Chapter 2. Resource Management Alternatives

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2.1. Resource Management Alternatives

Chapter 2 presents four alternative Resource Management Plans (RMPs) for managing the Buffalo planning area. The four alternative plans are identified by the letters A, B, C, and D. Alternative A, the No Action Alternative, represents the continuation of current management direction. Alternatives B and C represent the range of alternatives. The Bureau of Land Management (BLM) identified Alternative D as its Preferred Alternative in the Draft RMP and Environmental Impact Statement (EIS). Based on comments received during the public comment period on the Draft RMP and EIS, the BLM revised the Preferred Alternative. As modified, Alternative D is now presented as the Proposed RMP in the Final EIS. Each alternative provides a different emphasis for managing public lands and resources within the planning area, and represents a complete and reasonable land use plan that meets the purpose and need described in Chapter 1.

2.2. Summary of Changes Made Between the Draft RMP/EIS and the Proposed RMP/Final EIS

NEPA requires agencies to prepare a supplement to the draft EIS: 1) if the agency makes substantial changes in the proposed action that are relevant to environmental concerns; or 2) if there are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts. A supplement is not necessary if a newly formulated alternative is a minor variation of one of the alternatives and is qualitatively within the spectrum of alternatives analyzed in the Draft EIS.

The Proposed RMP includes components of the alternatives analyzed in the Draft RMP/EIS. Taken together, these components present a suite of management decisions that present a minor variation of alternatives identified in the Draft RMP/EIS and are qualitatively within the spectrum of alternative analyzed. As such, the BLM has determined that the Proposed RMP is a minor variation and that the impacts of the Proposed RMP would not affect the human environment in a substantial manner or to a significant extent not already considered in the EIS. The impacts disclosed in the Proposed RMP and Final EIS are similar or identical to those described in the Draft RMP/EIS such that supplementation of the Buffalo RMP Final Draft EIS is not required. See 40 Code of Federal Regulations (CFR) 1502.9(c)(1).

Since publication of the Buffalo Draft EIS in June 2013, additional reports regarding Greater Sage-Grouse conservation have been published by United States Geological Survey (USGS) and U.S. Fish and Wildlife Service (USFWS); the BLM National Greater-Sage Grouse Land Use Planning Strategy has continued to make progress in the development of cumulative effects analysis based upon Western Association of Fish and Wildlife Agencies (WAFWA) management zones; and the Wyoming 9-Plan Draft RMP Amendment/Draft EIS (December 2013) and the Bighorn Basin Supplemental Draft RMP Revision/Draft EIS (July 2013) have been published. Upon review of each of these subsequent publications which have come out, none constitute "significant new information relevant to environmental concerns and bearing on the proposed action or its impacts" such that supplementation of the Buffalo RMP Final Draft EIS is required. See 40 CFR 1502.9(c)(1).

Greater Sage-Grouse related management changes made to the Proposed RMP/Final EIS from the preferred alternative (D) in Draft RMP/EIS are the following:

- An assessment of the Proposed RMP consistency with USFWS Conservation Objectives Team (COT) Report was completed, and a summary comparison of alleviated threats to Greater Sage-Grouse was also prepared (see Table 2.2).

- Implementation Framework – An implementation framework for Greater Sage-Grouse management (Appendix B (p. 1779)) has been added which includes adaptive management and monitoring strategies developed in cooperation with the USFWS and State of Wyoming. All of the adaptive management hard trigger responses were analyzed within the range of alternatives. For example, if a hard trigger is reached in Priority Habitat Management Area, and Priority Habitat Management Area would be managed as open to saleable minerals in the Proposed Plan, the response would be to manage it as closed to saleable minerals. This closure was analyzed under Alternatives B in the Draft EIS (a 4 mile closure around all occupied or undetermined Greater Sage-Grouse leks). The monitoring framework was further refined in the Final EIS, and further clarification as to how disturbance cap calculations would be measured were developed for the Final EIS.

- WAFWA Management Zone Cumulative Effects Analysis on Greater Sage-Grouse – a quantitative cumulative effects analysis for Greater Sage-Grouse was included in the Final EIS. This analysis was completed to analyze the effects of management actions on Greater Sage-Grouse at a biologically significant scale which as determined to be at the WAFWA Management Zone. The Draft EIS, in Chapter 4, included a qualitative analysis and identified that a quantitative analysis would be completed for the Final EIS at the WAFWA Management Zone.

The Draft RMP and EIS public comment period closed in September 2013. The BLM received approximately 134 individual comment letters and two form emails with approximately 2,143 submissions. The BLM identified 2,142 unique comments from the comment documents received, which touched on a wide range of issues. While many of the comments strongly supported the Preferred Alternative in the Draft RMP and EIS, commenters also identified areas where the document could be improved. The Buffalo Field Office (BFO) carefully evaluated these comments (see Appendix Y (p. 2671)). The Proposed RMP and Final EIS contains a number of changes made in response to comments. Substantive changes are identified in the document with grey shaded text. BLM has reviewed the changes made between the draft and proposed RMPs and has determined that the changes have not triggered the need to prepare a supplemental EIS per 40 CFR 1502.9. A summary of the substantive changes follows.

Physical Resources

Soils: An erosion model was included in the analysis at the request of the U.S. Environmental Protection Agency (EPA). The Revised Universal Soil- Loss Equation (from the Natural Resources Conservation Service [NRCS]) is an erosion model designed to predict the longtime average annual soil loss carried from runoff from specific slopes in specified management conditions.

BLM worked with the Campbell County Conservation District and other cooperators to refine and clarify the information presented within the Affected Environment and Environmental Consequences *Soils* sections. The Soils Exception Criteria appendix was deleted as the information it contained was redundant with other sections such as the Fluid Mineral Lease Stipulation appendix (Appendix H (p. 1959)) and the BFO reclamation policy appendix (Appendix O (p. 2495)).

Water: The EPA and other commenters requested additional background information from the 2003 Powder River Basin (PRB) EIS (BLM 2003c) and whether the assumptions and trend predictions were accurate. The requested information was added to the Proposed RMP and Final EIS. A water management plan appendix (Appendix W (p. 2623)) was added at the request of the EPA, to disclose the process for analyzing water effects and mitigation during the implementation of project level activities.

Mineral Resources

Coal: The BLM edited the Proposed RMP and Final EIS to clarify that no coal leasing allocation decisions are being made through the RMP revision. The coal leasing decisions made in the 2001 RMP update are being carried forward as no substantial new information regarding coal leasing was received during the call for coal information during RMP scoping or through comments on the Draft RMP and EIS. Federal coal lands identified in 2001 as acceptable for further coal leasing consideration are available for Lease by Application, lease modifications, emergency leases, and exchanges. Prior to offering a coal tract for sale, the unsuitability criteria will be reviewed, a tract specific National Environmental Policy Act (NEPA) analysis will be completed, and there will be opportunity for public comment. Federal coal lands acceptable for further leasing consideration do not overlap with Greater Sage-Grouse priority habitat (Maps 11 and 40).

Management action Coal-2001 was revised to clarify that the leasing decisions from 2001 are being carried forward and management action Coal-2003 was deleted from the Proposed RMP and Final EIS. Management action Coal-2002 was revised to clarify coal and fluids management within the areas identified acceptable for further coal leasing consideration.

Fluid Minerals: Management action O&G-2008 was revised to clarify coal and fluids management within the areas identified acceptable for further coal leasing consideration. An oil and gas operations appendix (Appendix V (p. 2599)) was added to summarize the fluid mineral procedures from lease nomination through permitting and development to final abandonment and lease closure for the EPA and other reviewers. There were many comments related to private property rights and split estate. An appendix (Appendix X (p. 2661)) has been added to the Proposed RMP and Final EIS summarizing the BLM's split estate authority and policy.

Several reviewers commented that the fluid mineral constraint maps in the Draft RMP and EIS were difficult to interpret. The Buffalo planning area is complex with multiple overlapping resource values, which makes interpreting the individual resource protections within the constraint maps difficult. To address the concern, BLM added an additional series of maps (Maps 17–22) displaying overlapping fluid mineral lease stipulations by stipulation type (No Surface Occupancy [NSO], Controlled Surface Use [CSU], and Timing Limitation Stipulation [TLS]) for the major resource categories (Physical, Biological, Heritage, and Visual). Reviewers should also consult the individual resource maps (i.e., elk seasonal ranges or raptors).

Fire and Fuels Management

No substantive changes were made to the fire and fuels management sections in the Proposed RMP and Final EIS.

Biological Resources

Grassland and Shrubland Communities and Riparian and Wetland Communities: The analyses in the vegetation sections were reviewed and revised to increase clarity and consistency at the EPA's request.

Wildlife: The USFWS, the Avian Power Line Interaction Committee (APLIC) and others commented on the ineffectiveness of perch inhibitors in preventing raptor perching. Therefore, BLM revised management action WL-2014 by removing the anti-perch requirement and clarifying the intent of the management action to design powerlines (distribution and transmission) to minimize wildlife related impacts and to construct powerlines to the latest APLIC standards. Raptor perch-deterrents will be analyzed within identified wildlife habitats (SS WL-4022, SS WL-4024, SS WL-4025, and Appendix D (p. 1863)), including within Greater Sage-Grouse priority habitat and within 0.5 mile of general habitat leks, and will be required where appropriate.

Some commenters felt the raptor spatial buffer distances and dates were too restrictive while others commented that the protections were not sufficient. Proposed RMP management actions WL-4027 through WL-4030 and SS WL-4029 through SS WL-4032 were revised to fully conform to the distances and dates recommended by the USFWS Wyoming Ecological Services Office. Spatial buffers may be modified for site-specific implementation decisions based on auditory and visual impacts, as well as the topography and other ecological characteristics surrounding the nest site.

A Wildlife Habitat Management Area (WHMA) for the Fortification Creek elk herd (WL-4023) is not being carried forward in the Proposed RMP. A WHMA was not supported by the State of Wyoming, whom has primary management authority over the elk herd, which is above the established population objective. The Fortification Creek RMP Amendment (BLM 2011c) decisions which are sufficient to conserve a viable elk herd are carried forward in the Proposed RMP and Final EIS.

Grazing effects were revised within the wildlife and special status species sections to clarify that while livestock grazing does affect wildlife and their habitat, livestock grazing managed in accordance with the Proposed RMP and Final EIS (*Wyoming Standards for Healthy Rangelands*) is compatible with sustaining suitable wildlife and special status species habitats and that it is improper livestock grazing that can have major adverse effects on wildlife and their habitat.

Special Status Species: The USFWS proposed the northern long-eared bat for listing as an Endangered species after the Draft RMP and EIS was published. The northern long-eared bat's documented range includes eastern Campbell County. The northern long-eared bat has been included in the biological assessment (Appendix I (p. 2025)) and BLM will conference with the USFWS in order to conserve the bat and avoid jeopardizing its existence. BLM waited until the Proposed RMP and Final EIS to include the biological assessment in order to consult on the Proposed RMP.

The text of SS WL-4002 was broadened, including recovery plans and future biological opinions, to be consistent with the companion management actions for special status plants and fish.

BLM further refined Greater Sage-Grouse management within the Proposed RMP at the Governor's request to review the management actions to ensure consistency with Wyoming Executive Orders 2011-5 and 2013-3. Executive Order 2013-3 was released after the Draft RMP and EIS was delivered to the publisher. Text from Executive Order 2013-3 was added to the Greater Sage-Grouse Planning section (Section 2.5, " Greater Sage-Grouse Habitat Management" (p. 36)). Proposed RMP management action SS WL-4021 was revised from

prohibit renewable energy projects within Greater Sage-Grouse Priority Habitat (Core Population Areas and Core Population Connectivity Corridors) to avoid renewable energy projects in Greater Sage-Grouse Core Population Areas unless it can be demonstrated that the activity would not result in declines of core Greater Sage-Grouse populations. SS WL-4022 was revised to clarify when powerlines could be authorized within Core Population Areas and when raptor perch-deterrents could be required. Raptor perch-deterrents remain a required design feature (RDF) within Greater Sage-Grouse priority habitat (Appendix D (p. 1863)). BLM revised the SS WL-4023 requirements of when a fluid mineral lease could be less than the 640 acre minimum in order to be consistent with the Wyoming 9-Plan's *Draft RMP/Draft EIS preferred alternative*. A minimum lease size is also consistent with the proposed management of adjacent Montana field offices, also in WAFWA Greater Sage-Grouse Management Zone I. In management actions SS WL-4024 and SS WL-4025 BLM clarified that the one disturbance per square mile within Core Population Areas is one energy or mining facility; the technical feasibility restriction on facilities was dropped and replaced with the Executive Order 2011-5 noise limitations; and the sagebrush restoration requirement was clarified by replacing the shrub density formula with the formula's source (Wyoming Department of Environmental Quality [DEQ] community-specific full shrub density standard, Chapter 4 Rules and Regulations option III).

Heritage and Visual Resources

Cultural Resources: BLM complied with the Northern Cheyenne's request to combine the requirements for archeological and tribal monitors into one management action, Cultural-5008.

Land Resources

Travel Management: A common to all management action, Trans-6005, was added to respond to commenters concerned that the proposed travel management restricted the operations of authorized/permitted activities. The new management action clarifies that motorized travel under administrative permits and leases will be subject to the terms of the authorization.

Lands with Wilderness Characteristics: Some commenters wanted additional acreage managed to protect wilderness characteristics while others did not want any lands managed to protect wilderness characteristics. BLM continued with the 6,864 acres identified in the Draft RMP and EIS as they are the best suited for management to maintain identified wilderness characteristics. Fluid mineral leasing was changed from closed in the Draft RMP and EIS to leasing with a NSO stipulation in the Proposed RMP and Final EIS. The NSO stipulation enables BLM to protect wilderness characteristics while allowing for potential fluid mineral development (i.e., horizontal drilling).

Special Designations

Some commenters requested additional special designation areas with increased protections and others spoke against any special designation areas.

Areas of Critical Environmental Concern (ACECs): The Fortification Creek ACEC (ACEC-7003) is not being carried forward in the Proposed RMP. The State of Wyoming has primary management authority over the elk herd. State management and the Fortification Creek RMP Amendment (BLM 2011c) decisions, which are carried forward in the Proposed RMP and Final EIS, are sufficient to conserve a viable elk herd and the other ACEC values.

National Byways: Byways did not receive any support from commenters. The management action was to evaluate, not designate, and therefore was not revised.

Socioeconomic Resources

No substantive changes were made to the socioeconomic sections in the Proposed RMP and Final EIS.

2.3. Alternatives Development Process

The BLM complied with NEPA requirements in the development of alternatives for this RMP and EIS by seeking public comment and analyzing a reasonable range of alternatives. Alternative formulation took into consideration existing land use plan decisions, and issues and concerns developed internally and solicited from the public during the scoping process. The process to develop alternatives can be broadly broken down into five steps:

1. Identify Issues (Scoping)
2. Identify Current Management (Alternative A – No Action Alternative)
3. Develop the Range of Alternatives (alternatives B and C)
4. Analyze the Effects of the Alternatives (alternatives A, B, and C)
5. Develop the Preferred Alternative (Alternative D)

Identify Issues

The BLM considered public comments received during the scoping process while developing the alternatives and management actions. The BLM considers public comments received throughout the alternative development process. Chapter 1 and the project Scoping Report (available on the RMP revision website at http://www.blm.gov/wy/st/en/programs/Planning/rmps/buffalo/docs.html) summarize the results of the public scoping process and opportunities for future public involvement.

Identify Current Management

The 1985 Buffalo RMP, as updated in 2001, as amended by the 2003 Record of Decision (ROD) and RMP Amendment for the PRB Oil and Gas Project, and as amended by the 2011 Fortification Creek Planning Area Decision Record and RMP amendment (existing plan), and other current management direction served as the basis for the No Action Alternative (Alternative A). Alternative A, in conjunction with the planning criteria and the key issues identified during the scoping process, set the stage for developing the range of alternatives.

Develop the Range of Alternatives

The BLM conducted a series of seven alternatives development workshops with a team comprised of BLM staff and cooperating agencies. During the initial workshop, the team shared their knowledge and expertise and collaborated to identify goals and objectives (i.e., desired outcomes) for each resource. Each subsequent workshop refined the management actions composing each alternative and narrowed the scope of alternatives to a reasonable range limited by the planning criteria (refer to Chapter 1, Planning Criteria). Table 2.1, "Alternatives Development Workshops" (p. 33) identifies the dates and focus of each workshop. Prior to each workshop, the BLM provided preliminary draft alternatives prepared by BLM specialists to the cooperating

agencies. These preliminary alternatives served as a starting point for alternative formulation and a basis for discussion by team members during the workshops.

Table 2.1. Alternatives Development Workshops

Workshop Number	Dates	Focus
1	May 20 – 22, 2009	Goals and Objectives
2	June 17 – 18, 2009	Range of Alternatives
3	July 15 – 16, 2009	Range of Alternatives
4	August 19 – 20, 2009	Range of Alternatives
5	September 16 – 17, 2009	Range of Alternatives
6	October 7 – 8, 2009	Range of Alternatives
7	April 27 – 29, 2010	Preferred Alternative

The team formulated the range of alternatives (alternatives B and C) to meet the purpose and need of this RMP revision using different approaches to resource use. These alternatives represent the opposite ends of a continuum of resource use from a resource conservation emphasis (Alternative B) to a resource utilization emphasis (Alternative C). Management actions developed under all alternatives are subject to valid existing rights. In addition, management actions may only be implemented when they are consistent with applicable laws, regulations, and policies. The planning area is open to locatable mineral activities unless specifically withdrawn from operation under the mining laws. Alternatives were considered, but not carried forward for detailed analysis in this RMP and EIS if they did not meet the planning criteria or the purpose and need (see Chapter 1), or were already part of an existing plan, policy, requirement, or administrative function that will continue under the revised RMP.

Analyze the Effects of the Alternatives

The fourth step in the process is to analyze the effects of the range of alternatives. This task involved analyzing the impacts of one set of resource management actions on other resources and resource uses. These data were then compiled into Chapter 4 and considered in step five, Develop the Preferred Alternative.

Develop the Preferred Alternative

The BLM developed Alternative D, the Preferred Alternative, by considering the impacts analysis (Chapter 4) of alternatives A through C; knowledge of specific issues raised throughout the planning process; planning criteria; and recommendations from cooperating agencies, BLM specialists, and resource experts.

Refer to Table 2.1, "Alternatives Development Workshops" (p. 33) for the date of the Preferred Alternative workshop. The BLM developed the Preferred Alternative using the following selection criteria:

1. Satisfies statutory requirements (applies to all alternatives).
2. Reflects what the BLM considers to be the best combination of actions to achieve its goals and objectives.
3. Represents the most effective solution to the purpose and need.
4. Provides the most efficient approach to address key planning issues.

5. Best considers cooperating agencies and BLM specialists' recommendations.

The Preferred Alternative was identified as the BLM's preliminary preference in the Draft RMP and EIS. Following publication of the Draft RMP and EIS, the BLM revised the Preferred Alternative based on comments received during the public comment period. As modified, Alternative D is now presented as the Proposed RMP in the Final EIS. Following resolution of protests and the Governor's consistency review, the BLM will prepare a ROD and Approved RMP.

2.4. Alternative Components

Each alternative comprises two categories of land use planning decisions: (1) desired outcomes (goals and objectives) and (2) allowable uses and management actions.

2.4.1. Goals and Objectives

Goals and objectives direct the BLM's actions to most effectively meet legal mandates in statutes and regulations, agency policy, as well as local and regional resource needs. Goals are broad statements of desired outcomes that are usually not quantifiable. Objectives breakdown goals into more specific desired outcomes and typically include a measurable component. The management goals and objectives for each resource are presented in Section 2.9, "Detailed Alternative Descriptions by Resource" (p. 125).

2.4.2. Allowable Uses and Management Actions

Allowable uses and management actions are developed to achieve the goals and objectives defined for each resource.

Allowable Uses

Allowable uses identify uses that are allowed, restricted, or excluded on BLM surface lands and federal mineral estate. Alternatives may include specific land use restrictions or may exclude certain land uses (e.g., mineral leasing, salable mineral development, recreation, forest management, utility corridors, and livestock grazing) in order to meet goals and objectives and conserve resource values. For example, alternatives considered for this RMP revision exclude oil and gas development within certain buffers of occupied Greater Sage-Grouse leks while allowing recreation, livestock grazing, and other land uses. Allowable uses often contain a spatial component because the alternatives identify whether particular land uses are allowed, restricted, or excluded. These spatial components are illustrated on maps to display the geographical extent of the management actions.

Management Actions

Management actions are proactive measures (e.g., measures that will be taken to enhance watershed function and condition), or limitations intended to guide BLM activities in the planning area. An example of this type of management action is to prohibit surface-disturbing activity near riparian/wetland areas in order to achieve proper functioning condition (PFC).

Organization of Allowable Uses and Management Actions in the Alternatives

For simplicity, the term "management action" is inclusive of both allowable uses and management actions. Therefore, when the text refers to management actions, it is referring to both categories. Two types of management actions are included in the alternatives. The first is management actions common to all alternatives, which will apply regardless of the alternative. The second is management actions by alternative, which represent the choice(s) considered across alternatives. Management actions by alternative represents the range of land use management decisions considered. These management actions vary among the alternatives and represent a reasonable range of management options that were considered to meet the stated goals and objectives and purpose and need of the RMP revision. RMPs are strategic in nature, and, while they provide an overarching vision for managing resources in the planning area, they must also be flexible to changing priorities, information, and circumstances.

Conservation Measures and Required Design Features

Appendix D (p. 1863) identifies Greater Sage-Grouse conservation measures many of which have typically been recommended (voluntary) mitigation measures such as best management practices (BMPs) from Washington Office (WO) Instruction Memorandum (IM)-2012-044 (BLM 2012h), BMPs for fire and fuels management from WO IM 2011–138 (BLM 2011d), guidelines from Wyoming Governor's Executive Order 2011-5, recommended management practices from the Northeast Wyoming Greater Sage-Grouse Local Working Group's Conservation Plan (NWSGLWG 2006), and suggested management practices from the BLM National Greater Sage-Grouse Habitat Conservation Strategy (BLM 2004b). For the most part, these measures are a restatement of existing management practices, such as co-location of rights-of-way (ROWs) or clustering of development infrastructure.

These conservation measures are treated in the RMP as RDFs for future projects implemented consistent with the direction in the approved plan. Project proponents are encouraged to include all appropriate conservation measures in their proposals. The BLM will require application of all appropriate conservation measures, warranted by site-specific analysis, in order to avoid, minimize, rectify, reduce, or compensate for impacts. Conservation measures not included in project proposals and determined appropriate from the site-specific analysis will be required as Conditions of Approval (COAs). Additional COAs developed through consultation with other federal, state, and local regulatory and resource agencies may be applied when supported by site-specific analysis.

Because of site-specific circumstances, some conservation measures may not apply to all activities (e.g., a resource or conflict is not present on a given site) and/or may require slight variations. Proposed variations in conservation measures will be analyzed and may be applied in the site specific permitting process. All variations in conservation measures will require appropriate analysis and disclosure as part of activity authorization. It is anticipated that variations in the conservation measures will be approved in very limited circumstances and only in coordination with the Wyoming Game and Fish Department (WGFD) and/or the USFWS. Conservation measures and other mitigation selected for implementation will be identified in the project's decision document. The proponent must implement all identified measures because they are commitments made as part of the BLM decision. Because the decision document creates a clear obligation for the BLM to ensure any proposed mitigation adopted in the environmental analysis is performed, there is the expectation that applied mitigation will lead to a reduction of environmental impacts in the implementation stage and include binding mechanisms for enforcement (CEQ 2011). The determination of adequate application of the mitigation measures and conservation actions for specific projects will remain with the BLM's authorized officer.

2.5. Greater Sage-Grouse Habitat Management

On December 9, 2011, a Notice of Availability was published in the Federal Register (FR) to initiate the BLM and U.S. Forest Service (USFS) Greater Sage-Grouse Planning Strategy across nine western states, including California, Oregon, Nevada, Idaho, Utah, and Southwest Montana in the Great Basin Region and Northwest Colorado, Wyoming, Montana, South Dakota, and North Dakota in the Rocky Mountain Region. This Proposed RMP and Final EIS is one of fifteen separate EISs that are currently being conducted to analyze and incorporate specific conservation measures across the range of the Greater Sage-Grouse, consistent with BLM policy. The ROD for the first Greater Sage-Grouse related RMP; the Lander, Wyoming RMP revision was signed in June 2014.

The BLM WO issued a National Greater Sage-Grouse Planning Strategy (BLM 2012h) on December 27, 2011. The Wyoming State Office (WYSO) issued a revised Greater Sage-Grouse Habitat Management policy, WYSO IM 2012-019 (BLM 2012g), on February 12, 2012. These policies have been incorporated into the Buffalo Proposed RMP and Final EIS.

In August 2011, the BLM convened the Sage-Grouse National Technical Team (NTT), which brought together resource specialists and scientists from the BLM, state fish and wildlife agencies, the USFWS, the U.S. Department of Agriculture (USDA) NRCS, and the USGS. The NTT developed a series of science-based conservation measures to be considered and analyzed through the land use planning process. /2WO IM 2012-044 provides direction to the BLM on how to consider the NTT conservation measures in the land use planning process.

The WO IM requires that the conservation measures in the NTT report be analyzed in at least one alternative in the land use planning EIS and that a "hard look" be given to the conservation measures, as appropriate and applicable to local ecological site variability. Alternative B incorporates the national strategy (WO IM-2012-044) and Alternative D incorporates the Wyoming strategy (WYSO IM-2012-019).

Wyoming Governor Freudenthal issued the first Executive Order on August 1, 2008, mandating special management for all state lands in Greater Sage-Grouse "Core Population Areas." Core Population Areas are important breeding areas for Greater Sage-Grouse in Wyoming. In addition to identifying Core Population Areas, the Sage-Grouse Implementation team recommended placing restrictions on development activities to ensure that existing habitat function is maintained within the Core Population Areas. These restrictions would apply to the habitat supporting approximately 80 percent of the total estimated Greater Sage-Grouse breeding population in the state. Wyoming's Core Population Area strategy has been updated in two subsequent executive orders: Executive Order 2010-4 and Executive Order 2011-5. Governor Mead issued a grazing supplement (Executive Order 2013-3) to Wyoming's Core Population Area Strategy (Executive Order 2011-5) in 2013. The BLM will implement Executive Order 2013-3 in the following fashion: The BLM will collaborate with appropriate federal agencies, and the State of Wyoming as contemplated under Governor Executive Order 2013-3, to: (1) develop appropriate conservation objectives; (2) define a framework for evaluating situations where Greater Sage-Grouse conservation objectives are not being achieved on federal land, to determine if a causal relationship exists between improper grazing (by wildlife or wild horses or livestock) and Greater Sage-Grouse conservation objectives; and (3) identify appropriate site-based action to achieve Greater Sage-Grouse conservation objectives within the framework. BLM Wyoming adopted the State of Wyoming's approach for projects under its authority, through a series of IMs; the most recent being Greater Sage-Grouse Habitat Management policy IM 2012-019 (BLM

2012g). WYSO IM 2012-019 applies the State of Wyoming Greater Sage-Grouse management strategy (Wyoming Governor's Executive Order 2011-5) to BLM surface and federal mineral estate. The Protection measures described in the WYSO policy (with the exception of certain interim measures, like the Greater Sage-Grouse leasing screen) and Executive Order 2011-5 are incorporated into Alternative D, the Proposed RMP.

The BLM developed a multi-stage review process to ensure compliance with WO IM 2012-044. The local review (June 21, 2012) demonstrated and confirmed BFO compliance with WO IM 2012-044, Wyoming Executive Order 2011-5, and WYSO IM 2012-019. The WGFD, USFWS, and the BLM WYSO participated in the local review. The USFWS refrained from providing any comments at the local review.

The regional interdisciplinary team reviewed Greater Sage-Grouse management in the Buffalo Preliminary Draft RMP and EIS on July 24, 2012. The Wyoming Governor's office, WGFD, and the NRCS participated; the USFWS was not represented. The regional managers' team performed their review on July 31, 2012; the Wyoming Governor's office, WGFD, NRCS, and USFWS participated. The BLM WO completed their review on September 24, 2012. These reviews have ensured that BFO has complied with WO IM 2012-044 and has adequately incorporated the citizen based recommendations.

2.5.1. BLM Programs for Addressing Greater Sage-Grouse Threats

In 2013, the USFWS released their Conservation Objectives Team Report, which delineates reasonable objectives, based upon the best scientific and commercial data available at the time of its release, for the conservation and survival of Greater Sage-Grouse. The report also identified present and widespread and localized threats facing the Greater Sage-Grouse and their habitat in specific populations across the west. The ranges of management actions for managing Greater Sage-Grouse habitat analyzed in this EIS are directed towards responding to these threats. The USFWS threats do not necessarily align with BLM resource program areas, and are often integrated into several different resource program areas. Table 2.2, "USFWS Threats to Greater Sage-Grouse and Their Habitat, Applicable BLM Resource Program Areas Addressing These Threats" (p. 38) provides a cross-walk between each of the USFWS listing decision and Conservation Objectives Team identified threats and the BLM program areas and shows how those threats were addressed in the BLM's land use plan.

Table 2.2. USFWS Threats to Greater Sage-Grouse and Their Habitat, Applicable BLM Resource Program Areas Addressing These Threats

USFWS-Identified Threats to Greater Sage-Grouse and Its Habitat (2010 warranted but precluded finding)	Conservation Objectives Team Report-Identified Threats to Greater Sage-Grouse and Its Habitat	Applicable BLM Resource Program
Wildland Fire	Fire	**Fire and Fuels Management** • Follow fire management plans. • Utilize appropriate resources (equipment and personnel) and strategies. • Manage fire to accomplish resource objectives. • Implement the Emergency Stabilization and Burned Area Rehabilitation.
		Special Status Species • Fire management plan to guide suppression within sagebrush communities.
Invasive Species	Nonnative, Invasive Plant Species	**Fire and Fuels Management** • Implement the Emergency Stabilization and Burned Area Rehabilitation.
		Grassland and Shrubland Communities • Integrated management. • Minimize disturbance. • Vegetation disturbance areas to be treated species and revegetated. • Contingency planning.

USFWS-Identified Threats to Greater Sage-Grouse and Its Habitat (2010 warranted but precluded finding)	Conservation Objectives Team Report-Identified Threats to Greater Sage-Grouse and Its Habitat	Applicable BLM Resource Program
		Invasive Species and Pest Management • Limit surface disturbance. • Use certified weed free products. • Require vegetation disturbance areas to be treated species and revegetated. • Treat species of concern.
		Special Status Species • Limit surface disturbance. • Avoid broad-spectrum pesticides. • Vegetation disturbance areas to be treated species and revegetated. • Habitat restoration. • Prevent WNv spread.
		Rights-of-Way • Limit surface disturbance. • Avoid broad-spectrum pesticides. • Vegetation disturbance areas to be treated species and revegetated. • Habitat restoration. • Prevent WNv spread.
		Travel and Transportation Management • Close and reclaim unnecessary routes. • Limit motor vehicles to designated routes.

USFWS-Identified Threats to Greater Sage-Grouse and Its Habitat (2010 warranted but precluded finding)	Conservation Objectives Team Report-Identified Threats to Greater Sage-Grouse and Its Habitat	Applicable BLM Resource Program
		Recreation • Avoid siting facilities in riparian habitat. • Limit surface disturbance in SRMAs to administrative use.
Oil and Gas	Energy Development	**Soil** • Avoid sensitive soils. • Lease stipulations on sensitive soils. • Riparian buffer. • Remove and reclaim unnecessary reservoirs.
		Water **Riparian and Wetland Communities** • Reduce riparian habitat loss. •
		Leasables – Fluid Minerals • Designate areas available and closed to fluid mineral leasing. • Minimize adverse impacts. • Stipulate leases to meet resource objectives.
		Grassland and Shrubland Communities • Site exploration and facilities to reduce vegetation impacts.

USFWS-Identified Threats to Greater Sage-Grouse and Its Habitat (2010 warranted but precluded finding)	Conservation Objectives Team Report-Identified Threats to Greater Sage-Grouse and Its Habitat	Applicable BLM Resource Program
		Invasive Species and Pest Management • Minimize surface disturbance. • Use certified weed-free products. • Vegetation disturbance areas to be treated species and revegetated.
		Wildlife Resources • Construct fences to avoid impacts. • Surface disturbance and disruptive activities to meet wildlife objectives. • Powerlines designed to minimize wildlife impacts.
		Special Status Species • Maintain habitat and migration corridors. • Mitigate noise impacts. • Lease stipulations on special status species habitat. • Habitat restoration. • Manage water to prevent WNv. • Design to reduce wildlife mortalities. • Powerlines designed to minimize wildlife impacts.
		Visual Resources • Incorporate BMPs for visual resources.

USFWS-Identified Threats to Greater Sage-Grouse and Its Habitat (2010 warranted but precluded finding)	Conservation Objectives Team Report-Identified Threats to Greater Sage-Grouse and Its Habitat	Applicable BLM Resource Program
		Rights-of-Way • Designate avoidance and exclusion areas. • Designate major ROW corridors. • Minimize disturbance. • co-locate disturbance.
Prescribed Fire	Sagebrush Removal	**Fire and Fuels Management** • Use fire and other methods to meet vegetation objectives.
		Grassland and Shrubland Communities • Integrated vegetation management to meet resource objectives.
		Livestock Grazing Management • Provide rest following treatment until resource objectives are met.
Grazing	Grazing Range Management Structures	**Livestock Grazing Management** • Designate areas suitable for grazing. • Monitor and manage to achieve Standards for Healthy Rangelands. • Sustain wildlife habitat. • Develop range improvements. • Implement AMPs.
		Special Status Species • Manage water facilities to reduce mortality. • Manage fences to reduce impacts.

USFWS-Identified Threats to Greater Sage-Grouse and Its Habitat (2010 warranted but precluded finding)	Conservation Objectives Team Report-Identified Threats to Greater Sage-Grouse and Its Habitat	Applicable BLM Resource Program
No similar threat identified	Free-Roaming Equid Management	**Wild Horse and Burro Management** Resource not present.
Conifer Encroachment	Pinyon and/or Juniper Expansion	**Fire and Fuels Management** • Use fire to meet desired vegetation objectives.
		Grassland and Shrubland Communities • Manage to achieve Standards for Healthy Rangelands. • Use integrated vegetation management techniques.
		Special Status Species • Maintain, enhance, and restore habitat. • Remove encroaching conifers.
Agriculture and Urbanization	Agricultural Conversion and Ex-Urban Development	**Lands and Realty** • Acquire, dispose and retain lands in accordance with resource objectives.

USFWS-Identified Threats to Greater Sage-Grouse and Its Habitat (2010 warranted but precluded finding)	Conservation Objectives Team Report-Identified Threats to Greater Sage-Grouse and Its Habitat	Applicable BLM Resource Program
Hard Rock Mining	Mining	**Locatable Minerals** **Leasables- coal** **Salable Minerals** • Recommend areas for withdrawal (locatable). • Designate areas available and closed to coal leasing. • Designate areas as available and closed to mineral materials (salable). • Minimize adverse impacts. • Condition proposals to meet resource objectives.
		Soil See Oil and Gas.
		Water **Riparian and Wetland Communities** See Oil and Gas.
		Grassland and Shrubland Communities See Oil and Gas.
		Invasive Species and Pest Management
		Wildlife Resources See Oil and Gas.
		Special Status Species See Oil and Gas.
		Visual Resources See Oil and Gas.
		Rights-of-Way See Oil and Gas.

USFWS-Identified Threats to Greater Sage-Grouse and Its Habitat (2010 warranted but precluded finding)	Conservation Objectives Team Report-Identified Threats to Greater Sage-Grouse and Its Habitat	Applicable BLM Resource Program
Infrastructure, roads	Recreation	**Recreation** • Manage recreation to protect resources. • Issue SRPs. • Designate SRMAs, manage for recreation and other resources. • Site facilities to minimize adverse impacts.
		Travel and Transportation Management See Invasive Species.
Infrastructure • Powerlines/Pipelines • Roads • Communication Sites • Railroads	Infrastructure	**Rights-of-Way** See Oil and Gas.
		Soil See Oil and Gas.
		Water **Riparian and Wetland Communities** See Oil and Gas.
		Grassland and Shrubland Communities See Oil and Gas.
		Invasive Species and Pest Management See Oil and Gas.
		Wildlife Resources See Oil and Gas.
		Special Status Species See Oil and Gas.
		Visual Resources See Oil and Gas.

USFWS-Identified Threats to Greater Sage-Grouse and Its Habitat (2010 warranted but precluded finding)	Conservation Objectives Team Report-Identified Threats to Greater Sage-Grouse and Its Habitat	Applicable BLM Resource Program
Infrastructure, range improvements	Range Management Structures	**Livestock Grazing Management** • Site to minimize adverse impacts. • Prevent wildlife mortalities. • Design and manage for WNv.
Water Developments	No similar threat identified	**Water** • Reclaim unneeded reservoirs. • Prevent wildlife mortalities. • Design and manage for WNv.
		Special Status Species • Prevent wildlife mortalities. • Manage to prevent WNv.
		Rights-of-Way • Prevent WNv spread.
		Livestock Grazing Management See Infrastructure, range improvements.

USFWS-Identified Threats to Greater Sage-Grouse and Its Habitat (2010 warranted but precluded finding)	Conservation Objectives Team Report-Identified Threats to Greater Sage-Grouse and Its Habitat	Applicable BLM Resource Program
Climate Change	No similar threat identified	There is no BLM resource planning program for addressing this threat of Greater Sage-Grouse and its habitat. Proposed climate change management is incorporated in other resource programs throughout Chapter 2. Not applicable. **Air Quality** • Reduce emissions. **Leasables – Fluid Minerals** • Incorporate appropriate BMPs (green completions, closed loop drilling, etc.) • See Oil and Gas. **Locatable Minerals** • Incorporate appropriate BMPs. • See Hard Rock Mining. **Leasables- coal** • Incorporate appropriate BMPs. • See Hard Rock Mining. **Salable Minerals** • Incorporate appropriate BMPs. • See Hard Rock Mining.
Weather	No similar threat identified	There is no resource program in the BLM RMPs for addressing this USFWS-identified threat. Grazing – Adapt for drought situations

USFWS-Identified Threats to Greater Sage-Grouse and Its Habitat (2010 warranted but precluded finding)	Conservation Objectives Team Report-Identified Threats to Greater Sage-Grouse and Its Habitat	Applicable BLM Resource Program
Predation	No similar threat identified	**Invasive Species and Pest Management** • Coordinate management with APHIS Wildlife Services.
		Wildlife Resources **Special Status Species** • Maintain and improve habitat. • Construct fences and powerlines to avoid impacts.
Disease	No similar threat identified	**Water** See Water Developments.
		Special Status Species See Water Developments.
		Rights-of-Way See Water Developments.
		Livestock Grazing Management See Water Developments.
		All Applicable Programs Utilize design features and BMPs to reduce risk for WNv.
Hunting	No similar threat identified	There is no resource program in the BLM RMPs for addressing this USFWS-identified threat. Not applicable.

USFWS-Identified Threats to Greater Sage-Grouse and Its Habitat (2010 warranted but precluded finding)	Conservation Objectives Team Report-Identified Threats to Greater Sage-Grouse and Its Habitat	Applicable BLM Resource Program
Contaminants	No similar threat identified	**Health and Safety** • Reduce wastes. • Minimize hazards.
		All Applicable Programs Utilize design features and BMPs to reduce contaminant risk.
Sources: USFWS 2010, USFWS 2013c AMP Allotment Management Plan APHIS Animal and Plant Health Inspection Service BLM Bureau of Land Management BMP Best Management Practice RMP Resource Management Plan ROW right-of-way SRMA Special Resource Management Area SRP Special Recreation Permit USFWS U.S. Fish and Wildlife Service WNv West Nile Virus		

2.5.2. Range of Alternatives for Greater Sage-Grouse Management

The action alternatives (alternatives B, C, and D) in the Proposed RMP and Final EIS offer a range of management approaches to maintain or increase Greater Sage-Grouse abundance and distribution of Greater Sage-Grouse by conserving, enhancing, or restoring the sagebrush ecosystem upon which Greater Sage-Grouse populations depend in collaboration with other conservation partners. The relative emphasis given to particular resources and resource uses differs as well, including allowable uses, restoration measures, and specific direction pertaining to individual resource programs. When resources or resource uses are mandated by law or are not tied to planning issues, there are typically few or no distinctions between alternatives.

The meaningful differences among the alternatives are described in Section 2.8, "Summaries of the Alternatives" (p. 103). Section 2.9, "Detailed Alternative Descriptions by Resource" (p. 125) provides a complete description of the goals, objectives, and management actions for each alternative. In some instances, varying levels of management of Priority and General Habitat Management Areas (Map 36) overlap a single area, or polygon, due to management prescriptions from different resource programs. In instances where varying levels of management prescriptions overlap a single polygon, the stricter of the management prescriptions would apply. For the proposed land use decisions, Table 2.3, "Comparative Summary of Allocation Decisions by Proposed Land Use Decisions in the Buffalo Planning Area: Acres within Priority (PHMA) and General (GHMA) Habitat Management Areas and Percentage of BLM-Administered Estate within the Planning Area" (p. 51) compares the acreage and percentage of Priority and General Habitat Management Areas by alternative.

Table 2.3. Comparative Summary of Allocation Decisions by Proposed Land Use Decisions in the Buffalo Planning Area: Acres within Priority (PHMA) and General (GHMA) Habitat Management Areas and Percentage of BLM-Administered Estate within the Planning Area

Topic	Acreage Type	Alternative A (No Action)		Alternative B		Alternative C		Alternative D (Proposed RMP)	
		Acres	Percent	Acres	Percent	Acres	Percent	Acres	Percent
Physical Resources									
Surface Disturbance on Soils with Severe Erosion Hazard	BLM Surface	(TLS) PHMA: 36,185 GHMA: 176,990	PHMA: 4.6 GHMA: 22.6	(NSO) PHMA: 36,185 GHMA: 176,990	PHMA: 4.6 GHMA: 22.6	(Lease Terms) PHMA: 36,185 GHMA: 176,990	PHMA: 4.6 GHMA: 22.6	(CSU) PHMA: 36,185 GHMA: 176,990	PHMA: 4.6 GHMA: 22.6
	BLM-Administered Fluid Mineral Estate	(TLS) PHMA: 164,019 GHMA: 663,279	PHMA: 4.8 GHMA: 19.6	(NSO) PHMA: 164,019 GHMA: 663,279	PHMA: 4.8 GHMA: 19.6	(Lease Terms) PHMA: 164,019 GHMA: 663,279	PHMA: 4.8 GHMA: 19.6	(CSU) PHMA: 164,019 GHMA: 663,279	PHMA: 4.8 GHMA: 19.6
Surface Disturbance on Soils with Poor Reclamation Suitability	BLM Surface	(Lease terms) PHMA: 85,352 GHMA: 360,907	PHMA: 11 GHMA: 46	(NSO) PHMA: 85,352 GHMA: 360,907	PHMA: 11 GHMA: 46	(Lease Terms) PHMA: 85,352 GHMA: 360,907	PHMA: 11 GHMA: 46	(CSU) PHMA: 85,352 GHMA: 360,907	PHMA: 11 GHMA: 46
	BLM-Administered Fluid Mineral Estate	(Lease terms) PHMA: 375,093 GHMA: 1,486,496	PHMA: 11 GHMA: 44	(NSO) PHMA: 375,093 GHMA: 1,486,496	PHMA: 11 GHMA: 44	(Lease Terms) PHMA: 375,093 GHMA: 1,486,496	PHMA: 11 GHMA: 44	(CSU) PHMA: 375,093 GHMA: 1,486,496	PHMA: 11 GHMA: 44
Surface Disturbance within 500 feet of Water Resources	BLM Surface	(CSU) PHMA: 2,420 GHMA: 16,180	PHMA: 0.3 GHMA: 2	(NSO) PHMA: 2,420 GHMA: 16,180	PHMA: 0.3 GHMA: 2	(Lease Terms) PHMA: 2,420 GHMA: 16,180	PHMA: 0.3 GHMA: 2	(CSU) PHMA: 2,420 GHMA: 16,180	PHMA: 0.3 GHMA: 2
	BLM-Administered Fluid Mineral Estate	(CSU) PHMA: 14,285 GHMA: 147,617	PHMA: 0.4 GHMA: 4	(NSO) PHMA: 14,285 GHMA: 147,617	PHMA: 0.4 GHMA: 4	(Lease Terms) PHMA: 147,617 GHMA:	PHMA: 0.4 GHMA: 4	(CSU) PHMA: 14,285 GHMA: 147,617	PHMA: 0.4 GHMA: 4
Mineral Resources									

Topic	Acreage Type	Alternative A (No Action)		Alternative B		Alternative C		Alternative D (Proposed RMP)	
		Acres	Percent	Acres	Percent	Acres	Percent	Acres	Percent
Acres Recommended for Withdrawal (Closure) from Locatable Mineral Entry[1]	BLM Surface coupled with BLM-Administered Locatable Mineral Estate	PHMA: 0 GHMA: 0	PHMA: 0 GHMA: 0	PHMA: 490,491 GHMA: 123,626	PHMA: 63 GHMA: 4	PHMA: GHMA: 442	PHMA: 0 GHMA: 0	PHMA: 22,515 GHMA: 58,788	PHMA: 3 GHMA: 2
Acres Open to Fluid Mineral Leasing Subject to the Standard Lease Form[2]	BLM-Administered Fluid Mineral Estate	PHMA: 409,995 GHMA: 123,264	PHMA: 12 GHMA: 4	PHMA: 0 GHMA: 2,114	PHMA: 0 GHMA: 0	PHMA: 81,961 GHMA: 442,376	PHMA: 2 GHMA: 13	PHMA: 5,294 GHMA: 220,050	PHMA: 0 GHMA: 6
Acres Open to Fluid Mineral Leasing with Moderate Constraints	BLM-Administered Fluid Mineral Estate	PHMA: 200,108 GHMA: 532,788	PHMA: 6 GHMA: 16	PHMA: 5 GHMA: 102,183	PHMA: 0 GHMA: 3	PHMA: 571,193 GHMA: 1,859,890	PHMA: 17 GHMA: 55	PHMA: 573,587 GHMA: 1,867,165	PHMA: 17 GHMA: 55
Acres Open to Fluid Mineral Leasing with Major Constraints	BLM-Administered Fluid Mineral Estate	PHMA: 21,177 GHMA: 56,569	PHMA: 1 GHMA: 2	PHMA: 28 GHMA: 506,612	PHMA: 0 GHMA: 15	PHMA: 21,722 GHMA: 280,966	PHMA: 1 GHMA: 8	PHMA: 68,661 GHMA: 482,339	PHMA: 2 GHMA: 14
Acres Closed to Fluid Mineral Leasing	BLM-Administered Fluid Mineral Estate	PHMA: 412,561 GHMA: 1,900,445	PHMA: 12 GHMA: 56	PHMA: 674,808 GHMA: 2,002,156	PHMA: 20 GHMA: 59	PHMA: 0 GHMA: 3,0081	PHMA: 0 GHMA: 1	PHMA: 27,299 GHMA: 43,512	PHMA: 1 GHMA: 1
Acres Open to Salable Minerals	BLM-Administered Salable Mineral Estate	PHMA: 643,899 GHMA: 2,436,987	PHMA: 19 GHMA: 73	PHMA: 8,482 GHMA: 98,887	PHMA: 0.2 GHMA: 3	PHMA: 638,016 GHMA: 2,386,776	PHMA: 19 GHMA: 71	PHMA: 551,017 GHMA: 1,978,387	PHMA: 16 GHMA: 59
Biological Resources									

Topic	Acreage Type	Alternative A (No Action)		Alternative B		Alternative C		Alternative D (Proposed RMP)	
		Acres	Percent	Acres	Percent	Acres	Percent	Acres	Percent
Surface Disturbance within 0.25-mile of Natural Water Bodies Containing Desirable Fish	BLM Surface	N/A[3]	N/A[3]	(NSO) PHMA: 7,864 GHMA: 40,947	PHMA: 1 GHMA: 5	(Lease Terms) PHMA: 7,864 GHMA: 40,947	PHMA: 1 GHMA: 5	(CSU) PHMA: 7,864 GHMA: 40,947	PHMA: 1 GHMA: 5
	BLM-Administered Fluid Mineral Estate	N/A[3]	N/A[3]	(NSO) PHMA: 37,296 GHMA: 429,409	PHMA: 1 GHMA: 13	(Lease Terms) PHMA: 37,296 GHMA: 429,409	PHMA: 1 GHMA: 13	(CSU) PHMA: 37,296 GHMA: 429,409	PHMA: 1 GHMA: 13
Facility Development and Occupancy within Elk Crucial Winter Range and Calving Areas	BLM Surface	N/A[3]	N/A[3]	(NSO) PHMA: 4,319 GHMA: 68,554	PHMA: 1 GHMA: 9	(Lease Terms) PHMA: 4,319 GHMA: 68,554	PHMA: 1 GHMA: 9	(CSU) PHMA: 4,319 GHMA: 68,554	PHMA: 1 GHMA: 9
	BLM-Administered Fluid Mineral Estate	N/A[3]	N/A[3]	(NSO) PHMA: 6,552 GHMA: 154,179	PHMA: 0.2 GHMA: 5	(Lease Terms) PHMA: 6,552 GHMA: 154,179	PHMA: 0.2 GHMA: 5	(CSU) PHMA: 6,552 GHMA: 154,179	PHMA: 0.2 GHMA: 5

Topic	Acreage Type	Alternative A (No Action)		Alternative B		Alternative C		Alternative D (Proposed RMP)	
		Acres	Percent	Acres	Percent	Acres	Percent	Acres	Percent
Greater Sage-Grouse Occupied Leks Protective Buffers	BLM Surface	(CSU) PHMA: 1,314 GHMA: 2,278 (TLS) PHMA: 55,601 GHMA: 148,023 (NSO) PHMA: 0 GHMA: 0	(CSU) PHMA: 0.2 GHMA: 0.3 (TLS) PHMA: 7 GHMA: 19 (NSO) PHMA: 0 GHMA: 0	(CSU) PHMA: 136,230 GHMA: 555,937 (TLS) PHMA: 111,485 GHMA: 355,747 (NSO) PHMA: 111,485 GHMA: 355,747	(CSU) PHMA: 17 GHMA: 71 (TLS) PHMA: 14 GHMA: 45 (NSO) PHMA: 14 GHMA: 45	(CSU) PHMA: 1,314 GHMA: 2,278 (TLS) PHMA: 55,601 GHMA: 148,023 (NSO) PHMA: 0 GHMA: 0	(CSU) PHMA: 0.2 GHMA: 0.3 (TLS) PHMA: 7 GHMA: 19 (NSO) PHMA: 0 GHMA: 0	(CSU) PHMA: 136,261 GHMA: 2,278 (TLS) PHMA: 132,248 GHMA: 148,016 (NSO) PHMA: 7,687 GHMA: 2,278	(CSU) PHMA: 17 GHMA: 0.3 (TLS) PHMA: 17 GHMA: 19 (NSO) PHMA: 1 GHMA: 0.3
	BLM-Administered Fluid Mineral Estate	(CSU) PHMA: 6,673 GHMA: 16,106 (TLS) PHMA: 293,295 GHMA: 778,105 (NSO) PHMA: 0 GHMA: 0	(CSU) PHMA: 0.2 GHMA: 0.5 (TLS) PHMA: 9 GHMA: 23 (NSO) PHMA: 0 GHMA: 0	(CSU) PHMA: 668,495 GHMA: 2,420,650 (TLS) PHMA: 560,235 GHMA: 1,681,465 (NSO) PHMA: 560,235 GHMA: 1,681,465	(CSU) PHMA: 20 GHMA: 71 (TLS) PHMA: 17 GHMA: 50 (NSO) PHMA: 17 GHMA: 50	(CSU) PHMA: 6,673 GHMA: 16,106 (TLS) PHMA: 293,295 GHMA: 778,105 (NSO) PHMA: 0 GHMA: 0	(CSU) PHMA: 0.2 GHMA: 0.5 (TLS) PHMA: 9 GHMA: 23 (NSO) PHMA: 0 GHMA: 0	(CSU) PHMA: 668,501 GHMA: 16,103 (TLS) PHMA: 652,357 GHMA: 778,106 (NSO) PHMA: 37,936 GHMA: 16,124	(CSU) PHMA: 20 GHMA: 0.5 (TLS) PHMA: 19 GHMA: 23 (NSO) PHMA: 1 GHMA: 0.5

Topic	Acreage Type	Alternative A (No Action)		Alternative B		Alternative C		Alternative D (Proposed RMP)	
		Acres	Percent	Acres	Percent	Acres	Percent	Acres	Percent
Special Status Species Raptor Active Nest Protective Biologic Buffer Zone (Surface-disturbing Activities Prohibited or Restricted)	BLM Surface	N/A[3]	N/A[3]	(NSO) PHMA: 1,999 GHMA: 26,119	(NSO) PHMA: 0.3 GHMA: 3	(CSU) PHMA: 1,999 GHMA: 26,119	(CSU) PHMA: 0.3 GHMA: 3	(NSO) PHMA: 1,999 GHMA: 26,119	(NSO) PHMA: 0.3 GHMA: 3
	BLM-Administered Fluid Mineral Estate	N/A[3]	N/A[3]	(NSO) PHMA: 32,194 GHMA: 668,277	(NSO) PHMA: 1 GHMA: 9	(CSU) PHMA: 32,194 GHMA: 668,277	(CSU) PHMA: 1 GHMA: 9	(NSO) PHMA: 32,194 GHMA: 668,277	(NSO) PHMA: 1 GHMA: 9
Special Status Species Raptor Nests Seasonal Timing Limitation	BLM Surface	PHMA: 241 GHMA: 2,773	PHMA: 0 GHMA: 0.3	PHMA: 15,530 GHMA: 130,930	(PHMA: 2 GHMA: 17	PHMA: 420 GHMA: 4,389	PHMA: 0 GHMA: 0.6	PHMA: 1,999 GHMA: 26,119	PHMA: 0.3 GHMA: 3
	BLM-Administered Fluid Mineral Estate	(PHMA: 5,291 GHMA: 16,077	PHMA: 0.2 GHMA: 0.5	PHMA: 116,267 GHMA: 885,645	PHMA: 3 GHMA: 26	PHMA: 2,433 GHMA: 72,743	PHMA: 0.1 GHMA: 2	PHMA: 21,110 GHMA: 411,870	PHMA: 0.6 GHMA: 12
Heritage and Visual Resources									
Surface Disturbance in Areas Containing Historic Properties that Retain Their Setting (Surface-disturbing Activities Prohibited or Restricted)	BLM Surface	(NSO) PHMA: 1,420 GHMA: 2,497	(NSO) PHMA: 0.2 GHMA: 0.3	(Closed) PHMA: 43,691 GHMA: 140,769	(Closed) PHMA: 6 GHMA: 18	(CSU) PHMA: 43,691 GHMA: 140,365	(CSU) PHMA: 6 GHMA: 18	(NSO) PHMA: 1,784 GHMA: 4,909 (CSU) PHMA: 42,381 GHMA: 133,251	(NSO) PHMA: 0.2 GHMA: 0.6 (CSU) PHMA: 5 GHMA: 17
	BLM-Administered Fluid Mineral Estate	(NSO) PHMA: 5,287 GHMA: 14,915	(NSO) PHMA: 0.2 GHMA: 0.4	(Closed) PHMA: 171,280 GHMA: 570,650	(Closed) PHMA: 5 GHMA: 17	(CSU) PHMA: 171,280 GHMA: 570,650	(CSU) PHMA: 5 GHMA: 17	(NSO) PHMA: 4,312 GHMA: 17,426 (CSU) PHMA: 160,486 GHMA: 435,594	(NSO) PHMA: 0.1 GHMA: 0.5 (CSU) PHMA: 5 GHMA: 13

Topic	Acreage Type	Alternative A (No Action)		Alternative B		Alternative C		Alternative D (Proposed RMP)	
		Acres	Percent	Acres	Percent	Acres	Percent	Acres	Percent
Visual Resource Management – Class II	BLM Surface	(PHMA: 22,791 GHMA: 114,887	PHMA: 3 GHMA: 15	PHMA: 44,763 GHMA: 165,397	PHMA: 6 GHMA: 21	PHMA: 0 GHMA: 0	PHMA: 0 GHMA: 0	PHMA: 44,171 GHMA: 61,450	PHMA: 6 GHMA: 8
Visual Resource Management – Class III	BLM Surface	(PHMA: 6,531 GHMA: 68,790	PHMA: 1 GHMA: 9	PHMA: 35,959 GHMA: 229,916	PHMA: 5 GHMA: 29	PHMA: 29,989 GHMA: 130,940	PHMA: 4 GHMA: 17	PHMA: 36,552 GHMA: 332,495	PHMA: 5 GHMA: 43
Visual Resource Management – Class IV[4]	BLM Surface	(PHMA: 108,123 GHMA: 443,325	PHMA: 14 GHMA: 57	PHMA: 55,554 GHMA: 203,808	PHMA: 7 GHMA: 26	PHMA: 106,286 GHMA: 468,180	PHMA: 14 GHMA: 60	PHMA: 55,554 GHMA: 205,176	PHMA: 7 GHMA: 26
Land Resources									
Acres Open to Renewable Energy Development	BLM Surface	N/A[3]	N/A[3]	PHMA: 616 GHMA: 4,616	PHMA: 0.1 GHMA: 0.6	PHMA: 128,969 GHMA: 580,518	PHMA: 16 GHMA: 74	PHMA: 38 GHMA: 53,197	PHMA: 0 GHMA: 7
Renewable Energy Avoidance Areas	BLM Surface	N/A[3]	N/A[3]	PHMA: 2,959 GHMA: 35,537	PHMA: 0.4 GHMA: 4	PHMA: 8,481 GHMA: 19,109	PHMA: 1 GHMA: 2	PHMA: 68,800 GHMA: 298,685	PHMA: 9 GHMA: 38
Renewable Energy Exclusion Areas	BLM Surface	N/A[3]	N/A[3]	PHMA: 133,876 GHMA: 587,671	PHMA: 17 GHMA: 75	PHMA: 0 GHMA: 28,197	PHMA: 0 GHMA: 4	PHMA: 68,613 GHMA: 275,942	PHMA: 9 GHMA: 35
Major ROW/Utility Corridor Areas	BLM Surface	PHMA: 3,065 GHMA: 27,973	PHMA: 0.4 GHMA: 4	PHMA: 2,590 GHMA: 25,279	PHMA: 0.3 GHMA: 3	PHMA: 3,065 GHMA: 27,973	PHMA: 0.4 GHMA: 4	PHMA: 3,065 GHMA: 27,973	PHMA: 0.4 GHMA: 4
ROW Avoidance Areas	BLM Surface	N/A[3]	N/A[3]	PHMA: 6,982 GHMA: 44,316	PHMA: 0.9 GHMA: 6	PHMA: 8,481 GHMA: 19,109	PHMA: 1 GHMA: 2	PHMA: 49,741 GHMA: 264,032	PHMA: 6 GHMA: 34
ROW Exclusion Areas	BLM Surface	N/A[3]	N/A[3]	PHMA: 129,038 GHMA: 567,857	PHMA: 16 GHMA: 73	PHMA: 0 GHMA: 28,197	PHMA: 0 GHMA: 4	PHMA: 27,037 GHMA: 51,373	PHMA: 3 GHMA: 6

Topic	Acreage Type	Alternative A (No Action)		Alternative B		Alternative C		Alternative D (Proposed RMP)	
		Acres	Percent	Acres	Percent	Acres	Percent	Acres	Percent
Acres Closed to Motorized Vehicle Use	BLM Surface	PHMA: 1,379 GHMA: 2,325	PHMA: 0.2 GHMA: 0.3	PHMA: 121,320 GHMA: 493,600	PHMA: 16 GHMA: 63	PHMA: 0 GHMA: 28,229	PHMA: 0 GHMA: 4	PHMA: 1,756 GHMA: 35,225	PHMA: 0.2 GHMA: 4
Acres Seasonally Closed to Motorized Vehicle Use	BLM Surface	PHMA: 1,993 GHMA: 61,143	PHMA: 0.2 GHMA: 8	PHMA: 44 GHMA: 17,356	PHMA: 0 GHMA: 2	PHMA: 288 GHMA: 6,388	PHMA: 0 GHMA: 0.8	PHMA: 18,192 GHMA: 61,903	PHMA: 2 GHMA: 8
Acres Limited to Designated Roads and Trails for Motorized Vehicle Use	BLM Surface	PHMA: 25,372 GHMA: 112,569	PHMA: 3 GHMA: 14	PHMA: 15,167 GHMA: 113,883	PHMA: 2 GHMA: 15	PHMA: 130,704 GHMA: 579,042	PHMA: 17 GHMA: 74	PHMA: 117,503 GHMA: 530,696	PHMA: 15 GHMA: 68
Acres of SRMAs (Number of SRMAs)	BLM Surface	PHMA: 0 GHMA: 0	PHMA: 0 GHMA: 0	PHMA: 28,043 GHMA: 26,821	PHMA: 4 GHMA: 3	PHMA: 5,359 GHMA: 24,024	PHMA: 0.7 GHMA: 3	PHMA: 27,364 GHMA: 25,451	PHMA: 3 GHMA: 3
Acres Available to Livestock Grazing	BLM Surface	N/A[6]	N/A[6]	PHMA: 25,962 GHMA: 272,091	PHMA: 3 GHMA: 35	PHMA: 136,000 GHMA: 625,379	PHMA: 17 GHMA: 80	PHMA: 135,209 GHMA: 620,094	PHMA: 17 GHMA: 79

Topic	Acreage Type	Alternative A (No Action)		Alternative B		Alternative C		Alternative D (Proposed RMP)	
		Acres	Percent	Acres	Percent	Acres	Percent	Acres	Percent
Acres Incompatible to Livestock Grazing	BLM Surface	N/A[6]	N/A[6]	PHMA: 111,485 GHMA: 355,747	PHMA: 14 GHMA: 45	PHMA: 1,451 GHMA: 2,445	PHMA: 0.2 GHMA: 0.3	PHMA: 2,282 GHMA: 6,920	PHMA: 0.3 GHMA: 0.9

Source: BLM 2012f

Note: Although federal mineral estate acreage is not displayed for each resource topic in this table, land use decisions may affect management on federal mineral estate. The associated fluid mineral leasing decisions are noted in parentheses where applicable.
BLM Surface: 782,102 acres
BLM Fluid Mineral Estate: 3,386,530 acres
BLM Locatable/Salable Mineral Estate: 3,348,121 acres

PHMA: Greater Sage-Grouse Priority Habitat Management Areas (Core Population Areas and Core Population Connectivity Corridors).
GHMA: Greater Sage-Grouse General Habitat Management Areas
[1]The existing withdrawals from mineral entry (totaling 11,373 acres) are not included in the acres recommended for withdrawal from mineral entry.
[2]As of October 1, 2008, there are 2,570,703 acres under existing leases.
[3]Land use decision not applicable under Alternative A.
[4]Visual Resource Management Class V no longer exists as a class objective option for managing visual resources. As a result, these areas are managed as Class IV visual resources under Alternative A.
[5]Closed to off-highway vehicle use.
[6]Approximately 10,000 acres are presently incompatible with livestock grazing. The data are not available in a GIS layer; however, all 10,000 acres are within the Big Horn Mountains portion of the planning area and therefore not within priority habitat.
[7]P: Priority Greater Sage-Grouse Habitat (Core Population Areas and Core Population Connectivity Corridors), G: General Greater Sage-Grouse Habitat.

BLM Bureau of Land Management
CSU controlled surface use
GHMA General Habitat Management Area
N/A Not Applicable
NSO No Surface Occupancy
PHMA Priority Habitat Management Area
ROW right-of-way
RMP Resource Management Plan
SRMA Special Recreation Management Area
TLS timing limitation stipulation

2.5.3. Development of the BLM Proposed Plan for Greater Sage-Grouse Management

In developing the Proposed Plan for Greater Sage-Grouse management, the BLM made modifications to the Preferred Alternative identified in the Draft Land Use Plan/EIS. The modifications are based on public comments received on the Draft Land Use Plan/EIS, internal BLM review, new information and best available science, the need for clarification in the plans, and ongoing coordination with stakeholders across the range of the Greater Sage-Grouse. As a result, the Proposed Plan provides consistent Greater Sage-Grouse habitat management across the range, prioritizes development outside of Greater Sage-Grouse habitat, and focuses on a landscape-scale approach to conserving Greater Sage-Grouse habitat.

The BLM modified the Preferred Alternative, identified as Alternative D as presented in the Draft Land Use Plan/EIS, which is now considered the proposed plan for managing BLM-administered lands within the Buffalo Planning Area.

Since release of the Draft Land Use Plan/EIS, the BLM have continued to work closely with a broad range of governmental partners, including Governors, State Fish and Game agencies, the USFWS, Indian tribes, county commissioners and many others. Through this coordination, the BLM have developed a Proposed Plan that is consistent with state, Tribal, and local strategies to the maximum extent possible and ensures the long-term conservation of the Greater Sage-Grouse. The BLM also received many substantive public comments on the Draft Land Use Plan (see Appendix Y (p. 2671)), which greatly informed the BLM's development of the Proposed Plan for Greater Sage-Grouse management.

The BLM has refined the Proposed Plan to provide a layered management approach that offers the highest level of protection for Greater Sage-Grouse in the most valuable habitat. Land use allocations in the Proposed Plan would limit or eliminate new surface disturbance in Priority Habitat Management Area, while minimizing disturbance in General Habitat Management Area. In addition to establishing protective land use allocations, the Proposed Plan for Greater Sage-Grouse management would implement a suite of management tools such as disturbance limits, Greater Sage-Grouse habitat objectives and monitoring, mitigation approaches, adaptive management triggers and responses, and lek buffer-distances throughout the range (see Appendix B (p. 1779)). These overlapping and reinforcing conservation measures will work in concert to improve Greater Sage-Grouse habitat condition and provide clarity and consistency on how the BLM will manage activities in Greater Sage-Grouse habitat.

2.5.4. BLM Proposed Plan for Greater Sage-Grouse Habitat Management

Many of the proposed plan goals, objectives, management actions and allowable uses identified in this section originate from the specific BLM resource/program areas (e.g., Physical Resources) and have been determined to be applicable to the proposed management of Greater Sage-Grouse habitat. The management action/goal/objective numbers are the same as those presented in Section 2.9, "Detailed Alternative Descriptions by Resource" (p. 125) of this chapter and have simply been consolidated here to depict how the BLM proposes to manage Greater Sage-Grouse habitat.

Special Status Species

Greater Sage-Grouse

- Goal BR:11 Sustainable sagebrush habitats that provide the quantity, quality, and connectivity that is necessary to maintain sustainable populations of Greater Sage-Grouse and other special status species. (conserves habitat and populations)
  - Objective BR:11.1 Maintain large patches of high quality interconnected sagebrush habitats, with emphasis on patches occupied by Greater Sage-Grouse. (conserves habitat)
  - Objective BR:11.2 Maintain connectivity between and within sagebrush habitats with emphasis on communities occupied by Greater Sage-Grouse. (conserves habitat)
- Goal BR:12 Successful restoration and rehabilitation of potential Greater Sage-Grouse habitat across the planning area. (conserves habitat)
  - Objective BR:12.1 Reestablish sagebrush corridors, where feasible, between Greater Sage-Grouse occupied habitats. (conserves habitat and populations)
  - Objective BR:12.2 Reconnect large patches of sagebrush habitat with emphasis on reconnecting patches occupied by stronghold and isolated populations of Greater Sage-Grouse. (conserves habitat and populations)
- SS WL-4010: The BLM will collaborate with appropriate federal agencies, and the State of Wyoming as contemplated under Governor Executive Order 2013-3, to: (1) develop appropriate conservation objectives; (2) define a framework for evaluating situations where Greater Sage-Grouse conservation objectives are not being achieved on federal land, to determine if a causal relationship exists between improper grazing (by wildlife or livestock) and Greater Sage-Grouse conservation objectives; and (3) identify appropriate site-based action to achieve Greater Sage-Grouse conservation objectives within the framework. (conserves habitat and populations)
- SS WL-4011: Develop avoidance areas restricting the application of broad-spectrum pesticides in areas containing Greater Sage-Grouse nesting and brood-rearing habitats. (conserves habitat and populations)
- SS WL-4012: Restore Greater Sage-Grouse brood-rearing habitats in wetland/riparian areas. Maintain seeps, springs, wet meadows, and riparian vegetation in a functional and diverse condition for young Greater Sage-Grouse and other species that depend on forbs and insects associated with these areas. (conserves habitat and populations)
- SS WL-4013: Manage vegetation composition, diversity and structure, as determined by Ecological Site Description (ESD) and WGFD protocols (WY IM-2012–019 attachment 6), to achieve Greater Sage-Grouse habitat management objectives, in cooperation with stakeholders. (conserves habitat and populations)
- SS WL-4014: Minimize disturbances that would result in alterations to springs and riparian Greater Sage-Grouse habitat. In coordination with stakeholders, develop alternative water sources to replace natural sources that have been affected or destroyed. (conserves habitat)
- SS WL-4015: Manage stored water to control mosquitoes and prevent the spread of West Nile Virus (WNv) to Greater Sage-Grouse. (conserves populations)
- SS WL-4016: Design water facilities with protective features to reduce mortality of Greater Sage-Grouse from drowning or entrapment. (conserves populations)
- SS WL-4017: Design and locate fences to reduce impacts to important Greater Sage-Grouse habitat. (conserves habitat and populations)
- SS WL-4018: Use the Fire Management Plan to incorporate the most current sagebrush habitat information and to guide fire suppression priorities in sagebrush habitats. (conserves habitat)
- SS WL-4019: Remove conifers where they have encroached upon Greater Sage-Grouse habitat in cooperation with stakeholders. Reduce the density of conifers that have encroached into, but do not yet dominate sagebrush plant communities. (conserves habitat)

- SS WL-4020: Inventory, record, and report existing type and condition of BLM fences. Prioritize areas and annually implement modifications to existing fences to reduce hazards to flying Greater Sage-Grouse, in cooperation with stakeholders. All new fences, in priority areas, will be properly designed and located to avoid hazards to flying Greater Sage-Grouse. (conserves populations)
- SS WL-4021: Avoid renewable energy projects in Greater Sage-Grouse Core Population Areas unless it can be demonstrated that the activity would not result in declines of core Greater Sage-Grouse populations. Sufficient demonstration of "no declines" should be coordinated with the WGFD and USFWS. (conserves habitat and populations)
- SS WL-4022: Powerlines (distribution and transmission) will be designed to minimize wildlife related impacts. (conserves populations) This action includes but is not limited to:
  - Avoid areas of high avian use such as water bodies (including ponds, lakes, rivers, streams and wetlands), ridge tops, prairie dog colonies, Greater Sage-Grouse Core Population Areas and Core Population Connectivity Corridors, and sharp-tailed grouse leks. (PRB Final EIS, Executive Order 2011-05)
  - Prohibit within 0.6 mile of Greater Sage-Grouse Core Population Area and Core Population Connectivity Corridor leks unless within an established corridor or it can be demonstrated that the activity will not cause Greater Sage-Grouse population declines. Transmission and collectors lines are not permitted if they are outside designated corridors or at distances greater than 0.5 mile of an existing 115 kilovolt (kV) or greater powerlines, unless there is a demonstration of no declines in Greater Sage-Grouse populations. ROWs for residential and agricultural distribution lines will be evaluated on a project-specific basis. (Executive Order 2011-05)
  - Within general Greater Sage-Grouse habitat (outside Core Population Areas and Core Population Connectivity Corridors) overhead powerlines will be located at least 0.5 mile from Greater Sage-Grouse breeding grounds. (PRB Final EIS)
  - Any new powerlines authorized within the above identified areas will be buried or if overhead then marked to increase visibility and perch-guarded to prevent raptor perching. (PRB Final EIS)
- SS WL-4023: Lease fluid minerals dependent upon lease location and habitat suitability. In order to avoid surface-disturbing activities in Greater Sage-Grouse Priority Habitat (Core Population Areas and Core Population Connectivity Corridors), priority will be given to leasing fluid mineral resources outside of priority habitat. Within Priority Habitat (Core Population Areas and Core Population Connectivity Corridors), leases should be a minimum of 640 contiguous acres of federal mineral estate. Smaller parcels may be leased only when 640 contiguous acres of federal mineral estate is not available and leasing is necessary to remain in compliance with laws, regulations and policy; for example, to protect the federal mineral estate from drainage or to commit the federal mineral estate to unit or communitization agreements. Preliminary parcels reviewed for possible offering in a lease sale should comply with this minimum lease size. Expressions of interest that are less than this minimum lease size would be evaluated and modified by the BLM to meet the minimum lease size, where possible, prior to review for possible offering in a lease sale. (conserves habitat)
- SS WL-4025: In order to avoid surface-disturbing activities in Greater Sage-Grouse Priority Habitat (Core Population Areas and Core Population Connectivity Corridors), priority will be given to development of oil and gas and other mineral resources outside of priority habitat, subject to applicable stipulations. When authorizing development of oil and gas and other mineral resources in priority habitat, subject to applicable stipulations for the conservation of Greater Sage-Grouse, priority will be given to development in non-suitable habitat areas first and then in the least suitable habitat for Greater Sage-Grouse.

Manage Greater Sage-Grouse Core Population Areas as follows (Map 40) (conserves habitat and populations):

- Prohibit surface occupancy and disruptive activities within 0.6 mile of the perimeter of occupied Greater Sage-Grouse leks (independent of habitat suitability). (SS WL-4024: Fluid Mineral leasing NSO)
- Within core population areas, allow on average no more than 1 energy or mining facility per 640 acres. Within all Priority Habitat Management Area, and for all resource uses, allow on average no more than 5 percent total surface disturbance per 640 acres within the Disturbance Density Calculation Tool (DDCT) analysis area. (SS WL-4024: Fluid Mineral leasing CSU)
  - Design and manage facilities to prevent WNv transmission.
  - Prohibit overhead electric transmission lines unless within 0.5 mile either side of existing 115 kV or larger transmission lines creating a corridor no wider than 1.0 mile.
  - Work with proponents to limit project related noise where it would be expected to reduce habitat functionality.
    The BLM would evaluate the potential for limitation of new noise sources on a case-by-case basis as appropriate.
    BLM's near-term goal would be to limit noise sources that would be expected to negatively impact priority habitat area sage-grouse populations and to continue to support the establishment of ambient baseline noise levels for occupied priority habitat area leks.
    As additional research and information emerges, specific new limitations appropriate to the type of projects being considered would be evaluated and appropriate limitations would be implemented where necessary to minimize potential for noise impacts on sage-grouse priority population behavioral cycles.
    As new research is completed, new specific limitations would be coordinated with the WGFD and partners. Noise levels at the perimeter of the lek should not exceed 10 A-weighted decibels (dBA) above ambient noise.
  - Bury electric distribution lines where possible; if not possible, then locate overhead lines at least 0.6 mile from the perimeter of occupied Greater Sage-Grouse leks and install raptor perch guards.
  - Buried utilities constructed in designated utility corridors would not require that a DDCT be conducted.
  - Locate new roads that will have relatively high levels of activity (accessing multiple wells, housing development) greater than 1.9 miles from the perimeter of occupied Greater Sage-Grouse leks. Construct roads to minimum design standards needed.
  - Vegetation treatments in nesting and wintering habitat that would reduce sagebrush canopy cover to less than 15 percent would not be conducted unless it can be shown to be beneficial to sage-grouse habitat and removal of sagebrush canopy cover below 15 percent will be subject to the DDCT.
- Restore disturbed sagebrush communities on BLM surface to meet the Wyoming DEQ community-specific full shrub density standard (Chapter 4 Rules and Regulations, option III) for all predisturbance shrub species and 5 percent minimum canopy cover of sagebrush. A 90 percent confidence interval is required to demonstrate achievement of the standard. The standard must be demonstrated the last year of the responsibility period, and all planted shrubs shall have been in place for at least two years.
- Prohibit surface-disturbing and disruptive activities from March 15 to June 30 (independent of habitat suitability). (SS WL-4024: Fluid Mineral leasing TLS)
- Prohibit surface-disturbing and disruptive activities within Greater Sage-Grouse winter concentration areas, from December 1 to March 14. (SS WL-4024: Fluid Mineral leasing TLS)

To the extent necessary to prevent unnecessary or undue degradation, manage as follows within Greater Sage-Grouse Core Population Connectivity Corridors (conserves habitat and populations):

- Prohibit surface occupancy and disruptive activities within 0.6 mile of the perimeter of occupied Greater Sage-Grouse leks (independent of habitat suitability). (SS WL-4024: Fluid Mineral leasing NSO)
- Allow on average no more than 5 percent total surface disturbance per 640 acres within the DDCT analysis area. (SS WL-4024: Fluid Mineral leasing CSU)
  - Design and manage facilities to prevent WNv transmission.
  - Work with proponents to limit project related noise where it would be expected to reduce habitat functionality.
    The BLM would evaluate the potential for limitation of new noise sources on a case-by-case basis as appropriate.
    BLM's near-term goal would be to limit noise sources that would be expected to negatively impact priority habitat area sage-grouse populations and to continue to support the establishment of ambient baseline noise levels for occupied priority habitat area leks.
    As additional research and information emerges, specific new limitations appropriate to the type of projects being considered would be evaluated and appropriate limitations would be implemented where necessary to minimize potential for noise impacts on sage-grouse priority population behavioral cycles.
    As new research is completed, new specific limitations would be coordinated with the WGFD and partners. Noise levels at the perimeter of the lek should not exceed 10 dBA above ambient noise.
  - Buried utilities constructed in designated utility corridors would not require that a DDCT be conducted.
  - Vegetation treatments in nesting and wintering habitat that would reduce sagebrush canopy cover to less than 15 percent would not be conducted unless it can be shown to be beneficial to sage-grouse habitat and removal of sagebrush canopy cover below 15 percent will be subject to the DDCT. Wildland fire burns will be treated as disturbance if sagebrush is reduced below 5% canopy cover, unless there is an implementation plan outlining restoration efforts and 3 years of data showing a trend back to suitable habitat.
- Restore disturbed sagebrush communities on BLM surface to meet the Wyoming DEQ community-specific full shrub density standard (Chapter 4 Rules and Regulations, option III) for all predisturbance shrub species and 5 percent minimum canopy cover of sagebrush. A 90 percent confidence interval is required to demonstrate achievement of the standard. The standard must be demonstrated the last year of the responsibility period, and all planted shrubs shall have been in place for at least two years.
- Prohibit surface-disturbing and disruptive activities within 4 miles of occupied Greater Sage-Grouse leks from March 15 to June 30 (independent of habitat suitability and restricted to within Core Population Connectivity Corridors). (SS WL-4024: Fluid Mineral leasing TLS)
- Prohibit surface-disturbing and disruptive activities within Greater Sage-Grouse winter concentration areas from December 1 to March 14. (SS WL-4024: Fluid Mineral leasing TLS)

Manage as follows within occupied Greater Sage-Grouse habitat outside of Core Population Areas and Core Population Connectivity Corridors:

- Prohibit or restrict surface occupancy and disruptive activities within 0.25 mile of the perimeter of occupied Greater Sage-Grouse leks. (SS WL-4024: Fluid Mineral leasing NSO)

- Reduce surface disturbance for authorizations within 0.25 mile of occupied Greater Sage-Grouse leks by (SS WL-4024: Fluid Mineral leasing CSU):
  - Design and manage facilities to prevent WNv transmission.
  - Prohibit overhead transmission lines.
- Restore disturbed sagebrush communities on BLM surface to meet the Wyoming DEQ community-specific full shrub density standard (Chapter 4 Rules and Regulations, option III) for all predisturbance shrub species and 5 percent minimum canopy cover of sagebrush. A 90 percent confidence interval is required to demonstrate achievement of the standard. The standard must be demonstrated the last year of the responsibility period, and all planted shrubs shall have been in place for at least two years.

  Recommend for all surface-disturbing activities on BLM surface adjacent to Core Population Areas or Core Population Connectivity Corridors, or within or adjacent to lands involved in Greater Sage-Grouse conservation projects.
- Work with proponents to limit project related noise where it would be expected to reduce functionality of habitats that support priority habitat area populations. The BLM would evaluate the potential for limitation of new noise sources on a case-by-case basis as appropriate.
  BLM's near-term goal would be to limit noise sources that would be expected to negatively impact priority habitat area sage-grouse populations and to continue to support the establishment of ambient baseline noise levels for occupied priority habitat area leks. As additional research and information emerges, specific new limitations appropriate to the type of projects being considered would be evaluated and appropriate limitations would be implemented where necessary to minimize potential for noise impacts on sage-grouse priority population behavioral cycles. As new research is completed, new specific limitations would be coordinated with the WGFD and partners. Noise levels at the perimeter of the lek should not exceed 10 dBA above ambient noise.
- Prohibit surface-disturbing and disruptive activities within 2.0 miles of occupied Greater Sage-Grouse leks, from March 15 to June 30 (independent of habitat suitability). (SS WL-4024: Fluid Mineral leasing TLS)
- Prohibit surface-disturbing and disruptive activities from December 1 to March 14 within mapped Greater Sage-Grouse winter concentration areas that support populations of Greater Sage-Grouse that attend leks within Core Population Areas. (SS WL-4024: Fluid Mineral leasing TLS)

Other Special Status Species

- Goal BR:10 Distribution and abundance of all special status species are optimized. (conserves populations)
  - Objective BR:10.2 Manage BLM-administered lands to maintain or restore populations and habitat consistent with conservation requirements for special status species. (conserves habitat and populations)
  - Objective BR:10.3 Develop effective conservation and cooperative management plans, strategies, and agreements with stakeholders. (conserves habitat and populations)
- SS WL-4001: Utilize current research, management and conservation plans, and similar related documents to guide special status species habitat management. (conserves habitat)
- SS WL-4002: Implement actions set forth in recovery plans, conservation measures, terms and conditions, protection measures, and appropriate BMPs and reasonable and prudent measures within biological opinions for Threatened and/or Endangered wildlife species, including those

specific to this RMP and any future statewide programmatic biological opinions. (conserves habitat and populations)
- SS WL-4003: Maintain (size and quality) or enhance current habitat utilized by special status species. Enlarge/restore habitat on a site-specific basis. (conserves habitat)
- SS WL-4004: Maintain or enhance the integrity of identified special status wildlife species migration corridors. Manage identified special status wildlife species travel corridors consistent with other resource values. (conserves habitat)
- SS WL-4005: Locate and manage facilities to mitigate noise impacts on special status species. (conserves habitat)
- SS WL-4006: Manage surface-disturbing and disruptive activities to mitigate impacts on special status wildlife species and their habitats. (conserves habitat and populations)
- SS WL-4007: Apply a CSU stipulation to fluid mineral leases containing special status species habitat. Surveys required for clearance. (conserves habitat)
- SS WL-4018: Use the Fire Management Plan to incorporate the most current sagebrush habitat information and to guide fire suppression priorities in sagebrush habitats. (conserves habitat)

Vegetation

- Goal BR:1 Vegetation resources sustained in desired ecological conditions. (conserves habitat)
  - Objective BR:1.1 Manage communities for a diversity of native species, habitats, seral stages and distribution. (conserves habitat)
  - Objective BR:1.2 Manage for healthy vegetation communities to ensure their capability to provide sufficient plant composition, cover and litter accumulation to protect soils from wind and water erosion and enhance nutrient cycling and productivity. (conserves habitat)
  - Objective BR:1.3 Reclaim areas affected by surface-disturbing activities to promote healthy functioning native plant communities. (promotes habitat restoration)
  - Objective BR:1.4 Manage habitat to facilitate the conservation, recovery and maintenance of populations of native, desirable non-native, and special status plant species consistent with appropriate local, state, and federal conservation requirements and management plans. (conserves habitat)
  - Objective BR:1.5 Manage for healthy native plant communities by reducing and managing invasive, non-native noxious species. (conserves habitat)

Vegetation – Grassland and Shrubland Communities

- Goal BR:3 A diverse landscape of native grasslands and shrublands sustained in desired ecological conditions. (conserves habitat)
  - Objective BR:3.1 Manage for a full range of sagebrush, shrub, and grassland communities with diverse native species and subspecies, composition, canopies, densities, and age classes across the landscape. (conserves habitat)
- GS-4001: Manage vegetative communities (Map 25) in accordance with Standards for Healthy Rangelands and Guidelines for Livestock Grazing Management for the Public Lands Administered by the BLM in the State of Wyoming. (conserves habitat)
- GS-4002: Use an integrated management approach (e.g., mechanical, chemical, biological treatments, prescribed fire, and grazing management techniques) to maintain, restore, and enhance the health and diversity of plant communities to achieve resource or multi-resource objectives. (conserves habitat)
- GS-4005: Manage grasslands and shrublands to protect, preserve, or enhance plant communities. (conserves habitat)

- GS-4006: Manage the siting of facilities and related infrastructure (utility corridors, roads) to reduce impacts to vegetation resources. (conserves habitat)
- GS-4007: Manage the planning and development of travel routes, recreational uses, mineral exploration and development sites, and ROW to reduce impacts to the vegetation resource. (conserves habitat)
- GS-4008: Develop a contingency plan addressing catastrophic natural events such as drought, wildfires, and large-scale pest infestations, incorporating strategies that best protect vegetation resources. (conserves habitat)
- GS-4009: Work with landowners on split estate lands to reestablish disturbed sites to healthy plant communities in accordance with the ecological site potential. (promotes habitat restoration)

Vegetation – Forest and Woodland Communities

- Forest-4006: Actively manage woodlands to prevent expansion into other communities consistent with multiple resource values, on a project-specific basis. (conserves habitat)

Vegetation – Invasive Species and Pest Management

- Goal BR:5 Healthy native communities with manageable levels of pathogens, undesirable, invasive, non-native, or noxious species. (conserves habitat)
  - Objective BR:5.1 Develop and maintain baseline information regarding the extent, location, and potential impact(s) of pest species. From this baseline information develop and implement an Integrated Pest Management Plan. (conserves habitat)
  - Objective BR:5.2 Facilitate support for an integrated approach for the detection, management or eradication of new and minor infestations. (conserves habitat)
  - Objective BR:5.3 Develop, implement, and maintain a management program for annual bromes and other invasive or undesirable species not listed as noxious, utilizing the best available science and BMPs. (conserves habitat)
  - Objective BR:5.4 Coordinate with Animal and Plant Health Inspection Service (APHIS) to facilitate pest and predator management. (conserves populations)

- Pest-4002: Manage designated pests on public surface lands using an Integrated Pest Management Approach consistent with Department of the Interior (DOI) Manual 517 (BLM 2007f). (conserves habitat)

- Pest-4003: Limit surface disturbance to the minimum needed for safe project completion to limit the spread of noxious weeds. (conserves habitat)

- Pest-4004: Use certified noxious weed seed-free products on all BLM-administered projects and lands. (conserves habitat)

- Pest-4005: Implement and maintain cooperative integrated pest management programs with county weed and pest districts, state agencies, private industry, grazing lessees, and other stakeholders in conjunction with BLM weed and pest control work on public lands adjoining deeded and state lands (Map 27). (conserves habitat)

- Pest-4006: Require surface or vegetation disturbance areas, including areas formerly receiving or holding water, be treated for invasive species and revegetated. (conserves habitat)

- Pest-4009: Treat those plants on the State of Wyoming Designated list, the appropriate county lists, and other species of concern as determined by BLM resource specialists. (conserves habitat)

- Pest-4010: Designate and prioritize areas for the treatment of annual brome species. (conserves habitat)

Vegetation – Riparian and Wetland Communities

- Goal BR:4 Health and functional capabilities in riparian/wetland systems are maintained. (conserves brood-rearing habitat)
  - Objective BR:4.1 Manage lotic and lentic wetland/riparian systems at a minimum to achieve and/or maintain PFC. (conserves brood-rearing habitat)
  - Objective BR:4.2 Improve riparian systems and wetlands in systems operating at less than PFC. (conserves brood-rearing habitat)
  - Objective BR:4.3 Manage contributing watersheds to sustain riparian health and water quality. (conserves brood-rearing habitat)
  - Objective BR:4.4 Manage and enhance riparian and wetland systems for plant, insect, fish and wildlife species that depend on these systems for their health and well being. (conserves brood-rearing habitat)
  - Objective BR:4.5 Coalbed Natural Gas (CBNG) created riparian and wetland systems will be evaluated, retained, or reclaimed to support vegetation and other resource values. (conserves brood-rearing habitat)

- Riparian-4002: Prioritize, and develop activity and implementation plans to manage riparian systems to be at or above, or continue to be improving toward, PFC while achieving the Standards for Healthy Rangelands and Guidelines for Livestock Grazing Management for the Public Lands Administered by the BLM in the State of Wyoming. (conserves brood-rearing habitat)

- Riparian-4003: Manage riparian and wetland systems to enhance forage conditions and improve water quality. Manage all riparian systems with sensitive species concerns to a succession stage appropriate for that system, including vertical as well as horizontal vegetative structure and composition. (conserves brood-rearing habitat)

- Riparian-4004: Expand and enhance riparian/wetland systems and habitat in cooperation with stakeholders. (conserves brood-rearing habitat)

- Riparian-4005: Prevent degradation, loss, or destruction of riparian/wetland habitat. (conserves brood-rearing habitat)

- Riparian-4008: Allow surface disturbance within 500 feet of riparian/wetlands systems and aquatic habitats where riparian/wetland and other resource objectives (including, but not limited to soil, slope, and vegetation) can be met. (Riparian-4009: Fluid Mineral leasing CSU) (conserves brood-rearing habitat)

- Riparian-4010: Identify and manage systems capable of achieving Desired Future Condition (DFC). (conserves brood-rearing habitat)

- Riparian-4011: Restore vegetation in CBNG supported wetland and riparian systems on BLM surface and/or lease in accordance with the ecological site potential. (conserves brood-rearing habitat)

Climate Change
No proposed management actions directly applicable to Greater Sage-Grouse conservation (See Air Quality for proposed air resources management).

Fire and Fuels Management

- Goal FM:1 Life, property, and resource values are protected. (conserves habitat)
  - Objective FM:1.1 Respond to unplanned wildfires based on: (1) ecological, (2) social, and (3) legal consequences while supporting other resource values. (conserves habitat)
  - Objective FM:1.5 Implement appropriate emergency stabilization and rehabilitation actions following wildland fire. (conserves habitat)
- Goal FM:2 Plant community and hazardous fuel objectives are achieved. (conserves habitat)
  - Objective FM:2.1 Improve fire regime condition class and maintain or improve conditions of fire-adapted landscapes by managing fire, planned and unplanned, to accomplish beneficial resource objectives. (conserves habitat)
- Fire-3001: A Fire Management Plan for the Wyoming High Plains District will be maintained that more specifically outlines management response and implementation actions for wildland fire response of public lands. (conserves habitat)
- Fire-3002: A resource advisor appropriate to the potentially affected resource will be consulted, or assigned, to all wildland fires that involve or threaten BLM-administered lands. (conserves habitat)
- Fire-3006: Implement the BLM Emergency Stabilization and Burned Area Rehabilitation standards located in the DOI Interagency Burned Area Emergency Response Guidebook (DOI 2004) and BLM Burned Area Emergency Stabilization and Rehabilitation Handbook (BLM 2007c) as needed. (promotes habitat restoration)
- Fire-3007: Use the District Fire Management Plan to implement the objectives of this RMP; to address fire management on a landscape scale, to maintain or improve conditions in fire-adapted landscapes, and to accomplish resource management objectives. (conserves habitat)
- Fire-3011: Response to wildfire varies from full protection in areas where fire is undesirable to monitoring fire behavior in areas where fire can be managed to accomplish other resource objectives. (conserves habitat)
- Fire-3012: Prohibit heavy equipment use within the following areas, except when human safety is at risk or if the expected fire effects would cause more resource damage than the use of heavy equipment: Identified Greater Sage-Grouse important habitats: Core Population Area, nesting, brood-rearing, Core Population Connectivity Corridor, or winter habitat. (conserves habitat)
- Fire-3013: Use protection strategies in the following areas: Where sensitive or high value resources would be adversely affected by fire (i.e., Greater Sage-Grouse priority habitat). (conserves habitat)
- Fire-3014: Evaluate all fires and rehabilitate fire-damaged lands as needed to meet resource objectives. Repair suppression damages as necessary. (promotes habitat restoration)
- Fire-3015: Use wildland fire and other vegetation treatments to meet desired management objectives. (conserves habitat)

Livestock Grazing Management

- Goal LR:11 Public rangelands provide for a sustainable level of livestock grazing consistent with other resource values and sustained yield. (conserves habitat)
  - Objective LR:11.2 Manage forage to maintain or improve ecological states and achieve and/or maintain Standards for Healthy Rangelands and Guidelines for Livestock Grazing

Management for the Public Lands Administered by the BLM in the State of Wyoming. (conserves habitat)
  - Objective LR:11.3 Monitor and evaluate rangeland health and condition in coordination with cooperators, and lessees to determine if, and what additional management is needed to achieve desired ecological state. (conserves habitat)
- Grazing-6001: Develop and implement appropriate livestock grazing management actions to achieve the Standards for Healthy Rangelands and Guidelines for Livestock Grazing Management for the Public Lands Administered by the BLM in the State of Wyoming, to provide watershed protection, to improve forage for livestock, forage and habitat for wildlife, and enhance rangeland health. (conserves habitat)
- Grazing-6004: Continue implementation of existing Allotment Management Plans (AMPs). Develop and implement new AMPs with grazing lessees and other stakeholders to achieve desired resource goals and objectives. (conserves brood-rearing habitat)
- Grazing-6005: Manage livestock grazing to sustain riparian, wetland, mountain mahogany, specials status species, or other special habitats. (conserves habitat)
- Grazing-6009: Implement strategies that best protect rangeland resources during periods of drought. Cooperate with stakeholders for voluntary adjustments in livestock use and/or livestock management. (conserves habitat)
- Grazing-6015: Develop range improvements in accordance with resource needs and livestock management. (conserves habitat)
- Grazing-6016: Conduct baseline inventories. Develop, implement, and monitor AMPs. Base AMP goals/objectives in Category I and M allotments on resource protection and watershed health. (conserves habitat)
- Grazing-6019: Locate livestock salt or mineral supplements a minimum of 500 feet away from water sources, riparian areas, and aspen stands. (conserves brood-rearing habitat)
- Grazing-6021: Provide rest/deferment from livestock grazing following wildfire, prescribed burns, and other vegetative treatments until resource objectives are met. (promotes habitat restoration)

Wild Horses and Burros

Resource not present.

Lands and Realty

Lands and Realty (Land Tenure)

- Goal LR:2 Manage land tenure adjustments and land use authorizations to meet the needs of the customers while protecting other resource values. (conserves habitat)
  - Objective LR:2.1 Develop and maintain a land-ownership pattern that improves access for public use, and improves management and protection of BLM-administered lands. (conserves habitat)
- L&R-6002: Consider land use authorizations (permits, leases, etc.) on a project-specific basis consistent with other resource objectives. (conserves habitat)
- L&R-6003: Consider withdrawals for surface and/or minerals on a project-specific basis. (conserves habitat)
- L&R-6011: Acquire private or state land or interest in land from willing sellers consistent with other resource objectives, on a project-specific basis. (conserves habitat)
- L&R-6012: Acquire and dispose of land based on all resource values, including but not limited to agricultural potential and water. (conserves habitat)

- L&R-6014: Prioritize acquiring land or interests in lands in areas adjacent to large blocks of BLM-administered land or other lands having significant resource or other values before other areas. (conserves habitat)

Renewable Energy (Solar and Wind)
See Special Status Species, Greater Sage-Grouse.

Rights-of-Way and Corridors
- Goal LR:4 Primary infrastructure corridors and subsidiary routes consistent with other resource values. (conserves habitat)
  - Objective LR:4.1 Manage public lands to meet the needs of ROW customers while supporting other resource values. (conserves habitat)
  - Objective LR:4.3 Identify infrastructure corridors consistent with other resource values. (conserves habitat)
  - Objective LR:4.4 Make opportunities available for exploration and development of Carbon Dioxide (CO_2) sequestration research and activities, while avoiding or mitigating impacts of these activities on other resource values. (conserves habitat)
- ROW-6001: Designate corridors for major ROW to minimize surface disturbance and impacts to other resources. (conserves habitat)
- ROW-6004: The preferred location for new ROW will be in or adjacent to existing disturbed areas associated with existing ROW, constructed roads, or highways. (conserves habitat)
- ROW-6005: Maintain a transportation management system in cooperation with appropriate state and local agencies to meet public and resource management needs. (conserves habitat)
- ROW-6009: Designate the following corridors for major ROW transportation and utility use, (Map 58), in cooperation with the State of Wyoming: Echeta Road; Sheridan to Gillette, largely following US 14/16; Highway 59 north of Gillette; Interstate 25; Interstate 90; Gillette to Montana State Line; Powder River; Powder River Breaks (Buffalo to Gillette). Corridor use is required. No above ground lines will be authorized in the Powder River or Powder River Breaks corridors. Lines must be buried within Greater Sage-Grouse Core Population Areas unless within 0.5 mile either side of existing 115 kV or larger transmission lines creating a corridor no wider than 1.0 mile. (conserves habitat)
- ROW-6010: Authorize and place above ground facilities (i.e., compressors, electric distribution powerlines) within ROW and other disturbance areas when resource objectives can be met. (conserves habitat)
- ROW-6012: Evaluate CO_2 sequestration proposals where in accordance with management identified within Alternative D. (conserves habitat)

Withdrawals
Included under the resource for which the withdrawal or closure is recommended.

Mineral Resources

Leasables – Fluid Minerals
- O&G-2001: Continue to require lessees to conduct operations in a manner that minimizes adverse impacts to other resources and other land uses and users. (conserves habitat)

Locatable Minerals
- Objective MR:1.1 Provide opportunities for the exploration and development of locatable minerals, as well as mill and tunnel site operations, while avoiding or mitigating the effects of

these activities on other resource values so that unnecessary or undue degradation is prevented. (conserves habitat)

Salable Minerals (Mineral Materials)

- Objective MR:5.1 Provide opportunities for exploration and development of salable minerals while avoiding or mitigating effects to other resource values. (conserves habitat)

Leasables – Coal

- Objective MR:2.1 Maintain coal leasing and exploration, while minimizing impacts to other resource values. (conserves habitat)

Leasables – Other (Non-energy Leasables)

No proposed management directly related to Greater Sage-Grouse conservation; no foreseeable commercial potential within the planning area.

Travel and Transportation Management

- Goal LR:5 A safe transportation network that supports other resource values. (conserves habitat)
  - Objective LR:5.1 Utilize a comprehensive travel management approach to sustain and enhance access, recreational experiences, and support other resource values. (conserves habitat)
  - Objective LR:5.3 Designate all BLM-administered lands as Open, Limited, or Closed to Off-highway Vehicle (OHV) use, in consideration of other resource values. (conserves habitat)
  - Objective LR:5.4 Provide for acceptable modes of legal public access that supports other resources, reduces conflicts, and provides for diverse recreation opportunities. (conserves habitat)
- Trans-6002: Evaluate roads constructed under other initiatives (e.g., oil and gas exploration) for inclusion in the BLM transportation system. Roads that are no longer needed for their original purposes are assessed for addition to the BLM transportation system prior to reclamation. (conserves habitat)
- Trans-6004: Design, construct, and maintain roads or trails based on the specific objectives for that trail or road in consideration of other resources. Design, construct, and maintain roads to minimize surface disturbance, changes to surface water runoff, and erosion. (conserves habitat)
- Trans-6006: Base road or trail closures and abandonments on resource protection, demand for new roads and accommodation of authorized uses. (conserves habitat)
- Trans-6007: Maintain transportation system roads under BLM jurisdiction in accordance with assigned maintenance levels and in consideration of other resource values. Maintain administrative roads on an as needed basis, dependent on time, funding, and access priorities. (conserves habitat)
- Trans-6008: Within 5 years of the ROD, inventory all routes on public land and develop a Travel Management Plan to classify and designate routes for continued use or decommissioning and reclamation. (conserves habitat)
- Trans-6014: Limit OHV use to designated routes unless compelling reasons exist to classify parcels as Open or Closed, and is consistent with other resource values. (conserves habitat)
- Trans-6019: Limit motorized vehicle use to designated routes within habitat of special status species consistent with travel management designations for that area. Routes will be designated to avoid occupied habitat during travel management planning. (conserves habitat)
- Trans-6020: Evaluate existing routes in the vicinity of any new system roads for closure and reclamation consistent with other resource values. (conserves habitat)

Recreation

- Objective LR:7.2 Manage recreation to protect resources, maintain public health and safety, and to provide a diverse array of benefits to the public. (conserves habitat)
- Goal LR:8 Recreation facilities balance public demand with other resource values. (conserves habitat)
  - Objective LR:8.1 Design and maintain recreation sites to meet acceptable health and safety standards while supporting other resource values. (conserves habitat)
- Rec-6003: Open the planning area to dispersed recreation where consistent with other resource values. (conserves habitat)
- Rec-6010: Avoid riparian habitat or develop and manage recreational sites, recreation facilities, and recreational access in a manner that minimizes impacts to riparian habitats. (conserves brood-rearing habitat)
- Rec-6011: Prohibit dispersed camping and commercial camps within 200 feet of perennial surface water. (conserves brood-rearing habitat)
- Rec-6015: Allow additional recreation facilities in areas where they are supported by recreational use and are consistent with other resource values. (conserves habitat)
- Rec-6018: Designate the following areas as Special Recreation Management Areas (SRMAs) and delineate discrete recreation management zone boundaries (Map 71): Burnt Hollow (17,280 acres); Dry Creek Petrified Tree (2,567 acres); Hole-in-the-Wall (11,952 acres); Middle Fork Powder River (10,083 acres); Mosier Gulch (1,026 acres); Welch Ranch (1,748 acres); Weston Hills (9,504 acres). Strategically emphasize a variety of recreation opportunities along with the protection of natural and cultural resources. Recreation and Visitor Services (R&VS) management will be recognized as the predominant land use focus in SRMAs. (conserves habitat)
- Rec-6019: Do not lease minerals within the boundary of all SRMAs except Weston Hills (CSU). (conserves habitat)
- Rec-6021: Allow surface disturbance within designated SRMAs for administrative use only, where consistent with other resource values. (conserves habitat)
- Rec-6022: Recommend withdrawals from mineral entry under the mining laws in designated SRMAs. (conserves habitat)
- Rec-6023: Allow salable mineral development within designated SRMAs for administrative use only. (conserves habitat)

Special Designations

No proposed Special Designation management directly related to Greater Sage-Grouse conservation.

Other Resources

Soil

- Objective PR:2.1 Achieve and maintain Standards for Healthy Rangelands and Guidelines for Livestock Grazing Management for the Public Lands Administered by the BLM in the State of Wyoming. (conserves habitat)
- Objective PR:2.3 Rehabilitate all surface-disturbing activities consistent with applicable laws, regulations, and policies. (promotes habitat restoration)
- Soil-1002: 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. (promotes habitat restoration)

Water

- Goal PR:3 Watershed, surface water, and groundwater resources are consistent with applicable state and federal standards and regulations. (conserves habitat)
  - Objective PR:3.1 BLM actions maintain or improve watershed, wetland, and riparian functions to support desired surface-flow regimes and water quality. (conserves habitat)
- Water-1007: Design and manage land use and surface-disturbing activities to reduce channel and bank erosion and the associated loss of riparian habitats. (conserves brood-rearing habitat)
- Water-1013: Allow surface disturbance within 500 feet of springs, non-CBNG reservoirs, water wells, or perennial streams where water and other resource objectives (including, but not limited to soil, slope, and vegetation) can be met. (Water-1014: Fluid Mineral leasing CSU) (conserves brood-rearing habitat)
- Water-1016: Evaluate unneeded reservoirs for removal and reclamation. (promotes habitat restoration)

Fish and Wildlife Resources

- Goal BR:6 Distribution and abundance of all native and desirable non-native species are optimized. (conserves populations)
  - Objective BR:6.1 BLM actions prevent and/or reduce impacts to desirable species. (conserves habitat and populations)
  - Objective BR:6.2 In coordination with cooperating agencies, develop and implement an achievable Wildlife Monitoring and Protection Plan. (conserves habitat and populations)
  - Objective BR:6.3 Maintain, restore, or improve the continuity and productivity of fish and wildlife habitats to support WGFD population objectives. (conserves habitat)
  - Objective BR:6.4 Develop and implement an adaptive conservation and management strategy. (conserves habitat and populations)
- Goal BR:7 Sufficient functional habitat for native and desirable non-native species. (conserves habitat)
  - Objective BR:7.1 Evaluate, update, and revise as necessary existing Wildlife Habitat Management Plans. (conserves habitat)
  - Objective BR:7.2 Develop Wildlife Habitat Management Plans for areas with important habitats. (conserves habitat)
  - Objective BR:7.3 Manage habitat consistent with local, state, and federal management plans, as applicable. (conserves habitat)
  - Objective BR:7.4 Continue to gather habitat and population data while concurrently monitoring human and natural disturbance dynamics to improve habitat management. (conserves habitat and populations)
  - Objective BR:7.5 Provide security habitat, sufficient in amount and distribution, to support WGFD population objectives for fish and wildlife to escape from disruptive activities. (conserves habitat)
  - Objective: BR:7.6 Maintain and provide functioning sagebrush habitat to sustain sagebrush obligates and other sagebrush dependent species. (conserves habitat)
- Goal BR:8 Fish and wildlife are able to move between areas of functionally intact habitat. (conserves habitat and populations)
  - Objective BR:8.1 Develop Travel Management Plans for areas important for fish and wildlife while supporting other resource values. (conserves habitat and populations)
  - Objective BR:8.2 Develop a ROW Management Plan for utility corridors to manage impacts to areas of habitat important to fish and wildlife consistent with other resource values. (conserves habitat)

  - Objective BR:8.3 Land acquisitions should support desirable fish and wildlife populations or habitat. (conserves habitat)
  - Objective BR:8.4 Restore functionality to areas of degraded habitat important to fish and wildlife populations consistent with other resource values. (conserves habitat and populations)
- Fish-4008: Maintain or enhance streams and riparian areas associated with Class I and II streams (WGFD classifications), Powder River, Tongue River, and other appropriate areas for desired fisheries potential. (conserves brood-rearing habitat)
- Fish-4012: Allow surface-disturbing activities within 0.25 mile of naturally occurring water bodies containing native and desirable non-native fish species where fish resource objectives can be met. (Fish-4013: Fluid Mineral leasing CSU) (conserves brood-rearing habitat)
- WL-4001: Develop appropriate mitigation for surface-disturbing and disruptive activities associated with wildlife habitat management through use of the mitigation guidelines described in Appendix J (p. 2155). (conserves habitat)
- WL-4002: Maintain or improve important wildlife habitats through vegetative manipulations, habitat improvement projects, livestock grazing strategies, and the application of The Wyoming Guidelines for Managing Sagebrush Communities with Emphasis on Fire Management (Wyoming Interagency Vegetation Committee 2002) and Appendix J (p. 2155), WGFD Strategic Habitat Plan (WGFD 2001), State Wildlife Action Plan (SWAP) (WGFD 2010b), and similar guidance updated over time. (conserves habitat)
- WL-4003: Continue to use existing Habitat Management Plans and update as necessary to include management objectives and prescriptions for wildlife: South Big Horns Habitat Management Plan (BLM 1986c), including a portion or all of the Gardner Mountain and North Fork Wilderness Study Areas (WSAs); Wetlands Habitat Management Plan (BLM 1986b); and Middle Fork Powder River Habitat Management Plan (BLM 1980). (conserves habitat)
- WL-4005: Consult with the WGFD and USFWS, in accordance with MOUs, when applying mitigation for wildlife and before waiving, allowing exceptions to, or modifying wildlife-related land use restrictions and mitigation. (conserves habitat and populations)
- WL-4006: Provide, to the extent possible, suitable habitat and forage to support wildlife population objectives as defined by WGFD. BLM will cooperatively consider proposals by the WGFD to change population objective levels based on habitat capability and availability. (conserves habitat and populations)
- WL-4007: Manage access to protect crucial habitats in cooperation with WGFD and other stakeholders. (conserves habitat)
- WL-4008: Utilize current research, management and conservation plans, and similar related documents to guide wildlife habitat management. (conserves habitat)
- WL-4009: Construct new fences to avoid adverse impacts to wildlife and in accordance with BLM Fencing Handbook 1741-1 (BLM 1989) and WO IM 2010–022: Managing Structures for the Safety of Sage-grouse, Sharp-tailed grouse, and Lesser prairie chicken (BLM 2009e). (conserves habitat and populations)
- WL-4012: Inventory, record, and report existing type, condition and location of BLM fences. Prioritize fence projects and annually implement modifications in accordance with appropriate wildlife needs and the BLM Fencing Handbook 1741-1. (conserves habitat and populations)
- WL-4013: Allow surface-disturbing and disruptive activities to occur throughout the entire life of projects during seasons important for wildlife when wildlife resource objectives can be met. (conserves habitat and populations)
- WL-4014: Powerlines (distribution and transmission) will be designed to minimize wildlife related impacts and constructed to the latest APLIC standards. Prohibit above ground

distribution powerlines unless identified in an approved distribution plan. (conserves habitat and populations)

Cultural Resources

- Cultural-5007: Allow surface disturbance and infrastructure within 3.0 miles of the following sites where development is either not visible, or will result in a weak contrast to the setting: Pumpkin Buttes, Cantonment Reno, Dull Knife Battle, Crazy Woman Battle, Contributing and Unevaluated Segments of the Bozeman Trail, All Rock Art Sites, All Native American Burials. (conserves habitat)

Paleontological Resources

- Paleo-5001: Retain public lands with significant paleontological values (Map 47). (conserves habitat)
- Paleo-5006: Avoid areas containing paleontological resources of high quality or importance when developing locatable minerals. (conserves habitat)
- Paleo-5007: Apply an NSO stipulation to mineral leases in areas containing paleontological resources of high quality or importance. (conserves habitat)
- Paleo-5008: Avoid areas containing paleontological resources of high quality or importance when developing salable minerals. (conserves habitat)

Visual Resources

- VRM-5002: Incorporate BMPs for visual resources into project planning for federal actions. (conserves habitat)

RDFs are means, measures, or practices intended to reduce or avoid adverse environmental impacts. The Buffalo RMP proposes a suite of design features that would establish the minimum specifications for water developments, certain mineral development, and fire and fuels management and would mitigate adverse impacts. These design features would be required to provide a greater level of regulatory certainty than through implementing BMPs.

In general, the design features are accepted practices that are known to be effective when implemented properly at the project level. However, their applicability and overall effectiveness cannot be fully assessed except at the project-specific level when the project location and design are known. Because of site-specific circumstances, some features may not apply to some projects (e.g., when a resource is not present on a given site) or may require slight variations from what is described in the RMP/EIS (e.g., a larger or smaller protective area). All variations in design features would require appropriate analysis and disclosure as part of future project authorizations. Additional mitigation measures may be identified and required during individual project development and environmental review. The proposed RDFs are presented in Appendix D (p. 1863).

2.5.5. Adaptive Management Strategy for Greater Sage-Grouse

Management action SS WL-4010 directs that BLM's proposed management will include an adaptive management strategy for Greater Sage-Grouse.

Adaptive Management Plan

Wyoming ADPPs will include an adaptive management plan, as reviewed by the BLM WO, SOL, and USFWS, which includes: Upon determination that a hard trigger is tripped, the BLM will immediately defer issuance of discretionary authorizations for new actions within the Biologically Significant Unit for a period of 90 days. In addition, within 14 days of a determination, the Adaptive Management Working Group will convene to develop an interim response strategy and initiate an assessment to determine the causal factors.

Adaptive management is a decision process that promotes flexible resource management 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 with adjusting resource management directions as part of an iterative learning process. Adaptive management also recognizes 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.

In relation to the BLM/USFS' National Greater Sage-grouse Planning Strategy, adaptive management will help identify if Greater Sage-Grouse conservation measures presented in this EIS contain the needed level of certainty for effectiveness. Principles of adaptive management are incorporated into the conservation measures in the plan to ameliorate threats to a species, thereby increasing the likelihood that the conservation measure and plan will be effective in reducing threats to that species. The following provides the BLM adaptive management strategy for the Buffalo RMP.

Adaptive Management and Monitoring

This Proposed RMP contains a monitoring framework plan (Appendix B (p. 1779)) that includes an effectiveness monitoring component. The agencies intend to use the data collected from the effectiveness monitoring to identify any changes in habitat conditions related to the goals and objectives of the plan and other range-wide conservation strategies (DOI 2004; Stiver et al. 2006; USFWS 2013c). The information collected through the Monitoring Framework Plan outlined in Appendix B (p. 1779) will be used by the BLM/USFS to determine when adaptive management hard and soft triggers (discussed below) are met. The Greater Sage-Grouse adaptive management plan provides a means of addressing and responding to unintended negative impacts to Greater Sage-Grouse habitat will be addressed before consequences become severe or irreversible. This adaptive management plan:

- utilizes science based soft and hard adaptive management triggers,
- addresses multiple scales of data, and
- utilizes an adaptive management working group.

Adaptive Management Triggers

Adaptive management triggers are essential for identifying when potential management changes are needed in order to continue meeting Greater Sage-Grouse conservation objectives. With respect to Greater Sage-Grouse, all regulatory entities in Wyoming, including the BLM, use soft and hard triggers. Soft and hard triggers are focused on three metrics: (1) number of active leks, (2) acres of available habitat, and (3) population trends based on annual lek counts.

Soft Triggers:

Soft triggers are indicators that management or specific activities may not be achieving the intended results of conservation action or that unanticipated changes to populations or habitats have occurred that have the potential to place habitats or populations at risk. The soft trigger is

any deviation from normal trends in habitat or population in any given year. Metrics include, but are not limited to, annual lek counts, wing counts, aerial surveys, habitat monitoring, and DDCT evaluations. BLM field offices, with the assistance of their respective land and resource management plan implementation groups, local WGFD offices, and local Greater Sage-Grouse working groups will evaluate the metrics with the Adaptive Management Working Group (AMWG) on an annual basis. The purpose of these strategies is to address localized Greater Sage-Grouse population and habitat changes by providing the framework in which management will change if monitoring identifies negative population and habitat anomalies in order to avoid crossing a hard trigger threshold.

Hard Triggers:

Hard triggers are indicators that management is not achieving desired conservation results. Hard triggers would be considered a indicator that the species is not responding to conservation actions, or that a larger-scale impact or set of impacts is having a negative effect.

Within the range of normal population variables, hard triggers shall be determined to take effect when two of the three metrics exceeds 60 percent of normal variability for the area under management in a single year, or when any of the three metrics exceeds 40 percent of normal variability for a three year time period within a five-year range of analysis. A minimum of three consecutive years in a five-year period is used to determine trends (i.e., Y1-2-3, Y2-3-4, Y3-4-5).

Baseline Greater Sage-Grouse population levels are established by pre-disturbance surveys, reference surveys and accounting for regional and statewide trends in population levels. Population counts in Wyoming are maintained by the WGFD. Estimates of population are determined based upon survey protocols determined by the WGFD, and are implemented consistently throughout the State. Population counts are tracked for individual leks and then calculated for each Core Population Area (PHMA).

Adaptive Management Response

Soft Triggers Response:

Soft triggers require immediate monitoring and surveillance to determine causal factors and may require curtailment of activities in the short- or long-term, as allowed by law. The project level adaptive management strategies will identify appropriate responses where the project's activities are identified as the causal factor. The management agency (BLM) and the AMWG will implement an appropriate response strategy to address causal factors not attributable to a specific project or to make adjustments at a larger regional or state-wide level.

Hard Trigger Response:

Upon determination that a hard trigger has been tripped, the BLM will immediately defer issuance of discretionary authorizations for new actions within the Biologically Significant Unit for a period of 90 days. In addition, within 14 days of a determination that a hard trigger has been tripped, the AMWG will convene to develop an interim response strategy and initiate an assessment to determine the causal factor or factors (hereafter called the causal factor assessment).

An interim response strategy will be developed, and implemented to the extent permitted by law, within 90 days of determination that a hard trigger has been tripped. The technical team (see Appendix B (p. 1779)) will be consulted to identify the scope and scale of the interim strategy. Based on the recommendation of the AMWG, the BLM will implement an interim response strategy through an Instruction Memorandum or other management mechanisms to direct management until the causal factor(s) and appropriate response(s) can be determined. The interim response strategy will consist of appropriate management measures undertaken at the

project stage, supported by the best available science, to address the specific metric which has been tripped and may include deferral of some activities as appropriate. Measures that were analyzed in this EIS and the COT, NTT reports, and NPT guidance will be reviewed in addition to current science to identify the most appropriate measures to be implemented as part of the interim response strategy. The BLM will comply with all applicable law in implementing such response(s), and, if applicable, will undertake a plan amendment or revision under BLM's planning regulations and policies.

2.5.6. Regional Mitigation for Greater Sage-Grouse Habitat Management

Consistent with the proposed plan's goals outlined in Table 2.7, "1000 PHYSICAL RESOURCES (PR) – AIR QUALITY (AQ)" (p. 127) through Table 2.40, "8000 SOCIOECONOMIC RESOURCES (SR) – HEALTH AND SAFETY" (p. 275), the intent of the Proposed Plan is to provide a net conservation gain to the species. To do so, in undertaking BLM management actions, and, consistent with valid existing rights and applicable law, in authorizing third party actions that result in habitat loss and degradation within priority habitat (core population areas and core population connectivity corridors), the BLM will require and ensure mitigation that provides a net conservation gain to the species including accounting for any uncertainty associated with the effectiveness of such mitigation. This will be achieved by avoiding, minimizing, and compensating for impacts by applying beneficial mitigation actions. This is also consistent with BLM Manual 6840 – Special Status Species Management, Section .02B, which states "to initiate proactive conservation measures that reduce or eliminate threats to Bureau sensitive species to minimize the likelihood of the need for listing of these species under the ESA."

Mitigation Standards. In undertaking BLM management actions, and, consistent with valid existing rights and applicable law, in authorizing third party actions that result in habitat loss and degradation, the BLM will require and ensure mitigation that provides a net conservation gain to the species including accounting for any uncertainty associated with the effectiveness of such mitigation. This will be achieved by avoiding, minimizing, and compensating for impacts by applying beneficial mitigation actions. Mitigation will follow the regulations from the White House Council on Environmental Quality (CEQ) (40 CFR 1508.20; e.g., avoid, minimize, and compensate), hereafter referred to as the mitigation hierarchy. If impacts from BLM management actions and authorized third party actions that result in habitat loss and degradation remain after applying avoidance and minimization measures (i.e. residual impacts), then compensatory mitigation projects will be used to provide a net conservation gain to the species. Any compensatory mitigation will be durable, timely, and in addition to that which would have resulted without the compensatory mitigation (see the concepts of durability, timeliness, and additionality as described further in Appendix B (p. 1779)).

Greater Sage-Grouse Conservation Team. The BLM/USFS will establish a WAFWA Management Zone Greater Sage-Grouse Conservation Team (hereafter, Team) to help guide the conservation of Greater Sage-Grouse, within 90 days of the issuance of the ROD. This Team will develop a WAFWA Management Zone Regional Mitigation Strategy (hereafter, Regional Mitigation Strategy). The Team will also compile and report on monitoring data (including data on habitat condition, population trends, and mitigation effectiveness) from States across the WAFWA Management Zone (see Monitoring section). Subsequently, the Team will use these data to either modify the appropriate Regional Mitigation Strategy or recommend adaptive management actions (see Adaptive Management section).

The BLM/USFS will invite governmental and Tribal partners to participate in this Team, including the State Wildlife Agencies and USFWS, in compliance with the exemptions provided for committees defined in the Federal Advisory Committee Act and the regulations that implement that act. The BLM/USFS will strive for a collaborative and unified approach between Federal agencies (e.g., USFWS, BLM, and USFS), Tribal governments, state and local government(s), and other stakeholders for greater sage-grouse conservation. The Team will provide advice, and will not make any decisions that impact Federal lands. The BLM/USFS will remain responsible for making decisions that affect Federal lands.

Developing a Regional Mitigation Strategy. The Team will develop a Regional Mitigation Strategy to inform the mitigation components of NEPA analyses for BLM/USFS management actions and third party actions that result in habitat loss and degradation. The Strategy will be developed within one year of the issuance of the ROD. The BLM's Regional Mitigation Manual MS-1794 will serve as a framework for developing the Regional Mitigation Strategy. The Regional Mitigation Strategy will be applicable to the States/Field Offices/Forests within the WAFWA Management Zone's boundaries.

Regional mitigation is a landscape-scale approach to mitigating impacts to resources. This involves anticipating future mitigation needs and strategically identifying mitigation sites and measures that can provide a net conservation gain to the species. The Regional Mitigation Strategy developed by the Team will elaborate on the components identified above (i.e. avoidance, minimization, and compensation; additionality, timeliness, and durability) and further explained in Appendix B (p. 1779).

In the time period before the Strategy is developed, BLM will consider regional conditions, trends, and sites, to the greatest extent possible, when applying the mitigation hierarchy and will ensure that mitigation is consistent with the standards set forth in the first paragraph of this section.

Incorporating the Regional Mitigation Strategy into NEPA Analyses. The BLM will include the avoidance, minimization, and compensatory recommendations from the Regional Mitigation Strategy in one or more of the NEPA analysis' alternatives for BLM management actions and third party actions that result in habitat loss and degradation and the appropriate mitigation actions will be carried forward into the decision.

Implementing a Compensatory Mitigation Program. Consistent with the principles identified above, the BLM needs to ensure that compensatory mitigation is strategically implemented to provide a net conservation gain to the species, as identified in the Regional Mitigation Strategy. In order to align with existing compensatory mitigation efforts, this compensatory mitigation program will be implemented at a State-level (as opposed to a WAFWA Management Zone, a Field Office, or a Forest), in collaboration with our partners (e.g., Federal, Tribal, and State agencies).

To ensure transparent and effective management of the compensatory mitigation funds, the BLM will enter into a contract or agreement with a third-party to help manage the State-level compensatory mitigation funds, within one year of the issuance of the ROD. The selection of the third-party compensatory mitigation administrator will conform to all relevant laws, regulations, and policies. The BLM will remain responsible for making decisions that affect Federal lands.

2.5.7. Greater Sage-Grouse Habitat Management Objectives

BLM administrated surface will be managed to maintain a minimum of 70% of lands capable of producing sagebrush with 10-30% sagebrush canopy cover. BLM will incorporate Greater Sage-Grouse Seasonal Habitat Objectives (Table 2.4, "Seasonal Habitat Desired Conditions for Greater Sage-Grouse" (p. 82)) into the design of projects or activities, as appropriate, based on ecological site potential unless the NEPA analysis associated with the specific project can demonstrate other appropriate habitat conditions based on other factors such as:

- A specific objective is not applicable to the site-specific conditions of the project or activity;
- An alternative objective is determined to provide equal or better protection for Greater Sage-Grouse or its habitat (based on appropriate scientific findings);
- Analysis concludes that following a specific objective would provide no more protection to Greater Sage-Grouse or its habitat than not following it, for the project being proposed; or
- Achievement of fuels management objectives require additional reduction in sagebrush cover to meet strategic protection of Greater Sage-Grouse habitat and conserve habitat quality for the species.

This information should not be viewed as providing standards by which to judge the overall quality of sagebrush habitats. Instead, these Greater Sage-Grouse habitat characteristics should be used as one tool for assessing habitats and guiding management actions. There is a tendency to review each indicator and its suitability category independently, but site suitability is determined by the relationship among the several indicator values in each matrix and the relative abundance of habitat types across the landscape. It is important to understand that the desired conditions described for these habitat types are based on average plant productivity and structural data and expert opinion relative to Greater Sage-Grouse use of a subset of sagebrush communities and they may not apply to all sagebrush communities in the planning area variation (Davies and Bates 2006). These measures also do not account for inter-annual climate variation (Davies and Bates 2006). Individual indicator values do not define site suitability and overall site suitability descriptions require an interpretation of the relationships between the indicators and other factors. Professional expertise and judgment are required. Measurement of these objectives will follow the steps described in the Habitat Assessment Framework for Fourth Order Habitat Descriptions.

As described in the above paragraphs, the identified habitat objectives are averages and will vary based on the individual ecological sites and their potential. Ecological sites are the basic component of a land-type classification system that describes ecological potential and ecosystem dynamics of land areas. All land/land use types are identified within the ecological site system, including rangeland, pasture, and forest land. An ecological site is defined as a distinctive kind of land with specific soil and physical characteristics that differ from other kinds of land in its ability to produce a distinctive kind and amount of vegetation and its ability to respond similarly to management actions and natural disturbances. Lands are classified considering discrete physical and biotic factors. Physical factors include soils, climate, hydrology, geology, and physiographic features. Biotic factors include plant species occurrence, plant community compositions, annual biomass production, wildlife-vegetation interactions, and other factors. Ecological dynamics, primarily disturbance regimes, such as grazing; fire; drought; management actions; and all resulting interactions are also a primary factor of ecological sites. Information and data pertaining to a particular ecological site is organized into a reference document known as an ESD. ESDs function as a primary repository of ecological knowledge regarding an ecological site. ESDs are maintained on the NRCS Ecological Site Information System,

which is the repository for information associated with ESDs and the collection of all site data (https://esis.sc.egov.usda.gov/Welcome/pgESDWelcome.aspx).

The ESD can help interpret if a site's potential is less than or greater than the identified habitat objectives.

These habitat objectives in Table 2.4 summarize the characteristics that research has found represent the seasonal habitat needs for Greater Sage-Grouse. The specific seasonal components identified in the Table were adjusted based on local science and monitoring data to define the range of characteristics used in this subregion. Thus, the habitat objectives provide the broad vegetative conditions we strive to obtain across the landscape that indicate the seasonal habitats used by Greater Sage-Grouse. These habitat indicators are consistent with the rangeland health indicators used by the BLM.

The habitat objectives will be part of the Greater Sage-Grouse habitat assessment to be used during land health evaluations (see Monitoring Framework, Appendix B (p. 1779)). These habitat objectives are not obtainable on every acre within the designated Greater Sage-Grouse habitat management areas. Therefore, the determination on whether the objectives have been met will be based on the specific site's ecological ability to meet the desired condition identified in the table.

All BLM use authorizations will contain terms and conditions regarding the actions needed to meet or progress toward meeting the habitat objectives. If monitoring data show the habitat objectives have not been met nor progress being made towards meeting them, there will be an evaluation and a determination made as to the cause. If it is determined that the authorized use is a cause, the use will be adjusted by the response specified in the instrument that authorized the use.

In addition to the references identified in the following table (Table 2.4, "Seasonal Habitat Desired Conditions for Greater Sage-Grouse" (p. 82)), the Conservation Plans developed for each of the Wyoming Local Sage-Grouse Working Groups will be consulted to identify specific habitat objectives appropriate for site-specific conditions. The Conservation Plans, updated in March 2014, are available on the WGFD website at: https://wgfd.wyo.gov/web2011/wildlife-1000817.aspx.

Table 2.4. Seasonal Habitat Desired Conditions for Greater Sage-Grouse

ATTRIBUTE	INDICATOR	DESIRED CONDITION[7]	REFERENCES
BREEDING HABITAT (LEK AND NESTING/EARLY BROOD REARING)			Doherty. 2008. Sage-grouse and Energy Development: Integrating Science with Conservation Planning to Reduce Impacts. Holloran and Anderson. 2005. Spatial Distribution of Greater Sage-grouse nests in relatively contiguous sagebrush habitats.
Lek Security	Proximity of trees	Trees absent or uncommon on shrub/grassland ecological sites within 1.86 miles (3 km) of occupied leks.	Baruch-Mordo, S., J.S. Evans, J.P. Severson, D.E. Naugle, J.D. Maestas, J. M. Kiesecker, M.J. Falkowski, C.A. Hagen, and K.P. Reese. 2013. Saving sage-grouse from trees. Stiver, S.J., E.T. Rinkes, D.E. Naugle, P.D. Makela, D.A. Nance, and J.W. Karl. In Press. Sage-Grouse Habitat Assessment Framework: Multi-scale Habitat Assessment Tool. Bureau of Land Management and Western Association of Fish and Wildlife Agencies Technical Reference XXXX-X. U.S. Bureau of Land Management, Denver, Colorado.
	Proximity of sagebrush to leks	Adjacent protective sagebrush cover within 328 feet (100 m) of an occupied lek	Stiver, S.J., E.T. Rinkes, D.E. Naugle, P.D. Makela, D.A. Nance, and J.W. Karl. In Press. Sage-Grouse Habitat Assessment Framework: Multi-scale Habitat Assessment Tool. Bureau of Land Management and Western Association of Fish and Wildlife Agencies Technical Reference XXXX-X. U.S. Bureau of Land Management, Denver, Colorado.
NESTING/EARLY BROOD REARING[5]			

ATTRIBUTE	INDICATOR	DESIRED CONDITION[7]	REFERENCES
Cover and Food	Seasonal habitat extent	>80% of the nesting habitat meets the recommended vegetation characteristics, where appropriate (relative to ecological site potential, etc.).	Connelly, J.W., M.A. Schroeder, A.R. Sands, and C.E. Braun. 2000. Guidelines to manage sage-grouse populations and their habitats. Wildlife Society Bulletin 28:967-985.
	Sagebrush cover[2]	5-25%	Connelly, J.W., M.A. Schroeder, A.R. Sands, and C.E. Braun. 2000. Guidelines to manage sage-grouse populations and their habitats. Wildlife Society Bulletin 28:967-985. Connelly , J.W., K.P. Reese, and M.A. Schroeder. 2003. Monitoring of Greater sage-grouse habitats and populations. University of Idaho College of Natural Resources Experiment Station Bulletin 80. University of Idaho, Moscow, ID. Hagen, C.A., J.W. Connelly, and M.A. Schroeder. 2007. A meta-analysis of greater sage-grouse Centrocercus urophasianus nesting and brood-rearing habitats. Wildlife Biology 13 (Supplement 1):42-50. Wyoming Executive Order No. 2011-5. 2011. Greater Sage-Grouse Core Area Protection: Casper, Wyoming, Governor's Office, State of Wyoming. June 2, 2011.
	Sagebrush height Arid sites[3] Mesic sites[4]	4-31 inches (20.3-80cm) 12-31 inches (40-80cm)	Connelly, J.W., M.A. Schroeder, A.R. Sands, and C.E. Braun. 2000. Guidelines to manage sage-grouse populations and their habitats. Wildlife Society Bulletin 28:967-985.

ATTRIBUTE	INDICATOR	DESIRED CONDITION[7]	REFERENCES
	Predominant sagebrush shape	Predominantly spreading shape[5]	Stiver, S.J., E.T. Rinkes, D.E. Naugle, P.D. Makela, D.A. Nance, and J.W. Karl. In Press. Sage-Grouse Habitat Assessment Framework: Multi-scale Habitat Assessment Tool. Bureau of Land Management and Western Association of Fish and Wildlife Agencies Technical Reference XXXX-X. U.S. Bureau of Land Management, Denver, Colorado.
	Perennial grass cover [2] Arid sites[3] Mesic sites[4]	≥10% ≥15% Cool-season bunchgrasses preferred	Connelly, J.W., M.A. Schroeder, A.R. Sands, and C.E. Braun. 2000. Guidelines to manage sage-grouse populations and their habitats. Wildlife Society Bulletin 28:967-985. Stiver, S.J., E.T. Rinkes, D.E. Naugle, P.D. Makela, D.A. Nance, and J.W. Karl. In Press. Sage-Grouse Habitat Assessment Framework: Multi-scale Habitat Assessment Tool. Bureau of Land Management and Western Association of Fish and Wildlife Agencies Technical Reference XXXX-X. U.S. Bureau of Land Management, Denver, Colorado. Cagney, J., E. Bainter, B. Budd, T. Christiansen, V. Herren, M. Holloran, B. Rashford, M. Smith and J. Williams. 2010. Grazing influence, objective development, and management in Wyoming's greater sage-grouse habitat. University of Wyoming College of Agriculture Extension Bulletin B-1203. Laramie.

ATTRIBUTE	INDICATOR	DESIRED CONDITION[7]	REFERENCES
	Perennial grass height	Adequate nest cover >6 (15.2cm) in or as determined by ESD site potential and local variability.	Connelly, J.W., M.A. Schroeder, A.R. Sands, and C.E. Braun. 2000. Guidelines to manage sage-grouse populations and their habitats. Wildlife Society Bulletin 28:967-985. Connelly , J.W., K.P. Reese, and M.A. Schroeder. 2003. Monitoring of Greater sage-grouse habitats and populations. University of Idaho College of Natural Resources Experiment Station Bulletin 80. University of Idaho, Moscow, ID. Doherty, K.E., D.E. Naugle, J.D. Tack, B.L. Walker, J.M. Graham and J.L Beck. 2014. Linking Conservation Actions to Demography: Grass Height Explains Variation in Greater Sage-grouse Nest Survival. Wildlife Biology, 20(6):320–325. Hagen, C.A., J.W. Connelly, and M.A. Schroeder. 2007. A meta-analysis of greater sage-grouse Centrocercus urophasianus nesting and brood-rearing habitats. Wildlife Biology 13 (Supplement 1):42-50. Herman-Brunson, K.M., K.C. Jensen, N.W. Kaczor, C.C. Swanson, M.A. Rumble, and R.W. Klaver. 2009. Nesting Ecology of Greater Sage-Grouse Centrocercus urophasianus at the Easter Edge of their Historic Distribution. Wildl. Biol. 15:237-246.

ATTRIBUTE	INDICATOR	DESIRED CONDITION[7]	REFERENCES
			Stiver, S.J., E.T. Rinkes, D.E. Naugle, P.D. Makela, D.A. Nance, and J.W. Karl. In Press. Sage-Grouse Habitat Assessment Framework: Multi-scale Habitat Assessment Tool. Bureau of Land Management and Western Association of Fish and Wildlife Agencies Technical Reference XXXX-X. U.S. Bureau of Land Management, Denver, Colorado.
	Perennial forb cover [2] Arid sites[3] Mesic sites[4]	≥5% ≥10%	Connelly, J.W., M.A. Schroeder, A.R. Sands, and C.E. Braun. 2000. Guidelines to manage sage-grouse populations and their habitats. Wildlife Society Bulletin 28:967-985.
	Perennial forb availability	Preferred forbs are common with several species present	Stiver, S.J., E.T. Rinkes, D.E. Naugle, P.D. Makela, D.A. Nance, and J.W. Karl. In Press. Sage-Grouse Habitat Assessment Framework: Multi-scale Habitat Assessment Tool. Bureau of Land Management and Western Association of Fish and Wildlife Agencies Technical Reference XXXX-X. U.S. Bureau of Land Management, Denver, Colorado.
LATE BROOD-REARING/SUMMER[1] (July-October)[1] (Apply to all habitat outside of nesting/breeding and winter)			
Cover and Food	Seasonal habitat extent	>40% of the summer/brood habitat meets recommended brood habitat characteristics where appropriate (relative to ecological site potential, etc.)	Connelly, J.W., M.A. Schroeder, A.R. Sands, and C.E. Braun. 2000. Guidelines to manage sage-grouse populations and their habitats. Wildlife Society Bulletin 28:967-985.

ATTRIBUTE	INDICATOR	DESIRED CONDITION[7]	REFERENCES
	Sagebrush cover[2]	5-25%	Connelly, J.W., M.A. Schroeder, A.R. Sands, and C.E. Braun. 2000. Guidelines to manage sage-grouse populations and their habitats. Wildlife Society Bulletin 28:967-985. Wyoming Executive Order No. 2011-5. 2011. Greater Sage-Grouse Core Area Protection: Casper, Wyoming, Governor's Office, State of Wyoming. June 2, 2011.
	Sagebrush height	4 to 32 inches (20.3-80cm)	Connelly, J.W., M.A. Schroeder, A.R. Sands, and C.E. Braun. 2000. Guidelines to manage sage-grouse populations and their habitats. Wildlife Society Bulletin 28:967-985.
	Perennial grass canopy cover[2]	>15%	Connelly, J.W., M.A. Schroeder, A.R. Sands, and C.E. Braun. 2000. Guidelines to manage sage-grouse populations and their habitats. Wildlife Society Bulletin 28:967-985.
	Upland and riparian perennial forb availability[2]	Preferred forbs are common with several preferred species present[6]	Stiver, S.J., E.T. Rinkes, D.E. Naugle, P.D. Makela, D.A. Nance, and J.W. Karl. In Press. Sage-Grouse Habitat Assessment Framework: Multi-scale Habitat Assessment Tool. Bureau of Land Management and Western Association of Fish and Wildlife Agencies Technical Reference XXXX-X. U.S. Bureau of Land Management, Denver, Colorado.

ATTRIBUTE	INDICATOR	DESIRED CONDITION[7]	REFERENCES
	Riparian meadow habitat condition	Proper Functioning Condition	Stiver, S.J., E.T. Rinkes, D.E. Naugle, P.D. Makela, D.A. Nance, and J.W. Karl. In Press. Sage-Grouse Habitat Assessment Framework: Multi-scale Habitat Assessment Tool. Bureau of Land Management and Western Association of Fish and Wildlife Agencies Technical Reference XXXX-X. U.S. Bureau of Land Management, Denver, Colorado.
WINTER[1] November-March[1] (Apply to areas of known or likely winter-use)			
Cover and Food	Seasonal habitat extent	>80% of the wintering habitat meets winter habitat characteristics where appropriate (relative to ecological site, etc.).	Connelly, J.W., M.A. Schroeder, A.R. Sands, and C.E. Braun. 2000. Guidelines to manage sage-grouse populations and their habitats. Wildlife Society Bulletin 28:967-985.
	Sagebrush cover above snow[2]	>5%	Connelly, J.W., M.A. Schroeder, A.R. Sands, and C.E. Braun. 2000. Guidelines to manage sage-grouse populations and their habitats. Wildlife Society Bulletin 28:967-985. Stiver, S.J., E.T. Rinkes, D.E. Naugle, P.D. Makela, D.A. Nance, and J.W. Karl. In Press. Sage-Grouse Habitat Assessment Framework: Multi-scale Habitat Assessment Tool. Bureau of Land Management and Western Association of Fish and Wildlife Agencies Technical Reference XXXX-X. U.S. Bureau of Land Management, Denver, Colorado. Wyoming Executive Order No. 2011-5. 2011. Greater Sage-Grouse Core Area Protection: Casper, Wyoming, Governor's Office, State of Wyoming. June 2, 2011.

ATTRIBUTE	INDICATOR	DESIRED CONDITION[7]	REFERENCES
	Sagebrush height above snow	.>10 inches (>25 cm)	Connelly, J.W., M.A. Schroeder, A.R. Sands, and C.E. Braun. 2000. Guidelines to manage sage-grouse populations and their habitats. Wildlife Society Bulletin 28:967-985.

[1] Seasonal dates can be adjusted by local unit according to geographic region.
[2] Absolute cover is the actual recorded cover and can exceed 100% when recorded across all species and all layers. It is not relative cover, which is the proportions of each species, and equals 100%. Note that cover is reported for only those species (e.g., sagebrush, preferred forbs) that are sampled to determine suitability of habitat for sage-grouse. Overall cover at the site will be greater than that sampled for sage-grouse habitat, due to other species present.
[3] Arid corresponds to the 10 – 12 inch precipitation zone; *Artemisia tridentata wyomingensis* is a common big sagebrush sub-species for this type site (Stiver et al. *In Press*).
[4] Mesic corresponds to the ≥12 inch precipitation zone; *Artemisia tridentata vaseyana* is a common big sagebrush sub-species for this type site (Stiver et al. *In Press*).
[5] Collectively the indicators for sagebrush (cover, height, and shape), perennial grass and perennial forb (cover, height and/or availability) represent the desired condition range for nesting/early brood rearing habitat characteristics, consistent with the breeding habitat suitability matrix identified in Stiver et al. *In Press*. Sagebrush plants that are more tree or columnar-shaped provide less protective cover near the ground than sagebrush plants with a spreading shape (Stiver et al. *In Press*). Some sagebrush plants are naturally columnar (e.g., Great Basin big sagebrush), and a natural part of the plant community. However, a predominance of columnar shape arising from animal impacts may warrant management investigation or adjustments at site specific scales.
[6] Preferred forbs are listed in Stiver et al. *In press* . Overall total forb cover may be greater than that of preferred forb cover since not all forb species are listed as preferred.
[7] All Desired Conditions will be dependent upon site capability and local variation (e.g., weather patterns, localized drought, ESD state, etc.).
[8]

> greater than
≥ greater than or equal to
% percent
cm centimeter
km kilometer
m meter

2.5.8. Powder River Basin Restoration Program

The PRB Restoration program is a collaborative partnership to restore and enhance Greater Sage-Grouse habitat on a landscape level in the PRB. The PRB encompasses 13,493,840 acres in northeast Wyoming and southeast Montana; surface ownership is approximately 70 percent private, 14 percent BLM (Wyoming 8%, Montana 6%), 8 percent USFS, and 8 percent States of Wyoming/Montana. Mineral ownership is 50-60 percent federal.

This BLM High Plains District Office PRB Restoration program was initiated in 2010 and was developed to form partnerships with local cooperators, federal and state agencies, private landowners, and industry to work collaboratively on Greater Sage-Grouse habitat restoration. PRB Restoration is focusing on areas affected by federal oil and gas development that has occurred over the past decade in the PRB in northeastern Wyoming

The exploration and development of CBNG has to date been the largest mineral development in the PRB. There have been approximately 21,000 CBNG wells drilled over a 12 year period (1998-2010) which has fragmented Greater Sage-Grouse habitat throughout the PRB.

Development included construction of well sites and other facilities (i.e., metering buildings, compressor stations, pumping stations), building of roads to access well sites, construction of pipelines to transport product and wastewater, construction of powerlines to bring electrical power to the wells and other infrastructure, and the construction of water holding impoundments to hold the produced water as the wells must be de-watered to reduce pressure before the natural gas is released. Hundreds of miles of pipelines were constructed to transport CBNG gas from development site to delivery point. Other pipelines include gathering, transportation and distribution pipelines and lines used to transport produced water to discharge points. With a well life of approximately 12 years, many of the CBNG wells that were originally drilled are depleted and ready for the abandonment phase. Most buried pipelines have reclaimed their native vegetative cover and will not be removed. Utility roads and overhead powerlines continue to fragment thousands of acres of Greater Sage-Grouse habitat on private, federal, and state lands.

Goals

- Build partnerships to restore habitat for the Greater Sage-Grouse in large landscape or watershed.
- Integrate habitat improvement programs and projects implemented by partners to leverage funding to enhance Greater Sage-Grouse habitat reclamation.
- Facilitate the sharing of data/data collection methods, monitoring data/methods, and BMPs.

Objectives

- Build partnerships with local governments, federal agencies, and communities to restore large landscape or watershed areas starting with small scale restoration.
- Restore* or enhance disturbed previously suitable habitat to suitable habitat for sagebrush obligate species, primarily Greater Sage-Grouse. This would include multiple sites affected by CBNG abandonment reclamation efforts, wildfires, and/or noxious/invasive plants. Priority will be given to those areas recognized as Priority Habitat (Core Population Areas and Core Population Connectivity Corridors). Habitat objectives include meeting the needs for nesting, brood-rearing, and late brood-rearing.
- Contribute to efforts focused on the management and control of mosquitoes carrying WNv. Contribution would be monetary, manpower, treatment locations, and other needs as determined.
- Reduce fuels in and near Greater Sage-Grouse habitat to enhance sagebrush stands, support restoration efforts, and to reduce future risk of high severity wildfire. Manage conifer forests and woodlands for structural diversity, to reduce encroachment into sagebrush, and to reduce fuels, especially near priority habitat, human developments, and recreation areas.
- Restore health to grassland/shrubland plant communities by managing annual bromes.

*Restoration efforts will include but are not limited to: cheatgrass treatments (herbicide and/or mowing), seeding/interseeding forbs, planting sagebrush, conifer removal in sagebrush plant communities, fence marking, noxious/invasive plant treatments, and solar systems for livestock/wildlife watering.

Partners

Partners contribute technical expertise and/or financial support on three areas of emphasis. The first and primary emphasis is restoration of affected areas by the abandonment of CBNG wells and associated infrastructure, the second is restoration of vegetation communities adversely impacted by wildfires, and third is restoration of areas outside of CBNG development with first priority given to those locations within priority habitat, followed by other habitats of high value.

Current partners in the PRB Restoration include Conservation Districts (Lake DeSmet, Powder River, Campbell County, and Sheridan County), NRCS, WGFD, private landowners, oil and gas companies, Northeast Wyoming Sage-Grouse Local Working Group, BLM Wyoming Resource Advisory Council, University of Wyoming, Sheridan College, State of Wyoming, Thunder Basin Grassland Prairie Ecosystem Association, USFWS, and others.

Healthy Land Initiatives

PRB Restoration is one of three Healthy Land Initiative focal areas for BLM Wyoming. The Healthy Land Initiative is a major vegetation resources enhancement initiative to restore and improve the health and productivity of western public lands. The Healthy Land Initiative strategy increases the effectiveness and efficiencies of vegetation enhancement treatments by focusing on treatments on a substantial percentage of lands (focal areas) – both federal and non-federal – rather than focusing on the local project level. The strategy increases opportunities to leverage cooperative solutions across ownerships and jurisdictions.

The lands in Utah, Wyoming, New Mexico, Oregon, Idaho, Nevada, and Colorado were selected because they encompass Greater Sage-Grouse habitat or other important wildlife habitat in the wildlife - energy interface. Restoring Greater Sage-Grouse habitat is crucial because the Greater Sage-Grouse habitat ranges across 10 states covering more than 100 million acres, with 64 percent of the acreage under federal management.

Treating wildlife habitat in the wildlife-energy interface is important because BLM is clearly at a national crossroads for restoring habitats for a variety of species in a manner that keeps pace with the country's energy needs and demands. Energy production on BLM-administered lands provides 5 percent of our nation's oil, 18 percent of our nation's gas, and 44 percent of our nation's coal. Smaller scale, project-by-project approaches are unlikely to be sufficient.

The Healthy Land Initiative of 2008 is a dramatic change from current practices because of the larger scope and faster pace of the habitat improvement efforts and the more intensive involvement of partners and other landowners. Increased funding and work with partners allows the BLM to:

- Concentrate a large number of treatments in each emphasis area, resulting in a substantial amount of improved habitat in an entire watershed or landscape-wide area in three to five years, rather than the typical 10 to 15 years based on standard funding levels.
- Leverage partnership funding at unprecedented levels.
- Establish or enhance existing partnerships with adjoining landowners, so that a large percent of landowners in the area (federal or non-federal) treat their lands.
- Reduce BLM's overall unit cost due to lower costs per acre from large scale projects.

Accomplishments

To date and in partnership, the PRB Restoration effort has:

On-the-ground projects

- applied herbicide treatment on about 1,250 acres of cheatgrass in priority habitat.
- applied herbicide treatment on about 22,700 acres of annual bromes in plant communities adversely impacted by wildfires located in priority habitat.
- planted about 440 acres of sagebrush – planting plugs and locally collected seeds.
- removed more than 1,500 conifer tress from upland sagebrush habitat to remove the vertical structures of avoidance and perches for raptors.

- collected native seed on 14 forb species, 14 shrub species, and 11 grass species through the work of volunteers and interns funded through the Seeds of Success program. Over 2 million viable sagebrush seeds were collected in 2012.

Educational events

- co-hosted tours for federal, state, and local agencies, elected officials, interested publics, National Public Radio.
- co-hosted workshops (1) for landowners affected by CBNG stressing the importance of the removal of CBNG wells and related infrastructure as it relates to restoring habitat, and (2) for landowners affected by recent wildfires emphasizing the importance of restoring habitats.
- supported graduate student research including (1) the collection of shed feathers at leks to help determine if there is genetic transfer occurring between populations and the distances of the genetic transfer, and (2) the ability of fathead minnows to overwinter in livestock reservoirs. Fathead minnows are being used to control mosquito larvae potentially carrying WNv.

Future

Over the next 10 to 15 years these types of projects will continue as the reclamation effort in the PRB continues. Partnerships, funding, monitoring, and adaptive management will help drive the future of the PRB Restoration effort.

Overall, the initiative allows BLM to do more in substantially less time due to the substantial funding increase. Focusing funds in each of these six areas to a watershed or large landscape area will:

- prevent weeds from spreading;
- prevent the spread of insect infestations that harm native habitat;
- keep habitat suitable so that wide-ranging species can flourish; and
- prevent rare species from being listed.

2.5.9. Monitoring Framework for Greater Sage-Grouse Habitat Management

The BLM's planning regulations, specifically 43 CFR 1610.4-9, require that land use plans establish intervals and standards for monitoring based on the sensitivity of the resource decisions. Land use plan monitoring is the process of tracking the implementation of land use plan decisions (implementation monitoring) and collecting data/information necessary to evaluate the effectiveness of land use plan decisions (effectiveness monitoring). For Greater Sage-Grouse, these types of monitoring are also described in the criteria found in the Policy for Evaluation of Conservation Efforts When Making Listing Decisions (50 CFR Vol. 68, No. 60). One of the Policy for Evaluation of Conservation Efforts When Making Listing Decisions criteria evaluates whether provisions for monitoring and reporting progress on implementation (based on compliance with the implementation schedule) and effectiveness (based on evaluation of quantifiable parameters) of the conservation effort are provided.

A guiding principle in the BLM National Sage-grouse Conservation Strategy (DOI 2004) is that "the Bureau is committed to sage-grouse and sagebrush conservation and will continue to adjust and adapt our National Sage-grouse Strategy as new information, science, and monitoring results evaluate effectiveness over time." In keeping with the WAFWA Sage-grouse Comprehensive Conservation Strategy (Stiver et al. 2006) and the Greater Sage-grouse Conservation Objectives:

Final Report (USFWS 2013c), the BLM will monitor implementation and effectiveness of conservation measures in Greater Sage-Grouse habitats.

On March 5, 2010, USFWS' 12-Month Findings for Petitions to List the Greater Sage-Grouse (*Centrocercus urophasianus*) as Threatened or Endangered were posted as a FR notice (75 FR 13910-14014, March 23, 2010). This notice stated:

"…the information collected by BLM could not be used to make broad generalizations about the status of rangelands and management actions. There was a lack of consistency across the range in how questions were interpreted and answered for the data call, which limited our ability to use the results to understand habitat conditions for sage-grouse on BLM lands."

Standardization of monitoring methods and implementation of a defensible monitoring approach (within and across jurisdictions) will resolve this situation. The BLM, USFS, and other conservation partners use the resulting information to guide implementation of conservation activities.

Monitoring strategies for Greater Sage-Grouse habitat and populations must be collaborative, as habitat occurs across jurisdictional boundaries (52 percent on BLM-administered lands, 31 percent on private lands, 8 percent on National Forest System lands, 5 percent on state lands, 4 percent on tribal and other federal lands) (75 FR 13910, March 23, 2010), and state fish and wildlife agencies have primary responsibility for population level wildlife management, including population monitoring. Therefore, population efforts will continue to be conducted in partnership with state fish and wildlife agencies. The BLM and USFS have finalized a monitoring framework, which can be found in Appendix B (p. 1779). This framework describes the process that the BLM will use to monitor implementation and effectiveness of RMP decisions. The monitoring framework includes methods, data standards, and intervals of monitoring at broad and mid scales; consistent indicators to measure and metric descriptions for each of the scales; analysis and reporting methods; and the incorporation of monitoring results into adaptive management. The need for fine-scale and site-specific habitat monitoring may vary by area depending on existing conditions, habitat variability, threats, and land health. Indicators at the fine and site scales will be consistent with the Habitat Assessment Framework; however, the values for the indicators could be adjusted for regional conditions.

More specifically, the framework discusses how the BLM and USFS will monitor and track implementation and effectiveness of planning decisions (e.g., tracking of waivers, modifications, site-level actions). The two agencies will monitor the effectiveness of RMP decisions in meeting management and conservation objectives. Effectiveness monitoring will include monitoring disturbance in habitats, as well as landscape habitat attributes. To monitor habitats, the BLM and USFS will measure and track attributes of occupied habitat, priority habitat, and general habitat at the broad scale, and attributes of habitat availability, patch size, connectivity, linkage/connectivity habitat, edge effect, and anthropogenic disturbances at the mid-scale. Disturbance monitoring will measure and track changes in the amount of sagebrush in the landscape and changes in the anthropogenic footprint, including change energy development density. The framework also includes methodology for analysis and reporting for field offices, states, ranger districts, BLM districts, National Forests, and Forest regions, including geospatial and tabular data for disturbance mapping (e.g., geospatial footprint of new permitted disturbances) and management actions effectiveness.

2.6. Alternatives Considered, but not Carried Forward for Detailed Analysis

Several alternatives and management options were considered as possible methods of resolving resource management issues and conflicts, but after further review and consideration were not carried forward for detailed analysis. The alternatives listed below were not carried forward for detailed analysis because (1) they would not fulfill requirements of the Federal Land Policy and Management Act (FLPMA) or other existing laws or regulations, (2) they did not meet the purpose and need, (3) they were already part of an existing plan, policy, or administrative function, or (4) they did not fall within the limits of the planning criteria. These alternatives considered, but not carried forward have been grouped by resource topic, although several may apply to more than one resource.

2.6.1. Physical Resources

Preserve Minimum Instream Flows

The BLM considered, but eliminated from detailed analysis, alternatives to preserve minimum instream flows in the planning area. This alternative is outside the regulatory authority of the BLM as water management is under the jurisdiction of the Wyoming State Engineer's Office. Further, the State of Wyoming and private parties own much of the surface land and mineral estate within the planning area, and the BLM has no legal authority to direct water management on non-federally managed lands or in the development of non-federal mineral leases. BLM WYSO IM WY-2005-14 addresses water disposal and land application (BLM 2005e).

2.6.2. Mineral Resources

Recommend Mineral Withdrawal Across the Planning Area

The BLM considered, but eliminated from detailed analysis alternatives to recommend a withdrawal for the remainder of the planning area under the mining laws, even in the absence of an identified resource conflict. Recommending withdrawal of the entire planning area, even in the absence of a currently-identified resource conflict, would be inconsistent with the goals and objectives for mineral resources. Moreover, the BLM lacks the authority to close lands to the Mining Law in the planning process – its authority is limited to making recommendations for future withdrawals. Alternative B analyzes the impacts of recommending mineral withdrawal for resource conflicts on 467,897 acres of BLM surface (60%), and 618,256 acres of federal mineral estate (13%).

Suspend or Eliminate All Existing Federal Fluid Mineral Leasing

The BLM considered, but eliminated from detailed analysis suspending or eliminating all existing federal oil and gas leasing and development operations and canceling existing oil and gas leases. By law, the BLM must recognize all valid existing rights. The BLM's authority to suspend or cancel existing oil and gas leases is limited by regulation. The BLM can impose reasonable limits on the manner and pace of development, and limits of this type are evaluated in the alternatives analyzed in detail. Individual locations within the planning area which the BLM would close to fluid mineral leasing are also evaluated in the alternatives analyzed in detail.

Closure to Fluid Mineral Leasing

Closing the planning area to new leasing of federal fluid minerals, even where there are no identified resource conflicts, was considered but eliminated from further analysis. Closing the entire planning area to new fluid mineral leasing would not meet BLM's purpose and need. Oil and gas development is an authorized use of public lands and meets BLM's multiple use objectives. In addition, the federal fluid mineral estate in much of the planning area has already been leased (2,570,703 acres; 65%), and the majority of the leases are developed. Therefore, mineral development will continue as leases are subject to valid existing rights and much of the unleased acreage is intermingled with leased acreage.

Public scoping comments indicate a growing level of concern with the rate and scale of oil and gas leasing and development in the planning area. Making portions of the planning area unavailable for oil and gas leasing in response to other identified resource needs is addressed in the alternatives analyzed in detail.

Remove All Stipulations and Restrictions from Oil and Gas Leases

The BLM considered removing all stipulations and restrictions from existing oil and gas leases. The BLM can authorize waivers, modifications, and exceptions to stipulations on existing leases when appropriate given site-specific resource conditions. This alternative was eliminated from detailed analysis as BLM's authority to waive existing oil and gas lease stipulations is limited by regulation.

Phase Fluid Mineral Development

The BLM considered an alternative that would regulate the rate at which oil and gas development in the planning area occurred.

The State of Wyoming and private parties own much of the surface land and mineral estate within the planning area. The BLM is required to ensure that leased federal minerals are fully developed and that production on non-federal leases does not drain federal minerals. Given the extent of non-federal mineral ownership within the planning area, a phased development alternative would not allow compliance with any of the above requirements and therefore it was eliminated from detailed analysis. Limiting development rate can be analyzed in implementation-level NEPA documents that take into consideration existing development on adjacent leases.

Prohibit Surface Water Disposal of Produced Water

The BLM considered, but eliminated an alternative to prohibit surface water disposal of produced water. Discharge of produced water is regulated by the Wyoming DEQ, Wyoming State Engineer's Office, and/or the Wyoming Oil and Gas Conservation Commission. BLM IM WY-2005-14 addresses water disposal and land application.

Require Produced Water to be Returned to Aquifers

BLM's ability to implement this alternative is limited. Much of the planning area involves non-federal minerals and non-federal surface where BLM has limited to no jurisdiction. Discharge of produced water is regulated by the Wyoming DEQ, Wyoming State Engineer's Office, and/or the Wyoming Oil and Gas Conservation Commission. The BLM considered, but eliminated this alternative from detailed analysis. Requiring produced water to be returned to

aquifers is not typically addressed in a land use plan but addressed at the project level with the appropriate state agencies.

Require Produced Water to be Put to Beneficial Use

Under this alternative, produced waters would be used for beneficial uses such as stock watering, wildlife habitat, recreational opportunities, and irrigation. The BLM's ability to implement this alternative is limited since produced water disposal is under the jurisdiction of the Wyoming DEQ, Wyoming State Engineer's Office, and/or the Wyoming Oil and Gas Conservation Commission. The BLM considered, but eliminated this alternative from detailed analysis because of the limited short-term benefit and because it is outside of the BLM's jurisdiction.

2.6.3. Fire and Fuels Management

There were no alternatives considered but eliminated from detailed analysis for this resource category.

2.6.4. Biological Resources

Emphasize the Protection of Resources by Removing Human Uses

The BLM considered, but eliminated from detailed analysis an alternative that removed human uses from the planning area. The FLPMArequires the BLM to manage public lands and resources according to the principles of multiple use and sustained yield. Included in this requirement are human uses, such as mineral development or livestock grazing, that must be managed in consideration of other resource values, such as wilderness or wildlife resources. Management actions, including closure or prohibition of various resource uses over portions of the planning area, are included in the alternatives considered in detail.

Applying the National Technical Team Conservation Measures to Priority Habitat

The BLM National Greater Sage-Grouse Strategy (WO IM–2012-044) directed field offices to consider all applicable conservation measures recommended by the NTT when revising or amending RMPs in Greater Sage-Grouse habitat. Most of the NTT conservation measures are recommended to be applied to priority habitats. However, the designated priority habitat may not be sufficient to conserve Greater Sage-Grouse within the Buffalo planning area (Taylor et al. 2012). Taylor et al. (2012) stated:

> "core areas in northeast Wyoming were delineated after widespread development has already occurred, leaving few options for conserving populations. In northeast Wyoming, the far reaching influence of development has already negatively impacted the 103 active leks inside core areas…Despite the impacts, the potential may still exist to maintain populations inside core areas, but further drilling in and around the cores will compromise their remaining value."

Because of the concern over adequacy of the BFO designated Core Population Areas to meet the planning goal for Greater Sage-Grouse conservation, an alternative applying the NTT conservation measures only to the designated priority habitat was eliminated from detailed analysis.

Instead, in Alternative B, the BFO analyzed the recommended NTT occupancy restrictions and prohibitions within 4.0 miles of lek sites and winter concentration areas to encompass the most

utilized nesting and winter habitats. Four miles is also the NTT recommended prohibition within leased mineral estate (NTT Measure 62) and a multi-state ad-hoc Greater Sage-Grouse committee suggested that within at least 4.0 miles of leks be considered nesting and brood-rearing habitat (Christiansen and Bohne 2008). Sixty percent of the BLM surface and 66 percent of the BLM-administered fluid mineral estate are within 4.0 miles of lek sites and winter concentration areas whereas designated BFO priority habitat encompasses 21 percent of the BLM surface and 22 percent of the BLM-administered fluid mineral estate. Within 4.0 miles of leks is close to the Core Population Area strategy's goal of conserving 66 percent of the population.

No Development Within Occupied Greater Sage-Grouse Habitat

The BLM considered, but eliminated from detailed analysis an alternative that prohibited development within occupied Greater Sage-Grouse habitat. The FLPMA requires the BLM to manage public lands and resources according to the principles of multiple use and sustained yield. Included in this requirement are human uses which must be managed in consideration of other resource values, including wildlife resources such as Greater Sage-Grouse. The BLM worked with cooperators such as the WGFD and the USFWS to develop alternatives protective of Greater Sage-Grouse while allowing for development. Prohibiting development within occupied habitat would eliminate multiple use opportunities within all but the non-habitat areas of the planning area such as forested, mountainous (Big Horn Mountains), or urban areas. This alternative would preclude the BLM from achieving a balance among resources and resource uses. BLM Wyoming Greater Sage-Grouse policy restricts development within Core Population Areas subject to site-specific criteria. The alternatives consider a range of prohibitions on surface occupancy ranging from areas within 0.25 mile from leks (3,594 acres or 0.45% of BLM surface) to areas within 4.0 miles of leks or winter concentration areas (467,897 acres or 60% of BLM surface).

2.6.5. Heritage and Visual Resources

There were no alternatives considered but eliminated from detailed analysis for this resource category.

2.6.6. Land Resources

Boundaries of Public Lands Should be Clearly Marked

The BLM considered, but eliminated from detailed analysis an alternative that institutes clearly marking all boundaries of public lands in the planning area. An RMP is a broad level planning document that defines allocations and levels of land uses. The marking of public land boundaries is more appropriately analyzed in implementation level NEPA documents.

Closing All Public Lands to Motorized Vehicles or Limiting Travel to Existing Roads and Trails Only

Alternatives prohibiting motorized vehicle travel and limiting travel to existing roads and trails on all BLM-administered surface were considered, but eliminated from detailed analysis. The BLM's Travel and Transportation Manual (1626) states "the planning process should consider and address the full range of various modes of travel on public lands." The BLM's travel management program is guided by resource values and user needs. A broad travel designation for the entire planning area would not allow BLM to balance resource values and user needs when considering

travel designations within the planning area. The BLM analyzes a range of travel management designations in the alternatives considered in detail.

No Livestock Grazing

The elimination of livestock grazing from all BLM-administered lands in the planning area as a method for resolving range, watershed, and wildlife habitat-related planning issues was considered, but eliminated from detailed analysis. The BLM recognizes conflicts exist between resources and resource uses. However, BLM determined that resource conditions on BLM-administered lands in the planning area do not warrant such a blanket elimination of livestock grazing because 97 percent of allotments (122 out of 125) assessed to date meet the *Wyoming Standards for Healthy Rangelands*. The non-attainment areas are confined to small portions on each of the three allotments (9,601 acres total). All three allotments are progressing towards the standards. The BLM does not have data showing that resource conflicts in these areas can be resolved by closing them to public land grazing.

The BFO administers 427 grazing leases on 477 allotments; approximately 370 of these are Category C (custodial) allotments where BLM is the minority surface owner (Appendix E (p. 1899)). With the intermingling of private and public lands, each allotment would need to be evaluated to determine the extent to which additional fencing would be required in order to enforce a grazing closure. Fencing custodial allotments to keep cattle off public lands would require hundreds of miles of new fences to prevent unauthorized grazing. In addition, the potential impacts of such extensive fencing on, for example big game movement and Greater Sage-Grouse mortality from raptor predation and collisions are better analyzed on an allotment-by-allotment basis, taking into account distribution of wildlife habitat and other resources as well as site-specific land ownership patterns.

Reduction or elimination of livestock grazing could become necessary on specific allotments where livestock grazing is causing or contributing to conflicts with the protection and/or management of other resource values or uses. Such determinations would be made during site-specific activity planning and associated environmental analysis, and would be based on several sources of information. These sources include: monitoring studies, reviewing current range management science, obtaining input from livestock operators and stakeholders, and assessments of ability to meet the *Wyoming Standards for Healthy Rangelands*.

Alternative B analyzes closing 467,897 acres or 60 percent of BLM surface to livestock grazing for resource conflict including Greater Sage-Grouse habitat and SRMAs.

No Net Loss of Grazing Animal Unit Months

The BLM considered an alternative for no net loss of grazing animal unit months (AUMs), but eliminated it from detailed analysis. The commitment to manage for no net loss of AUMs would be in conflict with 43 CFR § 4110.3 which requires the BLM to periodically review permitted use specified in grazing permits or leases and make changes in the permitted use as needed to manage, maintain, or improve rangeland productivity; to assist in restoring ecosystems to PFC; to conform with land use plans; or to comply with the provisions of 43 CFR § 4100, Subpart 4180 - Fundamentals of Rangeland Health and Standards and Guidelines for Grazing Administration. Alternative B analyzes closing 467,897 acres or 60 percent of BLM surface to livestock grazing which would result in an associated AUM reduction.

2.6.7. Special Designations

New Wilderness Study Areas

The BLM acknowledges that FLPMA Section 603 (43 United States Code [U.S.C.] § 1782) requiring a one-time wilderness review and recommendations has expired. A current inventory of public lands, including wilderness characteristics resources, is required by FLPMA Section 201 (43 U.S.C. § 1711). The BLM periodically, and on a continuing basis, monitors existing WSAs in accordance with the BLM Manual 6330 – Management of Wilderness Study Areas; however, the BLM has no authority to designate new WSAs and considered alternatives for management of those areas, including management to protect their wilderness characteristics. Using existing resource information, the BLM evaluated all public surface in the planning area, including proposals by the public, to determine those areas that contained wilderness characteristics (naturalness and opportunities for solitude or primitive or unconfined recreation). Non WSA lands with wilderness characteristics in the planning area are identified in Chapter 3 of this document.

2.6.8. Socioeconomic Resources

There were no alternatives considered but eliminated from detailed analysis for this resource category.

2.7. Management Actions Common to All Alternatives

This section describes management actions that apply to all alternatives. Management actions common to all alternatives can result because of specific management limitations defined in the laws and regulations that govern BLM management decisions. For the most part, nondiscretionary laws and regulations are not identified here but rather are set forth through the planning criteria to ensure that management actions within all alternatives are compliant with nondiscretionary laws and regulations. Appendix A (p. 1771) contains a list of the laws and regulations guiding BLM management. This section primarily includes management actions not established by such laws or policies. For example, many resource programs require the use of BMPs to reduce impacts. Collaboration with stakeholders and the development of resource specific plans are also a common requirement for many resource programs.

This section provides some of the typical actions captured by management actions that are common to all alternatives. Not all management actions are listed below; instead, actions were selected and summarized to provide an overview. The complete list of management actions common to all alternatives is provided in Table 2.7, "1000 PHYSICAL RESOURCES (PR) – AIR QUALITY (AQ)" (p. 127) through Table 2.40, "8000 SOCIOECONOMIC RESOURCES (SR) – HEALTH AND SAFETY" (p. 275) under each resource heading. Management action summaries are organized into eight broad resource topics, including: Physical Resources, Mineral Resources, Fire and Fuels Management, Biological Resources, Heritage and Visual Resources, Land Resources, Special Designations, and Socioeconomic Resources.

2.7.1. Physical Resources

Management actions for physical resources are designed to conserve air, soil, cave and karst, and water resources. Certain management actions specify conformance with various laws and

regulations such as Wyoming DEQ smoke-management rules for air quality. Other actions designed to minimize impacts on air quality include implementing appropriate mitigation measures to reduce emissions from current levels and establishing a cooperative monitoring network for criteria pollutants and Air Quality Related Values.

Soil is protected by requiring site-specific reclamation plans for authorized surface-disturbing activities. The BLM manages water resources to meet the *Wyoming Standards for Healthy Rangelands* and to achieve PFC. Under all alternatives, the BLM limits the degradation of water quality by designing and managing surface-disturbing activities to reduce channel and bank erosion, and the associated loss of riparian habitats. Appropriate management for cave and karst resources in the planning area is determined by mapping, inventorying, and evaluating identified resources for significance.

2.7.2. Mineral Resources

Mineral resources management defines the scope of mineral development, applies measures to conserve other resources, and manages lands in the planning area for mineral exploration and development. Under all alternatives, the BLM manages land not formally withdrawn or segregated from mineral entry for exploration and development of locatable minerals (mining claim minerals). The 2001 Buffalo RMP update coal management decisions remain the basis for current coal management in the planning area. Those areas determined to be available for future coal leasing consideration will be carried forward in this RMP revision (Map 11). All federal oil and gas mineral estate is open to leasing of fluid mineral resources, unless otherwise noted. All federal salable minerals (also called mineral materials) estate is available for exploration and development, unless otherwise noted.

2.7.3. Fire and Fuels Management

Fire and fuels management in the planning area follows guidance from the National Wildland Fire Management Policy (DOI and USDA 1995), the Interagency Standards for Fire and Fire Aviation Operations, the BLM Emergency Stabilization and Burned Area Rehabilitation standards located in the DOI Interagency Burned Area Emergency Response Guidebook (DOI 2004), and the BLM Burned Area Emergency Stabilization and Rehabilitation Handbook (BLM 2007c). The Wyoming High Plains District Fire Management Plan (BLM 2004c) outlines management response and implementation actions for wildland fire response on public lands in the BFO. Management prescriptions include consulting appropriate resource advisors for all resources potentially affected by wildland fire; rehabilitation of firelines on steep slopes or constructed by heavy equipment; prohibiting the use of retardant and foam within 300 feet of surface water sources; and cooperating with other agencies and landowners to implement landscape treatments to achieve fuels management objectives and to maintain or improve the condition of fire-adapted ecosystems. Prescribed burns must comply with Wyoming DEQ air quality standards and smoke management rules.

2.7.4. Biological Resources

Management actions common to all alternatives for biological resources include laws, regulations, and BLM policies that govern management of biological resources as well as actions that set management to meet thresholds, minimize resource conflict and damage, and require stakeholder

coordination. Examples of these types of management actions include: a requirement that surface or vegetation disturbance areas be treated for invasive species and revegetated; that riparian/wetland areas be managed to enhance forage conditions and improve water quality; and that the BLM work cooperatively to complete vegetation inventories with appropriate stakeholders. Vegetative communities are managed in accordance with the *Wyoming Standards for Healthy Rangelands* and are maintained to provide sustainable forage levels for livestock and wildlife. Management prescriptions for invasive species include implementing cooperative integrated pest management programs with appropriate stakeholders; using certified noxious weed seed-free products on all BLM-administered projects and lands; and limiting surface disturbance to the minimum needed for safe project completion to limit the spread of noxious weeds.

Fish and wildlife management includes actions to appropriately mitigate surface-disturbing activities and maintain or improve fish and wildlife habitat. Management calls for collaboration with the WGFD and other stakeholders to manage barriers to fish passage, activities potentially affecting native and desirable non-native fish species, and harmful non-native riparian vegetation in important fish habitats. Wildlife habitats are maintained or improved through vegetative manipulations, habitat improvement projects, and livestock grazing strategies, in accordance with appropriate planning and guidance documents. Existing habitat management plans are used and updated as necessary to reflect current wildlife management objectives and prescriptions.

In consultation with stakeholders, projects that may affect special status species are to be modified in order to protect these species. The BLM implements actions set forth in recovery plans, conservation measures, terms and conditions, and reasonable and prudent measures within biological opinions for Threatened and/or Endangered plant and wildlife species. Management actions specific to special status fish species include supporting the WGFD in obtaining water rights for the benefit of special status fish species and prioritizing special status fish species over other fish species in planning and management actions. Management actions specific to special status plant and wildlife species include utilizing current research and management and conservation plans to guide special status species habitat management, and establishing a year-round disturbance-free buffer zone of at least 0.5 mile for known active bald eagle nests. For Greater Sage-Grouse, the BLM would collaborate with appropriate federal agencies and the State of Wyoming to develop and monitor conservation objectives and identify site-based actions to achieve the objectives. Additional management actions specific to Greater Sage-Grouse include managing habitat and reduce resource conflicts, and include specific restrictions on the application of pesticides in nesting and brood-rearing habitats; specifications on the design and location of water facilities and fences; and the maintenance of seeps, springs, wet meadows, riparian vegetation, and sagebrush habitat.

2.7.5. Heritage and Visual Resources

Cultural resources management includes cooperation with Native American tribes to protect land and artifacts important to them as well as preservation of all cultural resources by limiting exposure to incompatible uses. Specific actions include ensuring areas important to Native American tribes are not transferred from federal ownership and stabilizing and providing long-term protection for significant cultural sites that are experiencing adverse impacts.

The primary emphasis of paleontological resources management is the protection of land containing significant paleontological resources. To that end, the BLM retains all public lands with significant paleontological values.

Visual resource management (VRM) involves managing each VRM class according to the definitions and objectives in the VRM manual (H-8410-1). The BLM would manage WSAs and the Middle Fork Powder River, if designated by Congress as a Wild and Scenic River (WSR), under VRM Class I objectives. Measures designed to protect visual resources (i.e., screening, painting, and designing to blend with the surrounding landscape) are required for non-temporary facilities and structures.

2.7.6. Land Resources

Lands and realty management, including cadastral survey, seeks to improve access to public land and enable better overall management of BLM-administered land. Withdrawals, Recreation and Public Purpose applications, and land use authorizations (permits, leases, etc.) are all considered on a project-specific basis. Lands meeting the identified disposal criteria have priority consideration for disposal. In order to reduce inadvertent trespass potential, the BLM uses appropriate signage and access authorizations. Management of renewable energy and ROWs include cooperating with stakeholders to coordinate renewable energy opportunities and scientific research in accordance with other resource values; providing reasonable access across public land to private land; designating ROW corridors to minimize surface disturbance; developing communication site management plans for all existing and newly identified communication site concentration areas; and maintaining a transportation management system to meet public and resource management needs.

Travel and transportation management in the planning area involves maintaining a transportation system across public lands, improving access to public lands, and designating areas as Open, Closed, or Limited to designated routes or seasons for OHV use. Unless otherwise specified, OHV use is Limited to designated routes on BLM-administered land. Areas within the planning area will no longer be classified as Limited to existing routes. Specific management actions include negotiating access across non-BLM-administered lands to isolated public lands, evaluating roads constructed under other initiatives (e.g., oil and gas exploration) for inclusion in the BLM transportation system, and improving access for people with disabilities.

The BLM manages recreational use to provide recreational opportunities for public land users while protecting public safety and other resource values. Management actions include managing recreation sites, facilities, and access to minimize impacts to riparian habitat and opening the planning area to dispersed recreation where consistent with other resource values. Newly acquired lands, and other parcels meeting the size and naturalness requirements, are evaluated for wilderness characteristics.

The BLM manages livestock grazing to achieve the *Wyoming Standards for Healthy Rangelands*, improve forage for livestock, improve forage and habitat for wildlife, and enhance rangeland health. Forage allocations in grazing permits or leases can be adjusted when supported by monitoring, field observations, rangeland (land) health assessments/evaluations, or other data acceptable to the authorized officer.

2.7.7. Special Designations

The BLM evaluates authorized activities and develops mitigation to protect the integrity of the characteristics for which ACECs were designated. The BLM manages Scenic or National Back Country Byways with the objective of encouraging responsible motorized recreational

use of the proposed byway, while protecting and displaying the scenic, cultural, geological, multiple use, and crucial wildlife habitat values that occur in the area. The Middle Fork Powder River is managed in accordance with the Middle Fork Interim Management Plan (available on the BFO website, http://www.blm.gov/wy/st/en/programs/Planning/rmps/buffalo/docs.html) until Congress designates it as a WSR or releases the river for other uses. Similarly, WSAs within the planning area including Fortification Creek, Gardner Mountain, and North Fork are managed in accordance with BLM Manual 6330 – Management of Wilderness Study Areas until Congress acts upon the proposals.

2.7.8. Socioeconomic Resources

Socioeconomic impacts are largely derived from actions for management of other resources. These management actions are described under the resource headings they belong to. Management of socioeconomic resources includes quantifying socioeconomic impacts associated with site-specific and programmatic BLM actions, referring to available indicators for the economic and social health of an affected area, and, generally, managing in a way that considers the fact that BLM actions are integrally connected with both socioeconomics and the cultural health of the planning area. Indicators of economic activity on BLM-administered lands include leases and permits, visitation estimates, grazing allotment AUMs, among others. Management prescriptions for health and safety in the planning area generally seek to reduce human and environmental risk. Some of the actions designed to reduce these risks include prioritizing abandoned mine sites that most affect human health, safety, and the environment; using public awareness techniques to prevent exposure by the public to hydrogen sulfide gas; reducing waste produced by BLM activities through waste minimization practices; and mitigating hazards from coalbed fires.

2.8. Summaries of the Alternatives

This section summarizes the four alternatives (A through D) considered in detail in the Proposed RMP and Final EIS. Due to the breadth of management prescriptions in the alternatives, only key elements of the alternatives (those with the most potential to affect resources) are summarized in this section. The summary descriptions of each alternative in this section provide a general overview of the alternative, the management emphasis associated with each alternative, and key management actions for each alternative.

Table 2.5, “Comparative Summary of Acreage Affected (and associated fluid mineral lease stipulation) by Proposed Land Use Decisions in the Buffalo Planning Area” (p. 104) identifies acreage allocations for resources and resource uses by alternative. Table 2.6, “Comparative Summary of Proposed Areas of Critical Environmental Concern” (p. 110) identifies acreage allocations and the emphasis for management in proposed ACECs. These tables provide a comparative summary of acreage allocations in the four alternatives. Detailed descriptions of the alternatives can be found in Table 2.7, “1000 PHYSICAL RESOURCES (PR) – AIR QUALITY (AQ)” (p. 127) through Table 2.40, “8000 SOCIOECONOMIC RESOURCES (SR) – HEALTH AND SAFETY” (p. 275) in this chapter. The maps in Appendix F (p. 1931) further illustrate differences in acreage allocations and management prescriptions by alternative.

Table 2.5. Comparative Summary of Acreage Affected (and associated fluid mineral lease stipulation) by Proposed Land Use Decisions in the Buffalo Planning Area

Topic	Acreage Type	Alternative A		Alternative B		Alternative C		Alternative D	
		Acres	Percent	Acres	Percent	Acres	Percent	Acres	Percent
Physical Resources									
Surface Disturbance on Soils with Severe Erosion Hazard	BLM Surface	215,496 (TLS)	28%	215,496 (NSO)	28%	215,496 (Lease Terms)	28%	215,496 (CSU)	28%
	BLM-Administered Fluid Mineral Estate	669,739 (TLS)	20%	669,739 (NSO)	20%	669,739 (Lease Terms)	20%	669,739 (CSU)	20%
Surface Disturbance on Soils with Poor Reclamation Suitability	BLM Surface	455,090 (Lease terms)	58%	455,090 (NSO)	58%	455,090 (Lease Terms)	58%	455,090 (CSU)	58%
	BLM-Administered Fluid Mineral Estate	1,514,445 (Lease Terms)	45%	1,514,445 (NSO)	45%	1,514,445 (Lease Terms)	45%	1,514,445 (CSU)	45%
Surface Disturbance within 500 feet of Water Resources	BLM Surface	19,861 (CSU)	3%	19,861 (NSO)	3%	19,861 (Lease Terms)	3%	19,861 (CSU)	3%
	BLM-Administered Fluid Mineral Estate	95,172 (CSU)	3%	95,172 (NSO)	3%	95,172 (Lease Terms)	3%	95,172 (CSU)	3%
Mineral Resources									
Acres Recommended for Withdrawal (Closure) from Locatable Mineral Entry[1]	BLM Surface coupled with BLM-Administered Locatable Mineral Estate	0	0%	618,256	80%	0	0%	82,691	11%
Acres Open to Fluid Mineral Leasing Subject to the Standard Lease Form[2]	BLM-Administered Fluid Mineral Estate	146,126	4%	1,225	0%	539,499	16%	135,909	4%

Topic	Acreage Type	Alternative A		Alternative B		Alternative C		Alternative D	
		Acres	Percent	Acres	Percent	Acres	Percent	Acres	Percent
Acres Open to Fluid Mineral Leasing with Moderate Constraints	BLM-Administered Fluid Mineral Estate	782,501	23%	124,467	4%	2,472,472	73%	2,516,826	74%
Acres Open to Fluid Mineral Leasing with Major Constraints	BLM-Administered Fluid Mineral Estate	85,548	3%	642,232	19%	303,601	9%	556,592	16%
Acres Closed to Fluid Mineral Leasing	BLM-Administered Fluid Mineral Estate	2,346,307	69%	2,612,920	77%	30,520	1%	72,276	2%
Acres Open to Salable Minerals	BLM-Administered Salable Mineral Estate	3,319,248	99%	129,431	4%	3,290,908	98%	2,725,060	81%
Fire and Fuels Management									
Acres Available for Planned Ignitions	BLM Surface	14,000	2%	3,500	<1%	42,000	5%	14,000	2%
Biological Resources									
Surface Disturbance within 0.25-mile of Natural Water Bodies Containing Desirable Fish	BLM Surface	N/A[3]	N/A[3]	51,745 (NSO)	7%	51,745 (Lease Terms)	7%	51,745 (CSU)	7%
	BLM-Administered Fluid Mineral Estate	N/A[3]	N/A[3]	261,870 (NSO)	8%	261,870 (Lease Terms)	8%	261,870 (CSU)	8%
Facility Development and Occupancy within Elk Crucial Winter Range and Calving Areas	BLM Surface	N/A[3]	N/A[3]	75,175 (NSO)	10%	75,175 (Lease Terms)	10%	75,175 (CSU)	10%
	BLM-Administered Fluid Mineral Estate	N/A[3]	N/A[3]	173,512 (NSO)	5%	173,512 (Lease Terms)	5%	173,512 (CSU)	5%

Topic	Acreage Type	Alternative A		Alternative B		Alternative C		Alternative D	
		Acres	Percent	Acres	Percent	Acres	Percent	Acres	Percent
Greater Sage-Grouse Occupied Leks Protective Buffer (Surface-disturbing Activities Prohibited)	BLM Surface	3,594 (CSU) 203,724 (TLS)	0% 26%	695,827 (CSU) 467,897 (TLS) 467,897 (NSO)	89% 60% 60%	3,594 (CSU) 203,724 (TLS)	0% 26%	P[7]: 136,261 G[7]: 2,278 (CSU) P: 132,249 G: 148,121 (TLS) P: 7,687 G: 973 (NSO)	P[7]: 17% G[7]: <1% (CSU) P: 17% G: 19% (TLS) P: 1% G: <1% (NSO)
	BLM-Administered Fluid Mineral Estate	22,777 (CSU) 1,685,563 (TLS)	1% 50%	3,117,708 (CSU) 3,181,711 (TLS) 3,181,711 (NSO)	92% 94% 94%	22,777 (CSU) 1,685,563 (TLS)	1% 50%	P: 669,451 G: 16,103 (CSU) P: 653,307 G: 779,834 (TLS) P: 38,113 G: 16,103 (NSO)	P[7]: 20% G[7]: 0% (CSU) P: 19% G: 23% (TLS) P: 1% G: <0% (NSO)
Special Status Species Raptor Active Nest Protective Biologic Buffer Zone (Surface-disturbing Activities Prohibited or Restricted)	BLM Surface	N/A[3]	N/A[3]	28,437 (NSO)	4%	28,437 (CSU)	4%	28,437 (NSO)	4%
	BLM-Administered Fluid Mineral Estate	N/A[3]	N/A[3]	701,847 (NSO)	21%	701,847 (NSO)	21%	701,847 (NSO)	21%
Special Status Species Raptor Nests Seasonal Timing Limitation	BLM Surface	17,345	2%	113,784	15%	4,855	1%	28,437	4%
	BLM-Administered Fluid Mineral Estate	357,927	11%	855,772	25%	114,832	3%	701,847	21%
Heritage and Visual Resources									

Topic	Acreage Type	Alternative A		Alternative B		Alternative C		Alternative D	
		Acres	Percent	Acres	Percent	Acres	Percent	Acres	Percent
Surface Disturbance in Areas Containing Historic Properties that Retain Their Setting	BLM Surface	3,588 (NSO)	<1%	221,490 (No Leasing)	28%	221,490 (CSU)	28%	7,289 (NSO) 179,189 (CSU)	1% 23%
	BLM-Administered Fluid Mineral Estate	19,971 (NSO)	1%	732,300 (No Leasing)	22%	732,300 (CSU)	22%	23,447 (NSO) 613,601 (CSU)	1% 18%
Visual Resource Management – Class II	BLM Surface	127,594	16%	217,021	28%	0	0%	112,329	14%
Visual Resource Management – Class III	BLM Surface	63,583	8%	276,107	35%	167,334	21%	379,429	49%
Visual Resource Management – Class IV[4]	BLM Surface	559,674	72%	258,866	33%	584,500	75%	260,238	33%
Land Resources									
Acres Open to Renewable Energy Development	BLM Surface	N/A[3]	N/A[3]	6,131	1%	134,875	17%	55,516	7%
Renewable Energy Avoidance Areas	BLM Surface	N/A[3]	N/A[3]	45,441	6%	618,676	79%	374,518	48%
Renewable Energy Exclusion Areas	BLM Surface	N/A[3]	N/A[3]	730,530	93%	28,551	4%	352,068	45%
Major ROW/Utility Corridor Areas	BLM Surface	351,133	45%	29,126	4%	351,133	45%	29,126	4%
ROW Avoidance Areas	BLM Surface	N/A[3]	N/A[3]	56,857	7%	27,706	4%	321,149	41%

Topic	Acreage Type	Alternative A		Alternative B		Alternative C		Alternative D	
		Acres	Percent	Acres	Percent	Acres	Percent	Acres	Percent
ROW Exclusion Areas	BLM Surface	N/A[3]	N/A[3]	706,556	90%	28,554	4%	79,777	10%
Acres Closed to Motorized Vehicle Use	BLM Surface	3,650[5]	0%	625,854	80%	28,931	4%	37,389	5%
Acres Seasonally Closed to Motorized Vehicle Use	BLM Surface	37,646	5%	18,259	2%	6,839	1%	81,948	10%
Acres Limited to Designated Roads and Trails for Motorized Vehicle Use	BLM Surface	737,166	94%	137,126	18%	723,497	93%	661,726	85%
Acres of SRMAs (Number of SRMAs)	BLM Surface	0	0%	55,529 acres (8)	7%	30,570 acres (6)	4%	54,160 acres (7)	7%
Acres Available to Livestock Grazing	BLM Surface	Approx-imately 772,102	99%	314,205	40%	777,515	99%	772,110	99%

Topic	Acreage Type	Alternative A		Alternative B		Alternative C		Alternative D	
		Acres	Percent	Acres	Percent	Acres	Percent	Acres	Percent
Acres Incompatible to Livestock Grazing	BLM Surface	Approxi-mately 10,000[6]	1%	467,897	60%	4,587	1%	9,992	1%

Source: BLM 2012f

Note: Although federal mineral estate acreage is not displayed for each resource topic in this table, land use decisions may affect management on federal mineral estate.

[1]The existing withdrawals from mineral entry (totaling 11,373 acres) are not included in the acres recommended for withdrawal from mineral entry.

[2]As of October 1, 2008, there are 2,570,703 acres under existing leases.

[3]Land use decision not applicable under Alternative A.

[4]Visual Resource Management Class V no longer exists as a class objective option for managing visual resources. As a result, these areas are managed as Class IV visual resources under Alternative A.

[5]Closed to off-highway vehicle use.

[6]Includes areas both not authorized for grazing and incompatible to grazing identified in the current plan.

[7]P: Priority Greater Sage-Grouse Habitat (Core Population Areas and Core Population Connectivity Corridors), G: General Greater Sage-Grouse Habitat.

< less than
% percent
BLM Bureau of Land Management
CSU controlled surface use
N/A Not Applicable
NSO No Surface Occupancy
ROW right-of-way
SRMA Special Recreation Management Area
TLS timing limitation stipulation

Table 2.6. Comparative Summary of Proposed Areas of Critical Environmental Concern

Name	Value(s) of Concern	Alternative A		Alternative B		Alternative C		Alternative D	
		Existing Designation	BLM Surface Acreage	Proposed Designation	BLM Surface Acreage	Proposed Designation	BLM Surface Acreage	Proposed Designation	BLM Surface Acreage
Burnt Hollow	Scenic, geologic features, fragile watershed, local qualities, national priority concerns and public concern for management.	None	0	ACEC	17,280	None	0	None	0
Cantonment Reno	Historic values, local and national significance.	None	0	ACEC	523	None	0	None	0
Dry Creek Petrified Tree	Geologic features, local significance and qualities that are rare.	None	0	ACEC	2,567	None	0	None	0
Fortification Creek Elk Area	Scenic, wildlife resources, local significance, national concerns, and fragile watershed.	None	0	ACEC	32,602	None	0	None	0
Hole-in-the-Wall	Cultural, scenic values, local and national significance, uniqueness, and public concerns for management.	None	0	ACEC	11,952	None	0	None	0
Pumpkin Buttes	Cultural values, Native American religious and cultural values.	None	0	ACEC	1,731	None	0	ACEC	1,731
Sagebrush Ecosystem	Wildlife and Natural System	None	0	ACEC	467,897	None	0	None	0
Welch Ranch	Recreation and wildlife.	None	0	ACEC	1,748	None	0	ACEC	1,116

Source: BLM 2012f

ACEC Area of Critical Environmental Concern
BLM Bureau of Land Management

Restrictions on resource uses (e.g., closed to mineral leasing) apply throughout the life of the RMP, unless changed through an RMP amendment. Management actions developed under all alternatives are subject to valid existing rights. In addition, management actions may only be implemented when consistent with applicable laws, regulations, and policies. The planning area is open to locatable mineral activities unless specifically withdrawn from operation of the mining laws. NSO, CSU, and TLS stipulations apply only to fluid mineral leasing and not to other mineral resources. Changes in resource use restrictions that require an RMP amendment can result due to public demand, statewide or national policy and guidance, or other factors. The timing and degree of implementation for management prescriptions in this document depend on available budget, staffing, and agency priorities. Actions taken or authorized by the BLM during RMP implementation would comply with standard practices, guidelines for surface-disturbing activities, and other BLM guidance and policy. Therefore, these practices and guidelines are considered part of each alternative. Implementation of new BLM policy and guidance during the life of this RMP will be incorporated into the land use planning process consistent with the management prescriptions in the plan.

The planning process does not include detailed, implementation-level decisions. During the implementation stage, additional environmental analyses will be conducted, as appropriate, for site-specific actions and the BLM will determine on a project-specific basis what, if any, mitigation is required.

2.8.1. Alternative A – Current Management (No Action)

Overview of the Alternative

Alternative A represents the current management of resources on BLM surface and federal mineral estate within the planning area under the existing plan. Alternative A represents the No Action Alternative required by NEPA.

Physical Resources

Physical resources are managed under Alternative A to conserve air, water, soil, and cave and karst resources, and to support resources and resource uses. Under Alternative A, activities with expected effects to air resources are analyzed and monitoring may be performed on a project-specific basis. Alternative A places limitations on surface-disturbing activities to protect soil resources including prohibiting surface disturbance within areas of severe erosion hazard from March 1 through June 15, prohibiting surface disturbance on slopes of more than 25 percent, and restricting activity on soils having poor reclamation suitability on a project-specific basis. Water resources management under Alternative A includes prohibiting surface disturbance within 500 feet of any spring, reservoir, water well, or perennial stream. No previous management actions were defined for cave and karst management and, as such, management is considered on a project-specific basis under Alternative A.

Mineral Resources

Mineral resource uses are managed by identifying BLM-administered lands and federal mineral estate within the planning area suitable for exploration and/or development of leasable, locatable, and/or salable minerals. Management actions also seek to conserve other resource values where they are incompatible with mineral resources activity. For example, the Amsden Creek, Middle Fork Canyon, and Kerns Game Ranges are closed to mineral entry (11,373 acres), while the

WSAs (28,931 acres) remain open to mineral entry (locatable mineral activities). The WSAs, however, come under the purview of 43 CFR 3802, which includes stringent requirements for non-impairment of these areas. No new withdrawals are recommended under Alternative A. All federal coal lands are open to exploration. A portion of the federal coal lands have been reviewed against the coal screening criteria and have been determined to be acceptable for further consideration for coal leasing. Leasing of other minerals (i.e., phosphates or sodium) is considered on a project-specific basis.

Approximately 2,346,307 acres of federal mineral estate are closed to fluid mineral leasing. The remaining federal mineral estate is open for leasing subject to the following constraints: 146,126 acres are subject to standard stipulations only, 26,048 acres are subject to minor constraints, 782,501 acres are subject to moderate constraints, and 85,548 acres are subject to major constraints. Salable mineral exploration and development are prohibited on approximately 28,873 acres in the Fortification Creek, Gardner Mountain, and North Fork WSAs.

Fire and Fuels Management

For unplanned ignitions in Alternative A, fire management seeks to balance variable suppression strategies with resource values. Priority response is given to wildfires where there are high value resources, or where fires may spread to non-BLM-administered lands. No portion of the planning area is available to manage fires for other multiple resource objectives. Alternative A restricts the use of some types of suppression equipment in sensitive areas, and rehabilitates suppression damage.

Fuels management in Alternative A would treat about 14,000 acres with prescribed fire during the life of the plan (Appendix G (p. 1937)). These acres are based on treatments completed in the planning area from the years 1984 to 2007. Wildland fire and other vegetation treatments would be used to support vegetation and wildlife habitat objectives.

Biological Resources

Alternative A identifies few management actions to address vegetation and invasive species management and, as such, management is typically considered on a project-specific basis for these resources. Under Alternative A, vegetation treatments, including forest management and sagebrush spraying or burning, are designed to meet overall resource management objectives consistent with the policy to protect or improve biodiversity and water quality. Diseased old growth and overstocked forests are managed in accordance with the Healthy Forest Restoration Act. Control of noxious weeds under Alternative A is managed in cooperation with county weed and pest districts.

Alternative A management actions attempt to provide habitat for fish and wildlife and comply with the Endangered Species Act and BLM policy for special status species. For example, Alternative A management includes cooperation with the WGFD in introducing native and desirable non-native fish and maintaining reservoirs and riparian areas to improve or enhance potential fisheries. Wildlife management under Alternative A includes seasonal restrictions such as prohibiting surface disturbance in crucial elk winter range between November 15 and April 30, in elk calving areas from May 1 to June 30, and within 0.5 mile of raptor nests from February 1 to July 31. In addition, surface disturbance is prohibited in the Ed O. Taylor, Kerns, Bud Love, and Amsden Creek winter ranges for big game, within 750 feet of sharp-tailed grouse leks, and within biologic buffer zones around active raptor nests.

No previous decisions were identified under current management for special status plant and fish species, and, as such, management is considered on a project-specific basis for these resources. The BLM manages vegetation resources to comply with the Endangered Species Act and BLM policy associated with management of habitat for special status species. Management prescriptions to protect Greater Sage-Grouse include requiring anti-perching devices on new powerlines with 0.5 mile of occupied Greater Sage-Grouse leks and nesting habitat, and restricting surface disturbance and occupancy within a 0.25-mile radius of the perimeter of occupied or undetermined Greater Sage-Grouse leks. Management actions that limit surface-disturbing activity for the benefit of other special status wildlife species include a year-round disturbance-free buffer zone of 0.5 mile for bald eagle winter roosts, TLS for bald eagle winter roosts of 1.0 mile from November 1 to April 1, and prohibition of surface disturbance within a biologic buffer zone around active nests of special status raptor species.

Heritage and Visual Resources

Alternative A primarily considers cultural and paleontological resource management on a project-specific basis. Specific actions include applying a NSO stipulation to fluid mineral leases where potentially eligible or significant segments of the Bozeman Trail and Crazy Woman Battle Site exist, and developing Cultural RMPs for Cantonment Reno, Dull Knife Battlefield, and the Outlaw Cave Archeological District. VRM includes managing visual resources in accordance with objectives for VRM classes that have been assigned in the planning area.

Land Resources

Forest products management under Alternative A balances forest and woodland health with other resource uses such as commercial timber production. For example, forest products management under Alternative A allows the sale of minor forest products from woodlands and/or noncommercial forestlands on BLM-administered lands throughout the planning area, offers approximately 9 million board feet of sawtimber and 1 million board feet of minor green forest products from BLM-administered forestlands over a 10 year period, and limits individual clear-cuts to less than 20 acres.

Land resource program actions under Alternative A identify approximately 108,243 acres within the planning area as available for disposal. Lands having agricultural potential and water may be considered for disposal. Priority is given to acquiring land or interests in lands in areas adjacent to large blocks of BLM-administered land, especially in areas of high recreational potential. Other land resource program actions under Alternative A include requiring approval of renewable energy development projects on a project-specific basis. Under the existing plan, no specific management actions are identified for renewable energy resources. Alternative D recommends the use of designated corridors for ROWs and requires lines to be buried within Greater Sage-Grouse Core Population Areas unless they are within 0.5 mile of existing 115 kV or larger transmission lines. Surface disturbance and occupancy associated with ROW corridors is not allowed on slopes of 25 percent or more.

Transportation management designations under Alternative A include 3,650 acres Closed to OHV use and 737,166 acres Limited to designated roads and trails for OHV use. In addition, a seasonal closure (November 15 to April 30) for motorized vehicle use is instituted on several areas (37,646 acres) in the planning area. As noted in the *Management Actions Common to All Alternatives* section above, areas will no longer be classified as Limited to existing routes.

Recreation management under Alternative A balances protection of the recreational experience with other resource uses. For example, surface disturbance and fluid mineral leasing are prohibited near the Dry Creek Petrified Tree Environmental Education Area and the Mosier Gulch Recreation Area to protect the recreational experience and other resource values. However, salable mineral development and withdrawals from appropriation under the mining laws in Recreation Areas and SRMAs are considered on a project-specific basis under Alternative A. Alternative A manages the planning area as one Extensive Recreation Management Area (ERMA) with several developed recreation sites.

No previous decisions were identified under current management for areas with wilderness characteristics, and, as such, management is considered on a project-specific basis for this resource.

Under Alternative A, the BLM does not allow livestock grazing on about 4,000 acres of BLM-administered land located in the southern Big Horn Mountains due to the area's rough terrain and steep slopes and does not allow livestock grazing on about 6,000 acres where it is incompatible with other resource values. Management stipulates that any permanent increases in forage produced are considered for wildlife and watershed protection before additional livestock use is authorized. Several livestock grazing management decisions prescribed under the other alternatives are not included under Alternative A, and, therefore, management is typically conducted on a project-specific basis. For example, Alternative A does not specify the distance salt or mineral supplements should be placed away from water sources and placement is instead managed on a project-specific basis.

Special Designations

Alternative A does not designate any ACECs and no management actions are identified regarding Scenic or National Back Country Byways and WSRs. If Congress decides not to designate the WSAs in the planning area as Wilderness, the Gardner Mountain, North Fork, and Fortification Creek WSAs will be available for oil and gas leasing. The Middle Fork Powder River segments suitable for WSR designation are managed under an interim management plan (BLM 2003d) to protect the free-flowing condition, tentative "wild" classification, and identified outstandingly remarkable values. Alternative A does not address management for the release of WSRs for other uses, nor does it consider designation of Scenic and Back Country Byways, therefore, such management is considered on a project-specific basis.

Socioeconomic Resources

BLM's management recognizes and considers local and regional economic development and land use plans.

2.8.2. Alternative B – Resource Conservation

Overview of the Alternative

Alternative B emphasizes conservation of physical, biological, heritage and visual resources, and areas with wilderness characteristics with constraints on resource uses. Relative to all alternatives, Alternative B conserves the most land area for physical, biological, and heritage resources; designates the highest number of ACECs; and is the most restrictive to motorized vehicle use and mineral development.

Physical Resources

Under Alternative B, the BLM manages physical resources (air, water, soil, and cave and karst resources) with an emphasis on conserving these resources. This alternative is less focused on supporting resource uses than the other alternatives. Alternative B requires quantitative air quality modeling of industrial activities in order to determine the potential impacts of proposed emission sources and subsequently of potential mitigation strategies. Management of soil resources is similar to Alternative A although more limitations are placed on surface-disturbing activities to protect soils. For example, soils with severe erosion hazard are protected from surface disturbance year-round instead of from March 1 through June 15. In addition, Alternative B prohibits surface disturbance and applies an NSO stipulation on all slopes 25 percent and greater, soils with poor reclamation suitability, badlands, rock outcrops, and slopes susceptible to mass movement. Management under Alternative B includes more protections for water resources through prohibitions of on-channel reservoirs, restrictions on activities resulting in surface discharge of produced water, and prohibiting the conversion of oil and gas wells to water supply wells. Similar to Alternative A, Alternative B prohibits surface-disturbing activities within 500 feet of springs, water wells, and perennial streams and associated riparian habitat. In addition, Alternative B also prohibits surface-disturbing activities within 500 feet of non-CBNGreservoirs. Cave and karst management actions under Alternative B apply restrictions to incompatible resource uses and enable greater overall management of cave and karst resources through cave specific Cave Management Plans.

Mineral Resources

Mineral resource uses are subject to more extensive constraints under Alternative B than under the other alternatives. The BLM would recommend withdrawals to locatable mineral entry on 618,256 acres (2,686,776 acres open to locatable mineral entry, should these withdrawals occur).

Approximately 2,612,920 acres of federal fluid mineral estate are closed to fluid mineral leasing. The remaining federal mineral estate is open for leasing subject to the following constraints: 1,225 acres are subject to standard stipulations only, 5,685 acres are subject to minor constraints, 124,467 acres are subject to moderate constraints, and 642,232 acres are subject to major constraints (Map 14). Approximately 1,239,723 acres are open to leasing of other minerals (i.e., phosphates, sodium, etc.)Alternative B would result in 129,431 acres open to salable mineral exploration and development and 3,218,690 acres closed to or restricted from salable mineral exploration and development.

Fire and Fuels Management

Fire and fuels management under Alternative B places more emphasis on natural processes and less emphasis on planned vegetation treatments.

Response to unplanned ignitions in this alternative would vary from full protection in areas where fire is undesirable, to managing wildfire for other resource objectives. The entire planning area would be available to manage fires to meet resource objectives. This alternative utilizes protection strategies in the wildland urban interface, wildland industrial interface, developed recreation sites, commercial timber areas, and other sensitive resource areas. The BLM would limit heavy suppression equipment to existing roads and trails or immediately adjacent to them. This alternative rehabilitates all fire related damage including suppression activity and fire severity.

Fuels management in Alternative B would treat about 3,500 acres with prescribed fire during the life of the plan. Wildland fire and other vegetation treatments would be applied to restore fire-adapted ecosystems and to reduce hazardous fuels.

Biological Resources

Vegetation management under Alternative B emphasizes natural processes and ecosystem protection. For example, Alternative B minimizes silvicultural treatments; allows insect, disease, and wildland fire to run their natural course; and manages aspen communities as a seral stage and natural component of the forest. In addition, Alternative B authorizes only native plant species for reclamation activities and restores vegetation in all CBNG supported wetland and riparian systems. Alternative B provides the most protection for riparian/wetland resources by applying an NSO stipulation within 500 feet of riparian/wetland systems, aquatic habitat, and floodplains. Invasive species and pest management under Alternative B places no limitations on the aerial application of pesticides and requires the development of pest management areas, prioritizes noxious weed treatments where infestations on private land are threatening public lands, and requires the treatment of annual brome species throughout the planning area.

Alternative B emphasizes the conservation of habitat for fish and wildlife and places more constraints on resource uses that affect biological resources compared to Alternative A. For example, fish resources management under Alternative B prohibits surface-disturbing and disruptive activities within 0.25 mile of naturally occurring water bodies containing native and desirable non-native fish species. Proactive fish management includes designing crossings of water bodies to allow fish passage and performing restoration of important instream segments for fish habitat. Alternative B applies more constraints on resource uses to protect wildlife habitat than Alternative A including applying a seasonal restriction on surface disturbance in elk crucial winter range and prohibiting surface disturbance and disruptive activities within 0.5 mile of a big game migration corridor. Under Alternative B, raptor management is species based with varying protective distances and timing by species.

Compared to other alternatives, special status species receive increased protection under Alternative B. To protect special status plant species, Alternative B prohibits surface disturbance, mineral exploration, motor vehicle use, and the use of explosives and blasting within special status plant habitat. Under Alternative B, surface disturbance is prohibited within 0.25 mile of any waters containing special status fish species. Management actions to protect Greater Sage-Grouse are greater than Alternative A and include increased controlled management distances, winter timing limitation and winter habitat restrictions, and protection of brood-rearing habitat. Management actions to protect other special status wildlife include more constraints than Alternative A and list specific areas and species that will be impacted by these actions. For example, Alternative B institutes a disturbance free zone and applies an NSO stipulation to mineral leases within 0.5 mile of bald and golden eagle roosting sites and the following riparian corridors consistently used by wintering eagles: Clear Creek, Crazy Woman Creek, Piney Creek, Powder River, and Tongue River.

Heritage and Visual Resources

Alternative B emphasizes the protection of cultural and paleontological resources and places restrictions on resource uses that may adversely impact them. Around sites containing historical properties, the BLM prohibits surface disturbance and initiates mineral withdrawals in areas containing sensitive cultural sites such as traditional cultural properties (TCPs). Under this alternative, the BLM prohibits salable mineral exploration, recommends withdrawals to locatable

mineral entry, and closes mineral leasing in areas containing paleontological resources of high quality or importance. Proactive management designed to protect and enhance cultural and paleontological resources include establishing site stewardship opportunities in coordination with stakeholders and initiating paleontological field surveys on all Potential Fossil Yield Classification (PFYC) Class 3, 4, and 5 formations potentially affected by proposed activities.

Under Alternative B, the BLM manages all visual resource inventory (VRI) Class II areas and special emphasis areas as VRM Class II and all VRI Class III areas outside special emphasis areas as VRM Class III.

Land Resources

Forest products management under Alternative B places a greater emphasis on the role of natural processes. For example, Alternative B offers sawtimber only from specified forest areas, manages forest product sales to remain within ecologically sustainable limits, and limits forest management to five acres per select group harvest.

Land resource program actions under Alternative B retain BLM-administered lands identified for disposal that have agricultural potential, water, or other natural resource value. Alternative B considers all lands within the planning area for acquisition without prioritizing major blocks of public land and areas of high recreation potential. Renewable energy development is excluded in all areas where surface disturbance is prohibited and is avoided in mineral leasing NSO and CSU areas, ROW avoidance areas, and all other areas with surface disturbance restrictions. The BLM authorizes transmission lines only within identified corridors and requires co-location of new communication sites within designated areas. Fewer ROW corridors are designated under Alternative B than under other alternatives and no above ground high-voltage transmission lines would be authorized in the planning area. As under Alternative A, ROWs are excluded on slopes 25 percent or greater, but Alternative B additionally stipulates that placement of above ground facilities should be avoided along major transportation routes to protect visual resources. Alternative B also prohibits CO_2 sequestration research and projects. Transportation management designations under Alternative B include 625,854 acres Closed to motorized vehicle use, and 137,126 acres Limited to designated roads and trails for motorized vehicle use. In addition, Alternative B seasonally closes 18,259 acres to motorized vehicle use within big game crucial winter range.

Under Alternative B, recreation management emphasizes protection of resources and recreational experiences, and includes more restrictions on resource uses than the other alternatives. For example, the BLM limits development of additional recreational facilities to SRMAs and other high-use areas. Alternative B expands the constraints on resource uses applied under Alternative A by not leasing minerals within designated SRMAs, instituting a 0.5 mile buffer from mineral leasing surrounding SRMAs, and recommending withdrawals from appropriation under the mining law in designated SRMAs. However, Alternative B would allow salable mineral development within designated SRMAs for administrative use. Under Alternative B, the planning area would be managed under two ERMAs (Southern Big Horns and Buffalo ERMAs), totaling 726,573 acres. The BLM would also designate a total of 55,529 acres in eight SRMAs: Burnt Hollow, Dry Creek Petrified Tree, Middle Fork Powder River, Mosier Gulch, Welch Ranch, Weston Hills, Hole-in-the-Wall, and Cabin Canyon.

Alternative B manages areas with wilderness characteristics to emphasize primitive recreational opportunities and natural values. In order to protect these characteristics, Alternative B limits incompatible uses within these areas such as mineral development and motorized vehicle use.

Alternative B limits or prohibits livestock grazing where it has been determined to be incompatible with other uses, including areas within 4 miles of the perimeter of occupied or undetermined sage-grouse leks and winter concentrations areas (467,897 acres) as proposed under this alternative. Similar to Alternative A, Alternative B authorizes permanent increases in forage allocations to wildlife habitat and watershed protection as the first priority, livestock grazing second. Alternative B prohibits increases in livestock stocking rates as a result of vegetation treatment and locates livestock salt or mineral supplements a minimum of 0.5 mile away from water sources.

Special Designations

Alternative B designates eight ACECs including Cantonment Reno, Burnt Hollow, Dry Creek Petrified Tree, Fortification Creek Elk Area, Hole-in-the-Wall, Pumpkin Buttes, Sagebrush Ecosystem, and Welch Ranch. Refer to Table 2.6, "Comparative Summary of Proposed Areas of Critical Environmental Concern" (p. 110) for the management emphasis and acreages of each ACEC.

Alternative B would evaluate roads within the planning area for designation as National Back Country or Scenic Byways. If Congress does not designate the Middle Fork Powder River as a WSR, and releases the river for other uses, management will continue in accordance with the Middle Fork Interim Management Plan to protect and/or enhance its free-flowing condition and outstandingly remarkable values. The Middle Fork Interim Management Plan is available on the BFO website, http://www.blm.gov/wy/st/en/programs/Planning/rmps/buffalo/docs.html. If Congress decides not to designate the three WSAs in the planning area as Wilderness, and releases an area for other uses, the Gardner Mountain, North Fork, and Fortification Creek WSAs would not be available for oil and gas leasing until a plan amendment is completed. WSAs released from Congressional designation would then be subject to consideration for lands with wilderness characteristics.

Socioeconomic Resources

BLM management under Alternative B develops mitigation strategies to resolve conflicts that have detrimental effects on multiple resource use. Similar to Alternative A, BLM management under Alternative B considers local and regional economic development land use plans.

2.8.3. Alternative C – Resource Development

Overview of the Alternative

Alternative C emphasizes resource uses by limiting conservation measures afforded to physical, biological, heritage and visual resources. Relative to all other alternatives, Alternative C conserves the least land area for physical, biological, and heritage resources and is the least restrictive to motorized vehicle use and mineral development.

Physical Resources

Physical resources under Alternative C are generally managed with fewer management requirements and more allowance for the project-specific applications of management actions than the other alternatives. For example, quantitative air quality monitoring is not required for industrial activities and surface-disturbing activities and surface occupancy can be allowed on soils with severe erosion hazard, slopes 25 percent and greater, soils with poor reclamation

suitability, and on badlands and rock outcrops consistent with other resource values and subject to standard lease terms. Water resources management is more flexible in Alternative C than in other alternatives. For example, suitable abandoned oil and gas wells could be converted to water wells for livestock, recreation, and wildlife use, and on-channel reservoirs could be allowed in consideration of other resource uses. In addition, surface-disturbing activities can be allowed within 500 feet of springs, reservoirs, water wells, and perennial streams and riparian habitat. Cave and karst management under Alternative C is similar to Alternative B although fewer restrictions are placed on resource uses in proximity to cave and karst resources. For example, Alternative C applies a CSU stipulation within cave and karst areas whereas Alternative B applies an NSO stipulation. In addition, Alternative C would manage human activity in caves with significant resources by developing and implementing a Cave Management Plan for the entire planning area versus individual cave management plans.

Mineral Resources

Under Alternative C, mineral resource uses are subject to fewer constraints than under the other alternatives. No withdrawals from locatable mineral entry are recommended under Alternative C – all 3,319,535 acres currently open would remain open to locatable mineral entry within the planning area. Under Alternative C, the BLM would open all coal lands to coal exploration and leasing, resulting in zero acres closed to coal exploration and leasing and 4,775,136 acres open to coal exploration and leasing.

The entire federal fluid mineral estate is open for leasing subject to the following constraints: 539,499 acres are subject to standard stipulations only, 40,437 acres are subject to minor constraints, 2,472,472 acres are subject to moderate constraints, and 303,601 acres are subject to major constraints. Approximately 4,707,436 acres are open to leasing of other minerals (i.e., phosphates, sodium, etc.). Alternative C would also result in 3,290,908 acres open to salable mineral exploration and development and 57,213 acres closed to or restricted from salable mineral exploration and development.

Fire and Fuels Management

Fire and fuels management under Alternative C places more emphasis on suppression of unplanned ignitions, and uses planned ignitions to meet vegetation management objectives.

Response to unplanned ignitions in this alternative would use full protection strategies throughout the planning area. The BLM could use heavy equipment with few constraints for suppression efforts. This alternative rehabilitates suppression-related damage only.

Fuels management in Alternative C would treat about 42,000 acres with prescribed fire during the life of the plan. Wildland fire and other vegetation treatments would be used to restore fire-adapted ecosystems, enhance forage for commodity production, and to reduce hazardous fuels.

Biological Resources

Vegetation management under Alternative C emphasizes more resource use and greater intensive management practices compared to the other alternatives. For example, Alternative C implements silvicultural treatments to maximize forest health; utilizes intensive management tactics to manage for desired forest/woodland health; and manages forest/woodland to emphasize the forest resource. Reclamation under Alternative C could include using desirable non-native plant species for initial reclamation activities and would address vegetation restoration only on direct CBNG

disturbance areas. In addition, Alternative C would only apply standard lease terms to mineral leases within 500 feet of riparian/wetland systems, aquatic habitats, and floodplains. Alternative C prioritizes noxious weed treatments where infestations on public land are threatening private lands, and restricts noxious weed treatments to only those plants on the State of Wyoming Designated list. In addition, Alternative C limits aerial application to insecticides and treats annual brome species only in designated areas.

Alternative C generally applies less stringent management restrictions for surface-disturbing activities within fish and wildlife habitat than the other alternatives. For example, fish resource management under Alternative C allows surface-disturbing activities within 0.25 mile of naturally occurring water bodies consistent with other resource values while Alternative B restricts activity within that buffer. Proactive fish management makes more allowances for project-specific management decisions than the other alternatives. Alternative C also places few constraints on resource uses to protect wildlife habitat. For example, surface-disturbing activities are not prohibited in the Ed O. Taylor, Kerns, Bud Love, and Amsden Creek winter ranges as they are under the other alternatives.

Special status species receive limited protection from incompatible resource uses under Alternative C. Management of special status plant species under Alternative C is similar to Alternative B although restrictions on uses are typically limited to known special status plant populations versus within special status plant species habitat. Under Alternative C, surface disturbance is allowed to within 500 feet of any waters containing special status fish species when their impacts can be mitigated. Alternative C applies similar, but less stringent restrictions on surface-disturbing activities to protect special status wildlife species than Alternative B. For example, this alternative prohibits surface-disturbing activities within 0.25 mile of a special status species raptor nest whereas Alternative B prohibits surface disturbance within 1.5 miles. Similarly, Alternative C restricts surface-disturbing activities, disruptive activities, and occupancy within 0.25 mile of the perimeter of occupied or undetermined Greater Sage-Grouse leks, while Alternative B prohibits these activities within 4.0 miles of occupied or undetermined leks and winter concentration areas.

Heritage and Visual Resources

Alternative C provides for mineral development near historic and other cultural properties protecting them through NSO stipulations and other appropriate mitigation. The BLM applies stipulations such as NSO and CSU to protect culturally sensitive sites such as TCPs and/or sacred sites. In contrast to Alternative B, Alternative C does not prohibit salable mineral exploration, or initiate locatable mineral withdrawals in areas containing paleontological resources of high quality or importance. However, Alternative C does require paleontological field surveys on all PFYC Class 4 and 5 formations potentially affected by proposed activities.

Under Alternative C, the BLM manages all VRI Class II areas as VRM Class III and all VRI Class III areas as VRM Class IV.

Land Resources

Forest products management under Alternative C places a greater emphasis on forest products commodity production. The BLM manages forest products sales to maximize economic return and does not limit the size and design/shape of forest management in order to maximize the removal of harvestable products within the limits of Wyoming Forestry BMPs and other guidance.

All lands identified for disposal are available for disposal under Alternative C. In contrast to alternatives A and B, Alternative C lands and realty actions do not include land acquisition. Renewable energy development is allowed within the planning area as long as development is consistent with other resource values. Alternative C offers additional acreage for ROW development in comparison to Alternative B, and allows the authorization of above ground transmission lines in any designated corridor. Alternative C also does not require co-location of new communication sites nor does it exclude ROW on slopes of 25 percent or greater. CO_2 sequestration research and projects are allowed where consistent with other resource values. Transportation management under Alternative C closes 28,931 acres to motorized vehicle use and limits motorized vehicle use to designated roads and trails on 723,497 acres. In addition, Alternative C closes 6,839 acres of big game crucial winter range to motorized vehicle use from November 15 to April 30. As under all alternatives, motorized vehicle use is Limited to designated routes on BLM-administered land throughout the planning area unless otherwise designated.

Alternative C allows additional recreation facilities in areas where they are supported by recreational use and are consistent with other resource values. Generally, Alternative C does not apply specific limitations on surface disturbance or mineral development and manages recreational areas consistent with other resource values. Under Alternative C, the BLM would designate six SRMAs: Burnt Hollow, Dry Creek Petrified Tree, Middle Fork Powder River, Mosier Gulch, Welch Ranch, and Weston Hills. The rest of the planning area would be managed as the Buffalo ERMA.

Lands with wilderness characteristics are managed to follow the management within the surrounding areas and are not managed to emphasize primitive recreational opportunities and natural values.

Livestock grazing under Alternative C is limited or prohibited only in those areas where it is currently prohibited under Alternative A. Livestock grazing is generally managed with less emphasis on providing for other resource values than the other alternatives. For example, Alternative C authorizes permanent increases in forage allocations to livestock grazing as the first priority, wildlife habitat and watershed protection as the second priority. Alternative C requires livestock salt or mineral supplements to be placed a minimum of 500 feet away from water sources, riparian areas, and aspen stands.

Special Designations

Alternative C does not designate any ACECs. If Congress does not designate the Middle Fork Powder River as a WSR, and releases the river for other uses, management will follow the management within the surrounding areas as outlined in this RMP. Like Alternative B, if Congress decides not to designate the three WSAs in the planning area as wilderness, the Gardner Mountain, North Fork, and Fortification Creek WSAs would not be available for oil and gas leasing until a plan amendment is completed. WSAs released from Congressional designation would then be subject to consideration for lands with wilderness characteristics.

Socioeconomic Resources

BLM management under Alternative C develops management strategies designed to recognize and point out conflicts that are expected to impact multiple resource use. Alternative C also incorporates, to the extent possible, local and regional economic development and land use plans.

2.8.4. Alternative D – Proposed RMP

Overview of the Alternative

Alternative D generally allows resource use if the activity can be conducted in a manner that conserves physical, biological, and heritage and visual resources. Alternative D designates the second most land as SRMAs and ACECs and emphasizes moderate constraints on resource uses to reduce impacts to resource values.

Physical Resources

Physical resources management under Alternative D places few universal constraints on resource uses and instead allows activities if they meet certain requirements designed to mitigate impacts to air, soil, water, and cave and karst resources. For example, the BLM allows activities on highly erosive soils and on slopes 25 percent and greater if the actions meet certain criteria including having an approved stabilization and reclamation plan. Similar to Alternative B, this alternative would require quantitative air quality modeling of proposed activities to determine potential emission impacts and identify mitigation strategies. Water resources management generally seeks to support other resource uses while protecting water quality and quantity by allowing activities such as converting abandoned oil and gas wells to water supply wells (with proper permitting and regulation by the Wyoming DEQ) if a beneficial use can be demonstrated and allowing surface disturbance within 500 feet of springs, reservoirs, water wells, and perennial streams where water and other resource objectives can be met. In order to protect cave and karst resources, Alternative D applies site-specific buffers to restrict resource uses such as forest management around significant caves. In addition, Alternative D would manage human activity in caves with significant resources by developing and implementing a Cave Management Plan for the entire planning area with potential cave specific components.

Mineral Resources

Under Alternative D, mineral resource uses are subject to less extensive constraints than under Alternative B, but more than either alternatives A or C. The BLM recommends withdrawals from mineral entry for an additional 82,691 acres (totaling 94,288 acres potentially closed to mineral entry; closure of these acres would leave 4,720,586 acres open to mineral entry within the planning area). All coal lands are open to exploration, subject to multiple use constraints, resulting in zero acres closed to coal exploration and 4,775,136 acres open to coal leasing, subject to application of the coal planning screens in 43 CFR 3420.1-4.

Approximately 72,276 acres of federal fluid mineral estate are closed to fluid mineral leasing. The remaining federal fluid mineral estate is open for leasing subject to the following constraints: 135,909 acres are subject to standard stipulations only, 104,927 acres are subject to minor constraints, 2,516,826 acres are subject to moderate constraints, and 556,592 acres are subject to major constraints. In addition, approximately 3,801,889 acres are open to leasing of other minerals (i.e., phosphates, sodium, etc.). Alternative D would result in 2,725,060 acres remaining open to salable mineral exploration and development, and 623,061 acres closed to or restricted from salable mineral exploration and development.

Fire and Fuels Management

Fire management under Alternative D balances suppression strategies with resource values and desired conditions. Unplanned ignitions in this alternative may be managed to enhance other

resources such as wildlife habitat and forest health. Response to wildfires could vary from full protection in areas where fire is undesirable, to monitoring fire behavior in areas where fire can be used as a management tool. The entire planning area would be available to manage fires to meet resource objectives. Heavy equipment is prohibited in certain areas with sensitive resources such as riparian/wetland habitat, except where human safety is at risk or if the effects of the fire are anticipated to cause more resource damage than the use of heavy equipment.

Fuels management in Alternative D would treat about 14,000 acres with prescribed fire during the life of the plan. Wildland fire and other vegetation treatments would be used to meet desired management objectives.

Biological Resources

Vegetation management under Alternative D allows for resource uses where activities can be conducted that conserve vegetation and other resource values. For example, Alternative D manages forests and woodlands to emphasize multiple resource values and not just the forest resource as under Alternative C. Alternative D also implements silvicultural treatments to maximize forest health and manages forests and woodlands to emphasize multiple resource values including recreation, wildlife, soils, water, and forest products. Alternative D allows desirable non-native plant species for short-term reclamation activities as a component of an authorized reclamation plan. In addition, Alternative D would apply a CSU stipulation to any mineral lease within 500 feet of riparian/wetland systems and aquatic habitats. Invasive species and pest management under Alternative D includes the development of long-range pest management plans, treatment areas, and priorities in cooperation with stakeholders.

Alternative D emphasizes protection of fish and wildlife resources through the application of moderate resource constraints and defining resource objectives. For fish species, the BLM allows surface-disturbing activity within 0.25 mile of naturally occurring water bodies containing fish if fish resource objectives can be met. Proactive fish management includes performing restoration of important instream segments for fish habitat in accordance with WGFD priorities and designing crossings to allow fish passage. Alternative D would continue to prohibit surface disturbance in sensitive wildlife areas such as big game crucial winter range, but would allow other resource uses in certain habitat if the activities met specific criteria such as following an approved resource protection plan.

Special status species generally receive greater protection under Alternative D than under Alternative A. To protect special status plant species, Alternative D prohibits surface disturbance, mineral exploration, motor vehicle use, explosives, and the placement of water developments within known special status plant species populations. Alternative D prohibits new surface-disturbing activities within 0.25 mile of any waters containing special status fish species, although certain exceptions are allowed. For Greater Sage-Grouse, constraints on resource uses are greater within Core Population Areas than outside Core Population Areas. For example, the BLM would apply an NSO stipulation within 0.6 mile of Greater Sage-Grouse leks within priority habitat (Core Population Areas and Connectivity Corridors) and within 0.25 mile of occupied Greater Sage-Grouse leks outside of priority habitat. Alternative D applies similar, but less stringent restrictions on surface-disturbing activities to protect other special status wildlife species than Alternative B. For example, Alternative D institutes a disturbance free zone and applies a CSU stipulation to mineral leases within 0.5 mile of eagle roost sites and consistently used riparian corridors.

Heritage and Visual Resources

Cultural and paleontological resources generally receive more protection under Alternative D than under Alternative A. Alternative D applies an NSO stipulation to specific historic properties and a CSU stipulation to protect the setting of the same sites, subject to certain exceptions. Alternative D also avoids areas containing important paleontological resources when developing locatable and salable minerals and applies an NSO stipulation to mineral leases in the same areas. Paleontological field surveys are required on PFYC Class 4 and 5 formations potentially affected by proposed activities and on Class 3 formations as needed.

VRM under Alternative D includes managing VRI Class II areas (except Powder River Breaks and Fortification Creek) and special emphasis areas (i.e., SRMAs, ACECs, and wilderness characteristic areas) as VRM Class II.

Land Resources

Forest products management under Alternative D emphasizes commodity production while still managing for long-term ecological health of forestland. For example, sales of forest products are managed to remain within ecologically sustainable limits while maximizing economic return. The designing/shaping of forest management areas is conducted in accordance with other resource values and within the limits of the Wyoming Forestry BMPs.

The BLM actively pursues a program to dispose of BLM surface lands identified for disposal including other lands not identified but meeting appropriate disposal criteria. Land acquisition and disposal is based on all resources values, including but not limited to agricultural potential and water. Renewable energy development is excluded on 352,068 acres. Alternative D requires co-location of communication sites within identified communication site areas and avoids ROW on slopes 25 percent or greater and highly erodible soils. Alternative D requires corridor use and authorizes above ground and below ground structures in designated corridors when resource objectives can be met. Designated ROW corridors would be utilized as transportation and utility corridors. CO_2 sequestration proposals are evaluated in accordance with other management objectives. Transportation management under Alternative D closes 37,389 acres to motorized vehicle use and limits motorized vehicle use to designated roads and trails on 661,726 acres. In addition, Alternative D seasonally closes 18,259 acres to motorized vehicle use to protect wintering big game.

Recreation management under Alternative D generally increases constraints on resource uses within recreation management areas and places a greater emphasis on recreational facility development compared to current management. Surface disturbance and salable mineral development are allowed in SRMAs for administrative use only, while SRMAs are recommended for withdrawal from locatable mineral entry. Seven SRMAs totaling 54,160 acres and eight ERMAs totaling 349,663 acres would be designated under Alternative D. Cabin Canyon, proposed as an SRMA under Alternative B, would not be designated as an SRMA in Alternative D.

Non WSA lands with wilderness characteristics are managed to emphasize ecosystem health, natural values, and primitive recreational opportunities.

Livestock grazing is allowed on all public lands in the planning area except where an evaluation has determined it to be incompatible with other resource uses or values. Permanent forage allocations would consider watershed protection, livestock grazing, wildlife habitat, and other resource values. Similar to Alternative C, Alternative D allows increases in livestock stocking rates as a result of vegetation treatments and requires livestock salt or mineral supplements to be placed a minimum of 500 feet away from water sources.

Special Designations

Alternative D designates two ACECs including Fortification Creek Elk Area, Pumpkin Buttes, and Welch Ranch. Refer to Table 2.6, "Comparative Summary of Proposed Areas of Critical Environmental Concern" (p. 110) for the management emphasis and acreages of each ACEC.

Alternative D would evaluate roads in coordination with the counties and other stakeholders for designation as National Back Country or Scenic Byways. If Congress does not designate the Middle Fork Powder River as a WSR, and releases the river for other uses, management will continue to retain its free-flowing condition and outstandingly remarkable values. As under alternatives B and C, if Congress decides not to designate the three WSAs in the planning area as Wilderness, the Gardner Mountain, North Fork, and Fortification Creek WSAs will not be available for oil and gas leasing until a plan amendment is completed. WSAs released by Congressional for uses other than wilderness would then be considered pursuant to Manuals 6310 and 6320 to maintain wilderness characteristics.

Socioeconomic Resources

BLM management under Alternative D emphasizes collaboration with local, state, federal, and private entities to promote a healthy and sustainable social and economic environment. Similar to the other alternatives, Alternative D considers local and regional land use and economic development plans.

2.9. Detailed Alternative Descriptions by Resource

This section is comprised of multiple tables. Table 2.7, "1000 PHYSICAL RESOURCES (PR) – AIR QUALITY (AQ)" (p. 127) through Table 2.40, "8000 SOCIOECONOMIC RESOURCES (SR) – HEALTH AND SAFETY" (p. 275) identify goals and objectives, management actions common to all alternatives, and management actions by alternative. Table 2.7, "1000 PHYSICAL RESOURCES (PR) – AIR QUALITY (AQ)" (p. 127) through Table 2.40, "8000 SOCIOECONOMIC RESOURCES (SR) – HEALTH AND SAFETY" (p. 275) are arranged according to the following resource topics:

Number	Resource Topic
1000	Physical Resources (PR)
2000	Mineral Resources (MR)
3000	Fire and Fuels Management (FM)
4000	Biological Resources (BR)
5000	Heritage and Visual Resources (HR)
6000	Land Resources (LR)
7000	Special Designations (SD)
8000	Socioeconomic Resources (SR)

The above numbering system and abbreviations for each of the eight resource topics appear as headings and serve to organize Table 2.7, "1000 PHYSICAL RESOURCES (PR) – AIR QUALITY (AQ)" (p. 127) through Table 2.40, "8000 SOCIOECONOMIC RESOURCES (SR) – HEALTH AND SAFETY" (p. 275). Following the headings are the applicable goals and objectives for each resource topic. These goals and objectives apply to all four alternatives under consideration for the entire planning area and would apply for the life of the RMP.

Management actions are anticipated to achieve the goals and objectives identified for each resource topic. Some management actions are constant across all alternatives and are listed

for each resource topic under the Management Actions Common to All Alternatives sections. Other management actions vary by alternative and are identified in the Management Actions by Alternative sections.

Actions apply for the life of the RMP, but can be changed by amending the RMP. For example, areas identified as closed to mineral leasing refer to federal mineral estate closed from leasing for the life of the RMP unless changed through an RMP amendment. Moreover, where seasonal or other restrictions or limitations are placed on development, exception, waiver, or modification of these limitations may be approved in writing (Appendix H (p. 1959)), including documented supporting analysis, by the authorized officer. This applies to all restrictions and limitations.

2.9.1. 1000 PHYSICAL RESOURCES

Table 2.7. 1000 PHYSICAL RESOURCES (PR) – AIR QUALITY (AQ)

GOAL PR:1 Maintain existing air quality and air quality related values such as visibility by requiring that all BLM actions minimize impacts on air quality and comply with all applicable air quality laws, rules, and regulations.

Objectives:

PR:1.1 Reduce the impacts of criteria pollutants and greenhouse gases associated with BLM actions in compliance with applicable state and federal AAQS.

PR:1.2 Work cooperatively with Wyoming DEQ to reduce visibility-impairing pollutants in accordance with the State of Wyoming's Regional Haze SIP.

PR:1.3 Reduce atmospheric deposition of pollutants to levels below accepted and LAC.

PR:1.4 Manage fugitive dust to reduce impacts associated with BLM actions.

Record #	Goal/Obj.	MANAGEMENT ACTIONS COMMON TO ALL ALTERNATIVES
AQ-1001	PR:1	Manage prescribed burns to comply with Wyoming DEQ AQD smoke-management rules and regulations.
AQ-1002	PR:1	Define a criteria pollutant and AQRV monitoring strategy and cooperatively establish a monitoring network by creating a method for siting AQ monitors in order to provide additional data for describing background concentrations.
AQ-1003	PR:1	Implement mitigation measures within BLM's authority (BMPs – for example, dust suppression) to reduce emissions from current levels in the planning area and work cooperatively to encourage industry and other permittees to adopt measures to reduce emissions.
AQ-1004	PR:1	Enhance the existing cooperative process that shares air quality information with agencies, stakeholders, and the public.
AQ-1005	PR:1	Work cooperatively with stakeholders to reduce cumulative dust emissions (i.e., Campbell County Dust Coalition) and address other air quality concerns.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
AQ-1006	PR:1	Perform analysis of activities with expected effects to air resources. Modeling may be performed on a project-specific basis.	Require quantitative AQ modeling of industrial activities (e.g., oil and gas field development or mining activities) in order to determine the potential impacts of proposed emission sources and subsequently of potential mitigation strategies for projects expected to approach or exceed emission standards at the project level.	Do not require quantitative AQ modeling of industrial activities.	Require quantitative AQ modeling of industrial activities (i.e., oil and gas or mining) expected to result in emissions where ambient conditions may approach or exceed ambient air quality standards, in consultation with the Wyoming DEQ Air Quality Division and other stakeholder, in order to determine the potential impacts of proposed emission sources and potential mitigation strategies

Table 2.8. 1000 PHYSICAL RESOURCES (PR) – SOIL

GOAL PR:2 Soil quality is maintained, improved, or restored while supporting other resource values.

Objectives:

PR:2.1 Achieve and maintain Standards for Healthy Rangelands and Guidelines for Livestock Grazing Management for the Public Lands Administered by the BLM in the State of Wyoming.

PR:2.2 Incorporate soil protection consistent with soil resource capabilities for all BLM actions.

PR:2.3 Rehabilitate all surface-disturbing activities consistent with applicable laws, regulations, and policies.

Record #	Goal/Obj.	MANAGEMENT ACTIONS COMMON TO ALL ALTERNATIVES			
Soil-1001	PR:2.1 PR:2.2	Evaluate the effects of a proposed surface-disturbing activity to the soil resource using NRCS Soil Survey data and/or onsite investigation. Apply mitigation measures if necessary, relocate the activity to a more suitable soil type, or deny the authorization.			
Soil-1002	PR:2.1 PR:2.2 PR:2.3	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.			
Record #	**Goal/Obj.**	**Alternative A (Current Management)**	**Alternative B (Resource Conservation)**	**Alternative C (Resource Utilization)**	**Alternative D (Proposed RMP)**
Soil-1003	PR:2.2	Prohibit surface-disturbing activities within areas of severe erosion hazard (Map 3) from March 1 through June 15, unless the prohibition is waived by the authorized officer.	Prohibit surface-disturbing activities on soils with a severe erosion hazard (Map 3).	Allow surface-disturbing activities on soils with a severe erosion hazard consistent with other resource values.	Allow surface-disturbing activities on soils without a severe erosion hazard. Activities on highly erosive soils would be allowed with approved site-specific construction, stabilization, and reclamation plans to conserve the soil resource and meet reclamation (Appendix O (p. 2495)) and resource objectives.
Soil-1004	PR:2.1 PR:2.2	NSO on areas of severe erosion hazard from March 1 through June 15, unless waived by the authorized officer.	Apply an NSO stipulation on soils with a severe erosion hazard.	Allow surface occupancy on soils with a severe erosion hazard subject to standard lease terms.	Apply a CSU stipulation on soils with a severe erosion hazard with approved site-specific construction, stabilization, and reclamation plans.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
Soil-1005	PR:2.2	Prohibit surface-disturbing activities on slopes of more than 25% (Map 4), unless the prohibition is waived by the authorized officer.	Prohibit surface-disturbing activities on slopes 25% and greater (Map 4).	Allow surface-disturbing activities on slopes 25% and greater consistent with other resource values (Map 4).	Allow surface-disturbing activities on slopes less than 25%. Activities on slopes 25% and greater would be allowed with approved site-specific construction, stabilization, and reclamation plans to conserve the soil resource and meet reclamation (Appendix O (p. 2495)) and resource objectives (Map 4).
Soil-1006	PR:2.2	NSO for fluid mineral leases on slopes of more than 25% unless waived by the authorized officer (Map 4).	Apply an NSO stipulation on all slopes 25% and greater (Map 4).	Allow surface occupancy on slopes 25% and greater subject to standard lease terms (Map 4).	Apply a CSU stipulation on all slopes 25% and greater with approved site-specific construction, stabilization, and reclamation plans (Map 4).
Soil-1007	PR:2.2 PR:2.3	Surface-disturbing activities are restricted on soils having poor reclamation suitability on a project-specific basis (Map 5).	Prohibit surface-disturbing activities on soils with poor reclamation suitability (Map 5).	Allow surface-disturbing activities on soils with poor reclamation suitability consistent with other resource values (Map 5).	Allow surface-disturbing activities on soils with poor reclamation suitability recognizing that reclamation may be challenging and that construction, stabilization, and reclamation plans are required to conserve the soil resource (Map 5) (Appendix O (p. 2495)).
Soil-1008	PR:2.2 PR:2.3	Surface-disturbing activities are restricted on soils having poor reclamation suitability on a project-specific basis (Map 5).	Apply an NSO stipulation on soils having poor reclamation suitability (Map 5).	Allow surface occupancy on soils having poor reclamation suitability subject to standard lease terms (Map 5).	Apply a lease notice on soils with poor reclamation suitability identifying that reclamation may be challenging and that construction, stabilization, and reclamation plans are required to conserve the soil resource (Map 5).

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
Soil-1009	PR:2.2	No previous decision; considered on a project-specific basis.	Prohibit surface-disturbing activities on badlands, rock outcrops, biologic crusts, and slopes susceptible to mass movement (Map 6).	Allow surface-disturbing activities on badlands, rock outcrops, biologic crusts, and slopes susceptible to mass movement consistent with other resource values (Map 6).	Avoid surface-disturbing activities on limited reclamation potential areas such as badlands, rock outcrops, biologic crusts, and slopes susceptible to mass movement (Map 6). Activities may be allowed in limited cases with approved site-specific construction, stabilization, and reclamation plans to conserve the soil resource and meet reclamation (Appendix O (p. 2495)) and resource objectives.
Soil-1010	PR:2.2	No previous decision; considered on a project-specific basis.	Apply an NSO stipulation on badlands, rock outcrops, biologic crusts, and slopes susceptible to mass movement (Map 6).	Allow surface occupancy on badlands, rock outcrops, biologic crusts, and slopes susceptible to mass movement subject to standard lease terms (Map 6).	Apply a CSU stipulation on limited reclamation potential areas such as badlands, rock outcrops, biologic crusts, and slopes susceptible to mass movement with approved site-specific construction, stabilization, and reclamation plans (Map 6).

Table 2.9. 1000 PHYSICAL RESOURCES (PR) – WATER

GOAL PR:3 Watershed, surface water, and groundwater resources are consistent with applicable state and federal standards and regulations.

Objectives:

PR:3.1 BLM actions maintain or improve watershed, wetland, and riparian functions to support desired surface-flow regimes and water quality.

PR:3.2 Mitigate accelerated channel erosion and instability as a result of BLM actions.

PR:3.3 Ensure adequate reclamation of reservoir structures and affected downstream channels associated with BLM actions.

PR:3.4 Cooperatively develop monitoring, rehabilitation and restoration plans for degraded water bodies and riparian zones.

PR:3.5 Reclaim or remove unneeded, nonfunctional or poorly-sited reservoirs on BLM-administered lands.

PR:3.6 Continue monitoring groundwater potentially impacted as a result of BLM actions and expand the monitoring network as needed.

PR:3.7 Minimize impacts to aquifers and groundwater quality.

GOAL PR:4 Water availability to facilitate authorized uses while providing for the conservation of those waters.

Objectives:

PR:4.1 Develop new water-supply sources where appropriate during BLM actions.

PR:4.2 Identify abandoned oil and gas wells that are desirable for conversion to livestock and wildlife water supply use.

Record #	Goal/Obj.	MANAGEMENT ACTIONS COMMON TO ALL ALTERNATIVES
Water-1001	PR:3.1 PR:3.4	Provide an alternative or "off-source" water supply (e.g., piping water to troughs, tanks, or ponds) in locations where BLM-authorized uses are fenced out of water sources.
Water-1002	PR:4.1	Install flow-control devices on new and existing BLM-authorized water wells and spring developments and evaluate the need for additional flow-control devices on a project-specific basis.
Water-1003	PR:3.1 PR:3.7	File for water rights on BLM water projects.
Water-1004	PR:3.1 PR:3.2	Manage surface-disturbing activities to prevent degradation of water quality for all waters.
Water-1005	PR:3.6 PR:3.7	Minimize impacts to water quality and quantity during BLM-authorized actions. BLM will work with Wyoming DEQ to assess impacts and develop mitigation.

Record #	Goal/Obj.	MANAGEMENT ACTIONS COMMON TO ALL ALTERNATIVES			
Water-1006	PR:3.1 PR:3.2 PR:3.4	Manage water resources to meet the Standards for Healthy Rangelands and Guidelines for Livestock Grazing Management for the Public Lands Administered by the BLM in the State of Wyoming, achieve PFC, and meet Wyoming water quality standards. Take appropriate actions to improve the biological, chemical, and geomorphic conditions of streams adversely impacted by BLM-authorized actions and permitted activities.			
Water-1007	PR:3.1 PR:3.2 PR:3.4	Design and manage land use and surface-disturbing activities to reduce channel and bank erosion and the associated loss of riparian habitats.			
Record #	**Goal/Obj.**	**Alternative A (Current Management)**	**Alternative B (Resource Conservation)**	**Alternative C (Resource Utilization)**	**Alternative D (Proposed RMP)**
Water-1008	PR:3.1 PR:3.3 PR:3.5	No previous decision; considered on a project-specific basis.	Prohibit on-channel reservoirs to minimize effects to natural stream flow regimes.	Allow for on-channel reservoirs effecting natural stream flow regimes in consideration of other resource values.	Allow for on-channel reservoirs effecting natural stream flow regimes in consideration of other resource values.
Water-1009	PR:3.1 PR:3.2	No previous decision; considered on a project-specific basis.	Do not authorize activities resulting in the surface discharge of produced water from development of federal minerals.	Authorize activities associated with the surface discharge of produced water from development of federal minerals, when permitted by the State of Wyoming.	Authorize activities associated with the surface discharge of water produced during federal activities if erosive conditions, channel stability, soil characteristics, and other resource values warrant. Coordinate permitting process with the State of Wyoming.
Water-1010	PR:3.1 PR:3.2	No previous decision; considered on a project-specific basis.	Maintain existing water supply sources to meet current demand and need.	Maintain existing water supply sources and drill new water supply wells, develop new seeps and springs, and construct new reservoirs to meet demand and need.	Maintain existing water supply sources where possible, otherwise supply new water sources to meet demand and need, consistent with other resources.
Water-1011	PR:3.7 PR:4.1 PR:4.2	No previous decision; considered on a project-specific basis.	Do not convert abandoned oil and gas wells to water supply wells.	Convert suitable abandoned oil and gas development wells to water supply wells for livestock, recreation, and wildlife use.	Allow abandoned oil and gas wells to be converted to water supply wells if a beneficial use (livestock, recreation, and wildlife) can be demonstrated.
Water-1012	PR:4	No previous decision; considered on a project-specific basis.	Require alternative energy (e.g., solar and wind) to power all new and existing water resource developments.	Do not require alternative energy (e.g., solar and wind) to power new and existing water resource developments.	Encourage alternative energy (e.g., solar and wind) to power new water resource developments versus overhead power or petroleum based.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
Water-1013	PR:3.1 PR:3.2	Prohibit surface disturbance within 500 feet of any spring, reservoir, water well, or perennial stream, unless the prohibition is waived by the authorized officer.	Prohibit surface-disturbing activities within 500 feet of springs, non-CBNG reservoirs, water wells, or perennial streams and associated riparian habitat.	Allow surface-disturbing activities within 500 feet of springs, non-CBNG reservoirs, water wells, or perennial streams and associated riparian habitat.	Allow surface disturbance within 500 feet of springs, non-CBNG reservoirs, water wells, or perennial streams where water and other resource objectives (including, but not limited to soil, slope, and vegetation) can be met.
Water-1014	PR:3.1 PR:3.2	No previous decision; considered on a project-specific basis.	Apply an NSO stipulation to any fluid mineral lease within 500 feet of springs, non-CBNG reservoirs, water wells, or perennial streams and associated riparian habitat.	Do not apply an NSO stipulation to any fluid mineral lease within 500 feet of springs, non-CBNG reservoirs, water wells, or perennial streams and associated riparian habitat.	Apply a CSU stipulation to any fluid mineral lease within 500 feet of any spring, non-CBNG reservoir, water well, or perennial stream, based on other resource values, including, but not limited to soil, slope, and vegetation.
Water-1015	PR:3.1 PR:3.2 PR:3.4	No previous decision; considered on a project-specific basis.	Manage riparian and uplands in historically perennial systems to restore perennial flows or standing water.	Manage riparian and uplands in historically perennial systems on a project-specific basis.	Manage riparian and uplands to restore perennial flows or standing water.
Water-1016	PR:3.1 PR:3.3 PR:3.5	No previous decision; considered on a project-specific basis.	Require removal and reclamation of unneeded CBNG reservoirs for removal and reclamation.	Require removal and reclamation of unneeded CBNG reservoirs on BLM surface and where requested on private surface.	Evaluate unneeded reservoirs for removal and reclamation.

Table 2.10. 1000 PHYSICAL RESOURCES (PR) – CAVE AND KARST

GOAL PR:5 Significant cave and karst resources are conserved.

Objectives:

PR:5.1 Identify and determine cave and karst resources that meet significance criteria of 43 CFR 37.11(c).

PR:5.2 Manage significant cave and karst resources while supporting other resource values.

Record #	Goal/Obj.	MANAGEMENT ACTIONS COMMON TO ALL ALTERNATIVES			
Cave-1001	PR:5.1	Conduct cave inventories and significance determinations.			
Cave-1002	PR:5.1	Inventory and map cave and karst areas.			
Record #	**Goal/Obj.**	**Alternative A (Current Management)**	**Alternative B (Resource Conservation)**	**Alternative C (Resource Utilization)**	**Alternative D (Proposed RMP)**
Cave-1003	PR:5.2	No previous decision; considered on a project-specific basis.	Manage human activity in caves with significant resources through cave specific Cave Management Plans.	Manage human activity in caves with significant resources by developing and implementing a Cave Management Plan for the planning area.	Manage human activity in caves with significant resources by developing and implementing a Cave Management Plan for the planning area, with potential cave specific components.
Cave-1004	PR:5.2	No previous decision; considered on a project-specific basis.	Apply an NSO stipulation within cave and karst areas. Close these areas to surface and sub-surface-disturbing activities.	Apply a CSU stipulation within cave and karst areas. Mineral resource activities would likely be required to maintain a buffer around significant cave entrances and passages.	Apply a CSU stipulation within cave and karst areas. **Note:** Mineral resource activities would likely be required to maintain a site-specific buffer around significant cave entrances and passages.
Cave-1005	PR:5.2	No previous decision; considered on a project-specific basis.	Prohibit surface-disturbing activities in areas containing cave and karst resources (Map 7).	Require a buffer from significant cave entrances for surface-disturbing activities (Map 7).	Require a site-specific buffer from significant cave entrances for surface-disturbing activities.
Cave-1006	PR:5.2	No previous decision; considered on a project-specific basis.	Prohibit forest management in areas containing cave and karst resources.	Require forest management to maintain a buffer from significant cave entrances.	Require forest management to maintain a site-specific buffer from significant cave entrances.
Cave-1007	PR:5.2	No previous decision; considered on a project-specific basis.	Restrict livestock from entrances to significant caves.	Do not restrict livestock grazing in areas containing cave and karst resources.	Restrict livestock from entrances to significant caves.

2.9.2. 2000 MINERAL RESOURCES

Table 2.11. 2000 MINERAL RESOURCES (MR) – LOCATABLE MINERALS

GOAL MR:1 Federal mineral lands are open to mineral entry to support short-term and long-term domestic needs.

Objectives:

MR:1.1 Provide opportunities for the exploration and development of locatable minerals, as well as mill and tunnel site operations, while avoiding or mitigating the effects of these activities on other resource values so that unnecessary or undue degradation is prevented.

MR:1.2 Provide opportunities for the exploration, development, and reclamation of locatable minerals (including uranium), as well as mill and tunnel site operations, in coordination with other governmental agencies.

Record #	Goal/Obj.	MANAGEMENT ACTIONS COMMON TO ALL ALTERNATIVES
Locatable-2001	MR:1.1	Lands not formally withdrawn or segregated from mineral entry are open for the exploration and development of locatable minerals.
Locatable-2002	MR:1.2	Implement the MOUs between BLM and Wyoming DEQ, and BLM and NRC, addressing locatable mineral exploration, development, and reclamation activities.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
Locatable-2003	MR:1.1	Amsden Creek (523 acres), Middle Fork Canyon (about 10,695 acres), and Kerns (155 acres) Game Ranges are withdrawn from mineral entry; these withdrawals total 11,373 acres (Map 8). Although Fortification Creek, Gardner Mountain, and North Fork WSAs (28,931 acres) (Map 8) remain open to mineral entry, locatable mineral exploration and development activities on active claims or sites in these areas would be regulated pursuant to restrictions under 43 CFR 3802 to prevent impairment of the suitability of these areas for inclusion in the wilderness system.	Recommend withdrawals from mineral entry for areas identified within Alternative B to conserve other resource values (Map 8). This results in: • 159,054 acres remain open to mineral entry, if all acres recommended for withdrawal are withdrawn. • 687,813 acres recommended for withdrawal from mineral entry. • 11,373 acres remain withdrawn from mineral entry.	Do not recommend any new withdrawals from mineral entry. Manage lands open to mineral entry in accordance with Alternative C, as consistent with other resource values. This results in: • 777,310 acres remain open to mineral entry. • 0 acres recommended for withdrawal from mineral entry. • 11,373 acres remain withdrawn from mineral entry.	Recommend withdrawals from mineral entry for areas identified within Alternative D to conserve other resource values (Map 8). This results in: • 694,619 acres remain open to mineral entry, if all acres recommended for withdrawal are withdrawn. • 115,614 acres recommended for withdrawal from mineral entry. • 11,373 acres remain withdrawn from mineral entry.

Table 2.12. 2000 MINERAL RESOURCES (MR) – LEASABLE – COAL

GOAL MR:2 Leasable coal resources are available to support domestic and export needs.

Objectives:

MR:2.1 Maintain coal leasing and exploration, while minimizing impacts to other resource values.

MR:2.2 Manage opportunities for exploration and development of coal resources.

Record #	Goal/Obj.	MANAGEMENT ACTIONS COMMON TO ALL ALTERNATIVES
Coal-2001	MR:2.1 MR:2.2	Coal planning was completed as part of the April 2001 BFO RMP update. At that time the four coal planning screens (i.e., coal development potential, unsuitability, multiple use and surface owner consultation) were applied to certain federal coal lands within the BFO planning area. The result of this planning effort was a decision identifying lands acceptable for further coal leasing consideration. The coal management decisions made in the BFO RMP update will be carried forward in this RMP revision (Map 11). Federal coal lands identified acceptable for further coal leasing consideration are available for Lease By Applications, lease modifications, emergency leases, and exchanges. Prior to offering a coal tract for sale, the need to reapply the unsuitability criteria will be reviewed, a tract specific NEPA analysis will be completed, and there will be opportunity for public comment. At the time an application for a new coal lease or lease modification is submitted to the BLM, the BLM will determine whether the lease application area is "unsuitable" for all or certain coal mining methods pursuant to 43 CFR 3461.5. Priority habitat (core population areas and core population connectivity corridors) is essential habitat for maintaining Greater Sage-Grouse for purposes of the suitability criteria set forth at 43 CFR 3461.5(o)(1).

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
Coal-2002	MR:2.1 MR:2.2	On coal leases for which mining and reclamation plans have been approved, stipulate oil and gas leases to regulate oil and gas operations that would interfere with approved coal mining.	When a coal lease-by-application is filed over existing oil and gas leases, the coal lease applicant will be required to develop a mitigation plan acceptable to the oil and gas lessee allowing maximum recovery of both resources. Implementation of this mitigation plan must be accepted by any successful lease-by-application bidder and will become a stipulation on the coal lease. If a mitigation plan cannot be agreed upon prior to offering the coal lease sale, then BLM will delineate coal tracts to avoid oil and gas operations or will delay leasing of the coal tract.	Stipulate fluid mineral leases when nominated within the areas identified acceptable for further consideration for coal leasing (BLM 2001a) to require a mitigation plan allowing for maximization of both coal and oil and gas resources.	Stipulate fluid mineral leases when nominated over existing coal leases to allow maximum recover of the coal resources. When an oil and gas parcel is nominated over a coal lease application or coal lease modification application, the parcel will be pulled from the oil and gas sale list and deferred until such time a coal lease is issued. Once a coal leased is issued or the sale cancelled and the case closed, the deferred parcel nomination may be added to the oil and gas lease sale list with stipulations.

Table 2.13. 2000 MINERAL RESOURCES (MR) – LEASABLE – FLUID (Oil/Gas and Geothermal)

GOAL MR:3 Leasable fluid mineral resources are available to support domestic needs.

Objectives:

MR:3.1 Provide opportunities for exploration, leasing, and development of fluid mineral resources.

MR:3.2 Facilitate the evaluation of BLM-administered lands for fluid mineral potential.

MR:3.3 Manage BLM-administered lands for collection of subsurface geological (geophysical) data to aid in the exploration of fluid mineral resources.

MR:3.4 Priority will be given to leasing and development of fluid mineral resources, including geothermal, outside of Greater Sage-Grouse habitat. When analyzing leasing and authorizing development of fluid mineral resources, including geothermal, in priority habitat (core population areas and core population connectivity corridors) and general habitat, and subject to applicable stipulations for the conservation of Greater Sage-Grouse, priority will be given to development in non-habitat areas first and then in the least suitable habitat for Greater Sage-Grouse. The implementation of these priorities will be subject to valid existing rights and any applicable law or regulation, including, but not limited to, 30 U.S.C. 226(p) and 43 CFR 3162.3-1(h). Where a proposed fluid mineral development project on an existing lease could adversely affect Greater Sage-Grouse populations or habitat, the BLM will work with the lessees, operators, or other project proponents to avoid, reduce and mitigate adverse impacts to the extent compatible with lessees' rights to drill and produce fluid mineral resources. The BLM will work with the lessee, operator, or project proponent in developing an APD for the lease to avoid and minimize impacts to Greater Sage-Grouse or its habitat and will ensure that the best information about the Greater Sage-Grouse and its habitat informs and helps to guide development of such Federal leases.

Record #	Goal/Obj.	MANAGEMENT ACTIONS COMMON TO ALL ALTERNATIVES
O&G-2001	MR:3.1	Continue to require lessees to conduct operations in a manner that minimizes adverse impacts to other resources and other land uses and users. Where the federal government owns the mineral estate in Greater Sage-Grouse habitat and the surface is in non-federal ownership, apply to BLM authorizations regulating the Federal lessee the same stipulations, COAs, and/or conservation measures and RDFs applied if the mineral estate is developed on BLM-administered surface lands in that management area, to the maximum extent permissible under existing authorities, and in coordination with the landowner. Where the federal government owns the surface and the mineral estate is in non-federal ownership in Greater Sage-Grouse habitat, apply appropriate surface use COAs, stipulations, and mineral RDFs through ROW grants or other surface management instruments, to the maximum extent permissible under existing authorities, in coordination with the mineral estate owner/lessee.
O&G-2002	MR:3.1 MR:3.2 MR:3.3	Open all oil and gas mineral estate to leasing (Map 12), unless specifically identified as closed to mineral leasing. These open areas will be managed on a project-specific basis. Areas closed due to regulation, legislation, policy, or similar action: ● Incorporated municipalities and proximity to commercial airports ● WSAs and WSRs ● Withdrawals

Record #	Goal/Obj.	MANAGEMENT ACTIONS COMMON TO ALL ALTERNATIVES
O&G-2003	MR:3.1 MR:3.2 MR:3.3	Manage any acquired mineral estate, obtained during land tenure adjustments, in accordance with the management of the surrounding areas.
O&G-2004	MR:3.1 MR:3.2 MR:3.3	Defer fluid mineral leasing in areas where coal is already leased until fluid mineral development would not interfere with the economic recovery of the coal resources. This is determined on a project-specific basis during fluid mineral lease review.

Record #	Goal/Obj.	MANAGEMENT ACTIONS COMMON TO ALL ALTERNATIVES			
O&G-2005	MR:3.1	Make geothermal resources available for leasing in areas that are open to oil and gas leasing. Areas closed to oil and gas leasing are also closed to geothermal leasing.			
O&G-2006	MR:3.3	Areas that are open to oil and gas leasing are open to geophysical exploration subject to appropriate mitigation developed through use of the mitigation guidelines described in Appendix J (p. 2155). Areas closed to oil and gas leasing are closed to geophysical exploration. Geophysical exploration is subject to motorized travel limitations and restrictions on surface-disturbing and disruptive activities.			
Record #	**Goal/Obj.**	**Alternative A (Current Management)**	**Alternative B (Resource Conservation)**	**Alternative C (Resource Utilization)**	**Alternative D (Proposed RMP)**
N/A	N/A	Note: The following definitions apply only to fluid mineral management within the BFO planning area. Fluid Mineral Constraints Definitions: Closed: • Closed, withdrawn, or otherwise closed Major: • NSO more than 40 acres in size or more than 0.25 mile in width • TLS lasting 6 months or longer • Prohibition on surface disturbance more than 40 acres in size or more than 0.25 mile in width • VRM Class I Moderate: • CSU more than 40 acres in size or more than 0.25 mile in width • NSO less than 40 acres in size or less than 0.25 mile in width • TLS lasting more than 60 days but less than 6 months • Avoidance of 200 meters or more • VRM Class II Minor: • CSU less than 40 acres in size or less than 0.25 mile in width • TLS lasting less than 60 days • Avoidance of less than 200 meters • VRM Class III Open (standard): • Subject to standard lease terms and conditions, existing laws, regulations and formal orders			
O&G-2007	MR:3.1 MR:3.2 MR:3.3	Continue to lease and allow development of federal oil and gas (Map 13). This results in: • 2,346,307 acres closed to fluid mineral leasing. • 146,126 acres subject to the standard lease terms and conditions.	Make lands available for fluid mineral leasing and exploration in accordance with management identified within Alternative B to conserve other resources (Map 14). This results in: • 2,612,920 acres closed to fluid mineral leasing.	Make lands available for fluid mineral leasing and exploration in accordance with management identified within Alternative C consistent with other resource values (Map 15). This results in: • 30,520 acres closed to fluid mineral leasing.	Make lands available for fluid mineral leasing and exploration in accordance with management identified within Alternative D to conserve other resources (Map 16). This results in: • 72,276 acres closed to fluid mineral leasing.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
		• 26,048 acres subject to minor constraints. • 782,501 acres subject to moderate constraints. • 85,548 acres subject to major constraints. Within the boundary of the Wyodak-Anderson coal seam is closed to leasing [Pennaco v. U.S., 377 F.3d 1147 (10th Cir. 2004)]. 30,520 acres closed from present RMP.	• 1,225 acres subject to the standard lease terms and conditions. • 5,685 acres subject to minor constraints. • 124,467 acres subject to moderate constraints. • 642,232 acres subject to major constraints. Adopt a minimum lease size of 640 contiguous acres where feasible. Greater Sage-Grouse Priority Habitat Area (Core Population Area and Connectivity Corridors) are closed to leasing.	• 539,499 acres subject to the standard lease terms and conditions. • 40,437 acres subject to minor constraints. • 2,472,472 acres subject to moderate constraints. • 303,601 acres subject to major constraints.	• 135,909 acres subject to the standard lease terms and conditions. • 104,927 acres subject to minor constraints. • 2,516,826 acres subject to moderate constraints. • 556,592 acres subject to major constraints.
O&G-2008	MR:3.1 MR:3.2	Stipulate oil and gas leases to regulate any oil and gas operations that would interfere with ongoing coal operations.	When a coal lease-by-application is filed over existing oil and gas leases, the coal lease applicant will be required to develop a mitigation plan acceptable to the oil and gas lessee allowing maximum recovery of both resources. Implementation of this mitigation plan must be accepted by any successful lease-by-application bidder and will become a stipulation on the coal lease. If a mitigation plan cannot be agreed upon prior to offering the coal lease sale, then BLM will delineate coal tracts to avoid oil and gas operations or will delay leasing of the coal tract.	Stipulate fluid mineral leases when nominated within the areas identified acceptable for further consideration for coal leasing (BLM 2001a) to require a mitigation plan allowing for maximization of both coal and oil and gas resources.	Stipulate fluid mineral leases when nominated over existing coal leases to allow maximum recover of the coal resources. When an oil and gas parcel is nominated over a coal lease application or coal lease modification application, the parcel will be pulled from the oil and gas sale list and deferred until such time a coal lease is issued. Once a coal leased is issued or the sale cancelled and the case closed, the deferred parcel nomination may be added to the oil and gas lease sale list with stipulations.

Table 2.14. 2000 MINERAL RESOURCES (MR) – LEASABLES – OTHER LEASABLE MINERALS

GOAL MR:4 Manage leasable minerals other than oil, gas, coal, and geothermal energybased on demand, while avoiding or mitigating impacts to other resource values.

Objective:

MR:4.1 Make opportunities available for exploration and development of leasable minerals other than oil, gas, coal, and geothermal energy, while avoiding or mitigating impacts of these activities on other resource values.

Record #	Goal/Obj.	MANAGEMENT ACTIONS COMMON TO ALL ALTERNATIVES			
OL-2001	MR:4.1	All lands in the planning area are available to exploration and development of other leasable minerals unless closed to mineral leasing.			
Record #	**Goal/Obj.**	**Alternative A (Current Management)**	**Alternative B (Resource Conservation)**	**Alternative C (Resource Utilization)**	**Alternative D (Proposed RMP)**
OL-2002	MR:4.1	Consider leasing other minerals (i.e., phosphates, sodium, etc.) on a project-specific basis.	Close to leasing of other leasable minerals in accordance with management identified within Alternative B, to conserve other resource values. This results in: • 1,239,723 acres open to leasing of other leasable minerals. • 3,547,781 acres closed to leasing of other leasable minerals.	Allow leasing of other leasable minerals in accordance with management identified within Alternative C, as consistent with other resource values. This results in: • 4,707,436 acres open to leasing of other leasable minerals. • 80,068 acres closed to leasing of other leasable minerals.	Allow leasing of other leasable minerals in accordance with management identified within Alternative D, as consistent with other resource values. This results in: • 3,801,889 acres open to leasing of other leasable minerals. • 4,699,229 acres closed to leasing of other leasable minerals.

Table 2.15. 2000 MINERAL RESOURCES (MR) – SALABLE MINERALS

GOAL MR:5 Salable mineral resources (also called mineral materials) are available to support short-term and long-term local and regional demand.

Objective:

MR:5.1 Provide opportunities for exploration and development of salable minerals while avoiding or mitigating effects to other resource values.

Record #	Goal/Obj.	MANAGEMENT ACTIONS COMMON TO ALL ALTERNATIVES			
Salable-2001	MR:5.1	The majority of lands in the planning area, including federally administered surface/minerals and split estate, are available for mineral material exploration and development.			
Record #	**Goal/Obj.**	**Alternative A (Current Management)**	**Alternative B (Resource Conservation)**	**Alternative C (Resource Utilization)**	**Alternative D (Proposed RMP)**
Salable-2002	MR:5.1	Mineral materials activities are prohibited in the Fortification Creek, Gardner Mountain, and North Fork WSAs (28,931 acres).	Close to or restrict from salable mineral exploration and development in accordance with management identified within Alternative B, to conserve other resource values. This results in: • 129,431 acres remain open to salable mineral exploration and development. • 3,218,690 acres closed to or restricted from salable mineral exploration and development. • 28,931 acres remain closed to salable minerals activities in the three current WSAs.	Allow salable mineral exploration and development in accordance with management identified within Alternative C, as consistent with other resource values. This results in: • 3,290,908 acres remain open to salable mineral exploration and development. • 57,213 acres closed to or restricted from salable mineral exploration and development. • 28,931 acres remain closed to salable minerals activities in the three current WSAs.	Allow salable mineral exploration and development in accordance with management identified within Alternative D, as consistent with other resource values. This results in: • 2,725,060 acres remain open to salable mineral exploration and development. • 623,061 acres closed to or restricted from salable mineral exploration and development. • 28,931 acres remain closed to salable minerals activities in the three current WSAs.

2.9.3. 3000 FIRE AND FUELS MANAGEMENT

Table 2.16. 3000 FIRE AND FUELS MANAGEMENT (FM)

GOAL FM:1 Life, property, and resource values are protected.

Objectives:

FM:1.1 Respond to unplanned wildfires based on: (1) ecological, (2) social, and (3) legal consequences while supporting other resource values.

FM:1.2 Maintain partnerships with interagency cooperators and the public to strengthen coordination of all fire suppression activities.

FM:1.3 Manage fuels in WUI areas to reduce potential losses due to fire consistent with the BLM's 10-year comprehensive strategy.

FM:1.4 Cooperate with stakeholders to enhance the local fire prevention, defensible space protection, and public education programs.

FM:1.5 Implement appropriate emergency stabilization and rehabilitation actions following wildland fire.

FM:1.6 Pursue wildland fire management agreements to achieve resource objectives while protecting life and property.

GOAL FM:2 Plant community and hazardous fuel objectives are achieved.

Objectives:

FM:2.1 Improve fire regime condition class and maintain or improve conditions of fire-adapted landscapes by managing fire, planned and unplanned, to accomplish beneficial resource objectives.

FM:2.2 Cooperate with stakeholders to plan and implement fire and other vegetation treatments.

FM:2.3 In collaboration with stakeholders, manage and coordinate fire and fuel treatments consistent with approved local fire plans (CWPP).

Record #	Goal/Obj.	MANAGEMENT ACTIONS COMMON TO ALL ALTERNATIVES
Fire-3001	FM:1.1	A Fire Management Plan for the Wyoming High Plains District will be maintained that more specifically outlines management response and implementation actions for wildland fire response of public lands.
Fire-3002	FM:1.1	A resource advisor appropriate to the potentially affected resource will be consulted, or assigned, to all wildland fires that involve or threaten BLM-administered lands.
Fire-3003	FM:1.1	Restrict or prohibit fire retardant chemicals as appropriate to protect rock art.
Fire-3004	FM:1.1	Prohibit use of retardant or foam within 300 feet of surface water sources consistent with guidelines described in the *Interagency Standards for Fire and Fire Aviation Operations* (BLM 2011e).
Fire-3005	FM:1.3 FM:1.4	Reduce hazardous fuels in the WUI.
Fire-3006	FM:1.5	Implement the BLM Emergency Stabilization and Burned Area Rehabilitation standards located in the DOI Interagency Burned Area Emergency Response Guidebook (DOI 2004) and BLM Burned Area Emergency Stabilization and Rehabilitation Handbook (BLM 2007c) as needed.
Fire-3007	FM:2.1	Use the District Fire Management Plan to implement the objectives of this RMP; to address fire management on a landscape scale, to maintain or improve conditions in fire-adapted landscapes, and to accomplish resource management objectives.

Record #	Goal/Obj.	MANAGEMENT ACTIONS COMMON TO ALL ALTERNATIVES
Fire-3008	FM:2.2	Ensure all prescribed burning activities comply with Wyoming DEQ air quality standards and smoke management rules. If prescribed fire is used in Greater Sage-Grouse habitat, the NEPA analysis for the Burn Plan will address: ● why alternative techniques were not selected as a viable options; ● how Greater Sage-Grouse goals and objectives would be met by its use; ● how the Conservation Objectives Team Report objectives would be addressed and met; ● a risk assessment to address how potential threats to Greater Sage-Grouse habitat would be minimized. Prescribed fire as a vegetation or fuels treatment shall only be considered after the NEPA analysis for the Burn Plan has addressed the four bullets outlined above. Prescribed fire could be used to meet specific fuels objectives that would protect Greater Sage-Grouse habitat (e.g., creation of fuel breaks that would disrupt the fuel continuity across the landscape in stands where annual invasive grasses are a minor component in the understory, burning slash piles from conifer reduction treatments, used as a component with other treatment methods to combat annual grasses and restore native plant communities). Prescribed fire in known Greater Sage-Grouse winter range shall only be considered after the NEPA analysis for the Burn Plan has addressed the four bullets outlined above. Any prescribed fire in winter habitat would need to be designed to strategically reduce wildfire risk around and/or in the winter range and designed to protect winter range habitat quality.

Record #	Goal/Obj.	MANAGEMENT ACTIONS COMMON TO ALL ALTERNATIVES			
Fire-3009	FM:2.2 FM:2.3	Cooperate with and pursue agreements with other agencies and landowners to conduct landscape treatments to achieve enhanced fuels management and/or restoration of fire-adapted ecosystems.			
Fire-3010	FM:1.5	Rehabilitate firelines constructed by heavy equipment, or on steep slopes, to prevent or control erosion. Rehabilitation includes, but is not limited to, water barring and reseeding.			
Record #	**Goal/Obj.**	**Alternative A (Current Management)**	**Alternative B (Resource Conservation)**	**Alternative C (Resource Utilization)**	**Alternative D (Proposed RMP)**
Fire-3011	FM:1.1 FM:1.2	All fires are suppressed, though variable strategies are used. Priority response is given to wildfires where there are high value resources or where fires may spread to other land ownerships. Full protection is used in high value areas such as developed areas or where sensitive resources would be adversely affected by fire. Appropriate suppression actions are used in low value areas or where fire control is very difficult or extremely hazardous to firefighting personnel. No portion of the planning area is available to manage fires for multiple objectives.	Response to wildland fires varies from full protection in areas where fire is undesirable to monitoring fire behavior in areas where fire can be managed to accomplish other resource objectives. The entire planning area is available to manage wildfire for multiple objectives.	Use full protection strategies and tactics across the entire planning area. No portion of the planning area is available to manage fires for multiple objectives.	Response to wildfire varies from full protection in areas where fire is undesirable to monitoring fire behavior in areas where fire can be managed to accomplish other resource objectives. The entire planning area is available to manage wildfire for multiple objectives.
Fire-3012	FM:1.1 FM:1.2	Restrict the use of some types of suppression equipment in some areas.	Limit heavy equipment usage to existing roads and trails, or immediately adjacent to them, in areas not identified as full protection.	Utilize heavy equipment with few constraints and consistent with other resource values.	Prohibit heavy equipment use within the following areas, except when human safety is at risk or if the expected fire effects would cause more resource damage than the use of heavy equipment: ● Areas of cultural resource sensitivity ● Riparian/wetland habitats

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
					• Identified Greater Sage-Grouse important habitats: Core Population Area, nesting, brood-rearing, Connectivity Corridor, or winter habitat • Areas of highly erosive soils • Lands with wilderness characteristics Limit heavy equipment usage to existing roads and trails, or immediately adjacent to them, in areas not identified as full protection.
Fire-3013	FM:1.1 FM:1.2	Give priority to suppressing fires in or threatening higher value resources (commercial timber areas, developed recreation sites, and WUI areas) and keeping fires from spreading onto private, state, or other federal lands.	Use protection strategies in the following areas: • WUI • Wildland Industrial Interface • Developed recreation sites • Commercial timber areas • Where sensitive resources would be adversely affected by fire (i.e., within 4.0 miles of Greater Sage-Grouse leks or winter concentration areas)	Use full protection strategies across the entire planning area.	Use protection strategies in the following areas: • WUI • Wildland Industrial Interface • Developed recreation • Developed electronic/ communication sites of all types • Where sensitive or high value resources would be adversely affected by fire (i.e., Greater Sage-Grouse Core Population Area and Connectivity Corridor)

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
Fire-3014	FM:1.5	Rehabilitate fire-damaged lands to meet resource objectives; repair suppression damages as necessary.	Rehabilitate all fire-damaged lands; repair all suppression damages.	Repair suppression related damages only.	Evaluate all fires and rehabilitate fire-damaged lands as needed to meet resource objectives. Repair suppression damages as necessary.
Fire-3015	FM:1.6	Use wildland fire and other vegetation treatments to support vegetation and wildlife habitat objectives.	Use wildland fire and other vegetation treatments to restore fire-adapted ecosystems and to reduce hazardous fuels.	Use wildland fire and other vegetation treatments to restore fire-adapted ecosystems, enhance forage for commodity production, and to reduce hazardous fuels.	Use wildland fire and other vegetation treatments to meet desired management objectives.

2.9.4. 4000 BIOLOGICAL RESOURCES

Table 2.17. 4000 BIOLOGICAL RESOURCES (BR) – VEGETATION

GOAL BR:1 Vegetation resources sustained in desired ecological conditions.

Objectives:

BR:1.1 Manage communities for a diversity of native species, habitats, seral stages and distribution.

BR:1.2 Manage for healthy vegetation communities to ensure their capability to provide sufficient plant composition, cover and litter accumulation to protect soils from wind and water erosion and enhance nutrient cycling and productivity.

BR:1.3 Reclaim areas affected by surface-disturbing activities to promote healthy functioning native plant communities.

BR:1.4 Manage habitat to facilitate the conservation, recovery and maintenance of populations of native, desirable non-native, and special status plant species consistent with appropriate local, state, and federal conservation requirements and management plans.

BR:1.5 Manage for healthy native plant communities by reducing and managing invasive, nonnative noxious species.

BR:1.6 Identify and manage Native American traditional plant gathering areas.

Table 2.18. 4000 BIOLOGICAL RESOURCES (BR) – VEGETATION – FORESTS AND WOODLANDS

GOAL BR:2 Healthy forests and woodlands are sustained in desired ecological conditions.

Objective:

BR:2.1 Manage forests and woodlands to benefit multiple resource values.

Record #	Goal/Obj.	MANAGEMENT ACTIONS COMMON TO ALL ALTERNATIVES			
		None identified.			
Record #	**Goal/Obj.**	**Alternative A (Current Management)**	**Alternative B (Resource Conservation)**	**Alternative C (Resource Utilization)**	**Alternative D (Proposed RMP)**
Forest-4001	BR:2.1	Design vegetation treatments, including forest management and sagebrush spraying or burning, to meet overall resource management objectives consistent with the policy to protect or improve biodiversity and water quality.	Keep silvicultural treatments to a minimum, and only utilize them when catastrophic events, such as wildland fire, present hazardous conditions to the public and surrounding lands.	Design and implement silvicultural treatments to maximize forest health.	Design and implement silvicultural treatments to maximize forest health.
Forest-4002	BR:2.1	Diseased old growth and over stocked forests are managed in accordance with the HFRA.	Allow insect and disease, wildland fire, and other natural forces to run their natural course within forests and woodlands, without intervention.	Utilize intensive management tactics, such as large clear-cuts, to manage for desired forest/woodland health (HFRA) and to reduce or circumvent events such as insects, disease, and wildfire.	Utilize intensive management tactics to manage for desired forest/woodland health (HFRA) and to reduce or circumvent events such as insects, disease, and wildfire.
Forest-4003	BR:2.1	No previous decision; old growth considered on a project-specific basis.	Manage old growth forest stands to emphasize old growth characteristics.	Manage old growth forest stands to emphasize other stand characteristics.	Manage old growth forest stands to emphasize old growth characteristics.
Forest-4004	BR:2.1	No previous decision; recreation, wildlife, and other resource values considered on a project-specific basis.	Manage forests/woodlands to emphasize recreation, wildlife, and other resource values.	Manage forests/woodlands to emphasize the forest resource.	Manage forests/woodlands to emphasize multiple resource values (recreation, wildlife, soils, water, forest products).

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
Forest-4005	BR:2.1	No previous decision; aspen management considered on a project-specific basis.	Manage aspen communities as a seral stage and natural component of the forest. Allow decadent and non-reproductive stands to be naturally replaced in the ecosystem by climax forest.	Manage aspen communities to maintain aspen stands and strive for the DFC of all aspen forest.	Manage aspen communities to maintain aspen stands and strive for DFC in all aspen forests.
Forest-4006	BR:2.1	No previous decision; woodland encroachment evaluated on a project-specific basis.	Allow woodlands to expand into other communities.	Actively manage woodlands to prevent expansion into other communities.	Actively manage woodlands to prevent expansion into other communities consistent with multiple resource values, on a project-specific basis.

Table 2.19. 4000 BIOLOGICAL RESOURCES (BR) – VEGETATION – GRASSLAND AND SHRUBLAND COMMUNITIES

GOAL BR:3 A diverse landscape of native grasslands and shrublands sustained in desired ecological conditions.

Objective:

BR:3.1 Manage for a full range of sagebrush, shrub, and grassland communities with diverse native species and subspecies, composition, canopies, densities, and age classes across the landscape.

Record #	Goal/Obj.	MANAGEMENT ACTIONS COMMON TO ALL ALTERNATIVES
GS-4001	BR:3.1	Manage vegetative communities (Map 25) in accordance with Wyoming Standards for Healthy Rangelands and Guidelines for Livestock Grazing Management for the Public Lands Administered by the BLM in the State of Wyoming.
GS-4002	BR:3.1	Complete vegetation inventories. When applicable do so in coordination with stakeholders.
GS-4003	BR:3.1	Use an integrated management approach (e.g., mechanical, chemical, biological treatments, prescribed fire, and grazing management techniques) to maintain, restore, and enhance the health and diversity of plant communities to achieve resource or multi-resource objectives.
GS-4004	BR:3.1	Maintain sustainable forage levels for livestock and wildlife habitats.
GS-4005	BR:3.1	Manage grasslands and shrublands to protect, preserve, or enhance plant communities.
GS-4006	BR:3.1	Manage the siting of facilities and related infrastructure (utility corridors, roads) to reduce impacts to vegetation resources.
GS-4007	BR:3.1	Manage the planning and development of travel routes, recreational uses, mineral exploration and development sites, and ROW to reduce impacts to the vegetation resource.
GS-4008	BR:3.1	Develop a contingency plan addressing catastrophic natural events such as drought, wildfires, and large-scale pest infestations, incorporating strategies that best protect vegetation resources.
GS-4009	BR:3.1	Work with landowners on split estate lands to reestablish disturbed sites to healthy plant communities in accordance with the ecological site potential.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
GS-4010	BR:3.1	No previous decision; considered on a project-specific basis.	Authorize only native plant species for all reclamation activities.	Allow desirable non-native plant species for initial reclamation activities.	Allow desirable non-native plant species for short-term reclamation activities as a component in an authorized reclamation plan (followed up with planting of native species).

Table 2.20. 4000 BIOLOGICAL RESOURCES (BR) – VEGETATION – RIPARIAN/WETLAND RESOURCES

GOAL BR:4 Health and functional capabilities in riparian/wetland systems.

Objectives:

BR:4.1 Manage lotic and lentic wetland/riparian systems at a minimum to achieve and/or maintain PFC.

BR:4.2 Improve riparian systems and wetlands in systems operating at less than PFC.

BR:4.3 Manage contributing watersheds to sustain riparian health and water quality.

BR:4.4 Manage and enhance riparian and wetland systems for plant, insect, fish and wildlife species that depend on these systems for their health and well being.

BR:4.5 CBNG created riparian and wetland systems will be evaluated, retained, or reclaimed to support vegetation and other resource values.

Record #	Goal/Obj.	MANAGEMENT ACTIONS COMMON TO ALL ALTERNATIVES
Riparian-4001	BR:4.1 BR:4.2 BR:4.3 BR:4.4	Inventory lotic and lentic riparian/wetland systems.
Riparian-4002	BR:4.1 BR:4.2 BR:4.4	Prioritize, and develop activity and implementation plans to manage riparian systems to be at or above, or continue to be improving toward, PFC while achieving the Standards for Healthy Rangelands and Guidelines for Livestock Grazing Management for the Public Lands Administered by the BLM in the State of Wyoming.
Riparian-4003	BR:4.1 BR:4.2 BR:4.3 BR:4.4 BR:4.5	Manage riparian and wetland systems to enhance forage conditions and improve water quality. Manage all riparian systems with sensitive species concerns to a succession stage appropriate for that system, including vertical as well as horizontal vegetative structure and composition.
Riparian-4004	BR:4.1 BR:4.2 BR:4.3 BR:4.4 BR:4.5	Expand and enhance riparian/wetland systems and habitat in cooperation with stakeholders.
Riparian-4005	BR:4.1 BR:4.2 BR:4.3 BR:4.4 BR:4.5	Prevent degradation, loss, or destruction of riparian/wetland habitat.

Record #	Goal/Obj.	MANAGEMENT ACTIONS COMMON TO ALL ALTERNATIVES			
Riparian-4006	BR:4.4 BR:4.5	Prohibit conflicting uses within riparian research areas and special exclosures, such as waterfowl reservoirs and wetland systems on springs and streams.			
Riparian-4007	BR:4.5	Evaluate CBNG created riparian and wetland systems for retention or reclamation.			
Record #	**Goal/Obj.**	**Alternative A (Current Management)**	**Alternative B (Resource Conservation)**	**Alternative C (Resource Utilization)**	**Alternative D (Proposed RMP)**
Riparian-4008	BR:4.1 BR:4.2 BR:4.3 BR:4.4 BR:4.5	Prohibit surface-disturbing activities within 500 feet of springs, reservoirs, water wells, or perennial streams unless the prohibition is waived by the authorized officer.	Prohibit surface-disturbing and disruptive activities within 500 feet of riparian/wetlands systems, aquatic habitats, and floodplains.	Allow surface-disturbing and disruptive activities within 500 feet of riparian/wetlands systems, aquatic habitats, and floodplains consistent with other resource values.	Allow surface disturbance within 500 feet of riparian/wetlands systems and aquatic habitats where riparian/wetland and other resource objectives (including, but not limited to soil, slope, and vegetation) can be met.
Riparian-4009	BR:4.1 BR:4.2 BR:4.3 BR:4.4 BR:4.5	No previous decision; considered on a project-specific basis.	Apply an NSO stipulation for fluid mineral leasing within 500 feet of riparian/wetlands systems, aquatic habitats, and floodplains.	Apply standard lease terms to fluid mineral leases within 500 feet of riparian/wetlands systems, aquatic habitats, and floodplains consistent with other resource values.	Apply a CSU stipulation to any fluid mineral lease within 500 feet of riparian/wetlands systems, and aquatic habitats (based on other resource values - soil, slope).
Riparian-4010	BR:4.1 BR:4.3 BR:4.4	No previous decision; considered on a project-specific basis.	Identify and manage systems capable of achieving DFC.	Do not identify and manage systems capable of achieving DFC.	Identify and manage systems capable of achieving DFC.
Riparian-4011	BR:4.5	No previous decision; considered on a project-specific basis.	Restore vegetation in all CBNG supported wetland and riparian systems.	Restore vegetation only on direct CBNG disturbance areas (e.g., dams, reservoirs, etc.).	Restore vegetation in CBNG supported wetland and riparian systems on BLM surface and/or lease in accordance with the ecological site potential.

Table 2.21. 4000 BIOLOGICAL RESOURCES (BR) – INVASIVE SPECIES AND PEST MANAGEMENT

GOAL BR:5 Healthy native communities with manageable levels of pathogens, undesirable, invasive, non-native, or noxious species.

Objectives:

BR:5.1 Develop and maintain baseline information regarding the extent, location and potential impact(s) of pest species. From this baseline information develop and implement an Integrated Pest Management Plan. Integrated management would be used to control, suppress, and eradicate, where possible, noxious and invasive species per BLM Handbook H-1740-2. Manage noxious or invasive species treatments to maintain or improve Greater Sage-Grouse habitat. Apply Required Design Features as Conditions of Approval, such as those in Appendix B. Encourage the use of voluntary BMPs.

BR:5.2 Facilitate support for an integrated approach for the detection, management, or eradication of new and minor infestations.

BR:5.3 Develop, implement, and maintain a management program for annual bromes and other invasive or undesirable species not listed as noxious, utilizing the best available science and BMPs.

BR:5.4 Coordinate with APHIS to facilitate pest and predator management.

Record #	Goal/Obj.	MANAGEMENT ACTIONS COMMON TO ALL ALTERNATIVES
Pest-4001	BR:5.1 BR:5.2 BR:5.4	Cooperate with APHIS to control grasshoppers and Mormon crickets on public lands in conjunction with the control efforts initiated on adjoining non-federal lands.
Pest-4002	BR:5.1 BR:5.2 BR:5.3 BR:5.4	Manage designated pests on public surface lands using an Integrated Pest Management Approach consistent with DOI Manual 517 (BLM 2007f).
Pest-4003	BR:5.1 BR:5.2 BR:5.3 BR:5.4	Limit surface disturbance to the minimum needed for safe project completion to limit the spread of noxious weeds.
Pest-4004	BR:5.1 BR:5.2 BR:5.3	Use certified noxious weed seed-free products on all BLM-administered projects and lands.
Pest-4005	BR:5.1 BR:5.2 BR:5.3	Implement and maintain cooperative integrated pest management programs with county weed and pest districts, state agencies, private industry, grazing lessees, and other stakeholders in conjunction with BLM weed and pest control work on public lands adjoining deeded and state lands (Map 27).
Pest-4006	BR:5.2	Require surface or vegetation disturbance areas, including areas formerly receiving or holding water, be treated for invasive species and revegetated.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
Pest-4007	BR:5.2	No previous decision; aerial application decided on a project-specific basis.	Do not limit aerial application of pesticides.	Limit aerial application to insecticides only.	Authorize aerial application in areas where topography, extent of infestation, target species, and timing limit other application methods.
Pest-4008	BR:5.1	No previous decision; treatment areas decided annually.	Develop pest management areas within 5 years of the signing of the ROD.	Determine area to be treated with pesticides on an annual basis.	Develop long range pest management plans, treatment areas, priorities, etc. in cooperation with stakeholders.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
Pest-4009	BR:5.1 BR:5.2 BR:5.3	Control noxious weeds on public lands in cooperation with county weed and pest districts.	Treat those plants on the State of Wyoming Designated list, the appropriate county lists, and other species of concern as determined by BLM resource specialists. Priority treatments are those areas where infestations on private land are threatening public lands.	Treat only those plants on the State of Wyoming Designated list. Priority treatments are those areas where infestations on public land are threatening private lands.	Treat those plants on the State of Wyoming Designated list, the appropriate county lists, and other species of concern as determined by BLM resource specialists. Note: Priority treatments are those areas where infestations on private land are threatening public lands.
Pest-4010	BR:5.3	No previous decision; determine whether to treat annual brome species on a project-specific basis.	Treat annual brome species throughout the planning area.	Designate and prioritize areas for the treatment of annual brome species.	Designate and prioritize areas for the treatment of annual brome species.

Table 2.22. 4000 BIOLOGICAL RESOURCES (BR) – FISH & WILDLIFE RESOURCES

GOAL BR:6 Distribution and abundance of all native and desirable non-native species are optimized.

Objectives:

BR:6.1 BLM actions prevent and/or reduce impacts to desirable species.

BR:6.2 In coordination with cooperating agencies, develop and implement an achievable Wildlife Monitoring and Protection Plan.

BR:6.3 Maintain, restore, or improve the continuity and productivity of fish and wildlife habitats to support WGFD population objectives.

BR:6.4 Develop and implement an adaptive conservation and management strategy.

GOAL BR:7 Sufficient functional habitat for native and desirable non-native species.

Objectives:

BR:7.1 Evaluate, update, and revise as necessary existing Wildlife Habitat Management Plans.

BR:7.2 Develop Wildlife Habitat Management Plans for areas with important habitats.

BR:7.3 Manage habitat consistent with local, state, and federal management plans, as applicable.

BR:7.4 Continue to gather habitat and population data while concurrently monitoring human and natural disturbance dynamics to improve habitat management.

BR:7.5 Provide security habitat, sufficient in amount and distribution, to support WGFD population objectives for fish and wildlife to escape from disruptive activities.

BR:7.6 Maintain and provide functioning sagebrush habitat to sustain sagebrush obligates and other sagebrush dependent species.

GOAL BR:8 Fish and wildlife are able to move between areas of functionally intact habitat.

Objectives:

BR:8.1 Develop Travel Management Plans for areas important for fish and wildlife while supporting other resource values.

BR:8.2 Develop a ROW Management Plan for utility corridors to manage impacts to areas of habitat important to fish and wildlife consistent with other resource values.

BR:8.3 Land acquisitions should support desirable fish and wildlife populations or habitat.

BR:8.4 Restore functionality to areas of degraded habitat important to fish and wildlife populations consistent with other resource values.

GOAL BR:9 Terrestrial and aquatic ecosystems that provide recreational and educational benefits.

Objectives:

BR:9.1 Manage for a broad range of wildlife and fisheries based experiences.

BR:9.2 Improve public awareness, understanding, and support for resolving issues surrounding species conservation, management, and ecology.

BR:9.3 Identify, develop, and maximize distribution of natural resource interpretation media.

BR:9.4 Provide for research to support the management of fish and wildlife resources administered by the BLM.

Record #	Goal/Obj.	MANAGEMENT ACTIONS COMMON TO ALL ALTERNATIVES – FISH
Fish-4001	BR:6.1 BR:6.3 BR:6.4 BR:7.3 BR:7.4 BR:7.5 BR:8.1 BR:8.2 BR:9.1	Develop appropriate mitigation for surface-disturbing and disruptive activities associated with fish management through use of the mitigation guidelines described in Appendix J (p. 2155).
Fish-4002	BR:6.1 BR:6.3 BR:7.3 BR:7.4 BR:7.5 BR:8.4 BR:9.1	Manage barriers to fish passage in cooperation with the WGFD and other stakeholders.
Fish-4003	BR:6.3 BR:6.4 BR:7.3 BR:7.4 BR:8.3 BR:9.1 BR:9.2 BR:9.3	Provide public access to fish bearing waters in cooperation with WGFD Private Lands – Public Access Program and stakeholders.
Fish-4004	BR:6.1 BR:6.2 BR:6.3 BR:6.4 BR:7.3 BR:7.4 BR:7.5 BR:8.4 BR:9.1	Manage activities potentially affecting native and desirable non-native fish species in collaboration with the WGFD and other stakeholders.

Record #	Goal/Obj.	MANAGEMENT ACTIONS COMMON TO ALL ALTERNATIVES – FISH			
Fish-4005	BR:6.1 BR:6.2 BR:6.3 BR:6.4 BR:7.3 BR:7.4 BR:7.5 BR:8.4	Manage harmful non-native riparian vegetation in river and stream systems important to fish species in cooperation with the WGFD and other stakeholders.			
Fish-4006	BR:6.3 BR:6.4 BR:7.3 BR:7.4 BR:8.3 BR:9.1 BR:9.2 BR:9.3	Work with stakeholders to provide fisheries outreach and education.			
Record #	**Goal/Obj.**	**Alternative A (Current Management)**	**Alternative B (Resource Conservation)**	**Alternative C (Resource Utilization)**	**Alternative D (Proposed RMP)**
Fish-4007	BR:6.3 BR:6.4 BR:7.3 BR:7.4 BR:7.5 BR:8.4 BR:9.1	BLM cooperates with the WGFD in introducing or reintroducing native and desirable non-native fish within the planning area where potential habitat exists.	Cooperate with the WGFD in introducing or reintroducing native and desirable non-native fish where potential habitat exists.	Do not introduce or reintroduce native and desirable non-native fish.	Cooperate with the WGFD in introducing or reintroducing native and desirable non-native fish in support of WGFD and BLM objectives.
Fish-4008	BR:6.1 BR:6.3 BR:7.3 BR:7.4 BR:7.5 BR:8.4 BR:9.1	Reservoirs and riparian areas are sometimes maintained to improve or enhance potential fisheries.	Manage reservoirs and riparian areas to improve or enhance potential fisheries.	Manage reservoirs and riparian areas to improve or enhance other resource values first and potential fisheries second.	Maintain or enhance streams and riparian areas associated with Class I and II streams, (WGFD classifications), Powder River, Tongue River, and other appropriate areas for desired fisheries potential.
Fish-4009	BR:6.1 BR:6.3 BR:7.3 BR:7.4 BR:7.5 BR:8.4 BR:9.1	Designing reservoirs to enhance fisheries where potential exists will be encouraged.	Require the design of reservoirs to include fisheries enhancement where the potential exists.	Encourage the design of reservoirs to include fisheries enhancement where the potential exists.	Incorporate fisheries enhancement in reservoir design consistent with other resource values.
Fish-4010	BR:6.1 BR:6.3 BR:7.3 BR:7.4 BR:7.5 BR:8.4 BR:9.1	No previous decision; considered on a project-specific basis.	Maintain or enhance fish habitat with actions affecting perennial waters.	Consider all resource values with actions affecting perennial waters.	Maintain or enhance fish habitat with actions affecting perennial waters consistent with other resource values.
Fish-4011	BR:6.1 BR:6.3 BR:7.3 BR:7.4 BR:7.5 BR:8.4 BR:9.1	No previous decision; considered on a project-specific basis.	Manage fish habitat towards DFC.	Manage fish habitat to meet PFC.	Identify and manage fish habitat capable of achieving DFC. Manage all other areas with fish habitat to meet PFC.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
Fish-4012	BR:6.1 BR:6.3 BR:7.3 BR:7.4 BR:7.5 BR:9.1	No previous decision; considered on a project-specific basis.	Prohibit surface-disturbing and disruptive activities within 0.25 mile of naturally occurring water bodies containing native and desirable non-native fish species (Map 28).	Allow surface-disturbing activities within 0.25 mile of naturally occurring water bodies consistent with other resource values.	Allow surface-disturbing activities within 0.25 mile of naturally occurring water bodies containing native and desirable non-native fish species where fish resource objectives can be met.
Fish-4013	BR:6.1 BR:6.3 BR:7.3 BR:7.4 BR:7.5 BR:9.1	No previous decision; considered on a project-specific basis.	Apply an NSO stipulation to fluid mineral leases within 0.25 mile of naturally occurring water bodies containing native and desirable non-native fish species.	Apply standard lease terms to fluid mineral leases within 0.25 mile of naturally occurring water bodies containing native and desirable non-native fish species.	Apply a CSU stipulation within 0.25 mile of naturally occurring water bodies containing native and desirable non-native fish species.
Fish-4014	BR:6.1 BR:6.3 BR:7.3 BR:7.4 BR:8.4 BR:9.1	No previous decision; considered on a project-specific basis.	Design crossings of water bodies identified as supporting fish to allow fish passage.	Design crossings of water bodies identified as supporting fish to be consistent with all resource values.	Design crossings of water bodies identified as supporting fish to allow fish passage.
Fish-4015	BR:6.1 BR:6.3 BR:7.3 BR:7.4 BR:7.5 BR:8.4 BR:9.1	No previous decision; considered on a project-specific basis.	Perform restoration of important instream segments for fish habitat in accordance with WGFD priorities.	Perform restoration of important instream segments for fish habitat on a project-specific basis.	Perform restoration of important instream segments for fish habitat in accordance with WGFD priorities.
Record #	**Goal/Obj.**	**MANAGEMENT ACTIONS COMMON TO ALL ALTERNATIVES – WILDLIFE**			
WL-4001	BR:7.3 BR:7.4 BR:7.5 BR:8.1 BR:8.2 BR:8.4	Develop appropriate mitigation for surface-disturbing and disruptive activities associated with wildlife habitat management through use of the mitigation guidelines described in Appendix J (p. 2155).			
WL-4002	BR:6.1 BR:6.2 BR:6.3 BR:6.4 BR:7.1 BR:7.2 BR:7.3 BR:7.4 BR:7.5 BR:7.6 BR:8.3 BR:8.4	Maintain or improve important wildlife habitats through vegetative manipulations, habitat improvement projects, livestock grazing strategies and the application of The Wyoming Guidelines for Managing Sagebrush Communities with Emphasis on Fire Management (Wyoming Interagency Vegetation Committee 2002) and Appendix J (p. 2155), WGFD Strategic Habitat Plan (WGFD 2001b), State Wildlife Action Plan (SWAP) (WGFD 2010), and similar guidance updated over time.			
WL-4003	BR:7.1	Continue to use existing Habitat Management Plans and update as necessary to include management objectives and prescriptions for wildlife: South Big Horns Habitat Management Plan (BLM 1986c), including a portion or all of the Gardner Mountain and North Fork WSAs; Wetlands Habitat Management Plan (BLM 1986b); and Middle Fork Powder River Habitat Management Plan (BLM 1980).			

Record #	Goal/Obj.	MANAGEMENT ACTIONS COMMON TO ALL ALTERNATIVES – WILDLIFE
WL-4004	BR:6.1 BR:6.2 BR:6.3 BR:6.4 BR:7.1 BR:7.3 BR:7.4 BR:8.4 BR:9.1 BR:9.2	Coordinate authorized animal damage control with federal and state wildlife agencies, and other agencies, as appropriate, using guidance provided by the existing MOU with APHIS Wildlife Services.
WL-4005	BR:6.1 BR:6.2 BR:6.3 BR:6.4 BR:7.1 BR:7.2 BR:7.3 BR:7.4 BR:7.5 BR:7.6 BR:8.1 BR:8.2 BR:8.4 BR:9.1 BR:9.2	Consult with the WGFD and USFWS, in accordance with MOUs, when applying mitigation for wildlife and before waiving, allowing exceptions to, or modifying wildlife-related land use restrictions and mitigation.
WL-4006	BR:6.1 BR:6.2 BR:6.3 BR:6.4 BR:7.1 BR:7.2 BR:7.3 BR:7.4 BR:7.5 BR:7.6 BR:8.1 BR:8.2 BR:8.3 BR:8.4 BR:9.1 BR:9.2	Provide, to the extent possible, suitable habitat and forage to support wildlife population objectives as defined by WGFD. BLM will cooperatively consider proposals by the WGFD to change population objective levels based on habitat capability and availability.
WL-4007	BR:6.1 BR:6.2 BR:6.3 BR:6.4 BR:7.1 BR:7.2 BR:7.3 BR:7.4 BR:7.5 BR:7.6 BR:8.1 BR:8.2 BR:8.3 BR:8.4 BR:9.1 BR:9.2	Manage access to protect crucial habitats in cooperation with WGFD and other stakeholders.
WL-4008	BR:6.1 BR:6.2 BR:6.3 BR:6.4 BR:7.1 BR:7.2 BR:7.3 BR:7.4 BR:7.5 BR:7.6 BR:8.1 BR:8.2 BR:8.3 BR:8.4 BR:9.1 BR:9.2 BR:9.4	Utilize current research, management and conservation plans, and similar related documents to guide wildlife habitat management.

Record #	Goal/Obj.	MANAGEMENT ACTIONS COMMON TO ALL ALTERNATIVES – WILDLIFE			
WL-4009	BR:6.1 BR:6.2 BR:6.3 BR:6.4 BR:7.1 BR:7.2 BR:7.3 BR:7.4 BR:7.5 BR:7.6 BR:8.1 BR:8.2 BR:8.3 BR:8.4 BR:9.1 BR:9.2 BR:9.4	Construct new fences to avoid adverse impacts to wildlife and in accordance with BLM Fencing Handbook 1741-1 (BLM 1989) and WO IM 2010–022: Managing Structures for the Safety of Sage-grouse, Sharp-tailed grouse, and Lesser prairie chicken (BLM 2009e).			
WL-4010	BR:6.2 BR:6.3 BR:6.4 BR:7.1 BR:7.2 BR:7.3 BR:7.4 BR:7.6 BR:8.1 BR:8.3 BR:8.4 BR:9.4	Work cooperatively with the WGFD augmentation and/or reintroduction programs for acceptable wildlife species within suitable habitats.			
WL-4011	BR:7.3 BR:7.5 BR:7.6	Promote the maintenance and improvement of habitat for migratory bird species of conservation concern in a manner consistent with national, regional, and statewide bird conservation priorities.			
Record #	**Goal/Obj.**	**Alternative A (Current Management)**	**Alternative B (Resource Conservation)**	**Alternative C (Resource Utilization)**	**Alternative D (Proposed RMP)**
WL-4012	BR:6.1 BR:6.2 BR:6.3 BR:6.4 BR:7.1 BR:7.2 BR:7.3 BR:7.4 BR:7.5 BR:7.6 BR:8.1 BR:8.2 BR:8.3 BR:8.4 BR:9.1 BR:9.2 BR:9.4	No previous decision.	Modify existing fences preventing wildlife movement in accordance with appropriate wildlife needs and the BLM Fencing Handbook 1741-1.	Do not modify existing fences preventing wildlife movement.	Inventory, record, and report existing type, condition and location of BLM fences. Prioritize fence projects and annually implement modifications in accordance with appropriate wildlife needs and the BLM Fencing Handbook 1741-1.
WL-4013	BR:6.1 BR:6.2 BR:6.3 BR:6.4 BR:7.1 BR:7.2 BR:7.3 BR:7.4 BR:7.5 BR:7.6 BR:8.1 BR:8.2 BR:9.1 BR:9.4	No previous decision; considered on a project-specific basis.	Apply appropriate wildlife seasonal restrictions on surface-disturbing and disruptive activities to maintenance and operation of developed projects.	Do not apply wildlife seasonal restrictions on surface-disturbing and disruptive activities to maintenance and operation of developed projects.	Allow surface-disturbing and disruptive activities to occur throughout the entire life of projects during seasons important for wildlife when wildlife resource objectives can be met.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
WL-4014	BR:6.1 BR:6.2 BR:6.3 BR:6.4 BR:7.1 BR:7.2 BR:7.3 BR:7.4 BR:7.5 BR:7.6 BR:8.2 BR:9.1	No previous decision; considered on a project-specific basis.	Require burial of all new low voltage utility lines and installation of BLM-approved anti-perch devices on all new high voltage utility lines.	Do not require burial of all new low voltage utility lines or installation of BLM-approved anti-perch devices on all new high voltage utility lines.	Powerlines (distribution and transmission) will be designed to minimize wildlife related impacts and constructed to the latest APLIC standards. Prohibit above ground distribution powerlines unless identified in an approved distribution plan.
Big Game					
WL-4015	BR:6.1 BR:6.2 BR:6.3 BR:6.4 BR:7.1 BR:7.3 BR:7.5 BR:7.6 BR:8.1 BR:8.2 BR:9.1	Prohibit surface disturbance and occupancy in the Ed O. Taylor, Kerns, Bud Love, and Amsden Creek winter ranges for big game unless the prohibition is waived by the authorized officer.	Prohibit surface disturbance and occupancy in the Ed O. Taylor, Kerns, Bud Love, and Amsden Creek winter ranges for big game.	Do not prohibit surface disturbance and occupancy in the Ed O. Taylor, Kerns, Bud Love, and Amsden Creek winter ranges.	Prohibit surface disturbance and occupancy in the Ed O. Taylor, Kerns, Bud Love, and Amsden Creek winter ranges for big game.
WL-4016	BR:6.1 BR:6.2 BR:6.3 BR:6.4 BR:7.1 BR:7.2 BR:7.3 BR:8.1 BR:9.1	Surface disturbance and disruptive activity is not allowed in crucial elk winter range between November 15 and April 30, and in elk calving areas from May 1 to June 30, when necessary (Map 29).	Do not allow surface disturbance and disruptive activity in crucial elk winter range between November 15 and April 30, and in elk calving areas from May 1 to June 30 (Map 29).	Allow surface disturbance and disruptive activity in crucial elk winter range between November 15 and April 30, and in elk calving areas from May 1 to June 30.	Prohibit surface disturbance and disruptive activity in crucial big game winter range during WGFD specified dates, and in elk calving areas during WGFD specified dates (Map 29). Historic uses would be exempted.
WL-4017	BR:6.1 BR:6.2 BR:6.3 BR:6.4 BR:7.1 BR:7.2 BR:7.3 BR:8.1 BR:9.1	Surface disturbance and disruptive activity is not allowed in crucial elk winter range between November 15 and April 30, and in elk calving areas from May 1 to June 30, when necessary.	Apply a CSU stipulation to leases within elk crucial winter range and calving areas.	Do not apply a CSU stipulation to leases within elk crucial winter range and calving areas.	Apply a CSU and TLS stipulation to leases within big game crucial winter range and elk calving areas.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
WL-4018	BR:6.1 BR:6.2 BR:6.3 BR:6.4 BR:7.1 BR:7.2 BR:7.3 BR:8.1 BR:9.1	Require fluid mineral production and byproducts to be piped out of crucial elk winter range.	Require fluid mineral production and byproducts to be piped out of crucial elk winter range and calving areas.	Do not require fluid mineral production and byproducts to be piped out of crucial elk winter range and calving areas.	Require fluid mineral production and byproducts to be piped out of crucial elk winter range and calving areas unless operator proposes an acceptable alternative. (Note: this does not authorize off-lease measurement or comingling.)
WL-4019	BR:6.1 BR:6.2 BR:6.3 BR:6.4 BR:7.1 BR:7.3 BR:7.4 BR:7.5 BR:7.6 BR:8.2 BR:8.4 BR:9.1	Forest management activities are not allowed in areas where crucial elk habitat occurs or where hiding cover is insufficient to meet the minimum needs of this species.	Prohibit forest management activities within crucial elk habitat or hiding cover areas.	Allow forest management activities within crucial elk habitat and hiding cover areas.	Forest management activities shall maintain current amounts of functional crucial elk habitat and hiding cover (Map 29).
WL-4020	BR:6.1 BR:6.2 BR:6.3 BR:6.4 BR:7.1 BR:7.2 BR:7.3 BR:7.4 BR:7.5 BR:7.6 BR:8.1 BR:8.2 BR:8.3 BR:8.4 BR:9.1	No previous decision; considered on a project-specific basis.	Maintain traditional migration and travel corridors for big game species. Prohibit surface disturbance and disruptive activities within 0.5 mile of a big game migration corridor. Avoid constrictions of big game corridors.	Manage traditional migration and travel corridors for big game species to be consistent with other resource values. Do not prohibit surface disturbance and disruptive activities within 0.5 mile of a big game migration corridor. Do not avoid constrictions of big game corridors.	Maintain and reestablish identified traditional priority travel corridors for big game species. • Prohibit construction of new travel barriers within 0.5 mile of identified big game priority travel corridors. • Reduce barriers with cooperation of other agencies. • Avoid constrictions of big game corridors.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
WL-4021	BR:6.1 BR:6.2 BR:6.3 BR:6.4 BR:7.1 BR:7.2 BR:7.3 BR:7.4 BR:7.5 BR:7.6 BR:8.4 BR:9.1	No previous decision; considered on a project-specific basis.	Restrict facility development and occupancy within elk crucial winter range and calving areas.	Do not restrict facility development and occupancy within elk crucial winter range and calving areas.	Allow above ground facility development within elk crucial winter range and calving areas when population and habitat use objectives can be met. (Note: this does not authorize off-lease measurement or comingling.)
WL-4022	BR:6.1 BR:6.2 BR:6.3 BR:6.4 BR:7.1 BR:7.2 BR:7.3 BR:7.4 BR:7.5 BR:7.6 BR:8.4 BR:9.1	No previous decision; considered on a project-specific basis.	Loss of elk security habitat will not exceed baseline conditions as measured from roads.	Do not apply any restrictions to elk security habitat.	Retain 85% of existing security habitat as measured from roads within all elk seasonal ranges. (Excluding Fort Creek, will use amendment decision.)
WL-4023	BR:6.1 BR:6.2 BR:6.3 BR:6.4 BR:7.1 BR:7.2 BR:7.3 BR:7.4 BR:7.5 BR:7.6 BR:8.1 BR:8.2 BR:8.4 BR:9.1	No previous decision; considered on a project-specific basis.	Designate a WHMA for the Fortification Creek elk herd that includes elk crucial and yearlong ranges. Management to include: • Closing federal minerals within crucial ranges to leasing (fluid and solid). Lease federal minerals within the yearlong range with a CSU stipulation. • Recommending federal locatable minerals within crucial ranges to be withdrawn from mineral entry. • Closing federal salable minerals within crucial ranges to mineral material sales.	Designate a WHMA for the Fortification Creek elk herd that includes only elk crucial ranges. Management to include: Lease federal minerals with a CSU stipulation. Restrict surface-disturbing or disruptive activities determined to adversely affect the elk population or habitat effectiveness.	Do not designate a WHMA for the Fortification Creek elk herd. Fortification Creek RMP Amendment (BLM 2011c) management will be carried forward within the Fortification Creek Planning Area (Map 76).

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
WL-4024	BR:6.1 BR:6.2 BR:6.3 BR:6.4 BR:7.1 BR:7.2 BR:7.3 BR:7.4 BR:7.5 BR:7.6 BR:8.2 BR:9.1 BR:9.4	No previous decision; considered on a project-specific basis.	Prohibit renewable energy projects in big game crucial winter range, calving areas, and migration corridors (Map 29).	Do not prohibit renewable energy projects in big game crucial winter range, calving areas, and migration corridors.	Prohibit commercial renewable energy (wind and solar) projects in big game crucial winter range, elk calving areas, and identified big game priority travel corridors (Map 29).
Upland Game Birds					
WL-4025	BR:6.1 BR:6.2 BR:6.3 BR:6.4 BR:7.1 BR:7.2 BR:7.3 BR:7.4 BR:7.5 BR:7.6 BR:8.1 BR:8.2 BR:8.4 BR:9.1	Prohibit surface disturbance and occupancy within 750 feet of sharp-tailed grouse leks at any time. Prohibit surface disturbance within an additional 0.64-mile radius of sharp-tailed grouse leks from April 1 through May 30 unless the authorized officer waives the prohibition (Map 30).	Prohibit surface disturbance and occupancy within 0.25 mile of sharp-tailed grouse leks at any time. Prohibit surface disturbance within a 2.0-mile radius of sharp-tailed grouse leks from April 1 through July 15 (Map 30).	Do not prohibit surface disturbance and occupancy within 750 feet of sharp-tailed grouse leks at any time. Do not prohibit surface disturbance within an additional 0.64-mile radius of sharp-tailed grouse leks from April 1 through May 30.	1. Avoid surface disturbance or occupancy within 0.25 mile of the perimeter of occupied sharp-tailed grouse leks, 2. Avoid human activity between 6 p.m. and 8 a.m. from March 15 to May 31 within 0.25 mile of the perimeter of occupied sharp-tailed grouse leks, and 3. Avoid surface-disturbing activities, geophysical surveys, and organized recreational activities (events) which require a special use permit in potential nesting and early brood-rearing habitat within 2.0 miles of an occupied sharp-tailed grouse lek from April 1 to July 15.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
WL-4026	BR:6.1 BR:6.2 BR:6.3 BR:6.4 BR:7.1 BR:7.2 BR:7.3 BR:7.4 BR:7.5 BR:7.6 BR:8.1 BR:8.2 BR:8.4 BR:9.1	Prohibit surface disturbance and occupancy within 750 feet of sharp-tailed grouse leks at any time. Prohibit surface disturbance within an additional 0.64-mile radius of sharp-tailed grouse leks from April 1 through May 30 unless the authorized officer waives the prohibition.	Apply an NSO stipulation to fluid mineral leases within 0.25 mile of sharp-tailed grouse leks. Apply a TLS to fluid mineral leases within a 2.0-mile radius of sharp-tailed grouse leks from April 1 through July 15.	Do not apply an NSO stipulation to fluid mineral leases within 750 feet of sharp-tailed grouse leks. Do not apply a TLS to fluid mineral leases within an additional 0.64-mile radius of sharp-tailed grouse leks from April 1 through May 30.	Apply a CSU stipulation to fluid mineral leases within 0.25 mile of sharp-tailed grouse leks. Apply a TLS to fluid mineral leases within a 2.0-mile radius of sharp-tailed grouse leks from April 1 through July 15.
Raptors					
WL-4027	BR:6.1 BR:6.2 BR:6.3 BR:6.4 BR:7.1 BR:7.2 BR:7.3 BR:7.4 BR:7.5 BR:8.1 BR:8.2 BR:9.1	Prohibit surface disturbance or occupancy within a biologic buffer zone around active nests of raptor species of conservation concern unless the prohibition is waived by the authorized officer (Map 31).	Prohibit surface disturbance and occupancy within a biologic buffer zone around active nests of raptor species (Map 32).	Do not prohibit surface disturbance or occupancy within a biologic buffer zone around active nests of raptor species of conservation concern.	Allow surface disturbance and occupancy within the USFWS Wyoming Ecological Services' recommended spatial buffers for breeding raptors (http://www.fws.gov/wyominges/Pages/Species/Species_SpeciesConcern/Raptors.html) when nest productivity would not be harmed (Map 33). Spatial buffers may be modified based on auditory and visual impacts, as well as the topography and other ecological characteristics surrounding the nest site. BLM may coordinate buffer distances with the WGFD and/or the USFWS.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
WL-4028	BR:6.1 BR:6.2 BR:6.3 BR:6.4 BR:7.1 BR:7.2 BR:7.3 BR:7.4 BR:7.5 BR:8.1 BR:8.2 BR:9.1	Prohibit surface disturbance or occupancy within a biologic buffer zone around active nests of raptor species of high federal interest unless the prohibition is waived by the authorized officer.	Apply an NSO stipulation to fluid mineral leases within a biologic buffer zone around active nests of raptor species.	Do not apply an NSO stipulation to fluid mineral leases within a biologic buffer zone around active nests of raptor species of conservation concern.	Apply a CSU stipulation to fluid mineral leases containing active raptor nests using USFWS Wyoming Ecological Services' recommended spatial buffers for breeding raptors. (http://www.fws.gov/wyominges/Pages/Species/Species_SpeciesConcern/Raptors.html) (Map 33). Spatial buffers may be modified based on auditory and visual impacts, as well as the topography and other ecological characteristics surrounding the nest site. BLM may coordinate buffer distances with the WGFD and/or the USFWS.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
WL-4029	BR:6.1 BR:6.2 BR:6.3 BR:6.4 BR:7.1 BR:7.2 BR:7.3 BR:7.4 BR:8.1 BR:8.2 BR:9.1	Preclude new surface-disturbing activities within 0.5 mile of raptor nests, which could cause increased stress to and/or displacement of animals during the critical time period (February 1 to July 31) (Map 31).	Prohibit surface-disturbing activities potentially disruptive to nesting raptors within 1.5 miles of an active raptor nest during the following time periods (Map 32): • February 1 to July 15: golden eagle, barn owl, great horned owl • April 1 to July 31: osprey, merlin, sharp-shinned hawk, kestrel, prairie falcon, northern harrier, Swainson's hawk, Cooper's hawk • March 1 to July 31: red-tailed hawk, short-eared owl, long-eared owl, screech owl	Prohibit surface-disturbing activities potentially disruptive to nesting raptors within 0.5 mile of an active raptor nest during the following time periods (Map 31): • February 1 to July 15: golden eagle, barn owl, great horned owl • April 1 to July 31: osprey, merlin, sharp-shinned hawk, kestrel, prairie falcon, northern harrier, Swainson's hawk, Cooper's hawk • March 1 to July 31: red-tailed hawk, short-eared owl, long-eared owl, screech owl	Seasonally prohibit surface-disturbing and disruptive activities around active raptor nests using the USFWS Wyoming Ecological Services' recommended spatial buffers and dates for breeding raptors (http://www.fws.gov/wyominges/Pages/Species/Species_SpeciesConcern/Raptors.html) (Map 33). Spatial buffers may be modified based on auditory and visual impacts, as well as the topography and other ecological characteristics surrounding the nest site. BLM may coordinate buffer distances with the WGFD and/or the USFWS.
WL-4030	BR:6.1 BR:6.2 BR:6.3 BR:6.4 BR:7.1 BR:7.2 BR:7.3 BR:7.4 BR:8.1 BR:8.2 BR:9.1	Preclude new surface-disturbing activities within 0.5 mile of raptor nests, which could cause increased stress to and/or displacement of animals during the critical time period (February 1 to July 31).	Apply a TLS to fluid mineral leases within 1.5 miles of an active raptor nest for the following time periods: • February 1 to July 15: golden eagle, barn owl, great horned owl • April 1 to July 31: osprey, merlin, sharp-shinned hawk, kestrel, prairie falcon, northern harrier, Swainson's hawk, Cooper's hawk • March 1 to July 31: red-tailed hawk, short-eared owl, long-eared owl, screech owl	Apply a TLS to fluid mineral leases within 0.5 mile of an active raptor nest for the following time periods: • February 1 to July 15: golden eagle, barn owl, great horned owl • April 1 to July 31: osprey, merlin, sharp-shinned hawk, kestrel, prairie falcon, northern harrier, Swainson's hawk, Cooper's hawk • March 1 to July 31: red-tailed hawk, short-eared owl, long-eared owl, screech owl	Apply a TLS to fluid mineral leases containing active raptor nests using the USFWS Wyoming Ecological Services' recommended) spatial buffers and dates for breeding raptors (http://www.fws.gov/wyominges/Pages/Species/Species_SpeciesConcern/Raptors.html) (Map 33). Spatial buffers may be modified based on auditory and visual impacts, as well as the topography and other ecological characteristics surrounding the nest site. BLM may coordinate buffer distances with the WGFD and/or the USFWS. BLM may coordinate buffer distances with the WGFD and/or the USFWS.

Table 2.23. 4000 BIOLOGICAL RESOURCES (BR) – SPECIAL STATUS SPECIES

GOAL BR:10 Distribution and abundance of all special status species are optimized.

Objectives:

BR:10.1 Maintain or enhance special status species plant communities and habitats.

BR:10.2 Manage BLM-administered lands to maintain or restore populations and habitat consistent with conservation requirements for special status species.

BR:10.3 Develop effective conservation and cooperative management plans, strategies, and agreements with stakeholders.

GOAL BR:11 Sustainable sagebrush habitats that provide the quantity, quality, and connectivity that is necessary to maintain sustainable populations of Greater Sage-Grouse and other special status species.

Objectives:

BR:11.1 Maintain large patches of high quality interconnected sagebrush habitats, with emphasis on patches occupied by Greater Sage-Grouse.

BR:11.2 Maintain connectivity between and within sagebrush habitats with emphasis on communities occupied by Greater Sage-Grouse.

BR:11.3 Maintain a minimum of 70% of public lands capable of producing sagebrush with 10-30% sagebrush canopy cover.

GOAL BR:12 Successful restoration and rehabilitation of potential Greater Sage-Grouse habitat across the planning area.

Objectives:

BR:12.1 Reestablish sagebrush corridors, where feasible, between Greater Sage-Grouse occupied habitats.

BR:12.2 Reconnect large patches of sagebrush habitat with emphasis on reconnecting patches occupied by stronghold and isolated populations of Greater Sage-Grouse.

Record #	Goal/Obj.	MANAGEMENT ACTIONS COMMON TO ALL ALTERNATIVES – SPECIAL STATUS SPECIES PLANTS
SS Plants-4001	BR:10.1 BR:10.2	Implement actions set forth in recovery plans, conservation measures, terms and conditions, and appropriate BMPs and reasonable and prudent measures within biological opinions for Threatened and/or Endangered plant species.
SS Plants-4002	BR:10.1 BR:10.2	Allow treatments within habitat for special status plant species and within known populations that are proven to benefit the species.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
SS Plants-4003	BR:10.1 BR:10.2	No previous decision; considered on a project-specific basis.	Prohibit the following within habitat for special status plants species (Map 34): • Surface-disturbing activities that could adversely impact special status plant species habitat. • Mineral exploration and development activities. • All motor vehicle use, including uses related to fire suppression and geophysical exploration activities (surveying, etc.). • Use of explosives and blasting.	Allow the following within habitat for special status plant species, though not within known populations: • Surface-disturbing activities that could adversely impact special status plant species habitat. • Mineral exploration and development activities. • All motor vehicle use, including uses related to fire suppression and geophysical exploration activities (surveying, etc.). • Use of explosives and blasting.	Allow the following within habitat for special status plant species, though not within known populations, where populations could be conserved: • Surface-disturbing activities that could adversely impact special status plant species. • Mineral exploration and development activities. • All motor vehicle use, including uses related to fire suppression and geophysical exploration activities (surveying, etc.). • Use of explosives and blasting. • Placement of water developments, salt and mineral supplements. Where appropriate, establish a site-specific buffer, after predisturbance flowering season surveys have shown species presence or absence.
SS Plants-4004	BR:10.1 BR:10.2 BR:10.3	No previous decision; considered on a project-specific basis.	Require surveys for special status plant species prior to approving any project or activity that may impact the habitat for these species.	Do not require surveys for special status plant species (except for federally listed, proposed, and candidate species) prior to approving any project or activity that may impact the habitat for these species.	Require predisturbance flowering season surveys for special status plant species prior to approving any project or activity that may impact the habitat for these species as modeled and surveyed by WYNDD and BLM. Mitigation and monitoring plan to be developed within occupied habitat.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
SS Plants-4005	BR:10.1 BR:10.2 BR:10.3	No previous decision; considered on a project-specific basis.	Prohibit aerial application of herbicide treatments within areas containing habitat for special status plant species.	Allow aerial application of herbicide treatments within areas containing habitat for special status plant species, though not within areas of known populations.	Allow aerial application of narrow spectrum herbicide treatments within areas containing special status plant species.
SS Plants-4006	BR:10.1 BR:10.2 BR:10.3	No previous decision; considered on a project-specific basis.	Prohibit the use of fire suppression chemicals, including foaming agents and surfactants, within areas containing habitat for special status plant species unless human safety or property are at risk or for the protection of special status plant communities that are at risk of being lost by fire.	Allow the use of fire suppression chemicals, including foaming agents and surfactants, within areas containing habitat for special status plant species, though not within areas of known populations unless human safety or property are at risk.	Allow the use of fire suppression chemicals, including foaming agents and surfactants, within areas of known special status plant populations where consistent with the biology of the plant or where human safety or property are at risk and for the protection of special status plant communities that are at risk of being lost by fire.
SS Plants-4007	BR:10.1 BR:10.2	No previous decision; considered on a project-specific basis.	Prohibit ROW within habitat for special status species plants.	Allow ROW within areas containing habitat for special status species plants, though not within areas of known populations.	Allow ROW within areas containing habitat for special status species plants, though not within areas of known populations.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
SS Plants-4008	BR:10.1 BR:10.2	No previous decision; considered on a project-specific basis.	Apply an NSO stipulation to fluid mineral leases within habitat for special status plant species.	Apply an NSO stipulation to fluid mineral leases within known special status plant populations.	Apply a CSU stipulation to fluid mineral leases within habitat for special status plant species. Require necessary survey and establish site specific buffer. Apply an NSO stipulation to fluid mineral leases within known special status plant populations.
SS Plants-4009	BR:10.1 BR:10.2	No previous decision; considered on a project-specific basis.	Manage livestock grazing to protect special status plant habitat.	Manage livestock grazing to protect special status plant populations. (exclosures, timing)	Manage livestock grazing to protect special status plant populations where there is an identified conflict. (exclosures, timing)
Record #	**Goal/Obj.**	**MANAGEMENT ACTIONS COMMON TO ALL ALTERNATIVES – SPECIAL STATUS SPECIES FISH**			
SS Fish-4001	BR:10.2	Modify projects that may affect special status species fish to protect these species. Consult with the USFWS in such cases, as required by the ESA.			
SS Fish-4002	BR:10.1 BR:10.2 BR:10.3	Assist authorized agencies in the restoration, reintroduction, augmentation, or reestablishment of special status species populations and habitats.			
SS Fish-4003	BR:10.1 BR:10.2	Prioritize special status fish species over other fish species in planning and management actions.			

Record #	Goal/Obj.	MANAGEMENT ACTIONS COMMON TO ALL ALTERNATIVES – SPECIAL STATUS SPECIES FISH			
SS Fish-4004	BR:10.1 BR:10.2	Implement actions set forth in recovery plans, conservation measures, terms and conditions, and appropriate BMPs and reasonable and prudent measures within biological opinions for Threatened and/or Endangered fish species.			
SS Fish-4005	BR:10.3	Support WGFD in obtaining water rights for the benefit of special status fish habitat.			
Record #	**Goal/Obj.**	**Alternative A (Current Management)**	**Alternative B (Resource Conservation)**	**Alternative C (Resource Utilization)**	**Alternative D (Proposed RMP)**
SS Fish-4006	BR:10.1 BR:10.2	No previous decision; considered on a project-specific basis.	Restore or improve important stream segments for fisheries habitat.	Restore or improve important stream segments for fisheries habitat, only for special status fish species.	Restore or improve important stream segments for special status fish.
SS Fish-4007	BR:10.2	No previous decision; considered on a project-specific basis.	Prohibit surface-disturbing and disruptive activities within 0.25 mile of any waters containing special status fish species (Map 28).	Prohibit surface-disturbing and disruptive activities within 500 feet of any waters containing special status fish species when their impacts cannot be mitigated (Map 28).	Prohibit new surface-disturbing activities within 0.25 mile of any waters containing special status fish species (Map 28), unless it benefits the species. Exceptions must demonstrate the proposed impacts cannot be avoided and the proposal is least environmentally damaging alternative.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
SS Fish-4008	BR:10.2	No previous decision; considered on a project-specific basis.	Apply an NSO stipulation within 0.25 mile of any waters containing special status fish species.	Apply a NSO stipulation within 500 feet of any waters containing special status fish species.	Apply an NSO stipulation within 0.25 mile of any waters containing special status fish species.
SS Fish-4009	BR:10.1 BR:10.2	No previous decision; considered on a project-specific basis.	Prohibit impoundments and instream structures where adverse impacts on special status fish species and their habitat would potentially occur.	Design impoundments and instream structures to reduce impacts on special status fish species and their habitats.	All new surface-disturbing activities within 0.25 mile of any waters containing special status fish species (Map 28), must demonstrate that the proposed action will benefit the species or will be the least environmentally damaging alternative.
Record #	**Goal/Obj.**	**MANAGEMENT ACTIONS COMMON TO ALL ALTERNATIVES – SPECIAL STATUS SPECIES WILDLIFE**			
SS WL-4001	BR:10.1 BR:10.2 BR:10.3 BR:11.1 BR:11.2 BR:12.1 BR:12.2	Utilize current research, management and conservation plans, and similar related documents to guide special status species habitat management.			
SS WL-4002	BR:10.3	Implement actions set forth in recovery plans, conservation measures, terms and conditions, protection measures, and appropriate BMPs and reasonable and prudent measures within biological opinions for Threatened and/or Endangered wildlife species, including those specific to this RMP and any future statewide programmatic biological opinions.			
Record #	**Goal/Obj.**	**Alternative A (Current Management)**	**Alternative B (Resource Conservation)**	**Alternative C (Resource Utilization)**	**Alternative D (Proposed RMP)**
SS WL-4003	BR:10.1 BR:10.2 BR:11.1 BR:11.2 BR:12.1 BR:12.2	Manage vegetation resources to comply with the ESA and BLM policy associated with management of habitat for special status species.	Enlarge and enhance habitat and habitat connectivity for special status species.	Maintain current habitat utilized by special status species.	Maintain (size and quality) or enhance current habitat utilized by special status species. Enlarge/restore habitat on a site-specific basis.
SS WL-4004	BR:10.1 BR:10.2 BR:10.3 BR:11.1 BR:11.2 BR:12.1 BR:12.2	No previous decision; considered on a project-specific basis.	Maintain the integrity of traditional wildlife migration and travel corridors.	Manage traditional wildlife migration and travel corridors consistent with other resource values.	Maintain or enhance the integrity of identified special status wildlife species migration corridors. Manage identified special status wildlife species travel corridors consistent with other resource values.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
SS WL-4005	BR:10.2 BR:10.3	No previous decision; considered on a project-specific basis.	Locate and manage facilities to minimize noise impacts on special status species.	Do not locate and manage facilities to minimize noise impacts on special status species.	Locate and manage facilities to mitigate noise impacts on special status species.
SS WL-4006	BR:10.1 BR:10.2 BR:10.3 BR:11.1 BR:11.2	No previous decision; considered on a project-specific basis.	Manage surface-disturbing and disruptive activities to minimize impacts on special status wildlife species and their habitats.	Manage surface-disturbing and disruptive activities consistent with other resource values.	Manage surface-disturbing and disruptive activities to mitigate impacts on special status wildlife species and their habitats.
SS WL-4007	BR:10.1 BR:10.2 BR:10.3 BR:11.1 BR:11.2	No previous decision; considered on a project-specific basis.	Apply a CSU stipulation to fluid mineral leases containing special status species habitat.	Apply standard lease terms to fluid mineral leases containing special status species habitat.	Apply a CSU stipulation to fluid mineral leases containing special status species habitat. Surveys required for clearance.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
SS WL-4008	BR:10.1 BR:10.2 BR:10.3	No previous decision; considered on a project-specific basis.	Prohibit surface-disturbing and disruptive activities in all prairie dog colonies to provide suitable habitat for special status species dependent upon prairie dog colonies (Map 35).	Do not prohibit surface-disturbing and disruptive activities in prairie dog colonies.	Allow surface-disturbing and disruptive activities within active prairie dog colonies on BLM surface that do not adversely impact suitable habitat for special status species dependent upon prairie dog colonies (Map 35).
SS WL-4009	BR:10.1 BR:10.2 BR:10.3	No previous decision; considered on a project-specific basis.	Apply an NSO stipulation to fluid mineral leases containing prairie dog colonies to provide suitable habitat to special status species dependent upon prairie dog colonies.	Apply standard lease terms to fluid mineral leases containing prairie dog colonies.	Apply a CSU stipulation to fluid mineral leases containing active prairie dog colonies.
Record #	**Goal/Obj.**	**MANAGEMENT ACTIONS COMMON TO ALL ALTERNATIVES – Upland Game Birds**			
SS WL-4010	BR:10.1 BR:10.2 BR:10.3	The BLM will collaborate with appropriate federal agencies and the State of Wyoming, as contemplated under the Wyoming Governor's Executive Order 2013-3, to: 1) develop appropriate conservation objectives; 2) define a framework for evaluating situations where Greater Sage-Grouse conservation objectives are not being achieved on federal land, to determine if a significant causal relationship exists between improper grazing (by wildlife or wild horses or livestock) and Greater Sage-Grouse conservation objectives; and 3) identify appropriate site-based actions to achieve Greater Sage-Grouse conservation objectives within the framework. Absent substantial and compelling information that adjustments are necessary to the core population area strategy, these core population areas, connectivity areas, identified and mapped winter concentration areas, and protective stipulations shall not be altered for a minimum of 7 years. Any changes shall involve a transparent process that provides an opportunity for public input and proper consideration of any proposal consistent with the provisions contemplated under Wyoming's core population area strategy. The BLM will coordinate new recommendations, mitigation, and sage-grouse habitat objectives and management considerations with the WGFD and other appropriate agencies, local government cooperators, and the Wyoming SGIT. These measures will be analyzed in site-specific NEPA documents, as necessary. The Greater Sage-Grouse adaptive management plan (Appendix B (p. 1779)) provides regulatory assurance that unintended negative impacts to Greater Sage-Grouse habitat will be addressed before consequences become severe or irreversible. Projects requiring an EIS shall develop adaptive management strategies in support of the population management objectives for Greater Sage-Grouse set by the State of Wyoming (State of WY EO 2011-05). Adaptive management triggers are essential for identifying when potential management changes are needed in order to continue meeting Greater Sage-Grouse conservation objectives. With respect to sage-grouse, all regulatory entities in Wyoming, including the BLM, use soft and hard triggers. Soft and hard triggers are focused on three metrics: 1) number of active leks, 2) acres of available habitat, and 3) population trends based on annual lek counts.			

Record #	Goal/Obj.	MANAGEMENT ACTIONS COMMON TO ALL ALTERNATIVES – Upland Game Birds
		Soft Triggers Response: Soft triggers require immediate monitoring and surveillance to determine causal factors and may require curtailment of activities in the short- or long-term, as allowed by law. The project level adaptive management strategies will identify appropriate responses where the project's activities are identified as the causal factor. The management agency (BLM) and the Adaptive Management Working Group will implement an appropriate response strategy to address causal factors not attributable to a specific project or to make adjustments at a larger regional or state-wide level. **Hard Trigger Response**: Upon determination that a hard trigger has been tripped, the BLM will immediately defer issuance of discretionary authorizations for new actions within the Biologically Significant Unit for a period of 90 days. In addition, within 14 days of a determination that a hard trigger has been tripped, the Adaptive Management Working Group will convene to develop an interim response strategy and initiate an assessment to determine the causal factor or factors (hereafter called the causal factor assessment).
SS WL-4011	BR:10.1 BR:10.2 BR:10.3 BR:11.1 BR:11.2	Develop avoidance areas restricting the application of broad-spectrum pesticides in areas containing Greater Sage-Grouse nesting and brood-rearing habitats.
SS WL-4012	BR:10.1 BR:10.2 BR:10.3 BR:11.1 BR:11.2 BR:12.1 BR:12.2	Restore Greater Sage-Grouse brood-rearing habitats in wetland/riparian areas. Maintain seeps, springs, wet meadows, and riparian vegetation in a functional and diverse condition for young Greater Sage-Grouse and other species that depend on forbs and insects associated with these areas.
SS WL-4013	BR:10.1 BR:10.2 BR:10.3 BR:11.1 BR:11.2 BR:11.3 BR:12.1 BR:12.2	Manage vegetation composition, diversity and structure, as determined by ecological site description and WGFD protocols (WY IM-2012–019 attachment 6), to achieve Greater Sage-Grouse habitat management objectives, in cooperation with stakeholders.
SS WL-4014	BR:10.1 BR:10.2 BR:10.3 BR:11.1 BR:11.2	Minimize disturbances that would result in alterations to springs and riparian Greater Sage-Grouse habitat. In coordination with stakeholders, develop alternative water sources to replace natural sources that have been affected or destroyed.
SS WL-4015	BR:10.1 BR:10.2 BR:10.3	Manage stored water to control mosquitoes and prevent the spread of WNv to Greater Sage-Grouse.

Record #	Goal/Obj.	MANAGEMENT ACTIONS COMMON TO ALL ALTERNATIVES – Upland Game Birds
SS WL-4016	BR:10.1 BR:10.2 BR:10.3	Design water facilities with protective features to reduce mortality of Greater Sage-Grouse from drowning or entrapment.
SS WL-4017	BR:10.1 BR:10.2 BR:10.3 BR:11.1 BR:11.2	Design and locate fences to reduce impacts to important Greater Sage-Grouse habitat.

Record #	Goal/Obj.	MANAGEMENT ACTIONS COMMON TO ALL ALTERNATIVES – Upland Game Birds
SS WL-4018	BR:10.1 BR:10.2 BR:10.3 BR:11.1 BR:11.2 BR:11.3 BR:11.4	Use the Fire Management Plan to incorporate the most current sagebrush habitat information and to guide fire suppression priorities in sagebrush habitats.
SS WL-4019	BR:10.1 BR:10.2 BR:10.3 BR:11.1 BR:11.2 BR:11.3 BR:11.4	Remove conifers where they have encroached upon Greater Sage-Grouse habitat in cooperation with stakeholders. Reduce the density of conifers that have encroached into, but do not yet dominate sagebrush plant communities.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
SS WL-4020	BR:10.1 BR:10.2 BR:10.3 BR:11.1 BR:11.2	No previous decision; considered on a project-specific basis.	Increase the visibility of existing fences within Greater Sage-Grouse habitat to reduce hazards to flying Greater Sage-Grouse, in cooperation with stakeholders.	Do not increase the visibility of existing fences to reduce hazards to flying Greater Sage-Grouse.	Inventory, record, and report existing type and condition of BLM fences. Prioritize areas and annually implement modifications to existing fences to reduce hazards to flying Greater Sage-Grouse, in cooperation with stakeholders. All new fences, in priority areas, will be properly designed and located to avoid hazards to flying Greater Sage-Grouse.
SS WL-4021	BR:10.1 BR:10.2 BR:10.3 BR:11.1 BR:11.2	No previous decision; considered on a project-specific basis.	Prohibit renewable energy projects within Greater Sage-Grouse nesting, brood-rearing and winter habitat.	Do not prohibit renewable energy projects in Greater Sage-Grouse nesting, brood-rearing and winter concentration areas.	Avoid renewable energy (solar and wind) projects in Greater Sage-Grouse Core Population Areas unless it can be demonstrated that the activity would not result in declines of core Greater Sage-Grouse populations. Sufficient demonstration of "no declines" should be coordinated with the WGFD and USFWS.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
SS WL-4022	BR:10.1 BR:10.2 BR:10.3	Require anti-perching devices on new powerlines within 0.5 mile of occupied Greater Sage-Grouse leks and nesting habitat.	Require anti-perching devices on existing and new powerlines in occupied Greater Sage-Grouse habitat to minimize raptor use. Evaluate and take advantage of opportunities to remove or modify existing power lines within Greater Sage-Grouse habitat.	Require anti-perching devices on new powerlines within occupied Greater Sage-Grouse habitat to minimize raptor use of these poles.	Powerlines (distribution and transmission) will be designed to minimize wildlife related impacts. This action includes but is not limited to: ● Avoid areas of high avian use such as water bodies (including ponds, lakes, rivers, streams and wetlands), ridge tops, prairie dog colonies, Greater Sage-Grouse Core Population and Connectivity Areas, and sharp-tailed grouse leks (PRB Final EIS, EO 2011-05). ● Prohibit within 0.6 miles of Greater Sage-Grouse Core Population and Connectivity Area leks unless within an established corridor or it can be demonstrated that the activity will not cause Greater Sage-Grouse population declines. Major overhead powerlines will not be authorized unless co-located with an existing 115 kilovolt or greater powerline, as close as technically feasible, not to exceed 0.5 miles or within a designated corridor authorized for overhead powerlines.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
					• Distribution lines may be authorized when effectively mitigated to protect Greater Sage-Grouse and the authorized officer determines that overhead installation is the action alternative with the fewest adverse impacts. Agricultural and residential lines will be considered to be adequately mitigated for Greater Sage-Grouse if constructed at least 0.6 mile from the lek perimeter with appropriate timing constraints and installation of raptor deterrents. These ROW authorizations will be subject to approval by the State Director. • Within general Greater Sage-Grouse habitat (outside core population and connectivity areas) overhead powerlines will be located at least 0.5 miles from Greater Sage-Grouse breeding and nesting grounds (PRB Final EIS). • Any new power lines authorized within the above identified areas will be buried or if overhead then marked to increase visibility and perch-guarded to prevent raptor perching (PRB Final EIS).

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
SS WL-4023	BR:10.1 BR:10.2 BR:10.3 BR:11.1 BR:11.2 BR:11.3 BR:11.4	Lease fluid minerals where not prohibited by regulation, policy, withdrawal, or similar action Note: Within the boundary of the Wyodak-Anderson coal seam is presently closed to leasing due to Pennaco v. U.S., 377 F.3d 1147 (10th Cir. 2004).	Lease fluid minerals dependent upon Greater Sage-Grouse habitat suitability, population density, and development density Close to leasing within 4.0 miles of the perimeter of occupied or undetermined Greater Sage-Grouse leks and winter concentration areas (independent of habitat suitability). Adopt a minimum lease size of 640 contiguous acres.	Lease fluid minerals where not prohibited by regulation, policy, withdrawal, or similar action.	Lease fluid minerals dependent upon lease location and habitat suitability. In order to avoid surface-disturbing activities in Greater Sage-Grouse Priority Habitat (Core Population Areas and Core Population Connectivity Corridors), priority will be given to leasing fluid mineral resources outside of priority habitat. Within Priority Habitat (Core Population Areas and Connectivity Corridors), leases should be a minimum of 640 contiguous acres of federal mineral estate. Smaller parcels may be leased only when 640 contiguous acres of federal mineral estate is not available and leasing is necessary to remain in compliance with laws, regulations and policy; for example, to protect the federal mineral estate from drainage or to commit the federal mineral estate to unit or communitization agreements. Preliminary parcels reviewed for possible offering in a lease sale should comply with this minimum lease size. Expressions of interest that are less than this minimum lease size would be evaluated and modified by the BLM to meet the minimum lease size, where possible, prior to review for possible offering in a lease sale.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
SS WL-4024	BR:10.1 BR:10.2 BR:10.3 BR:11.1 BR:11.2 BR:11.3 BR:11.4	Apply the following stipulations to fluid mineral leases: ● CSU - Surface-disturbing activities or surface occupancy is prohibited or restricted on or within a 0.25-mile radius of the perimeter of occupied or undetermined Greater Sage-Grouse leks. ● TLS - Disruptive activity is restricted on or within a 0.25-mile radius of the perimeter of occupied or undetermined Greater Sage-Grouse leks from 6 pm to 8 am from March 15 to May 15. ● TLS - Surface-disturbing activities are prohibited from March 15 to June 30 in suitable Greater Sage-Grouse nesting and early brood rearing habitat and within 2 miles of any occupied or undetermined Greater Sage-Grouse leks.	Apply the following stipulations to fluid mineral leases: ● NSO prohibiting surface-disturbing activities, disruptive activities, and occupancy within 4.0 miles of the perimeter of occupied or undetermined Greater Sage-Grouse leks and winter concentration areas (independent of habitat suitability). ● TLS prohibiting surface-disturbing and disruptive activities within 4.0 miles of occupied and undetermined Greater Sage-Grouse leks from March 1 to July 15 (independent of habitat suitability). ● TLS prohibiting surface-disturbing and disruptive activities within nesting and early brood-rearing habitat greater than 4.0 miles of an occupied or undetermined Greater Sage-Grouse lek, from March 1 to July 15. ● TLS prohibiting surface-disturbing and disruptive activities within 4.0 miles of Greater Sage-Grouse winter concentration areas, from November 15 to March 14 (independent of habitat suitability).	Apply the following stipulations to fluid mineral leases: ● CSU within 0.25 mile of the perimeter of occupied or undetermined Greater Sage-Grouse leks. ● TLS within 2 miles of any occupied or undetermined Greater Sage-Grouse leks and within suitable Greater Sage-Grouse nesting and early brood rearing habitat (greater than 2 miles). ● TLS within Greater Sage-Grouse winter concentration areas from November 15 to March 14.	Apply the following stipulations to fluid mineral leases within Greater Sage-Grouse Core Population Areas: ● NSO prohibiting surface occupancy and disturbing activities, disruptive activities, and occupancy within 0.6 mile of the perimeter of occupied Greater Sage-Grouse leks (independent of habitat suitability). ● CSU within Greater Sage-Grouse Core Population Areas ○ Allow on average no more than 1 energy or mining facility and on average no more than 5% total surface disturbance per 640 acres within the DDCT analysis area.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
			• TLS prohibiting surface-disturbing and disruptive activities within Greater Sage-Grouse winter habitat greater than 4.0 miles of Greater Sage-Grouse winter concentration areas, from November 15 to March 14. • CSU allowing no more than 1 disturbance and 3% total surface disturbance per 640 acres within the DDCT analysis area. • CSU - Restore disturbed sagebrush communities on BLM administered surface to full shrub density ($D_{Post} = [D_{Pre} * 1/(N+1)]$) for all pre-disturbance shrub species (Based on Wyoming DEQ Chapter 4 Rules and Regulations, Appendix 4A, option III community-specific full shrub density standard) and 5% minimum canopy cover of sagebrush. A 90% confidence interval is required to demonstrate achievement of the standard. The standard must be demonstrated the last year of the responsibility period, and all planted shrubs shall have been in place for at least two years.		○ In Greater Sage-Grouse core population areas, the density of disturbance of an activity (oil and gas or mining) would be limited to an average of one site per square mile (640 acres) within the DDCT, subject to valid existing rights and applicable law. The one location and cumulative value of existing disturbances will not exceed 5 percent of suitable habitat of the DDCT area. Utilize the Greater Sage-Grouse density disturbance process as described in Appendix B (p. 1779). Inside Greater Sage-Grouse (priority habitat) core population areas and connectivity corridors, all suitable habitat disturbed (any program area) will not exceed 5% of suitable habitat within the DDCT area using the DDCT process described in Appendix B (p. 1779). ○ Design and manage facilities to prevent WNv transmission.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
			D_{Pre} is the pre-disturbance total shrub density. D_{Post} is the post-disturbance total shrub density. N is the number of primary pre-disturbance shrub species. Apply to all surface-disturbing activities on BLM surface within nesting, brood-rearing, or winter habitat. Encourage unitization, offsite mitigation, and orderly (e.g., phased and/or clustered) development as means of minimizing adverse impacts to Greater Sage-Grouse. Require a full reclamation bond specific to the site and sufficient to cover costs required for full reclamation. Limit seismic activity to designated routes on BLM surface. Apply appropriate BMPs (see BMP Section) as COAs.		○ Prohibit overhead electric transmission lines unless within one-half mile either side of existing 115 kV or larger transmission lines creating a corridor no wider than one mile. ○ Limit project related noise where it would be expected to reduce habitat functionality. The BLM would evaluate the potential for limitation of new noise sources on a case-by-case basis as appropriate. BLM's near-term goal would be to limit noise sources that would be expected to negatively impact priority habitat area sage-grouse populations and to continue to support the establishment of ambient baseline noise levels for occupied priority habitat area leks.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
					As additional research and information emerges, specific new limitations appropriate to the type of projects being considered would be evaluated and appropriate implemented where necessary to minimize potential for noise impacts on sage-grouse priority population behavioral cycles. As new research is completed, new specific limitations would be coordinated with the WGFD and partners. Noise levels at the perimeter of the lek should not exceed 10 dBA above ambient noise. ○ Bury electric distribution lines where possible, if not possible; then locate overhead lines at least 0.6 miles from the perimeter of occupied Greater Sage-Grouse leks and install raptor perch guards.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
					○ Buried utilities constructed in designated utility corridors would not require that a DDCT be conducted. ○ Locate new roads that will have relatively high levels of activity (accessing multiple wells, housing development) greater than 1.9 miles from the perimeter of occupied Greater Sage-Grouse leks. Locate new roads used to provide facility site access and maintenance > 0.6 miles from the perimeter of occupied Greater Sage-Grouse leks. Vegetation treatments in nesting and wintering habitat that would reduce sagebrush canopy cover to less than 15% would not be conducted unless it can be shown to be beneficial to sage-grouse habitat and removal of sagebrush canopy cover below 15% will be subject to the DDCT.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
					Wildland fire burns will be treated as disturbance if sagebrush is reduced below 5% canopy cover, unless there is an implementation plan outlining restoration efforts and 3 years of data showing a trend back to suitable habitat. ● CSU - Restore disturbed sagebrush communities on BLM surface to meet the Wyoming DEQ community-specific full shrub density standard (Chapter 4 Rules and Regulations, option III) for all predisturbance shrub species and 5% minimum canopy cover of sagebrush. A 90% confidence interval is required to demonstrate achievement of the standard. The standard must be demonstrated the last year of the responsibility period, and all planted shrubs shall have been in place for at least two years. ● TLS prohibiting surface-disturbing and disruptive activities from March 15 to June 30 (independent of habitat suitability). ● TLS prohibiting surface-disturbing and disruptive activities within mapped Greater Sage-Grouse winter concentration areas, from December 1 to March 14.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
					Apply the following stipulations to fluid mineral leases within Greater Sage-Grouse Population Connectivity Areas: ● NSO prohibiting surface occupancy and disturbing activities, disruptive activities, and occupancy within 0.6 mile of the perimeter of occupied Greater Sage-Grouse leks (independent of habitat suitability). ● CSU within Greater Sage-Grouse Population Connectivity Areas. ○ Allow on average no more than 5% total surface disturbance per 640 acres within the DDCT analysis area. In Greater Sage-Grouse Core Population Connectivity Corridors, subject to valid existing rights and applicable law, the cumulative value of existing disturbances will not exceed 5 percent of suitable habitat of the DDCT area. Utilize the Greater Sage-Grouse density disturbance calculation tool described in (Appendix B (p. 1779)).

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
					Inside Greater Sage-Grouse (priority habitat) core population areas and connectivity corridors, all suitable habitat disturbed (any program area) will not exceed 5% of suitable habitat within the DDCT area using the DDCT process described in Appendix B (p. 1779). ○ Design and manage facilities to prevent WNv transmission. ○ Limit project related noise where it would be expected to reduce habitat functionality. The BLM would evaluate the potential for limitation of new noise sources on a case-by-case basis as appropriate. BLM's near-term goal would be to limit noise sources that would be expected to negatively impact priority habitat area sage-grouse populations and to continue to support the establishment of ambient baseline noise levels for occupied priority habitat area leks.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
					As additional research and information emerges, specific new limitations appropriate to the type of projects being considered would be evaluated and appropriate limitations would be implemented where necessary to minimize potential for noise impacts on sage-grouse priority population behavioral cycles. As new research is completed, new specific limitations would be coordinated with the WGFD and partners. Noise levels at the perimeter of the lek should not exceed 10 dBA above ambient noise. ● Buried utilities constructed in designated utility corridors would not require that a DDCT be conducted. ● Vegetation treatments in nesting and wintering habitat that would reduce sagebrush canopy cover to less than 15% would not be conducted unless it can be shown to be beneficial to sage-grouse habitat and removal of sagebrush canopy cover below 15% will be subject to the DDCT.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
					Wildland fire burns will be treated as disturbance if sagebrush is reduced below 5% canopy cover, unless there is an implementation plan outlining restoration efforts and 3 years of data showing a trend back to suitable habitat. • CSU - Restore disturbed sagebrush communities on BLM surface to meet the Wyoming DEQ community-specific full shrub density standard (Chapter 4 Rules and Regulations, option III) for all predisturbance shrub species and 5% minimum canopy cover of sagebrush. A 90% confidence interval is required to demonstrate achievement of the standard. The standard must be demonstrated the last year of the responsibility period, and all planted shrubs shall have been in place for at least two years. • TLS prohibiting surface-disturbing and disruptive activities within 4.0 miles of an occupied Greater Sage-Grouse lek, from March 15 to June 30 (independent of habitat suitability and restricted to within Population Connectivity Areas).

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
					• TLS prohibiting surface-disturbing and disruptive activities within mapped Greater Sage-Grouse winter concentration areas, from December 1 to March 14. Apply the following stipulations to fluid mineral leases within Greater Sage-Grouse habitat outside of Core Population and Population Connectivity Areas: • NSO prohibiting surface occupancy and disturbing activities, disruptive activities, and occupancy within 0.25 mile of the perimeter of occupied Greater Sage-Grouse leks. • CSU within 0.25 mile of occupied Greater Sage-Grouse leks. ○ Design and manage facilities to prevent WNv transmission. ○ Prohibit overhead electric transmission lines.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
					• CSU - Restore disturbed sagebrush communities on BLM surface to meet the Wyoming DEQ community-specific full shrub density standard (Chapter 4 Rules and Regulations, option III) for all predisturbance shrub species and 5% minimum canopy cover of sagebrush. A 90% confidence interval is required to demonstrate achievement of the standard. The standard must be demonstrated the last year of the responsibility period, and all planted shrubs shall have been in place for at least two years. Recommend for all surface-disturbing activities on BLM surface adjacent to Core or Connectivity Population Areas, or within or adjacent to lands involved in Greater Sage-Grouse conservation projects.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
					• CSU requiring proponents to limit project related noise where it would be expected to reduce functionality of habitats that support priority habitat area populations. The BLM would evaluate the potential for limitation of new noise sources on a case-by-case basis as appropriate. BLM's near-term goal would be to limit noise sources that would be expected to negatively impact priority habitat area sage-grouse populations and to continue to support the establishment of ambient baseline noise levels for occupied priority habitat area leks. As additional research and information emerges, specific new limitations appropriate to the type of projects being considered would be evaluated and appropriate limitations would be implemented where necessary to minimize potential for noise impacts on sage-grouse priority population behavioral cycles. As new research is completed, new specific limitations would be coordinated with the WGFD and partners. Noise levels at the perimeter of the lek should not exceed 10 dBA above ambient noise.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
					• TLS prohibiting surface-disturbing and disruptive activities within 2.0 miles of occupied Greater Sage-Grouse leks, from March 15 to June 30 (independent of habitat suitability). • TLS prohibiting surface-disturbing and disruptive activities from December 1 to March 14 within mapped Greater Sage-Grouse winter concentration areas that support populations of Greater Sage-Grouse that attend leks within Core Population Areas. In cases where federal oil and gas leases are or have been issued without stipulated restrictions or requirements that are later found to be necessary, or with stipulated restrictions or requirements later found to be insufficient, consider their inclusion before approving subsequent exploration and development activities. Include these restrictions or requirements only as reasonable measures or as conditions of approval in authorizing APDs or Master Development Plans.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
					Conversely, in cases where leases are or have been issued with stipulated restrictions or requirements that are later found to be excessive or unnecessary, the stipulated restrictions or requirements may be appropriately modified, excepted or waived in authorizing actions. Both the application of reasonable measures or COAs and the modification, exception, or waiver of stipulated restrictions or requirements must first be based upon site-specific analysis including the necessary supporting NEPA. **Note** (priority and general habitat): The authorized officer may grant an exception if an environmental record of review determines that the action, as proposed or conditioned, would not impair the function or utility of the site for the current or subsequent seasonal habitat, life-history, or behavioral needs of Greater Sage-Grouse.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
SS WL-4025	BR:10.1 BR:10.2 BR:10.3 BR:11.1 BR:11.2 BR:11.3 BR:11.4	Surface-disturbing activities or surface occupancy is prohibited or restricted on or within 0.25-mile radius of the perimeter of occupied or undetermined Greater Sage-Grouse leks. Disruptive activity is restricted on or within 0.25- mile radius of the perimeter of occupied or undetermined Greater Sage-Grouse leks from 6 pm to 8 am from March 15 to May 15. Surface-disturbing activities are prohibited from March 15 to June 30 in suitable Greater Sage-Grouse nesting and early brood rearing habitat and within 2 miles of any occupied or undetermined Greater Sage-Grouse leks (Map 37).	Manage Greater Sage-Grouse habitat as follows (Map 38): • Prohibit surface-disturbing activities, disruptive activities, and occupancy within 4.0 miles of the perimeter of occupied or undetermined Greater Sage-Grouse leks and winter concentration areas (independent of habitat suitability). • Prohibit surface-disturbing and disruptive activities within 4.0 miles of occupied and undetermined Greater Sage-Grouse leks from March 1 to July 15 (independent of habitat suitability). • Prohibit surface-disturbing and disruptive activities in nesting and early brood-rearing habitat greater than 4.0 miles of occupied and undetermined Greater Sage-Grouse leks, from March 1 to July 15. • Prohibit surface-disturbing activities, disruptive activities and occupancy within 4.0 miles of Greater Sage-Grouse winter concentration areas, from November 15 to March 14 (independent of habitat suitability).	To the extent necessary to prevent unnecessary or undue degradation, manage as follows within occupied Greater Sage-Grouse habitat (Map 39): • Restrict surface-disturbing and disruptive activities and occupancy within 0.25 mile of the perimeter of occupied or undetermined Greater Sage-Grouse leks. • Prohibit surface-disturbing and disruptive activities in all areas within 2 miles of occupied leks from March 15 to June 30 (independent of habitat suitability). • Prohibit surface-disturbing and disruptive activities in identified nesting and early brood-rearing habitat outside the 2-mile lek buffer, from March 15 to June 30. • Avoid surface-disturbing and disruptive activities and occupancy within Greater Sage-Grouse winter concentration areas from November 15 to March 14.	Manage Greater Sage-Grouse Core Population Areas as follows (Map 40): • Prohibit surface-disturbing activities, disruptive activities, and occupancy within 0.6 mile of the perimeter of occupied Greater Sage-Grouse leks (independent of habitat suitability). • Allow on average no more than 1 energy or mining facility and on average no more than 5% total surface disturbance per 640 acres within the DDCT analysis area . In Greater Sage-Grouse core population areas, the density of disturbance of an activity (oil and gas or mining) would be limited to an average of one site per square mile (640 acres) within the DDCT, subject to valid existing rights and applicable law. The one location and cumulative value of existing disturbances will not exceed 5 percent of suitable habitat of the DDCT area. Utilize the Greater Sage-Grouse density disturbance calculation tool described in Appendix B (p. 1779).

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
			• Prohibit surface-disturbing and, disruptive activities within winter habitat greater than 4.0 miles of Greater Sage-Grouse winter concentration areas, from November 15 to March 14. • Allow no more than 1 disturbance and 3% total surface disturbance per 640 acres within the DDCT analysis area. • Restore disturbed sagebrush communities on BLM surface to full shrub density (D_{Post} = [D_{Pre} * 1/(N+1)]) for all pre-disturbance shrub species and 5% minimum canopy cover of sagebrush. A 90% confidence interval is required to demonstrate achievement of the standard. The standard must be demonstrated the last year of the responsibility period, and all planted shrubs shall have been in place for at least two years. Apply to all surface-disturbing activities on BLM surface within nesting, brood-rearing, or winter habitat.		Inside Greater Sage-Grouse (priority habitat) core population areas and connectivity corridors, all suitable habitat disturbed (any program area) will not exceed 5% of suitable habitat within the DDCT area using the DDCT process described in Appendix B (p. 1779). Inside Greater Sage-Grouse (priority habitat) core population areas and connectivity corridors, all suitable habitat disturbed (any program area) will not exceed 5% of suitable habitat within the DDCT area using the DDCT process described in Appendix B (p. 1779). ○ Design and manage facilities to prevent WNv transmission. ○ Prohibit overhead electric transmission lines unless within one-half mile either side of existing 115 kV or larger transmission lines creating a corridor no wider than one mile.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
			Within 4.0 miles of the perimeter of occupied or undetermined Greater Sage-Grouse leks and winter concentration areas (independent of habitat suitability): ● Exclude all ROW. ● Recommend for withdrawal from locatable mineral location and entry under the Mining Law, subject to valid existing rights. ● Prohibit mineral material sales. ● Close to solid and fluid mineral leasing. ● Close to non-energy leasable mineral leasing. ● Do not recommend for federal land withdrawal (43 CFR 2300) unless the land management is consistent with Greater Sage-Grouse conservation. ● Avoid constructed roads beyond 4 miles of occupied and undetermined Greater Sage-Grouse leks and winter concentration areas. ● Close to livestock grazing. Within occupied Greater Sage-Grouse habitat: ● Avoid ROWs. ● Require full reclamation bonding specific to the site and sufficient to cover costs required for full reclamation.		● Work with proponents to limit project related noise where it would be expected to reduce habitat functionality. The BLM would evaluate the potential for limitation of new noise sources on a case-by-case basis as appropriate. BLM's near-term goal would be to limit noise sources that would be expected to negatively impact priority habitat area sage-grouse populations and to continue to support the establishment of ambient baseline noise levels for occupied priority habitat area leks. As additional research and information emerges, specific new limitations appropriate to the type of projects being considered would be evaluated and appropriate limitations would be implemented where necessary to minimize potential for noise impacts on sage-grouse priority population behavioral cycles.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
					As new research is completed, new specific limitations would be coordinated with the WGFD and partners. Noise levels at the perimeter of the lek should not exceed 10 dBA above ambient noise. ○ Bury electric distribution lines where possible, if not possible; then locate overhead lines at least 0.6 miles from the perimeter of occupied Greater Sage-Grouse leks and install raptor perch guards. ○ Buried utilities constructed in designated utility corridors would not require that a DDCT be conducted. ○ Locate new roads that will have relatively high levels of activity (accessing multiple wells, housing development) greater than 1.9 miles from the perimeter of occupied Greater Sage-Grouse leks. Locate new roads used to provide facility site access and maintenance > 0.6 miles from the perimeter of occupied Greater Sage-Grouse leks.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
					○ Vegetation treatments in nesting and wintering habitat that would reduce sagebrush canopy cover to less than 15% would not be conducted unless it can be shown to be beneficial to sage-grouse habitat and removal of sagebrush canopy cover below 15% will be subject to the DDCT. Wildland fire burns will be treated as disturbance if sagebrush is reduced below 5% canopy cover, unless there is an implementation plan outlining restoration efforts and 3 years of data showing a trend back to suitable habitat. ● Restore disturbed sagebrush communities on BLM surface to meet the Wyoming DEQ community-specific full shrub density standard (Chapter 4 Rules and Regulations, option III) for all predisturbance shrub species and 5% minimum canopy cover of sagebrush. A 90% confidence interval is required to demonstrate achievement of the standard. The standard must be demonstrated the last year of the responsibility period, and all planted shrubs shall have been in place for at least two years.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
					• Prohibit surface-disturbing and disruptive activities from March 15 to June 30 (independent of habitat suitability). • Prohibit surface-disturbing and disruptive activities within mapped Greater Sage-Grouse winter concentration areas, from December 1 to March 14. To the extent necessary to prevent unnecessary or undue degradation, manage as follows within Greater Sage-Grouse Population Connectivity Areas: • Prohibit surface occupancy and disturbing activities, disruptive activities and occupancy within 0.6 mile of the perimeter of occupied Greater Sage-Grouse leks (independent of habitat suitability). • Allow on average no more than 5% total surface disturbance per 640 acres within the DDCT analysis area. In Greater Sage-Grouse Core Population Connectivity Corridors, subject to valid existing rights and applicable law, the cumulative value of existing disturbances will not exceed 5 percent of suitable habitat of the DDCT area.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
					Utilize the Greater Sage-Grouse density disturbance tool described in Appendix B (p. 1779). Inside Greater Sage-Grouse (priority habitat) core population areas and connectivity corridors, all suitable habitat disturbed (any program area) will not exceed 5% of suitable habitat within the DDCT area using the DDCT process described in Appendix B (p. 1779). ○ Design and manage facilities to prevent WNv transmission. ○ Work with proponents to limit project related noise where it would be expected to reduce habitat functionality. The BLM would evaluate the potential for limitation of new noise sources on a case-by-case basis as appropriate.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
					BLM's near-term goal would be to limit noise sources that would be expected to negatively impact priority habitat area sage-grouse populations and to continue to support the establishment of ambient baseline noise levels for occupied priority habitat area leks. As additional research and information emerges, specific new limitations appropriate to the type of projects being considered would be evaluated and appropriate limitations would be implemented where necessary to minimize potential for noise impacts on sage-grouse priority population behavioral cycles. As new research is completed, new specific limitations would be coordinated with the WGFD and partners. Noise levels at the perimeter of the lek should not exceed 10 dBA above ambient noise.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
					○ Buried utilities constructed in designated utility corridors would not require that a DDCT be conducted. ○ Vegetation treatments in nesting and wintering habitat that would reduce sagebrush canopy cover to less than 15% would not be conducted unless it can be shown to be beneficial to sage-grouse habitat and removal of sagebrush canopy cover below 15% will be subject to the DDCT. Wildland fire burns will be treated as disturbance if sagebrush is reduced below 5% canopy cover, unless there is an implementation plan outlining restoration efforts and 3 years of data showing a trend back to suitable habitat.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
					• Restore disturbed sagebrush communities on BLM surface to meet the Wyoming DEQ community-specific full shrub density standard (Chapter 4 Rules and Regulations, option III) for all pre-disturbance shrub species and 5% minimum canopy cover of sagebrush. A 90% confidence interval is required to demonstrate achievement of the standard. The standard must be demonstrated the last year of the responsibility period, and all planted shrubs shall have been in place for at least two years. • Prohibit surface-disturbing and disruptive activities within 4 miles of occupied Greater Sage-Grouse leks from March 15 to June 30 (independent of habitat suitability and restricted to within Population Connectivity Areas). • Prohibit surface-disturbing and disruptive activities within mapped Greater Sage-Grouse winter concentration areas, from December 1 to March 14.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
					Manage as follows within occupied Greater Sage-Grouse habitat outside of Core Population and Population Connectivity Areas: ● Prohibit or restrict surface occupancy and disruptive activities within 0.25 mile of the perimeter of occupied Greater Sage-Grouse leks. ● Reduce surface disturbance for authorizations within 0.25 miles of occupied Greater Sage-Grouse leks by: ○ ○ Design and manage facilities to prevent WNv transmission. ○ Prohibit overhead transmission lines. ● Restore disturbed sagebrush communities on BLM surface to meet the Wyoming DEQ community-specific full shrub density standard (Chapter 4 Rules and Regulations, option III) for all pre-disturbance shrub species and 5% minimum canopy cover of sagebrush. A 90% confidence interval is required to demonstrate achievement of the standard. The standard must be demonstrated the last year of the responsibility period, and all planted shrubs shall have been in place for at least two years.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
					Recommend for all surface-disturbing activities on BLM surface adjacent to core or connectivity population areas, within or adjacent to lands involved in Greater Sage-Grouse conservation projects. BLM parcels less than 640 acres that only meet the population density factor may be excluded. Work with proponents to limit project related noise where it would be expected to reduce functionality of habitats that support priority habitat area populations. The BLM would evaluate the potential for limitation of new noise sources on a case-by-case basis as appropriate. BLM's near-term goal would be to limit noise sources that would be expected to negatively impact priority habitat area sage-grouse populations and to continue to support the establishment of ambient baseline noise levels for occupied priority habitat area leks.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
					As additional research and information emerges, specific new limitations appropriate to the type of projects being considered would be evaluated and appropriate limitations would be implemented where necessary to minimize potential for noise impacts on sage-grouse priority population behavioral cycles. As new research is completed, new specific limitations would be coordinated with the WGFD and partners. Noise levels at the perimeter of the lek should not exceed 10 dBA above ambient noise. • Prohibit surface-disturbing and disruptive activities within 2.0 miles of occupied Greater Sage-Grouse leks, from March 15 to June 30 (independent of habitat suitability). • Prohibit surface-disturbing and disruptive activities from December 1 to March 14 within mapped Greater Sage-Grouse winter concentration areas that support populations of Greater Sage-Grouse that attend leks within Core Population Areas.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
					Note (priority and general habitat): The authorized officer may grant an exception if an environmental record of review determines that the action, as proposed or conditioned, would not impair the function or utility of the site for the current or subsequent seasonal habitat, life-history, or behavioral needs of Greater Sage-Grouse.
Record #	**Goal/Obj.**	**MANAGEMENT ACTIONS COMMON TO ALL ALTERNATIVES – Raptors**			
SS WL-4026	BR:10.1 BR:10.2 BR:10.3	Establish a year-round disturbance-free buffer zone of at least 0.5 mile for known active bald eagle nests. Establish a 1.0-mile limited activity zone for known active nests (February 1 to August 15) (Map 41).			
Record #	**Goal/Obj.**	**Alternative A (Current Management)**	**Alternative B (Resource Conservation)**	**Alternative C (Resource Utilization)**	**Alternative D (Proposed RMP)**
SS WL-4027	BR:10.1 BR:10.2 BR:10.3	Establish a year-round disturbance-free buffer zone of at least 0.5 mile for known bald eagle winter roosts.	Establish a year-round disturbance-free buffer zone of at least 0.5 mile for consistently used bald or golden eagle winter roosts and the following riparian corridors consistently used by bald eagles:	Establish a year-round disturbance-free buffer zone of at least 0.5 mile for known bald eagle winter roosts.	Establish a year-round disturbance-free buffer zone of at least 0.5 mile for consistently used bald or golden eagle winter roosts and the following riparian corridors consistently used by bald eagles:

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
		Additionally, establish a 1.0-mile limited activity zone for known roosts (November 1 to April 1). Also, protect documented cottonwood trees, and other potential critical habitats related to hunting and concentration areas for bald eagles (Map 41).	Clear Creek, Crazy Woman Creek, Piney Creek, Powder River, and Tongue River. The stipulation area may be adjusted to 1.0 mile or greater based on topographic features, visibility, disturbance and human activity levels, and other factors. The buffer zone restriction will be based on site specific information and coordinated with the USFWS's Wyoming Field Office, which will provide written concurrence. Consistent use is evident by the documentation of nests along several of these streams (Clear Creek, Piney Creek, Powder River, and Tongue River) and eagle use along the streams throughout the winter over multiple winters. Additionally, establish at least a 1.0-mile limited activity zone for consistently used roosts and the identified riparian corridors (November 1 to April 1). The buffer zone restriction will be based on site specific information and coordinated with the USFWS's Wyoming Field Office, which will provide written concurrence.	Additionally, establish a 1.0-mile limited activity zone for known roosts (November 1 to April 1) (Map 41). Also, protect documented cottonwood trees, and other potential critical habitats related to hunting and concentration areas for bald eagles.	Clear Creek, Crazy Woman Creek, Piney Creek, Powder River, and Tongue River. The stipulation area may be adjusted to 1.0 mile based on topographic features, visibility, disturbance and human activity levels, and other factors. This buffer zone restriction will be based on site specific information and BLM may coordinate with the USFWS. Additionally, apply a 1.0-mile limited activity TLS for consistently used roosts and the identified riparian corridors (November 1 to April 1). The buffer zone restriction will be based on site specific information and BLM may coordinate with the USFWS.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
SS WL-4028	BR:10.1 BR:10.2 BR:10.3	Apply TLS for known bald eagle winter roosts of 1.0 mile from November 1 to April 1.	Apply an NSO stipulation to fluid mineral leases within 0.5 mile of consistently used bald or golden eagle winter roosts and the following riparian corridors consistently used by bald eagles: Clear Creek, Crazy Woman Creek, Piney Creek, Powder River, and Tongue River. The stipulation area may be adjusted to 1.0 mile or greater based on topographic features, visibility, disturbance and human activity levels, and other factors. Additionally, apply at least a 1.0-mile limited activity TLS for consistently used roosts and the identified riparian corridors (November 1 to April 1). The buffer zone restriction will be based on site specific information and coordinated with the USFWS's Wyoming Field Office, which will provide written concurrence.	Apply standard lease terms to fluid mineral leases within 0.5 mile of the following riparian corridors consistently used by bald eagles: Clear Creek, Crazy Woman Creek, Piney Creek, Powder River, and Tongue River. This buffer may be adjusted to 1.0 mile or greater based on topographic features, visibility, disturbance and human activity levels, and other factors.	Apply an NSO stipulation to fluid mineral leases within 0.5 mile of consistently used bald or golden eagle winter roosts and the following riparian corridors consistently used by bald eagles: Clear Creek, Crazy Woman Creek, Piney Creek, Powder River, and Tongue River. The stipulation area may be adjusted to 1.0 mile based on topographic features, visibility, disturbance and human activity levels, and other factors. This buffer zone restriction will be based on site specific information and BLM may coordinate with the USFWS. Additionally, apply a 1.0-mile limited activity TLS for consistently used roosts and the identified riparian corridors (November 1 to April 1). The buffer zone restriction will be based on site specific information and BLM may coordinate with the USFWS.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
SS WL-4029	BR:10.1 BR:10.2 BR:10.3	No previous decision; considered on a project-specific basis.	Prohibit surface-disturbing and disruptive activities to nesting raptors within 1.5 miles of a special status species raptor nest during the following time periods for the protection of raptor nesting areas (Map 32): • January 1 to August 15: bald eagle • March 1 to July 31: ferruginous hawk, peregrine falcon • April 15 to September 15: burrowing owl • April 1 to August 31: northern goshawk	Prohibit surface-disturbing and disruptive activities to nesting raptors within 0.25 mile of a special status species raptor nest during the following time periods for the protection of raptor nesting areas (Map 31): • January 1 to August 15: bald eagle • March 1 to July 31: ferruginous hawk, peregrine falcon • April 15 to September 15: burrowing owl • April 1 to August 31: northern goshawk	Seasonally prohibit surface-disturbing and disruptive activities to nesting raptors using USFWS Wyoming Ecological Services' recommended spatial buffers and dates for breeding raptors (http://www.fws.gov/wyominges/Pages/Species/Species_SpeciesConcern/Raptors.html) (Map 33). Spatial buffers may be modified based on auditory and visual impacts, as well as the topography and other ecological characteristics surrounding the nest site. BLM may coordinate buffer distances with the WGFD and/or the USFWS.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
SS WL-4030	BR:10.1 BR:10.2 BR:10.3	Prohibit surface disturbance or occupancy within a biologic buffer zone around active nests of special status raptor species unless the prohibition is waived by the authorized officer.	Prohibit surface disturbance and occupancy within a biologic buffer zone around active nests of special status raptor species.	Do not prohibit surface disturbance or occupancy within a biologic buffer zone around active nests of special status raptor species.	Prohibit surface disturbance, disruptive activities, and occupancy around active nests of special status raptor species within a species specific biologic buffer zone using USFWS Wyoming Ecological Services' recommended spatial buffers for breeding raptors (http://www.fws.gov/wyominges/Pages/Species/Species_SpeciesConcern/Raptors.html) (Map 33). Spatial buffers may be modified based on auditory and visual impacts, as well as the topography and other ecological characteristics surrounding the nest site. BLM may coordinate buffer distances with the WGFD and/or the USFWS.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
SS WL-4031	BR:10.1 BR:10.2 BR:10.3	No previous decision; considered on a project-specific basis.	Apply TLS to fluid mineral leases within 1.5 miles of a special status species raptor nest during the following time periods for the protection of raptor nesting areas: • March 1 to July 31: ferruginous hawk, peregrine falcon • April 15 to September 15: burrowing owl • April 1 to August 31: northern goshawk	Apply TLS to fluid mineral leases within 0.25 mile of a special status species raptor nest during the following time periods for the protection of raptor nesting areas: • March 1 to July 31: ferruginous hawk, peregrine falcon • April 15 to September 15: burrowing owl • April 1 to August 31: northern goshawk	Apply a TLS to mineral leases containing nests of active special status raptor species using USFWS Wyoming Ecological Services' recommended spatial buffers and dates for breeding raptors (http://www.fws.gov/wyominges/Pages/Species/Species_SpeciesConcern/Raptors.html) (Map 33). Spatial buffers may be modified based on auditory and visual impacts, as well as the topography and other ecological characteristics surrounding the nest site. BLM may coordinate buffer distances with the WGFD and/or the USFWS.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
SS WL-4032	BR:10.1 BR:10.2 BR:10.3	No previous decision; considered on a project-specific basis.	Apply an NSO stipulation to fluid mineral leases within a biologic buffer zone around active nests of special status raptor species.	Apply a CSU stipulation to fluid mineral leases within a biologic buffer zone around active nests of special status raptor species.	Apply an NSO stipulation to fluid mineral leases containing active nests of special status raptor species within a species specific biologic buffer zone using USFWS Wyoming Ecological Services' recommended spatial buffers for breeding raptors (http://www.fws.gov/wyominges/Pages/Species/Species_SpeciesConcern/Raptors.html) (Map 33). Spatial buffers may be modified based on auditory and visual impacts, as well as the topography and other ecological characteristics surrounding the nest site. BLM may coordinate buffer distances with the WGFD and/or the USFWS. BLM may coordinate buffer distances with the WGFD and/or the USFWS.
Record #	**Goal/Obj.**	**Alternative A (Current Management)**	**Alternative B (Resource Conservation)**	**Alternative C (Resource Utilization)**	**Alternative D (Proposed RMP)**
Amphibians, Reptiles, and Bats					
SS WL-4033	BR:10.1 BR:10.2 BR:10.3	No previous decision; considered on a project-specific basis.	Prohibit surface-disturbing and disruptive activities for the protection of special status amphibian and reptile species and their habitats, in the following areas: (1) identified 100-year floodplains, (2) areas within 1,640 feet (500 meters) of perennial waters, springs, playas, wells, and wetlands, (3) areas within 100 feet of ephemeral channels, and (4) within 1,640 feet (500 meters) of south-facing rock outcrops.	Do not prohibit surface-disturbing and disruptive activities in the following areas: (1) identified 100-year floodplains, (2) areas within 1,640 feet (500 meters) of perennial waters, springs, playas, wells, and wetlands, (3) areas within 100 feet of ephemeral channels, and (4) within 1,640 feet (500 meters) of south-facing rock outcrops.	Require surveys for special status amphibian, reptile, and bat species prior to approving any project or activity that may impact the habitat for these species. This habitat includes: perennial waters, vernal pools, playas, wetlands, and south-facing rock outcrops.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
					Allow surface-disturbing and disruptive activities, where special status amphibian, reptile, and bat species occur: (1) areas within 1,640 feet (500 meters) of perennial waters, vernal pools, playas, and wetlands, and (2) within 1,640 feet (500 meters) of south-facing rock outcrops when populations and habitat can be conserved.
SS WL-4034	BR:10.1 BR:10.2 BR:10.3	No previous decision; considered on a project-specific basis.	Apply an NSO stipulation to fluid mineral leases for the protection of special status amphibian and reptile species and their habitats, in the following areas: (1) identified 100-year floodplains, (2) areas within 500 meters of perennial waters, springs, playas, wells, and wetlands, (3) areas within 100 feet of ephemeral channels, and (4) within 500 meters of south-facing rock outcrops.	Apply standard lease terms to fluid mineral leases in the following areas: (1) identified 100-year floodplains, (2) areas within 500 meters of perennial waters, springs, playas, wells, and wetlands, (3) areas within 100 feet of ephemeral channels, and (4) within 500 meters of south-facing rock outcrops.	Require surveys for special status amphibian, reptile, and bat species prior to approving any project or activity that may impact the habitat for these species. This habitat includes: perennial waters, vernal pools, playas, wetlands, and south-facing rock outcrops. Apply a CSU stipulation to fluid mineral leases for the protection of special status amphibian, reptile, and bat species and their habitats where special status species occur: (1) areas within 1,640 feet (500 meters) of perennial waters, vernal pools, playas, and wetlands, and (2) within 1,640 feet (500 meters) of south-facing rock outcrops.

2.9.5. 5000 HERITAGE AND VISUAL RESOURCES

Table 2.24. 5000 HERITAGE AND VISUAL RESOURCES (HR) – CULTURAL RESOURCES

GOAL HR:1 Stewardship and appreciation of cultural resources is promoted.

Objectives:

HR:1.1 In compliance with NAGPRA, maintain and enhance programs that provide opportunities for scientific research of cultural resources.

HR:1.2 Develop a public outreach and education program to instill a preservation ethic in the public regarding archeological and historic resources.

HR:1.3 Develop and maintain interpretation of cultural resources in areas of high public interest.

HR:1.4 Enhance public experience through interpretive facilities and support of heritage tourism.

GOAL HR:2 Native American sacred sites are preserved and protected.

Objectives:

HR:2.1 In coordination with tribes, identify Native American sacred sites.

HR:2.2 In coordination with tribes and other stakeholders, provide for tribal access to known sacred sites.

HR:2.3 Consult with Native Americans to identify resource types or places that may be impacted by BLM actions.

HR:2.4 Maximize opportunities for cooperation with tribal governments for managing cultural resources and public education.

GOAL HR:3 National Register eligible and unevaluated cultural resources are protected.

Objectives:

HR:3.1 Identify cultural resources by defining priority geographic areas for new field inventory, based on the probability for unrecorded significant cultural resources.

HR:3.2 In cooperation with stakeholders, develop and implement activity plans for significant cultural resources.

GOAL HR:4 Cultural resources are identified, preserved, and protected, while remaining available for appropriate uses by present and future generations.

Objectives:

HR:4.1 Manage each type of cultural resource according to their proper use allocation, and monitor their condition and use.

HR:4.2 Develop activity plans for special areas or historic properties identified as high risk for adverse impacts.

HR:4.3 Recruit site stewards to assist with monitoring the condition of sites important to national heritage.

GOAL HR:5 Select historic properties are managed for long-term heritage and educational values and to enhance the public experience.

Objectives:

HR:5.1 Maintain compatible recreational use with the historic values of these historic properties.

HR:5.2 Maintain the setting for those contributing trail segments, battlefield sites, forts, and other historic properties for which setting is an important aspect of site integrity, by utilizing viewshed management tools.

HR:5.3 Maximize partnership and cooperative management opportunities.

Record #	Goal/Obj.	MANAGEMENT ACTIONS COMMON TO ALL ALTERNATIVES
Cultural-5001	HR:3.2 HR:4.2 HR:4.3	Complete site stabilization and long-term protection for significant sites that are experiencing adverse impacts.
Cultural-5002	HR:1.1 HR:2.1 HR:2.2 HR:2.3 HR:2.4	Maintain existing relationships and develop new relationships with Native American tribes to identify sites, areas, and resources important to them. Document and keep confidential sites, areas, and resources that necessitate protection. Incorporate the information obtained from the tribes into planning decisions. Manage identified areas of tribal importance to minimize disturbance.
Cultural-5003	HR:2.1 HR:2.2 HR:2.3 HR:2.4	Ensure areas of importance to Native American tribes are not transferred from federal ownership.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
Cultural-5004	HR:1.1 HR:1.2 HR:1.3 HR:1.4	No previous decision; considered on a project-specific basis.	Establish site stewardship opportunities in coordination with stakeholders for appropriate sites.	Do not establish site stewardship opportunities.	Establish site stewardship opportunities in coordination with stakeholders for appropriate sites.
Cultural-5005	HR:1.3 HR:3.2 HR:4.1 HR:4.2	Develop CRMPs for Cantonment Reno, Dull Knife Battlefield, and the Outlaw Cave Archeological District and for additional federally owned sites as they are nominated for the National Register of Historic Places.	Develop management plans for specific sites or geographic regions based on site significance and/or potential impacts in cooperation with stakeholders.	Do not develop management plans for specific sites or geographic regions.	Develop CRPPs for the protection and preservation of the following geographic areas in cooperation with stakeholders: ● Pumpkin Buttes ● Sites Associated with Red Cloud's War and the Great Sioux War (including Dull Knife Battlefield, Cantonment Reno, Crazy Woman Battle, Bozeman Trail) ● South Big Horn Mountains

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
Cultural-5006	HR:4.1 HR:5.1 HR:5.2	Bozeman Trail and Crazy Woman Battle Site. NSO stipulations will be applied to fluid mineral leases where potentially eligible or significant segments exist (within 0.25 mile or visual horizon, whichever is closer, from the Bozeman Trail) (Map 43).	Initiate mineral withdrawals in areas containing historic properties that retain their historic setting (Map 44). Close to mineral leasing areas containing historic properties that retain their historic setting.	Do not initiate mineral withdrawals in areas containing historic properties that retain their historic setting. Mitigate through appropriate stipulation such as NSO or CSU to protect the setting. Allow mineral leasing in areas containing historic properties that retain their historic setting, when appropriate mitigation is accomplished. Mitigate through appropriate stipulation such as NSO or CSU to protect the setting.	Apply NSO stipulations to fluid mineral leases containing the following historic properties (Map 45): • Pumpkin Buttes • Cantonment Reno • Dull Knife Battle • Crazy Woman Battle • Contributing and Unevaluated Segments of the Bozeman Trail • All Rock Art Sites • All Rock Shelter Sites • All Native American Burials Apply CSU stipulations (surface disturbance and infrastructure must either not be visible, or will result in a weak contrast) to protect the setting within 3.0 miles of the following sites: • Pumpkin Buttes • Cantonment Reno • Dull Knife Battle • Crazy Woman Battle • Contributing and Unevaluated Segments of the Bozeman Trail • All Rock Art Sites • All Native American Burials

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
Cultural-5007	HR:3.1 HR:4.1	No previous decision; considered on a project-specific basis.	Prohibit surface disturbance in areas containing historic properties, or within 5.0 miles or visual horizon (whichever is closer) of historic properties that retain their integrity of setting.	Allow surface disturbance in areas containing historic properties when appropriate mitigation is accomplished.	Prohibit surface disturbance within the following sites: ● Pumpkin Buttes ● Cantonment Reno ● Dull Knife Battle ● Crazy Woman Battle ● Contributing and Unevaluated Segments of the Bozeman Trail ● All Rock Art Sites ● All Rock Shelter Sites ● All Native American Burials Allow surface disturbance and infrastructure within 3.0 miles of the following sites where development is either not visible, or will result in a weak contrast to the setting: ● Pumpkin Buttes ● Cantonment Reno ● Dull Knife Battle ● Crazy Woman Battle ● Contributing and Unevaluated Segments of the Bozeman Trail ● All Rock Art Sites ● All Native American Burials

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
Cultural-5008	HR:2.1 HR: 2.3 HR:2.4HR:3.1 HR:4.1	No previous decision; considered on a project-specific basis.	Require archeological monitors for all surface-disturbing activities. Require Native American monitors for surface-disturbing federal undertakings when requested by tribes.	Require archeological monitors for projects on a project-specific basis. Do not require Native American monitors for surface-disturbing federal undertakings.	Require archeological monitors for projects in accordance to developed strategy. Require Native American monitoring for surface-disturbing federal undertakings in accordance with agreements or on a project-specific basis
Cultural-5009	HR:1.1 HR:2.1 HR:2.2 HR:2.4	No previous decision; considered on a project-specific basis.	Establish programmatic agreements with every tribe the field office consults.	Do not establish programmatic agreements with tribes.	Establish programmatic agreements with interested tribes.
Cultural-5010	HR:2.1 HR:2.3 HR:2.4	No previous decision; considered on a project-specific basis.	Establish agreements that provide tribal access to known TCPs and sacred sites on BLM-administered surface, in coordination with stakeholders.	Establish tribal access to known TCPs and sacred sites on BLM-administered surface on a project-specific basis.	Establish agreements that provide tribal access to the Pumpkin Buttes and any other TCPs or sacred sites on BLM-administered surface, in coordination with stakeholders.
Cultural-5011	HR:2.3 HR:2.4	No previous decision; considered on a project-specific basis.	Initiate mineral withdrawals in areas containing sensitive sites such as TCPs and/or sacred sites to protect the setting. Close to mineral leasing areas containing sensitive sites such as TCPs and/or sacred sites to protect the setting.	Do not initiate mineral withdrawals in areas containing sensitive sites such as TCPs and/or sacred sites. Mitigate through appropriate stipulation such as NSO or CSU to protect the setting. Allow mineral leasing in areas containing sensitive sites such as TCPs and/or sacred sites. Mitigate through appropriate stipulations such as NSO or CSU to protect the setting.	Mitigate adverse effects to sensitive sites such as TCPs and/or sacred sites through appropriate prohibitions and measures to protect setting. Allow mineral leasing in areas containing sensitive sites such as TCPs and/or sacred sites. Mitigate through appropriate stipulations such as NSO, CSU, surface occupancy prohibitions or measures to protect setting.

Table 2.25. 5000 HERITAGE AND VISUAL RESOURCES (HR) – PALEONTOLOGICAL RESOURCES

GOAL HR:6 Paleontological resources are preserved and protected.

Objectives:

HR:6.1 Reduce threats to paleontological resources from natural or human-caused deterioration.

HR:6.2 Implement proper assessment procedures for all surface-disturbing activities on public lands, split estate, and under all federal actions.

GOAL HR:7 Paleontological resources are appreciated and scientific knowledge of paleontological resources promoted.

Objectives:

HR:7.1 Provide paleontological research opportunities for qualified scientists/academia.

HR:7.2 Manage select paleontological sites for their educational value and to enhance the public experience.

Record #	Goal/Obj.	MANAGEMENT ACTIONS COMMON TO ALL ALTERNATIVES			
Paleo-5001	HR:6.1 HR:6.2	Retain public lands with significant paleontological values (Map 47).			
Record #	**Goal/Obj.**	**Alternative A (Current Management)**	**Alternative B (Resource Conservation)**	**Alternative C (Resource Utilization)**	**Alternative D (Proposed RMP)**
Paleo-5002	HR:6.1 HR:6.2	No previous decision; considered on a project-specific basis.	Require paleontological field surveys on all PFYC Class 3, 4, and 5 formations potentially affected by proposed activities. Require monitoring of surface-disturbing activities on all Class 4 and 5 formations and as needed for Class 3 formations.	Require paleontological field surveys on all PFYC Class 4 and 5 formations potentially affected by proposed activities. Monitoring may be required on a project-specific basis.	Require paleontological field surveys on PFYC Class 4 and 5 formations potentially affected by proposed activities and Class 3 formations as needed. Require monitoring of surface-disturbing activities based on survey results.
Paleo-5003	HR:6.1 HR:6.2	No previous decision; considered on a project-specific basis.	Do not identify specific casual collection areas.	Identify and designate casual collection areas for common invertebrate, plant, and petrified wood fossil collection by the public.	Do not identify specific casual collection areas.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
Paleo-5004	HR:7.1	No previous decision; cooperative agreements and partnerships with researchers, museums, or other institutions are established as requested by proponents.	Actively solicit research efforts throughout the planning area to identify, monitor, and gather research data on paleontological resources. Proactively develop supporting cooperative agreements and partnerships with researchers, museums or other institutions.	Evaluate and establish cooperative agreements and partnerships with researchers, museums or other institutions as requested by proponents.	Evaluate and establish cooperative agreements and partnerships with researchers, museums or other institutions where appropriate; BLM initiated or as requested by proponents.
Paleo-5005	HR:6.1 HR:6.2 HR:7.2	No previous decision; considered on a project-specific basis.	Designate areas containing paleontological resources of high quality or importance for special management, as they are identified.	Do not designate areas containing paleontological resources of high quality or importance for special management.	Designate areas containing paleontological resources of high quality or importance for special management, as they are identified.
Paleo-5006	HR:6.1 HR:6.2	No previous decision; considered on a project-specific basis.	Initiate locatable mineral withdrawals in areas containing paleontological resources of high quality or importance.	Do not initiate locatable mineral withdrawals in areas containing paleontological resources of high quality or importance.	Avoid areas containing paleontological resources of high quality or importance when developing locatable minerals.
Paleo-5007	HR:6.1 HR:6.2	No previous decision; considered on a project-specific basis.	Close to mineral leasing areas containing paleontological resources of high quality or importance.	Allow mineral leasing in areas containing paleontological resources of high quality or importance.	Apply an NSO stipulation to mineral leases in areas containing paleontological resources of high quality or importance.
Paleo-5008	HR:6.1 HR:6.2	No previous decision; considered on a project-specific basis.	Prohibit salable mineral exploration and development in areas containing paleontological resources of high quality or importance.	Allow salable mineral exploration and development in areas containing paleontological resources of high quality or importance.	Avoid areas containing paleontological resources of high quality or importance when developing salable minerals.

Table 2.26. 5000 HERITAGE AND VISUAL RESOURCES (HR) – VISUAL RESOURCES

GOAL HR:8 The scenic (visual) quality of BLM-administered lands are maintained.

Objectives:

HR:8.1 Perform VRI and update VRM management classes.

HR:8.2 Manage each VRM class according to the definitions in the VRM manual (H-8410-1).

Record #	Goal/Obj.	MANAGEMENT ACTIONS COMMON TO ALL ALTERNATIVES
VRM-5001	HR:8.2	Manage WSAs under VRM Class I objectives. Any facilities or structures proposed in WSAs will be designed so as not to impair wilderness suitability. If the Middle Fork Powder River is designated by Congress as a Wild and Scenic River, the river will be managed as VRM Class I.
VRM-5002	HR:8.2	Incorporate BMPs for visual resources into project planning for federal actions.

Record #	Goal/Obj.	MANAGEMENT ACTIONS COMMON TO ALL ALTERNATIVES			
VRM-5003	HR:8.1 HR:8.2	Manage areas rated as VRI Class IV that do not contain special emphasis areas as VRM Class IV. Manage areas that were not rated during the VRI that contain BLM-administered surface to match the surrounding VRM classification.			
VRM-5004	HR:8.2	Require non-temporary facilities and structures to be screened, painted, and designed to blend with the surrounding landscape except where safety indicates otherwise.			
Record #	**Goal/Obj.**	**Alternative A (Current Management)**	**Alternative B (Resource Conservation)**	**Alternative C (Resource Utilization)**	**Alternative D (Proposed RMP)**
VRM-5005	HR:8.1 HR:8.2	Manage visual resources in accordance with objectives for VRM classes that have been assigned to the planning area (Map 48).	Manage all VRI Class II areas and special emphasis areas as VRM Class II (Map 49).	Manage all VRI Class II areas as VRM Class III (Map 50).	Manage VRI Class II areas (except the Powder River Breaks, Fortification Creek and northwestern portion of the Main Powder River VRI rating units) and special emphasis areas as VRM Class II (Map 51). Special emphasis areas will include: SRMAs, designated ACECs, and lands with wilderness characteristics units.
VRM-5006	HR:8.1 HR:8.2	Manage visual resources in accordance with objectives for VRM classes that have been assigned to the planning area (Map 48).	Manage all VRI Class III areas outside special emphasis areas as VRM Class III (Map 49).	Manage all VRI Class III areas as VRM Class IV (Map 50).	Manage all VRI Class III areas, plus the Powder River Breaks, Fortification Creek and northwestern portion of the Main Powder River VRI rating units (outside of special emphasis areas) as VRM Class III (Map 51).
VRM-5007	HR:8.2	No previous decision; utilize visual simulations on a project-specific basis.	Complete a visual simulation and mitigation design for all proposed actions within or viewable from VRM Classes I to III.	Utilize visual simulations on a project-specific basis.	Complete a visual simulation and mitigation design for all proposed actions within VRM Classes I and II. Visual simulation and mitigation design may be required on a project-specific basis within VRM Class III areas with high visual sensitivity.

2.9.6. 6000 LAND RESOURCES

Table 2.27. 6000 LAND RESOURCES (LR) – FOREST PRODUCTS

GOAL LR:1 Healthy forests and woodlands are available to provide a variety of products for consumptive use.

Objectives:

LR:1.1 Provide for diverse social and economic outputs in a fair, balanced, efficient, and ecologically sustainable manner.

LR:1.2 Manage forests and woodlands to provide a diversity of forest products.

LR:1.3 Cooperation with stakeholders in the utilization of silviculture and land management while implementing Wyoming Forestry BMPs.

Record #	Goal/Obj.	MANAGEMENT ACTIONS COMMON TO ALL ALTERNATIVES			
FP-6001	LR:1.1	Prohibit forest management activities within 200 feet of surface waters.			
FP-6002	LR:1.1 LR:1.2	Allow the sale of permits to meet the public demand for personal use of forest products consistent with wildlife habitat requirements and other resource values.			
Record #	**Goal/Obj.**	**Alternative A (Current Management)**	**Alternative B (Resource Conservation)**	**Alternative C (Resource Utilization)**	**Alternative D (Proposed RMP)**
FP-6003	LR:1.1 LR:1.2	Allow the sale of minor forest products (posts, poles, and fuelwood) from woodlands and/or noncommercial forestlands throughout the planning area on BLM-administered lands (Map 52).	Offer sawtimber only from specified forest areas (Map 52).	Offer an array of forest products from forest and woodlands throughout the planning area (Map 52).	Offer an array of forest products from forest and woodlands throughout the planning area in accordance with other resource values (Map 52).
FP-6004	LR:1.1 LR:1.2	Offer approximately 9 MMBF of sawtimber for sale from BLM-administered forestlands over the next ten years. In addition, offer approximately 1 MMBF of minor green forest products for sale over the next ten years from BLM-administered forestlands.	Manage forest product sales to remain within ecologically sustainable limits.	Manage forest product sales to maximize economic return.	Manage forest product sales to remain within ecologically sustainable limits while maximizing economic return.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
FP-6005	LR:1.3	No previous decision; access dealt with on a project-specific basis.	Require the contractor and/or partner involved in commercial sales to take responsibility for acquiring access when needed for forest management purposes.	Do not require the contractor and/or partner involved in commercial sales to take responsibility for acquiring access. BLM will negotiate and procure access when needed for forest management purposes.	Require the contractor and/or partner involved in commercial sales to take responsibility for acquiring access when needed for forest management purposes. BLM will negotiate and procure access when needed. (BLM driven project or commercial sale.)
FP-6006	LR:1.1	Limit individual clear-cuts to less than 20 acres.	Limit forest management to 5 acres per select group harvest; with the exception being the harvest and removal after catastrophic events that require removal for safety. Design all forest management and/or silvicultural practices to have meandering boundaries that follow topographic lines and natural obstacles.	Do not limit the acres and design/shape of forest management. Design select group harvests and all other methods of forest management practices to maximize the removal of harvestable products within the limits of the Wyoming Forestry BMPs and other guidance.	Design/shape forest management areas to have meandering boundaries, follow topography, avoid natural barriers, and in accordance with other resource values and within the limits of the Wyoming Forestry BMPs and other guidance without limiting the harvest area size.
FP-6007	LR:1.1 LR:1.2	Consider fencing of regeneration areas to prevent livestock from damaging seedlings.	Require fencing of regeneration areas to prevent damage to seedlings.	Do not require fencing of regeneration areas to prevent damage to seedlings.	Protect forest regeneration areas that are being damaged or in an area where damage is probable.
FP-6008	LR:1.1 LR:1.2	Plant trees on forest management areas that fail to regenerate naturally to minimum stocking levels within five years of harvest completion and rehabilitation activities.	Allow forest management areas to regenerate naturally.	Plant and maintain trees following forest management to minimum stocking levels.	Evaluate forest management areas and their successional dynamics, and where necessary implement tactics to assure regeneration (forest sustainability).
FP-6009	LR:1.1 LR:1.2	Initiate pre-commercial tree thinning on overstocked re-leasable seedling and sapling size stands.	Do not utilize pre-commercial thinning or other non-harvest silvicultural operations.	Utilize pre-commercial thinning and other silvicultural practices to create healthy and economically sustainable forest stands.	Utilize pre-commercial thinning and other silvicultural practices to create healthy and economically sustainable forest stands consistent with other resource values.

Table 2.28. 6000 LAND RESOURCES (LR) – LANDS AND REALTY

GOAL LR:2 Manage land tenure adjustments and land use authorizations to meet the needs of the customers while protecting other resource values.

Objectives:

LR:2.1 Develop and maintain a land-ownership pattern that improves access for public use, and improves management and protection of BLM-administered lands by:

1. Acquiring legal easements to BLM-administered lands for recreational opportunities and administrative use.
2. Responding to requests for land authorizations for access needs.
3. Responding to requests for land transfers.
4. Giving priority to land exchanges and/or sales on custodial grazing allotments while supporting other resource values.

LR:2.2 Through consolidation and disposal, the overall result should be no net acreage gain during the life of the RMP.

Record #	Goal/Obj.	MANAGEMENT ACTIONS COMMON TO ALL ALTERNATIVES
L&R-6001	LR:2.1	Consider R&PP applications on a project-specific basis. Prohibit subsequent uses on these lands unless they are compatible with each R&PP authorization.
L&R-6002	LR:2.1	Consider land use authorizations (permits, leases, etc.) on a project-specific basis consistent with other resource objectives.
L&R-6003	LR:2.1	Consider withdrawals for surface and/or minerals on a project-specific basis.
L&R-6004	LR:2.1	Review withdrawal proposals from other agencies on a project-specific basis.
L&R-6005	LR:2.1 LR:2.2	Lands meeting the identified disposal criteria will have priority consideration for disposal.
L&R-6006	LR:2.1	Avoid the potential of inadvertent trespass by people accessing public lands though the use of appropriate signage and access authorizations.
L&R-6007	LR:2.1	Review existing withdrawals on a case-by-case basis. Determine whether the use is consistent with the intent of the withdrawal and whether the withdrawal should be continued, modified, revoked or terminated.
L&R-6008	LR:2.1	Any land becoming unencumbered by withdrawals will be managed in a manner consistent with adjacent or comparable public land within the planning area.

Record #	Goal/Obj.	MANAGEMENT ACTIONS COMMON TO ALL ALTERNATIVES			
L&R-6009	LR:2.1	Review existing classification and segregations on a case-by-case basis to determine whether classification and segregation is appropriate and should be continued, modified or terminated.			
L&R-6010	LR:2.1	Land on which a classification or segregation has been terminated will be managed in a manner consistent with adjacent or comparable public land within the planning area.			
Record #	**Goal/Obj.**	**Alternative A (Current Management)**	**Alternative B (Resource Conservation)**	**Alternative C (Resource Utilization)**	**Alternative D (Proposed RMP)**
L&R-6011	LR:2.1	Acquire private or state land or interest in land from willing sellers in coordination with other resource objective, on a project-specific basis.	Acquire private or state land or interest in land from willing sellers in coordination with other resource objectives (i.e., Greater Sage-Grouse habitat).	Do not acquire private or state lands or interest in land.	Acquire private or state land or interest in land from willing sellers consistent with other resource objectives, on a project-specific basis.
L&R-6012	LR:2.1	Consider disposal of lands having agricultural potential and water by sale, exchange, or desert land entry.	Retain lands having agricultural potential, water, or other natural resource value (i.e., Greater Sage-Grouse habitat).	Dispose of lands having agricultural potential or water.	Acquire and dispose of land based on all resource values, including but not limited to agricultural potential and water. Do not classify, open, or make available any BLM-administered public lands within the planning area for agricultural leasing or agricultural entry under either Desert Land Entry or Indian Allotment for one or more of the following reasons: rugged topography, presence of sensitive resources, lack of water or access, small parcel size, and/or unsuitable soils. Greater Sage-Grouse habitat will be retained in federal management unless: (1) the agency can demonstrate that disposal of the lands will provide a net conservation benefit to the Greater Sage-Grouse or (2) the agency can demonstrate that the lands will have no direct or indirect adverse impact on conservation of the Greater Sage-Grouse.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
L&R-6013	LR:2.2	Approximately 108,243 acres of BLM-administered lands are identified for disposal (Map 53). These areas have priority consideration for exchange, public sale, or transfer of jurisdiction to another agency, subject to disposal criteria.	Retain lands identified for disposal, but having important natural resource values (i.e., Greater Sage-Grouse habitat).	Do not retain lands identified for disposal, but having important natural resource values, until all other lands identified for disposal are disposed of (Map 54).	Actively pursue a program to dispose of BLM surface lands identified for disposal including other lands not identified but meeting appropriate disposal criteria (Map 54). These areas have priority consideration for exchange, public sale, or transfer of jurisdiction to another agency, subject to disposal criteria.
L&R-6014	LR:2.2	Priority is given to acquiring land or interests in lands in areas adjacent to large blocks of BLM-administered land, especially in areas of high recreational potential like the south Big Horn Mountains.	Consider all lands within the planning area for acquisition from interested parties without giving priority to major blocks of public land, and areas of high recreational potential.	Do not acquire land in areas adjacent to major blocks of public land or areas of high recreational potential.	Prioritize acquiring land or interests in lands in areas adjacent to large blocks of BLM-administered land or other lands having significant resource or other values before other areas.
L&R-6015	LR:2.2	Pursue easements that will provide access to BLM-administered lands for recreation and administrative purposes.	Pursue easements accessing public lands that would benefit BLM management for any resource value.	Do not pursue easements to facilitate BLM management.	Pursue easements accessing public lands that would benefit any resource value.
L&R-6016	LR:2.2	No previous decision; considered on a project-specific basis.	Pursue land tenure adjustments on lands holding custodial grazing allotments and/or sales, in accordance with other resource values.	Allow land tenure adjustments for lands holding custodial grazing allotments and/or sales independent of other resource values.	Pursue land tenure adjustments on lands holding custodial grazing allotments and/or sales, in accordance with other resource values.

Table 2.29. 6000 LAND RESOURCES (LR) – RENEWABLE ENERGY

GOAL LR:3 Renewable energy development consistent with other resource values.

Objectives:

LR:3.1 Identify BLM-administered lands that are suitable and not suitable for renewable energy development while supporting other resource values.

LR:3.2 In cooperation with stakeholders, provide opportunities for scientific research of renewable energy and affected resources.

Record #	Goal/Obj.	MANAGEMENT ACTIONS COMMON TO ALL ALTERNATIVES
RE-6001	LR:3.2	Cooperate with stakeholders to promote opportunities for scientific research for renewable energy in accordance with other resource values.
RE-6002	LR:3.2	Cooperate with stakeholders to coordinate renewable energy opportunities in accordance with other resource values.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
RE-6003	LR:3.1	No previous decision; considered on a project-specific basis.	Exclude renewable energy development in the following areas (730,530 acres) (Map 55): • Areas closed to mineral leasing (fluid and solid) • Areas closed to mineral entry (locatable and salable) • ROW exclusion areas • All other areas where surface disturbance is prohibited	Exclude renewable energy development on 28,551 acres in accordance with management outlined in Alternative C.	Exclude renewable energy development on 352,068 acres in accordance with management outlined in Alternative D. • Southern Big Horn Mountains • Areas closed to mineral leasing (fluid and solid) • Areas recommended for withdrawal to mineral entry (locatable) • Areas closed to mineral material entry (salable) • ROW exclusion areas • Areas within 3.0 miles and visible from historic properties that retain an intact setting • All other areas where surface disturbance is prohibited

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
RE-6004	LR:3.1	No previous decision; considered on a project-specific basis.	Avoid renewable energy development in the following areas (45,441 acres) (Map 55): ● Mineral leasing (fluid and solid), NSO, and CSU areas ● ROW avoidance areas ● All other areas with surface disturbance restrictions Allow renewable energy development on 6,131 acres.	Avoid renewable energy development on 618,676 acres where inconsistent with other resource values. Allow renewable energy development on 134,875 acres.	Avoid renewable energy development on 374,518 acres in the following areas (Map 56): ● Mineral leasing (fluid and solid), NSO, and CSU areas ● ROW avoidance areas ● Areas greater than 3.0 miles and visible from historic properties that retain an intact setting ● All other areas with surface disturbance restrictions Renewable energy development would be avoided in Greater Sage-Grouse priority habitat (Core Population Areas and Core Population Connectivity Corridors), unless it can be sufficiently demonstrated that the development activity would not result in declines of Greater Sage-Grouse priority populations. Sufficient demonstration of "no declines" should be coordinated with the WGFD and USFWS.

Table 2.30. 6000 LAND RESOURCES (LR) – RIGHTS-OF-WAY AND CORRIDORS

GOAL LR:4 Primary infrastructure corridors and subsidiary routes consistent with other resource values.

Objectives:

LR:4.1 Manage public lands to meet the needs of ROW customers while supporting other resource values.

LR:4.2 Maintain and acquire access routes across non public lands to meet resource management and use objectives.

LR:4.3 Identify infrastructure corridors consistent with other resource values.

LR:4.4 Make opportunities available for exploration and development of CO_2 sequestration research and activities, while avoiding or mitigating impacts of these activities on other resource values.

Record #	Goal/Obj.	MANAGEMENT ACTIONS COMMON TO ALL ALTERNATIVES
ROW-6001	LR:4.3	Designate corridors for major ROW to minimize surface disturbance and impacts to other resources.
ROW-6002	LR:4.2	Provide reasonable access across public land to private land, subject to other resource values.
ROW-6003	LR:4.1	Develop communication site management plans for all existing and newly identified communication site concentration areas.

Record #	Goal/Obj.	MANAGEMENT ACTIONS COMMON TO ALL ALTERNATIVES			
ROW-6004	LR:4.3	The preferred location for new ROW will be in or adjacent to existing disturbed areas associated with existing ROW, constructed roads, or highways.			
ROW-6005	LR:4.2	Maintain a transportation management system in cooperation with appropriate state and local agencies to meet public and resource management needs.			
Record #	**Goal/Obj.**	**Alternative A (Current Management)**	**Alternative B (Resource Conservation)**	**Alternative C (Resource Utilization)**	**Alternative D (Proposed RMP)**
ROW-6006	LR:4.1	Continue to authorize ROW grants.	Make lands available for ROW in accordance with management identified within Alternative B to conserve other resources. This results in: • 706,556 acres excluded from ROW. • 56,857 acres identified for ROW avoidance. • 18,869 acres are open for ROW development.	Make lands available for ROW in accordance with management identified within Alternative C to conserve other resources. This results in: • 28,554 acres excluded from ROW. • 27,706 acres identified for ROW avoidance. • 725,842 acres are open for ROW development.	Make lands available for ROW in accordance with management identified within Alternative D to conserve other resources (Map 59). This results in: • 79,777 acres excluded from ROW. • 321,149 acres identified for ROW avoidance. Greater Sage-Grouse priority habitat (core population areas and core population connectivity corridors) are designated as avoidance areas for ROWs. • 381,176 acres are open for ROW development.
ROW-6007	LR:4.1	Authorize communication sites only in the Pumpkin Buttes area on South Middle Butte until that area has been fully utilized, unless the decision is waived by the authorized officer. Prohibit communication sites on North Middle Butte unless it becomes absolutely necessary to use that butte for the line-of-sight needs (such as microwave transmission).	Prohibit new communication authorizations in the Pumpkin Buttes area. Maintain existing land use authorizations until they expire.	Allow authorizations for communication sites in the Pumpkin Buttes area without first fully utilizing the South Middle Butte. Authorize communication sites on North Middle Butte regardless of line-of-sight needs.	Manage authorizations for communication sites in the Pumpkin Buttes area for the protection of cultural and visual resources. New authorizations would be limited to existing towers. Prohibit communication sites on North Middle Butte.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
ROW-6008	LR:4.1	No previous decision; considered on a project-specific basis.	Require new communication proposals to co-locate within existing communication sites (portable stations excluded).	Preference is to use designated communication concentration areas. Proposals outside concentration areas are not required to be co-located.	Identify and designate communication concentration areas. Evaluate proposals outside designated concentration areas and co-locate sites where feasible.
ROW-6009	LR:4.1	Designate the following corridors for major ROW (Map 57): ● Echeta Road ● Sheridan to Gillette, largely following US 14/16 ● Highway 59 north of Gillette ● Interstate 25 ● Interstate 90, Gillette to Montana State Line ● Powder River ● Powder River Breaks (Buffalo to Gillette) Corridor use is recommended, but not required. There are no restrictions on above ground lines except that lines must be buried within Greater Sage-Grouse Core Population Areas unless within 0.5 mile either side of existing 115 kV or larger transmission lines creating a corridor no wider than 1.0 mile.	Designate the following corridors for major ROW transportation and utility corridor (Map 58): ● Echeta Road ● Sheridan to Gillette, largely following US 14/16 ● Highway 59 north of Gillette ● Interstate 25 ● Interstate 90, Gillette to Montana State Line ● Powder River Corridor use is required. No above ground lines will be authorized.	Designate the following corridors for major ROW transportation and utility corridor (Map 57): ● Echeta Road ● Sheridan to Gillette, largely following US 14/16 ● Highway 59 north of Gillette ● Interstate 25 ● Interstate 90, Gillette to Montana State Line ● Powder River ● Powder River Breaks (Buffalo to Gillette) Corridor use is required. Above ground lines can be authorized in any corridor.	Designate the following corridors for major ROW transportation and utility use, (Map 58) in cooperation with the State of Wyoming: ● Echeta Road ● Sheridan to Gillette, largely following US 14/16 ● Highway 59 north of Gillette ● Interstate 25 ● Interstate 90, Gillette to Montana State Line ● Powder River ● Powder River Breaks (Buffalo to Gillette) Corridor use is required. No above ground lines will be authorized in the Powder River or Powder River Breaks corridors. Lines must be buried within Greater Sage-Grouse Core Population Areas unless within 0.5 mile either side of existing 115 kV or larger transmission lines creating a corridor no wider than 1.0 mile.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
ROW-6010	LR:4.1	No previous decision; considered on a project-specific basis.	Avoid placement of above ground facilities such as powerlines along major transportation routes to protect visual resources.	Place above ground facilities such as powerlines along major transportation routes.	Authorize and place above ground facilities (i.e., compressors, electric distribution powerlines) within ROW and other disturbance areas when resource objectives can be met.
ROW-6011	LR:4.1	Surface disturbance and occupancy will not be allowed on slopes of 25% or more.	Exclude ROW on slopes 25% or greater and highly erodible soils.	Do not exclude ROW on slopes 25% or greater and highly erodible soils.	Avoid ROW on slopes 25% or greater and highly erodible soils.
ROW-6012	LR:4.4	No previous decision.	Prohibit CO_2 sequestration research and projects.	Allow CO_2 sequestration research and projects where consistent with other resource values.	Evaluate CO_2 sequestration proposals where in accordance with management identified within Alternative D.

Table 2.31. 6000 LAND RESOURCES (LR) – TRAVEL AND TRANSPORTATION MANAGEMENT

GOAL LR:5 A safe transportation network that supports other resource values.

Objectives:

LR:5.1 Utilize a comprehensive travel management approach to sustain and enhance access, recreational experiences, and support other resource values.

LR:5.2 Maintain an inventory of the road and trail system.

LR:5.3 Designate all BLM-administered lands as Open, Limited, or Closed to OHV use, in consideration of other resource values.

LR:5.4 Provide for acceptable modes of legal public access that supports other resources, reduces conflicts, and provides for diverse recreation opportunities.

GOAL LR:6 Opportunities for safe and enjoyable OHV use are provided while supporting other resource values.

Objectives:

LR:6.1 Assess OHV demand and plan for and balance the demand for OHV use with other uses.

LR:6.2 Manage OHV use to conserve soil functionality, vegetative cover, watershed health, and other resource values.

LR:6.3 Manage OHV use in partnership with stakeholders.

Record #	Goal/Obj.	MANAGEMENT ACTIONS COMMON TO ALL ALTERNATIVES
Trans-6001	LR:5.4	Negotiate access across non-BLM-administered lands to isolated public land parcels from willing landowners.
Trans-6002	LR:5.1 LR:5.4	Evaluate roads constructed under other initiatives (e.g., oil and gas exploration) for inclusion in the BLM transportation system. Roads that are no longer needed for their original purposes are assessed for addition to the BLM transportation system prior to reclamation.
Trans-6003	LR:5.1	Require maintenance of all designated routes to meet or exceed BLM standards according to the road classification (i.e. road, primitive road, trail) assigned in FAMS.
Trans-6004	LR:5.1	Design, construct, and maintain roads or trails based on the specific objectives for that trail or road in consideration of other resources. Design, construct, and maintain roads to minimize surface disturbance, changes to surface water runoff, and erosion.
Trans-6005	LR:5.1 LR:5.4	All motorized use, except emergency response, will be subject to the Open, Closed and Limited OHV area designations, unless specifically addressed in an authorization or otherwise approved by the authorized officer.
Trans-6006	LR:5.1 LR:5.4	Base road or trail closures and abandonments on resource protection, demand for new roads and accommodation of authorized uses.
Trans-6007	LR:5.4 LR:6.1 LR:6.2 LR:6.3	Maintain transportation system roads under BLM jurisdiction in accordance with assigned maintenance levels and in consideration of other resource values. Maintain administrative roads on an as needed basis, dependent on time, funding, and access priorities.

Record #	Goal/Obj.	MANAGEMENT ACTIONS COMMON TO ALL ALTERNATIVES
Trans-6008	LR:5.2	Within 5 years of the ROD, inventory all routes on public land and develop a travel management plan to classify and designate routes for continued use or decommissioning and reclamation. Include maintenance standards for routes to be retained for public use, as well as specific measures to accomplish road closure in the travel management plan. Inventory, designate, number, and sign all routes as appropriate. Posted signs will include allowed uses and activities. Restrictions to existing roads and trails remains in effect until travel management planning is completed and designated routes are identified.
Trans-6009	LR:5.1 LR:6.3	Establish TMAs for locations receiving intensive use or areas where resource damage is imminent.
Trans-6010	LR:5.3	Restrict OHV use to signed roads in areas limited to designated roads and trails.
Trans-6011	LR:5.1 LR:5.4	Consider ways to allow motorized access for people with disabilities under section 504 of the Rehabilitation Act of 1973.
Trans-6012	LR:5.4	Identify areas appropriate for providing access for people with disabilities for recreational activities. Prioritize trails appropriate for upgrades that make them ADA compliant.
Trans-6013	LR:5.1 LR:5.3	Allow temporary closures to motorized vehicle use in areas that pose public health and safety risks, and/or where resource damage is imminent. In Greater Sage-Grouse priority habitat (core population areas and core population connectivity corridors) and general habitat, temporary closures will be considered in accordance with 43 CFR subpart 8364 (Closures and Restrictions); 43 CFR subpart 8351 (Designated National Area); 43 CFR subpart 6302 (Use of Wilderness Areas, Prohibited Acts, and Penalties); 43 CFR subpart 8341 (Conditions of Use). Temporary closure or restriction orders under these authorities are enacted at the discretion of the authorized officer to resolve management conflicts and protect persons, property, and public lands and resources. Where an authorized officer determines that off-highway vehicles are causing or will cause considerable adverse effects upon soil, vegetation, wildlife, wildlife habitat, cultural resources, historical resources, threatened or endangered species, wilderness suitability, other authorized uses, or other resources, the affected areas shall be immediately closed to the type(s) of vehicle causing the adverse effect until the adverse effects are eliminated and measures implemented to prevent recurrence. (43 CFR 8341.2) A closure or restriction order should be considered only after other management strategies and alternatives have been explored. The duration of temporary closure or restriction orders should be limited to 24 months or less; however, certain situations may require longer closures and/or iterative temporary closures. This may include closure of routes or areas."
Trans-6014	LR:5.3	Limit OHV use to designated routes unless compelling reasons exist to classify parcels as Open or Closed, and is consistent with other resource values. Until individual routes are designated, areas subject to route designation will be classified as Limited to existing routes (Map 60). Once route designation is completed, areas will no longer be classified as Limited to existing routes.

Record #	Goal/Obj.	MANAGEMENT ACTIONS COMMON TO ALL ALTERNATIVES			
Trans-6015	LR:5.1 LR:5.2 LR:5.4 LR:6.1	Consider nominations from the public for appropriate OHV use areas, consistent with other resource values.			
Trans-6016	LR:5.1 LR:5.3 LR:6.1 LR:6.2	Prohibit motorized travel if damage to vegetation, soils, or water quality would result.			
Record #	**Goal/Obj.**	**Alternative A (Current Management)**	**Alternative B (Resource Conservation)**	**Alternative C (Resource Utilization)**	**Alternative D (Proposed RMP)**
Trans-6017	LR:6.2	Open stock driveways and stock rests to motorized vehicle use.	Limit motorized vehicle use to designated routes within stock driveways.	Open stock driveways and stock rests to motorized vehicle use.	Allow OHV use only on designated routes within stock driveways for the general public and in additional areas within stock driveways and rests under a trailing permit.
Trans-6018	LR:6.2	No previous decision; considered on a project-specific basis.	Allow over-the-snow vehicle use consistent with motorized use designations when snow cover is sufficient to prevent resource damage.	Allow over-the-snow vehicle use when snow cover is sufficient to prevent resource damage.	Allow over-the-snow vehicle use consistent with OHV use designations when snow cover is sufficient to prevent resource damage.
Trans-6019	LR:6.2	No previous decision; considered on a project-specific basis.	Close areas within habitat of special status species to motorized vehicle use..	Allow motorized vehicle use within habitat of special status species consistent with travel management designations for that area.	Limit motorized vehicle use to designated routes within habitat of special status species consistent with travel management designations for that area. Routes will be designated to avoid occupied habitat during travel management planning.
Trans-6020	LR:5.1 LR:5.4	No previous decision; considered on a project-specific basis.	Evaluate existing routes in the vicinity of any new system roads for closure and reclamation consistent with other resource values.	Do not close and reclaim existing routes in the vicinity of any new system roads.	Evaluate existing routes in the vicinity of any new system roads for closure and reclamation consistent with other resource values.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
Trans-6021	LR:5.3	Areas where OHV use is Closed (approximately 3,650 acres) are defined in the corresponding special designation and resource alternatives, and also include (Map 65): • Middle Fork Canyon 6.0 miles southwest of Barnum • Cantonment Reno 20 miles northwest of Kaycee • Dry Creek Petrified Tree EEA 9.0 miles east of Buffalo	Close areas to motorized vehicle use to protect sensitive resources as defined in the corresponding special designation and resource sections of Alternative B (625,854 acres) and in addition include (Map 66): • Wilderness Study Areas • Lands with wilderness characteristics • Habitat for sensitive plant and wildlife species • Middle Fork Canyon • Cantonment Reno ACEC • Dry Creek Petrified Tree EEA • A 500-foot buffer of designated nonmotorized trails	Close areas to motorized vehicle use to protect sensitive resources as defined in the corresponding special designation and resource sections of Alternative C and no additional areas (28,931 acres) (Map 67).	Close areas to motorized vehicle use to protect sensitive resources as defined in the corresponding special designation and resource sections of Alternative D (37,389 acres) and in addition include (Map 68): • Wilderness Study Areas • Lands with wilderness characteristics identified for special management • Middle Fork Canyon • Cantonment Reno • Dry Creek Petrified Tree EEA • A 500-foot buffer of designated nonmotorized trails
Trans-6022	LR:5.3	Limit OHV use to existing or designated roads and trails (737,166 acres) (Map 65).	Limit motorized vehicle travel to designated roads and trails in 137,126 acres, consistent with other resource values in Alternative B (Map 66).	Limit motorized vehicle travel to designated roads and trails in 723,497 acres, consistent with other resource values in Alternative C (Map 67).	Limit motorized vehicle travel to designated roads and trails in 661,729 acres, consistent with other resource values in Alternative D (Map 68).

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
Trans-6023	LR:5.3	Areas where motorized vehicle use is Closed (approximately 37,646 acres) from November 15 to April 30 include (Map 65): • North Fork Powder River area 10 miles northwest of Barnum • Barnum Mountain 6.0 miles west of Barnum • A portion of the Middle Fork Management Area 12 miles southwest of Barnum • Fortification Creek Area, including portions of WSA Note: The Ed O. Taylor is Closed for winter, following the hunting season.	Prohibit motorized vehicle use from November 15 to April 30 within the following areas (Map 66): • Big game crucial winter ranges	Prohibit motorized vehicle use from November 15 to April 30 within the following areas (Map 67): • Big game crucial winter ranges in the Southern Big Horns	Protect wintering big game by seasonally prohibiting motorized vehicle use within big game crucial winter ranges in accordance with WGFD recommendations (presently November 15 or December 1 to April 30) (Map 68).
Trans-6024	LR:5.3	No previous decision; considered on a project-specific basis.	Prohibit motorized vehicle use from May 1 to June 30 within big game calving areas.	Do not prohibit motorized vehicle use seasonally within big game calving areas.	Protect big game by seasonally prohibiting motorized vehicle use within big game calving areas in accordance with WGFD recommendations (presently May 1 to June 30).
Trans-6025	LR:5.1 LR:5.3 LR:6.2	No previous decision; considered on a project-specific basis.	Allow motorized travel off designated routes only under a special use permit (grazing lessee, administrative use, etc.).	Allow motorized travel not causing resource damage, to go up to 300 feet off designated routes, for necessary tasks.	Allow motorized travel not causing resource damage to go up to 300 feet off designated routes for dispersed camping and game retrieval, where consistent with travel management designations in defined areas (activities under administrative permits excluded) (Map 60).

Table 2.32. 6000 LAND RESOURCES (LR) – RECREATION

GOAL LR:7 Diverse recreational opportunities are provided.

Objectives:

LR:7.1 Manage SRMAs and ERMAs in partnership with stakeholders.

LR:7.2 Manage recreation to protect resources, maintain public health and safety, and to provide a diverse array of benefits to the public.

LR:7.3 Manage recreation opportunities to maintain a minimal level of user conflict.

GOAL LR:8 Recreation facilities balance public demand with other resource values.

Objective:

LR:8.1 Design and maintain recreation sites to meet acceptable health and safety standards while supporting other resource values.

GOAL LR:9 Awareness, education, and support for BFO recreation programs and opportunities.

Objective:

LR:9.1 Emphasize and support collaborative public outreach.

Record #	Goal/Obj.	MANAGEMENT ACTIONS COMMON TO ALL ALTERNATIVES
Rec-6001	LR:7.1 LR:7.2	Develop or revise RAMPs for the SRMAs and ERMAs as public demand and management needs dictate.
Rec-6002	LR:7.2	Allow casual use of the public land for hiking, bicycling, hunting, fishing, camping and similar uses.
Rec-6003	LR:7.2 LR:8.1 LR:9.1	Open the planning area to dispersed recreation where consistent with other resource values.
Rec-6004	LR:9.1	Provide general and interpretive information as well as information designed to prevent trespass to visitors of SRMAs and other high-use recreation areas.
Rec-6005	LR:8.1	Maintain existing facilities consistent with the recreational setting.
Rec-6006	LR:7.2	Provide diverse recreational opportunities in cooperation with a variety of user groups.
Rec-6007	LR:9.1	Work with state, local groups, and adjacent landowners to identify and develop recreational facilities and trails and to improve public access to public lands.
Rec-6008	LR:7.2 LR:8.1	Design any new recreation facilities within a SRMA to be ADA compliant. Upgrade existing recreation facilities to be ADA compliant as time and funding allow.
Rec-6009	LR:7.2	Pursue access to public lands for recreational purposes.
Rec-6010	LR:7.2	Avoid riparian habitat or develop and manage recreational sites, recreation facilities, and recreational access in a manner that minimizes impacts to riparian habitats.
Rec-6011	LR:7.2	Prohibit dispersed camping and commercial camps within 200 feet of perennial surface water.
Rec-6012	LR:7.2	Manage access to caves for recreationists under a Cave Management Plan.

Record #	Goal/Obj.	MANAGEMENT ACTIONS COMMON TO ALL ALTERNATIVES
Rec-6013	LR:7.2	Use the best available technology to minimize noise and light pollution potentially affecting recreation facilities and sites.
Rec-6014	LR:7.2	Close developed recreation sites such as picnic areas, campgrounds, and environmental education areas to livestock grazing.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
Rec-6015	LR:7.3 LR:8.1	No previous decision; considered on a project-specific basis.	Limit development of additional recreation facilities to SRMAs and other high-use areas.	Allow additional recreation facilities in areas where they are supported by recreational use and are consistent with other resource values.	Allow additional recreation facilities in areas where they are supported by recreational use and are consistent with other resource values. In Greater Sage-Grouse priority habitat (core population areas and core population connectivity corridors), do not construct new recreation facilities (e.g., campgrounds, trails, trailheads, staging areas) unless the development would have a net conservation gain to Greater Sage-Grouse habitat (such as concentrating recreation, diverting use away from important areas, etc.), or unless the development is required for visitor health and safety or resource protection.
Rec-6016	LR:7.2 LR:7.3	Camping is limited to 14 days at any one spot.	Allow camping, unless otherwise posted, for no more than 14 days within any period of 28 consecutive days. After this period, the visitor must relocate to another site at least 5.0 miles away.	Allow camping, unless otherwise posted, for no more than a period of 14 days within any period of 28 consecutive days. After this period, the visitor must relocate to another site at least 1.0 mile away.	Allow camping for no more than 14 days within any 28 consecutive days. After reaching this time limit, the visitor must relocate to another site at least 1.0 mile away.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
Rec-6017	LR:7.1	No previous decision; the planning area has been managed as one ERMA with several developed recreation sites and trails.	Divide the planning area into the following ERMAs (Map 69): • Southern Big Horns ERMA (128,761 acres): Lands south of the Bighorn National Forest and west of I-25 in southwestern Johnson County (excludes Middle Fork and Hole-in-the-Wall SRMAs) • Buffalo ERMA (597,812 acres): This ERMA includes the remainder of the planning area not included in the Southern Big Horns ERMA or the designated SRMAs. Recreation opportunities in ERMAs will be allowed that are in concert with protecting cultural and visual resources and sustaining the biological integrity of habitats for plant, wildlife, and fish species. In sensitive areas, recreation use could be limited.	Do not designate any ERMAs. Address recreation issues outside of SRMAs on a case-by-case basis through site-specific analysis.	Divide the planning area into the following ERMAs (Map 71): • Cabin Canyon (1,369 acres): Includes lands adjacent to State of Wyoming lands north of Bishop Road. • Face of the Bighorns/North Fork ERMA (34,477 acres): Includes lands from the Poison Creek Trail area south along the Face of the Bighorns, the Horn, and the North Fork WSA. • Gardner Mountain ERMA (55,181 acres): Includes lands along and south of the Mayoworth-Slip Road and north of Barnum Mountain Road. • Kaycee Stockrest ERMA (2,685 acres) • North Bighorns ERMA (2,926 acres): Includes parcels in Sheridan County adjacent to the Bighorn National Forest. • Powder River Basin ERMA (224,483 acres): This ERMA includes the public lands in the planning area with reasonable public access of sufficient size to support recreation that are not included in the other ERMAs or SRMAs.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
					• Southern Bighorns ERMA (25,535 acres): Lands in southwestern Johnson County adjacent to the Middle Fork Powder River and Hole-in-the-Wall SRMAs. • Walk-in Area ERMA (3,007 acres): Includes BLM-administered lands adjacent to WGFD walk-in areas not designated in another SRMA or ERMA. Strategically emphasize a variety of recreation opportunities along with the protection of natural and cultural resources. R&VS management will be recognized as an important affected resource in ERMAs. ERMAs will be managed to allow continued recreation opportunities and to protect RSCs in concert with other resource values or uses.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
Rec-6018	LR:7.1	No SRMAs have been previously designated. Recreation and/or interpretation decisions were applied to the following areas: • South Big Horns • Gardner Mountain WSA • North Fork WSA • Dry Creek Petrified Tree • Fortification Creek • Weston Hills • Mosier Gulch • Cantonment Reno • Bozeman Trail and Crazy Woman Battle Site	Designate the following areas as SRMAs and delineate discrete recreation management zone boundaries (Map 69): • Burnt Hollow (17,280 acres) • Cabin Canyon (1,369 acres) • Dry Creek Petrified Tree (2,567 acres) • Hole-in-the-Wall (11,952 acres) • Middle Fork Powder River (10,083 acres) • Mosier Gulch (1,026 acres) • Welch Ranch (1,748 acres) • Weston Hills (9,504 acres) Emphasize recreation opportunities in SRMAs that are in concert with protecting cultural and visual resources and sustaining the biological integrity of habitats for plant, wildlife, and fish species. In sensitive areas, recreation use could be limited to protect natural and cultural resources.	Designate the following areas as SRMAs and delineate discrete recreation management zone boundaries (Map 70): • Burnt Hollow (17,280 acres) • Dry Creek Petrified Tree (2,567 acres) • Middle Fork Powder River (1,294 acres) • Mosier Gulch (868 acres) • Welch Ranch (1,748 acres) • Weston Hills (9,504 acres) Emphasize managing BLM-administered lands for a variety of structured and dispersed recreational opportunities in a manner favorable to accommodate the maximum amount of recreation use in combination with other BLM land uses, in order to produce social and economic benefits.	Designate the following areas as SRMAs and delineate discrete recreation management zone boundaries (Map 71): • Burnt Hollow (17,280 acres) • Dry Creek Petrified Tree (2,567 acres) • Hole-in-the-Wall (11,952 acres) • Middle Fork Powder River (10,083 acres) • Mosier Gulch (1,026 acres) • Welch Ranch (1,748 acres) • Weston Hills (9,504 acres) Strategically emphasize a variety of recreation opportunities along with the protection of natural and cultural resources. R&VS management will be recognized as the predominant land use focus in SRMAs. Manage SRMAs under site specific management plans. Site specific management plans will be consistent with and implement the provisions specified for SRMAs in Appendix T (p. 2543).

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
Rec-6019	LR:7.1 LR:7.2 LR:8.1	Oil and gas leasing and development are not allowed in the Mosier Gulch Recreation Area. Surface disturbance or occupancy is prohibited within 0.5 mile of the Dry Creek Petrified Tree site unless waived by the authorized officer.	Do not lease minerals within the boundary of a designated SRMA.	Lease fluid minerals with a CSU stipulation to be consistent with SRMA management objectives in all SRMAs.	Do not lease minerals within the boundary of the following SRMAs: • Burnt Hollow (17,280 acres) • Dry Creek Petrified Tree (2,567 acres) • Hole-in-the-Wall (11,952 acres) • Middle Fork Powder River (10,083 acres) • Mosier Gulch (1,026 acres) • Welch Ranch (1,748 acres) Lease fluid minerals with a CSU stipulation to be consistent with SRMA management in the following SRMAs: • Weston Hills (9,504 acres)
Rec-6020	LR:7.1 LR:7.2 LR:8.1	Prohibit surface disturbance or occupancy within a 0.5 mile of Dry Creek Petrified Tree Environmental Education Area, unless waived by the authorized officer.	Institute a 0.5-mile buffer from mineral leasing surrounding SRMAs.	Do not institute a mineral leasing buffer surrounding SRMAs.	Do not institute a mineral leasing buffer surrounding SRMAs.
Rec-6021	LR:7.1 LR:7.2 LR:8.1	Prohibit surface disturbance or occupancy within 0.5 mile of Dry Creek Petrified Tree Environmental Education Area, unless waived by the authorized officer.	Prohibit surface disturbance within designated SRMAs unless for administrative use and consistent with other resource values.	Allow surface disturbance within designated SRMAs consistent with other resource values.	Allow surface disturbance within designated SRMAs for administrative use only, where consistent with other resource values.
Rec-6022	LR:7.1 LR:7.2 LR:8.1	Pursue withdrawals from appropriation under the mining laws in recreation areas and SRMAs on a project-specific basis.	Recommend withdrawals from appropriation under the mining laws in designated SRMAs.	Do not recommend withdrawals from appropriation under the mining laws in designated SRMAs.	Recommend withdrawals from mineral entry under the mining laws in designated SRMAs.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
Rec-6023	LR:7.1 LR:7.2 LR:8.1	Allow salable mineral development within recreation areas and SRMAs on a project-specific basis.	Allow salable mineral development within designated SRMAs for administrative use only.	Allow salable mineral development within designated SRMAs consistent with other resource values.	Allow salable mineral development within designated SRMAs for administrative use only.
Rec-6024	LR:7.2 LR:7.3	Allow licensed motor vehicles on existing and designated routes without requiring a fee or permit. ORV permits are required for non-licensed vehicles on designated routes enrolled in the Wyoming Trails Program.	Evaluate fees for access to eligible areas, as allowed by the Federal Lands Recreation Enhancement Act.	Do not evaluate fees for access to eligible areas, as allowed by the Federal Lands Recreation Enhancement Act.	Evaluate fees for access to eligible areas, as allowed by the Federal Lands Recreation Enhancement Act, when resource condition and/or documented public desire for expanded services are warranted.
Rec-6025	LR:7.2 LR:7.3 LR 8.1	Recreational target shooting (excludes hunting) is generally allowed on BLM-administered lands that have not been administratively closed. Decisions to limit or close areas to recreational target shooting have been implemented at: • Burnt Hollow (17,280 acres) • Welch Ranch (1,748 acres) • Weston Hills (9,464 acres)	Make ERMAs available (open) for recreational shooting; close all SRMAs (55,529 acres) to recreational shooting.	All BLM-administered surface within the planning area is open to recreational target shooting, except where prohibited for human health and safety by state or federal law.	Close the following areas to recreational target shooting to protect natural and cultural resources, promote human health and safety, and reduce user conflicts: • Burnt Hollow (17,280 acres) • Welch Ranch (1,748 acres) *Note: All developed recreation sites (including trailheads, picnic areas, etc.) are closed to target shooting per 43 CFR 8365.2-5(a).*

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
		Note: All developed recreation sites (including trailheads, picnic areas, etc.) are closed to target shooting per 43 CFR 8365.2-5(a).			Establish RMA standards and indicators, monitor recreational target shooting and increase education and enforcement of target shooting regulations in the following RMAs: • Cabin Canyon (1,369 acres) • Dry Creek Petrified Tree (2,567 acres) • Hole-in-the-Wall (11,952 acres) • Kaycee Stockrest ERMA (2,685 acres) • Middle Fork Powder River (10,083 acres) • Mosier Gulch (1,026 acres) • Walk-in Area ERMA (3,007 acres): Includes BLM-administered lands adjacent to WGFD walk-in areas not designated in another SRMA or ERMA. • Weston Hills (9,504 acres) Establish partnerships with shooting sports advocacy organizations or other interested agencies or organizations to accommodate opportunities for shooting sports on public lands, where consistent with other resource values.

Table 2.33. 6000 LAND RESOURCES (LR) – LANDS WITH WILDERNESS CHARACTERISTICS

GOAL LR:10 All lands that have wilderness characteristics have been identified, evaluated, and management determined.

Objectives:

LR:10.1 Assess all BLM-administered lands for potential areas containing wilderness characteristics.

LR:10.2 Inventory areas identified as possessing wilderness characteristics and determine appropriate management.

Record #	Goal/Obj.	MANAGEMENT ACTIONS COMMON TO ALL ALTERNATIVES
LWC-6001	LR:10.1 LR:10.2	Evaluate newly acquired lands, and other parcels meeting the size and naturalness requirements for wilderness characteristics.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
LWC-6002	LR:10.2	No previous decision; considered on a project-specific basis.	Manage lands with wilderness characteristics (Map 73) to emphasize primitive recreational opportunities and natural values (12,237 acres). Management would include: ● Close or limit motorized vehicles to designated roads and trails ● Managing for visual resources as Class II ● Closing the area to mineral leasing (fluid and solid) ● Recommending withdrawal to locatable mineral entry ● Closing the areas to salable mineral development ● Excluding ROW ● Prohibiting renewable energy development ● Commercial woodcutting would be prohibited unless it is a byproduct of an environmental restoration effort.	Do not apply any special restrictions related to lands with wilderness characteristics. Manage lands with wilderness characteristics to follow the general management outlined in Alternative C of this RMP.	Manage lands with wilderness characteristics (Map 74) to emphasize ecosystem health, natural values, and primitive recreational opportunities (6,864 acres). The lands with wilderness characteristics area will be managed to protect wilderness characteristics. Management would include: ● Closing the area to motorized use ● Managing for visual resources as Class II ● Leasing fluid minerals with a NSO stipulation with no exceptions, modifications or waivers ● Recommending withdrawal to locatable mineral entry ● Closing the areas to salable mineral development ● Excluding ROW ● Prohibiting renewable energy development

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
			• Prohibiting all other surface-disturbing activities not compatible with retaining or enhancing the area's natural values.		• Prohibit Commercial woodcutting would be prohibited unless it is a byproduct of an environmental restoration effort. • Prohibiting all other surface-disturbing activities not compatible with retaining or enhancing the area's natural values.

Table 2.34. 6000 LAND RESOURCES (LR) – LIVESTOCK GRAZING MANAGEMENT

GOAL LR:11 Public rangelands provide for a sustainable level of livestock grazing consistent with other resource values and sustained yield.

Objectives:

LR:11.1 Continue livestock grazing on available BLM-administered lands.

LR:11.2 Manage forage to maintain or improve ecological states and achieve and/or maintain Standards for Healthy Rangelands and Guidelines for Livestock Grazing Management for the Public Lands Administered by the BLM in the State of Wyoming.

LR:11.3 Monitor and evaluate rangeland health and condition in coordination with cooperators, and lessees to determine if, and what additional management is needed to achieve desired ecological state.

LR:11.4 Emphasize the use of mechanical, chemical, and biological methods, as well as fire and livestock grazing to achieve desired ecological state.

LR:11.5 Continue the existence and use of stock driveways and other stock driveway withdrawals.

LR:11.6 Identify and implement opportunities for vegetation improvements to increase the number of AUMs available for livestock grazing to support and sustain the economies of local communities.

LR:11.7 Create and maintain reserve common allotments or pastures for temporary grazing purposes to facilitate another allotment in attaining management objectives.

LR:11.8 In coordination with cooperators and lessees develop and implement allotment management plans, where feasible. Emphasis to be placed on Category I allotments.

Record #	Goal/Obj.	MANAGEMENT ACTIONS COMMON TO ALL ALTERNATIVES
Grazing-6001	LR:11.1 LR:11.2 LR:11.3 LR:11.4 LR:11.6 LR:11.7 LR:11.8	Develop and implement appropriate livestock grazing management actions to achieve the Standards for Healthy Rangelands and Guidelines for Livestock Grazing Management for the Public Lands Administered by the BLM in the State of Wyoming, to provide watershed protection, to improve forage for livestock, forage and habitat for wildlife, and enhance rangeland health.
Grazing-6002	LR:11.1 LR:11.2 LR:11.3 LR:11.4 LR:11.6 LR:11.8	Continue to authorize appropriate amounts, kinds, and seasons of use. Forage allocations in grazing leases can be adjusted when supported by monitoring, field observations, rangeland health standards assessment/evaluation results, or other data acceptable to the authorized officer. Category C allotments have a low priority, Category M allotments have a medium priority, and Category I allotments have a high priority for monitoring and funding of range improvement projects.
Grazing-6003	LR:11.1 LR:11.3 LR:11.8	Continue the M, C, and I allotment categorization designations (Map 72).
Grazing-6004	LR:11.1 LR:11.2 LR:11.3 LR:11.4 LR:11.6 LR:11.8	Continue implementation of existing AMPs. Develop and implement new AMPs with grazing lessees and other stakeholders to achieve desired resource goals and objectives.
Grazing-6005	LR:11.1 LR:11.2 LR:11.3 LR:11.8	Manage livestock grazing to sustain riparian, wetland, mountain mahogany, specials status species, or other special habitats.

Record #	Goal/Obj.	MANAGEMENT ACTIONS COMMON TO ALL ALTERNATIVES			
Grazing-6006	LR:11.1 LR:11.2 LR:11.3	Manage Category C allotments to continue authorized livestock use.			
Grazing-6007	LR:11.1 LR:11.2 LR:11.3 LR:11.4 LR:11.6 LR:11.7 LR:11.8	Construct reservoirs, wells, troughs and pipelines to provide water to disperse grazing use. The grazing lessee or other cooperator will be required to maintain water in troughs located on public land during the frost-free period (April through October) for wildlife.			
Grazing-6008	LR:11.1 LR:11.5	Retain designated stock driveways and livestock trails. Consider any stock driveway designation change on a project-specific basis and analyze through an environmental assessment.			
Grazing-6009	LR:11.1 LR:11.2 LR:11.3 LR:11.7 LR:11.8	Implement strategies that best protect rangeland resources during periods of drought. Cooperate with stakeholders for voluntary adjustments in livestock use and/or livestock management.			
Grazing-6010	LR:11.2 LR:11.4	Rest prescribed burn areas from livestock grazing prior to treatment when necessary to increase or maintain fuels for burning.			
Grazing-6011	LR:11.2 LR:11.3 LR:11.4	Authorize OHV travel for maintaining range improvements and animal husbandry activities by the grazing lessee and his/her agent, consistent with other management actions, as long as resource damage does not occur or new routes created.			
Grazing-6012	LR:11.2 LR:11.4	Avoid creating concentrations of livestock in areas of known eligible and unevaluated cultural sites. (salt blocks, water source)			
Record #	**Goal/Obj.**	**Alternative A (Current Management)**	**Alternative B (Resource Conservation)**	**Alternative C (Resource Utilization)**	**Alternative D (Proposed RMP)**
Grazing-6013	LR:11.1 LR:11.3	Suspend or adjust livestock grazing use in areas where forest management has occurred whenever grazing would impair forest regeneration.	Restoration treatments may include actions to reduce or eliminate potential grazing impacts to meet regeneration objectives following forest management.	Restoration treatments will not include actions to reduce or eliminate potential grazing impacts to meet regeneration objectives following forest management.	Restoration treatments may include actions to reduce or eliminate potential grazing impacts to meet regeneration objectives following forest management.
Grazing-6014	LR:11.1 LR:11.2 LR:11.3 LR:11.4 LR:11.6	Manage Category M allotments to continue the current authorized livestock use on 98 "M" allotments at 43,573 AUMs.	Manage Category M allotments to achieve multiple resource health and objectives.	Manage Category M allotments to achieve livestock management objectives only.	Manage Category M allotments to achieve multiple resource health and objectives.
Grazing-6015	LR:11.1 LR:11.2 LR:11.6	Allow development of range improvements. Establish resource monitoring studies as necessary to detect undesirable changes in the current satisfactory resource conditions.	Develop range improvements for Category M allotments in accordance with resource needs and livestock management.	Develop range improvements for Category M allotments that are lessee proposed and funded only.	Develop range improvements in accordance with resource needs and livestock management.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
Grazing-6016	LR:11.1 LR:11.2 LR:11.3 LR:11.4 LR:11.6 LR:11.8	Manage Category I allotments as described below. Conduct baseline inventories. Develop, implement, and monitor AMPs. After range condition class has been upgraded to "good" on allotments now rated "poor" to "fair," allocate the increased available forage first to wildlife to meet the population objectives of the WGFD. Any of the increased forage not needed for wildlife will be available to be licensed for livestock use.	Base AMP goals/objectives on multiple resource health and livestock management in Category I allotments.	Base AMP goals/objectives on livestock management only in Category I allotments.	Conduct baseline inventories. Develop, implement, and monitor AMPs. Base AMP goals/objectives in Category I and M allotments on resource protection and watershed health.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
Grazing-6017	LR:11.1 LR:11.2 LR:11.3 LR:11.7	Livestock grazing is not authorized on about 4,000 acres of public land located in the canyons and slopes of the southern Big Horn Mountains because of the rough terrain and steep slopes. Livestock grazing is allowed on all public lands in the resource area except on about 6,000 acres (1%) where it has been determined to be incompatible with other resource uses or values.	Limit or prohibit livestock grazing where it has been determined to be incompatible with other resource values as proposed under this alternative. 467,897 acres are incompatible and 314,205 acres are available to livestock grazing.	Limit or prohibit livestock grazing only in those areas where it is currently prohibited. 4,587 acres are incompatible and 777,515 acres are available to livestock grazing.	Allow livestock grazing on all public lands in the planning area except where an evaluation has determined it to be incompatible with other resource uses or values (campgrounds, entrances of caves, sites of cultural significance). ● The BLM will prioritize (1) the review of grazing permits/leases, in particular to determine if modification is necessary prior to renewal, and (2) the processing of grazing permits/leases in Greater Sage-Grouse priority habitat (core population areas and core population connectivity corridors) followed by general habitat. In setting workload priorities, precedence will be given to existing permits/leases in these areas not meeting Land Health Standards, with focus on those containing riparian areas, including wet meadows. The BLM may use other criteria for prioritization to respond to urgent natural resource concerns (ex., fire) and legal obligations.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
					• The NEPA analysis for renewals and modifications of livestock grazing permits/leases that include lands within PHMAs will include specific management thresholds based on Greater Sage-Grouse Habitat Objectives Table and Land Health Standards (43 CFR 4180.2) and one or more defined responses that will allow the authorizing officer to make adjustments to livestock grazing that have already been subjected to NEPA analysis. • Allotments within priority habitat (core population areas and core population connectivity corridors), and focusing on those containing riparian areas, including wet meadows, will be prioritized for field checks to help ensure compliance with the terms and conditions of the grazing permits. Field checks could include monitoring for actual use, utilization, and use supervision.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
					• At the time a permittee or lessee voluntarily relinquishes a permit or lease, the BLM will consider whether *the public lands where that permitted use was authorized should remain available for livestock grazing or be used for other resource management objectives, such as reserve common allotments or fuel breaks.* 9,992 acres are incompatible and 772,110 acres are available to livestock grazing.
Grazing-6018	LR:11.1 LR:11.2 LR:11.3 LR:11.6	Any permanent increases in the amount of forage produced are considered for wildlife and watershed protection before additional livestock use is authorized.	Authorize permanent increases in forage allocations to wildlife habitat and watershed protection as the first priority, livestock grazing second.	Authorize permanent increases in forage allocations to livestock grazing as the first priority, wildlife habitat and watershed protection second.	Permanent forage allocations would consider watershed protection, livestock grazing, wildlife habitat, and other resource values. Increases in vegetative production would be allocated for watershed protection first, then for forage and habitat.
Grazing-6019	LR:11.1 LR:11.3 LR:11.6	No previous decision; considered on a project-specific basis.	Locate livestock salt or mineral supplements a minimum of 0.5 mile away from water sources, riparian areas, and aspen stands.	Locate livestock salt or mineral supplements a minimum of 500 feet away from water sources, riparian areas, and aspen stands.	Locate livestock salt or mineral supplements a minimum of 500 feet away from water sources, riparian areas, and aspen stands.
Grazing-6020	LR:11.1 LR:11.2 LR:11.4 LR:11.7	No previous decision; considered on a project-specific basis.	Designate and manage future Resource Reserve common allotments as needed. Develop management criteria for reserve common allotments at the time of designation.	Do not designate reserve common allotments.	Designate and manage future reserve common allotments as needed. Develop management criteria for the reserve common allotments at the time of designation

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
Grazing-6021	LR:11.1 LR:11.2 LR:11.3 LR:11.4 LR:11.6 LR:11.7	Livestock grazing strategies on vegetative treatment areas generally include rest the first year following treatments and deferment of livestock grazing the second year.	Provide a minimum of two years rest from livestock grazing following prescribed burns and other vegetative treatments. Allow additional rest where necessary to achieve resource goals and objectives.	Provide a maximum of two growing seasons rest from livestock grazing following prescribed burns and other vegetative treatments.	Provide rest/deferment from livestock grazing following wildfire, prescribed burns, and other vegetative treatments until resource objectives are met.
Grazing-6022	LR:11.1 LR:11.2 LR:11.3 LR:11.4	No previous decision; considered on a project-specific basis.	Prohibit increases in livestock stocking rates as a result of vegetation treatments.	Allow increases in livestock stocking rates as a result of vegetation treatments.	Allow increases in livestock stocking rates as a result of vegetation treatments when resource objectives are met.

2.9.7. 7000 SPECIAL DESIGNATIONS

Table 2.35. 7000 SPECIAL DESIGNATIONS (SD) – AREAS OF CRITICAL ENVIRONMENTAL CONCERN

GOAL SD:1 The integrity of unique resources are protected and opportunities for compatible uses are provided.

Objectives:

SD:1.1 Identify areas for potential special designation that contain important scenic, ecological, and/or cultural values that are currently unprotected.

SD:1.2 Utilize special designations to meet resource protection needs within appropriate geographical areas.

SD:1.3 Interpret sites of high public interest.

Record #	Goal/Obj.	MANAGEMENT ACTIONS COMMON TO ALL ALTERNATIVES			
ACEC-7001	SD:1.2	Evaluate BLM authorized activities and develop mitigation to protect the integrity of the characteristics for which the ACEC was designated.			
ACEC-7002	SD:1.3	Develop educational materials describing access and features of ACECs and appropriate use protocols.			
Record #	**Goal/Obj.**	**Alternative A (Current Management)**	**Alternative B (Resource Conservation)**	**Alternative C (Resource Utilization)**	**Alternative D (Proposed RMP)**
ACEC-7003	SD:1.1	There are currently no ACECs designated in the planning area. Existing management for proposed ACECs has been determined to be protective of the resource values.	Designate the following areas as ACECs (Map 73): ● Burnt Hollow (17,280 acres) ● Cantonment Reno (523 acres) ● Dry Creek Petrified Tree (2,567 acres) ● Fortification Creek Elk Area (32,602 acres) ● Hole-In-The-Wall (11,952 acres) ● Pumpkin Buttes (1,731 acres) ● Sagebrush Ecosystem ACEC: public lands within 4.0 miles of the perimeter of occupied or undetermined Greater Sage-Grouse leks and winter concentration areas (467,897 acres) ● Welch Ranch (1,748 acres)	Do not designate any ACECs.	Designate the following areas as ACECs (Map 74): ● Pumpkin Buttes (1,731 acres) ● Welch Ranch (1,116 acres)

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
ACEC-7004	SD:1.2	Continue with no ACECs designated in the planning area.	Manage designated ACECs through the following actions: • Closing or limiting motorized vehicles to designated roads and trails • Managing for visual resources as Class II • Closing the area to mineral leasing (fluid and solid) • Recommending withdrawal to locatable mineral entry • Closing the area to salable minerals • Excluding ROW • Prohibiting all other surface-disturbing activities not compatible with retaining or enhancing the area's values for which the ACEC was designated	Continue with no ACECs designated in the planning area.	Manage ACECs under site specific management plansSite specific management plans will be consistent with and implement the provisions specified for ACECs in Appendix S (p. 2531)..

Table 2.36. 7000 SPECIAL DESIGNATIONS (SD) – SCENIC OR NATIONAL BACK COUNTRY BYWAYS

GOAL SD:2 Potential National Byways are evaluated to enhance opportunities for the public to see and enjoy public lands.

Objectives:

SD:2.1 Where appropriate, identify scenic or national back country byways and develop management prescriptions to maintain resource values.

SD:2.2 Promote the increased awareness of historical and cultural values and facilitate a sense of stewardship within proposed national back country byways.

Record #	Goal/Obj.	MANAGEMENT ACTIONS COMMON TO ALL ALTERNATIVES
BCB-7001	SD:2.1	Manage national back country byways with the objective of encouraging responsible use of the proposed byway, while protecting and displaying the scenic, cultural, geological, multiple use, and crucial wildlife habitat values that occur in the area.
BCB-7002	SD:2.2	Coordinate with local residents in the area of any designated national back country byway to develop information and interpretive materials for visitors that highlight multiple uses of public lands and land stewardship in the area.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
BCB-7003	SD:2.1	No previous decision; considered on a project-specific basis.	Evaluate roads within the planning area for designation as National Back Country or Scenic Byways. Eligible routes may be proposed for National Back Country or Scenic Byway designation (Map 73). Potential routes include: ● Hazelton Road ● Slip Road ● Trabing/Sussex ● Powder River ● Rome Hill ● Tipperary/Thompson Road	Do not evaluate roads within the planning area for National Back Country or Scenic Byway inclusion.	Evaluate roads in coordination with the counties and other stakeholders for designation as National Back Country or Scenic Byways. Eligible routes may be proposed for National Back Country or Scenic Byway designation (Map 74). Potential routes include: ● Hazelton Road ● Slip Road ● Trabing/Sussex ● Powder River ● Rome Hill ● Tipperary/Thompson Road

Table 2.37. 7000 SPECIAL DESIGNATIONS (SD) – WILD AND SCENIC RIVERS

GOAL SD:3 Suitable waterway segments' free-flowing condition, water quality, outstandingly remarkable values and tentative classification would be protected and/or enhanced until such time that Congress designates the Middle Fork Powder River as a WSR or releases the river for other uses.

Objectives:

SD:3.1 Manage suitable segments to protect and enhance their free-flowing condition, water quality, outstandingly remarkable values and tentative classification.

SD:3.2 Develop partnerships for managing and promoting suitable waterways to enhance their public enjoyment.

Record #	Goal/Obj.	MANAGEMENT ACTIONS COMMON TO ALL ALTERNATIVES
WSR-7001	SD:3.1	Manage the Middle Fork Powder River (Map 75) in accordance with the Middle Fork Interim Management Plan until Congress acts upon the nomination. (The interim management plan and eligibility review eport are available on the BFO website, http://www.blm.gov/wy/st/en/programs/Planning/rmps/buffalo/docs.html.)
WSR-7002	SD:3.2	Work with stakeholders to manage the Middle Fork Powder River corridor.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
WSR-7003	SD:3.1 SD:3.2	No previous decision.	If Congress does not designate the Middle Fork Powder River as a WSR, and releases the river for other uses, management will continue in accordance with the Middle Fork Interim Management Plan to protect and enhance its free-flowing condition and outstandingly remarkable values.	If Congress does not designate the Middle Fork Powder River as a WSR, and releases the river for other uses, do no apply special provisions related to protection of free-flowing characteristics and outstanding resource values. Manage the Middle Fork Powder River to follow the management outlined in Alternative C of this RMP.	If Congress does not designate the Middle Fork Powder River as a WSR, and releases the river for other uses, management will continue to retain the free-flowing characteristics and outstanding remarkable values.

Table 2.38. 7000 SPECIAL DESIGNATIONS (SD) – WILDERNESS STUDY AREAS

GOAL SD:4 Existing WSAs will meet the "non-impairment standard" under BLM Manual 6330 – Management of Wilderness Study Areas.

Objectives:

SD:4.1 Monitor and document condition and use of each WSA at least once per year.

SD:4.2 Manage and protect the characteristics of each WSA so as to maintain their existing size, naturalness, unique values, and outstanding opportunities.

Record #	Goal/Obj.	MANAGEMENT ACTIONS COMMON TO ALL ALTERNATIVES
WSA-7001	SD:4.2	If Congress acts to either designate as Wilderness or release WSAs from further consideration (Fortification Creek, Gardner Mountain, North Fork) (Map 75), the RMP will be amended as necessary.
WSA-7002	SD:4.2	Manage WSAs for the preservation of natural conditions and processes, and to provide opportunities for solitude or a primitive and unconfined type of recreation. Under the guidance of BLM Manual 6330 – Management of Wilderness Study Areas, manage WSAs to emphasize primitive, nonmotorized activities to maintain the current natural values.

Record #	Goal/Obj.	Alternative A (Current Management)	Alternative B (Resource Conservation)	Alternative C (Resource Utilization)	Alternative D (Proposed RMP)
WSA-7003	SD:4.2	If Congress decides not to designate the WSAs as wilderness, lease for oil and gas development in the following WSAs: ● Gardner Mountain WSA (6,423 acres) ● North Fork WSA (10,089 acres) ● Fortification Creek WSA (12,419 acres)	If Congress decides not to designate a WSA as wilderness, do not lease mineral rights until a plan amendment is completed. Additionally, motorized travel, surface-disturbing activities and any other activities (except valid existing rights) that may impair wilderness characteristics will be prohibited until a plan amendment is completed. WSAs released by Congressional for uses other than wilderness would then be considered pursuant to Manuals 6310 and 6320 to maintain wilderness characteristics.	If Congress decides not to designate a WSA as wilderness, do not lease mineral rights until a plan amendment is completed. Additionally, motorized travel, surface-disturbing activities and any other activities (except valid existing rights) that may impair wilderness characteristics will be prohibited until a plan amendment is completed. WSAs released by Congressional for uses other than wilderness would then be considered pursuant to Manuals 6310 and 6320 to maintain wilderness characteristics.	If Congress decides not to designate a WSA as wilderness, do not lease mineral rights until a plan amendment is completed. Additionally, motorized travel, surface-disturbing activities and any other activities (except valid existing rights) that may impair wilderness characteristics will be prohibited until a plan amendment is completed. WSAs released by Congressional for uses other than wilderness would then be considered pursuant to Manuals 6310 and 6320 to maintain wilderness characteristics.
WSA-7004	SD:4.2	No previous decision; considered on a project-specific basis. All WSAs are currently Closed to motorized use or use is Limited to designated routes, though no routes have been designated in any of the WSAs.	Prohibit all motorized and mechanized equipment within WSAs.	Prohibit motorized equipment within WSAs.	Prohibit all motorized and mechanized equipment within WSAs.

2.9.8. 8000 SOCIOECONOMIC RESOURCES

Table 2.39. 8000 SOCIOECONOMIC RESOURCES (SR) – SOCIAL AND ECONOMIC

GOAL SR:1 Opportunities for economic and social sustainability are provided at the national, regional, and local levels.

Objectives:

SR:1.1 Ensure local and regional economic development and local land use plans are considered in BLM actions.

SR:1.2 Consider and address economic impact of BLM actions.

SR:1.3 Coordinate and address impacts to the social structure to the extent BLM actions are expected to affect the social structure.

SR:1.4 Recognize city and county infrastructure needs associated with BLM actions.

GOAL SR:2 Sustainable consumptive economic development opportunities are provided for and are balanced against non-consumptive uses.

Objectives:

SR:2.1 Identify options to utilize resources consistent with a multiple resource management philosophy that provides a balance between local, regional, and national views.

SR:2.2 Maintain a balance between consumptive and nonconsumptive uses.

GOAL SR:3 Use conflicts are managed through public education and outreach.

Objective:

SR:3.1 Work cooperatively with local agencies to foster public awareness.

Record #	Goal/Obj.	MANAGEMENT ACTIONS COMMON TO ALL ALTERNATIVES
Socio-8001	SR:2	Remain sensitive to the economic and social health of the impacted area.
Socio-8002	SR:1	Refer to available socioeconomic monitoring plans that provide indicators for the economic and social health of an affected area.
Socio-8003	SR:1	Manage in a way that considers the fact that BLM actions are integrally connected with both socioeconomics and the cultural health of the planning area.

Record #	Goal/Obj.	MANAGEMENT ACTIONS COMMON TO ALL ALTERNATIVES			
Socio-8004	SR:1	Quantify socioeconomic impacts associated with site-specific and programmatic BLM actions to the extent possible.			
Socio-8005	SR:3	Share the results with state and local governmental officials for the purpose of promoting collaborative management, where possible, to ensure the affected parties and overlapping jurisdictions are provided that information as required by law.			
Record #	**Goal/Obj.**	**Alternative A (Current Management)**	**Alternative B (Resource Conservation)**	**Alternative C (Resource Utilization)**	**Alternative D (Proposed RMP)**
Socio-8006	SR:2	No previous decision.	Develop mitigation strategies designed to resolve conflicts that have detrimental effects on multiple resource use.	Develop management strategies designed to recognize and point out conflicts that are expected to have an impact on multiple resource use.	Work with local, state, federal, and private entities with the intention of developing mitigation strategies designed to promote a healthy and sustainable social and economic environment.
Socio-8007	SR:1 SR:3	BLM's management recognizes and considers local and regional economic development and land use plans.	Consider local and regional economic development and land use plans.	Incorporate, to the extent possible, local and regional economic development and land use plans.	In consideration of local and regional economic development and land use plans, work cooperatively with all stakeholders to identify the socioeconomic impacts of BLM actions and develop strategies that would mitigate those impacts where possible with the overriding goal of promoting sustainability in a multiple resource use environment.

Table 2.40. 8000 SOCIOECONOMIC RESOURCES (SR) – HEALTH AND SAFETY

GOAL SR:4 Public health and safety are protected.

Objectives:

SR:4.1 Reduce or eliminate hazards to human health and safety and the environment by reporting, cleanup, and reclamation of contaminated sites.

SR:4.2 Integrate environmental protection and hazard management into all BLM actions.

SR:4.3 Collaborate with Wyoming DEQ to identify, mitigate, or remediate Abandoned Mine Land sites and coalbed fires.

SR:4.4 Avoid public exposure to H_2S.

SR:4.5 Reduce or eliminate physical hazards through appropriate mitigation.

Record #	Goal/Obj.	MANAGEMENT ACTIONS COMMON TO ALL ALTERNATIVES
Health-8001	SR:4.1 SR:4.2	Identify, report, control, and mitigate imminent and potential hazards or threats to human health and/or the environment from hazardous substance releases and physical hazards.
Health-8002	SR:4.1	Manage the cleanup of hazardous substance and other contaminant spills and releases to reduce human health and/or environmental risk, reclaim and monitor contaminated lands, and carry out emergency response activities.
Health-8003	SR:4.3	Identify and prioritize abandoned mine sites for reclamation that most affect human health or safety, and the environment.
Health-8004	SR:4.4	Require, as appropriate, warning signs, sirens, and public education to prevent exposure by the public to hydrogen sulfide gas associated with oil and gas development and production. Develop and maintain a field office hydrogen sulfide gas safety plan to identify areas of potential hydrogen sulfide gas, appropriate safety distances, and access restrictions, if necessary.
Health-8005	SR:4.5	Ensure appropriate review of BLM-authorized activities and the application of effective management controls to minimize hazardous substance and other contaminant spills, releases, and physical hazards.
Health-8006	SR:4.1 SR:4.5	Reduce waste produced by BLM activities and from authorized uses of public lands through waste minimization practices that promote reducing, reusing, recycling, substituting, and other innovative methods of pollution prevention.
Health-8007	SR:4.3	Identify, monitor, and mitigate hazards to public health and safety from coal seamfires.

Note: NSO, CSU, and TSU stipulations identified in the management actions in Table 2.7, "1000 PHYSICAL RESOURCES (PR) – AIR QUALITY (AQ)" (p. 127) through Table 2.40, "8000 SOCIOECONOMIC RESOURCES (SR) – HEALTH AND SAFETY" (p. 275), apply only to fluid mineral leasing.

%-Percent
AAQS Ambient Air Quality Standard
ACEC Area of Critical Environmental Concern
ADA Americans With Disabilities Act
AMP Allotment Management Plan
APD Application for Permit to Drill
APHIS Animal and Plant Health Inspection Service
AQD Air Quality Division
AQ Air Quality
AQRV Air Quality Related Value
AUM Animal Unit Month
BFO Buffalo Field Office
BLM Bureau of Land Management
BMP Best Management Practice
BR Biological Resources
C Custodial Allotment
CBNG Coalbed Natural Gas
CFR Code of Federal Regulations
CO_2 Carbon Dioxide
COA Condition of Approval
CRMP Cultural Resources Management Plan
CRPP Cultural Resource Project Plans
CSU Controlled Surface Use
CWPP Community Wildfire Protection Plan
dBA A-weighted decibels
DDCT Disturbance Density Calculation Tool
DEQ Department of Environmental Quality
DFC Desired Future Condition
DOI Department of the Interior
EEA Environmental Education Area
EIS Environmental Impact Statement
EO Executive Order
ERMA Extensive Recreation Management Area
ESA Endangered Species Act
FAMS Facility Asset Management System
FM Fire and Fuels Management
H_2S Hydrogen Sulfide
HFRA Healthy Forest Restoration Act
HR Heritage and Visual Resources
I Improvement Allotment
IM Instruction Memorandum
kV kilovolt
LAC Limit of Acceptable Change
LOC Level of Concern
LR Land Resources
M Maintain Allotment
MMBF Million Board Feet
MOU Memorandum of Understanding
MR Mineral Resources
N/A Not Applicable
NAGPRA Native American Graves Protection and Repatriation Act
NEPA National Environmental Policy Act
NRC Nuclear Regulatory Commission
Natural Resources Conservation Service
NSO No Surface Occupancy
O&G Oil and Gas
OHV Off-Highway Vehicle
ORV Outstandingly Remarkable Value
PFC Proper Functioning Condition
PFYC Potential Fossil Yield Classification
PHMA Priority Habitat Management Area
PR Physical Resources
PRB Powder River Basin
R&PP Recreation and Public Purposes
R&VS Recreation and Visitor Services
RAMP Recreation Area Management Plan
RDF Required Design Feature
RMA Recreation Management Area
RMP Resource Management Plan
ROD Record of Decision
ROW right-of-way
RSC Recreation Setting Characteristic
SD Special Designations
SIP State Implementation Plan
SR Socioeconomic Resources
SRMA Special Recreation Management Area
SWAP State Wildlife Action Plan
TCP Traditional Cultural Property
TLS Timing Limitation Stipulation
TMA Travel Management Area
U.S.C. United States Code
USFWS United States Fish and Wildlife Service
VRI Visual Resource Inventory
VRM Visual Resource Management
WGFD Wyoming Game and Fish Department
WHMA Wildlife Habitat Management Area
WO Washington Office
WSA Wilderness Study Area
WSR Wild and Scenic River
WUI Wildland Urban Interface
WYNDD Wyoming Natural Diversity Database
WNv West Nile Virus

2.10. Summary of Environmental Consequences by Alternative

Table 2.41, "Summary of Environmental Consequences by Alternative" (p. 277) summarizes potential impacts under alternatives A through D. Where appropriate, the table quantifies potential impacts anticipated from BLM-authorized actions. Table 2.41, "Summary of Environmental Consequences by Alternative" (p. 277) summarizes impacts under the four alternatives in acres (e.g., more acreage implies more impact, either beneficial or adverse) or qualitative descriptions comparing the anticipated impacts among the alternatives (i.e., negligible, minor, moderate, or major). See the Scale of Impacts section in the Chapter 4 Introduction, for the definition of each of these terms as applied to the extent of anticipated impact. The *Summary of Impacts* section for each resource in Chapter 4 provides a more detailed comparison of impacts between alternatives. Chapter 4 describes cumulative impacts from non-BLM actions; Table 2.41, "Summary of Environmental Consequences by Alternative" (p. 277) does not include cumulative impacts.

The environmental consequences of alternatives are not anticipated to exceed known legal thresholds or standards over the life of this RMP, with the exception of air quality. Standard practices, RDFs, BMPs, and guidelines for surface-disturbing activities are built into each alternative to avoid and minimize potential impacts. The BLM would consider mitigation of residual impacts during subsequent implementation-level projects and any associated environmental analyses performed at that time. All alternatives include reclamation of surface disturbance to reduce long-term impacts.

Table 2.41. Summary of Environmental Consequences by Alternative

Resources	Alternative A	Alternative B	Alternative C	Alternative D
Air Quality				
NAAQS	May Exceed	May Exceed	May Exceed	May Exceed
WAAQS	May Exceed	May Exceed	May Exceed	May Exceed
AQRV Impacts	Minor Adverse	Minor Adverse	Minor Adverse	Minor Adverse
Visibility Impacts	Minor Adverse	Minor Adverse	Minor Adverse	Minor Adverse
Atmospheric Deposition	Minor Adverse	Minor Adverse	Minor Adverse	Minor Adverse
Soil and Water				
Acres of Surface Disturbance Anticipated	322,026 short-term/ 100,138 long-term	422,903 short-term/ 78,152 long-term	422,544 short-term/ 130,621 long-term	486,957 short-term/ 128,086 long-term
Soil with Severe Erosion Hazard (215,496 acres of BLM surface, 669,739 acres of fluid-mineral estate)	Surface-disturbing activities prohibited unless waived by authorized officer.	Surface-disturbing activities prohibited.	Surface-disturbing activities allowed consistent with other resource values.	Surface-disturbing activities allowed when resource objectives can be achieved.
Impacts from Long-term Erosion	Major Adverse	Minor Adverse	Major Adverse	Moderate Adverse
Produced Water Impact to Soils	Minor Adverse	Negligible Adverse	Minor Adverse	Minor Adverse
Impacts to Groundwater and Surface Water	Minor Adverse	Negligible Adverse	Moderate Adverse	Minor Adverse
Minerals				
Impacts to the Locatable Minerals Resource	Negligible Adverse	Major Adverse	Negligible Adverse	Major Adverse
Impacts to Coal Resources	No Effect	Moderate Adverse	No Effect	No Effect

Resources	Alternative A	Alternative B	Alternative C	Alternative D
Total Projected New Federal Conventional Oil and Gas Wells	1,828	7	1,990	1,773
Total Projected New Federal CBNG Wells	903	101	5,280	2,721
Impacts to the Salable Minerals Resource	Minor Adverse	Major Adverse	Minor Adverse	Moderate Adverse
Fire and Fuels Management				
Impacts of Restrictions to Implementation of Planned Ignitions	Negligible Adverse	Moderate Adverse	Minor Beneficial	Negligible Beneficial
Impacts to Goals and Strategies of Unplanned Ignitions	Minor Adverse	Moderate Adverse	Negligible Adverse	Negligible Beneficial
Vegetation				
Acres of Forests and Woodlands Treated to Provide Forest Products and Improve Forest Health	4,000 to 6,000	200 to 1,000	16,000 to 24,000	16,000 to 20,000
Impacts to Grasslands and Shrublands	Major Adverse	Minor Adverse	Major Adverse	Moderate Adverse
Surface-disturbing Activities within 500 feet of Riparian/Wetland Areas (23,831 acres)	Prohibited unless waived by the authorized officer	Prohibited	Allowed when consistent with other values	Allowed where resource objectives can be met
Invasive Species and Pest Management				
Potential to Spread Invasive and Non-native Species	Major Adverse	Minor Adverse	Major Adverse	Moderate Adverse
Fish and Wildlife				
Impacts to Water Quality and Fish Habitat	Moderate Adverse	Minor Adverse	Major Adverse	Minor Adverse
Acres of NSO Restrictions and Surface Disturbance Prohibition on Big Game Winter Ranges	4,583 (unless waived by the authorized officer)	4,583	0	4,583
Impact of Motorized Vehicle Use to Wildlife	Major Adverse	Minor Adverse	Major Adverse	Moderate Adverse
Special Status Species				
Impacts to Special Status Plant Species within the Planning Area	Negligible Adverse	Negligible Beneficial	Minor Adverse	Negligible Adverse
Impacts to Special Status Wildlife Species within the Planning Area	Major Adverse	Minor Adverse	Major Adverse	Moderate Adverse
Heritage				
Potential to Impact Eligible/Listed Cultural Sites	Moderate Adverse	Negligible Adverse	Minor Adverse	Negligible Adverse
Potential to Impact Paleontological Localities	Moderate Adverse	Negligible Adverse	Minor Adverse	Negligible Adverse

Resources	Alternative A	Alternative B	Alternative C	Alternative D
Visual Resources				
Percent of Planning Area Managed as VRM Class I-II[1]	19%	33%	5%	19%
Percent of Planning Area Managed as VRM Class III-IV[1]	81%	67%	95%	81%
Impact to Areas with Unique Scenic Features	Moderate Adverse	Negligible Adverse	Moderate Adverse	Minor Adverse
Renewable Energy				
Acres/Percent of BLM surface with Good or Better Wind Potential Managed as Renewable Energy Exclusion or Avoidance	0	49,099/ 99%	0	48,184/ 97%
Rights-of-Way and Corridors				
Potential To Limit the Development of ROWs	Moderate Beneficial	Major Adverse	Major Beneficial	Moderate Adverse
Miles/Acres of New Roads and Trails Due to ROW Authorizations	1,225/11,501	450/6,585	1,500/15,025	785/12,800
Travel and Transportation Management				
Miles of New Roads and Trails for Public Access	9	3	12	12
Recreation				
Impact Recreation Desired Settings, Opportunities, Activities, Experiences, and Beneficial Outcomes	Moderate Adverse	Major Beneficial	Major Adverse	Moderate Beneficial
Number/Total Acres of SRMAs	0/0	8/55,529	30,570	7/54,160
Lands with Wilderness Characteristics				
Impacts to Lands with Wilderness Characteristics	Moderate Adverse	Major Beneficial	Major Adverse	Moderate Beneficial
Livestock Grazing				
Total Authorized AUMs[2] Lost from Surface-disturbing Activities	8,352	6,615	11,526	12,241
Authorized AUMs[2] Projected at the End of the Planning Cycle/Percent Reduction from Baseline (106,078)	97,726/ 7.9%	44,538/ 58.0%	94,552/ 10.9%	93,837/ 11.5%
Special Designations				
Number/Acres Designated as ACECs	0/0	8/511,000	0/0	2/2,849
Impacts to the Middle Fork Powder River Suitable WSR	Negligible Adverse	Major Beneficial	Minor Adverse	Minor Beneficial
Socioeconomics				

Resources	Alternative A	Alternative B	Alternative C	Alternative D
Effect on Planning Area Population	Low Impact	Medium Impact (due to anticipated reductions focused in oil/gas service areas, which generally correspond to population centers)	Low Impact	Low Impact
Effect on Housing and Community Services	Low Impact	Medium Impact (due to anticipated population reductions)	Low Impact	Low Impact
Impacts on Quality of Life and Local Culture	Low Impact (continued policy of balanced use; no change from current conditions)	Low to Medium Impact (change from recent trends would constitute greater emphasis on resource conservation)	Low Impact (change from recent trends would constitute greater emphasis on resource development)	Low Impact (continued policy of balanced use, with some change from current conditions)
Forecasted annual earnings (millions of 2011 dollars) due to activities on BLM surface and federal mineral estate[3]	202.8	3.9	243.0	206.4
Forecasted Oil and Gas Tax Revenues (millions of 2011 dollars)	95.4	1.8	165.2	118.8
Forecasted annual employment due to activities on BLM surface and federal mineral estate[3]	3,482	109	4,206	3,562

[1] VRM classes establish a measurable standard for the amount of change allowed to a specific area's visual resource.
[2] Authorized AUMs are the AUMs actually billed for and paid for each year by the permittee/lessee.
[3] Estimate of annual earnings and employment includes direct, indirect, and induced economic activity (the "multiplier effect").

ACEC Area of Critical Environmental Concern
AUM animal unit month
AQRV Air Quality Related Value
BLM Bureau of Land Management
CBNG Coalbed Natural Gas
NAAQS National Ambient Air Quality Standards
NSO No Surface Occupancy
ROW rights-of-way
SRMA Special Recreation Management Area
VRM Visual Resource Management
WAAQS Wyoming Ambient Air Quality Standards
WSR Wild and Scenic River
% percent