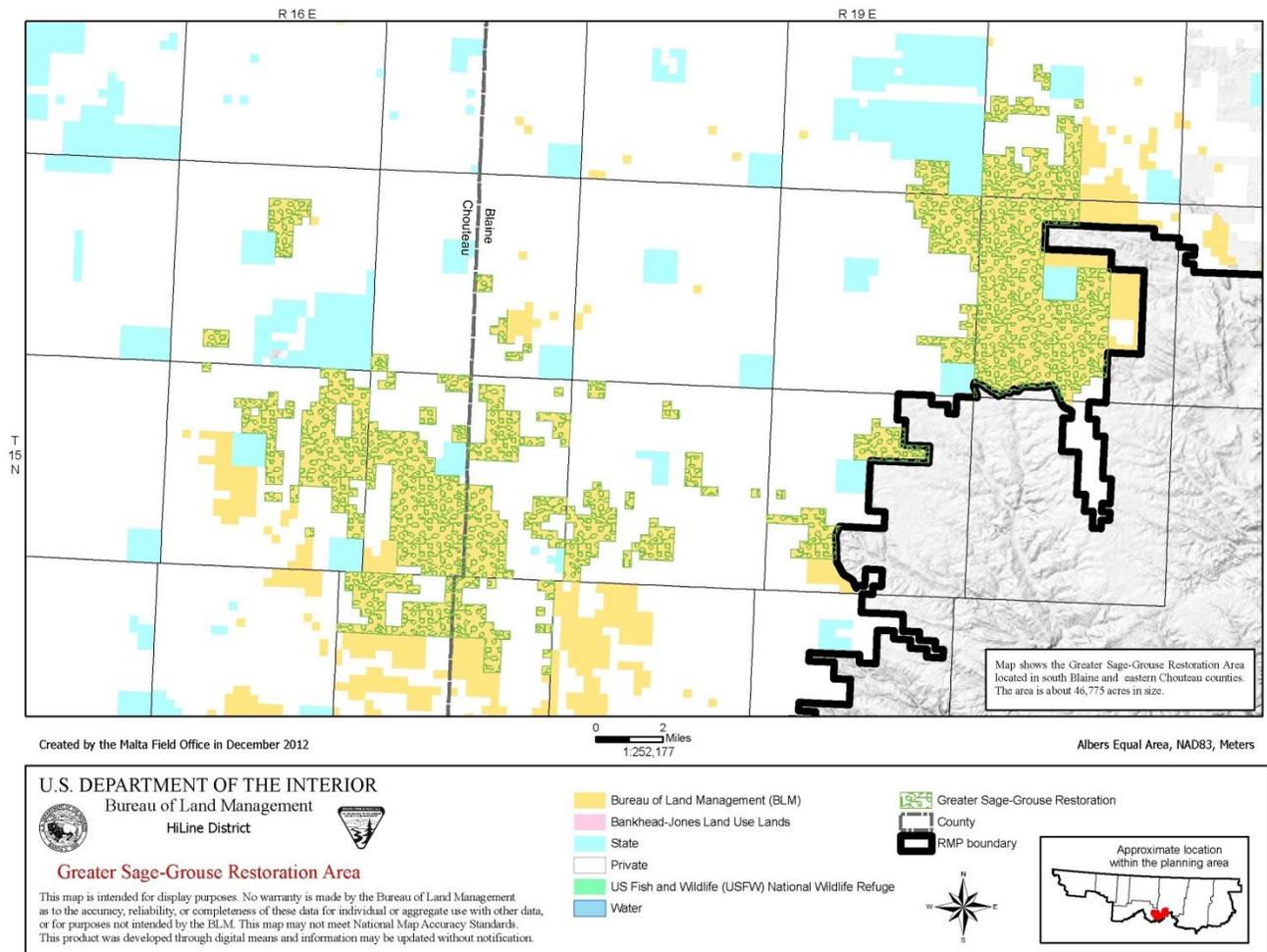
Photo by Craig Miller

**Greater Sage-Grouse Restoration Area:** This is an area with ongoing or imminent impacts containing substantial and high quality sage-grouse habitat that historically supported sustainable sage-grouse populations. This area includes 46,786 acres of BLM surface (Figure 2.7). Management actions would emphasize restoration for the purpose of establishing or restoring sustainable sage-grouse populations.

Specific management for this area would be addressed through plan implementation, most likely a natural gas field development plan for the Bears Paw South Area (see Appendix E, Map E.1). Management actions addressed during implementation would be based on guidance contained in Instruction Memorandum MT-2010-017 and may include:

- Maximizing the area of interim reclamation on roads and well locations.
- Direct planting of seedlings of shrubs and forbs important for spring and summer food.
- Seeding of wild collected shrub seed to increase nesting habitat.
- Burying powerlines to prevent predator perch sites.

**Figure 2.7**  
**Greater Sage-Grouse Restoration Area**



**Mountain Plover:** The following management actions would apply to protect mountain plover habitat and to maintain regional mountain plover populations:

- Mountain plover habitat would include an NSO stipulation for oil and gas leasing: surface occupancy and use would be prohibited within mountain plover habitat (Appendix E.4).
- A timing stipulation would also apply: surface occupancy and use would be prohibited within 1/4 mile of mountain plover habitat from April 1 through July 15 (Appendix E.4).
- Activities for existing oil and gas leases would be managed according to BMPs (Appendix E.2).
- For surface-disturbing or disruptive activities other than oil and gas, mitigation would be applied where needed to minimize impacts of human activities on mountain plover habitat consistent with the oil and gas surface use restrictions. The BLM would avoid permanent above-ground structures that may provide perches for avian predators or deter plover from using preferred habitat. Mitigation measures would be applied on a case-by-case basis during activity level planning if an evaluation of the project area indicates the presence of mountain plovers. This would include surveys for mountain plovers in all suitable habitat, as well as avoidance of nesting areas from April 1 through July 15. Exceptions may be granted by the authorized officer if an environmental review demonstrates that effects could be mitigated to an acceptable level.
- Road maintenance in mountain plover habitat would not occur between April 1 and July 15 unless the road is surveyed prior to maintenance activities for plover presence and avoidance measures are implemented.
- The BLM would reduce or control non-native grasses to increase breeding habitat, and prescribed burning could be used to increase the availability of nesting habitat, particularly on lands where taller or non-native grasses occur.
- The BLM would promote integrated pest management practices that limit chemical applications in mountain plover habitat.

**Piping Plover:** The following management actions would apply to protect piping plover habitat and maintain regional piping plover populations:

- Piping plover habitat would include an NSO stipulation for oil and gas leasing: surface occupancy and use would be prohibited within 1/4 mile of essential and critical habitat (Appendix E.4).
- Road maintenance in piping plover habitat would not occur between April 1 and July 31 unless the road is surveyed prior to maintenance activities for plover presence and avoidance measures are implemented.

**Sprague's Pipit:** The following management actions would apply to protect Sprague's pipit habitat:

- Sprague's pipits would be protected through management actions for the Grassland Bird/Greater Sage-Grouse Priority Areas.
- A timing stipulation would apply to areas within Sprague's pipit habitat: surface occupancy and use would be prohibited from April 15 through July 15 (Appendix E.4).

## Alternatives Considered but Not Analyzed in Detail

### Conservation Groups Alternative

During the range-wide scoping effort for sage-grouse, several conservation organizations submitted scoping comments and proposed management actions and alternatives for sage-grouse conservation (referred to here as the Conservation Groups Alternative). In summary, the primary intent of these proposed alternatives and management actions was to: (1)

add additional measures (beyond those conservation measures identified in the National Technical Team (NTT) report (disseminated by BLM WO-IM-2012-044)) in order to maintain and increase sage-grouse abundance; (2) designate two additional habitat types – Greater Sage-Grouse Areas of Critical Environmental Concern (ACECs) and “restoration” habitat areas; and (3) expand NTT conservation measures to all occupied sage-grouse habitat.

These proposed actions and alternatives submitted by the conservation organizations were determined to have substantially similar effects to the actions and habitat areas considered within the range of alternatives identified above. As described in the Wildlife, Special Status Species section of Chapter 2, this Draft RMP/EIS delineates four types of sage-grouse habitat areas as part of the planning process, including: Grassland Bird/Greater Sage-Grouse Priority Areas; Greater Sage-Grouse Protection Priority Area, Greater Sage-Grouse Restoration Area, and General Greater Sage-Grouse Habitat Areas (see Map 2.17). Varying degrees of management are considered and analyzed as part of the range of alternatives within each of these habitat delineations in this Draft RMP/EIS in order to achieve the goals or objectives for each sage-grouse habitat area, as well as address the conservation measures and management practices to conserve greater sage-grouse consistent with the NTT report. Additionally, this Draft RMP/EIS includes Mitigation Measures and Conservation Actions for Greater Sage-Grouse (Appendix M). The appendix identifies best practices, design features and proactive management activities to conserve greater sage-grouse that would be applied during project-specific activities through subsequent environmental review and analysis.

Specific to the organizations’ proposed alternative to designate sage-grouse ACECs and ‘restoration’ areas, this Draft RMP/EIS does include, within the range of alternatives for detailed study, a Greater Sage-Grouse Priorities Area ACEC and Greater Sage-Grouse Protection Priority Area ACEC (Alternative B), and a restoration area for greater sage-grouse (Alternative E). The Alternative Summary Table 2.21 provides a summary of the range of acreages for priority, general, and restoration habitat for greater sage-grouse and a summary of the range of alternatives (e.g., allowable uses, constraints, etc.). This range of alternatives is adequate to compare impacts to greater sage-grouse from different conservation measures as well as the size of habitat classifications.

In summary, the additional alternatives and actions proposed through the Conservation Groups Alternative were considered but eliminated from detailed study in this Draft RMP/EIS because the range of alternatives adequately addresses conservation measures for greater sage-grouse. For example, the alternatives range from open to fluid mineral leasing and right-of-way development, to a no-lease stipulation for new oil and gas development and exclusion areas for rights-of-way.

## Master Leasing Plan

During preparation of the HiLine RMP, the BLM issued WO IM No. 2010-117 in May 2010, which introduced the Master Leasing Plan (MLP) concept. In July 2010, The Wilderness Society submitted a proposal for an MLP for an area called the Bitter Creek/Frenchman Breaks in northern Phillips and Valley Counties.

The BLM reviewed this proposal and determined that the Bitter Creek/Frenchman Breaks did not meet all four of the criteria as required by WO IM No. 2010-117 and the proposal does not warrant preparation of an MLP (Appendix E.1). The preparation of an MLP is required when all four of the following criteria are met: (1) a substantial portion of the area is not currently leased; (2) a majority of the area has federal mineral interest; (3) the area has a moderate or high potential for oil and gas; and (4) additional analysis is needed to address likely impacts if oil and gas development were to occur. The MLP proposal for Bitter Creek/Frenchman Breaks only meets criteria (1) and (2).

- About 582,000 acres of federal minerals are within the proposed MLP. However, 61,000 acres are within the Bitter Creek WSA and are not available for oil and gas leasing. Currently, about 140,000 acres are leased, or 24% of the federal minerals. A substantial portion of the area is not currently leased.
- The area submitted as a proposal includes about 1 million acres, including 582,000 acres of federal minerals. A majority of the area has federal mineral interest (56% of the area is federal minerals).
- The oil and gas industry has expressed some interest in leasing in the area. Some leasing has been deferred in the area pending completion of the HiLine RMP. None of the area is considered to have high development potential as defined in the reasonable foreseeable development scenario (Appendix E.1). About 2% of the area

is considered to have moderate development potential. The remainder of the area is considered to have low to very low development potential. The southwestern portion of the area is within the Bowdoin Dome area, which was established in 1954. In the last 10 years, 47 wells have been drilled in the area of which 39 were drilled within the Bowdoin gas field. All 39 were completed as producing gas wells. The other 8 wells were drilled outside of the Bowdoin gas field, and all 8 were dry holes. Therefore, there is not a discovery outside of the Bowdoin Dome area.

- Oil and gas lease stipulations within the range of alternatives considered in the RMP address this area including those management actions for the Frenchman Creek ACEC, the grassland bird priority area, and crucial winter range. This planning process involves a great deal of information and analysis to illustrate the environmental consequences of oil and gas development. There is no identified need for additional analysis or information to address likely resource or cumulative impacts.

## No Bison Grazing

A no bison grazing alternative was considered but eliminated from detailed study because it does not meet the purpose and need for this Draft RMP/EIS.

Bison in private ownership are considered livestock, and as such can be permitted by the BLM (43 CFR 4130.3-2(e)). The primary test in making this distinction is whether or not the owner of the animals qualifies as an applicant under the requirements of the grazing regulations. The grazing regulations define qualified applicants and apply equally to all qualified applicants, regardless of the class of livestock.

Privately owned bison may be authorized to graze under the regulations provided it is consistent with multiple use objectives. No scientifically and/or resource management based reason has been identified for why bison should not be permitted to graze BLM land. At the present time, there are no conflicts identified with other resource objectives if bison were permitted to graze. Implementation of a no bison grazing alternative is not considered reasonable or necessary.

As with other classes of livestock, bison grazing may not be permitted where environmental review indicates conflict with resource objectives and attainment of Standards for Rangeland Health.

## No Livestock Grazing/Reduced Grazing

### *Analyzing an Alternative that makes all Lands or a Reduction of Lands in the Planning Area Unavailable for Livestock Grazing (No Grazing / Reduced Grazing Alternative)*

An alternative that proposes to make the entire HiLine Planning Area unavailable for livestock grazing would not meet the purpose and need of this Draft RMP/EIS. NEPA requires that agencies study, develop, and describe appropriate alternatives to recommended courses of action in any proposal that involves unresolved conflicts concerning alternative uses of available resources. No issues or conflicts have been identified during this land use planning effort that require the complete elimination of livestock grazing within the planning area for their resolution (WO IM 2012-069). Where appropriate, removal of livestock and adjustments to livestock use have been incorporated in this planning effort. Because the BLM has considerable discretion through its grazing regulations to determine and adjust stocking levels, seasons-of-use, and grazing management activities, and to allocate forage to uses of the public lands in RMPs, the analysis of an alternative to entirely eliminate grazing is not needed.

The HiLine RMP planning area is located in the northern portion of the Great Plains Ecoregion (EPA 2010a) and the rangelands in the planning area are classified as mixed-grass prairie. The rangelands of the Great Plains have a long evolutionary history of grazing and grazing is accepted by grassland ecologists as a keystone process of the grassland ecosystem (Fuhlendorf and Engle 2001, Milchunas, et al. 1988, Knapp et al. 1999). There is also agreement among many scientists and natural resource managers that some level of grazing disturbance is necessary to assure the ecological integrity of the mixed-grass prairie ecosystem (Parks Canada 2002).

From 1956 through 1972, the BLM conducted a classification of public lands to estimate the amount of available forage within the planning area. These are typically referred to as the “Missouri River Basin Surveys.” From this effort,

multiple sub-basin reports were generated, which provided the carrying capacities by Animal Unit Months (AUMs) for all BLM-administered lands at the time of survey.

The measurement of the available forage for livestock grazing was conducted by trained professionals and involved intensive vegetation sampling (clipping, weighing, and ocular estimation). The BLM, in cooperation with grazing advisory boards, used the information to make adjustments to the AUMs allocated to a grazing permit. This cooperative effort resulted in implementation of appropriate changes to grazing permits in the planning areas. These changes were implemented in a timely manner and completed prior to 1975.

These historical grazing allocations have been included in the existing RMPs and allocation of vegetation generally ranges from 25% to 40% for livestock and 75% to 60% for other uses (e.g. wildlife, soil protection, etc.).

In addition to the inherent role of large herbivore grazing in maintaining ecosystem health within the planning area, current resource conditions on BLM-administered land, including range vegetation, watershed, and wildlife habitat, as reflected in land health assessments, do not warrant prohibition of livestock grazing throughout the entire planning area. Following initial surveyed forage allocations, land health evaluations, inventories and monitoring data (vegetative and levels of use) have been the basis for increasing or decreasing permitted use. Through this process the planning area has changed the grazing allocations on allotments to ensure the healthy ecological systems are provided for future generations.

Livestock grazing is a well-established use within the BLM's multiple-use mandate. The BLM considered but did not analyze in detail an alternative that would make all and/or a reduction of public lands within the planning area unavailable for livestock grazing, because such an alternative is not reasonable, viable, or necessary.

During the planning process for this RMP, the BLM issued IM No. 2012-169, which governs alternative development with respect to livestock grazing in RMPs and their associated EISs. In accordance with that IM and BLM's Land Use Planning Handbook, the BLM considered what range of alternatives was necessary to address unresolved conflicts among available resources. Although IM 2012-169 recognizes that RMPs will usually include one or more alternatives with a meaningful reduction in either lands available for grazing, forage amounts, or both, in the circumstances presented here such alternatives are not reasonable or necessary.

In particular, of the 969 allotments in the planning area that have been assessed, 907 meet the Standards for Rangeland Health and Guidelines for Livestock Grazing Management for Montana, North Dakota, and South Dakota (BLM 1997a). For the 62 allotments not meeting one or more standard, past or present livestock uses were determined to be the cause on 27 allotments and in all cases corrective actions have been taken. All allotments within priority sage-grouse habitat are currently meeting Rangeland Health Standards. Suitable measures, which could include reduction or elimination of livestock grazing, could become necessary in specific situations where livestock grazing causes or contributes to conflicts with the protection and/or management of other resource values or uses. Such determinations would be made during site-specific activity planning or permit renewal and the associated environmental review. These determinations would be based on several factors, including monitoring studies, review of current range management science, input from livestock operators and interested parties, and ability to meet the Standards for Rangeland Health and Guidelines for Livestock Grazing Management (Appendix H).

Alternatives that included no grazing or reduced grazing were previously analyzed in detail in the Missouri Breaks Grazing Environmental Impact Statement (BLM 1979), the Prairie Potholes Environmental Impact Statement (BLM 1982), and the national Rangeland Reform '94 Environmental Impact Statement (BLM 1994b).

Livestock grazing is and has been an important use of the public lands in the planning area for many years and is a continuing government program. The CEQ guidelines for compliance with NEPA require that agencies analyze the "No Action Alternative" in all EISs (40 CFR 1502.14(d)). For the purposes of this NEPA analysis, the "no action alternative" is to continue the status quo, which includes livestock grazing. For this reason and those stated above, a no grazing alternative for the entire planning area was dismissed from further consideration in this Draft RMP/EIS.

## Comparison of Alternatives and Environmental Consequences

A summary comparison of all the alternatives discussed in Chapter 2 follows in Table 2.21. This table summarizes the major land use plan decisions including the allowable uses and actions described in Chapter 2 but does not include all the management actions included under each alternative. A summary comparison of the environmental consequences discussed in Chapter 4 also follows in Table 2.22. The summary tables provide a comparative form for defining the differences among the alternatives.



Sweet Grass Hills

Photo by Craig Miller

| <b>Table 2.21<br/>Summary Comparison of Alternatives</b>  |   |                             |                          |                      |  |
|---|---|-----------------------------|--------------------------|----------------------|--|
| <i>Please note: This is a summary only and highlights the major differences between the alternatives in a comparative form. The complete description of the alternatives including goals, objectives, and management actions can be found in Chapter 2.</i> |   |                             |                          |                      |  |
| <i>Resource</i>   | <i>Alternative A<br/>(Current Management)</i>   | <i>Alternative B</i>        | <i>Alternative C</i>     | <i>Alternative D</i> | <i>Alternative E<br/>(Preferred Alternative)</i> |
| <b>Air Resources</b>  |   |                             |                          |                      |  |
| Air Quality   | Actions authorized on BLM land will comply with the Clean Air Act requirements, including the State of Montana Air Quality Implementation Plan, through the use of BMPs and the Air Resource Management Plan. Prescribed burns will be managed to comply with Montana DEQ smoke management rules and regulations. |                             |                          |                      |  |
| <b>Cultural Resources – Traditional Cultural Properties (TCP)</b>   |   |                             |                          |                      |  |
| <i>Little Rocky Mountains TCP (30,648 acres)</i>  |   |                             |                          |                      |  |
| Oil and Gas Leasing   | NHPA requirements   | NSO                         |                          |                      | NSO (5,936 acres)<br>Closed (32,166 acres)       |
| Rights-of-Way (ROWs)  | Open  |                             |                          |                      | Avoidance area                                   |
| Wind Energy ROWs  | Open  | Exclusion area              |                          |                      |  |
| Solid Minerals<br>Leasable  | Open  | Closed                      | Closed                   | Closed               | Open (5,458 acres)<br>Closed (32,573 acres)      |
| Locatable<br>Salable  | Open<br>Open  | Withdrawn<br>Open           | Open<br>Open             | Open<br>Closed       | Open (5,332 acres)<br>Closed (32,055 acres)      |
| <i>Sweet Grass Hills TCP (7,718 acres)</i>  |   |                             |                          |                      |  |
| Oil and Gas Leasing   | NSO   |                             |                          |                      | Closed   |
| Rights-of-Way (ROWs)  | Open  |                             |                          |                      | Avoidance area                                   |
| Wind Energy ROWs  | Open  | Exclusion area              |                          |                      |  |
| Solid Minerals<br>Leasable<br>Locatable<br>Salable  | Open<br>Withdrawn<br>Open   | Closed<br>Withdrawn<br>Open | Closed<br>Open<br>Closed |                      | Closed<br>Withdrawn<br>Closed                    |
| <b>Fire Management and Ecology (Categories)</b>   |   |                             |                          |                      |  |
| <i>Category B</i>   | 2,244,429 acres   | 395,092 acres               |                          |                      | 1,390,208 acres                                  |
| <i>Category C</i>   | 193,046 acres   | 2,042,382 acres             |                          |                      | 1,047,266 acres                                  |

| <b>Table 2.21<br/>Summary Comparison of Alternatives</b>  |   |   |                       |                       |  |
|---|---|---|-----------------------|-----------------------|--|
| <i>Please note: This is a summary only and highlights the major differences between the alternatives in a comparative form. The complete description of the alternatives including goals, objectives, and management actions can be found in Chapter 2.</i> |   |   |                       |                       |  |
| <i>Resource</i>   | <i>Alternative A<br/>(Current Management)</i>   | <i>Alternative B</i>  | <i>Alternative C</i>  | <i>Alternative D</i>  | <i>Alternative E<br/>(Preferred Alternative)</i> |
| <b>Fish</b>   |   |   |                       |                       |  |
| Aquatic Habitats  | High value fisheries would be evaluated to determine the need for fencing to promote riparian vegetation. | New reservoirs would be analyzed for fish habitat potential. New and existing designated fishing reservoirs would be maintained and/or improved. All fishing reservoirs would be maintained as fisheries with MFWP concurrence. Fish stocking would be coordinated with MFWP. To the extent possible, roads would be located, designed and maintained to reduce sedimentation, identify and remove unnatural barriers, eliminate fish passage barriers, and maintain/restore riparian vegetation. |                       |                       |  |
| <b>Fluid Minerals</b>   |   |   |                       |                       |  |
| Open to leasing:<br>NSO stipulation   | 282,062 acres (8%)  | 258,560 acres (7%)  | 1,291,160 acres (37%) | 357,456 acres (10%)   | 1,711,378 acres (49%)                            |
| Open to leasing:<br>CSU/TLS stipulation   | 2,649,241 acres (76%)   | 3,291 acres (<1%)   | 1,681,990 acres (48%) | 2,461,652 acres (71%) | 1,460,097 acres (42%)                            |
| Open to leasing:<br>Standard lease terms  | 457,849 acres (13%)   | 55,962 acres (2%)   | 299,713 acres (9%)    | 597,668 acres (17%)   | 167,274 acres (5%)                               |
| Closed to leasing   | 102,298 acres (3%)  | 3,173,637 acres (91%)   | 218,586 acres (6%)    | 74,674 acres (2%)     | 152,702 acres (4%)                               |
| <b>Forests and Woodlands</b>  |   |   |                       |                       |  |
| Forest Product Sales  | The ASQ would not exceed 350 MBF/year.  | The PSQ would not exceed 650 MBF and 4,000 tons of biomass per year. Management of old growth stands would follow USFS overall guidance and direction.  |                       |                       |  |
| Sweet Grass Hills ACEC  | Would not be available for sale of commercial wood products.  | A full range of forest health treatments would be allowed, and could include sale of wood products. The ACEC would not be open for incidental personal use wood products.   |                       |                       |  |
| <b>Lands and Realty</b>   |   |   |                       |                       |  |
| <b>Land Ownership Adjustment</b>  |   |   |                       |                       |  |
| Category 1 - Retention  | NA  | 609,978 acres   | 484,127 acres         | 332,283 acres         | 296,881 acres                                    |
| Category 2 – Retention/<br>Limited Disposal   | 90,114 acres  | 1,813,668 acres   | 1,939,218 acres       | 2,074,881 acres       | 2,126,465 acres                                  |
| Category 3 – Disposal   |   | 14,129 acres  | 14,129 acres          | 30,310 acres          | 14,129 acres                                     |
| <b>Access</b>   |   |   |                       |                       |  |
| Legal Public or   | Case-by-case basis as the need or opportunity arises.   |   |                       |                       |  |

| <b>Table 2.21<br/>Summary Comparison of Alternatives</b>  |   |  |  |  |  |
|---|---|--|--|--|--|
| <i>Please note: This is a summary only and highlights the major differences between the alternatives in a comparative form. The complete description of the alternatives including goals, objectives, and management actions can be found in Chapter 2.</i> |   |  |  |  |  |
| <i>Resource</i>   | <i>Alternative A<br/>(Current Management)</i>   | <i>Alternative B</i>   | <i>Alternative C</i>                                 | <i>Alternative D</i>   | <i>Alternative E<br/>(Preferred Alternative)</i> |
| Administrative Access   | Focus on areas with important resource values.  | Focus on Category 1 and 2 lands where no legal public access exists or where additional access is necessary to meet management objectives.   |  |  |  |
| <b>Facilities</b>   |   |  |  |  |  |
| Recreation Sites, Administrative Sites, Buildings and Communication Towers  | Recreation sites, administrative sites, buildings and communication towers will be maintained within Bureau standards to reduce deferred maintenance costs and meet public health and safety requirements. Comprehensive condition assessments will be conducted for all maintained facilities and maintenance actions would be implemented if necessary. These activities will be coordinated with other federal, state, and local government agencies, private landowners and the general public as needed. Existing and new facilities will be managed through FAMS. |  |  |  |  |
| <b>Rights-of-Way (Individual exclusion and avoidance areas are identified in Chapter 2, Table 2.6.)</b>   |   |  |  |  |  |
| Corridors   | 1 corridor<br>(4 1/2 miles wide)  | 5 corridors<br>(1 mile wide)   | 5 corridors<br>(2 miles wide)                        | No designated corridors  | 5 corridors<br>(1 mile wide)                     |
| Exclusion Areas   | 2 areas   | 4 areas  | 3 areas  | 2 areas  | 2 areas  |
| Avoidance Areas   | 2 areas   | 15 areas   | 17 areas   | 13 areas   | 19 areas   |
| <b>Livestock Grazing</b>  |   |  |  |  |  |
| Lands Available for Livestock Grazing   | Livestock will continue to be allocated approximately 386,600 AUMs of forage each year. Approximately 2,390,000 acres will be open to livestock grazing and 47,000 acres will be closed to livestock grazing except as needed for resource management. Actions consistent with achieving or maintaining the Standards for Rangeland Health and Guidelines for Livestock Grazing Management for Montana, North Dakota, and South Dakota will continue to be incorporated into livestock grazing permits and leases and will apply to all livestock grazing activities.   |  |  |  |  |
| Newly Acquired Lands  | Grazing allocations on newly acquired land would be based on management needs and objectives for the acquisition.   | Newly acquired lands would be evaluated to determine if they should be designated as reserve common allotments, allocated for grazing, or designated as unavailable for livestock grazing in consideration of the management needs and objectives for the acquisition. | Newly acquired lands would be allocated for grazing. | Newly acquired lands would be evaluated to determine if they should be designated as reserve common allotments, allocated for grazing, or designated as unavailable for livestock grazing in consideration of the management needs and objectives for the acquisition. |  |

| <p align="center"><b>Table 2.21</b><br/><b>Summary Comparison of Alternatives</b></p>   |   |  |  |   |   |
|---|---|--|--|---|---|
| <p align="center"><i>Please note: This is a summary only and highlights the major differences between the alternatives in a comparative form. The complete description of the alternatives including goals, objectives, and management actions can be found in Chapter 2.</i></p> |   |  |  |   |   |
| <i>Resource</i>   | <i>Alternative A<br/>(Current Management)</i> | <i>Alternative B</i>   | <i>Alternative C</i>   | <i>Alternative D</i>  | <i>Alternative E<br/>(Preferred Alternative)</i>  |
| Grazing Preference Relinquishment/Reserve Common Allotments   | NA  | <p>Where grazing preference is relinquished or cancelled within the Greater Sage-Grouse Protection Priority Area ACEC and/or the Grassland Bird/Greater Sage-Grouse Priority Areas ACEC, retirement of grazing privileges would be considered in a site-specific environmental analysis that addresses the potential impacts (both positive and negative) to greater sage-grouse. If the analysis does not support closing the allotment to grazing for the benefit of sage-grouse, the allotment would remain available for livestock grazing and would be designated as a reserve common allotment.</p> <p>All allotments wholly located in the Grassland Bird/Greater Sage-Grouse Priority Areas ACEC or Greater Sage-Grouse Protection Priority Area ACEC would be considered for retirement where the base property</p> | <p>Where grazing preference is relinquished or cancelled allotments would remain available for livestock grazing and evaluated to determine if they should be designated as reserve common allotments or reassigned.</p> <p>All allotments wholly located in the Grassland Bird/Greater Sage-Grouse Priority Areas or Greater Sage-Grouse Protection Priority Area habitat would be considered for retirement where the base property owner relinquishes their preference.</p> | <p>Where grazing preference is relinquished or cancelled allotments would be made available for qualified applicants.</p> | <p>Allotments within priority habitat areas for sage-grouse where grazing preference is relinquished or cancelled would be evaluated in a site-specific NEPA document to determine if they should be closed to grazing, designated as reserve common allotments, or reassigned.</p> <p>All allotments wholly located in the Grassland Bird/Greater Sage-Grouse Priority Areas or Greater Sage-Grouse Protection Priority Area habitat would be considered for retirement where the base property owner relinquishes their preference.</p> <p>Where grazing preference is relinquished or cancelled outside of priority sage-grouse habitat, allotments would remain in active use and available for livestock grazing. These allotments could be evaluated to determine if they should be designated as reserve</p> |

**Table 2.21  
Summary Comparison of Alternatives**

*Please note: This is a summary only and highlights the major differences between the alternatives in a comparative form. The complete description of the alternatives including goals, objectives, and management actions can be found in Chapter 2.*

| <i>Resource</i>   | <i>Alternative A<br/>(Current Management)</i>  | <i>Alternative B</i>   | <i>Alternative C</i>   | <i>Alternative D</i> | <i>Alternative E<br/>(Preferred Alternative)</i> |
|---|--|--|--|----------------------|--|
|   |  | owner relinquishes their preference.<br><br>Allotments outside of priority sage-grouse habitat would remain available for livestock grazing and designated as reserve common allotments. |  |                      | common allotments.                               |
| Yearling Factors  | Would be considered through individual AMPs.   | Would not be considered.   | Would be considered within the framework outlined in Appendix I. |                      |  |
| <b>Noxious Weeds and Other Invasive Non-Native Species</b>              |  |  |  |                      |  |
| Noxious Weeds   | Montana state and county designated noxious weeds will be managed according to current federal, state, and local weed management plans. BLM will continue cooperative agreements with state and county entities and will coordinate with other federal, state, and county agencies, weed management areas, and private landowners and organizations. Weed seed free forage will be used on BLM land. |  |  |                      |  |
| Invasive Species  | Other resource programs would assist in invasive species management through project planning and program implementation, and would include integrating prevention measures in program activities to reduce the spread of invasive species and mitigation measures.   |  |  |                      |  |
| Pest Management   | Pest management including the use of pesticides is conducted on a case-by-case basis.  |  |  |                      |  |
| <b>Off-Highway Vehicle Use and Travel and Transportation Management</b> |  |  |  |                      |  |
| <b><i>OHV Area Designations</i></b>                                     |  |  |  |                      |  |
| Open  | 124 acres  | 0 acres  | 0 acres  | 305 acres            | 165 acres  |
| Limited   | 2,429,930 acres  | 2,429,971 acres  | 2,429,930 acres  | 2,437,169 acres      | 2,429,889 acres                                  |
| Closed  | 7,419 acres  | 7,504 acres  | 7,544 acres  | 0 acres              | 7,419 acres                                      |
| <b><i>Travel Management Areas</i></b>                                   |  |  |  |                      |  |
| High Priority   | 27,529 acres   | 1,515,503 acres  | 236,893 acres  | 236,893 acres        | 1,440,901 acres                                  |
| Moderate Priority   | 694,735 acres  | 270,236 acres  | 1,262,260 acres  | 1,262,260 acres      | 121,440 acres                                    |
| Low Priority  | 1,715,311 acres  | 651,735 acres  | 938,321 acres  | 938,321 acres        | 875,133 acres                                    |

| <b>Table 2.21<br/>Summary Comparison of Alternatives</b>  |   |                      |                      |                      |  |
|---|---|----------------------|----------------------|----------------------|--|
| <i>Please note: This is a summary only and highlights the major differences between the alternatives in a comparative form. The complete description of the alternatives including goals, objectives, and management actions can be found in Chapter 2.</i> |   |                      |                      |                      |  |
| <i>Resource</i>   | <i>Alternative A<br/>(Current Management)</i>   | <i>Alternative B</i> | <i>Alternative C</i> | <i>Alternative D</i> | <i>Alternative E<br/>(Preferred Alternative)</i> |
| <b>Travel and Transportation Management</b>   |   |                      |                      |                      |  |
| Roads, Primitive Roads and Trails   | Roads, primitive roads and trails will be maintained in accordance with BLM policy, assigned maintenance intensities (Levels 0-5), consideration of resource issues, and available funding. Existing BLM roads will be managed through FAMS.  |                      |                      |                      |  |
| <b>Paleontological Resources</b>  |   |                      |                      |                      |  |
| Locations and Assessments   | Identify and prioritize high probability paleontological locations for inventories and information attained will guide management decisions. Paleontological assessments will be completed for all projects proposed on federal lands to determine the need for further paleontological inventories.  |                      |                      |                      |  |
| Research and Education  | Develop a resource awareness program to enhance public appreciation of paleontological resource values. This includes coordination with permitted universities and museums. Paleontological research and education opportunities will be pursued for high priority areas.   |                      |                      |                      |  |
| Collection for Personal Use   | The collection of petrified wood and invertebrate fossils for personal use will be allowed as limited by the regulations in areas not specifically closed.  |                      |                      |                      |  |
| <b>Public Safety</b>  |   |                      |                      |                      |  |
| <i>Abandoned Mine Lands</i>   | The closure of dangerous inactive and abandoned mine sites will be designed to reduce the risks to human health and safety, restore the environment, and protect geological and cultural resources. Reclamation will be implemented at the highest risk sites first. Where deemed appropriate, the BLM will restore severely impacted soils and watersheds as close as possible to pre-disturbed conditions that support productive plant communities and ensure properly functioning watersheds. |                      |                      |                      |  |
| <i>Hazard Class Dams</i>  | Construction and maintenance priorities for hazard class dams will be in conformance with applicable laws and regulations, and BLM policy. Condition assessments and Emergency Action Planning will be performed as required by the latest version of the 9177 (Dam Safety) manual section and associated handbooks. The results of the condition assessments will be reviewed to determine the need for reconstruction, maintenance or disposal.   |                      |                      |                      |  |
| <i>Hazardous Materials</i>  | The BLM will comply with all federal environmental and safety laws and regulations governing storage, handling, and use of hazardous materials and governing disposal of hazardous waste. The BLM will also comply with state hazardous materials laws and regulations as required. The BLM will promote and support the appropriate use and recycling of hazardous materials in public facilities and on public land to prevent or minimize the generation and disposal of hazardous wastes.     |                      |                      |                      |  |
| <b>Recreation</b>   |   |                      |                      |                      |  |
| <b>Recreation Opportunity Spectrum Classes</b>  |   |                      |                      |                      |  |
| Primitive   | 0 acres   | 0 acres              | 0 acres              | 0 acres              | 0 acres  |
| Semi-Primitive  | 7,481 acres   | 7,566 acres          | 136,276 acres        | 0 acres              | 7,481 acres                                      |
| Nonmotorized  | 91,872 acres  | 474,217 acres        | 187,503 acres        | 91,872 acres         | 102,586 acres                                    |
| Motorized   |   |                      |                      |                      |  |

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Summary Comparison of Alternatives**

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| <i>Resource</i>                           | <i>Alternative A<br/>(Current Management)</i>       | <i>Alternative B</i>  | <i>Alternative C</i>  | <i>Alternative D</i>   | <i>Alternative E<br/>(Preferred Alternative)</i> |
|---|---|---|---|--|--|
| Roaded                                    |   |   |   |  |  |
| Natural                                   | 2,336,762 acres                                     | 1,916,104 acres   | 2,060,410 acres   | 2,095,626 acres  | 2,111,311 acres                                  |
| Modified                                  | 125 acres   | 38,353 acres  | 52,051 acres  | 248,742 acres  | 214,861 acres                                    |
| Rural                                     | 1,234 acres   | 1,234 acres   | 1,234 acres   | 1,234 acres  | 1,234 acres                                      |
| <b>Recreation Management Areas (RMAs)</b> |   |   |   |  |  |
| Special RMAs                              | 5 areas (1,307,741 acres)                           | 0 acres   | 1 area (27,688 acres)   | 12 areas (97,088 acres)  | 2 areas (27,728 acres)                           |
| Extensive RMAs                            | 3 areas (1,129,734 acres)                           | 0 acres   | 9 areas (61,800 acres)  | 2 areas (244 acres)  | 10 areas (69,405 acres)                          |
| Lands Not Designated                      | 0 acres   | 2,437,474 acres   | 2,347,986 acres   | 2,340,142 acres  | 2,340,341 acres                                  |
| <b>Recreation Sites</b>                   | Manage 70 existing recreation sites and facilities. | Manage 48 recreation sites and facilities. 24 existing fishing reservoir recreation sites would not be managed as recreation sites due to poor habitat and/or insufficient water capacity. Reservoirs that lack water during dry periods would be considered for fish stocking in good water years. | Manage 50 recreation sites and facilities. 24 existing fishing reservoir recreation sites would not be managed as recreation sites due to poor habitat and/or insufficient water capacity. Reservoirs that lack water during dry periods would be considered for fish stocking in good water years. In addition to the 48 sites in Alternatives B and C, Timber Creek Ridge and Thirty Mile OHV would be managed as recreation areas. | Manage 49 recreation sites and facilities. 24 existing fishing reservoir recreation sites would not be managed as recreation sites due to poor habitat and/or insufficient water capacity. Reservoirs that lack water during dry periods would be considered for fish stocking in good water years. In addition to the 48 sites in Alternatives B and C, Timber Creek Ridge would be managed as a recreation area. |  |
| <b>Renewable Energy Resources</b>         |   |   |   |  |  |
| <b>Wind Energy Rights-of-Way</b>          |   |   |   |  |  |
| Open Areas                                | 2,248,336 acres                                     | 6,637 acres   | 106,182 acres   | 231,961 acres  | 33,119 acres                                     |
| Avoidance Areas                           | 0 acres   | 239,014 acres   | 821,335 acres   | 1,912,095 acres  | 885,661 acres                                    |
| Exclusion Areas                           | 189,138 acres                                       | 2,191,823 acres   | 1,509,958 acres   | 293,418 acres  | 1,518,695 acres                                  |

| <b>Table 2.21<br/>Summary Comparison of Alternatives</b>  |   |                               |                            |                         |  |
|---|---|-------------------------------|----------------------------|-------------------------|--|
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| <i>Resource</i>   | <i>Alternative A<br/>(Current Management)</i>   | <i>Alternative B</i>          | <i>Alternative C</i>       | <i>Alternative D</i>    | <i>Alternative E<br/>(Preferred Alternative)</i> |
| <b>Soil Resources</b>   |   |                               |                            |                         |  |
| Surface-disturbing Activities   | BLM will evaluate effects of proposed surface-disturbing activities using NRCS soil survey data/interpretations and/or through onsite investigation, and will apply mitigation measures/BMPs as necessary, relocate the activity to a more suitable soil type, or deny the authorization.<br><br>Authorized surface-disturbing activities will include plans for reclamation. Authorization could be denied in areas where erosion cannot be effectively controlled/mitigated and reclamation would likely be unsuccessful. |                               |                            |                         |  |
| <b>Solid Minerals</b>   |   |                               |                            |                         |  |
| <b>Leasable</b>   |   |                               |                            |                         |  |
| Open  | 3,292,616 acres   | 1,701,587 acres               | 1,834,993 acres            | 3,125,459 acres         | 1,797,760 acres                                  |
| Closed  | 76,477 acres  | 1,667,506 acres               | 1,534,100 acres            | 243,635 acres           | 1,571,333 acres                                  |
| <b>Locatable</b>  |   |                               |                            |                         |  |
| Existing Withdrawals  | 4 areas (19,914 acres)  | 4 areas (20,058 acres)        | 4 areas (20,058 acres)     | 3 areas (387 acres)     | 4 areas (20,058 acres)                           |
| Recommended Withdrawals   | 2 areas (1,991 acres)   | 9 areas (1,674,298 acres)     | 10 areas (1,539,290 acres) | 8 areas (184,458 acres) | 2 areas (24,692 acres)                           |
| <b>Salable</b>  |   |                               |                            |                         |  |
| Open  | 3,034,777 acres   | 1,529,973 acres               | 1,628,980 acres            | 2,866,657 acres         | 2,881,603 acres                                  |
| Closed  | 74,506 acres  | 1,579,309 acres               | 1,480,302 acres            | 242,626 acres           | 227,679 acres                                    |
| <b>Special Designations – Existing ACECs</b>  |   |                               |                            |                         |  |
| <b>Azure Cave ACEC (141 acres)</b>  |   |                               |                            |                         |  |
| Oil and Gas Leasing   | Closed  |                               |                            |                         |  |
| Rights-of-Way (ROWs)  | Avoidance area  |                               |                            |                         |  |
| Wind Energy ROWs  | Avoidance area  |                               | Exclusion area             |                         |  |
| Solid Minerals<br>Leasable<br>Locatable<br>Salable  | Open<br>Withdrawn<br>Open   | Closed<br>Withdrawn<br>Closed |                            |                         |  |

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| <i>Resource</i>                                      | <i>Alternative A<br/>(Current Management)</i>  | <i>Alternative B</i>                       | <i>Alternative C</i>                       | <i>Alternative D</i>                     | <i>Alternative E<br/>(Preferred Alternative)</i> |
|--|--|--|--|--|--|
| <b>Big Bend of the Milk River ACEC (1,972 acres)</b> |  |  |  |  |  |
| Oil and Gas Leasing                                  | NSO  |  |  |  |  |
| Rights-of-Way (ROWs)                                 | Avoidance area   |  |  |  |  |
| Wind Energy ROWs                                     | Avoidance area   | Exclusion area                             |  |  |  |
| Solid Minerals<br>Leasable<br>Locatable<br>Salable   | Closed<br>Recommend withdrawal<br>Open   | Closed<br>Open<br>Open                     |  | Closed<br>Open<br>Closed                 |  |
| <b>Bitter Creek ACEC (60,701 acres)</b>              |  |  |  |  |  |
| Oil and Gas Leasing                                  | Closed until an ACEC management plan is completed that would address leasing (60,717 acres). |  |  |  |  |
| Rights-of-Way (ROWs)                                 | Northern Border Corridor<br>(4 ½ mile width)   | Northern Border Corridor<br>(1 mile width) | Northern Border Corridor<br>(2 mile width) | Avoidance area (no corridor)             |  |
| Wind Energy ROWs                                     | Exclusion area   |  |  |  |  |
| Solid Minerals<br>Leasable<br>Locatable<br>Salable   | Closed<br>Open<br>Closed   | Closed<br>Recommend withdrawal<br>Closed   |  |  | Closed<br>Open<br>Closed                         |
| <b>Kevin Rim ACEC (4,557 acres)</b>                  |  |  |  |  |  |
| Oil and Gas Leasing                                  | NSO within 3 miles from<br>active raptor nests   | NSO  |  |  |  |
| Rights-of-Way (ROWs)                                 | Avoidance area   |  |  |  |  |
| Wind Energy ROWs                                     | Avoidance area   | Exclusion area                             |  |  |  |
| Solid Minerals<br>Leasable<br>Locatable<br>Salable   | Open<br>Open<br>Open   | Closed<br>Recommend withdrawal<br>Open     |  | Closed<br>Recommend withdrawal<br>Closed | Closed<br>Open<br>Closed                         |
| <b>Mountain Plover ACEC (24,762 acres)</b>           |  |  |  |  |  |
| Oil and Gas Leasing                                  | Timing April 1 to July 31  | NSO  |  |  | Closed   |

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|---|---|--|--|--|--|
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| <b>Resource</b>   | <b>Alternative A<br/>(Current Management)</b> | <b>Alternative B</b>   | <b>Alternative C</b>                     | <b>Alternative D</b>                     | <b>Alternative E<br/>(Preferred Alternative)</b> |
| Rights-of-Way (ROWs)  |   | Avoidance area   |  |  |  |
| Wind Energy ROWs  |   | Exclusion area   |  |  |  |
| Solid Minerals<br>Leasable<br>Locatable<br>Salable  | Open<br>Open<br>Open                          | Closed<br>Recommend withdrawal<br>Open   |  | Closed<br>Recommend withdrawal<br>Closed |  |
| <b>Prairie Dog Towns within the 7km Complex ACEC (16,392 acres)</b>   |   |  |  |  |  |
| Designation   | BLM would retain the ACEC (16,392 acres).     | BLM would not retain the ACEC. Management of prairie dog habitat would be consistent with the Wildlife section of Chapter 2. |  |  |  |
| <b>Sweet Grass Hills ACEC (7,419 acres)</b>   |   |  |  |  |  |
| Oil and Gas Leasing   | NSO   |  |  |  | Closed   |
| Rights-of-Way (ROWs)  | Open  | Avoidance area   |  |  |  |
| Wind Energy ROWs  | Open  | Exclusion area   |  |  |  |
| OHV Use   | Closed  |  |  | Open                                     | Closed   |
| Solid Minerals<br>Leasable<br>Locatable<br>Salable  | Open<br>Withdrawn<br>Open                     | Closed<br>Withdrawn<br>Open  |  | Closed<br>Open<br>Closed                 | Closed<br>Withdrawn<br>Open                      |
| <b>Special Designations – Potential ACECs</b>   |   |  |  |  |  |
| <b>Frenchman ACEC</b>   |   |  |  |  |  |
| Designation   | The area would not be designated an ACEC.     |  | Designate 42,020 acres                   | Designate 63,482 acres                   | Designate 42,020 acres                           |
| Oil and Gas Leasing   |   |  | NSO                                      | NSO                                      | NSO  |
| Rights-of-Way (ROWs)  |   |  | Avoidance area                           | Avoidance area                           | Avoidance area                                   |
| Wind Energy ROWs  |   |  | Exclusion area                           | Exclusion area                           | Exclusion area                                   |
| Solid Minerals<br>Leasable<br>Locatable<br>Salable  |   |  | Closed<br>Recommend withdrawal<br>Closed | Closed<br>Recommend withdrawal<br>Closed | Closed<br>Open<br>Closed                         |

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| <i>Resource</i>   | <i>Alternative A<br/>(Current Management)</i> | <i>Alternative B</i>  | <i>Alternative C</i>                       | <i>Alternative D</i>  | <i>Alternative E<br/>(Preferred Alternative)</i> |
|---|---|---|--|-----------------------|--|
| <b>Grassland Bird/Greater Sage-Grouse Priority Areas ACEC</b> |   |   |  |                       |  |
| Designation   | The areas would not be designated an ACEC.    | Designate 461,220 acres. Management would be the same as described for the Grassland Bird/Greater Sage-Grouse Priority Areas in the Wildlife Section. | The areas would not be designated an ACEC. |                       |  |
| Oil and Gas Leasing   |   | Closed  |  |                       |  |
| Rights-of-Way (ROWs)  |   | Exclusion area  |  |                       |  |
| Wind Energy ROWs  |   | Exclusion area  |  |                       |  |
| Solid Minerals<br>Leasable<br>Locatable<br>Salable            |   | Closed<br>Recommend withdrawal<br>Closed  |  |                       |  |
| <b>Greater Sage-Grouse Protection Priority Area ACEC</b>      |   |   |  |                       |  |
| Designation   | The area would not be designated an ACEC.     | Designate 930,265 acres. Management would be the same as described for the Greater Sage-Grouse Protection Priority Area in the Wildlife Section.      | The area would not be designated an ACEC.  |                       |  |
| Oil and Gas Leasing   |   | Closed  |  |                       |  |
| Rights-of-Way (ROWs)  |   | Exclusion area  |  |                       |  |
| Wind Energy ROWs  |   | Exclusion area  |  |                       |  |
| Solid Minerals<br>Leasable<br>Locatable<br>Salable            |   | Closed<br>Recommend withdrawal<br>Closed  |  |                       |  |
| <b>Little Rocky Mountains ACEC</b>                            |   |   |  |                       |  |
| Designation   | The area would not be designated an ACEC.     |   | Designate 27,177 acres                     | The area would not be |  |

| <b>Table 2.21<br/>Summary Comparison of Alternatives</b>  |   |  |                      |  |  |
|---|---|--|----------------------|--|--|
| <i>Please note: This is a summary only and highlights the major differences between the alternatives in a comparative form. The complete description of the alternatives including goals, objectives, and management actions can be found in Chapter 2.</i> |   |  |                      |  |  |
| <i>Resource</i>   | <i>Alternative A<br/>(Current Management)</i> | <i>Alternative B</i>                     | <i>Alternative C</i> | <i>Alternative D</i>   | <i>Alternative E<br/>(Preferred Alternative)</i> |
| Oil and Gas Leasing   |   |  |                      | NSO  | designated an ACEC.                              |
| Rights-of-Way (ROWs)  |   |  |                      | Avoidance area   |  |
| Wind Energy ROWs  |   |  |                      | Exclusion area   |  |
| Solid Minerals<br>Leasable<br>Locatable<br><br>Salable  |   |  |                      | Closed<br>Recommend partial<br>withdrawal (15,000 acres)<br>Closed |  |
| <b>Malta Geological ACEC</b>  |   |  |                      |  |  |
| Designation   | The area would not be designated an ACEC.     | Designate 6,153 acres                    |                      |  | Designate 6,153 acres                            |
| Oil and Gas Leasing   |   | CSU                                      |                      |  | CSU  |
| Rights-of-Way (ROWs)  |   | Avoidance area                           |                      |  | Avoidance area                                   |
| Wind Energy ROWs  |   | Exclusion area                           |                      |  | Exclusion area                                   |
| Solid Minerals<br>Leasable<br>Locatable<br>Salable  |   | Closed<br>Recommend withdrawal<br>Closed |                      |  | Closed<br>Open<br>Closed                         |
| <b>Woody Island ACEC</b>  |   |  |                      |  |  |
| Designation   | The area would not be designated an ACEC.     | Designate 22,411 acres                   |                      |  | Designate 32,869 acres                           |
| Oil and Gas Leasing   |   | NSO                                      |                      |  | NSO  |
| Rights-of-Way (ROWs)  |   | Avoidance area                           |                      |  | Avoidance area                                   |
| Wind Energy ROWs  |   | Exclusion area                           |                      |  | Exclusion area                                   |
| Solid Minerals<br>Leasable<br>Locatable<br>Salable  |   | Closed<br>Recommend withdrawal<br>Closed |                      |  | Closed<br>Open<br>Closed                         |
| <b>Zortman/Landusky Mine Reclamation ACEC</b>   |   |  |                      |  |  |
| Designation   | The area would not be                         | Designate 3,609 acres                    |                      | The area would not be  | Designate 2,682 acres                            |

**Table 2.21  
Summary Comparison of Alternatives**

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| <b>Resource</b>                                    | <b>Alternative A<br/>(Current Management)</b>  | <b>Alternative B</b>  | <b>Alternative C</b>  | <b>Alternative D</b>   | <b>Alternative E<br/>(Preferred Alternative)</b>  |
|--|--|---|---|--|---|
| Oil and Gas Leasing                                | designated an ACEC.  | NSO   | designated an ACEC.   | designated an ACEC.  | Closed  |
| Rights-of-Way (ROWs)                               |  | Avoidance area  |   |  | Avoidance area  |
| Wind Energy ROWs                                   |  | Exclusion area  |   |  | Exclusion area  |
| Solid Minerals<br>Leasable<br>Locatable<br>Salable |  | Closed<br>Recommend withdrawal<br>Closed  |   |  | Closed<br>Consider withdrawal<br>Open for reclamation materials   |
| <b>National Historic Trails</b>                    | BLM will manage National Historic Trails consistent with laws and management plans.  |   |   |  |   |
| <b>Special Designations – Other</b>                |  |   |   |  |   |
| <b>Wild and Scenic Rivers</b>                      | No segments would be recommended for inclusion in the National Wild and Scenic Rivers System.  | The 1/2 mile segment of the Marias River at the confluence of the Missouri River would be recommended as suitable.  | The 1/2 mile segment of the Marias River at the confluence of the Missouri River would be recommended as nonsuitable. |  |   |
| <b>Wilderness Study Areas</b>                      | The Bitter Creek and Burnt Lodge WSAs will be managed according to the BLM Manual 6330-Management of BLM Wilderness Study Areas until such time as Congress acts upon the recommendations. |   |   |  |   |
| <b>Vegetation – Rangeland</b>                      |  |   |   |  |   |
| Rest Periods from Livestock Grazing                | A minimum rest period of 2 growing seasons would be required after any major disturbance to vegetation communities.  | Rest periods of less than 2 growing seasons may be desirable in some circumstances, and would be determined by site-specific planning, monitoring and environmental review. |   |  |   |
| Sale of Grass Seed or Hay                          | May be authorized.   | Would not be authorized.  | May be authorized.  |  |   |
| Water Developments                                 | In the Prairie Potholes area, one water source per section would be the guideline.   | Installed and/or maintained to facilitate control of livestock use of vegetation, support other uses and protect resource values.   |   | In the Prairie Potholes area, one water source per section would be the guideline. | Installed and/or maintained to facilitate control of livestock use of vegetation, support other uses and protect resource values. |

| <b>Table 2.21<br/>Summary Comparison of Alternatives</b>  |   |   |  |  |   |
|---|---|---|--|--|---|
| <i>Please note: This is a summary only and highlights the major differences between the alternatives in a comparative form. The complete description of the alternatives including goals, objectives, and management actions can be found in Chapter 2.</i> |   |   |  |  |   |
| <b>Resource</b>   | <b>Alternative A<br/>(Current Management)</b>   | <b>Alternative B</b>  | <b>Alternative C</b>   | <b>Alternative D</b>   | <b>Alternative E<br/>(Preferred Alternative)</b>  |
|   | Alternate water developments would be considered before constructing reservoirs greater than 5 acre feet in soil subgroups 3 and 4.   | Alternative water developments would be emphasized before constructing new pits and reservoirs.   |  | Alternate water developments would be considered before constructing reservoirs greater than 5 acre feet in highly erodible soils with high siltation rates. | Alternative water developments would be emphasized before constructing new pits and reservoirs.   |
| Land Treatments   | Additional forage would normally be allocated 75% to watershed and 25% to livestock.  | Increased production would be allocated toward accomplishing multiple-use objectives. Additional forage resulting from land treatments could be temporarily allocated 75% to watershed and wildlife, and 25% to livestock.                    |  |  |   |
|   | Where there is substantial contribution by the livestock permittee and no conflicts with wildlife objectives, up to 50% of the additional vegetation may be allocated to livestock. | Where there is substantial contribution by the livestock permittee and no conflicts with wildlife objectives, up to 50% of the additional vegetation may be temporarily allocated to livestock.   |  |  |   |
|   |   | Outside greater sage-grouse priority habitats, land treatments would be used to achieve and maintain fire regimes, and watershed, grazing management, and wildlife objectives.  |  |  |   |
|   |   | Only treatments that conserve, enhance or restore greater sage-grouse and/or grassland bird habitat would be allowed in the Greater Sage-Grouse Protection Priority Area ACEC and the Grassland Bird/Greater Sage-Grouse Priority Areas ACEC. | Within the Greater Sage-Grouse Protection Priority Area and the Grassland Bird/Greater Sage-Grouse Priority Areas, only treatments that conserve, enhance or restore greater sage-grouse habitat would be allowed.   |  | Within the Greater Sage-Grouse Protection Priority Area and the Grassland Bird/Greater Sage-Grouse Priority Areas, treatments that conserve, enhance or restore greater sage-grouse habitat would be allowed as well as treatments that benefit other resources and do not adversely affect greater sage-grouse or their habitat. |
| Crested Wheatgrass Seedings   | Manage existing crested wheatgrass seedings where feasible as spring use pastures to defer native rangeland grazing,  | Evaluate crested wheatgrass seedings emphasizing conversion to native species on a case-by-case basis.  | Manage existing crested wheatgrass seedings where feasible as spring use pastures to defer native rangeland grazing. Seedings would be maintained for maximum livestock forage production with up to 70% of the production allocated to livestock when soils are stabilized to a satisfactory condition. Additional seedings may be used to consolidate existing scattered stands into manageable units. |  |   |

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Summary Comparison of Alternatives**

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| <i>Resource</i>                          | <i>Alternative A<br/>(Current Management)</i>  | <i>Alternative B</i>   | <i>Alternative C</i>  | <i>Alternative D</i> | <i>Alternative E<br/>(Preferred Alternative)</i>  |
|--|--|--|---|----------------------|---|
|  | except where sagebrush invasion has resulted in important wildlife habitat.  | Where native restoration of old crested wheatgrass seedings is considered, farming and herbicide use could be authorized for up to three years in order to help destroy the old seed bank and improve the success of the native seeding.                               |   |                      |   |
| Rehabilitation of Surface Disturbance    | Rehabilitate surface disturbances greater than 1/4 acre.   | Reclaim surface disturbances greater than 1/10 acre. Range improvement pits and reservoirs would be excluded until abandonment.  |   |                      |   |
| <b>Vegetation – Riparian and Wetland</b> |  |  |   |                      |   |
| Range Improvements/<br>Water Facilities  | Range improvements would be built to support AMPs.   | Alternate water facilities would be installed to relieve grazing impacts on riparian areas inside of priority sage-grouse habitat.   | Alternate water facilities would be installed to relieve grazing impacts on riparian areas. |                      | Alternate water facilities would be installed to relieve grazing impacts on riparian areas inside of priority sage-grouse habitat.  |
| Hot Season Grazing                       | No restrictions.   | Grazing techniques and practices would be implemented to reduce hot season (summer) grazing on riparian and meadow complexes within the Greater Sage-Grouse Protection Priority ACEC and the Grassland Bird/Greater Sage-Grouse Priority Areas ACEC.                   | No restrictions.  |                      | Grazing techniques and practices would be implemented to reduce hot season (summer) grazing on riparian and meadow complexes within the Greater Sage-Grouse Protection Priority Area and the Grassland Bird/Greater Sage-Grouse Priority Areas. |
| Saline Seeps                             | Saline seeps would be evaluated on an individual basis to assess the cause, understand the purview, and determine how the seeps should be managed. | Saline seeps that occur as a result of surface-disturbing activities would be prioritized and reclaimed. Surface-disturbing activities with the potential for producing seep areas would be designed with mitigation measures to minimize development of saline seeps. |   |                      |   |
| Riparian Exclosures                      | Riparian exclosures would be monitored and   | Riparian exclosures would be maintained, monitored, evaluated and/or modified for their intended purpose. If they no longer serve a resource management purpose they would be removed.   |   |                      |   |

| <b>Table 2.21<br/>Summary Comparison of Alternatives</b>  |   |  |                      |                      |  |
|---|---|--|----------------------|----------------------|--|
| <i>Please note: This is a summary only and highlights the major differences between the alternatives in a comparative form. The complete description of the alternatives including goals, objectives, and management actions can be found in Chapter 2.</i> |   |  |                      |                      |  |
| <b>Resource</b>   | <b>Alternative A<br/>(Current Management)</b>   | <b>Alternative B</b>   | <b>Alternative C</b> | <b>Alternative D</b> | <b>Alternative E<br/>(Preferred Alternative)</b>   |
|   | evaluated for future removal.   |  |                      |                      |  |
| Pits/Wetlands   | NA  | No pits would be placed in natural wetlands and in some cases pits may be filled in to improve wildlife habitat in natural wetlands. | NA                   |                      | No pits would be placed in natural wetlands and in some cases pits may be filled in to improve wildlife habitat in natural wetlands.       |
| <b>Vegetation – Special Status Plants</b>   |   |  |                      |                      |  |
|   | Inventory BLM lands to determine which BLM special status plant species occur on public lands, the condition of the plant populations and their habitats, and how discretionary BLM actions affect those plant species and their habitats.<br><br>Site-specific prescriptions may include avoidance of special status plant habitat for ROWs, seasonal timing restrictions for grazing (e.g., limited to no grazing during flowering to seed set for a particular species), no salt or water placement within 0.25 miles of a known special status plant species population, seed collection or transplanting of special status plant species for mitigation. |  |                      |                      |  |
| <b>Visual Resources</b>   |   |  |                      |                      |  |
| Class I   | 0 acres   | 90,032 acres   | 74,506 acres         | 74,506 acres         | 74,506 acres   |
| Class II  | 417,334 acres   | 977,396 acres  | 914,197 acres        | 127,439 acres        | 841,087 acres  |
| Class III   | 58,213 acres  | 498,298 acres  | 521,322 acres        | 584,113 acres        | 521,868 acres  |
| Class IV  | 1,961,928 acres   | 871,748 acres  | 927,449 acres        | 1,651,416 acres      | 1,000,013 acres  |
| <b>Water Resources</b>  |   |  |                      |                      |  |
| Watershed Control Structures  | Maintain some of the Willow Creek Basin watershed control structures in south Valley County for wildlife, riparian and access values.   | Watershed control structures would be maintained on a case-by-case basis to meet Standards for Rangeland Health.                     |                      |                      | Watershed control structures would be maintained on a case-by-case basis to meet Standards for Rangeland Health or public safety concerns. |
| New Reservoirs  | New reservoirs would be evaluated on a case-by-   | New reservoirs would not be built where water  | NA                   |                      | New reservoirs would be considered on a site-  |

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| <i>Resource</i>   | <i>Alternative A<br/>(Current Management)</i>  | <i>Alternative B</i>  | <i>Alternative C</i>   | <i>Alternative D</i> | <i>Alternative E<br/>(Preferred Alternative)</i>  |
|---|--|---|--|----------------------|---|
|   | case basis through the environmental review process.   | would inundate highly productive riparian areas and areas of important wildlife habitat, such as buffaloberry thickets.   |  |                      | specific basis through activity planning and would consider livestock grazing practices, important wildlife habitat, alternate water sources, and the opportunity to replace or repair existing reservoirs. |
| Produced Water  | NA   | Encourage oil and gas operators to develop and implement methods that treat produced water and enable its beneficial use. | Avoid the discharge of produced water from point sources to BLM land, including stream channels and uplands, as a means of disposal. | NA                   | Avoid the discharge of produced water from point sources to BLM land, including stream channels and uplands, as a means of disposal.  |
| <b>Wilderness Characteristics</b>   |  |   |  |                      |   |
| <i>Areas Managed to Protect Wilderness Characteristics As a Priority Over Other Resource Values and Multiple Uses<br/>(See Chapter 2, Table 2.20 for more detailed information.)</i>  |  |   |  |                      |   |
| Number  | NA   | 26 acres  | 12 areas   | 0                    | 2 areas   |
| Acres   | NA   | 386,428 acres   | 228,395 acres  | 0                    | 10,714 acres  |
| <i>Acres Managed to Emphasize Other Resource Values and Multiple Uses While Applying Management Restrictions to Reduce Impacts to Wilderness Characteristics<br/>(See Chapter 2, Table 2.20 for more detailed information.)</i> |  |   |  |                      |   |
| Acres   | NA   | 0   | 75,327 acres   | 0                    | 290,865 acres   |
| <i>Acres Managed to Emphasize Other Resource Values and Multiple Uses As a Priority Over Protecting Wilderness Characteristics<br/>(See Chapter 2, Table 2.20 for more detailed information.)</i>                               |  |   |  |                      |   |
| Acres   | NA   | 0   | 82,706 acres   | 386,428 acres        | 84,849 acres  |
| <b>Wildlife</b>   |  |   |  |                      |   |
| General Wildlife  | The BLM will provide ecological conditions that support wildlife species over the long term and promote maintenance and recovery of federally listed species and BLM sensitive species. The planning area provides for the range of habitat requirements for species by managing for the broad level ecosystem desired conditions. |   |  |                      |   |

| <b>Table 2.21<br/>Summary Comparison of Alternatives</b>  |   |   |   |  |   |
|---|---|---|---|--|---|
| <i>Please note: This is a summary only and highlights the major differences between the alternatives in a comparative form. The complete description of the alternatives including goals, objectives, and management actions can be found in Chapter 2.</i> |   |   |   |  |   |
| <b>Resource</b>   | <b>Alternative A<br/>(Current Management)</b>   | <b>Alternative B</b>  | <b>Alternative C</b>  | <b>Alternative D</b>   | <b>Alternative E<br/>(Preferred Alternative)</b>  |
| Mitigation Measures   | <p>The BLM will apply appropriate mitigation measures and conservation actions to BLM-authorized activities to avoid, minimize, rectify, reduce, or compensate for impacts if an evaluation of the project area indicates the presence of important wildlife species, seasonal wildlife habitat, or other resource concerns.</p> <p>Mitigation of surface-disturbing or disruptive activities will be applied where needed to minimize impacts of human activities on important seasonal wildlife habitats consistent with the oil and gas leasing stipulations. Mitigation measures will be applied on a case-by-case basis during activity level planning if an evaluation of the project area indicates the presence of important wildlife species. Exceptions may be granted by the authorized officer if an environmental review demonstrates that effects could be mitigated to an acceptable level, habitat for the species is not present in the area, or portions of the area can be occupied without affecting a particular species. Exceptions may also be granted where the short-term effects are mitigated by the long-term benefits (e.g., prescribed fire or forest health treatments).</p> |   |   |  |   |
| <b>Oil and Gas Lease Stipulations</b>   |   |   |   |  |   |
| Bald Eagle  | NSO - 1/4 mile from identified essential habitat of state and federal sensitive species.  | Closed to leasing within 1/2 mile of bald eagle nest sites and winter roost sites active within the last 7 years. | NSO within 1/4 mile of bald eagle nest sites active within the last 7 years.  | TLS – Surface occupancy and use is prohibited within 1/2 mile of bald eagle nest sites active within the last 7 years, from January 1 through August 31. | NSO within 1/2 mile of bald eagle nest sites active within the preceding 5 breeding seasons.  |
| Bighorn Sheep Lambing   | Standard lease terms only (200 meters and 60 days).   | Closed to leasing.  | NSO   | TLS - Surface occupancy and use is prohibited within bighorn sheep lambing areas from May 1 through June 30.   | NSO   |
| Bighorn Sheep Range   | Standard lease terms only (200 meters and 60 days).   | Closed to leasing.  | CSU - Surface-disturbing or disruptive activities within bighorn sheep range would require a plan to avoid or minimize habitat loss from direct and indirect impacts. The plan would be approved by the authorized officer. | Standard lease terms only (200 meters and 60 days).  | CSU - Prior to surface-disturbing or disruptive activities a plan to maintain bighorn sheep habitat would be prepared by the proponent and implemented upon approval by the authorized officer. |
| Black-footed Ferret   | NSO - 1/4 mile from identified essential habitat of state and   | Closed to leasing within 1/2 mile of black-footed ferret habitat.   | NSO within 1/4 mile of black-footed ferret habitat.   | NSO within black-footed ferret habitat.  | NSO within 1/4 mile of black-footed ferret habitat.   |

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|---|---|---|--|---|--|
|   | federal sensitive species.  |   |  |   |  |
| Black-tailed Prairie Dog                        | NSO - 1/4 mile from identified essential habitat of state and federal sensitive species.  | Closed to leasing within 1/2 mile of black-tailed prairie dog habitat.  | NSO within 1/4 mile of black-tailed prairie dog habitat.               | NSO within black-tailed prairie dog habitat.  | NSO within 1/4 mile of black-tailed prairie dog habitat.   |
| Colonial Waterbirds (Surface Occupancy)         | NSO within 1/4 mile of a waterbird nesting colony.  | Closed to leasing within 1/2 mile of a waterbird nesting colony.  | NSO within 1/2 mile of a waterbird nesting colony.                     | NSO within 1/4 mile of a waterbird nesting colony.  |  |
| Colonial Waterbirds (Timing Limits)             | Standard lease terms only (200 meters and 60 days).   | TLS - Surface occupancy and use is prohibited within 1 mile of a waterbird nesting colony from April 1 through July 15. |  | TLS - Surface occupancy and use is prohibited within 1/2 mile of a waterbird nesting colony from April 1 through July 15.   |  |
| Crucial Winter Range (antelope, elk, mule deer) | TLS - December 1 to May 15.   | Closed to leasing.  | NSO - Surface occupancy and use is prohibited in crucial winter range. | CSU - Surface-disturbing or disruptive activities within crucial winter range would require a plan to maintain functionality of habitat and avoid or minimize habitat loss. This plan would limit the number of disturbed areas (well pads) within crucial winter range to less than 2 well disturbances per 640 acres of crucial winter range. The plan would be approved by the authorized officer. | CSU - Prior to surface-disturbing or disruptive activities a plan to maintain functionality of crucial winter range for big game and/or greater sage-grouse will be prepared by the proponent and implemented upon approval by the authorized officer. Surface-disturbing or disruptive activities would be restricted or prohibited within 0.6 miles from any existing surface-disturbing or disruptive activity. |
| Elk Calving Grounds                             | TLS - May 1 to June 30.   | Closed to leasing.  | Standard lease terms only (200 meters and 60 days).                    |   |  |
| Endangered Species Act Section 7 Consultation   | The BLM may recommend modifications to or disapprove a proposed activity that would contribute to a need to list plants, animals, or their habitats determined to be threatened, endangered, or other special status species, or that is likely to jeopardize the continued existence of a proposed or listed species or its habitat (Washington Office IM No. 2002-174). |   |  |   |  |

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|---|--|--|---|---|--|
| Grassland Bird/Greater Sage-Grouse Priority Areas     | Appropriate resource stipulations.   | Closed to leasing within the proposed ACEC.            | CSU - Prior to surface-disturbing or disruptive activities a plan to maintain functionality of grassland bird/greater sage-grouse habitat would be prepared by the proponent and implemented upon approval by the authorized officer. Surface-disturbing or disruptive activities would be restricted or prohibited within 0.6 miles from any existing surface-disturbing or disruptive activity. | Appropriate resource stipulations.  | NSO.   |
| Greater Sage-Grouse Leks (General Habitat)            | NSO - 1/4 mile from identified essential habitat of state and federal sensitive species. | Closed to leasing within 2 miles of a sage-grouse lek. | NSO within 1 mile of a sage-grouse lek.   | NSO within 0.6 miles of a sage-grouse lek.  | NSO within 1 mile of a sage-grouse lek.  |
| Greater Sage-Grouse Nesting Habitat (General Habitat) | TLS - Avoid nesting areas March 1 to June 15.  | Closed to leasing.                                     | CSU - Surface-disturbing or disruptive activities would require specific actions to prevent or minimize disturbance to sage-grouse or their habitat outside of the Greater Sage-Grouse Protection Priority Area.  | TLS - Surface occupancy and use is prohibited within 1 mile of leks from March 1 through June 15. | CSU - Surface-disturbing or disruptive activities may be restricted or prohibited. Prior to such activities a plan to maintain functionality of greater sage-grouse habitat will be prepared by the proponent and implemented upon approval by the authorized officer. |
| Greater Sage-Grouse Protection Priority Area          | Appropriate resource stipulations.   | Closed to leasing within the proposed ACEC.            | CSU - Prior to surface-disturbing or disruptive   | Appropriate resource stipulations.  | NSO.   |

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|-------------------------------------|--|--|---|---|--|
|                                     |  |  | activities a plan to maintain functionality of greater sage-grouse habitat will be prepared by the proponent and implemented upon approval by the authorized officer. Surface-disturbing or disruptive activities would be restricted or prohibited within 0.6 miles from any existing surface-disturbing or disruptive activity. |   |  |
| Greater Sage-Grouse Winter Range    | TLS - December 1 to May 15.  | Closed to leasing.   | TLS – Surface occupancy and use is prohibited within winter range from December 1 through May 15.   | TLS - Surface occupancy and use is prohibited within winter range from December 1 through March 31. |  |
| Interior Least Tern                 | NSO - 1/4 mile from identified essential habitat of state and federal sensitive species. | Closed to leasing within 1/2 mile of interior least tern occupied habitat.   | NSO within 1/2 mile of interior least tern occupied habitat.  | NSO within 1/4 mile of interior least tern occupied habitat.  |  |
| Mountain Plover (Surface Occupancy) | NSO - 1/4 mile from identified essential habitat of state and federal sensitive species. | Closed to leasing within 1/4 mile of mountain plover habitat.  | NSO within mountain plover habitat.   |   |  |
| Mountain Plover (Timing Limit)      | Standard lease terms only (200 meters and 60 days).                                      | TLS - Surface occupancy and use is prohibited within 1/2 mile of mountain plover habitat from April 1 through July 31. | TLS - Surface occupancy and use is prohibited within 1/4 mile of mountain plover habitat from April 1 through July 31.  | Standard lease terms only (200 meters and 60 days).   | TLS - Surface occupancy and use is prohibited within 1/4 mile of mountain plover habitat from April 1 through July 15. |
| Pallid Sturgeon                     | Endangered Species Act Section 7 Consultation.   |  |   |   |  |

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|---|--|---|---|--|--|
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| <i>Resource</i>   | <i>Alternative A<br/>(Current Management)</i>  | <i>Alternative B</i>  | <i>Alternative C</i>  | <i>Alternative D</i>   | <i>Alternative E<br/>(Preferred Alternative)</i>   |
|   |  |   |   |  | CSU - Prior to surface-disturbing or disruptive activities occurring in or within 1/2 mile of river or stream shorelines identified as pallid sturgeon habitat, a plan to maintain pallid sturgeon habitat would be prepared by the proponent and implemented upon approval by the authorized officer. |
| Peregrine Falcon  | NSO - 1/4 mile from identified essential habitat of state and federal sensitive species.   | Closed to leasing within 1/2 mile of peregrine falcon nests active within the past 7 years. | NSO within 1/4 mile of peregrine falcon nests active within the past 7 years. | CSU – Surface-disturbing or disruptive activities within 1/4 mile of peregrine falcon nests active within the past 7 years would require a plan to maintain the functionality of the nest, avoid or minimize habitat loss, and minimize disturbances to peregrine falcons. | NSO within 1 mile of peregrine falcon nests active within the preceding 7 breeding seasons.  |
| Piping Plover   | NSO - 1/4 mile from identified essential habitat of state and federal sensitive species.   | Closed to leasing within 1/2 mile of piping plover habitat.                                 | NSO within 1/4 mile of piping plover habitat.                                 | TLS – Surface occupancy and use is prohibited within 1/4 mile of piping plover habitat from May 15 through July 31.  | NSO within 1/4 mile of piping plover habitat.  |
| Raptors   | NSO - 1/4 mile from identified essential habitat of state and federal sensitive species.<br><br>Various stipulations (see Table 2.3 in Chapter 2 | Closed to leasing within 1/2 mile of raptor nests active within the past 7 years.           | NSO within 1/4 mile of raptor nests active within the past 7 years.           | CSU – Surface-disturbing or disruptive activities within 1/4 mile of raptor nests active within the past 7 years would require a plan to maintain the functionality of the nest,   | NSO within 1/4 mile of raptor nests active within the past 7 years.  |

**Table 2.21  
Summary Comparison of Alternatives**

*Please note: This is a summary only and highlights the major differences between the alternatives in a comparative form. The complete description of the alternatives including goals, objectives, and management actions can be found in Chapter 2.*

| <i>Resource</i>                       | <i>Alternative A<br/>(Current Management)</i>  | <i>Alternative B</i>  | <i>Alternative C</i>   | <i>Alternative D</i>   | <i>Alternative E<br/>(Preferred Alternative)</i>   |
|---------------------------------------|--|---|--|--|--|
|                                       | for specifics).  |   |  | avoid or minimize habitat loss, and minimize disturbances to raptors.  |  |
| Raptors (Timing Limits)               | NSO - 1/4 mile from identified essential habitat of state and federal sensitive species. | TLS - Surface occupancy and use is prohibited from March 1 through September 1 within 1 mile of active raptor nest sites. | TLS - Surface occupancy and use is prohibited from March 1 through July 31 within 1/2 mile of active raptor nest sites.  | TLS - Surface occupancy and use is prohibited from March 1 through July 31 within 1/4 mile of active raptor nest sites.  | TLS - Surface occupancy and use is prohibited from March 1 through July 31 within 1/2 mile of active raptor nest sites.  |
| Sharp-tailed Grouse (leks)            | NSO - 500 feet from strutting grounds.   | Closed to leasing within 1/2 mile of sharp-tailed grouse leks.  | NSO within 1/4 mile of sharp-tailed grouse leks.   | CSU – Surface-disturbing or disruptive activities within 1/4 mile of sharp-tailed grouse leks would require a plan to maintain the functionality of the lek, avoid or minimize habitat loss, and minimize disturbances to sharp-tailed grouse. | NSO within 1/4 mile of sharp-tailed grouse leks.   |
| Sharp-tailed Grouse (nesting habitat) | TLS - March 1 to June 30 within 500 feet of a sharp-tailed grouse nest.                  | TLS - Surface occupancy and use is prohibited from March 15 through June 30 within 1 mile of sharp-tailed grouse leks.    | TLS - Surface occupancy and use is prohibited from March 15 through June 30 within 1/2 mile of sharp-tailed grouse leks. | TLS - Surface occupancy and use is prohibited from March 15 through June 30 within 1/4 mile of sharp-tailed grouse leks.   | TLS - Surface occupancy and use is prohibited from March 15 through June 30 within 1/2 mile of sharp-tailed grouse leks.   |
| Special Status Species                | NSO - 1/4 mile from identified essential habitat of state and federal sensitive species. | NSO within 1/4 mile of essential habitat of special status species unless other species-specific stipulations apply.      |  |  | CSU - BLM may recommend modifications to exploration and development proposals to further its conservation and management objective to avoid activities that would contribute to a need to list such a species or their habitat. |
| Sprague’s Pipit                       | Standard lease terms   | Closed to leasing within  | Standard lease terms only (200 meters and 60 days).  |  | TLS – Surface occupancy  |

| <b>Table 2.21<br/>Summary Comparison of Alternatives</b>  |   |   |   |   |   |
|---|---|---|---|---|---|
| <i>Please note: This is a summary only and highlights the major differences between the alternatives in a comparative form. The complete description of the alternatives including goals, objectives, and management actions can be found in Chapter 2.</i> |   |   |   |   |   |
| <b>Resource</b>   | <b>Alternative A<br/>(Current Management)</b>                             | <b>Alternative B</b>                                    | <b>Alternative C</b>  | <b>Alternative D</b>  | <b>Alternative E<br/>(Preferred Alternative)</b>  |
|   | only (200 meters and 60 days).  | Sprague’s pipit habitat.                                |   |   | and use is prohibited from April 15 through July 15 in Sprague’s pipit habitat.                   |
| Swift Fox (Lonesome Lake)   | CSU - 1/2 mile from swift fox dens.                                       | Standard lease terms only (200 meters and 60 days).     |   |   |   |
| Winter Range (antelope, elk, mule deer)   | TLS - December 1 to May 15.   | Closed to leasing.                                      | TLS – Surface occupancy and use is prohibited within winter range from December 1 through May 15. | TLS - Surface occupancy and use is prohibited within winter range from December 1 through March 31. | TLS - Surface occupancy and use is prohibited within winter range from December 1 through May 15. |
| <b>Grassland Bird/Greater Sage-Grouse Priority Areas</b>  |   |   |   |   |   |
| Priority Areas  | NA – priority areas are not identified under this alternative.            | 4 areas (461,220 acres) managed as one ACEC.            | 2 areas (298,772 acres)   | NA – priority areas are not identified under this alternative.                                      | 2 areas (298,772 acres)   |
| Fluid Minerals  |   | Closed  | CSU   |   | NSO   |
| Rights-of-Way (ROWs)  |   | Exclusion area  | Avoidance area  |   | Avoidance area  |
| Wind Energy ROWs  |   | Exclusion area  | Exclusion area  |   | Exclusion area  |
| Solid Minerals<br>Locatable<br>Leasable<br>Salable  |   | Recommend Withdrawal<br>Closed<br>Closed to new permits | Recommend Withdrawal<br>Closed<br>Closed  |   | Open<br>Closed<br>Open  |
| <b>Greater-Sage-Grouse Protection Priority Area</b>   |   |   |   |   |   |
| Protection Priority Areas   | NA – protection priority areas are not identified under this alternative. | 1 area (930,265 acres) managed as an ACEC.              | 1 area (930,265 acres)  | NA – protection priority areas are not identified under this alternative.                           | 1 area (930,265 acres)  |
| Fluid Minerals  |   | Closed  | CSU   |   | NSO   |
| Rights-of-Way (ROWs)  |   | Exclusion area  | Avoidance area  |   | Avoidance area  |
| Wind Energy ROWs  |   | Exclusion area  | Exclusion area  |   | Exclusion area  |
| Solid Minerals<br>Locatable<br>Leasable<br>Salable  |   | Recommend Withdrawal<br>Closed<br>Closed to new permits | Recommend Withdrawal<br>Closed<br>Closed  |   | Open<br>Closed<br>Open  |

**Table 2.22  
Summary Comparison of Environmental Consequences**

| <b>Resource</b>   | <b>Alternative A<br/>(Current Management)</b>   | <b>Alternative B</b>   | <b>Alternative C</b>  | <b>Alternative D</b>   | <b>Alternative E<br/>(Preferred Alternative)</b>  |
|---|---|--|---|--|---|
| <p align="center"><i>Throughout the planning area, BLM-authorized activities associated with all resources and all resource use programs would be subject to mitigation and minimization guidelines and Best Management Practices (BMPs) (Appendix C), including specific Mitigation Measures and Conservation Actions for Greater Sage-Grouse (Appendix M). For analysis purposes, it has been assumed that these practices and conservation actions would be implemented during site-specific project planning where appropriate.</i></p> |   |  |   |  |   |
| <b>Air Resources</b>  |   |  |   |  |   |
| Criteria Air Pollutants and Volatile Organic Compounds  | 4,409 tons/year, of which 3,058 tons (69%) would be from oil and gas activities.  | 2,518 tons/year, of which 1,072 tons (43%) would be from oil and gas activities.   | 4,319 tons/year, of which 2,873 tons (67%) would be from oil and gas activities.  | 4,542 tons/year, of which 3,096 tons (68%) would be from oil and gas activities.   | 4,082 tons/year, of which 2,635 tons (65%) would be from oil and gas activities.  |
| Greenhouse Gases  | 521,277 tons/year, of which 164,221 tons (32%) would be from oil and gas activities.  | 411,559 tons/year, of which 54,507 tons (13%) would be from oil and gas activities.  | 510,929 tons/year, of which 153,877 tons (30%) would be from oil and gas activities.  | 523,531 tons/year, of which 166,479 tons (32%) would be from oil and gas activities.   | 497,848 tons/year, of which 140,796 tons (28%) would be from oil and gas activities.  |
| <b>Cultural Resources</b>   |   |  |   |  |   |
| Fluid Minerals  | <p>102,298 acres would be closed to leasing, including 27,768 acres in the Little Rocky Mountains TCP.</p> <p>An NSO stipulation would be placed on 282,062 acres, including Big Bend of the Milk River ACEC (1,979 acres); Kevin Rim ACEC (4,564 acres); and Sweet Grass Hills ACEC (6,248 acres).</p> <p>Remaining area available for leasing (3,107,090 acres) would require mitigation through Section 106 of NHPA.</p> | <p>3,173,637 acres would be closed to leasing, including 40 acres near the Bear Paw Battlefield.</p> <p>An NSO stipulation would be placed on 258,560 acres, including Big Bend of the Milk River ACEC (1,979 acres); Kevin Rim ACEC (4,564 acres); Sweet Grass Hills TCP (21,275 acres); Little Rocky Mountains TCP (38,102 acres); and National Register eligible properties (1,497 acres).</p> <p>Remaining area available for leasing (59,253 acres) would require mitigation through Section 106 of NHPA.</p> | <p>218,586 acres would be closed to leasing, including 40 acres near the Bear Paw Battlefield.</p> <p>An NSO stipulation would be placed on 1,291,160 acres, including Big Bend of the Milk River ACEC (1,979 acres); Kevin Rim ACEC (4,564 acres); Sweet Grass Hills TCP (21,275 acres); Little Rocky Mountains TCP (38,102 acres); and National Register eligible properties (1,497 acres).</p> <p>Remaining area available for leasing (1,981,704 acres) would require mitigation through Section 106 of NHPA.</p> | <p>74,674 acres would be closed to leasing.</p> <p>An NSO stipulation would be placed on 357,456 acres, including Big Bend of the Milk River ACEC (1,979 acres); Kevin Rim ACEC (4,564 acres); Sweet Grass Hills TCP (21,275 acres); Little Rocky Mountains TCP (38,102 acres); and National Register eligible properties (1,497 acres).</p> <p>Remaining area available for leasing (3,059,320 acres) would require mitigation through Section 106 of NHPA.</p> | <p>152,702 acres would be closed to leasing, including 21,275 acres in the Sweet Grass Hills TCP and 32,166 acres in higher elevations of the Little Rocky Mountains TCP.</p> <p>An NSO stipulation would be placed on 1,711,378 acres, including Big Bend of the Milk River ACEC (1,979 acres); Kevin Rim ACEC (4,564 acres); remaining lower elevations of the Little Rocky Mountains TCP (5,936 acres); National Register eligible properties (1,497 acres); and 40 acres near the Bear Paw Battlefield.</p> |

| <p align="center"><b>Table 2.22</b><br/><b>Summary Comparison of Environmental Consequences</b></p>  |  |  |   |  |   |
|--|--|--|---|--|---|
| <i>Resource</i>  | <i>Alternative A<br/>(Current Management)</i>  | <i>Alternative B</i>   | <i>Alternative C</i>  | <i>Alternative D</i>   | <i>Alternative E<br/>(Preferred Alternative)</i>  |
| <p><i>Throughout the planning area, BLM-authorized activities associated with all resources and all resource use programs would be subject to mitigation and minimization guidelines and Best Management Practices (BMPs) (Appendix C), including specific Mitigation Measures and Conservation Actions for Greater Sage-Grouse (Appendix M). For analysis purposes, it has been assumed that these practices and conservation actions would be implemented during site-specific project planning where appropriate.</i></p> |  |  |   |  |   |
|  |  |  |   |  | Remaining area available for leasing (1,627,370 acres) would require mitigation through Section 106 of NHPA.  |
| Renewable Energy   | No special protection for 11,590 acres of National Register eligible sites in high potential areas except mitigation under Section 106 of the NHPA.  | <p>ACECs and TCPs would be better protected as exclusion areas for wind energy rights-of-way.</p> <p>No special protection for 11,590 acres of National Register eligible sites in high potential areas except mitigation under Section 106 of the NHPA.</p>   |   |  |   |
| Solid Minerals   | <p>Upon expiration of the Zortman/Landusky withdrawal in 2015 mining development could occur which could have indirect impacts to the viewshed and create unwanted noise for traditionalists using the surrounding areas.</p> <p>If the Sweet Grass Hills withdrawal is not renewed in 2017, mining development could occur which would indirectly affect the visual landscape and could directly affect sacred sites.</p> <p>Adverse effects to cultural resources from salable</p> | <p>The Sweet Grass Hills and Little Rocky Mountains TCPs would be recommended for withdrawal from mineral entry for an additional 20 years, which would provide maximum beneficial effects for archaeological sites and traditional uses.</p> <p>The Big Bend of the Milk River and Kevin Rim ACECs would be withdrawn from mineral entry for 20 years, which would protect the historic properties and traditional users of the areas would have no visual or audio disturbance from mining</p> | <p>The Sweet Grass Hills TCP would be recommended for withdrawal from mineral entry for an additional 20 years, which would provide maximum beneficial effects for archaeological sites and traditional uses.</p> <p>The Little Rocky Mountains TCP would be closed to leasable and salable solid minerals, which would benefit cultural resources.</p> <p>Adverse effects to cultural resources from salable minerals would be mitigated through Section</p> | <p>Upon expiration of the Zortman/Landusky withdrawal in 2015 mining development could occur which could have indirect impacts to the viewshed and create unwanted noise for traditionalists using the surrounding areas.</p> <p>Upon expiration of the Sweet Grass Hills withdrawal in 2017 mining development could occur which would indirectly affect the visual landscape and could directly affect sacred sites.</p> <p>Adverse effects to cultural resources from salable</p> | <p>The Sweet Grass Hills TCP would be recommended for withdrawal from mineral entry for an additional 20 years, which would provide maximum beneficial effects for archaeological sites and traditional uses.</p> <p>A portion of the Little Rocky Mountains TCP would be closed to leasable minerals (32,573 acres) but would be open to locatable minerals, which would adversely impact the visual, aural and physical qualities of the TCP.</p> |

| <b>Table 2.22<br/>Summary Comparison of Environmental Consequences</b>  |   |  |   |  |   |
|---|---|--|---|--|---|
| <i>Resource</i>   | <i>Alternative A<br/>(Current Management)</i>   | <i>Alternative B</i>   | <i>Alternative C</i>  | <i>Alternative D</i>   | <i>Alternative E<br/>(Preferred Alternative)</i>  |
| <i>Throughout the planning area, BLM-authorized activities associated with all resources and all resource use programs would be subject to mitigation and minimization guidelines and Best Management Practices (BMPs) (Appendix C), including specific Mitigation Measures and Conservation Actions for Greater Sage-Grouse (Appendix M). For analysis purposes, it has been assumed that these practices and conservation actions would be implemented during site-specific project planning where appropriate.</i> |   |  |   |  |   |
|   | minerals would be mitigated through Section 106 of the NHPA.  | activities.<br><br>Cultural resources in the Greater Sage-Grouse Protection Priority Area and Grassland Bird/Greater Sage-Grouse Priority Areas would be protected because surface disturbance would be restricted on 1,391,485 acres. | 106 of the NHPA.<br><br>Cultural resources in the Greater Sage-Grouse Protection Priority Area and Grassland Bird/Greater Sage-Grouse Priority Areas would be protected because surface disturbance would be restricted on 1,229,037 acres. | minerals would be mitigated through Section 106 of the NHPA. | Constraints in the Greater Sage-Grouse Protection Priority Area and Grassland Bird/Greater Sage-Grouse Priority Areas (NSO for oil and gas development (1,028,661 acres and 318,526 acres, respectively); closure to leasable minerals (1,069,671 acres and 317,242 acres, respectively); closure to renewable energy development; avoidance areas for transmission lines and new roads) would provide greater protection from surface disturbance. |
| <b>Economics</b>  |   |  |   |  |   |
| Agricultural and Livestock Use  | BLM would continue to provide about 7% of the total livestock forage needs in the planning area and economic dependency of livestock producers on BLM forage would remain unchanged. About 550 operators would continue to have grazing permits on 1,030 allotments. About 10% of the farms/ranches in the planning area would hold grazing permits. Since the amount of authorized use would remain unchanged, dependency on BLM forage for each county would also remain relatively unchanged. The economic dependency of individual livestock producers on BLM forage would also remain unchanged and BLM forage would continue to provide a critical element of some livestock producers' complement of grazing, forage, and hay production. An annual average of 329,644 AUMs of authorized livestock grazing would support approximately 300 total full and part-time jobs and \$2.1 million in labor and proprietor's income. Annual federal revenues from livestock grazing fees would be about \$445,000 annually, of which about \$80,000 would be distributed to the counties. |  |   |  |   |
| Mineral Development   | Under all alternatives, mineral development (mostly oil and gas) would continue to be the land/mineral use that has the most influence on the local economy. It would contribute more employment, income, and public revenue than any other major category of BLM activity. About 70% of  |  |   |  |   |

| <p align="center"><b>Table 2.22</b><br/><b>Summary Comparison of Environmental Consequences</b></p>  |  |   |  |   |  |
|--|--|---|--|---|--|
| <i>Resource</i>  | <i>Alternative A<br/>(Current Management)</i>  | <i>Alternative B</i>  | <i>Alternative C</i>   | <i>Alternative D</i>  | <i>Alternative E<br/>(Preferred Alternative)</i>   |
| <p><i>Throughout the planning area, BLM-authorized activities associated with all resources and all resource use programs would be subject to mitigation and minimization guidelines and Best Management Practices (BMPs) (Appendix C), including specific Mitigation Measures and Conservation Actions for Greater Sage-Grouse (Appendix M). For analysis purposes, it has been assumed that these practices and conservation actions would be implemented during site-specific project planning where appropriate.</i></p> |  |   |  |   |  |
|  | <p>federal natural gas production would occur in Phillips County and almost 70% of federal oil production would occur in Toole County. Sand/gravel production (about 38,500 short tons per year) and associated royalties (about \$16,000) would remain unchanged.</p>   |   |  |   |  |
|  | <p>Federal minerals leased for oil/gas exploration, development, and production would increase from 939,700 acres to about 1.387 million acres when areas deferred from leasing are available after RMP revision. Estimated annual leasing and rental revenues would increase from \$880,000 to \$1.83 million. Federal mineral production would also increase. Average annual production of 21,409 MMCF of natural gas, 140,100 bbl of oil, 38,500 short tons of sand / gravel, and 27,650 short tons of bentonite would support about 1,350 local jobs and \$71.8 million in income. Total annual federal revenues from leases, rents, production royalties, and sales would be about \$23.9 million; of which about \$3.7 million would be distributed to the counties of production.</p> | <p>Federal minerals leased for oil/gas exploration, development, and production would increase from 939,700 acres to about 996,900 acres when areas deferred from leasing are available after RMP revision. Estimated annual leasing and rental revenues would increase from \$880,000 to \$1.002 million. Federal oil production would increase slightly while gas production would decline from current levels. Annual production of 7,104 MMCF of natural gas, 127,500 bbl of oil, 38,500 short tons of sand / gravel, and 27,650 short tons of bentonite would support about 500 local jobs and \$26.3 million in total income. Total annual federal revenues from mineral leases, rents, production royalties, and sales would be about \$9.3 million; of which about \$1.4 million would be</p> | <p>Federal minerals leased for oil/gas exploration, development, and production would increase from 939,700 acres to about 1.210 million acres when areas deferred from leasing are available after RMP revision. Estimated annual leasing and rental revenues would increase from \$880,000 to \$1.45 million. Federal oil/gas production would increase less than with Alternative A. Annual production of 18,278 MMCF of natural gas, 137,000 bbl of oil, 38,500 short tons of construction sand / gravel, and 27,650 short tons of bentonite would support about 1,160 local jobs and \$61.9 million in income. Total annual federal revenues from mineral leases, rents, and production would be about \$20.5 million; of which about \$3.2 million would be distributed to the counties of production.</p> | <p>Federal minerals leased for oil/gas exploration, development, and production would increase from 939,700 acres to about 1.390 million acres when areas deferred from leasing are available after RMP revision. Estimated annual leasing and rental revenues would increase from \$880,000 to \$1.837 million. Federal oil/gas production would increase the most with this alternative. Annual production of 21,639 MMCF of natural gas, 140,300 bbl of oil, 38,500 short tons of construction sand / gravel, and 27,650 short tons of bentonite would support about 1,360 local jobs and \$72.5 million in income. Total annual federal revenues from mineral leasing, rents, production royalties, and sales would be about \$24.1 million; of which about \$3.8 million would be distributed to the</p> | <p>Federal minerals leased for oil/gas exploration, development, and production would increase from 939,700 acres to about 1.380 million acres when areas deferred from leasing are available after RMP revision. Estimated annual leasing and rental revenues would increase from \$880,000 to \$1.817 million. Federal oil/gas production would increase. Annual production of 20,098 MMCF of natural gas, 138,900 bbl of oil, 38,500 short tons of construction sand / gravel, and 27,650 short tons of bentonite would support about 1,270 local jobs and \$67.6 million in income. Total annual federal revenues from mineral leasing, rents, production royalties, and sales would be about \$22.6 million; of which about \$3.5 million would be distributed to the counties of production.</p> |

| <b>Table 2.22<br/>Summary Comparison of Environmental Consequences</b>  |   |  |  |  |  |
|---|---|--|--|--|--|
| <i>Resource</i>   | <i>Alternative A<br/>(Current Management)</i>   | <i>Alternative B</i>   | <i>Alternative C</i>   | <i>Alternative D</i>   | <i>Alternative E<br/>(Preferred Alternative)</i>   |
| <i>Throughout the planning area, BLM-authorized activities associated with all resources and all resource use programs would be subject to mitigation and minimization guidelines and Best Management Practices (BMPs) (Appendix C), including specific Mitigation Measures and Conservation Actions for Greater Sage-Grouse (Appendix M). For analysis purposes, it has been assumed that these practices and conservation actions would be implemented during site-specific project planning where appropriate.</i> |   |  |  |  |  |
|   |   | distributed to the counties of production.   |  | counties of production.  |  |
| Recreation  | Annual revenues from recreation use permits, campground receipts, and outfitter/guide receipts would be about \$8,000. None of these revenues would be distributed to the local counties.   |  |  |  |  |
|   | An annual average of 113,000 recreation visits would support about 80 full and part time jobs and \$2.2 million in labor income. The willingness to pay for recreation opportunities would represent an estimated annual consumer surplus of \$5.19 million to the recreation visitors.   | An annual average of 120,000 recreation visits would support about 90 jobs and \$2.3 million in labor income. The willingness to pay for recreation opportunities would represent an annual estimated consumer surplus of \$5.51 million to the recreation visitors. | Recreation impacts would be very similar to those of Alternative B. An annual average of 120,000 recreation visits would support about 90 jobs and \$2.3 million in labor income. The willingness to pay for recreation opportunities would represent an estimated annual consumer surplus of \$5.50 million to recreation visitors. | Recreation impacts would be very similar to those of Alternative B and C. An annual average of 120,000 recreation visits would support about 90 jobs and \$2.3 million in labor income. The willingness to pay for recreation opportunities would represent an estimated annual consumer surplus of \$5.48 million to recreation visitors. | Recreation impacts would be very similar to those of Alternative B, C, and D. An annual average of 120,000 recreation visits would support about 90 jobs and \$2.3 million in labor income. The willingness to pay for recreation opportunities would represent an estimated annual consumer surplus of \$5.49 million to recreation visitors. |
| Government  | Average annual BLM labor and non-labor expenditures (\$9.5 million) would support an estimated 110 full and part time jobs and about \$9.0 million in wage and proprietor’s income. The influence of BLM labor and operations contributions would be most apparent in Havre (Hill County), Malta (Phillips County), and Glasgow (Valley County) where BLM offices are located. Employment and income effects of mine reclamation, water treatment, mechanical treatments, prescribed burning, invasive species treatments, and timber management (fuels treatments) would be included in government operations. Treating hazardous fuels would tend to reduce the threat to life and property nearby. |  |  |  |  |
| Fuels Treatments and Fire Suppression   | The relative cost of treating an average 6,860 acres per year with prescribed fire would trend along the 10-year average for fire suppression.  | The relative cost of treating 26,660 acres per year with prescribed fire would tend to reduce suppression costs compared to Alternative A (continued current management).  |  |  |  |
| Lands and Realty  | Annual use authorizations would generate about \$80,000 of federal revenue and annual PILT would be about \$ 2.043 million.   |  |  |  |  |

| <b>Table 2.22<br/>Summary Comparison of Environmental Consequences</b>  |   |   |  |   |  |
|---|---|---|--|---|--|
| <i>Resource</i>   | <i>Alternative A<br/>(Current Management)</i>   | <i>Alternative B</i>  | <i>Alternative C</i>   | <i>Alternative D</i>  | <i>Alternative E<br/>(Preferred Alternative)</i>   |
| <i>Throughout the planning area, BLM-authorized activities associated with all resources and all resource use programs would be subject to mitigation and minimization guidelines and Best Management Practices (BMPs) (Appendix C), including specific Mitigation Measures and Conservation Actions for Greater Sage-Grouse (Appendix M). For analysis purposes, it has been assumed that these practices and conservation actions would be implemented during site-specific project planning where appropriate.</i> |   |   |  |   |  |
| Combined Effects  | The combined effect of Alternative A would contribute an average annual 1,920 local full and part-time jobs and \$88.0 million in wage and proprietor’s income. This would be about 5.3 % of current local employment and 7.3 % of current local income. Annual program revenues to the federal government would be about \$24.6 million; payments to counties would be about \$5.8 million, most of which would be related to oil and gas production and PILT payments. BLM land and mineral uses would contribute about 5% of total employment. The number of total jobs would increase by about 19% compared to current levels; total income would increase by about 22%; the local population and the number of households would increase by about 510 people and 190 households. | The combined effect of Alternative B would contribute an average annual 1,050 local full and part-time jobs and \$41.8 million in wage and proprietor’s income. This would be a reduction of about 570 jobs and \$30.1 million in wage and proprietor’s income from current levels. BLM land and mineral uses would contribute about 3% of total local employment and 4% of total local income. Annual program revenues to the federal government would be about \$10.0 million; payments to counties would be about \$3.6 million, most of which would be related to oil and gas production and PILT payments. The local population would decrease by about 930; the number of households would decrease by about 350. | The combined effect of Alternative C would contribute an average annual 1,740 local full and part-time jobs and \$78.0 million in wage and proprietor’s income. This would be a reduction of about 130 jobs and \$6.1 million in wage and proprietor’s income from current levels. BLM land and mineral uses would contribute about 5% of total local employment and 7% of total local income. Annual program revenues to the federal government would be about \$21.2 million; payments to counties would be about \$5.3 million, most of which would be related to oil and gas production and PILT payments. The local population would increase by about 210 and number of households would increase by about 80. | The combined effect of Alternative D would contribute an average annual 1,940 local full and part-time jobs and \$88.9 million in wage and proprietor’s income. This would be an increase of about 330 jobs and \$17.0 million in wage and proprietor’s income compared to current levels. BLM land and mineral uses would contribute about 5% of local employment and 7% of local income. Annual program revenues to the federal government would be about \$24.9 million; payments to counties would be about \$5.9 million, most of which would be related to oil and gas production and PILT payments. The local population would increase by about 540 and number of households would increase by about 200. | The combined effect of Alternative E would contribute an average annual 1,850 local full and part-time jobs and \$83.9 million in wage and proprietor’s income. This would be an increase of about 240 jobs and \$12.0 million in wage and proprietor’s income from current levels. BLM land and mineral uses would contribute about 5% of total local employment and 7% of total local income. Annual program revenues to the federal government would be about \$23.4 million; payments to counties would be about \$5.6 million, most of which would be related to oil and gas production and PILT payments. The local population would increase by about 390 and number of households would decrease by about 150. |

| <b>Table 2.22<br/>Summary Comparison of Environmental Consequences</b>  |  |  |                      |                      |  |
|---|--|--|----------------------|----------------------|--|
| <i>Resource</i>   | <i>Alternative A<br/>(Current Management)</i>  | <i>Alternative B</i>   | <i>Alternative C</i> | <i>Alternative D</i> | <i>Alternative E<br/>(Preferred Alternative)</i> |
| <i>Throughout the planning area, BLM-authorized activities associated with all resources and all resource use programs would be subject to mitigation and minimization guidelines and Best Management Practices (BMPs) (Appendix C), including specific Mitigation Measures and Conservation Actions for Greater Sage-Grouse (Appendix M). For analysis purposes, it has been assumed that these practices and conservation actions would be implemented during site-specific project planning where appropriate.</i> |  |  |                      |                      |  |
| Other Combined Effects  | BLM management that would generate the most employment and income would be mineral development (mostly oil and gas development). The employment, income, and revenue effects of BLM resource management would be spread unequally among the counties and communities within the planning area. Most of BLM land and minerals base and land/mineral uses are in Phillips, Valley, and Blaine counties. Most of the economic impacts would also occur in those counties. The influence of resource management on BLM-administered lands would not change local economic diversity (as indicated by the number of economic sectors), dependency (i.e. where one or a few industries dominate the economy), or stability (as indicated by seasonal unemployment, sporadic population changes, and fluctuating income rates). The population density and average income per household would continue to be about the same as current levels.  |  |                      |                      |  |
| Soil and Water  | Economic benefits from soil and water management and costs (from lost agricultural production, additional costs for municipal water treatments, shortened life of dams and reservoirs, additional cost of water for industrial purposes, reduced water recreation use, reduced soil productivity, and water pollution) associated with resource use are unknown.   |  |                      |                      |  |
| Cumulative Effects  | The demographic and economic trends that are described in Chapter 3 to provide context for impacts would be expected to continue. The description of the Affected Environment found in Chapter 3 summarizes the past and present activities that influenced cumulative economic conditions. The economic impacts summarized above for each alternative would be combined with those demographic and economic trends to provide an idea of the cumulative economic effects. In addition, construction of two wind energy developments with a total of about 30 towers on BLM lands would be anticipated. The portion of these projects that would occur on BLM lands would support up to 338 local jobs and \$12.8 million in labor income during the two-year construction periods. Average annual operation and maintenance associated with the portion on BLM lands would contribute about 16 jobs and \$0.58 million in wage and proprietor's income. It would generate about \$190,000 in annual federal revenues. Annual employment associated with maintenance and operation of other lands/realty rights-of-way would be negligible; however federal rights-of-way rent revenues would average about \$80,000 per year. |  |                      |                      |  |
| <b>Fire Management and Ecology</b>  |  |  |                      |                      |  |
|   | 237 acres treated mechanically and 343 acres treated with prescribed fire annually. A total of 11,600 acres (10% of BLM forested landscape) would be treated in a 20-year period.<br><br>Treatments would not keep pace with vegetation growth/disturbance cycles  | 391 acres treated mechanically and 1,333 acres treated with prescribed fire annually. A total of 34,480 acres (73% of BLM forested landscape) would be treated in a 20-year period.<br><br>Over time conditions may be created where new suppression strategies in Category C areas could be considered. |                      |                      |  |

| <b>Table 2.22<br/>Summary Comparison of Environmental Consequences</b>  |  |   |  |  |   |
|---|--|---|--|--|---|
| <b>Resource</b>   | <b>Alternative A<br/>(Current Management)</b>  | <b>Alternative B</b>  | <b>Alternative C</b>   | <b>Alternative D</b>   | <b>Alternative E<br/>(Preferred Alternative)</b>  |
| <i>Throughout the planning area, BLM-authorized activities associated with all resources and all resource use programs would be subject to mitigation and minimization guidelines and Best Management Practices (BMPs) (Appendix C), including specific Mitigation Measures and Conservation Actions for Greater Sage-Grouse (Appendix M). For analysis purposes, it has been assumed that these practices and conservation actions would be implemented during site-specific project planning where appropriate.</i> |  |   |  |  |   |
|   | and reduced treatments could exacerbate or expand poor forest health conditions, and cause the greatest chance of extreme fire behavior and larger fire sizes. |   |  |  |   |
|   | The Class II rating for the Bears Paw and Little Rocky Mountains and Sweet Grass Hills may restrict landscape level forest health treatments.                  | The Class I rating for the Sweet Grass Hills and Kevin Rim ACECs and Burnt Lodge and Bitter Creek WSAs could restrict landscape level forest health treatments on 90,032 acres.<br><br>The Class II rating for the Little Rocky Mountains, Frenchman area, and Missouri breaks (781,545 acres) could conflict with vegetation treatment objectives.<br><br>Treatments may exceed the accepted level of change and objectives of a Class I or II rating. | The Class III rating for Sweet Grass Hills, Bears Paw Mountains, and Little Rocky Mountains could allow increased landscape level forest health treatments on up to 38,037 acres.<br><br>The Class I rating for the Burnt Lodge and Bitter Creek WSAs, and Class II ratings in the Frenchman area, Woody Island ACEC, and Missouri breaks (857,061 acres) could conflict with vegetation treatment objectives.<br><br>Treatments may exceed the accepted level of change and objectives of a Class I or II rating. | The Class III rating for all forested areas except the WSAs could allow increased landscape level forest health treatments on up to 44,282 acres.<br><br>The Class I or II rating for all remaining forested acres in the planning area may restrict landscape level forest health treatments.<br><br>Treatments may exceed the accepted level of change and objectives of a Class I or II rating. | The Class III rating for Sweet Grass Hills, Bears Paw Mountains, and Little Rocky Mountains could allow increased landscape level forest health treatments on up to 38,037 acres.<br><br>The Class I rating for the Burnt Lodge and Bitter Creek WSAs, and Class II rating in the Frenchman area, Woody Island ACEC, and Missouri breaks (857,061 acres) could conflict with vegetation treatment objectives.<br><br>Treatments may exceed the accepted level of change and objectives of a Class I or II rating. |
| <b>Fish</b>   |  |   |  |  |   |
|   | Rehabilitation would be required only on surface   | NSO stipulations required within 1/4 mile of lentic   | NSO stipulations required within 500 feet of riparian  | CSU stipulations within 300 feet of riparian areas   | NSO stipulations within perennial or intermittent   |

**Table 2.22  
Summary Comparison of Environmental Consequences**

| <b>Resource</b>   | <b>Alternative A<br/>(Current Management)</b>   | <b>Alternative B</b>  | <b>Alternative C</b>  | <b>Alternative D</b>   | <b>Alternative E<br/>(Preferred Alternative)</b>   |
|---|---|---|---|--|--|
| <i>Throughout the planning area, BLM-authorized activities associated with all resources and all resource use programs would be subject to mitigation and minimization guidelines and Best Management Practices (BMPs) (Appendix C), including specific Mitigation Measures and Conservation Actions for Greater Sage-Grouse (Appendix M). For analysis purposes, it has been assumed that these practices and conservation actions would be implemented during site-specific project planning where appropriate.</i> |   |   |   |  |  |
|   | disturbances greater than 1/4 acre in size, which could allow for more sedimentation in nearby fish-bearing streams.<br><br>Riparian and wetland areas would be avoidance areas for rights-of way, which would provide protection for fish-bearing streams. | or lotic riparian areas, and rehabilitation required on surface disturbances greater than 1/10 acre in size would greatly reduce sediment flow into fish-bearing streams or fisheries reservoirs.<br><br>Riparian areas with unique values would be avoidance areas for rights-of-way, which would provide protection for fish-bearing streams. | areas and rehabilitation required on surface disturbances greater than 1/10 acre in size would reduce sediment flow into fish-bearing streams.<br><br>No avoidance areas for rights-of-way could compromise habitat for sensitive fish species. | and rehabilitation required on surface disturbances greater than 1/10 acre in size would reduce sediment flow into fish-bearing streams, but the greater acreage of disturbance allowed could result in increased sediment flow.<br><br>No avoidance areas for rights-of-way would provide fewer protections for fish-bearing streams. | streams and CSU stipulations within 300 feet of riparian areas along with rehabilitation required on surface disturbances greater than 1/10 acre in size would reduce sediment flow into fish-bearing streams.<br><br>Riparian areas with unique values would be avoidance areas for rights-of-way, which would provide protection for fish-bearing streams. |
| <b>Fluid Minerals</b>   |   |   |   |  |  |
| New Federal Oil and Gas Wells   | 1,874   | 647   | 1,617   | 1,894  | 1,756  |
| Acres Closed by Development Potential   |   |   |   |  |  |
| High  | 0   | 138,489   | 0   | 0  | 0  |
| Moderate  | 0   | 283,347   | 0   | 0  | 0  |
| Low   | 0   | 324,728   | 2,841   | 0  | 21,271   |
| Very Low  | 102,298   | 2,427,013   | 215,745   | 74,674   | 131,431  |
| Acres NSO by Development Potential  |   |   |   |  |  |
| High  | 3,938   | 6,889   | 50,521  | 13,094   | 35,654   |
| Moderate  | 9,199   | 45,247  | 154,468   | 10,742   | 59,753   |

| <i>Resource</i>   | <i>Alternative A<br/>(Current Management)</i>   | <i>Alternative B</i>   | <i>Alternative C</i>   | <i>Alternative D</i>  | <i>Alternative E<br/>(Preferred Alternative)</i>   |
|---|---|--|--|---|--|
| <i>Throughout the planning area, BLM-authorized activities associated with all resources and all resource use programs would be subject to mitigation and minimization guidelines and Best Management Practices (BMPs) (Appendix C), including specific Mitigation Measures and Conservation Actions for Greater Sage-Grouse (Appendix M). For analysis purposes, it has been assumed that these practices and conservation actions would be implemented during site-specific project planning where appropriate.</i> |   |  |  |   |  |
| Low   | 22,614  | 72,412   | 169,265  | 31,297  | 55,328   |
| Very Low  | 246,310   | 133,968  | 916,833  | 302,323   | 1,560,614  |
| Acres CSU/TLS by Development Potential  |   |  |  |   |  |
| High  | 137,116   | 0  | 89,832   | 107,298   | 106,803  |
| Moderate  | 233,907   | 778  | 126,822  | 219,021   | 251,155  |
| Low   | 277,051   | 423  | 143,928  | 211,988   | 286,720  |
| Very Low  | 2,001,094   | 2,090  | 1,321,410  | 1,923,287   | 815,388  |
| Acres Standard Terms Only by Development Potential  |   |  |  |   |  |
| High  | 5,206   | 883  | 5,908  | 25,867  | 3,802  |
| Moderate  | 94,336  | 8,070  | 56,153   | 107,680   | 26,535   |
| Low   | 111,916   | 14,019   | 95,550   | 168,297   | 48,263   |
| Very Low  | 246,323   | 32,956   | 142,038  | 295,744   | 88,594   |
| Cumulative Effects  | Approximately 6,014 additional oil and gas wells could be drilled during the next 20 years, of which 1,874 wells would access federal minerals. From baseline conditions, total oil production could be 0.6% less and total gas production could also be 4.4% less. | Approximately 4,787 additional oil and gas wells could be drilled during the next 20 years, of which 647 wells would access federal minerals. From baseline conditions, total oil production could be 9.5% less and total gas production could also be 68.3% less. | Approximately 5,756 additional oil and gas wells could be drilled during the next 20 years, of which 1,617 wells would access federal minerals. From baseline conditions, total oil production could be 2.8% less and total gas production could also be 18.4% less. | Approximately 6,034 additional oil and gas wells could be drilled during the next 20 years, of which 1,894 wells would access federal minerals. From baseline conditions, total oil production could be 0.5% less and total gas production could also be 3.4% less. | Approximately 5,896 additional oil and gas wells could be drilled during the next 20 years, of which 1,756 wells would access federal minerals. From baseline conditions, total oil production could be 1.5% less and total gas production could also be 10.3% less. |

**Table 2.22  
Summary Comparison of Environmental Consequences**

| <b>Resource</b>   | <b>Alternative A<br/>(Current Management)</b>   | <b>Alternative B</b>   | <b>Alternative C</b>  | <b>Alternative D</b>   | <b>Alternative E<br/>(Preferred Alternative)</b>  |
|---|---|--|---|--|---|
| <p align="center"><i>Throughout the planning area, BLM-authorized activities associated with all resources and all resource use programs would be subject to mitigation and minimization guidelines and Best Management Practices (BMPs) (Appendix C), including specific Mitigation Measures and Conservation Actions for Greater Sage-Grouse (Appendix M). For analysis purposes, it has been assumed that these practices and conservation actions would be implemented during site-specific project planning where appropriate.</i></p> |   |  |   |  |   |
| <b>Forests and Woodlands</b>  |   |  |   |  |   |
|   | <p>FMUs would remain as Category B and natural fire would not be considered as a management tool.</p> <p>Minimal gains would be made on restoration of forest health during the life of the plan as treatments could not exceed ASQ of 3.5 MMBF per decade.</p> <p>Class II rating for the Bears Paw and Little Rocky Mountains and Sweet Grass Hills may restrict landscape-level forest health treatments.</p> <p>Timing limits for wildlife (December 1-May 15) could constrain most forest health activities and contracts may require multiple years to be completed.</p> <p>Small forest health projects would provide a small quantity of wood products to the local</p> | <p>The eastern half of the planning area (including 30,949 acres of forested land in the Little Rocky Mountains) would be reclassified as FMU Category C.</p> <p>Forest health treatments averaging 390 acres per year would focus on landscape-level treatments rather than ASQ. Silvicultural treatment would address old growth.</p> <p>Class I rating for the Sweet Grass Hills may restrict landscape-level forest health treatments on 6,248 acres. Class III rating for the entire Little Rocky Mountains would all landscape-level treatments on up to 30,949 acres.</p> <p>Timing or location considerations for wildlife and habitat would be evaluated at the project planning level and appropriate mitigation</p> | <p>The eastern half of the planning area (including 30,949 acres of forested land in the Little Rocky Mountains) would be reclassified as FMU Category C.</p> <p>Forest health treatments averaging 390 acres per year would focus on landscape-level treatments rather than ASQ. Silvicultural treatment would address old growth.</p> <p>Class III rating for the Sweet Grass Hills and Bears Paw and Little Rocky Mountains would provide landscape-level forest management opportunities on up to 38,037 acres.</p> <p>Timing limits for wildlife (December 1-May 15) could constrain most forest health activities and contracts may require multiple years to be completed.</p> | <p>The eastern half of the planning area (including 30,949 acres of forested land in the Little Rocky Mountains) would be reclassified as FMU Category C.</p> <p>Forest health treatments averaging 390 acres per year would focus on landscape-level treatments rather than ASQ. Silvicultural treatment would address old growth.</p> <p>Class III rating for all forested areas in the planning area except the WSAs would provide landscape-level forest management opportunities on up to 44,282 acres. All remaining forested acres would fall within Class I and II ratings which may restrict landscape-level forest health treatments.</p> <p>Timing limits for wildlife (December 1-March 31) could constrain forest health activities and</p> | <p>The northeastern portion of the planning area (Malta Prairie Potholes) would be reclassified as FMU Category C.</p> <p>Forest health treatments averaging 390 acres per year would focus on landscape-level treatments rather than ASQ. Silvicultural treatment would address old growth.</p> <p>Class III rating for the Sweet Grass Hills and Bears Paw and Little Rocky Mountains would provide landscape-level forest management opportunities on up to 38,037 acres. All remaining forested acres would fall within Class I and II ratings which may restrict landscape-level forest health treatments.</p> <p>Timing limits for wildlife (December 1-May 15) could constrain most forest health activities and contracts may require</p> |

| <b>Table 2.22<br/>Summary Comparison of Environmental Consequences</b>  |  |  |   |  |  |
|---|--|--|---|--|--|
| <i>Resource</i>   | <i>Alternative A<br/>(Current Management)</i>  | <i>Alternative B</i>   | <i>Alternative C</i>  | <i>Alternative D</i>   | <i>Alternative E<br/>(Preferred Alternative)</i>   |
| <i>Throughout the planning area, BLM-authorized activities associated with all resources and all resource use programs would be subject to mitigation and minimization guidelines and Best Management Practices (BMPs) (Appendix C), including specific Mitigation Measures and Conservation Actions for Greater Sage-Grouse (Appendix M). For analysis purposes, it has been assumed that these practices and conservation actions would be implemented during site-specific project planning where appropriate.</i> |  |  |   |  |  |
|   | industry and provide some work opportunities and boost to the local economy.   | applied. Timing considerations within 1 mile of active raptor nests could constrain vegetation treatments.<br><br>Forest health projects would provide wood products and work opportunities to the local industry and help boost to the local economy.       | Forest health projects would provide wood products and work opportunities to the local industry and help boost to the local economy.  | contracts may require multiple years to be completed. Prescribed fire could usually be implemented successfully in the month of April.<br><br>Forest health projects would provide wood products and work opportunities to the local industry and help boost to the local economy.               | multiple years to be completed. In some situations prescribed fire may not be available as a treatment option in forested settings during summer and fall.<br><br>Forest health projects would provide wood products and work opportunities to the local industry and help boost to the local economy. |
| <b>Lands and Realty</b>   |  |  |   |  |  |
|   | As the population continues to shift from urban areas to a more rural setting, more land is subdivided. This will result in an increasing demand for rights-of-way to address access needs, enhanced telecommunications capacity, and increased demands for power. As more private lands are closed to recreational use, the public will turn their attention to available open lands (i.e., BLM land, block management areas, and private land where access is allowed). Consequently, there will be an increased demand for recreational access, whether through access easements, conservation easements that provide access, or land exchange proposals that enhance access. |  |   |  |  |
| <b>OHV Use and Travel and Transportation Management</b>   |  |  |   |  |  |
|   | Areas designated as open to OHV use off roads, primitive roads and trails would include the Fresno OHV area (84 acres) and the Glasgow OHV area (40 acres); designated as limited to existing roads, primitive roads and trails (2,429,885 acres); and closed to OHV use (7,429 acres in the Sweet Grass   | OHV designations would include: limited to existing roads, primitive roads and trails (2,429,925 acres); and closed (7,513 acres). No areas would be designated as open to off-road travel, which would adversely affect OHV users.<br><br>No motorized game | OHV designations would include: limited to existing roads, primitive roads and trails (2,429,885 acres); and closed (7,553 acres). No areas would be designated as open to off-road travel, which would adversely affect OHV users.<br><br>Motorized game retrieval | Areas designated as open to OHV use off roads, primitive roads and trails would include the Fresno OHV area (84 acres), Glasgow OHV area (40 acre), and Thirty Mile OHV area (181 acres); designated as limited to existing roads, primitive roads and trails (2,437,133 acres). No closed areas | The Glasgow OHV area (40 acres) would remain designated as open to OHV use off roads, primitive roads and trails.<br><br>The Fresno OHV area (125 acres) would remain designated as open to OHV travel off roads, primitive roads and trails. Through travel   |

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Summary Comparison of Environmental Consequences**

| <i>Resource</i>  | <i>Alternative A<br/>(Current Management)</i>   | <i>Alternative B</i>  | <i>Alternative C</i>  | <i>Alternative D</i>   | <i>Alternative E<br/>(Preferred Alternative)</i>  |
|--|---|---|---|--|---|
| <p><i>Throughout the planning area, BLM-authorized activities associated with all resources and all resource use programs would be subject to mitigation and minimization guidelines and Best Management Practices (BMPs) (Appendix C), including specific Mitigation Measures and Conservation Actions for Greater Sage-Grouse (Appendix M). For analysis purposes, it has been assumed that these practices and conservation actions would be implemented during site-specific project planning where appropriate.</i></p> |   |   |   |  |   |
|  | <p>Hills ACEC).</p> <p>No motorized game retrieval off road would be allowed, but could be considered during subsequent travel management planning.</p> | <p>retrieval off road would be allowed, and would not be considered during subsequent travel management planning.</p> <p>Overall protection measures for natural and cultural resources would have a greater impact on OHV use than all other alternatives.</p> | <p>off road would be allowed in specified areas (387,118 acres).</p> <p>Overall protection measures for natural and cultural resources would have a similar, but less impact on OHV use than Alternative B.</p> | <p>would be designated, which would beneficially affect OHV users.</p> <p>Motorized game retrieval off road would be allowed on all BLM land in the planning area except the Bitter Creek and Burnt Lodge WSAs, and Big Bend of the Milk River, Kevin Rim, Frenchman, and Malta Geological ACECs (2,290,669 acres).</p> <p>Overall protection measures for natural and cultural resources would have a lesser impact on OHV use than all other alternatives.</p> | <p>management planning the BLM would address the need for seasonal restrictions, and/or a boundary adjustment to address resource values and conflicts of use.</p> <p>2,429,885 acres would be designated as limited to existing roads, primitive roads and trails; and 7,429 acres in the Sweet Grass Hills ACEC would be closed to OHV use.</p> <p>This alternative would have little effect on the volume of OHV use in the short or long term.</p> <p>Off-road game retrieval would not be allowed, but could be considered during subsequent travel management planning.</p> |
| <b>Paleontological Resources</b>   |   |   |   |  |   |
|  | <p>Fluid mineral development could affect paleontological resources, but stipulations would minimize the effects of permitted activities.</p>           | <p>Fluid mineral development would have less potential to affect paleontological resources, and stipulations would minimize the effects of permitted activities.</p>  | <p>Moderate fluid mineral development could lead to the inadvertent discovery of paleontological resources, but to a lesser degree because this alternative would have the</p>                                  | <p>Fluid mineral development would have greater potential to affect paleontological resources due to fewer surface limitations and more acreage open to surface</p>  | <p>Fluid mineral development would have less potential to affect paleontological resources due to the second most acres open to leasing with NSO stipulations and the</p>   |

| <p align="center"><b>Table 2.22</b><br/><b>Summary Comparison of Environmental Consequences</b></p>   |  |  |   |   |  |
|---|--|--|---|---|--|
| <p align="center"><i>Resource</i></p>   | <p align="center"><i>Alternative A</i><br/><i>(Current Management)</i></p>   | <p align="center"><i>Alternative B</i></p>   | <p align="center"><i>Alternative C</i></p>  | <p align="center"><i>Alternative D</i></p>  | <p align="center"><i>Alternative E</i><br/><i>(Preferred Alternative)</i></p>  |
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|   | <p>OHV use may inadvertently impact paleontological resources from vehicles driving over fossil exposures. Vehicle travel would also contribute to erosion, which would result in exposure and loss of specimens.</p> <p>2,248,567 acres would be open areas, and 188,871 acres would be exclusion areas for wind energy rights-of-way, and surface disturbance during construction of facilities would have the greatest potential to affect paleontological resources.</p> | <p>OHV use may inadvertently impact paleontological resources from vehicles driving over fossil exposures, but to a lesser extent. Vehicle travel would also contribute to erosion, which would result in exposure and loss of specimens. No open OHV areas would offer the greatest protection of paleontological resources from vehicles.</p> <p>249,050 acres would be open areas and 2,188,388 acres would be exclusion areas for wind energy rights-of-way, but surface disturbance during construction of commercial facilities would have the least potential to affect paleontological resources because of the limited acres available for development.</p> | <p>most acres open with NSO and the second most acres closed to leasing.</p> <p>OHV use may inadvertently impact paleontological resources from vehicles driving over fossil exposures. Vehicle travel would also contribute to erosion, which would result in exposure and loss of specimens.</p> <p>Off-road game retrieval could lead to inadvertent discovery of and the greatest potential impact to paleontological resources.</p> <p>1,112,481 acres would be open areas and 1,324,957 acres would be exclusion areas for wind energy rights-of-way, and surface disturbance during construction of facilities could affect paleontological resources.</p> | <p>disturbance. More roads would be created, thus increasing the possibility for inadvertent discovery.</p> <p>OHV use may inadvertently impact paleontological resources from vehicles driving over fossil exposures. Vehicle travel would also contribute to erosion, which would result in exposure and loss of specimens.</p> <p>Not allowing off-road game retrieval in the WSAs and 4 ACECs would decrease the number of inadvertent discoveries.</p> <p>2,144,466 acres would be open areas, and 292,992 acres would be exclusion areas for wind energy rights-of-way, and surface disturbance during construction of facilities would have the second greatest potential to affect paleontological resources.</p> | <p>second most acres closed to leasing. Roads would still be created which could lead to the possibility for inadvertent discovery.</p> <p>OHV use may inadvertently impact paleontological resources from vehicles driving over fossil exposures. Vehicle travel would also contribute to erosion, which would result in exposure and loss of specimens.</p> <p>Off-road game retrieval would be limited which would lessen the potential for inadvertent discovery of paleontological resources.</p> <p>897,765 acres would be open areas and 1,539,673 acres would be avoidance areas for wind energy rights-of-way, but surface disturbance during construction of commercial facilities would have the second least potential to affect</p> |

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Summary Comparison of Environmental Consequences**

| <b>Resource</b>  | <b>Alternative A<br/>(Current Management)</b>   | <b>Alternative B</b>   | <b>Alternative C</b>  | <b>Alternative D</b>   | <b>Alternative E<br/>(Preferred Alternative)</b>   |
|--|---|--|---|--|--|
| <p><i>Throughout the planning area, BLM-authorized activities associated with all resources and all resource use programs would be subject to mitigation and minimization guidelines and Best Management Practices (BMPs) (Appendix C), including specific Mitigation Measures and Conservation Actions for Greater Sage-Grouse (Appendix M). For analysis purposes, it has been assumed that these practices and conservation actions would be implemented during site-specific project planning where appropriate.</i></p> |   |  |   |  |  |
|  |   |  |   |  | paleontological resources because fewer acres would be available for development.  |
| <b>Recreation</b>  |   |  |   |  |  |
|  | <p>6,860 acres would have short-term disturbance from prescribed fire, and 4,740 acres would have short-term disturbance from mechanical treatment actions. Surface disturbance from these actions would reduce recreational opportunities and degrade the quality of recreational experiences in the short term, but would improve opportunities and experiences in the long term.</p> <p>9,564 acres would have short-term surface disturbance from oil and gas development actions, and 2,422 acres would have long-term surface disturbance which would reduce recreational opportunities and the quality of the recreational experience. The 102,298 acres closed to fluid</p> | <p>26,660 acres would have short-term disturbance from prescribed fire, and 7,820 acres would have short-term disturbance from mechanical treatment actions. Surface disturbance from these actions would reduce recreational opportunities and degrade the quality of recreational experiences in the short term, but would improve opportunities and experiences in the long term.</p> <p>4,440 acres would have short-term surface disturbance from oil and gas development actions, and 1,544 acres would have long-term surface disturbance which would reduce recreational opportunities and the quality of the recreational experience. The 3,173,637 acres closed to fluid mineral leasing and 258,560 acres open with NSO stipulations would protect existing recreational opportunities and experiences.</p> <p>Non-motorized recreational users would benefit from having no open areas available as designated OHV areas</p> | <p>8,547 acres would have short-term surface disturbance from oil and gas development actions, and 2,238 acres would have long-term surface disturbance which would reduce recreational opportunities and the quality of the recreational experience. The 218,586 acres closed to fluid mineral leasing and 1,291,160 acres open with NSO stipulations would protect existing recreational opportunities and experiences.</p> <p>Non-motorized recreational users would benefit from having no open areas available as designated OHV areas</p> | <p>9,663 acres would have short-term surface disturbance from oil and gas development actions, and 2,436 acres would have long-term surface disturbance which would reduce recreational opportunities and the quality of the recreational experience. The 74,674 acres closed to fluid mineral leasing and 357,456 acres open with NSO stipulations would protect existing recreational opportunities and experiences.</p> <p>Non-motorized recreational users would benefit from having no areas open to motorized use except for the three</p> | <p>9,068 acres would have short-term surface disturbance from oil and gas development actions, and 2,337 acres would have long-term surface disturbance which would reduce recreational opportunities and the quality of the recreational experience. The 152,702 acres closed to fluid mineral leasing and 1,711,378 acres open with NSO stipulations would protect existing recreational opportunities and experiences.</p> <p>Non-motorized recreational users would benefit from having no areas open to motorized use except for the Fresno</p> |

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| <p><i>Throughout the planning area, BLM-authorized activities associated with all resources and all resource use programs would be subject to mitigation and minimization guidelines and Best Management Practices (BMPs) (Appendix C), including specific Mitigation Measures and Conservation Actions for Greater Sage-Grouse (Appendix M). For analysis purposes, it has been assumed that these practices and conservation actions would be implemented during site-specific project planning where appropriate.</i></p> |   |   |  |  |   |
|  | <p>mineral leasing and 282,062 acres open with NSO stipulations would not affect recreation experiences in these existing areas.</p> <p>Motorized recreational users would benefit from the designated open OHV areas. Recreational users who enjoy hiking and horseback riding would benefit from the 7,429 acres closed to motorized use in the Sweet Grass Hills. The limited designation on remaining lands would benefit the motorized recreational user more than the non-motorized user.</p> <p>The 5 areas designated as SRMAs (1,305,593 acres) would benefit recreation by allowing for development of new facilities and road upgrades that would increase recreational opportunities and enhance recreational experiences.</p> <p>Closing the Sweet Grass</p> | <p>(including the Fresno OHV area which would be closed to motorized use), while motorized recreationists would be denied the opportunity to use their specialized equipment. Recreational users who enjoy hiking and horseback riding would benefit from the 7,429 acres closed to motorized use in the Sweet Grass Hills. The 84 acre Fresno OHV area would be closed to motorized use. The limited designation on remaining lands would benefit the motorized recreational user more than the non-motorized user.</p> <p>Not allowing motorized game retrieval off road would enhance more primitive, non-motorized hunting experiences, whereas those hunters who are unable to retrieve their down big game by non-motorized means may experience decreased hunting opportunities.</p> | <p>(including the Fresno and Glasgow OHV areas which would be closed to motorized use), while motorized recreationists would be denied the opportunity to use their specialized equipment. Recreational users who enjoy hiking and horseback riding would benefit from the 7,429 acres closed to motorized use in the Sweet Grass Hills. The 84 acre Fresno OHV area would be closed to motorized use. The limited designation on remaining lands would benefit the motorized recreational user more than the non-motorized user.</p> <p>Allowing motorized game retrieval off road in specified areas would benefit motorized recreational users by allowing hunting opportunities for those hunters who are unable to retrieve their down big game by non-motorized means.</p> | <p>designated open OHV areas: Fresno (84 acres), Glasgow (40 acres), and Thirty Mile (181 acres). Motorized recreational users would benefit from the designated open OHV areas. The Sweet Grass Hills would be open to motorized use and limited to existing roads, primitive roads and trails, which would benefit motorized recreational users but adversely affect non-motorized recreational users.</p> <p>Allowing motorized game retrieval off road in all areas except the Burnt Lodge and Bitter Creek WSAs and the Big Bend of the Milk River, Kevin Rim, Frenchman, and Malta Geological ACECs would benefit motorized recreational users by allowing hunting opportunities for those hunters who are unable to retrieve their down big game by non-motorized means. However, the encounter of off-road</p> | <p>(125 acres) and Glasgow (40 acres) designated OHV areas. Motorized recreationists would benefit from the designated open OHV areas. Recreational users who enjoy hiking and horseback riding would benefit from the 7,429 acres closed to motorized use in the Sweet Grass Hills. The limited designation on remaining lands would benefit the motorized recreational user more than the non-motorized user.</p> <p>Not allowing motorized game retrieval off road would enhance more primitive, non-motorized hunting experiences, whereas those hunters who are unable to retrieve their down big game by non-motorized means may experience decreased hunting opportunities.</p> <p>The Little Rocky Mountains (27,688 acres) would be designated a SRMA, which would</p> |

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Summary Comparison of Environmental Consequences**

| <i>Resource</i>   | <i>Alternative A<br/>(Current Management)</i>   | <i>Alternative B</i>   | <i>Alternative C</i>  | <i>Alternative D</i>   | <i>Alternative E<br/>(Preferred Alternative)</i>  |
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|   | <p>Hills SRMA to motorized use would adversely affect opportunities for motorized recreationists.</p> <p>With a few exceptions the remaining lands (1,131,845 acres) would be managed as an ERMA.</p> | <p>The entire planning area (2,437,399 acres) would be managed as an LND, which would create the most dispersed recreation opportunities, but would adversely impact facility-based recreation resources as the development of new facilities would have a lower priority for construction and funding. Disturbance from development of recreational facilities would be the least under this alternative.</p> | <p>The Little Rocky Mountains (27,688 acres) would be designated a SRMA, which would better enable the BLM to deal with high OHV use in the area that is adversely affecting the setting, and would also benefit recreation by allowing for development of new facilities at and near the established campgrounds that would increase recreational opportunities and enhance recreational experiences.</p> <p>Nine sites would be managed as an ERMA (61,800 acres), which would have a lower priority for resources and development than SRMAs, but recreation resources would be less impacted by other resource issues than LNDs.</p> <p>The remaining lands in the planning area would be designated as an LND (2,347,911 acres), which</p> | <p>motorized game retrieval could diminish hunting opportunities and quality of the experience for non-motorized hunters.</p> <p>Twelve sites would be managed as SRMAs (97,088 acres) and 2 sites would be managed as ERMAs (244 acres). This would be the most SRMA acreage and the second least ERMA acreage of all the alternatives. This alternative would lead to the most potential disturbance from recreation management of all alternatives because it identifies more acres for high priority facility-based recreation management which includes more concentrated recreation activities and development of more recreation-related facilities.[</p> <p>The remaining lands in the planning area would be managed as an LND (2,340,066 acres), which</p> | <p>better enable the BLM to deal with high OHV use in the area that is adversely affecting the setting, and would also benefit recreation by allowing for development of new facilities at and near the established campgrounds that would increase recreational opportunities and enhance recreational experiences.</p> <p>The Glasgow OHV area would also be designated a SRMA (40 acres) and open to OHV use. This would benefit the motorized recreational user and prioritize management resources to this type of recreation outcome over other resource issues.</p> <p>Ten RMAs would be managed as ERMAs (69,405 acres) to protect the recreation facilities and uses that currently take place in those areas. Recreation outcomes would be a high priority but may be limited if they</p> |

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|   |   |   | would create the most dispersed recreation opportunities, but would adversely impact facility-based recreation resources as the development of new facilities would have a lower priority for construction and funding. | would create the most dispersed recreation opportunities, but would adversely impact facility-based recreation resources as the development of new facilities would have a lower priority for construction and funding. | conflict with other resource management priorities within the ERMA.<br><br>The remaining lands in the planning area would be managed as an LND (2,340,266 acres), which would create the most dispersed recreation opportunities, but would adversely impact facility-based recreation resources as the development of new facilities would have a lower priority for construction and funding. |
| <b>Renewable Energy Resources (Wind)</b>  |   |   |   |   |   |
|   | About 188,871 acres would be exclusion areas for wind energy rights-of-way. About 90% of the high and 93% of the moderate development potential areas on BLM land would be available for wind energy rights-of-way. | About 2,188,388 acres would be exclusion areas for wind energy rights-of-way. About 10% of the high and 10% of the moderate development potential areas on BLM land would be available for wind energy rights-of-way. | About 1,324,957 acres would be exclusion areas for wind energy rights-of-way. About 49% of the high and 45% of the moderate development potential areas on BLM land would be available for wind energy rights-of-way.   | About 292,992 acres would be exclusion areas for wind energy rights-of-way. About 79% of the high and 91% of the moderate development potential areas on BLM land would be available for wind energy rights-of-way.     | About 1,539,673 acres would be exclusion areas for wind energy rights-of-way. About 48% of the high and 36% of the moderate development potential areas on BLM land would be available for wind energy rights-of-way.   |
| <b>Social</b>   |   |   |   |   |   |
|   | Groups and individuals who give a high priority to resource use, including  | Groups and individuals who give a high priority to resource use would not   | Groups and individuals who give a high priority to resource use may be  | Groups and individuals who give a high priority to resource use would   | Groups and individuals who give a high priority to resource use may be  |

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|   | <p>many local residents, indicate that current management has adequately protected these resources.</p> <p>Groups and individuals who give a high priority to resource protection, including the protection of the prairie ecosystem and greater sage-grouse habitat, may not feel this alternative offers adequate protection for these resources. This could result in a decline in the quality of life for these groups and individuals.</p> <p>Recreationists who desire a primitive experience may not feel this alternative provides the opportunities to enhance primitive experiences in the future.</p> <p>Native Americans who engage in traditional practices in the Sweet Grass Hills or the Little Rocky Mountains may be less able to practice their religion in an</p> | <p>support this alternative because it contains the most restrictions on oil and gas development. This group includes many local residents who are concerned about the potential negative social effects to small communities if economies suffer because resource development is not allowed. In addition, opportunities for OHV use or off road game retrieval would not be available.</p> <p>Groups and individuals who give a high priority to resource protection, including the protection of the prairie ecosystem and greater sage-grouse habitat, may favor this alternative because it offers the most protection for these resources and the least amount of surface disturbance. However, they may also be concerned that some of the effects to these resources from development restricted on public lands would be</p> | <p>concerned about restrictions on oil and gas development. This group includes many local residents who are concerned about economic development and its potential positive effects on the social environment of small communities.</p> <p>Groups and individuals who give a high priority to resource protection, including the protection of the prairie ecosystem and greater sage-grouse habitat, may feel this alternative does not offer enough protection for these resources.</p> <p>Recreationists who desire a primitive experience would feel this alternative provides opportunities to enhance this type of experience.</p> <p>Effects to Native Americans who engage in traditional practices could be positive in the Sweet Grass Hills and negative</p> | <p>support this alternative because it offers the fewest restrictions on oil and gas development. This group includes many local residents who are concerned about economic development and its potential positive effects on the social environment of small communities.</p> <p>Groups and individuals who give a high priority to resource protection, including the protection of the prairie ecosystem and greater sage-grouse habitat, may not feel this alternative offers adequate protection for these resources, because management actions under this alternative would slowly degrade existing conditions for these resources in most of the planning area. This could result in a decline in the quality of life for these groups and individuals.</p> <p>Effects to Native Americans who engage in</p> | <p>concerned about restrictions on oil and gas development. This group includes many local residents who are concerned about economic development and its potential positive effects on the social environment of small communities.</p> <p>Groups and individuals who give a high priority to resource protection, including the protection of the prairie ecosystem and greater sage-grouse habitat, may feel this alternative offers adequate protection for these resources. This could enhance the quality of life for these groups and individuals.</p> <p>Effects to Native Americans who engage in traditional practices could be positive in the Sweet Grass Hills and negative in the Little Rocky Mountains in terms of their ability to practice their religion in an</p> |

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|   | unencumbered way in the future.   | <p>pushed onto private lands where the protections would not be in place. This alternative may enhance the quality of life for these groups and individuals.</p> <p>Recreationists who desire a primitive experience would feel this alternative provides opportunities to enhance primitive experiences in the future.</p> <p>Native Americans who engage in traditional practices in the Sweet Grass Hills or the Little Rocky Mountains would be better able to practice their religion in an unencumbered way in the future.</p> | in the Little Rocky Mountains in terms of their ability to practice their religion in an unencumbered way. | <p>traditional practices could be positive in the Little Rocky Mountains but negative elsewhere in terms of their ability to practice their religion in an unencumbered way.</p> <p>Opportunities would increase for those who enjoy a motorized experience and decline for those who enjoy a more primitive experience.</p> | <p>unencumbered way.”</p> <p>Recreation opportunities would be balanced between motorized and nonmotorized opportunities.</p> |
| <b>Soil Resources and Vegetation – Rangeland</b>  |   |  |  |  |   |
|   | Surface disturbing activities would affect soils and vegetation to varying degrees depending on the amount, location, and type of disturbance; soil type; time of year; climate; and, surface hydrology. Surface disturbing activities remove protective vegetative cover and/or crusts and can alter soil physical, chemical, and biological properties; resulting in increased soil susceptibility to water and wind erosion, and decreased soil quality and site productivity. Guidance from BMPs, Standards for Rangeland Health and design standards would be implemented to minimize and mitigate soil effects. |  |  |  |   |
|   | Approximately 223,654 acres of new surface disturbances are   | Approximately 241,116 acres of new surface disturbances are  | Approximately 245,228 acres of new surface disturbances are  | Approximately 246,659 acres of new surface disturbances are  | Approximately 245,872 acres of new surface disturbances are   |

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|  | <p>anticipated on all land ownerships over the next 20 years. Cumulatively, 1.4% of soils and vegetation would be affected from new surface disturbances.</p> <p>This alternative would provide an intermediate level of protection and mitigation of cumulative impacts.</p>   | <p>anticipated on all land ownerships over the next 20 years. Cumulatively, 1.5% of soils and vegetation would be affected from new surface disturbances.</p> <p>This alternative would be the most protective and would provide the greatest reductions of cumulative impacts by implementing restrictions on many surface-disturbing activities.</p>                    | <p>anticipated on all land ownerships over the next 20 years. Cumulatively, 1.5% of soils and vegetation would be affected from new surface disturbances.</p> <p>This alternative would provide an intermediate level of protection and mitigation of cumulative impacts.</p>   | <p>anticipated on all land ownerships over the next 20 years. Cumulatively, 1.6% of soils and vegetation would be affected from new surface disturbances.</p> <p>This alternative would be the least protective of soils and vegetation and would result in the greatest cumulative impacts.</p>   | <p>anticipated on all land ownerships over the next 20 years. Cumulatively, 1.5% of soils and vegetation would be affected from new surface disturbances.</p> <p>This alternative would provide an intermediate level of protection and mitigation of cumulative impacts.</p>                                  |
| <b>Solid Minerals – Locatable</b>  |   |   |   |  |  |
|  | <p>23,444 acres would be withdrawn from mineral entry.</p> <p>The Zortman/ Landusky mine reclamation withdrawal (3,530 acres) would be allowed to expire in October 2015 and the Sweet Grass Hills withdrawal (19,671 acres) would be allowed to expire in April 2017. This would have a positive impact to locatable minerals by opening land for development.</p> | <p>23,563 acres of existing withdrawals in the Little Rocky Mountains and Sweet Grass Hills would be recommended for renewal.</p> <p>An additional 1,647,638 acres of recommended withdrawals would close more land to locatable mineral entry, including Greater Sage-Grouse Protection Priority Area (1,034,102 acres); Grassland Bird/Greater Sage-Grouse Priority</p> | <p>23,563 acres of existing withdrawals in the Little Rocky Mountains and Sweet Grass Hills would be recommended for renewal.</p> <p>An additional 1,506,000 acres of recommended withdrawals would close more land to locatable mineral entry, including Greater Sage-Grouse Protection Priority Area (1,034,102 acres); Grassland Bird/Greater Sage-Grouse Priority</p> | <p>Approximately 185,000 acres would be recommended for withdrawal from mineral entry.</p> <p>The Zortman/ Landusky mine reclamation withdrawal (3,380 acres) would be allowed to expire in October 2010, and the Sweet Grass Hills withdrawal (19,761 acres) would be allowed to expire in April 2017. This would have a positive impact to locatable</p> | <p>Approximately 45,000 acres would be recommended for withdrawal from mineral entry.</p> <p>The Sweet Grass Hills withdrawal (19,761 acres) would be recommended for renewal.</p> <p>Other recommended withdrawals would include Azure Cave (143 acres); Camp Creek Campground (169 acres); Montana Gulch</p> |

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|   | This alternative would be the most favorable for locatable minerals exploration and development.   | <p>Areas (480,035 acres); Bitter Creek ACEC (60,717 acres); Kevin Rim ACEC (4,553 acres); Malta Geological ACEC (6,152 acres); Mountain Plover ACEC (24,672 acres); Little Rocky Mountains TCP (37,387 acres); and Zortman Cemetery (20 acres).</p> <p>This alternative would reduce most locatable minerals development opportunities by eliminating any foreseeable development for the reestablishment and expansions of the Zortman and Landusky Mines and limiting all mining activity in the Sweet Grass Hills to claims with valid existing rights.</p> | <p>Areas (320,405 acres); Bitter Creek ACEC (60,717 acres); Frenchman ACEC (39,661 acres); Kevin Rim ACEC (4,553 acres); Malta Geological ACEC (6,152 acres); Woody Island ACEC (15,804 acres); and Zortman Cemetery (20 acres).</p> <p>This alternative would reduce most locatable minerals development opportunities by eliminating any foreseeable development for the reestablishment and expansions of the Zortman and Landusky Mines and limiting all mining activity in the Sweet Grass Hills to claims with valid existing rights.</p> | minerals by opening land for development.<br><br>Recommended withdrawals would be the Bitter Creek ACEC (60,717 acres); Frenchman ACEC (57,540 acres); Kevin Rim ACEC (4,553 acres); Little Rocky Mountains ACEC (15,000 acres); Malta Geological ACEC (6,152 acres); Woody Island ACEC (15,804 acres); and Zortman Cemetery (20 acres). | <p>Campground (75 acres); and the Mountain Plover ACEC (24,672 acres).</p> <p>Through a future withdrawal review process the BLM would consider the need for a new withdrawal or right-of-way to promote successful reclamation of the Zortman/Landusky mines. The area for the withdrawal would not exceed the existing withdrawal boundary, but would likely be smaller (maximum size would be 2,560 acres). This would have a positive impact to locatable mineral development.</p> |
| <b>Special Designations – Existing ACECs</b>  |  |  |   |  |  |
| Azure Cave ACEC   | Retention of the ACEC (142 acres) would provide protection for sensitive bat species hibernating in the cave and features of the cave, and would provide for public safety by limiting access to the cave. |  |   |  |  |
|   | The area would be open for wind energy rights-of-way.  | The area would be an exclusion area for wind energy rights-of-way, which would provide the greatest protection for sensitive bat species and cave features.  |   |  |  |

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| Big Bend of the Milk River ACEC   | Retention of the ACEC (1,979 acres) would protect and manage archaeological resources, including the Henry Smith and Beaucoup sites, which represent bison hunting and prehistoric ceremonial use of the Northwestern Plains.   |   |  |   |  |
|   | 1,140 acres are currently leased and natural gas production has direct and indirect impacts on archaeological sites within the ACEC. Direct impacts to sites would be avoided by mitigation through the Section 106 process.  |   |  |   |  |
|   | <p>An NSO stipulation would be required for future oil and gas leasing.</p> <p>Impacts from salable minerals could be mitigated through the Section 106 process.</p> <p>The area would be open for wind energy rights-of-way. Surface-disturbing activities could be mitigated through the Section 106 process, but the viewshed could not be mitigated.</p>                    | <p>The area would be closed to future oil and gas leasing.</p> <p>Impacts from salable minerals could be mitigated through the Section 106 process.</p> <p>The area would be an avoidance area for rights-of-way and an exclusion area for wind energy rights-of-way, which would increase protection to cultural resources from potential visual intrusions.</p> | <p>An NSO stipulation would be required for future oil and gas leasing.</p> <p>Impacts from salable minerals could be mitigated through the Section 106 process.</p> <p>The area would be an avoidance area for rights-of-way and an exclusion area for wind energy rights-of-way, which would increase protection to cultural resources from potential visual intrusions.</p> | <p>An NSO stipulation would be required for future oil and gas leasing.</p> <p>The ACEC would be closed to salable minerals, which would increase the protection to cultural resources from surface-disturbing activities associated with sand and gravel extraction.</p> <p>The area would be an avoidance area for rights-of-way and an exclusion area for wind energy rights-of-way, which would increase protection to cultural resources from potential visual intrusions.</p> |  |
| Bitter Creek ACEC   | Retention of the ACEC (60,701 acres) would benefit scenic diversity and a variety of vegetation types and wildlife habitats.  |   |  |   |  |
|   | The area would remain closed to oil and gas leasing until an ACEC management plan is completed that addresses leasing. It would also be an exclusion area for wind energy rights of way and closed to solid minerals-leasable and mineral material sales. The exclusion and closures would protect the ACEC from potential surface-disturbing activities and visual intrusions. |   |  |   |  |
|   | The 4 1/2 mile wide right-of-way for the Northern Border Corridor would not affect values for which the ACEC was designated due to successful reclamation   | The ACEC would be an avoidance area for rights-of-way, and the Northern Border Corridor within the ACEC would be a designated right-of-way  | The ACEC would be an avoidance area for rights-of-way, and the Northern Border Corridor within the ACEC would be a designated right-of-way   | The ACEC would be an avoidance area for rights-of-way. The values for which the ACEC was designated would be protected, but not to the  | The ACEC would be an avoidance area for rights-of-way, and no utility and transportation corridor would be designated. This would protect the values |

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|--|---|--|---|--|---|
| <i>Resource</i>  | <i>Alternative A<br/>(Current Management)</i>   | <i>Alternative B</i>   | <i>Alternative C</i>  | <i>Alternative D</i>                           | <i>Alternative E<br/>(Preferred Alternative)</i>  |
| <p><i>Throughout the planning area, BLM-authorized activities associated with all resources and all resource use programs would be subject to mitigation and minimization guidelines and Best Management Practices (BMPs) (Appendix C), including specific Mitigation Measures and Conservation Actions for Greater Sage-Grouse (Appendix M). For analysis purposes, it has been assumed that these practices and conservation actions would be implemented during site-specific project planning where appropriate.</i></p> |   |  |   |  |   |
|  | and soil and vegetation productivity.   | corridor with a width of 1 mile. This would protect the values for which the ACEC was designated and successful reclamation that has occurred by preventing future right-of-way actions in the ACEC and confining the Northern Border Pipeline right-of-way to a narrower corridor than under Alternative A.                       | corridor with a width of 2 miles. This would protect the values for which the ACEC was designated and successful reclamation that has occurred by preventing future right-of-way actions in the ACEC and confining the Northern Border Pipeline right-of-way to a narrower corridor than under Alternative A. | degree provided under Alternatives A, B, or C. | for which the ACEC was designated by preventing future right-of-way actions in the ACEC.  |
|  | The area would be open to solid mineral entry and location, but would be subject to management consistent with BLM Manual 6330-Management of BLM Wilderness Study Areas as appropriate, which would protect the values for which the ACEC was designated.                     | The BLM would recommend a withdrawal from mineral entry and location (60,717 acres) to protect significant cultural, scenic, and wildlife values. This would benefit scenic views and sensitive archaeological resources, and would protect wildlife by providing a large, continuous, and contiguous amount of grassland habitat. |   |  | The area would be open to solid mineral entry and location, but would be subject to management consistent with BLM Manual 6330-Management of BLM Wilderness Study Areas as appropriate, which would protect the values for which the ACEC was designated. |
| Kevin Rim ACEC   | Retention of the ACEC (4,557 acres) would protect the diverse archeological resources and significant raptor habitat.   |  |   |  |   |
|  | An NSO stipulation would be required for future oil and gas leasing. 2,950 acres are currently leased and production has direct and indirect impacts on cultural sites within the ACEC. Avoidance and/or other types of mitigation (BMPs) could negate or lessen the effects. |  |   |  |   |
|  | No mineral withdrawal would be recommended, but no effects from locatable minerals are  | A mineral withdrawal would be recommended, although no effects from locatable minerals would be expected due to low potential.   |   |  | No mineral withdrawal would be recommended, but no effects from locatable minerals are  |
|  |   | The area would be an exclusion area for wind energy rights-of-way, which would   |   |  |   |

| <b>Table 2.22<br/>Summary Comparison of Environmental Consequences</b>  |  |   |  |  |  |
|---|--|---|--|--|--|
| <i>Resource</i>   | <i>Alternative A<br/>(Current Management)</i>  | <i>Alternative B</i>  | <i>Alternative C</i>   | <i>Alternative D</i>   | <i>Alternative E<br/>(Preferred Alternative)</i>   |
| <i>Throughout the planning area, BLM-authorized activities associated with all resources and all resource use programs would be subject to mitigation and minimization guidelines and Best Management Practices (BMPs) (Appendix C), including specific Mitigation Measures and Conservation Actions for Greater Sage-Grouse (Appendix M). For analysis purposes, it has been assumed that these practices and conservation actions would be implemented during site-specific project planning where appropriate.</i> |  |   |  |  |  |
|   | <p>expected due to low potential.</p> <p>The ACEC would be open to salable minerals. Impacts to cultural resources from surface-disturbing activities associated with sand and gravel extraction could occur.</p> <p>The ACEC would be open for wind energy rights-of-way. The surface-disturbing activities could be mitigated through the Section 106 process, but impacts to the viewshed could not be mitigated.</p> | <p>increase protection to cultural resources from potential visual intrusions.</p> <p>The ACEC would be closed to salable minerals, which would benefit the ACEC because sand and gravel would be the most likely solid mineral resource extracted within the ACEC.</p> |  |  | <p>expected due to low potential.</p> <p>The area would be an exclusion area for wind energy rights-of-way, which would increase protection to cultural resources from potential visual intrusions.</p> <p>The ACEC would be closed to salable minerals, which would benefit the ACEC because sand and gravel would be the most likely solid mineral resource extracted within the ACEC.</p> |
| Mountain Plover ACEC  | Retention of the ACEC (24,762 acres) would provide protection to the natural habitat for mountain plover in this unique area away from traditional habitat associated with prairie dogs.   |   |  |  |  |
|   | <p>A timing stipulation for oil and gas leasing would avoid direct long-term impacts to mountain plover habitat.</p> <p>The ACEC would be open for locatable solid minerals (bentonite) with timing stipulations to protect breeding mountain plovers.</p>   | <p>An NSO stipulation for oil and gas leasing would avoid any impacts from oil and gas exploration and development.</p> <p>A mineral withdrawal would be recommended. This would protect mountain plover from potential permanent impacts and habitat</p>               | <p>An NSO stipulation for oil and gas leasing would avoid direct long-term impacts to mountain plover habitat.</p> <p>A mineral withdrawal would be recommended. This would protect mountain plover from potential permanent impacts and habitat</p> | <p>An NSO stipulation for oil and gas leasing would avoid direct long-term impacts to mountain plover habitat.</p> <p>A mineral withdrawal would be recommended. This would protect mountain plover from potential permanent impacts and habitat</p> | <p>The ACEC would be closed to oil and gas leasing which would avoid any impacts from oil and gas exploration and development.</p> <p>A mineral withdrawal would be recommended. This would protect mountain plover from potential permanent</p>   |

| <b>Table 2.22<br/>Summary Comparison of Environmental Consequences</b>  |  |  |  |  |  |
|---|--|--|--|--|--|
| <i>Resource</i>   | <i>Alternative A<br/>(Current Management)</i>  | <i>Alternative B</i>   | <i>Alternative C</i>   | <i>Alternative D</i>   | <i>Alternative E<br/>(Preferred Alternative)</i>   |
| <i>Throughout the planning area, BLM-authorized activities associated with all resources and all resource use programs would be subject to mitigation and minimization guidelines and Best Management Practices (BMPs) (Appendix C), including specific Mitigation Measures and Conservation Actions for Greater Sage-Grouse (Appendix M). For analysis purposes, it has been assumed that these practices and conservation actions would be implemented during site-specific project planning where appropriate.</i> |  |  |  |  |  |
|   | <p>The ACEC would be open to salable minerals which could create impacts from surface-disturbing activities associated with sand and gravel extraction, but the potential is considered low.</p> <p>The area would be open for wind energy rights-of-way.</p>  | <p>reduction that mining would cause.</p> <p>The ACEC would be open to salable minerals which could create impacts from surface-disturbing activities associated with sand and gravel extraction, but the potential is considered low.</p> <p>The area would be an avoidance area for rights-of-way and an exclusion area for wind energy rights-of-way, which would increase protection of mountain plover habitat.</p> | <p>reduction that mining would cause.</p> <p>The ACEC would be open to salable minerals which could create impacts from surface-disturbing activities associated with sand and gravel extraction, but the potential is considered low.</p> <p>The area would be an avoidance area for rights-of-way and an exclusion area for wind energy rights-of-way, which would increase protection of mountain plover habitat.</p> | <p>reduction that mining would cause.</p> <p>The ACEC would be closed to salable minerals which would protect the mountain plover habitat from surface-disturbing activities associated with sand and gravel extraction.</p> <p>The area would be an avoidance area for rights-of-way and an exclusion area for wind energy rights-of-way, which would increase protection of mountain plover habitat.</p> | <p>impacts and habitat reduction that mining would cause.</p> <p>The ACEC would be closed to salable minerals which would protect the mountain plover habitat from surface-disturbing activities associated with sand and gravel extraction.</p> <p>The area would be an avoidance area for rights-of-way and an exclusion area for wind energy rights-of-way, which would increase protection of mountain plover habitat.</p> |
| Prairie Dog Towns within the 7km Complex ACEC   | The ACEC (16,403 acres) would be retained. Benefits for prairie dogs and associated species still found within the ACEC boundary would be maintained.  | The ACEC would not be retained. The ACEC is no longer effective in providing special management for prairie dogs, associated species, and black-footed ferret reintroduction. Management actions directed at prairie dogs and associated species would still protect the resources for which the ACEC was originally established.  |  |  |  |
| Sweet Grass Hills ACEC  | Retention of the ACEC (7,429 acres) would protect habitat which has high potential for reintroduction of peregrine falcon; would protect areas of traditional spiritual importance to Native Americans; and would protect seasonally important elk and deer habitat and aquifer in the area that provide potable water to local residents. |  |  |  |  |
|   | An NSO stipulation for oil and gas leasing would apply to future leasing.  | An NSO stipulation for oil and gas leasing would apply to future leasing. BLM would work directly with oil and gas operators on existing leases to mitigate adverse  |  | An NSO stipulation for oil and gas leasing would apply to future leasing.  | The area would be closed to future oil and gas leasing. BLM would work   |

**Table 2.22  
Summary Comparison of Environmental Consequences**

| <i>Resource</i>   | <i>Alternative A<br/>(Current Management)</i>   | <i>Alternative B</i>   | <i>Alternative C</i> | <i>Alternative D</i>   | <i>Alternative E<br/>(Preferred Alternative)</i>   |
|---|---|--|----------------------|--|--|
| <p align="center"><i>Throughout the planning area, BLM-authorized activities associated with all resources and all resource use programs would be subject to mitigation and minimization guidelines and Best Management Practices (BMPs) (Appendix C), including specific Mitigation Measures and Conservation Actions for Greater Sage-Grouse (Appendix M). For analysis purposes, it has been assumed that these practices and conservation actions would be implemented during site-specific project planning where appropriate.</i></p> |   |  |                      |  |  |
|   | <p>BLM would work directly with oil and gas operators on existing leases to mitigate adverse impacts to the resources caused by exploration and development activities.</p> <p>No impacts are anticipated to occur from locatable minerals because the Sweet Grass Hills TCP, of which the ACEC is part, is withdrawn from mineral entry.</p> <p>The ACEC is closed to leasable minerals which would protect the resources from impacts that could occur from those surface-disturbing activities.</p> <p>The ACEC is open to salable minerals and impacts could occur from surface-disturbing activities associated with sand and gravel extraction.</p> <p>The area would be open for wind energy rights-of-way. Surface-disturbing activities could be</p> | <p>impacts to the resources caused by exploration and development activities.</p> <p>BLM would recommend a continuance of the withdrawal from mineral entry. No impacts would occur from hardrock mining.</p> <p>The ACEC would be closed to leasable and salable minerals, which would protect the resources from impacts that could occur from those surface-disturbing activities.</p> <p>The ACEC would be an avoidance area for rights-of-way and an exclusion area for wind energy rights-of-way. This would increase the protection to cultural resources from potential visual intrusions.</p> |                      | <p>BLM would work directly with oil and gas operators on existing leases to mitigate adverse impacts to the resources caused by exploration and development activities.</p> <p>BLM would recommend the withdrawal from mineral entry be allowed to expire. Impacts from mining could include noise and visual impacts to traditional users of the area, and damage and/or destruction to archaeological sites.</p> <p>The ACEC would be closed to leasable and salable minerals, which would protect the resources from impacts that could occur from those surface-disturbing activities.</p> <p>The ACEC would be an avoidance area for rights-of-way and an exclusion area for wind energy rights-of-way. This would increase the protection to cultural resources from</p> | <p>directly with oil and gas operators on existing leases to mitigate adverse impacts to the resources caused by exploration and development activities.</p> <p>BLM would recommend a continuance of the withdrawal from mineral entry. No impacts are anticipated to occur from hardrock mining.</p> <p>The ACEC would be closed to leasable and salable minerals, which would protect the resources from impacts that could occur from those surface-disturbing activities.</p> <p>The ACEC would be an avoidance area for rights-of-way and an exclusion area for wind energy rights-of-way. This would increase the protection to cultural resources from potential visual intrusions.</p> |

| <p align="center"><b>Table 2.22</b><br/><b>Summary Comparison of Environmental Consequences</b></p>  |   |  |  |   |   |
|--|---|--|--|---|---|
| <i>Resource</i>  | <i>Alternative A<br/>(Current Management)</i>   | <i>Alternative B</i>   | <i>Alternative C</i>   | <i>Alternative D</i>  | <i>Alternative E<br/>(Preferred Alternative)</i>  |
| <p><i>Throughout the planning area, BLM-authorized activities associated with all resources and all resource use programs would be subject to mitigation and minimization guidelines and Best Management Practices (BMPs) (Appendix C), including specific Mitigation Measures and Conservation Actions for Greater Sage-Grouse (Appendix M). For analysis purposes, it has been assumed that these practices and conservation actions would be implemented during site-specific project planning where appropriate.</i></p> |   |  |  |   |   |
|  | mitigated through the Section 106 process, but the viewshed could not be mitigated.   |  |  | potential visual intrusions.  |   |
| <p><b>Special Designations – Potential ACECs</b></p>   |   |  |  |   |   |
| Frenchman ACEC   | Surface-disturbing activities could occur under all alternatives and BMPs for surface-disturbing activities would be applied. Under normal circumstances, standard mitigation guidelines are effective in minimizing impacts to resources; however, conditions such as severely erodible soils, severe winters with high mule deer populations on crucial winter range, or extreme environmental events may require more aggressive management actions to mitigate adverse impacts. |  |  |   |   |
|  | The ACEC would not be designated.   | The ACEC would not be designated. An NSO stipulation would apply to future oil and gas leases to protect soils with severe erosion hazards, badlands, rock outcrop, and lentic or lotic riparian areas. The crucial mule deer winter range within the Frenchman area would be closed to leasing to protect the crucial winter range. | The ACEC (42,020 acres) would be designated to maintain the unique landscape and scenic characteristics, protect erodible soils and rock outcrop, and protect important wildlife habitats. | The ACEC (63,482 acres) would be designated to maintain the unique landscape and scenic characteristics, protect erodible soils and rock outcrop, and protect important wildlife habitats.  | The ACEC (42,020 acres) would be designated to maintain the unique landscape and scenic characteristics, protect erodible soils and rock outcrop and protect important wildlife habitats. |
|  |   |  |  | An NSO stipulation would apply to future oil and gas leases to protect the fragile watershed and crucial winter range.  |   |
|  |   |  |  | Fluid mineral development could occur on acreage currently leased. Development of the leases would impact soils. Wildlife impacts would be reduced by timing and/or avoidance stipulations. |   |
|  |   |  |  | The ACEC would be closed to leasable and salable solid minerals, which would protect the erodible soils and rock outcrop, and important wildlife habitats.                                  |   |
|  |   |  |  | The ACEC would be an avoidance area for rights-of-way and an exclusion area for wind energy rights-of-way.  |   |

| <b>Table 2.22<br/>Summary Comparison of Environmental Consequences</b>  |   |   |  |  |   |
|---|---|---|--|--|---|
| <b>Resource</b>   | <b>Alternative A<br/>(Current Management)</b>   | <b>Alternative B</b>  | <b>Alternative C</b>                       | <b>Alternative D</b>   | <b>Alternative E<br/>(Preferred Alternative)</b>  |
| <i>Throughout the planning area, BLM-authorized activities associated with all resources and all resource use programs would be subject to mitigation and minimization guidelines and Best Management Practices (BMPs) (Appendix C), including specific Mitigation Measures and Conservation Actions for Greater Sage-Grouse (Appendix M). For analysis purposes, it has been assumed that these practices and conservation actions would be implemented during site-specific project planning where appropriate.</i> |   |   |  |  |   |
| Grassland Bird/Greater Sage-Grouse Priority Areas ACEC  | The areas would not be designated an ACEC.  | The ACEC (461,220 acres) would be designated. Closing the ACEC to fluid mineral leasing, making it an exclusion area for ROWs and recommending a locatable mineral withdrawal would minimize fragmentation of sage-grouse and grassland bird habitat. | The areas would not be designated an ACEC. |  |   |
| Greater Sage-Grouse Protection Priority Area ACEC   | The area would not be designated an ACEC.   | The ACEC (930,265 acres) would be designated. Closing the ACEC to fluid mineral leasing, making it an exclusion area for ROWs and recommending a locatable mineral withdrawal would minimize fragmentation of sage-grouse habitat.                    | The area would not be designated an ACEC.  |  |   |
| Little Rocky Mountains ACEC   | The area would not be designated an ACEC. Prehistoric and historic archaeological resources, and spiritual and traditional resources in the area would be managed and protected through management of the Little Rocky Mountains TCP. |   |  | The ACEC (27,163 acres) would be designated to protect prehistoric and historic archaeological resources, and spiritual and traditional resources.<br><br>An NSO stipulation for oil and gas leasing would avoid potential impacts to prehistoric and historic | The ACEC would not be designated. Prehistoric and historic archaeological resources, and spiritual and traditional resources in the area would be managed and protected through management of the Little Rocky Mountains TCP, including the exclusion of wind |

| <p align="center"><b>Table 2.22</b><br/><b>Summary Comparison of Environmental Consequences</b></p>   |   |  |   |  |  |
|---|---|--|---|--|--|
| <p align="center"><i>Resource</i></p>   | <p align="center"><i>Alternative A<br/>(Current Management)</i></p> | <p align="center"><i>Alternative B</i></p> | <p align="center"><i>Alternative C</i></p>  | <p align="center"><i>Alternative D</i></p> | <p align="center"><i>Alternative E<br/>(Preferred Alternative)</i></p> |
| <p align="center"><i>Throughout the planning area, BLM-authorized activities associated with all resources and all resource use programs would be subject to mitigation and minimization guidelines and Best Management Practices (BMPs) (Appendix C), including specific Mitigation Measures and Conservation Actions for Greater Sage-Grouse (Appendix M). For analysis purposes, it has been assumed that these practices and conservation actions would be implemented during site-specific project planning where appropriate.</i></p> |   |  |   |  |  |
|   |   |  | <p>archaeological resources.</p> <p>The ACEC would be an avoidance area for rights-of-way and an exclusion area for wind energy rights-of-way. This would increase the protection to cultural resources from potential visual intrusions.</p> <p>BLM would recommend a withdrawal for the northern portion of the ACEC (15,000 acres) to avoid potential impacts associated with mining.</p> <p>The area would be closed to solid mineral leasing and mineral material sales to avoid potential impacts associated with these activities.</p> <p>The area would have a limited designation for OHV use; seasonal restrictions, if enacted through travel management planning, would protect cultural resource values.</p> |  | <p>energy rights-of-way.</p>   |

**Table 2.22  
Summary Comparison of Environmental Consequences**

| <i>Resource</i>   | <i>Alternative A<br/>(Current Management)</i>   | <i>Alternative B</i>   | <i>Alternative C</i> | <i>Alternative D</i> | <i>Alternative E<br/>(Preferred Alternative)</i>  |
|---|---|--|----------------------|----------------------|---|
| <p align="center"><i>Throughout the planning area, BLM-authorized activities associated with all resources and all resource use programs would be subject to mitigation and minimization guidelines and Best Management Practices (BMPs) (Appendix C), including specific Mitigation Measures and Conservation Actions for Greater Sage-Grouse (Appendix M). For analysis purposes, it has been assumed that these practices and conservation actions would be implemented during site-specific project planning where appropriate.</i></p> |   |  |                      |                      |   |
| Malta Geological ACEC   | <p>The area would not be designated an ACEC. Paleontological resources would be protected under BLM 8270 Guidance and Handbook. Impacts due to damage, destruction, theft, and vandalism would diminish the scientific value of paleontological resources.</p> <p>Further field investigations could benefit scientific knowledge.</p> <p>An NSO stipulation for oil and gas leasing would be required for known paleontological sites, which would protect the resource.</p> <p>The area would be open to wind energy rights-of-way; however, anticipated effects of surface disturbance required during construction could be minimized or eliminated through avoidance and mitigation actions.</p> | <p>The Malta Geological ACEC (6,153 acres) would be designated to protect significant paleontological values.</p> <p>A CSU stipulation would be placed on future oil and gas leases to protect the paleontological values.</p> <p>The area would be an avoidance area for rights-of-way and an exclusion area for wind energy rights-of-way to protect the shallow subsurface paleontological resources. This would increase the protection to paleontological resources from potential surface-disturbing activities.</p> <p>BLM would recommend a withdrawal for locatable minerals, and the area would be closed to solid mineral leasing and mineral material sales to avoid potential impacts associated with these activities.</p> |                      |                      | <p>The Malta Geological ACEC (6,153 acres) would be designated to protect significant paleontological values.</p> <p>A CSU stipulation would be placed on future oil and gas leases to protect the paleontological values.</p> <p>The area would be an avoidance area for rights-of-way and an exclusion area for wind energy rights-of-way to protect the shallow subsurface paleontological resources.</p> <p>BLM would not recommend a withdrawal for locatable minerals, but the area is in a very low or unknown potential for locatable mineral development.</p> <p>The area would be closed to solid mineral leasing and mineral material sales to avoid potential impacts associated with these activities.</p> |

| <p align="center"><b>Table 2.22</b><br/><b>Summary Comparison of Environmental Consequences</b></p>  |   |  |   |   |   |
|--|---|--|---|---|---|
| <i>Resource</i>  | <i>Alternative A<br/>(Current Management)</i> | <i>Alternative B</i>   | <i>Alternative C</i>                      | <i>Alternative D</i>  | <i>Alternative E<br/>(Preferred Alternative)</i>  |
| <p><i>Throughout the planning area, BLM-authorized activities associated with all resources and all resource use programs would be subject to mitigation and minimization guidelines and Best Management Practices (BMPs) (Appendix C), including specific Mitigation Measures and Conservation Actions for Greater Sage-Grouse (Appendix M). For analysis purposes, it has been assumed that these practices and conservation actions would be implemented during site-specific project planning where appropriate.</i></p> |   |  |   |   |   |
| Woody Island ACEC  | The area would not be designated an ACEC.     | <p>The Woody Island ACEC (22,411 acres) would be designated to maintain the unique landscape and scenic characteristics, and to protect the fragile watershed and wildlife species from fragmentation.</p> <p>An NSO stipulation would apply to all future oil and gas leases, but this would have little to no impact because development potential is very low.</p> <p>The ACEC would be an avoidance area for rights-of-way and an exclusion area for wind energy rights-of-way. This would increase the protection for the unique landscape from potential surface-disturbing activities.</p> <p>BLM would recommend a withdrawal from locatable mineral entry and the area would be closed to solid mineral leasing and mineral material sales.</p> |   | <p>The Woody Island ACEC (32,869 acres) would be designated to maintain the unique landscape and scenic characteristics, and to protect the fragile watershed and wildlife species from fragmentation.</p> <p>An NSO stipulation would be applied to all future oil and gas leases, but this would have little to no impact because development potential is very low.</p> <p>The ACEC would be an avoidance area for rights-of-way and an exclusion area for wind energy rights-of-way.</p> <p>BLM would recommend a withdrawal from locatable mineral entry and the area would be closed to solid mineral leasing and mineral material sales.</p> |   |
| Zortman/Landusky Mine Reclamation ACEC   | The area would not be designated an ACEC.     | The Zortman/Landusky Mine Reclamation ACEC (3,575 acres) would be designated to promote successful reclamation and ensure public safety on BLM lands affected by prior surface and underground mining  | The area would not be designated an ACEC. | The withdrawal would be   | The Zortman/Landusky Mine Reclamation ACEC (2,656 acres) would be designated to promote |

**Table 2.22  
Summary Comparison of Environmental Consequences**

| <i>Resource</i>   | <i>Alternative A<br/>(Current Management)</i> | <i>Alternative B</i>   | <i>Alternative C</i> | <i>Alternative D</i>             | <i>Alternative E<br/>(Preferred Alternative)</i>   |
|---|---|--|----------------------|----------------------------------|--|
| <p align="center"><i>Throughout the planning area, BLM-authorized activities associated with all resources and all resource use programs would be subject to mitigation and minimization guidelines and Best Management Practices (BMPs) (Appendix C), including specific Mitigation Measures and Conservation Actions for Greater Sage-Grouse (Appendix M). For analysis purposes, it has been assumed that these practices and conservation actions would be implemented during site-specific project planning where appropriate.</i></p> |   |  |                      |                                  |  |
|   |   | <p>activities.</p> <p>An NSO stipulation would be applied to all future oil and gas leases. This would support reclamation success by preventing surface disturbance associated with oil and gas exploration and development.</p> <p>The area would be an avoidance area for rights-of-way and an exclusion area for wind energy rights-of-way. This would increase the success of reclamation by preventing potential surface-disturbing activities.</p> <p>BLM would recommend a 20-year withdrawal from mineral entry and location upon expiration of the existing withdrawal in 2015. The area would be closed to solid mineral leasing and mineral material sales. This would support reclamation success by preventing surface disturbance from mining activity.</p> |                      | <p>allowed to expire (2015).</p> | <p>successful reclamation and ensure public safety on BLM lands affected by prior surface and underground mining activities.</p> <p>The area within the higher elevations of the Little Rocky Mountains TCP (2,604 acres) would be closed to oil and gas leasing to protect the prehistoric and historic archaeological resources in the area.</p> <p>The existing withdrawal will expire in 2015. Through the withdrawal review process the BLM would consider the need for a new withdrawal or right-of-way to promote successful reclamation. The area of the withdrawal or right-of-way would be based on need to maintain and protect infrastructure associated with reclamation activities.</p> <p>The area would be open to mineral material sales associated with the need</p> |

| <b>Table 2.22<br/>Summary Comparison of Environmental Consequences</b>  |  |  |  |  |  |
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| <i>Throughout the planning area, BLM-authorized activities associated with all resources and all resource use programs would be subject to mitigation and minimization guidelines and Best Management Practices (BMPs) (Appendix C), including specific Mitigation Measures and Conservation Actions for Greater Sage-Grouse (Appendix M). For analysis purposes, it has been assumed that these practices and conservation actions would be implemented during site-specific project planning where appropriate.</i> |  |  |  |  |  |
|   |  |  |  |  | <p>for reclamation materials and maintenance of existing roads (5-6 miles).</p> <p>The area would be an avoidance area for rights-of-way.</p> <p>The area would be an exclusion area for wind energy rights-of-way.</p> <p>The area would be designated closed to off-road vehicles to maintain the reclamation and ensure public safety until reclamation is completed.</p> |
| <b>Vegetation – Riparian and Wetland</b>  |  |  |  |  |  |
| Surface-Disturbing Activities   | 2,188 acres of long-term surface disturbance are anticipated, mostly in the high and moderate potential oil and gas development areas. Impacts would include direct removal of vegetation on stream banks and around potholes when surface-disturbing activities cannot be moved due to other resource values, and would most likely occur on small, | 1,056 acres of long-term surface disturbance are anticipated.<br><br>The short-term and long-term surface disturbance would be the lowest under this alternative and would have the least potential to affect riparian and wetland values. | 1,927 acres of long-term surface disturbance are anticipated, mostly in the high and moderate potential oil and gas development areas. Impacts would include direct removal of vegetation on stream banks and around potholes when surface-disturbing activities cannot be moved due to other resource values, and would most likely occur on small, | 2,202 acres of long-term surface disturbance are anticipated, mostly in the high and moderate potential oil and gas development areas. Impacts would include direct removal of vegetation on stream banks and around potholes when surface-disturbing activities cannot be moved due to other resource values, and would most likely occur on small, | 2,055 acres of long-term surface disturbance are anticipated, mostly in the high and moderate potential oil and gas development areas.   |

| <b>Table 2.22<br/>Summary Comparison of Environmental Consequences</b>  |  |  |   |  |   |
|---|--|--|---|--|---|
| <i>Resource</i>   | <i>Alternative A<br/>(Current Management)</i>  | <i>Alternative B</i>   | <i>Alternative C</i>  | <i>Alternative D</i>   | <i>Alternative E<br/>(Preferred Alternative)</i>  |
| <i>Throughout the planning area, BLM-authorized activities associated with all resources and all resource use programs would be subject to mitigation and minimization guidelines and Best Management Practices (BMPs) (Appendix C), including specific Mitigation Measures and Conservation Actions for Greater Sage-Grouse (Appendix M). For analysis purposes, it has been assumed that these practices and conservation actions would be implemented during site-specific project planning where appropriate.</i> |  |  |   |  |   |
|   | <p>intermittent riparian areas where oil and gas development is most intensive.</p> <p>The short-term and long-term surface disturbance would be the highest under this alternative and would have the most potential to affect riparian and wetland values.</p>   |  | <p>intermittent riparian areas where oil and gas development is most intensive.</p>   | <p>intermittent riparian areas where oil and gas development is most intensive.</p> <p>The short-term and long-term surface disturbance would be the highest under this alternative and would have the most potential to affect riparian and wetland values.</p>   |   |
| Fluid Minerals  | <p>Stipulations would apply to 243 miles (25%) and 5,857 acres (11%) of riparian habitat with major constraints (closed or NSO). Of this total, 229 miles (94%) and 5,071 acres (87%) are unleased in the very low potential area.</p> <p>60 miles and 7,410 acres of riparian habitat are not protected by major constraints in the high and moderate potential areas and could be affected by fluid mineral development.</p> | <p>Stipulations would apply to 36 miles and 4,513 acres of riparian habitat that are unleased in the high, moderate and low potential areas. The remaining areas have very low development potential or are currently leased. As existing leases expire, a 1/4 mile NSO stipulation would be applied to new leases, which would protect more riparian areas from surface disturbance.</p> <p>All of the lotic and lentic riparian habitat in the high and moderate potential areas that could be affected by fluid mineral</p> | <p>Major constraints (closed or NSO) would apply to 36 miles and 4,513 acres of riparian habitat that are unleased in the high, moderate and low potential areas.</p> <p>All of the lotic and lentic riparian habitat in the high and moderate potential areas that could be affected by fluid mineral development would be protected by major constraints.</p> | <p>Major constraints (closed or NSO) would apply to 9 miles and 80 acres of riparian habitat that are unleased in the high, moderate and low potential areas.</p> <p>61 miles and 7,563 acres of riparian habitat not protected by major constraints in the high and moderate potential areas could be affected by fluid minerals development.</p> | <p>Major constraints (closed or NSO) would apply to 14 miles and 207 acres of riparian habitat that are unleased in the high, moderate and low potential areas.</p> <p>50 miles and 7,185 acres of riparian habitat not protected by major constraints in the high and moderate potential areas could be affected by fluid mineral development.</p> |

| <p align="center"><b>Table 2.22</b><br/><b>Summary Comparison of Environmental Consequences</b></p>  |   |   |  |  |  |
|--|---|---|--|--|--|
| <i>Resource</i>  | <i>Alternative A<br/>(Current Management)</i>   | <i>Alternative B</i>  | <i>Alternative C</i>   | <i>Alternative D</i>   | <i>Alternative E<br/>(Preferred Alternative)</i>   |
| <p><i>Throughout the planning area, BLM-authorized activities associated with all resources and all resource use programs would be subject to mitigation and minimization guidelines and Best Management Practices (BMPs) (Appendix C), including specific Mitigation Measures and Conservation Actions for Greater Sage-Grouse (Appendix M). For analysis purposes, it has been assumed that these practices and conservation actions would be implemented during site-specific project planning where appropriate.</i></p> |   |   |  |  |  |
|  |   | development would be protected by major constraints.  |  |  |  |
| Solid Minerals   | 390 acres have potential for short-term surface disturbance and 2,495 acres for long-term surface disturbance for solid mineral development.<br><br>Overall effects on riparian areas would be small because the high development potential area includes only 52 acres and 11 miles of riparian habitat. | 355 acres have potential for short-term and long-term surface disturbance.  | 355 acres have potential for short-term and long-term surface disturbance.   | 235 acres have potential for short term surface disturbance and 300 acres for long-term surface disturbance.   | 355 acres have potential for short-term and long-term surface disturbance.   |
| <b>Visual Resources</b>  |   |   |  |  |  |
|  | This alternative includes the following acreages by VRM Class:<br><br>Class I           0 acres<br>Class II   417,334 acres<br>Class III   58,513 acres<br>Class IV 1,961,591 acres<br><br>Surface-disturbing activities would affect 35,541 acres in the short term and 2,581 acres in the long term.    | This alternative includes the following acreages by VRM Class:<br><br>Class I   90,032 acres<br>Class II  977,396 acres<br>Class III 498,298 acres<br>Class IV 871,712 acres<br><br>Surface-disturbing activities would affect 62,837 acres in the short term and 2,576 acres in the long term. | This alternative includes the following acreages by VRM Class:<br><br>Class I   74,506 acres<br>Class II  914,194 acres<br>Class III 521,322 acres<br>Class IV  927,413 acres<br><br>Surface-disturbing activities would affect 63,404 acres in the short term and 2,734 acres in the long term. | This alternative includes the following acreages by VRM Class:<br><br>Class I   74,506 acres<br>Class II  127,439 acres<br>Class III  584,113 acres<br>Class IV 1,651,380 acres<br><br>Surface-disturbing activities would affect 63,945 acres in the short term and 2,979 acres in the long term. | This alternative includes the following acreages by VRM Class:<br><br>Class I   74,506 acres<br>Class II  841,087 acres<br>Class III 521,868 acres<br>Class IV  999,977 acres<br><br>Surface-disturbing activities would affect 63,404 acres in the short term and 2,734 acres in the long term. |

| <b>Table 2.22<br/>Summary Comparison of Environmental Consequences</b>  |   |  |  |   |  |
|---|---|--|--|---|--|
| <i>Resource</i>   | <i>Alternative A<br/>(Current Management)</i>   | <i>Alternative B</i>   | <i>Alternative C</i>   | <i>Alternative D</i>  | <i>Alternative E<br/>(Preferred Alternative)</i>   |
| <i>Throughout the planning area, BLM-authorized activities associated with all resources and all resource use programs would be subject to mitigation and minimization guidelines and Best Management Practices (BMPs) (Appendix C), including specific Mitigation Measures and Conservation Actions for Greater Sage-Grouse (Appendix M). For analysis purposes, it has been assumed that these practices and conservation actions would be implemented during site-specific project planning where appropriate.</i> |   |  |  |   |  |
|   | Effects from fluid mineral development would mostly occur within high and moderate potential areas in Blaine, Hill, and Phillips counties and would continue through the life of the plan or term of the leased wells. These effects could be reduced by utilizing VRM class objectives to provide the basis for allowable changes in form, line, color, and texture.   |  |  |   |  |
|   | The 102,298 acres closed to fluid mineral leasing and 282,062 acres with an NSO stipulation would protect existing visual resources on those acres from surface-disturbing activities related to natural gas development and would benefit scenic quality.  | The 3,173,637 acres closed to fluid mineral leasing and 258,560 acres with an NSO stipulation would protect existing visual resources on those acres from surface-disturbing activities related to natural gas development and would benefit scenic quality.   | The 218,586 acres closed to fluid mineral leasing and 1,291,160 acres with an NSO stipulation would protect existing visual resources on those acres from surface-disturbing activities related to natural gas development and would benefit scenic quality. | The 74,674 acres closed to fluid mineral leasing and 357,456 acres with an NSO stipulation would protect existing visual resources on those acres from surface-disturbing activities related to natural gas development and would benefit scenic quality. | The 152,702 acres closed to fluid mineral leasing and 1,711,378 acres with an NSO stipulation would protect existing visual resources on those acres from surface-disturbing activities related to natural gas development and would benefit scenic quality. |
|   | Approximately 6,860 acres of short-term disturbance and 4,740 acres of long-term disturbance are projected for management-ignited prescribed fire actions. Approximately 3,500 acres of short-term disturbance are projected for silviculture treatments, fuels management, and forest product harvesting actions. The long-term benefits of prescribed fire and forest and woodland treatments (improved vegetation composition and wildlife habitat) may, in turn, improve scenic | Approximately 26,660 acres would have short-term disturbance from prescribed fire, and 7,820 acres would have short-term disturbance from mechanical treatment actions. Surface disturbance from these actions would reduce recreational opportunities and degrade the quality of recreational experiences in the short term, but would improve opportunities and experiences in the long term. The long-term benefits of prescribed fire and forest and woodland treatments (improved vegetation composition and wildlife habitat) may, in turn, improve scenic quality and increase recreational opportunities for wildlife viewing, hiking and hunting. |  |   |  |

| <b>Table 2.22<br/>Summary Comparison of Environmental Consequences</b>  |   |  |   |  |  |
|---|---|--|---|--|--|
| <i>Resource</i>   | <i>Alternative A<br/>(Current Management)</i>   | <i>Alternative B</i>   | <i>Alternative C</i>  | <i>Alternative D</i>   | <i>Alternative E<br/>(Preferred Alternative)</i>   |
| <i>Throughout the planning area, BLM-authorized activities associated with all resources and all resource use programs would be subject to mitigation and minimization guidelines and Best Management Practices (BMPs) (Appendix C), including specific Mitigation Measures and Conservation Actions for Greater Sage-Grouse (Appendix M). For analysis purposes, it has been assumed that these practices and conservation actions would be implemented during site-specific project planning where appropriate.</i> |   |  |   |  |  |
|   | quality and increase recreational opportunities for wildlife viewing, hiking and hunting.   |  |   |  |  |
|   | OHV activities can affect visual resources by adding different colored, linear forms that contrast with the forms and colors of the characteristic landscape. OHV use on roads, primitive roads and trails could increase color contrasts between the travel surface and surrounding vegetation through continued vegetation loss and soil erosion.   |  |   |  |  |
|   | OHV designations would include 124 acres as open; 2,355,457 acres as limited to existing roads, primitive roads and trails, and 7,429 acres in the Sweet Grass Hills ACEC as closed to OHV use. 74,428 acres in the WSAs would be limited to identified primitive routes.   | OHV designations would include 2,355,497 acres as limited to existing roads, primitive roads and trails and 7,513 acres (Fresno OHV area and Sweet Grass Hills ACEC) as closed to OHV use. 74,428 acres in the WSAs would be limited to identified primitive routes. | OHV designations would include 2,355,457 acres as limited to existing roads, primitive roads and trails and 7,513 acres (Fresno OHV area, Glasgow OHV area, and Sweet Grass Hills ACEC) as closed to OHV use. 74,428 acres in the WSAs would be limited to identified primitive routes.<br><br>Motorized game retrieval off road on 387,118 acres could affect visual resources in those areas. | OHV designations would include 305 acres as open; and 2,362,705 acres as limited to existing roads, primitive roads and trails. 74,428 acres in the WSAs would be limited to identified primitive routes.<br><br>Motorized game retrieval off road on 2,290,669 acres would have the greatest potential to affect visual resources in the planning area. | OHV designations would include 165 acres as open (Fresno and Glasgow OHV areas), 2,355,967 acres as limited to existing roads, primitive roads and trails and 7,429 acres (Sweet Grass Hills ACEC) as closed to OHV use. 74,428 acres in the WSAs would be limited to identified primitive routes.<br><br>Options for motorized game retrieval off road could be considered during subsequent site-specific travel management planning, which could affect visual resources in the areas considered. |
| <b>Water Resources</b>  |   |  |   |  |  |
|   | Surface-disturbing activities affect water resources to varying degrees depending on the type, amount, and location of disturbance; time of year; precipitation; and the condition and types of present and surrounding soil and vegetation. Surface-disturbing activities lead to alterations in the chemical, physical, and biological integrity of water when vegetation and protective crusts are removed or manipulated, when contaminants are |  |   |  |  |

**Table 2.22  
Summary Comparison of Environmental Consequences**

| <b>Resource</b>  | <b>Alternative A<br/>(Current Management)</b>   | <b>Alternative B</b>  | <b>Alternative C</b>  | <b>Alternative D</b>   | <b>Alternative E<br/>(Preferred Alternative)</b>  |
|--|---|---|---|--|---|
| <p><i>Throughout the planning area, BLM-authorized activities associated with all resources and all resource use programs would be subject to mitigation and minimization guidelines and Best Management Practices (BMPs) (Appendix C), including specific Mitigation Measures and Conservation Actions for Greater Sage-Grouse (Appendix M). For analysis purposes, it has been assumed that these practices and conservation actions would be implemented during site-specific project planning where appropriate.</i></p> |   |   |   |  |   |
|  | <p>introduced, or when natural soil architecture and functionality is disrupted. Protecting the quality and quantity of water for ourselves and future generations consists of the BLM adhering to the objectives of the federal Clean Water Act to restore and maintain the chemical, physical, and biological integrity of the nation’s water. Site-specific mitigation measures, BMPs, and reclamation standards would be implemented and monitored in order to minimize effects to water resources.</p> |   |   |  |   |
|  | <p>Approximately 218,600 acres of new surface disturbances are anticipated on all land ownerships over the next 20 years.</p> <p>On BLM surface, mostly in the high and moderate potential oil and gas development areas, approximately 2,422 acres of long-term disturbance are anticipated.</p> <p>This alternative would provide an intermediate level of protection and mitigation of cumulative impacts.</p>   | <p>Approximately 230,600 acres of new surface disturbances are anticipated on all land ownerships over the next 20 years.</p> <p>On BLM surface, approximately 1,544 acres of long-term disturbance are anticipated.</p> <p>This alternative would be the most protective and would provide the greatest reductions of cumulative impacts by implementing restrictions on many surface-disturbing activities.</p> | <p>Approximately 236,900 acres of new surface disturbances are anticipated on all land ownerships over the next 20 years.</p> <p>On BLM surface, mostly in the high and moderate potential oil and gas development areas, approximately 2,238 acres of long-term disturbance are anticipated.</p> <p>This alternative would provide an intermediate level of protection and mitigation of cumulative impacts.</p> | <p>Approximately 241,600 acres of new surface disturbances are anticipated on all land ownerships over the next 20 years.</p> <p>On BLM surface, mostly in the high and moderate potential oil and gas development areas, approximately 2,436 acres of long-term disturbance are anticipated.</p> <p>This alternative would be the least protective and would result in the greatest cumulative impacts.</p> | <p>Approximately 238,700 acres of new surface disturbances are anticipated on all land ownerships over the next 20 years.</p> <p>On BLM surface, mostly in the high and moderate potential oil and gas development areas, approximately 2,337 acres of long-term disturbance are anticipated.</p> <p>This alternative would provide an intermediate level of protection and mitigation of cumulative impacts.</p> |
| <b>Wilderness Characteristics</b>  |   |   |   |  |   |
|  | <p>Allowable uses and management actions that could affect wilderness characteristics include surface development and associated infrastructures such as vegetation management, range improvement projects, or more intensive activities such as natural gas development.</p>   |   |   |  |   |
|  | <p>No actions would be taken to manage lands with wilderness characteristics to retain their wilderness qualities under this alternative.</p>   | <p>All 26 areas totaling 386,428 acres that were found to have wilderness characteristics would be managed to protect wilderness characteristics</p>  | <p>Twelve areas totaling 228,395 acres would be managed to protect wilderness characteristics as a priority over other resource values and</p>  | <p>No actions would be taken to manage lands with wilderness characteristics to retain their size, apparent naturalness, opportunities for solitude,</p>   | <p>Two areas totaling 10,714 acres would be managed to protect wilderness characteristics as a priority over other resource values and</p>  |

| <p align="center"><b>Table 2.22</b><br/><b>Summary Comparison of Environmental Consequences</b></p>  |  |   |  |   |   |
|--|--|---|--|---|---|
| <i>Resource</i>  | <i>Alternative A<br/>(Current Management)</i>  | <i>Alternative B</i>  | <i>Alternative C</i>   | <i>Alternative D</i>  | <i>Alternative E<br/>(Preferred Alternative)</i>  |
| <p><i>Throughout the planning area, BLM-authorized activities associated with all resources and all resource use programs would be subject to mitigation and minimization guidelines and Best Management Practices (BMPs) (Appendix C), including specific Mitigation Measures and Conservation Actions for Greater Sage-Grouse (Appendix M). For analysis purposes, it has been assumed that these practices and conservation actions would be implemented during site-specific project planning where appropriate.</i></p> |  |   |  |   |   |
|  |  | as a priority over other resource values and multiple uses. A variety of protective measures would be applied to these areas, as described under the applicable resource sections.  | multiple uses. A variety of protective measures would be applied to these areas, as described under the applicable resource sections. Management proposed for other resources is complementary to maintaining wilderness characteristics on 75,327 acres. Management proposed for other resources may be incompatible with maintaining wilderness characteristics on 82,706 acres. | opportunities for primitive and unconfined recreation, or supplemental values. These lands would be managed for other resource values which may be in direct conflict with preservation of wilderness characteristics..                               | multiple uses. A variety of protective measures would be applied to these areas, as described under the applicable resource sections. Management proposed for other resources is complementary to maintaining wilderness characteristics on 290,865 acres. Management proposed for other resources may be incompatible with maintaining wilderness characteristics on 84,849 acres. |
| <b>Wildlife</b>  |  |   |  |   |   |
| General  | Impacts to wildlife would vary by species and activity.  | Impacts to wildlife would vary by species and activity. Species-specific mitigation measures would be adopted for all surface-disturbing activities.  |  |   |   |
| Fluid Minerals   | The 102,298 acres closed to fluid mineral leasing, 282,062 acres with an NSO stipulation, 2,649,242 acres with CSU/TLS stipulations, and 457,849 acres with standard lease terms would protect wildlife habitat on those acres from surface-disturbing | The 3,173,637 acres closed to fluid mineral leasing, 258,560 acres with an NSO stipulation, 3,291 acres with CSU/TLS stipulations, and 55,962 acres with standard lease terms would protect wildlife habitat on those acres from surface-disturbing | The 218,586 acres closed to fluid mineral leasing, 1,291,160 acres with an NSO stipulation, 1,681,990 acres with CSU/TLS stipulations, and 299,713 acres with standard lease terms would protect wildlife habitat on those acres from surface-disturbing   | The 74,674 acres closed to fluid mineral leasing, 357,456 acres with an NSO stipulation, 2,461,653 acres with CSU/TLS stipulations, and 597,668 acres with standard lease terms would protect wildlife habitat on those acres from surface-disturbing | The 152,702 acres closed to fluid mineral leasing, 1,711,378 acres with an NSO stipulation, 1,460,096 acres with CSU/TLS stipulations, and 167,274 acres with standard lease terms would protect wildlife habitat on those acres from surface-disturbing  |

**Table 2.22  
Summary Comparison of Environmental Consequences**

| <b>Resource</b>   | <b>Alternative A<br/>(Current Management)</b>   | <b>Alternative B</b>   | <b>Alternative C</b>  | <b>Alternative D</b>  | <b>Alternative E<br/>(Preferred Alternative)</b>  |
|---|---|--|---|---|---|
| <i>Throughout the planning area, BLM-authorized activities associated with all resources and all resource use programs would be subject to mitigation and minimization guidelines and Best Management Practices (BMPs) (Appendix C), including specific Mitigation Measures and Conservation Actions for Greater Sage-Grouse (Appendix M). For analysis purposes, it has been assumed that these practices and conservation actions would be implemented during site-specific project planning where appropriate.</i> |   |  |   |   |   |
|   | activities.   | activities.  | activities.   | activities.   | activities.   |
| <i>Anticipated Well Density (Wells per Square Mile) on BLM Land</i>   |   |  |   |   |   |
| High<br>(existing – 0.44)   | 2.34  | 2.64   | 2.14  | 2.38  | 2.22  |
| Moderate<br>(existing – 0.44)   | 3.33  | 2.36   | 3.06  | 3.34  | 3.23  |
| Low<br>(existing – 0.44)  | 1.18  | 0.87   | 1.12  | 1.18  | 1.15  |
| Very Low<br>(existing – 0.44)   | 0.03  | 0.02   | 0.02  | 0.03  | 0.03  |
|   | The greatest impact in the long-term would occur in the high development potential areas, including the Bears Paw South area, where mean well densities would rise from the current 0.44 wells/mi <sup>2</sup> to 2.34 wells/mi <sup>2</sup> (a 420% increase) and mean road densities would increase from 0.47 to 1.21 miles of road/mi <sup>2</sup> . This would result in a direct and indirect loss of most habitat for big game in the high development potential areas. | The greatest impact during the life of the plan would occur in the high development potential areas, including the Bears Paw South area, where mean well densities would rise from the current 0.44 wells/mi <sup>2</sup> to 2.64 wells/mi <sup>2</sup> (a 587% increase) and road densities would increase from 0.47 to 1.14 miles of road/mi <sup>2</sup> . This would result in an increase in direct and indirect loss of habitat for big game in the high development potential areas but mean well densities on BLM land would not exceed the upper threshold. | The greatest impact during the life of the plan would occur in the high development potential areas, including the Bears Paw South area, where mean well densities would rise from the current 0.44 wells/mi <sup>2</sup> to 2.14 wells/mi <sup>2</sup> (a 408% increase) and road densities would increase from 0.47 to 1.15 miles of road/mi <sup>2</sup> . This would result in a direct and indirect loss of most habitat for big game in the high development potential areas. | Mean well densities on BLM land in each of the oil and gas development potential areas would exceed 1.04 wells/mi <sup>2</sup> except in the very low development potential areas (0.03 wells per square mile). Road densities would exceed the upper threshold in the moderate development potential area and the lower threshold in the high and low development potential areas (Table 4.96). A significant decline in populations of big game animals would be expected within all potential areas except in the very low development | Mean well densities on BLM land in each of the oil and gas development potential areas would exceed 1.04 wells/mi <sup>2</sup> except in the very low development potential areas (0.05 wells per square mile). Road densities would exceed the upper threshold in the moderate development potential area and the lower threshold in the high and low development potential areas (Table 4.96). A significant decline in populations of big game animals would be expected within high, moderate and low potential areas except in |

| <p align="center"><b>Table 2.22</b><br/><b>Summary Comparison of Environmental Consequences</b></p>  |   |  |   |   |   |
|--|---|--|---|---|---|
| <i>Resource</i>  | <i>Alternative A<br/>(Current Management)</i> | <i>Alternative B</i>   | <i>Alternative C</i>  | <i>Alternative D</i>                                      | <i>Alternative E<br/>(Preferred Alternative)</i>  |
| <p><i>Throughout the planning area, BLM-authorized activities associated with all resources and all resource use programs would be subject to mitigation and minimization guidelines and Best Management Practices (BMPs) (Appendix C), including specific Mitigation Measures and Conservation Actions for Greater Sage-Grouse (Appendix M). For analysis purposes, it has been assumed that these practices and conservation actions would be implemented during site-specific project planning where appropriate.</i></p> |   |  |   |   |   |
|  |   |  |   | potential area because of the density of wells and roads. | the very low development potential areas because of the density of wells and roads.   |
| Greater Sage-Grouse  | Not applicable.                               | Protection priority areas for greater sage-grouse (930,265 acres) and priority areas for grassland birds/greater sage-grouse (461,220 acres) would be established and managed as ACECs which would minimize additional impacts to wildlife resources in these areas. | Protection priority areas for greater sage-grouse (930,265 acres) and priority areas for grassland birds/greater sage-grouse (298,772 acres) would be established which would minimize additional impacts to wildlife resources in these areas. | Not applicable.   | Protection priority areas for greater sage-grouse (930,265 acres) and priority areas for grassland birds/greater sage-grouse (298,772 acres) would be established which would minimize additional impacts to wildlife resources in these areas. |