Chapter 2

Proposed Action and Alternatives

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Chapter 2. Proposed Action and Alternatives

2.1 Changes between the Draft LUPA/EIS and Proposed LUPA/Final EIS

As a result of public comments, best science, cooperating agency coordination, and internal review of the Draft LUPA/EIS, the BLM and Forest Service have developed the Proposed LUPA/FEIS for managing BLM-administered and National Forest System lands in the Idaho and Southwestern Montana GRSG sub-region. The Proposed LUPA/FEIS focuses on addressing public comments, while continuing to meet the BLM's and Forest Service's legal and regulatory mandates. The Proposed LUPA/FEIS is a variation of the co-preferred alternative (Alternatives D and E), and is within the range of alternatives analyzed in the DEIS.

Changes made to the Proposed LUPA/FEIS from the co-preferred alternative (Alternatives D and E) in Draft LUPA/EIS are the following:

- During review of the DEIS, mapping adjustments were made in response to public comments and were based on agency field and personnel input and discussions with State of Idaho and USFWS (**Appendix N**). Specifically, adjustments were intended to address the broad scale nature of the initial map and to address disparities. Specifically, certain portions of the Alternative D and Alternative E maps still encompassed some areas of non-habitat, such as timber or farm lands; or they were missing some areas of potential restoration or other locally definable areas or habitat; or were designated inappropriately as Core and/or Important. As a result, in preparing the Proposed Plan/FEIS, BLM, Forest Service, USFWS and the State of Idaho worked together to refine the GRSG Habitat Management Area map. To resolve map disparities between Alternatives D and E, and to provide more recognizable boundaries of Habitat Management Areas on the ground, BLM and Forest Service worked closely with field personnel in December 2013. During the winter and spring of 2014, BLM and Forest Service also worked closely with the State of Idaho and USFWS (Idaho Fish and Wildlife Office, Boise) in re-evaluating the Core, Important or General Management Zone designations of Alternative E, in order to move forward with a map for the Proposed Plan that met BLM and Forest Service objectives for habitat and State of Idaho and USFWS objectives for populations.
- Allocations for PHMA, IHMA, and GHMA — allocations in the proposed plan/FEIS provide more opportunities for uses in GHMA, while still maintaining conservation management by establishing screening criteria for project/activity review in GRSG habitat. Allocations that were changed between the preferred Alternative and the Proposed Plan are as follows:
- Major ROWs in PHMA, analyzed as exclusion in Alternative D in the DEIS, were changed to Avoidance, and analyzed in the Proposed Plan.
- Major ROWs in GHMA, analyzed as avoidance in Alternative D in the DEIS, were changed to open, and analyzed in the Proposed Plan (Idaho).

- Minor ROWs in GHMA, analyzed as avoidance in Alternative D in the DEIS, were changed to open, and analyzed in the Proposed Plan.
- Solar development in PHMA, analyzed as avoidance in Alternative E in the DEIS, was changed to exclusion and analyzed in the Proposed Plan.
- Wind development in PHMA, was analyzed as Exclusion in the Proposed Plan. The Proposed Plan's allocation for wind is within the range of alternatives analyzed in the DEIS.
- Wind development in IHMA, was analyzed as Avoidance in the Proposed Plan. The Proposed Plan's allocation for wind is within the range of alternatives analyzed in the DEIS.
- Salable minerals in PHMA, analyzed as open in Alternative E in the DEIS, was changed to closed to new development and analyzed in the Proposed Plan.
- Non energy leasables in PHMA, analyzed as open in Alternative E in the DEIS, was changed to closed and analyzed in the Proposed Plan.
- Sagebrush Focal Areas (SFAs) — these areas have been identified in the Proposed Plan based on recommendations in a USFWS memorandum, and are proposed to be managed as PHMA with the following additional management: recommended for withdrawal; NSO without waiver, exception, or modification for fluid mineral leasing; and prioritized for management and conservation actions including, but not limited to review of livestock grazing permits/leases. Alternatives B and C recommended withdrawal from locatable minerals development; alternatives B and D proposed closure of PPMA to fluid mineral development whereas Alternative E proposed the Idaho Core Habitat Zone as open to fluid minerals with NSO. Alternatives C and F proposed no grazing in occupied GRSG habitat whereas other alternatives were open with varying management actions. See DEIS at Chapter 4. As such, the management of these areas as SFAs and the impacts of the associated management decisions was addressed in the DEIS and is qualitatively within the spectrum of alternatives analyzed.

  BLM and the Forest Service will manage these areas, totaling approximately 3,842,900 acres (3,606,100 acres of BLM; 236,800 acres of Forest Service) within the Idaho and Southwestern Montana sub-region, as SFAs because of the importance to the conservation of the species range-wide. Specifically, SFAs include characteristics such as existing high-quality sagebrush habitat; highest breeding densities; have been identified as essential to conservation and persistence of the species; represent a preponderance of current federal ownership and in some cases are adjacent to protected areas that serve to anchor the conservation importance of the landscape. While SFAs provide essential habitat for the conservation of GRSG, a broad, landscape approach that integrates appropriate conservation efforts across habitats occurring outside the SFAs, in accordance with the Proposed Plan, is also integral since effective

conservation strategies are predicated on identifying key areas across the landscape that are necessary to maintain redundant, representative and resilient GRSG populations (see LUPA/DEIS Issues **Section 1.5.2**, Management and Monitoring). In light of the landscape level approach to GRSG conservation provided through this planning effort and as defined by the characteristics set forth above, as well as additional considerations, including potential for impacts from climate change, fire and invasives, these areas have been identified as SFAs.

- As noted in the DEIS, the goals of this planning effort are to protect both the habitat and the species. While action Alternatives B through F, and portions of Alternative A emphasize a slightly different mix of resources and resource uses, all have goals to 1) conserve, enhance, and restore the sagebrush ecosystem that GRSG populations depend on in order to maintain or increase their abundance and distribution, in cooperation with other conservation partners; and 2) to protect GRSG habitats from disturbances that will reduce distribution or abundance of GRSG (see LUPA/DEIS **Section 2.2.1** Management Common To All Alternatives and **Table 2-17**). The BLM and Forest Service committed to using the best available scientific information to determine appropriate local and regional management strategies to enhance and restore GRSG habitats (see LUP/DEIS **Section 1.6.1** Preliminary Planning Criteria and **Section 4.1.2** Incomplete or Unavailable Information).

- USGS Buffer Study—Included a management action to incorporate the lek buffer-distances identified in the USGS report titled Conservation Buffer Distance Estimates for Greater Sage Grouse—A Review: USGS Open File Report 2014-1239 (Mainer et al. 2014) during NEPA analysis at the implementation stage. Although the buffer report was not available at the time of the DEIS release, applying these buffers was addressed in the DEIS and is qualitatively within the spectrum of alternatives analyzed. Specifically, (Alternatives B, C, D, E, and F) identified and analyzed allocation restrictions such as closure to fluid minerals, recommendation for locatable mineral withdrawal, elimination of grazing, saleable mineral restrictions, and ROW avoidance and exclusion. Alternatives B and C were the most restrictive. The following were analyzed in the DEIS: 1) closing PHMA to fluid minerals development (Alternatives B and C); 2) recommending withdrawal of PHMA to locatable minerals (Alternatives B and C); 3) closing occupied GRSG habitat to livestock grazing (Alternatives C and F); and 4) closing PHMA to salable minerals (Alternatives B, C, and F) and applying a 3 km buffer restriction for saleable minerals around leks (Alternative B). In addition to specific management actions designed to protect GRSG habitat, the DEIS included a Required Design Features and Best Management Practices Appendix D that applies protective measures during project implementation. However, the No Action was still the least restrictive of all alternatives analyzed. Accordingly, the management decision to require lek buffers for development within certain habitat types is within the range of alternatives analyzed.

- Adaptive management—Identification of hard and soft adaptive management triggers for population and habitat and identified appropriate management responses. Chapter 2 of the DEIS identified that the BLM/Forest Service would further develop the adaptive management approach by identifying hard and soft triggers and responses. All of the adaptive management hard trigger responses were analyzed within the range of alternatives. For example, in a Conservation Area, if a hard trigger is reached in IHMA, all IHMA in the Conservation Area would be managed as PHMA for all resources. Adaptive triggers were analyzed in Alternatives D and E of the Draft EIS

- Monitoring and Disturbance – The monitoring framework was further refined in the FEIS, and further clarification as to how disturbance cap calculations would be measured were developed for the FEIS. During the public comment period, BLM received comments on how monitoring and disturbance cap calculations would occur at implementation. The DEIS outlined the major components of the monitoring strategy, as well as provided a table portraying a list of anthropogenic disturbances that would count against the disturbance cap. A BLM Disturbance and Monitoring Sub-team further enhanced the three Appendices (**Appendix G**, Disturbance and Adaptive Management, **Appendix H**, Anthropogenic Disturbance Calculation, and **Appendix E**, GRSG Final Monitoring Framework) in the FEIS.

- Mitigation Strategy; Net Conservation Gain –The net conservation gain strategy is in response to the overall landscape-scale goal which is to enhance, conserve, and restore GRSG and its habitat. All of the action alternatives provided management actions to meet the landscape-scale goal (GRSG Goals: Goal 1, 2, 3 and 5; Special Status Species Objectives: MA-OBJ-1, 2, and 3; HM-OBJ-1 and 2; Vegetation Management Objectives VEG-OBJ-1, 2, and 3, Wildland Fire Management Objective Fuel-OBJ - 1). WAFWA Management Zone Cumulative Effects Analysis on GRSG – a quantitative cumulative effects analysis for GRSG was included in the FEIS. This analysis was completed to analyze the effects of management actions on GRSG at a biologically significant scale which as determined to be at the WAFWA Management Zone. The DEIS, in Chapter 4, included a qualitative analysis and identified that a quantitative analysis would be completed for the FEIS at the WAFWA Management Zone.

- Forest Service Plan Amendment—Chapter 2 separates the Forest Service Proposed Plan and the BLM Proposed Plan. This is because the Forest Service has different guidance for writing planning language; however, the actions are basically the same for both the BLM and FS under the Proposed Plan.

- Public Comment on DEIS—Updated the FEIS based on public comment received on the DEIS (see **Appendix T**, Public Comment Report)

NEPA requires agencies to prepare a supplement to the draft EIS if: 1) 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 is qualitatively within the spectrum of alternatives analyzed in the Draft EIS.

The Proposed LUPA includes components of the alternatives analyzed in the Draft EIS. Taken together, these components present a suite of management decisions that present a minor variation of the preferred alternative identified in the Draft LUPA/Draft EIS and are qualitatively within the spectrum of alternatives analyzed.

As such, the BLM has determined that the Proposed LUPA is a minor variation of the preferred alternative and that the impacts of the Proposed LUPA 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/Final EIS are similar or identical to those described Draft LUPA/Draft EIS.

2.2 Introduction

The LUPA/EIS complies with NEPA, which directs the BLM and Forest Service to "study, develop, and describe appropriate alternatives to recommended courses of action in any proposal that involves unresolved conflicts concerning alternative uses of available resources…" (NEPA Section 102[2][e]). At the heart of the alternative development process is the required development of a reasonable range of alternatives. Public and internal (within BLM and Forest Service) scoping (see **Section 1.5**, Scoping and Identification of Issues) identified issues that present opportunities for alternative courses of action, while the purpose and need for action described in **Section 1.2**, Purpose and Need, provides sideboards for determining "reasonableness."

This chapter introduces and details the Proposed Plan. The Proposed Plan is a mix of management actions selected from the range of alternatives in the Draft LUPA/EIS and is based on best science, public scoping comments, public comments on the Draft LUPA/EIS and internal agency discussion. The alternatives that were in the Draft LUPA/EIS are also included in this chapter. These include the No Action Alternative, which would continue the existing policies of the BLM and Forest Service; five action alternatives; and the alternatives considered but eliminated from detailed analysis.

The identification of the co-Preferred Alternatives in the Draft LUPA/EIS did not constitute a commitment or decision in principle, and there is no requirement to select either of the co-Preferred Alternatives or any of the separate alternatives presented in the Draft LUPA/EIS in the Final LUPA/EIS as the Proposed Plan. The BLM and Forest Service have the discretion to select any of the alternatives as their Preferred Alternative(s) in the Draft LUPA/EIS. The agencies also have the discretion to modify the Preferred Alternative(s) between the Draft EIS and the Final EIS into the Proposed Plan. The modifications are allowable as long as the actions presented in the Proposed Plan within the Proposed LUPA/Final EIS were within the range of alternatives in the Draft EIS. The various parts of the separate alternatives that were analyzed in the Draft EIS can be "mixed and matched" to develop an alternative – known as the Proposed Plan - in the Final EIS, as long as the reasons for doing so are explained (40 CFR 1506.2(b)).

2.3 Introduction to Draft Alternatives

LUP decisions consist of identifying and clearly defining goals and objectives (desired outcomes) for resources and resource uses, followed by developing allowable uses and management actions necessary for achieving the goals and objectives. These critical determinations guide future land management actions and subsequent site-specific implementation actions to meet multiple use and sustained yield mandates while sustaining land health.

2.3.1 Components of Alternatives

Goals are broad statements of desired (LUP-wide and resource- or resource-use-specific) outcomes and are not quantifiable or measurable. Objectives are specific measurable desired conditions or outcomes intended to meet goals. Goals and objectives can vary across alternatives, resulting in different allowable uses and management actions for some resources and resource uses. Forest Service objectives are also time specific.

Management actions and allowable uses are designed to achieve objectives. Management actions are measures that guide day-to-day and future activities. Allowable uses delineate which uses are permitted, restricted, or prohibited, and may include stipulations or restrictions. Allowable uses also identify lands where specific uses are excluded to protect resource values, or where certain lands are open or closed in response to legislative, regulatory, or policy requirements. Implementation decisions are site-specific on-the-ground actions and are typically not addressed in LUPs.

On National Forest System lands, forest plans guide management activities and contain desired conditions and objectives as well as standards and guidelines that provide direction for project planning and design. Desired conditions are descriptions of specific social, economic, and/or ecological characteristics of the plan area, or a portion of the plan area, toward which management of the land and resources should be directed. Standards are mandatory constraints on project and activity decision making. Not meeting a standard would require a site-specific forest plan amendment. A guideline is a constraint on project and activity decision making that allows for departure from its terms, so long as the purpose of the guideline is met.

2.3.2 Purpose of Alternatives Development

Land use planning and NEPA regulations require the BLM and Forest Service to formulate a reasonable range of alternatives. Alternative development is guided by established planning criteria (as outlined for the BLM at 43 CFR 1610) (see **Chapter 1**).

The NEPA regulations at 40 CFR Part 1501.2(c) states that Federal agencies shall: "Study, develop, and describe appropriate alternatives to recommended courses of action in any proposal which involves unresolved conflict concerning alternatives uses of available resources…."

The basic goal of alternative development is to produce distinct potential management scenarios that:

- Address the identified major planning issues;
- Explore opportunities to enhance management of resources and resource uses;
- Resolve conflicts among resources and resource uses; and
- Meet the purpose of and need for the LUP or LUPA.

Pursuit of this goal provides the BLM, Forest Service, and the public with an appreciation for the diverse ways in which conflicts regarding resources and resource uses might be resolved, and offers the decision maker a reasonable range of alternatives from which to make an informed decision. The components and broad aim of each alternative considered for the Idaho and Southwestern Montana GRSG LUPA/EIS are discussed below.

2.4 Alternative Development Process for the Idaho and Southwestern Montana Greater Sage-Grouse Land Use Plan Amendment

The Idaho and Southwestern Montana GRSG LUPA/EIS planning team employed the BLM planning process (outlined in **Section 1.4**, Planning Process) to develop a reasonable range of alternatives for the LUPA/EIS. The BLM and Forest Service complied with NEPA and the CEQ implementing regulations at 40 CFR Part 1500 in the development of alternatives for this Proposed LUPA/EIS, including seeking public input and analyzing reasonable alternatives. Where necessary to meet the planning criteria, to address issues and comments from cooperating agencies and the public, or to provide a reasonable range of alternatives, the alternatives include management options for the planning area that would modify or amend decisions made in the applicable LUP. Since this LUPA/EIS will specifically address GRSG conservation, many decisions within existing LUPs that do not impact GRSG are acceptable and reasonable; in these instances, there is no need to develop alternative management prescriptions.

Public input received during the scoping process was considered to identify significant issues deserving of detailed study to help identify alternatives. The planning team developed planning issues to be addressed in the LUPA/EIS, based on broad concerns or controversies related to conditions, trends, needs, and existing and potential uses of planning area lands and resources. All comments were reviewed to determine whether they identified significant issues or unresolved conflicts.

2.4.1 Develop a Reasonable Range of Alternatives

Based on scoping and collaboration efforts, the BLM and Forest Service finalized their planning criteria and identified 13 key planning issues to help frame the alternatives development process. Following the close of the public scoping period in March 2012, the BLM and the Forest Service began the alternatives development process. Between May and September 2012, the planning team (BLM, Forest Service, and cooperating agencies) met to develop management goals and to identify objectives and actions to address the goals. The

various groups met numerous times throughout this period to refine their work. As outcomes of this process, the planning team:

- Developed one No Action Alternative (Alternative A) and three preliminary action alternatives. The first action alternative (Alternative B) is based on A Report on National Greater Sage-Grouse Conservation Measures (NTT 2011), and the two additional action alternatives (Alternative C and F) are based on proposed alternatives submitted by various conservation groups.
- Customized the objectives and actions from the NTT-based alternative (Alternative B) to develop a third action alternative (Alternative D) that strives for balance among competing interests.
- Incorporated proposed GRSG protection measures recommended by state governments as a fifth alternative (Alternative E).

Each of the preliminary action alternatives in the Draft LUPA/EIS was designed to:

- Address the 13 planning issues (identified in Section 1.5.3);
- Fulfill the purpose and need for the LUPA (outlined in Section 1.2, Purpose and Need); and
- Meet the multiple use mandates of the FLPMA (43 CFR 1716), MUSYA and NFMA.

2.4.2 Resulting Range of Alternatives in Draft LUPA/EIS

The five resulting action alternatives (Alternatives B, C, D, E, and F) in the Draft LUPA/EIS offer a range of management approaches to maintain or increase GRSG abundance and distribution of GRSG by conserving, enhancing, or restoring the sagebrush ecosystem upon which GRSG populations depend in collaboration with other conservation partners. While the goal is the same across all the alternatives, each alternative contains a discrete set of objectives and management actions constituting a separate LUPA. The goal is met in varying degrees, with the potential for different long-range outcomes and conditions.

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 2.9**, Summary Comparison of Proposed Plan Amendment and Draft Alternatives. **Section 2.10**, Detailed Description of Draft Alternatives, also provides a complete description of the proposed decisions for each alternative, including the project goal and objectives, management actions, and allowable uses for individual resource programs. Maps and figures in **Appendix A** provide a visual representation of differences between alternatives. In some instances, varying levels of management 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.

2.4.3 Selection of and Rationale for identifying the co-Preferred Alternatives

The BLM and Forest Service selected Alternatives D and E as its co-preferred alternatives, which were presented in the Draft RMP/EIS, released in October 2013. The BLM and Forest Service selected the co-preferred alternatives based on interdisciplinary team recommendations, environmental consequences analysis of the alternatives, cooperating agency input, and public input during scoping.

Alternative D provides LUP guidance and conservation measures to address all GRSG threats for BLM- and Forest Service-managed programs that affect GRSG or their habitat. It provides a consistent approach to BLM and Forest Service management within the entire sub-region. It is also consistent with existing regulations and policy.

Alternative E provides LUP guidance focusing on the primary threats to GRSG in Idaho (e.g., wildfire, invasive species and infrastructure development). It also includes LUP guidance for some other secondary GRSG threats (e.g., recreation, improper livestock grazing and West Nile virus) on BLM and Forest Service programs which affect GRSG or their habitat. This alternative also includes four foundational elements: habitat zones; conservation areas; population objectives; and adaptive triggers.

Alternatives D and E both categorize GRSG habitat into three delineations which differentiate them from the other alternatives analyzed in the Draft LUPA/EIS. Alternative D names these Priority Habitat Management Areas (PHMA), Important Habitat Management Areas (IHMA), and General Habitat Management Areas (GHMA). Alternative E names these categories Core Habitat Zones (CHZ), Important Habitat Zones (IHZ), and General Habitat Zones (GHZ).

The BLM used the impact analysis, along with knowledge of specific issues raised throughout the planning process; recommendations from the tribes, cooperating agencies, and BLM and Forest Service resource specialists; consideration of planning criteria; and anticipated resolution of resource conflicts to identify Alternatives D and E as co-Preferred Alternatives from the suite of alternatives analyzed. Specifically, the selection of the co-Preferred Alternatives was based on the following:

- Achievement of BLM goals and policies; and
- Consideration of cooperating agencies and BLM specialists' recommendations.

See **Section 2.6.1**, Development of the Proposed Plan Amendment for GRSG Management, for a discussion of the how the Proposed Plan Amendments were developed.

2.5 BLM/Forest Service Resource Programs for Addressing GRSG Threats

The action alternatives are directed towards responding to USFWS-identified issues and threats to GRSG and its habitat. The USFWS threats do not necessarily align with BLM and Forest Service resource program areas, and are often integrated into several different agency resource program areas. **Table 2-1**, USFWS Threats to GRSG and Their Habitat, Applicable BLM and Forest Service Proposed Plan Resource Program Areas Addressing these Threats, provides a cross-walk between each of the USFWS listing decision and COT identified threats and the BLM and the Forest Service resource program areas and shows how those threats were addressed in the BLM and the Forest Service land use plan.

2.6 Proposed Plan Amendment

2.6.1 Development of the Proposed Plan Amendment for GRSG Management

In developing the Proposed Plan Amendment, the BLM and Forest Service made modifications to the co-Preferred Alternatives identified in the Draft LUPA/EIS. The modifications are based on public comments received on the Draft LUPA/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 GRSG. As a result, the Proposed Plan Amendment provides consistent GRSG habitat management across the range, prioritizes development outside of GRSG habitat, and focuses on a landscape-scale approach to conserving GRSG habitat. Differences between the Proposed Plan and the co-preferred alternatives are presented in **Appendix EE**.

Since release of the Draft LUPA/EIS, the BLM and Forest Service 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 cooperation, the BLM and Forest Service have developed a Proposed Plan Amendment that takes into account state, Tribal, and local plans, policies, and strategies in accordance with applicable law, and contributes to the long-term conservation of the GRSG. The BLM and Forest Service also received many substantive public comments on the Draft LUPA (**Appendix T**), which greatly informed the BLM's and Forest Service's development of the Proposed Plan Amendment.

The BLM's and Forest Service's Proposed Plan Amendment considers documents related to the conservation of GRSG that have been released since the publication of the draft LUPA/EIS. For example, this Proposed Plan Amendment considers the USFWS' October 27th, 2014 memorandum *"Greater Sage-Grouse: Additional Recommendations to Refine Land Use Allocations in Highly Important Landscapes"* and the USGS' November 21st, 2014 report *"Conservation Buffer Distance Estimates for Greater Sage-Grouse—A Review" (USGS 2014)*. Based on these documents, the BLM is proposing to designate SFAs to further protect highly valuable habitat and is proposing to include lek-buffer distances when authorizing activities near leks. The BLM and Forest Service also updated the Proposed Plan Amendment to reflect new GRSG state conservation strategies, including recent State Executive Orders.

Table 2-1
USFWS Threats to GRSG and Their Habitat, Applicable BLM and Forest Service Proposed Plan Resource Program Areas Addressing these Threats

USFWS-Identified Threats to GRSG and Its Habitat (2010 warranted but precluded finding)	COT Report-Identified Threats to GRSG and Its Habitat (2013)	Applicable BLM/Forest Service Proposed Plan Resource Program Addressing Threat[1]
Wildland Fire	Fire	BLM: Wildland Fire Management Forest Service: Fire Management
Invasive Species	Nonnative, Invasive Plants Species	BLM: Vegetation Management, Range Management, Wildland Fire Management, and Recreation Forest Service: GRSG Habitat, Fire Management, and Roads and Transportation
Oil and Gas For wind energy development, see *Infrastructure – power lines/pipelines, roads (below)*	Energy Development	BLM: Lands and Realty and Fluid Minerals Forest Service: Lands and Realty and Fluid Minerals
Prescribed Fire	Sagebrush Removal	BLM: Vegetation Management and Wildland Fire Management Forest Service: GRSG Habitat and Fire Management
Grazing	Grazing	BLM: Range Management, Wild Horse and Burro Management, Special Status Species, and Vegetation Management Forest Service: Livestock Grazing and Wild Horse and Burro Management
See *Grazing Management (above)*	Range Management Structures	BLM: Range Management Forest Service: Livestock Grazing
No similar threat identified	Free-Roaming Equid Management	BLM: Wild Horse and Burro Management Forest Service: Wild Horse and Burro Management
Conifer Encroachment	Pinyon and/or Juniper Expansion	BLM: Wildland Fire Management and Vegetation Management Forest Service: Fire Management and GRSG Habitat
Agriculture & Urbanization	Agricultural Conversion and Ex-Urban Development	BLM: Lands and Realty Forest Service: Lands and Realty/Land Ownership Adjustments

Table 2-1
USFWS Threats to GRSG and Their Habitat, Applicable BLM and Forest Service Proposed Plan Resource Program Areas Addressing these Threats

USFWS-Identified Threats to GRSG and Its Habitat (2010 warranted but precluded finding)	COT Report-Identified Threats to GRSG and Its Habitat (2013)	Applicable BLM/Forest Service Proposed Plan Resource Program Addressing Threat[1]
Hard Rock Mining	Mining	BLM: Lands and Realty, Locatable Minerals, Salable Minerals, and Non-energy Leasable Minerals Forest Service: Locatable Minerals, Non-energy Leasable Minerals, and Mineral Materials
See Infrastructure, Roads	Recreation	BLM: Recreation and Trails and Travel Management Forest Service: Recreation and Roads/ Transportation
Infrastructure - Power lines/ pipelines - Roads - Communication sites - Railroads Range improvements (see below)	Infrastructure	BLM: Lands and Realty and Trails and Travel Management Forest Service: Lands and Realty and Roads/ Transportation
Infrastructure – Range Improvements	Range Management Structures	BLM: Range Management Forest Service: Livestock Grazing
Water Developments	No similar threat identified	All applicable programs
Climate Change	No similar threat identified	*There is no BLM or Forest Service resource program in the proposed plan addressing this threat.*
Weather	No similar threat identified	*There is no BLM or Forest Service resource program in the proposed plan addressing this threat.*
Predation	No similar threat identified	BLM: All applicable programs Forest Service: GRSG Habitat, Land and Realty, and Minerals
Disease	No similar threat identified	BLM: All applicable programs Forest Service: Minerals/Fluid Mineral Operations

Table 2-1
USFWS Threats to GRSG and Their Habitat, Applicable BLM and Forest Service Proposed Plan Resource Program Areas Addressing these Threats

USFWS-Identified Threats to GRSG and Its Habitat (2010 warranted but precluded finding)	COT Report-Identified Threats to GRSG and Its Habitat (2013)	Applicable BLM/Forest Service Proposed Plan Resource Program Addressing Threat[1]
Hunting	No similar threat identified	*There is no BLM or Forest Service resource program in the proposed plan addressing this threat.*
Contaminants	No similar threat identified	BLM: Public Health and Safety Forest Service: Mineral

Source: USFWS 2010, 2013
[1] For management associated with each resource program, see **Section 2.6.2** for the BLM Proposed Plan and **Section 2.6.3** for the Forest Service Proposed Plan

On October 27, 2014, the USFWS provided the BLM and Forest Service a memorandum titled "Greater Sage-Grouse: Additional Recommendations to Refine Land Use Allocations in Highly Important Landscapes". The memorandum and associated maps provided by the USFWS identify areas that represent recognized "strongholds" for GRSG that have been noted and referenced as having the highest densities of GRSG and other criteria important for the persistence of the species. Within these areas, the BLM/FS identified Sagebrush Focal Areas (SFAs), which are PHMAs with the following additional management (Figure 2-3):

1) Recommended for withdrawal from the Mining Law of 1872, subject to valid existing rights.

2) Managed as NSO, without waiver, exception, or modification, for fluid mineral leasing.

3) Prioritized for management and conservation actions in these areas, including, but not limited to review of livestock grazing permits/leases (see livestock grazing section for additional actions).

The BLM and Forest Service have refined the Proposed Plan Amendment to provide a layered management approach that offers the highest level of protection for GRSG in the most valuable habitat. Land use allocations in the Proposed Plan would limit or eliminate new surface disturbance in PHMA, while minimizing disturbance in GHMA. In addition to establishing protective land use allocations, the Proposed Plan Amendment would implement a suite of management tools such as disturbance limits (**Appendix G**), GRSG habitat objectives and monitoring (**Appendix E**), mitigation approaches (**Appendix J**), adaptive management triggers and responses (**Appendix G**), and lek buffer-distances (**Appendix B**) throughout the range. These overlapping and reinforcing conservation measures will work in concert to improve GRSG habitat condition and provide clarity and consistency on how the BLM/FS will manage activities in GRSG habitat.

For the sake of clarity, BLM and Forest Service decisions have been separated into two sections (described in **Sections 2.6.2** and **2.6.3**, respectively) in the Proposed Plan Amendment.

2.6.2 BLM Proposed Plan Amendment

The Proposed Plan represents a management strategy to address GRSG, their habitat and associated threats within the Idaho and Southwestern Montana Sub-region. The Plan has been developed through a coordinated partnership of BLM, Forest Service, the States of Idaho and Montana and the USFWS.

The Plan incorporates appropriate conservation measures to conserve, enhance, and restore GRSG habitat by reducing, eliminating, or minimizing threats to that habitat. The Plan is also consistent with the objectives described in the USFWS Conservation Objectives Team Report (USFWS 2013) to: 'Conserve sage-grouse so that it is no longer in danger of

extinction or likely to become in danger of extinction in the foreseeable future…' through 'Maintaining viable, connected, and well-distributed populations and habitats across [the range of GRSG], through threat amelioration, conservation of key habitats, and restoration activities'.

To achieve these objectives the Plan includes a combination of: goals and objectives including vegetation/habitat management objectives to be applied during project development and implementation (**Table 2-3**); land allocation decisions (**Table 2-2**, Idaho and Southwestern Montana GRSG EIS – Land Allocation Decisions Summary[1]); delineation of five Conservation Areas (**Figure 2-1**) to support evaluation of the adaptive management strategy and 3 percent anthropogenic disturbance cap; delineation of PHMA, IHMA, GHMA, and SFAs (**Figures 2-2** and **2-3**) with associated program management direction; a mitigation framework and strategy; development of Wildfire and Invasive Species Assessments; and associated monitoring to support these decisions.

The decisions described in this Plan apply to BLM lands in both Montana and Idaho unless identified differently. Several notable differences include the Adaptive Management Strategy and the Disturbance Density evaluation. In both cases Idaho and Southwestern Montana have separate approaches which are described in the applicable sections. Southwestern Montana's approach in both cases is the same as the approaches being applied in the rest of Montana; this supports a consistent approach within the entire state that can be implemented in coordination with State and Federal partners.

The proposed plan incorporates the following GRSG goals:

GOAL-1: Maintain and/or increase the abundance, distribution and connectivity of GRSG by conserving, enhancing and restoring GRSG habitat to maintain resilient populations by reducing, eliminating or minimizing threats to GRSG habitats.

GOAL-2: Provide for the needs of GRSG and their habitat while also providing for resource uses in accordance with the agencies' direction for multiple use and sustained yield as described in FLPMA and the NFMA.

GOAL-3: Manage anthropogenic development and human disturbance to minimize the likelihood of adverse population level effects on GRSG.

GOAL-4: Reduce the risk of West Nile Virus or other disease outbreaks from BLM and Forest Service management actions.

GOAL-5: Conserve, enhance, and restore the sagebrush ecosystem upon which GRSG populations depend in an effort to maintain and/or increase their abundance and distribution, in cooperation with other conservation partners.

Table 2-2
Idaho and Southwestern Montana GRSG EIS – Land Allocation Decisions Summary[1]

PHMA	IHMA	GHMA
Solar/Wind/Nuclear/Hydropower – Figure 2-4		
Exclusion (LR-2)	Avoidance (LR-2)	Idaho: Open (LR-2) Montana: Avoidance
Commercial Service Airports – Figure 2-6		
Exclusion (LR-3)	Avoidance (LR-1)	Open (LR-1)
Landfills – Figure 2-6		
Exclusion (LR-4)	Avoidance (LR-1)	Open (LR-1)
Utility Corridors – Figure 2-7		
Existing designated corridors which are land use plan designations (and include Section 368 Corridors), will remain "open" (subject to the ongoing settlement agreement) and can provide an opportunity to be modified with mitigation. Any new disturbance within these corridors would count towards the disturbance cap. All new, modified, or deleted corridors will require a land use plan amendment. (LR-7)	Same as PHMA (LR-7)	Same as PHMA (LR-7)
ROWs and Land Use Authorizations/Permits – High Voltage Transmission Lines and Large Pipelines – Figure 2-8		
Avoidance (LR-1)	Avoidance (LR-1)	Idaho: Open (LR-1) Montana: Avoidance
ROWs and Land Use Authorizations/Permits – Minor ROWs– Figure 2-9		
Avoidance (LR-1)	Avoidance (LR-1)	Open (LR-1)

Note:
[1] The Idaho and Southwestern Montana Subregion includes portions of Idaho, Montana and Utah. Where differences exist between direction for Idaho and Montana or between BLM and Forest Service, those are noted in the table and within the management action section. The lands within Utah are part of the Sawtooth National Forest and are managed as such; therefore direction for these lands in Utah is the same as that described for the Sawtooth National Forest in Idaho.

Table 2-2
Idaho and Southwestern Montana GRSG EIS – Land Allocation Decisions Summary[1]

PHMA	IHMA	GHMA
Land Tenure Adjustments – Figure 2-10		
Lands classified as PHMA, IHMA, and GHMA for GRSG will be retained in federal management unless: (1) the agency can demonstrate that disposal of the lands will provide a net conservation gain to the GRSG or (2) the agency can demonstrate that the disposal of the lands will have no direct or indirect adverse impact on conservation of the GRSG. (LR-14)	Same as PHMA (LR-14)	Same as PHMA (LR-14)
Fluid Mineral Resource Allocation (Includes Geothermal) – Figures 2-11 and 2-12		
Idaho and Montana: Open subject to No Surface Occupancy (NSO) without waiver, or modification. (FLM-1)	Idaho: Open subject to NSO with a limited exception. Montana: Not Applicable (FLM-1)	Idaho and Montana: Open subject to Controlled Surface Use and Timing Limitations (FLM-1)
Locatable Minerals – Figure 2-13		
All PHMA within SFA are recommended for withdrawal. Areas not previously withdrawn are open.	Areas not previously withdrawn are open.	Same as IHMA
Non-Energy Leasables – Figure 2-14		
Closed to leasing. (NEL-1) There are no Known Phosphate Leasing Areas (KPLAs) in PHMA.	KPLAs are Open subject to standard leasing stipulations. Areas outside KPLAs are Open subject to standard and GRSG stipulations (required design features, seasonal timing restrictions). (NEL-1)	Open to leasing with standard and GRSG stipulations (required design features and seasonal timing restrictions) (NEL-1)

Note:
[1] The Idaho and Southwestern Montana Subregion includes portions of Idaho, Montana and Utah. Where differences exist between direction for Idaho and Montana or between BLM and Forest Service, those are noted in the table and within the management action section. The lands within Utah are part of the Sawtooth National Forest and are managed as such; therefore direction for these lands in Utah is the same as that described for the Sawtooth National Forest in Idaho.

Table 2-2
Idaho and Southwestern Montana GRSG EIS – Land Allocation Decisions Summary[1]

PHMA	IHMA	GHMA
Mineral Materials (Salable Minerals) – Figure 2-15		
Closed to new site authorizations. Existing sites Open to new free use subject to RDFs, buffers and seasonal timing restrictions. (SAL-1)	Open to new site authorizations subject to Anthropogenic Disturbance Criteria (AD-4). Existing sites Open to new sales subject to seasonal timing restrictions. (SAL-1)	Open to new site authorizations subject to RDFs, buffers and seasonal timing restrictions. Existing sites Open to new sales subject to seasonal timing restrictions. (SAL-1)
Travel Management – Figure 2-16		
BLM Idaho: Limited to Existing (TM-1) BLM Montana: Limited to Designated (Decisions described in Dillon RMP)	BLM: Limited to Existing (TM-1)	BLM: Limited to Existing (TM-1) BLM Montana: Limited to Designated (Decisions described in Dillon RMP)

Note:
[1] The Idaho and Southwestern Montana Subregion includes portions of Idaho, Montana and Utah. Where differences exist between direction for Idaho and Montana or between BLM and Forest Service, those are noted in the table and within the management action section. The lands within Utah are part of the Sawtooth National Forest and are managed as such; therefore direction for these lands in Utah is the same as that described for the Sawtooth National Forest in Idaho.

Special Status Species

Objectives

MA-OBJ-1 (Management Area – Objective): Maintain a resilient population of GRSG in Idaho and Southwestern Montana.

MA-OBJ-2: Designate GRSG management areas and associated management to maintain a resilient population and to designate strategically located adjacent areas to provide a buffer from unpredictable habitat loss such as wildfire to the resilient population areas.

MA-OBJ-3: Identify and strategically protect larger intact sagebrush areas and areas of lower fragmentation to maintain GRSG population persistence.

HM-OBJ-1 (Habitat Management): Maintain or make progress toward at least 70 percent of lands within PHMAs and IHMAs capable of producing sagebrush at 10 to 25 percent canopy cover and conifers absent to uncommon within 1.86 miles of occupied leks.

HM-OBJ-2: Incorporate GRSG Seasonal Habitat Objectives (**Table 2-3**, Seasonal Habitat Desired Conditions for GRSG on BLM-Administered Lands) into the design of projects or activities, as appropriate, based on site conditions and ecological potential, unless achievement of fuels management objectives require additional reduction in sagebrush cover to meet strategic protection of GRSG habitat and conserve habitat quality for the species or at least one of the following conditions can be demonstrated and documented in the NEPA analysis associated with the specific project:

- 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 GRSG or its habitat (based on appropriate scientific findings); or
- Analysis concludes that following a specific objective would provide no more protection to GRSG or its habitat than not following it, for the project being proposed.

Table 2-3
Seasonal Habitat Desired Conditions for GRSG on BLM-Administered Lands

Attribute	Indicator	Desired Condition	Reference
BREEDING HABITAT (LEK AND NESTING/EARLY BROOD REARING)			
Breeding and Nesting (Seasonal Use Period March 1 – June 15)[1]			
Lek Security	Proximity of trees	Trees (i.e., in Idaho mainly juniper, conifers, and does not include old-growth juniper, pinyon pine and mountain mahogany; in Montana mainly Douglas-fir) absent or uncommon on shrub/grassland ecological sites within 1.86 miles (3 km) of occupied leks.	Baruch-Mordo et al. 2013[7] Stiver et al. *in press*[13]
	Proximity of sagebrush to leks	Adjacent protective sagebrush cover within 328 ft. (100 m) of an occupied lek	Stiver et al. *in press*[13]
NESTING/EARLY BROOD REARING[1,5,10,12,13,14]			
Cover and Food	Seasonal habitat extent (Percent of Seasonal Habitat Meeting Desired Conditions)	>80% of the nesting habitat meets the recommended vegetation characteristics, where appropriate (relative to ecological site potential, etc.).	Connelly et al. 2000[8]
	Sagebrush cover [2]	15-25%	Connelly et al. 2000[8] Connelly et al. 2003[9] Hagen et al. 2007[11]
	Sagebrush height Arid sites[3] Mesic sites[4]	 12-31 inches (30-80cm) 16-31 inches (40-80cm)	Connelly et al. 2000[8]
	Predominant sagebrush shape	Predominantly spreading shape[5]	Stiver et al. *in press*[13]
	Perennial grass cover [2] Arid sites[3] Mesic sites[4]	 ≥10% ≥15%	Connelly et al. 2000[8] Stiver et al. *in press*[13]
	Perennial grass (and forb) height	≥ 7 inches	Connelly et al. 2000[8] Connelly et al. 2003[9] Hagen et al. 2007[11] Stiver et al. *in press*[13]
	Perennial forb cover [2] Arid sites[3] Mesic sites[4]	 ≥5% ≥10%	Connelly et al. 2000[8]
	Perennial forb availability	Preferred forbs are common with several species present[6]	Stiver et al. *in press*[13]

Table 2-3
Seasonal Habitat Desired Conditions for GRSG on BLM-Administered Lands

Attribute	Indicator	Desired Condition	Reference
LATE BROOD-REARING/SUMMER[1, 15] (July-October)[1] Late brood-rearing areas, such as riparian, meadows, springs, higher elevation mesic uplands, etc. may occur within other mapped seasonal habitat areas. Apply late brood rearing/summer habitat desired conditions locally as appropriate.			
Cover and Food	Seasonal habitat extent (Percent of Seasonal Habitat Meeting Desired Condition)	>40% of the summer/brood habitat meets recommended brood habitat characteristics where appropriate (relative to ecological site potential, etc.)	Connelly et al. 2000[8]
	Sagebrush cover[2]	Uplands 10-25% Riparian/Meadow: Sagebrush cover within 100 m	Connelly et al. 2000[8]
	Sagebrush height	16 to 32 inches (40-80cm)	Connelly et al. 2000[8]
	Perennial grass and forb cover [2]	>15%	
	Upland and riparian perennial forb availability [2]	Preferred forbs are common with appropriate numbers of species present[6]	Stiver et al. *in press*[13]
	Riparian and/or meadow habitat condition	Proper Functioning Condition	Stiver et al. *in press*[13]
WINTER[1] November-March[1] (Apply to areas of known or likely winter-use)			
Cover and Food	Seasonal habitat extent (Percent of Seasonal Habitat Meeting Desired Condition)	>80% of the wintering habitat meets winter habitat characteristics where appropriate (relative to ecological site, etc.).	Connelly et al. 2000[8]
	Sagebrush cover and height above snow[5]	Sagebrush is at least 10 inches (25 cm) above snow and ≥10% cover[16]	Connelly et al. 2000[8] Stiver et al. *in press*[13]

NOTES AND REFERENCES

[1] Seasonal dates can be adjusted by local unit according to geographic region.
[2] Since plant species and/or life forms may overlap, total vegetative cover, inclusive of shrubs, forbs and grasses may exceed 100%.
[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]Baruch-Mordo, S., J. S. Evans, J. P. Severson, D. E. Naugle, J. D. Maestas, J. M. Kiesecker, M. J. Falkowski, C.

Table 2-3
Seasonal Habitat Desired Conditions for GRSG on BLM-Administered Lands

Attribute	Indicator	Desired Condition	Reference

A. Hagen, and K. P. Reese. 2013. Saving sage-grouse from trees. Biological Conservation 167:233-241.
[8] 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.
[9] 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.
[10]Doherty, K. 2008. Sage-grouse and Energy Development: Integrating Science with Conservation Planning to Reduce Impacts. Ph.D. Dissertation. University of Montana, Missoula, MT.
[11] 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.
[12]Holloran, M. J., and S. H. Anderson. 2005. Spatial Distribution of Greater Sage-grouse nests in relatively contiguous sagebrush habitats. Condor 107:742-752.
[13]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: A Multi-scale Habitat Assessment Tool. Bureau of Land Management and Western Association of Fish and Wildlife Agencies Technical Reference 6710-1. U.S. Bureau of Land Management, Denver, Colorado.
[14] Connelly, J.W., A. Moser, and D. Kemner. 2013. Greater Sage-Grouse breeding habitats: Landscape-based comparisons. Grouse News 45. Research Reports.
[15] Some late brood habitat occurs at higher elevations outside of mapped nesting habitat and some is embedded within nesting landscapes especially areas such as wet meadows, riparian areas, springs and seeps.
[16]Winter habitat metrics are a guideline but snow depths and habitat availability may vary widely depending on winter severity, topography and elevation.

- These habitat objectives in **Table 2-3** summarize the characteristics that research has found represent the seasonal habitat needs for GRSG. 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 sub-region. Thus, the habitat objectives provide the broad vegetative conditions we strive to obtain across the landscape that indicate the seasonal habitats used by GRSG. These habitat indicators are consistent with the rangeland health indicators used by the BLM.

- The habitat objectives will be part of the GRSG habitat assessment to be used during land health evaluations (see Monitoring Framework, **Appendix E**). These habitat objectives are not obtainable on every acre within the designated GRSG 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.

Coordination

CC-1: Collaborate, coordinate and utilize cooperative planning efforts to implement and monitor activities to achieve desired conditions and to maximize the utilization of available funding opportunities. Coordination efforts could include: adjacent landowners, federal and state agencies, local governments, tribes, communities, other agencies, resource advisory groups, public lands permit holders and non-governmental organizations.

CC-2: Develop a cooperative MOU between the BLM, Forest Service and State of Idaho to establish the State of Idaho as a cooperating agency during implementation of the final decision. The MOU would identify responsibilities, role and interaction of the BLM, Forest Service and State of Idaho. Montana BLM will participate as appropriate on Montana's Sage-grouse Oversight Team to facilitate coordination and implementation of BLM's final decision and Montana's Executive Order No. 10-2014.

CC-3: The BLM and Forest Service would consider any recommendations from the Governor of Idaho as a result of evaluation completed by the Sage-Grouse Implementation Task Force.

CC-4: Idaho: The BLM would coordinate with the State of Idaho and the Idaho Sage-Grouse Implementation Task Force regarding proposed management changes, the implementation of conservation measures, mitigation, and site-specific monitoring, related to adaptive management, anthropogenic disturbance and livestock grazing (**Appendix M**).

CC-5: Montana: The BLM would coordinate with the State of Montana and the Montana Sage-grouse Oversight Team regarding proposed management changes, the implementation of conservation measures, mitigation, and site-specific monitoring, related to adaptive management and anthropogenic disturbance (**Appendix M**).

CC-5: Upon completion of the Record of Decision the BLM will develop an initial Implementation Guide for BLM District and Field Offices within a year of issuance of the Record of Decision. This Guide would define and describe consistent application of the allocations, management actions, required design features, and etc. that are contained within the final plan and would be updated and expanded as needed to respond to issues and concerns.

CC-6: At the state level, BLM and Forest Service would coordinate with IDFG, MFWP, USFWS, and other conservation partners in collaborative efforts

with adjacent states (Oregon, Nevada, Utah, Montana, Wyoming) in GRSG MZs IV and II to evaluate GRSG habitat and population status and trends and make appropriate regional recommendations for GRSG conservation at broader scales.

CC-7: At the state level, BLM and Forest Service would coordinate with the appropriate WAFWA Sage-grouse Technical Committee to develop consistent population and habitat monitoring approaches that facilitate GRSG conservation at the MZ scale.

CC-8: All prescribed burning would be coordinated with state and local air quality agencies to ensure that local air quality is not significantly impacted by BLM and Forest Service activities.

Greater Sage-Grouse Management Areas

MA-1 (Management Area): Designate five GRSG Conservation Areas (see **Chapter 8,** Glossary) within the sub-region to form the geographic basis for achieving population objectives; evaluating the disturbance density and adaptive regulatory triggers; and tailor adaptive management responses. These conservation areas are depicted in **Figure 2-1**. These areas are referred to as Mountain Valleys, Desert, West Owyhee, Southern and Southwestern Montana Conservation Areas.

Conservation Area Description:

Mountain Valleys Conservation Area – generally located north of the Snake River Plain, including GRSG habitat in the Salmon and Challis areas, and habitat in west-central population area. It extends west from Rexburg, north and west of Highway 33 to Howe, north and west of Highway 33/22 to Arco, north and west of Highway 26/20/93 to Carey, north and west of Highway 20 west to Hill City, north and west of Highway 20 to the Dylan Karaus Road, west to Canyon Creek. Canyon Creek to the confluence with the Snake River form the western boundary.

Desert Conservation Area – located north of the Snake River and south of the Mountain Valleys Conservation Area. It extends from the confluence of Canyon Creek and the Snake River, eastward to Idaho Falls. The Snake River and Henry's Fork form the eastern boundary.

West Owyhee Conservation Area – located south of the Snake River and west of the Bruneau River.

Southern Conservation Area – located south of the Snake River and east of the Bruneau River, including East Idaho uplands and Bear Lake Plateau, and the Utah portion of the Sawtooth National Forest in Box Elder County.

Southwestern Montana – located in southwestern Montana - encompassing the Dillon Butte BLM Field Office and Beaverhead-Deerlodge National Forest boundaries (the Butte RMP is not being amended and since there are

limited GRSG federal GHMAs, management actions do not apply in the Butte Field Office).

In general, GRSG habitats in the Desert and West Owyhee CAs are relatively contiguous, while those in the Mountain Valleys and Southern CAs tend to be more fragmented due to more complex topography, and elevational differences and/or effects from wildfires, agriculture, urbanization or other factors.

MA-2: Within each Conservation Area designate GRSG Habitat Management Areas: Priority, Important and General Habitat Management Areas (**Figure 2-2**). **Priority Habitat Management Areas (PHMAs**) focus on conserving the two key meta-populations in the sub-region. PHMA encompasses areas with the highest conservation value to GRSG, based on the presence of larger leks, habitat extent, important movement and connectivity corridors and winter habitat. PHMAs include adequate area to accommodate continuation of existing land uses and landowner activities. **Important Habitat Management Areas (IHMAs)** contain additional habitat and populations that provide a management buffer for the PHMA and to connect patches of PHMA. IHMA encompasses areas of generally moderate to high conservation value habitat and/or populations and in some Conservation Areas includes areas beyond those identified by USFWS as necessary to maintain redundant, representative and resilient populations (Priority Areas for Conservation (PACs)). IHMAs are typically adjacent to PHMAs but generally reflect somewhat lower GRSG population status and/or reduced habitat value due to disturbance, habitat fragmentation or other factors. There are no IHMAs designated within the Southwestern Montana Conservation Area. **General Habitat Management Areas (GHMAs)** encompass habitat that is outside of PHMAs or IHMAs. GHMAs contain approximately 10 percent of the occupied leks that are also of relatively low male attendance compared to leks in PHMA or IHMA. GHMAs are generally characterized by lower quality disturbed or patchy habitat of low lek connectivity.

MA-3: In Idaho, Designate PHMA and IHMA to encompass 90 percent of the breeding males in Idaho. In Montana, designate PHMA to encompass Montana Fish, Wildlife, and Parks 2009 Greater Sage Grouse Core Area designations.

MA-4: Annually prioritize Conservation Areas at the state scale considering results of the annual adaptive regulatory trigger evaluations relative to implementation of restoration and mitigation activities.

MA-5: Prioritize activities and mitigation to protect, enhance and restore GRSG habitats (i.e., fire suppression activities, fuels management activities, vegetation treatments, invasive species treatments etc.) first by Conservation Area, if appropriate (Conservation Area under adaptive management or at

risk of engaging adaptive management), followed by PHMAs, then IHMAs then GHMAs within the Conservation Areas. Local priority areas within these areas will be further refined as a result of completing the GRSG Wildfire and Invasive Species Habitat Assessments as described in **Appendix D**. This could include projects outside GRSG habitat when those projects would provide a benefit to GRSG habitat.

MA-6: The management area map and Biologically Significant Unit (BSU) baseline map would be re-evaluated in conjunction with plan evaluation processes (i.e. approximately every 5 years). This re-evaluation could indicate the need to adjust PHMA, IHMA or GHMA or the habitat baseline. These adjustments could occur upon completion of the appropriate analysis (plan amendment) to review the allocation decisions based on the map. Results from the Wildfire and Invasive Species Assessments, such as identified focal or emphasis areas would also be used to help inform mapping adjustments during this evaluation.

MA-7: GRSG habitat within the project area would be assessed during project-level NEPA analysis within the management area designations (PHMA, IHMA, GHMA). Project proposals and their effects would be evaluated based on the habitat and values affected.

MA-8: Idaho BLM will annually update the Key Habitat map as described in **Appendix F**, in order to reflect habitat changes resulting from wildfire, succession, and vegetation treatments that occurred or were observed since the last update. Key habitat includes areas of generally intact sagebrush that provide sage-grouse habitat during some portion of the year. This map also identifies potential restoration areas (perennial grassland annual grasslands, conifer encroachment and recent burns). This map a broad scale current vegetation map that changes as habitat is lost or restored. The Key Habitat Map is not an allocation decision such as PHMA, IHMA, and GHMA. Updates to the map will also occur if it is determined that mapping errors or omissions have occurred, or that radio-telemetry studies indicate that GRSG are consistently utilizing an area. Updates are also intended to capture recommendations by the field offices, GRSG Local Working Groups, or agency partners in GRSG conservation. Project-level evaluations of GRSG habitat during the NEPA process may also be used to inform the annual update.

MA-9: Areas of habitat outside of delineated management areas identified during the Key habitat update process would be evaluated during site specific NEPA for project level activities and GRSG required design features (**Appendix B**), seasonal timing restrictions (**Appendix C**) and buffers (**Appendix B**) would be included as part of project design. These areas would be further evaluated during plan evaluation and the 5-year update to the management areas, to determine whether they should be included as PHMAs, IHMAs, or GHMAs.

MA-10: Designate Sagebrush Focal Areas (SFA) as shown on **Figure 2-3**. SFAs will be managed as PHMA, with the following additional management:

- Recommended for withdrawal from the General Mining Act of 1872, as amended, subject to valid existing rights.
- Managed as NSO, without waiver, exception, or modification, for fluid mineral leasing.
- Prioritized for management and conservation actions in these areas, including, but not limited to review of livestock grazing permits/leases (see livestock grazing section for additional actions).
- Areas of non-PHMA mapped within the SFA boundary will not be managed as SFA, except for the Donkey Hills ACEC and three Forest Service parcels in the Lost River Range, Idaho (Borah Peak, Big Flat Top Mountain, and Copper Basin Knob).

Adaptive Management

AM-1 (Adaptive Management): Idaho: Use hard and soft population and habitat triggers to determine an appropriate management response as described in AM-6 to AM-16. Hard and soft triggers responses are applied at the Conservation Area (MA-1) scale (**Appendix G**).

AM-2: Utilize monitoring information collected through the Monitoring Framework (**Appendix E**) to determine when adaptive regulatory triggers have been met.

AM-3: Idaho: BLM and Forest Service would maintain GRSG habitat information, through use of the Key Habitat map or latest sagebrush/vegetation map, which would be used to track and identify habitat changes to assess the habitat trigger in the adaptive management approach. Key habitat map updates are made each winter by BLM in coordination with the Forest Service and IDFG, using the process described in **Appendix F**.

AM-4: Idaho: BLM would coordinate with the IDFG regarding population information collected and maintained by the IDFG to track and identify population changes to assess the population trigger in the adaptive management approach.

AM-5: Idaho: Twice each year the applicable monitoring information would be reviewed to determine if any adaptive management triggers have been met.

AM-6: Idaho: Adaptive habitat regulatory triggers would be individually calculated across all ownerships within the BSUs (**Appendix G**). The BSU is defined as the IDFG modeled nesting and wintering habitat (IDFG 2013, unpublished data) within PHMAs and IHMAs within a Conservation Area. The sagebrush component of the BSU is represented by the Key habitat within the BSU

present during the 2011 baseline and as mapped during subsequent annual Key habitat map updates. Key habitat is defined as areas of generally intact sagebrush that provide GRSG habitat during some portion of the year (ISAC 2006).

AM-7: Adaptive Regulatory Criteria for Habitat Hard Triggers are defined as:

- A 20 percent loss of Key Habitat within the BSU of the PHMA of a Conservation Area when compared to the 2011 baseline, inclusive of all land ownerships or
- A 20 percent loss of Key Habitat within the BSU of the IHMA of a Conservation Area when compared to the 2011 baseline.

AM-8: Adaptive Regulatory Criteria for Habitat Soft Triggers are defined as:

- A 10 percent loss of Key Habitat within the BSU of the PHMA of a Conservation Area when compared to the 2011 baseline; or
- A 10 percent loss of Key Habitat within the BSU of the IHMA of a Conservation Area when compared to the 2011 baseline.

AM-9: Adaptive Regulatory Criteria for Population Hard Triggers are defined as:

- A 20 percent decline in the current 3-year average of total maximum number of males counted compared to the 2011 maximum male baseline and a finite rate of change (λ) significantly below 1.0 within PHMA within a Conservation Area over the same 3-year period; or
- A 20 percent decline in the current 3-year average of total maximum number of males counted compared to the 2011 maximum male baseline and a finite rate of change (λ) significantly below 1.0 within IHMA within a Conservation Area over the same 3-year period.
- Significance is defined by the 90 percent confidence interval around the current 3-year finite rate of change. If the 90 percent confidence interval is less than, and does not include 1.0, then the finite rate of change is considered significant. The finite rate of change and variance will be calculated following Garton et al. (2011).

AM-10: Adaptive Regulatory Criteria for Population Soft Triggers are defined as:

- A 10 percent decline in the current 3-year average of total maximum number of males counted compared to the 2011 maximum male baseline and a finite rate of change (λ) below 1.0 within PHMA within a Conservation Area over the same 3-year period; or
- A 10 percent decline in the current 3-year average of total maximum number of males counted compared to the 2011 maximum male

baseline and a finite rate of change (λ) below 1.0 within IHMA within a Conservation Area over the same 3-year period.

AM-11: When any of the Adaptive Regulatory Criteria for Soft Triggers have been met the Implementation Team would evaluate causal factors and recommend additional potential implementation level activities (**Appendix G**).

AM-12: When any of the Adaptive Regulatory Criteria for Hard Triggers have been met then all PHMA management actions would be applied to the IHMA within that Conservation Area and the Implementation Team would evaluate causal factors and recommend additional potential implementation level activities.

AM-13: If an adaptive regulatory trigger is tripped and livestock grazing is identified as a probable limiting factor then adjustments would follow the Adaptive Grazing Management Response described in **Appendix G**.

AM-14: Remove any adaptive management response when the habitat or maximum male population count (i.e., 3-year average) returns to or exceeds the 2011 baseline levels within the associated Conservation Area in accordance with the Adaptive Management Strategy (**Appendix G**). In such a case, changes in management allocations resulting from a tripped trigger would revert back to the original allocation (AM-12).

AM-15: Montana: Follow the NPT Adaptive Management Guidance and Sideboards. When a hard trigger is hit in a BSU, the designated response will be put in place in that BSU. Triggers and responses have been developed with local state and USFWS experts (**Appendix I**).

AM-16: Idaho and Montana: When a hard trigger is hit in a BSU within a PAC that has multiple BSUs, including those that cross state lines, the WAFWA Management Zone Greater Sage-Grouse Conservation Team will convene to determine the causal factor, put project-level responses in place, as appropriate and discuss further appropriate actions to be applied. The team will also investigate the status of the hard triggers in other BSUs within the PAC and will invoke the appropriate plan response.

Anthropogenic Disturbance

AD-1 (Anthropogenic Disturbance): For Idaho and Montana, if the 3 percent anthropogenic disturbance cap is exceeded on lands (regardless of land ownership) within GRSG PHMA (or IHMA in Idaho) Habitat Management Areas in any given BSU, then no further discrete anthropogenic disturbances (subject to applicable laws and regulations, such as the General Mining Law of 1872, as amended, valid existing rights, etc.) will be permitted by BLM within GRSG PHMAs and IHMAs in any given BSU until the disturbance has been reduced to less than the cap. As measured according to the Monitoring Framework (**Appendix G**) for the intermediate scale.

For Idaho, if the 3 percent disturbance cap is exceeded on all lands (regardless of land ownership) within a proposed project analysis area (**Appendix G**) in a PHMA (or IHMA in Idaho), then no further anthropogenic disturbance will be permitted by BLM until disturbance in the proposed project analysis area has been reduced to maintain the area under the cap (subject to applicable laws and regulations, such as the General Mining Law of 1872, as amended, valid existing rights, etc.).

For Montana, if the 3 percent disturbance cap is exceeded on lands (regardless of land ownership) or if anthropogenic disturbance and habitat loss associated with conversion to agricultural tillage or fire exceed 5% within a project analysis area in PHMAs, then no further discrete anthropogenic disturbances (subject to applicable laws and regulations, such as the 1872 Mining Law, valid existing rights, etc.) will be permitted by BLM within PHMA in a project analysis area until the disturbance has been reduced to less than the cap. If the BLM determines that the State of Montana has adopted a GRSG Habitat Conservation Program that contains comparable components to those found in the State of Wyoming's Core Area Strategy including an all lands approach for calculating anthropogenic disturbances, a clear methodology for measuring the density of operations, and a fully operational Density Disturbance Calculation Tool, the 3% disturbance cap will be converted to a 5% cap for all sources of habitat alteration within a project analysis area.

For Idaho the BSU (**Figure 2-3**) is defined as the currently mapped nesting and wintering habitat within PHMA and IHMA within a Conservation Area, inclusive of all ownerships for evaluation. For Montana the BSU is defined as the PHMA in Montana. Anthropogenic disturbance excludes habitat disturbance from wildfire and fuels management activities and includes activities described in **Table 2-4**, Anthropogenic Disturbances and Areas of Impact. For Idaho this disturbance is measured by direct footprint or by ROW width for linear features (powerlines, pipelines and roads). For Montana disturbance is measured similar to the Wyoming Disturbance Density Calculation Tool process described in **Appendix G**.

Subject to applicable laws and regulations and valid existing rights, if the average density of one energy and mining facility per 640 acres (the density cap) is exceeded on all lands (regardless of land ownership) in the Priority Habitat Management Area within a proposed project analysis area, then no further disturbance from energy or mining facilities will be permitted by BLM: (1) until disturbance in the proposed project analysis area has been reduced to maintain the limit under the cap; or (2) unless the energy or mining facility is co-located into an existing disturbed area.

Table 2-4
Anthropogenic Disturbances and Areas of Impact

Datasets as Described in the Monitoring Framework[1]
Oil and Gas Wells and Development Facilities
Coal Mines
Wind Towers
Solar Fields
Geothermal Development Facilities
Mining (Active Locatable, Non-Energy Leasable and Saleable Developments)
Roads
Railroads
Powerlines
Communication Towers
Other Vertical Structures
Additional Local Datasets
Coalbed Methane Ponds
Meteorological Towers (e.g., wind energy testing)
Nuclear Energy Facilities
Airport Facilities and Infrastructure
Military Range Facilities and Infrastructure
Hydroelectric Plants
Recreation Areas Facilities and infrastructure

Note:
[1] Taken from Table 6 – GRSG Monitoring Framework.
See **Appendix G** for further details

AD-2: New anthropogenic disturbances within PHMA or IHMA within a Conservation Area where the disturbance cap is already exceeded from any source or where the proposed development would result in the cap being exceeded would not be allowed in within that Conservation Area until enough habitat has been restored within that Conservation Area to maintain the area under this cap (subject to valid existing rights).

AD-3: PHMA (Idaho only): Anthropogenic Disturbance Screening Criteria. In order to avoid surface-disturbing activities in PHMA, priority will be given to development (including ROWs, fluid minerals and other mineral resources subject to applicable stipulations) outside of PHMA. When authorizing development in PHMA, priority will be given to development in non-habitat areas first and then in the least suitable habitat for GRSG. In addition to the PHMA and IHMA Anthropogenic Disturbance Development Criteria (AD-4), the following criteria must all be met in the project screening and assessment process:

a. The population trend for the GRSG within the associated Conservation Area is stable or increasing over a three-year period and the population levels are not currently engaging the adaptive management triggers (this applies strictly to new authorizations;

renewals and amendments of existing authorizations would not be subject to this criteria when it can be shown that long-term impacts from those renewals or amendments would be substantially the same as the existing development);

b. The development with associated mitigation would not result in a net loss of GRSG Key habitat and mitigation would provide a net conservation benefit to the respective PHMA;

c. The project and associated impacts would not result in a net loss of GRSG Key habitat or habitat fragmentation or other impacts causing a decline in the population of the species within the relevant Conservation Area (the project would be outside Key habitat in areas not meeting desired habitat conditions or the project would provide a benefit to habitat areas that are functioning in a limited way as habitat);

d. Cannot be reasonably accomplished outside of the PHMA; or can be either: 1) developed pursuant to a valid existing authorization; or 2) is co-located within the footprint of existing infrastructure (proposed actions would not increase the 2011 authorized footprint and associated impacts more than 50 percent, depending on industry practice.

e. Development could be implemented adhering to the required design features (RDF) described in **Appendix B**;

f. The project would not exceed the disturbance cap (AD-1).

g. The project has been reviewed by the State Implementation Team and recommended for consideration by the Idaho Governor.

AD-4: The following Anthropogenic Disturbance Development Criteria must be met in the screening and assessment process for proposals in PHMA and IHMA to discourage additional disturbance in PHMAs and IHMAs (as described in LR-1 and LR-2; applies to Idaho only):

a. Through coordination with the USFWS and State of Idaho (as described in CC-1), it is determined that the project cannot be achieved, technically or economically, outside of this management area; and

b. The project siting and/or design should best reduce cumulative impacts and/or impacts on GRSG and other high value natural, cultural, or societal resources; this may include co-location within the footprint for existing infrastructure, to the extent practicable; and

c. The project results in a net conservation gain to GRSG Key habitat or with beneficial mitigation actions reduces habitat fragmentation or other threats within the Conservation Area; and

d. The project design mitigates unavoidable impacts through appropriate compensatory mitigation; and

e. Development could be implemented adhering to the RDFs described in **Appendix B**.

f. The project would not exceed the disturbance cap (AD-1).

In Montana, the BLM would apply the project/action screen and mitigation process (**Appendix I**).

AD-5: Co-locating new infrastructure within existing ROWs and maintaining and upgrading ROWs is preferred over the creation of new ROWs or the construction of new facilities in all management area. Colocation for various activities is defined as:

- Communication Sites – The installation of new equipment/facilities on or within or adjacent to existing authorized equipment/facilities or within a communication site boundary as designated in the Communication Site Plan.
- Electrical Lines – Installation of new ROWs adjacent to current ROWs boundaries, not necessarily placed on the same power poles.
- Other Rights-of-Way – The installation of new ROWs within the existing footprint of an approved ROW boundary or adjacent to an approved ROW boundary.
- Designated Corridors – The installation of new rights-of-way within the existing corridor or adjacent to the existing corridor.

AD-6: Incorporate RDFs as described in **Appendix B** in the development of project or proposal implementation, reauthorizations or new authorizations and suppression activities, as conditions of approval (COAs) into any post-lease activities and as best management practices for locatable minerals activities, to the extent allowable by law, unless at least one of the following conditions can be demonstrated and documented in the NEPA analysis associated with the specific project:

a. A specific RDF is not applicable to the site-specific conditions of the project or activity;

b. A proposed design feature or BMP is determined to provide equal or better protection for GRSG or its habitat; or

c. Analysis concludes that following a specific RDF would provide no more protection to GRSG or its habitat than not following it, for the project being proposed.

AD-7: Conduct implementation and project activities, including construction and short-term anthropogenic disturbances consistent with seasonal habitat restrictions described in **Appendix C**.

AD-8: RDFs and seasonal habitat restrictions would not be required for emergency or short-term activities necessary to protect and preserve human life or property.

AD-9: In undertaking BLM management actions, and consistent with valid and existing rights and applicable law in authorizing third-party actions, the BLM will apply the lek buffer-distances identified in the USGS Report Conservation Buffer Distance Estimates for Greater Sage-Grouse – A Review (Open File Report 2014-1239) in accordance with **Appendix B**.

AD-10: Incorporate appropriate conservation measures for slickspot peppergrass (*Lepidium papilliferum*) as described in the 2014 Conservation Agreement (as updated, amended or reauthorized) into implementation and project design within slickspot peppergrass habitat in the Jarbidge and Four Rivers Field Offices to avoid and minimize impacts to slickspot peppergrass. The 2014 Conservation Agreement is included as **Appendix P**.

Mitigation

MIT-1 (Mitigation): BLM would establish an inter-agency State GRSG Conservation Team at the state level (both Idaho and Montana) to help guide conservation of GRSG through compensatory mitigation, within 90 days of the issuance of the Record of Decision.

MIT-2: The BLM and Forest Service, in coordination with the GRSG Conservation Team would develop a Mitigation Strategy within one year of the issuance of the Record of Decision. In Idaho this strategy would be consistent with the Idaho Mitigation Framework (**Appendix J**).

MIT-3: In all GRSG habitat, 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 (**Appendix G, Table G-1**), 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.

MIT-4: Mitigate anthropogenic development (**Appendix G, Table G-1**) impacts to GRSG habitat through application of appropriate mitigation in accordance with the Mitigation Framework (**Appendix J**).

MIT-5: Consistent with regulations for minerals activities, require a full reclamation bond specific to the site when surface disturbing activities are proposed. Ensure reclamation bonds are sufficient to cover costs to fully rehabilitate lost GRSG habitat. Base the reclamation costs on the assumption that contractors for the BLM will perform the work. Areas are considered fully rehabilitated when they meet the conditions described in **Table 2-3**.

Monitoring

MON-1 (Monitoring): Once FIAT Assessments are complete, annually complete a review of FIAT Assessment implementation efforts within GRSG habitat with appropriate USFWS and state agency personnel.

MON-2: Monitor the effectiveness of projects (e.g., fuel breaks. fuels treatments) until objectives have been met or until it is determined that objectives cannot be met, according to the monitoring schedule identified for project implementation.

MON-3: Monitor invasive vegetation post vegetation management treatment

MON-4: Monitor project construction areas for noxious weed and invasive species for at least 3 years, unless control is achieved earlier.

MON-5: Use lek, nesting and winter habitat maps and key habitat map (updates) to annually assess GRSG population and habitat status in the context of the adaptive management triggers.

MON-6: Continue to support updates to the Key Habitat map to track vegetation changes in relation to GRSG habitat on a yearly basis, until such a time this process is replaced. The process used to update the Key Habitat Map is described in **Appendix F**.

MON-7: Monitor GRSG habitat as described in the monitoring framework plan (**Appendix E**) in coordination with IDFG and MT FWP.

Vegetation

Objectives

VEG-OBJ-1 (Vegetation): Reconnect and expand areas of higher native plant community integrity/rangeland health to increase the extent of high quality habitat and, where possible, to accommodate the future effects of climate change.

VEG-OBJ-2: Increase the amount and functionality of seasonal habitats by:

a. Increasing or enhancing canopy cover and average patch size of sagebrush.
b. Increasing the amount, condition and connectivity of seasonal habitats.

c. Protecting or improving GRSG migration/movement corridors.

d. Reducing conifer encroachment within GRSG seasonal habitats.

e. Improving understory (grass, forb) and/or riparian condition within breeding and late brood-rearing habitats.

f. Reducing the extent of annual grasslands within and adjacent to PHMA and IHMA.

Decadal treatment objectives by population area are identified in **Table 2-5**, Estimated Acres of Treatment Needed within a 10-Year Period to Achieve Vegetation Objectives on BLM-Administered Lands[1].

VEG-OBJ-3: In all SFAs and PHMAs, the desired condition is to maintain a minimum of 70 percent of lands capable of producing sagebrush with 10 to 30 percent sagebrush canopy cover. The attributes necessary to sustain these habitats are described in Interpreting Indicators of Rangeland Health (BLM Tech Ref 1734-6).

Table 2-5
Estimated Acres of Treatment Needed within a 10-Year Period to Achieve Vegetation Objectives on BLM-Administered Lands[1]

Population Area	Mechanical[2]	Prescribed Fire (FM-15) [3]	Grass Restoration (VEG-2) [4]
Bear Lake Plateau	1,000	0	0
East Idaho Uplands	6,000	9,000	1,000
S Central Idaho/N Snake River and Mountain Valleys	18,000	11,000	162,000
Weiser	0	0	13,000
SW Idaho	52,000	10,000	444,000
SW Montana	0	0	0

Note:
[1] These are estimates of treatments required to achieve and/or maintain desired habitat conditions over a period of ten years. There are many dynamic and highly variable disturbances that may happen over that period of time that could have a significant effect on the amount, type, and timing of treatment needed. Those disturbances are factored into the ten-year simulation using stochastic, not predictive, techniques. Probabilities of events such as large wildfires are used in the model to make the simulation as realistic as possible, given empirical data about such events in the past, but the results of the simulation cannot be used to predict the future occurrence of such events, including their timing, size, or location, which are essentially random.
[2] Removal of conifers that have invaded sagebrush including phase one juniper that is 10 percent or less and reducing sagebrush cover in areas over 30 percent canopy cover
[3] Acres are those that are greater than 30 percent sagebrush canopy cover and/or invaded by 10 percent or greater conifer.
[4] Acres presently dominated by annual grasses that could be improved by herbicide application and seeding of perennial vegetation.

Vegetation Management

VEG-1: Implement habitat rehabilitation or restoration projects in areas that have potential to improve GRSG habitat using a full array of treatment activities as appropriate, including chemical, mechanical and seeding treatments.

VEG-2: Implement vegetation rehabilitation or manipulation projects to enhance sagebrush cover or to promote diverse and healthy grass and forb understory to achieve the greatest improvement in GRSG habitat based on FIAT Assessments, HAF assessments, other vegetative assessment data and local, site specific factors that indicate sagebrush canopy cover or herbaceous conditions do not meet habitat management objectives (i.e. is minimal or exceeds optimal characteristics). This may necessitate the use of prescribed fire as a site preparation technique to remove annual grass residual growth prior to the use of herbicides in the restoration of certain lower elevation sites (e.g., Wyoming big sagebrush) but such efforts will be carefully planned and coordinated to minimize impacts to GRSG seasonal habitats.

VEG-3: Require use of native seeds for restoration based on availability, adaptation (ecological site potential), and probability of success (Richards et al. 1998). Non-native seeds may be used as long as they support GRSG habitat objectives (Pyke 2011) to increase probability of success, when adapted seed availability is low or to compete with invasive species especially on harsher sites.

VEG-4: Implement management changes in restoration and rehabilitation areas, as necessary, to maintain suitable GRSG habitat, improve unsuitable GRSG habitat and to ensure long-term persistence of improved GRSG habitat (Eiswerth and Shonkwiler 2006). Management changes could be considered during livestock grazing permit renewals, travel management planning, and renewal or reauthorization of ROWs.

VEG-5: Consider establishing seed harvest areas that are managed for seed production (Armstrong 2007) to provide a reliable source of locally adapted seed to use during rehabilitation and restoration activities.

VEG-6: Allocate use of native seed to GRSG or ESA listed species habitat in years when preferred native seed is in short supply. This may require reallocation of native seed from ESR (BLM) and/or BAER (Forest Service) projects outside of PHMA or IHMA to those inside it. Where probability of success or native seed availability is low, nonnative seeds may be used as long as they meet GRSG habitat conservation objectives (Pyke 2011). Re-establishment of appropriate sagebrush species/subspecies and important understory plants, relative to site potential, shall be the highest priority for rehabilitation efforts.

VEG-7: During land health assessments, evaluate the relative value of existing nonnative seeding within GRSG habitat as: 1) a component of a grazing system allowing improvement of adjacent native vegetation, 2) development of a forage reserve, 3) incorporation into a fuel break system (Davies et al. 2011) or 4) restoration/diversification for GRSG habitat improvement. Where appropriate and feasible, diversify seedings, or restore to native vegetation when potential benefits to GRSG habitat outweigh the other potential uses of the non-native seeding, with emphasis on PHMA and IHMA. Allow recolonization of seedings by sagebrush and other native vegetation.

VEG-8: Remove conifers encroaching into sagebrush habitats. Prioritize treatments closest to occupied GRSG habitats and near occupied leks, and where juniper encroachment is phase 1 or phase 2. Use of site-specific analysis and tools like VDDT and the FIAT report (Chambers et. al., 2014) will help refine the location for specific areas to be treated.

Invasive Species

INV-1 (Invasive Species): Incorporate results of the FIAT Assessments into projects and activities addressing invasive species.

INV-2: Implement noxious weed and invasive species control using integrated vegetation management actions per national guidance and local weed management plans for Cooperative Weed Management Areas in cooperation with State and Federal agencies, affected counties, and adjoining private lands owners.

INV-3: Conduct integrated weed management actions for noxious and invasive weed populations that are impacting or threatening GRSG habitat quality using a variety of eradication and control techniques including chemical, mechanical and other appropriate means.

INV-4: Require project proponent (projects described in **Table 2-4** and which are included in the anthropogenic disturbance cap evaluation) to ensure that noxious weeds and invasive species caused as a result of the project are treated to eliminate establishment on the disturbed project construction areas for at least 3 years and monitored and treated during the life of the project.

Wildland Fire Management

Objectives

FUEL-OBJ-1: Design fuel treatments to restore, enhance, or maintain GRSG habitat.

FUEL-OBJ-2: Manage wildfires to minimize loss of sagebrush and protect GRSG habitat.

Wildfire Preparedness/Prevention

WFP-1 (Wildfire Preparedness): Support development and implementation of Rangeland Fire Protection Associations (RFPAs) in coordination with the State of Idaho.

WFP-2: Develop a consistent approach to fire restrictions within GRSG habitat through the existing coordinated inter-agency approach to fire restrictions based upon National Fire Danger Rating System thresholds (fuel conditions, drought conditions, and predicted weather patterns).

WFP-3: Annually incorporate into existing fire management plans results and updates from the Wildfire and Invasive Species Habitat Assessments (FIAT Assessments) described in **Appendix D**, to communicate/explain the resource value of GRSG habitat, including fire prevention messages and actions to reduce human-caused ignitions.

WFP-4: Continue to participate with the Wildland Fire Leadership Council, a cooperative, interagency organization dedicated to achieving consistent implementation of the goals, actions, and policies in the National Fire Plan and the Federal Wildland Fire Management Policy.

WFP-5: Continue annual coordination meetings held between cooperating agencies that have fire suppression responsibilities. Incorporate Rangeland Fire Protection Associations and other stakeholders into this coordination. Discuss priority suppression areas and distribute maps showing priority suppression areas at both the Conservation Area and the local office levels as based on the adaptive management strategy and FIAT Assessments.

WFP-6: Ensure firefighter personnel receive annual orientation regarding GRSG habitat and sagebrush management issues as related to wildfire suppression.

WFP-7: As part of the FIAT Assessments, identify roads, trails, and recreational use areas with high frequency of human caused fires within or adjacent to the PHMA or IHMA. Consider these areas during annual fire restriction evaluations, and as appropriate, through site specific management.

WFP-8: Coordinate with Federal, State and local jurisdictions on fire and litter prevention programs to reduce human caused ignitions.

WFP-9: Implement activities identified within the FIAT Assessments.

Wildfire Suppression

WFS-1: Complete Wildland Fire and Invasive Species Assessments (FIAT Assessments) as described within **Appendix D** and incorporate results into appropriate Fire Management Plans as they are completed. FIAT Assessments are interdisciplinary evaluations of the threats posed by wildfire and invasive species, as well as identification of focal and emphasis

habitats/treatment opportunities for fuels management, fire management, and restoration. These FIAT Assessments identify focal and emphasis habitats and describe strategies for fuels management, suppression and restoration activities. Focal and Emphasis Habitats identified through the FIAT Assessment to further refine priority areas for treatments to reduce the threats posed by wildfire, invasive annual grass and conifer expansion.

WFS-2: As part of the FIAT Assessments incorporate a wildfire response time analysis focusing on response time to identified priority areas within PHMA and IHMA or on those fires that have the potential to impact PHMA and IHMA. Incorporate findings into Unit Initial Attack program that determines initial attack resources.

WFS-3: As part of the FIAT Assessment incorporate a water capacity analysis for suppression purposes, including potential private water sources. Utilized the analysis to ensure water availability for response to fire in or threatening PHMA and IHMA during initial attack.

WFS-4: During high fire danger conditions, stage initial attack and secure additional resources closer to priority areas identified in the FIAT Assessments, based on anticipated fires and weather conditions, with particular consideration of the West Owyhee, Southern and Desert Conservation Areas to ensure quicker response times in or near GRSG habitat after considerations and placement of resources to protect human life and property.

WFS-5: Utilize a full range of fire management strategies and tactics through strategic wildfire suppression planning consistent with appropriate management response and within acceptable risk levels, to achieve resource objectives for GRSG habitat consistent with land use plan direction. Utilizing both direct and indirect attack as appropriate to limit the overall amount of GRSG habitat burned. This could include suppressing fires in intact sagebrush habitats; limiting fire growth in GHMA when suppression resources are available or managing wildfire for resource benefit in areas of conifer (juniper) encroachment.

WFS-6: Suppression priorities: Firefighter and public safety followed by property are the highest priority for protection during suppression activities. Maintaining GRSG habitat will be the highest natural resources priority immediately after human life and property, commensurate with threatened and endangered species habitat or other critical habitats to be protected.

WFS-7: Ensure close coordination with federal and state firefighters including the Rangeland Fire Protection Associations during suppression activities.

Fuels Management

FM-1: Design and implement fuels treatments that would reduce the potential start and spread of unwanted wildfires and provide anchor points or control lines for the containment of wildfires during suppression activities with an emphasis on maintaining, protecting, and expanding sagebrush ecosystems and successfully rehabilitated areas and strategically and effectively reduce wildfire threats in the greatest area.

FM-2: Enhance (or maintain/retain) sagebrush canopy cover and community structure to match expected potential for the ecological site and consistent with GRSG habitat objectives unless fuels management objectives requires additional reduction in sagebrush cover to meet strategic protection of GRSG habitat. Closely evaluate the benefits of the fuel management treatments against the additional loss of sagebrush cover on the local landscape in the NEPA process.

FM-3: Apply appropriate seasonal restrictions for implementing vegetation and fuels management treatments according to the type of seasonal habitats present. Allow no treatments in known winter range unless the treatments are designed to strategically reduce wildfire risk around and/or in the winter range and would protect, maintain, increase, or enhance winter range habitat quality. Ensure chemical applications are utilized where they would assist in success of fuels treatments. Strategically place treatments on a landscape scale to prevent fire from spreading into PHMA or WUI.

FM-4: Develop a fuels continuity and management strategy to expand, enhance, maintain and protect GRSG habitat informed by the FIAT Assessments completed as described in **Appendix D**.

FM-5: When developing the fuels management strategy as part of the FIAT Assessment described in **Appendix D** consider up-to-date fuels profiles; land use plan direction; current and potential habitat fragmentation; sagebrush and GRSG ecological factors; active vegetation management steps to provide critical breaks in fuel continuity where appropriate; incorporate a comparative risk analysis with regard to the risk of increased habitat fragmentation from a proposed action versus the risk of large scale fragmentation posed by wildfires if the action is not taken.

FM-6: Fuel treatments will be designed through an interdisciplinary process to expand, enhance, maintain, and protect GRSG habitat which considers a full range of cost effective fuel reduction techniques, including: chemical, biological (including grazing and targeted grazing), mechanical and prescribed fire treatments.

FM-7: Existing and proposed linear ROWs could be considered for use and maintenance as vegetated fuel breaks in appropriate areas (this activity may

or may not be part of the ROW permit or the responsibility of the permit holder, in cases where this activity is considered part of mitigation for project design then it would be appropriately included as part of the ROW permit and the responsibility of the permit holder for development and maintenance).

FM-8: Fuel breaks would incorporate existing vegetation treatments (seedings), rocky areas or other appropriate topography or features or be located adjacent to existing linear disturbance areas where appropriate. Fuel breaks should be placed in areas with the greatest likelihood of compartmentalizing a fire and/or to foster suppression options to protect existing intact habitat.

FM-9: Strategically pre-treat areas to reduce fine fuels consistent with areas and results identified within the Wildfire and Invasive Species Assessments.

FM-10: Protect vegetation restoration and rehabilitation efforts/projects from subsequent fire events.

FM-11: Targeted grazing as a fuels treatment to adjust the vegetation conditions to reduce the potential start and spread of wildfires may be implemented within existing grazing authorizations if feasible such as through temporary non-renewable authorizations, or through contracts, agreements or other appropriate means separate from existing grazing authorizations and permits.

FM-12: Targeted grazing to achieve fuels management objectives should conform to the following criteria:

a. Targeted grazing should be implemented strategically on the landscape, and directly involve the minimum footprint and grazing intensity required to meet fuels management objectives.

b. Conform to the applicable Standards for Rangeland Health and Guidelines for Livestock Grazing Management (Idaho or Montana) at the assessment scale (pasture/watershed).

c. Where feasible and applicable coordinate with the grazing permittee to strategically reduce fuels through livestock management within the Mandatory Terms and Conditions of the applicable grazing authorizations

FM-13: Prioritize the use of native seeds for fuels management treatment based on availability, adaptation (site potential), and probability of success. Where probability of success or native seed availability is low or non-economical, nonnative seeds may be used to meet GRSG habitat objectives to trend toward restoring the fire regime. When reseeding, use fire resistant native and nonnative species, as appropriate, to provide for fuel breaks.

FM-14: Maintain effectiveness of fuels projects, including fuel breaks, to ensure long-term success, including persistence of seeded species and/or other treatment components while maintaining the integrity of adjacent vegetation.

FM-15: If prescribed fire is used in GRSG habitat, the NEPA analysis for the Burn Plan will address:

- why alternative techniques were not selected as a viable options;
- how GRSG goals and objectives would be met by its use;
- how the COT Report objectives would be addressed and met;
- a risk assessment to address how potential threats to GRSG habitat would be minimized.

a. Allow prescribed fire as a vegetation or fuels treatment in Wyoming big sagebrush sites or other xeric sagebrush species sites, or in areas with a potential for post-fire exotic annual dominance only 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 in PHMAs (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).

b. Allow prescribed fire in known winter range only 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.

Wildfire Restoration/Rehabilitation – Emergency Stabilization and Rehabilitation

ESR-1: Utilize the findings and Restoration/Rehabilitation Strategy developed as part of the FIAT Assessment process described in **Appendix D** to determine if GRSG rehabilitation actions are needed, based on ecological potential, and direct emergency stabilization and rehabilitation (ESR) (BLM) or Burned Area Emergency Response (BAER) (Forest Service) actions after fire.

ESR-2: Incorporate GRSG Habitat Management Objectives into ESR/BAER plans based on site potential and in accordance with the Restoration/Rehabilitation Strategy developed as a result of the FIAT Assessments.

ESR-3: Provide adequate rest from livestock grazing to allow natural recovery of existing vegetation and successful establishment of seeded species within burned/ESR areas. All new seedings of grasses and forbs should not be grazed until at least the end of the second growing season, and longer as needed to allow plants to mature and develop robust root systems which will stabilize the site, compete effectively against cheatgrass and other invasive annuals, and remain sustainable under long-term grazing management. Adjust other management activities, as appropriate, to meet ESR objectives.

ESR-4: Adjust, as appropriate, livestock management on adjacent unburned areas to mitigate the effect of the burn on local GRSG populations.

ESR-5: Following seedling establishment, modify grazing management practices if needed to achieve long-term vegetation and habitat objectives.

Livestock Grazing

RM-1 (Range Management): Maintain existing areas designated as available or unavailable for livestock grazing. Existing active AUMs for livestock grazing within the planning area would not be changed at the broad scale, though the number of AUMs available on an allotment may be adjusted based on site-specific conditions to meet management objectives during term permit renewals, AMP development, or other appropriate implementation planning. Additionally, temporary adjustments can be made annually to livestock numbers, the number of AUMs, and season of use in accordance with applicable regulations.

RM-2: Prioritize BLM land health assessments and processing of BLM grazing permits consistent with management area prioritization (MA-3), unless other higher priority considerations exist (RM-16) or other factors such as threatened, endangered and proposed species habitat that livestock grazing could affect. Where possible, conduct land health assessments at the watershed, or other meaningful landscape-scale.

RM-3: Where opportunities exist, coordinate with other land managers to encourage livestock operations that utilize mixed federal, private and/or state land to be managed at the landscape scale to benefit GRSG and their habitat across land ownerships.

RM-4: PHMA & IHMA: During the land health assessment process, identify the type(s) of seasonal habitat the assessed areas are capable of supporting. Utilize the habitat assessment framework, (Stiver et al. 2014 as amended/replaced) or other BLM or Forest Service approved methodology, in accordance with current policy and guidance to determine whether vegetation structure, condition and composition are meeting GRSG habitat objectives including riparian and lentic areas (HM-OBJ-2; **Table 2-3**). Use appropriate Ecological Site Descriptions, reference sheets and state and

transition models to inform desired habitat conditions and expected responses to management changes for the land unit being assessed.

RM-5: When modifying grazing management, analyze indirect effects to habitat, including changes in fuel loading and wildfire behavior.

RM-6: When livestock management practices are determined to not be compatible with meeting or making progress towards achievable habitat objectives following appropriate consultation, cooperating and coordination, implement changes in grazing management through grazing authorization modifications, or allotment management plan implementation. Potential modifications include, but are not limited to, changes in:

1) Season or timing of use;
2) Numbers of livestock;
3) Distribution of livestock use;
4) Duration and/or level of use;
5) Kind of livestock (e.g., cattle, sheep, horses, or goats) (Briske et al. 2011); and
6) Grazing schedules (including rest or deferment).

RM-7: Where opportunities exist, establish forage reserves to facilitate restoration and rehabilitation efforts in GRSG habitat areas. A forage reserve is an area that is set aside for use as needed by various permittees who might be displaced by wildfire, ESR, restoration efforts, etc. rather than having a term permit issued for grazing like a regular allotment.

RM-9: PHMA & IHMA - Where practical, design pasture rotations to utilize non-native perennial grass seedings and/or annual grasslands, during GRSG nesting season annually or periodically.

RM-10: Evaluate the locations where salt/supplements are placed, coordinate salt/supplements placement to reduce impacts to GRSG habitat (e.g., existing disturbed areas).

RM-11: Incorporate RDFs into Terms and Conditions for crossing permits to limit disturbance of occupied leks when trailing livestock across BLM- and Forest Service -administered lands in the spring. Work with permittees in locating over-nighting, watering and bedding locations to minimize impacts to seasonal habitats.

RM-12: Design any new structural range improvements, following appropriate cooperation, consultation and coordination, to minimize and/or mitigate effects to GRSG habitat. Any new structural range improvements should be placed along existing disturbance corridors or in unsuitable habitat, to the

extent practical, and are subject to RDFs (**Appendix B**). Structural range improvement in this context, include, but are not limited to: fences, exclosures, corrals or other livestock handling structures; pipelines, troughs, storage tanks (including moveable tanks used in livestock water hauling), windmills, ponds/reservoirs, solar panels and spring developments.

RM-13: During the land health assessment and grazing permit renewal process, evaluate existing livestock management range improvements with respect to their effect on GRSG habitat. Consider removal of projects that are not needed for effective livestock management, are no longer in working condition, and/or negatively affect GRSG habitat, with the exception of functional projects needed for management of habitat for other threatened, endangered or proposed species or other sensitive resources.

RM-14: Prioritize removal, modification or marking of fences or other structures in areas of high collision risk following appropriate cooperation, consultation and coordination to reduce the incidence of GRSG mortality due to fence strikes (Stevens et al. 2012).

RM-15: In response to weather conditions (i.e. drought) adjust grazing management (i.e., delay turnout, adjust pasture rotations, adjust the amount and/or duration of grazing) as appropriate to provide for adequate food and cover for GRSG.

RM-16: 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 Sagebrush Focal Areas (SFAs) followed by PHMAs outside of the SFAs. 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.

RM-17: The NEPA analysis for renewals and modifications of livestock grazing permits/leases that include lands within SFAs and PHMAs will include specific management thresholds, based on GRSG Habitat Objectives Table, Land Health Standards (43 CFR 4180.2) and ecological site potential, 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.

RM-18: Allotments within SFAs, followed by those within PHMAs, 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.

RM-19: 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 fire breaks.

Wild Horses and Burros

WHB-1: Manage herd management areas (HMAs) in GRSG habitat within established AML ranges to achieve and maintain GRSG habitat objectives (**Table 2-3**).

WHB- 2: Complete rangeland health assessments for HMAs containing GRSG habitat using an interdisciplinary team of specialists (e.g. range, wildlife, and riparian). The priorities for conducting assessments are: 1) HMAs Containing SFA; 2) HMAs containing PHMA; 3) HMAs containing IHMA; 4) HMAs containing GHMA; 5) HMAs containing sagebrush habitat outside of PHMA, IHMA, and GHMA mapped habitat; 6) HMAs without GRSG Habitat.

WHB-3: Prioritize gathers and population growth suppression techniques in HMAs in GRSG habitat, unless removals are necessary in other areas to address higher priority environmental issues, including herd health impacts. Place higher priority on Herd Areas not allocated as HMAs and occupied by wild horses and burros in SFAs followed by PHMA.

WHB-4: In SFAs and PHMA outside of SFA, assess and adjust AMLs through the NEPA process within HMAs when wild horses or burros are identified as a significant causal factor in not meeting land health standards, even if current AML is not being exceeded.

WHB-5: In SFAs and PHMA outside of SFA, monitor the effects of wild horse and burro use in relation to GRSG seasonal habitat objectives on an annual basis to help determine future management actions.

WHB-6: Develop or amend herd management area plans (HMAPs) to incorporate GRSG habitat objectives and management considerations for all HMAs within GRSG habitat, with emphasis placed on SFAs and other PHMAs.

WHB-7: Consider removals or exclusion of wild horse and burros during or immediately following emergency situations (such as fire, floods, and drought) to facilitate meeting GRSG habitat objectives where HMAs overlap with GRSG habitat.

WHB-8: When conducting NEPA analysis for wild horse and burro management activities, water developments, or other rangeland improvements for wild horses, address the direct and indirect effects to GRSG populations and

habitat. Implement any water developments or rangeland improvements using the criteria identified for domestic livestock.

WHB-9: Coordinate with professionals from other federal and state agencies, researchers at universities, and others to utilize and evaluate new management tools (e.g., population growth suppression, inventory techniques, and telemetry) for implementing the wild horse and burro program.

Lands and Realty

LR-1 (Lands and Realty): PHMA: Designate and manage PHMA as ROW avoidance areas, consistent with AD-3 and subject to RDFs, buffers and seasonal timing restrictions (**Appendices B** and **C**). IHMA: Designate and manage IHMA as ROW avoidance areas, consistent with AD-4 and subject to RDFs, buffers and seasonal timing restrictions. GHMA (Idaho and Montana): Designate and manage GHMA as open with proposals subject to RDFs, buffers and seasonal timing restrictions.

LR-2: PHMA: Designate and manage PHMA as exclusion areas for utility scale (20 MW) wind and solar testing and development, nuclear and hydropower energy development. IHMA: Designate and manage IHMA as avoidance areas for wind and solar testing and development, nuclear and hydropower development. GHMA (Idaho): Designate and manage GHMA as open for wind and solar testing and development and nuclear and hydropower development subject to RDFs, buffers and seasonal timing restrictions. GHMA (Montana): Designate and manage GHMA as avoidance for wind and solar testing and development and nuclear and hydropower development.

LR-3: PHMA: Development of commercial service airports and facilities (as defined by FAA 2014 – publically owned airports that have at least 2,500 passenger boardings each calendar year and receive scheduled passenger service) would not be allowed within PHMA. IHMA and GHMA are Avoidance and Open respectively for these types of ROW applications as described in LR-1.

LR-4: PHMA: Development of new or expansion of existing landfills would not be allowed within PHMA. IHMA and GHMA are Avoidance and Open respectively for these types of ROW applications as described in LR-1.

LR-5: Consistent with LR-2, LR-3 and LR-4, Rights-of-way for development of new or amended ROWs and land use authorizations (including permits and leases) in PHMA would only be considered when consistent with the Anthropogenic Disturbance Screening Criteria (AD-3); Rights-of-way for development of new or amended ROWs and land use authorizations (including permits and leases) in IHMA could be considered consistent with

the IHMA Anthropogenic Disturbance Development Criteria (AD-4). GHMA: New ROW and land use authorizations could be considered.

LR-6: In PHMA, if a higher voltage transmission line is required adjacent to an existing line (i.e. the project is an incremental upgrade/capacity increase of existing development (i.e. powerline capacity upgrade):

- the existing transmission line must be removed and area rehabilitated within a specified amount of time after the new line is installed and energized; and
- the new line must be constructed in the same alignment as the existing line unless an alternate route would benefit GRSG or GRSG habitat.

LR-7: Existing designated corridors, including Section 368 Corridors, will remain Open in all habitat management areas (subject to the ongoing settlement agreement).

LR-8: Process unauthorized use. If the unauthorized use is subsequently authorized, it would be authorized consistent with direction from this plan including RDFs, buffers and seasonal timing restrictions. If the use is not subsequently authorized the site would be reclaimed by removing these unauthorized (trespass) features and rehabilitating the habitat.

LR-9: Land use authorizations that are temporary (less than 3 years) in nature and are not otherwise excluded or restricted would be subject to seasonal or timing restrictions and mitigation requirements regarding habitat loss as needed.

LR-10: New ROW applications for water facilities (ditches, canals, pipelines), or amendments to existing water facilities which include additional structures to improve fish passage or benefits to fisheries (new diversions, fish screens) would be allowed on a case-by-case basis subject to RDFs to reduce impacts to GRSG habitat and mitigation requirements regarding GRSG habitat loss as needed.

LR-11: When a ROW grant expires and is not requested to be renewed, is relinquished, or terminated, the lease holder would be required to reclaim the site by removing overhead lines and other infrastructure and to eliminate avian predator nesting opportunities provided by anthropogenic development on public lands associated with the now void ROW grant (e.g., remove powerline and communication facilities no longer in service).

LR-12: As opportunities and priorities indicate work with existing ROW holders to retrofit existing towers and structures consistent with RDFs described in **Appendix B**.

LR-13: PHMA (Idaho and Montana) and IHMA (Idaho), and GHMA (Montana only) are designated as avoidance areas for high voltage transmission line and large pipeline ROWs, except for Gateway West and Boardman to Hemingway Transmission Projects. All authorizations in these areas, other than the excepted projects, must comply with the conservation measures outlined in this proposed plan, including the RDFs and avoidance criteria presented in AD-3 and AD-4 of this document. The BLM is currently processing an application for Gateway West and Boardman to Hemingway Transmission Projects and the NEPA review for this project is well underway. These projects are further discussed in the cumulative effects analysis. The BLM is analyzing GRSG mitigation measures through the projects' NEPA review process.

LR-14: Lands classified as PHMA, IHMA, and GHMA for GRSG will be retained in federal management unless: (1) the agency can demonstrate that disposal of the lands will provide a net conservation gain to the GRSG or (2) the agency can demonstrate that the disposal of the lands will have no direct or indirect adverse impact on conservation of the GRSG. Land tenure adjustments would be subject to the following disposal, exchange, and acquisition criteria, which include retaining lands with GRSG habitat. Retention of areas with GRSG would reduce the likelihood of habitat conversion to agriculture, urbanization, or other uses that would remove sagebrush habitat and potentially impact sensitive plants. Criteria:

a. Lands within PHMA, IHMA and GHMA would only be available for disposal through exchange (**Appendix K**).

b. Acquire habitat within PHMA and IHMA, when possible (i.e. willing landowner), and retain ownership of habitat within all Areas, except if a land exchange would allow for additional or more contiguous federal ownership patterns.

c. Lands within PHMA, IHMA and GHMA would be retained unless exchange of those lands would increase the extent or provide for connectivity of PHMA or IHMA.

d. Evaluate potential land exchanges containing historically low-quality GRSG habitat that may be too costly to restore in exchange for lands of higher quality habitat, lands that connect seasonal GRSG habitats or lands providing for threatened and endangered species. These potential exchanges should lead to an increase in the extent or continuity of or provide for improved connectivity of PHMA. Higher priority will be given to exchanges for those in-tact areas of sagebrush that will contribute to the expansion of sagebrush areas within PHMA currently in public ownership. Lower priority would be given to other lands that would promote enhancement in the

PHMA and IHMA (i.e., areas with fragmented or less in-tact sagebrush).

e. Identify lands for acquisition that increase the extent of or provide for connectivity of PHMA.

Minerals

Fluid Minerals (Oil, Gas, and Geothermal)

Objectives

FLM-OBJ-1: Priority will be given to leasing and development of fluid mineral resources, including geothermal, outside of PHMA, IHMA, and GHMA. When analyzing leasing and authorizing development of fluid mineral resources, including geothermal, in PHMA, IHMA, and GHMA, and subject to applicable stipulations for the conservation of GRSG, priority will be given to development in non-habitat areas first and then in the least suitable habitat for GRSG. The implementation of these priorities will be subject to valid existing rights and any applicable law or regulation, including, but not limited to, 30 USC 226(p) and 43 CFR 3162.3-1(h).

FLM-OBJ-2: Where a proposed fluid mineral development project on an existing lease could adversely affect GRSG populations or habitat, the BLM will work with the lessees, operators, or other project proponents to avoid, minimize and apply compensatory mitigation 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 or Geothermal Drilling Permit (GDP) for the lease to avoid, minimize, and apply compensatory mitigation to impacts to GRSG or its habitat and will ensure that the best information about the GRSG and its habitat informs and helps to guide development of such Federal leases.

Management

FLM-1 (Fluid Minerals): Idaho and Montana: Areas within SFAs would be open to fluid mineral leasing and development and geophysical exploration subject to NSO without waiver, exception, or modification. Areas within PHMA and IHMA would be open to mineral leasing and development and geophysical exploration subject to NSO with a limited exception (FLM-3). GHMA would be open to mineral leasing and development and geophysical exploration subject to CSU which includes buffers, seasonal timing restrictions (see Appendix C) and standard stipulations.

FLM-2: In Idaho, parcels nominated for lease in PHMA or IHMA would be evaluated prior to lease offering to determine if development is feasible. In GHMA, parcels would not be offered for lease if buffers and restrictions (including RDFs) preclude development in the leasing area.

FLM-3: PHMA and IHMA: No waivers or modifications to a fluid mineral lease NSO stipulation will be granted. The Authorized Officer may grant an exception to a fluid mineral lease NSO stipulation only where the proposed action:

i. Would not have direct, indirect, or cumulative effects on GRSG or its habitat; or,

ii. Is proposed to be undertaken as an alternative to a similar action occurring on a nearby parcel, and would provide a clear conservation gain to GRSG.

Exceptions based on conservation gain (ii) may only be considered in (a) PHMAs of mixed ownership where federal minerals underlie less than fifty percent of the total surface, or (b) areas of the public lands where the proposed exception is an alternative to an action occurring on a nearby parcel subject to a valid Federal fluid mineral lease existing as of the date of this RMP amendment. Exceptions based on conservation gain must also include measures, such as enforceable institutional controls and buffers, sufficient to allow the BLM to conclude that such benefits will endure for the duration of the proposed action's impacts.

Any exceptions to this lease stipulation may be approved by the Authorized Officer only with the concurrence of the State Director. The Authorized Officer may not grant an exception unless the applicable state wildlife agency, the USFWS, and the BLM unanimously find that the proposed action satisfies (i) or (ii). Such finding shall initially be made by a team of one field biologist or other GRSG expert from each respective agency. In the event the initial finding is not unanimous, the finding may be elevated to the appropriate BLM State Director, USFWS State Ecological Services Director, and state wildlife agency head for final resolution. In the event their finding is not unanimous, the exception will not be granted. Approved exceptions will be made publically available at least quarterly.

Waivers, Exceptions and Modifications (WEMs) (Source IM-2008-032):

- A waiver is a permanent exemption from a lease stipulation, the stipulation would no longer apply anywhere within the lease. Waivers, by regulation, require a 30-day public review if the authorized officer has determined, prior to lease issuance, that a stipulation involves an issue of major concern to the public (43 CFR 3101.4) and are approved and signed by the State Director.

- An exception is a one-time exemption for a particular site within the lease; exceptions are determined on a case-by-case basis; the stipulation continues to apply to all other sites within the lease. An exception is a limited type of waiver.

- A modification is a change to the provisions of a lease stipulation, either temporarily or for the term of the lease. Depending on the specific modification, the stipulation may or may not apply to all sites within the lease to which the restrictive criteria are applied.

FLM-4: Incorporate required design features and best management practices appropriate to the management area as COAs when post leasing activity is proposed into any post-lease authorizations.

FLM-5: In Montana, prior to leasing conduct a Master Leasing Plan process when all four of the following criteria are met:

- A substantial portion of the area to be analyzed in the MLP is not currently leased.
- There is a majority Federal mineral interest.
- The oil and gas industry has expressed a specific interest in leasing, and there is a moderate or high potential for oil and gas confirmed by the discovery of oil and gas in the general area.
- Additional analysis or information is needed to address likely resource or cumulative impacts if oil and gas development were to occur where there are:
  - multiple-use or natural/cultural resource conflicts;
  - impacts to air quality;
  - impacts on the resources or values of any unit of the National Park System, national wildlife refuge, or National Forest wilderness area, as determined after consultation or coordination with the NPS, the USFWS, or the Forest Service; or
  - impacts on other specially designated areas. – analyzing likely development scenarios and varying mitigation levels.

FLM-5: In Idaho, complete a Master Development Plan, consistent with plan development guide on leases where a producing field is proposed to be developed.

FLM-6: Encourage unitization when deemed necessary for proper development and operation of an area (with strong oversight and monitoring). The unitization must be designed in a manner to minimize adverse impacts on GRSG according to the Federal Lease Form, 3100-11, Sections 4 and 6.

FLM-7: Issue Written Orders of the Authorized Officer (43 CFR 3161.2) requiring reasonable protective measures consistent with the lease terms where necessary to avoid or minimize effects to GRSG populations or habitat.

Locatable Minerals

LOC-2: Apply reasonable and appropriate RDFs to locatable minerals consistent with applicable law to prevent unnecessary or undue degradation of GRSG habitat when a Plan of Operations is submitted for BLM or Forest Service approval, in accordance with 43 CFR 3809.411(d)(2) (or 36 CFR 228.5(a)(3) on National Forest System lands).

LOC-3: Recommend SFAs for withdrawal from the General Mining Act of 1872, as amended, subject to valid existing rights.

Mineral Materials (Saleable Minerals)

SAL-1 (Salable Minerals): PHMA: All PHMAs will be closed to mineral materials development. However, existing free use permits and the expansion of existing free use permits may be considered only if the following criteria are met:

- the project area disturbance cap is not exceeded within a BSU;
- the activity is subject to the provisions set forth in the mitigation framework [**Appendix J**];
- all applicable required design features are applied; and
- the activity is permissible under the Idaho exception and development criteria (AD-3 and AD-4)
    - IHMA: All IHMA will be open to mineral materials development, consistent with the Idaho Anthropogenic Disturbance Criteria (AD-4), and subject to RDFs, buffers and seasonal timing restrictions. Sales from existing community pits within IHMA would be subject to seasonal timing restrictions.
    - GHMA: All GHMA will be open to mineral materials development, subject to RDFs, buffers and seasonal timing restrictions. Sales from existing community pits within GHMA would be subject to seasonal timing restrictions.

SAL-2: Restore salable mineral pits no longer in use to meet GRSG habitat management objectives.

SAL-3: Require reclamation bonding that would require restoration of GRSG habitat on new site authorizations for mineral material pits in IHMA (this would not apply to free use permits issued to a government entity such as a county road district, but would apply to non-profit entities).

SAL-4: Montana: PHMAs are closed to new mineral material sales. However, these areas remain "open" to free use permits and the expansion of existing active pits, only if the following criteria are met:

- the activity is within the BSU and project area disturbance cap;
- the activity is subject to the provisions set forth in the mitigation framework [**Appendix J**];
- all applicable required design features are applied; and
- the activity is permissible under the Montana screening criteria (AD-4) Appendix I.

Nonenergy Leasable Minerals

NEL-1 (Nonenergy Leasables): PHMAs are closed to leasing. IHMA and GHMA: Areas within Known Phosphate Leasing Areas (KPLAs) will remain open to leasing subject to standard stipulations. IHMA areas outside of KPLAs are open to prospecting and subsequent leasing provided the Anthropogenic Disturbance Development Criteria (AD-4) and the anthropogenic disturbance cap (AD-1) can be met. RDFs, buffers and seasonal timing restrictions shall be applied to prospecting permits. GHMA: Lands outside KPLAs are available for prospecting and subsequent leasing and initial mine development subject to RDFs, buffers, timing restrictions (seasonal and daily) and standard stipulations.

NEL-2: Require seasonal and daily timing restrictions in undeveloped nonenergy mineral leases when exploration activities or initial mine development is proposed (e.g. exploration drilling, timber removal, shrub clearing, etc.) as COAs.

NEL-3: Include RDFs as COAs to mine plans in undeveloped non-energy mineral leases for exploration activities or initial mine development.

Mineral Split Estate

MSE-1 (Mineral Split Estate): BLM Owns Mineral Estate – non-federal surface owner: Where the federal government owns the mineral estate in PHMAs, IHMAs, and GHMAs, and the surface is in non-federal ownership, apply the same stipulations, COAs, and/or conservation measures and RDFs applied if the mineral estate is developed on BLM-administered lands in that management area, to the maximum extent permissible under existing authorities, and in coordination with the landowner.

MSE-2: BLM owns surface – non-federal mineral estate owner: Where the federal government owns the surface and the mineral estate is in non-federal ownership in PHMA, IHMA, and GHMA, 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.

Coal (Montana)

Coal-1 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. PHMA is essential habitat for maintaining GRSG for purposes of the suitability criteria set forth at 43 CFR 3461.5(o)(1).

Comprehensive Trails and Travel Management

TM-1 (Travel Management): Limit off-highway vehicle travel within Idaho BLM Field Offices to existing roads, primitive roads, and trails in areas where travel management planning has not been completed or is in progress. This excludes areas previously designated as open through a land use plan decision or currently under review for designation as open, currently being analyzed in ongoing RMP revision efforts in the Four Rivers, Jarbidge and Upper Snake Field Offices.

An off-highway vehicle is any motorized vehicle capable of, or designed for, travel on or immediately over land, water, or other natural terrain, excluding: (1) Any nonamphibious registered motorboat; (2) any military, fire, emergency, or law enforcement vehicle while being used for emergency purposes; (3) any vehicle whose use is expressly authorized by the authorized officer, or otherwise officially approved; (4) Vehicles in official use where official use is use by an employee, agent, or designated representative of the Federal Government or one of its contractors, in the course of his employment, agency, or representation.; and (5) any combat or combat support vehicle when used in times of national defense emergencies (43 CFR 8340.0 5).

TM-2: In PHMA, IHMA, and GHMA, 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.

TM-3: Develop Travel Management Plans for each Field Office as described in the BLM Travel Management Handbook 8342.1 and according to the travel management planning guidelines (**Appendix L**).

TM-4: During subsequent travel management planning design and designate a travel system to minimize adverse effects on GRSG. Locate areas and trails to minimize disturbance of GRSG and/or to have a neural or positive effect on GRSG habitat and populations. Give special attention to protect endangered or threatened species and their habitats. Allow for route upgrade, closure of existing routes, timing restrictions, seasonal closures, and creation of new routes to help protect habitat and meet user group needs, thereby reducing the potential for pioneering unauthorized routes. The emphasis of the comprehensive travel and transportation planning within PHMA would be placed on having a neutral or positive effect on GRSG habitat. Individual route designations would occur during subsequent travel management planning efforts.

TM-5: Conduct road construction, upgrades, and maintenance activities to avoid disturbance during the lekking season – see **Appendix C**.

Recreation and Visitor Services

REC-1: Manage existing recreation uses and sites to minimize adverse effects on GRSG or their habitat through incorporation of RDFs, buffers and seasonal restrictions.

REC-2: In PHMA and IHMA, do not construct new recreation facilities (e.g., campgrounds, trails, trailheads, staging areas) unless the development would have a net conservation gain to GRSG habitat (such as concentrating recreation, diverting use away from critical areas, etc.), or unless the development is required for visitor health and safety or resource protection.

RDFs are means, measures, or practices intended to reduce or avoid adverse environmental impacts. This LUPA/EIS 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 LUPA/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 B,** Greater Sage-Grouse Habitat Required Design Features and Best Management Practices.

2.6.3 Forest Service Proposed Plan Amendment

Forest Service Plan Components[1]

Desired condition - A description of specific social, economic, and/or ecological characteristics of the plan area, or a portion of the plan area, toward which management of the land and resources should be directed. Desired conditions must be described in terms that are specific enough to allow progress toward their achievement to be determined, but do not include completion dates. (36 CFR 219.7(e)(1)(i)) FSH 1909.12, Chapter 20)

Guideline – A constraint on project and activity decisionmaking that allows for departure from its terms, so long as the purpose of the guideline is met.. Guidelines are established to help achieve or maintain a desired condition or conditions, to avoid or mitigate undesirable effects, or to meet applicable legal requirements.

Objective - A concise, measurable, and time-specific statement of a desired rate of progress toward a desired condition or conditions. Objectives should be based on reasonably foreseeable budgets. (36 CFR 219.9(e)(1)(ii)) FSH 1909.12, Chapter 20)

Standard - A mandatory constraint on project and activity decisionmaking, established to help achieve or maintain the desired condition or conditions, to avoid or mitigate undesirable effects, or to meet applicable legal requirements. (36 CFR 219.7(e)(1) (iii)) FSH 1909.12, Chapter 20)

The direction in the following standards and guidelines will be applied consistent with applicable valid existing rights, law, and regulations.

General Greater Sage-Grouse

GRSG-GEN-DC-001-Desired Condition – The landscape for GRSG encompasses large contiguous areas of native vegetation, approximately 6 to 62 square miles in area, to provide for multiple aspects of species life requirements. Within these landscapes, a variety of sagebrush-community compositions exist without invasive species, which have variations in subspecies composition, co-dominant vegetation, shrub cover, herbaceous cover, and stand structure, to meet seasonal requirements for food, cover, and nesting for GRSG.

GRSG-GEN-DC-002-Desired Condition – Anthropogenic disturbance is focused in non-habitat areas outside of PHMA, IHMA, GHMA and SFA[2]. Disturbance in GHMA are

[1] Plan component definitions are based on generally accepted meanings under the 1982 rule and the Forest Service Plan Wording Style Guide 2009, http://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5260265.pdf.

limited, and there is little to no disturbance in PHMA, IHMA and SFAs except for valid existing rights and existing authorized uses.

GRSG-GEN-DC-003-Desired Condition – In all GRSG seasonal habitats, including all seasonal habitats, 70 percent of lands capable of producing sagebrush have 10 to 30 percent sagebrush canopy cover and less than 10 percent conifer canopy cover. In addition, within breeding and nesting habitat, sufficient herbaceous vegetation structure and height provides overhead and lateral concealment for nesting and early brood rearing life stages. Within brood rearing habitat, wet meadows and riparian areas sustain a rich diversity of perennial forb species relative to site potential. Within winter habitat, sufficient sagebrush height and density provides food and cover for GRSG during this seasonal period. Specific desired conditions for GRSG based on seasonal habitat requirements are in **Table 2-6**, Seasonal Habitat Desired Conditions for GRSG on National Forest System Lands.

GRSG-GEN-ST-004-Standard –In PHMA, IHMA and SFA, do not issue new discretionary written authorizations unless all existing discrete anthropogenic disturbances cover less than 3 percent of the total GRSG habitat within the BSU and the proposed project area, regardless of ownership, and the new use will not cause exceedance of the 3 percent cap (**Appendix G**).

GRSG-GEN-ST-005-Standard - In PHMA, SFA, and IHMA, only allow new authorized land uses if the residual impacts to GRSG or their habitats are fully offset by compensatory mitigation projects that provide a net conservation gain to the species, which will be achieved by avoiding, minimizing, and compensating for impacts by applying beneficial mitigation actions. Any compensatory mitigation will be durable, timely, and in addition to what would have resulted without the compens atory mitigation, as addressed in the Mitigation Framework (**Appendix J**).

GRSG-GEN-GL-006-Standard – During lekking (March 1 to April 30) restrict surface disturbing and disruptive activities, including noise at 10dB above ambient (not to exceed 20-24 dB) measured at the perimeter of an occupied lek, to lekking birds from 6 pm to 9 am within a buffer distance[3] of 3.1 miles.

GRSG-GEN-GL-007-Guideline – During breeding and nesting (March 1 to June 15), surface disturbing and disruptive activities to nesting birds should be avoided.

GRSG-GEN-GL-008-Guideline - When breeding and nesting habitat overlaps with other seasonal habitats, habitat should be managed for breeding and nesting desired conditions in **Table 2-6**.

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[2] PHMA and GHMA may contain non-habitat, but management direction would not apply to those areas of non-habitat. However, management direction would apply to all areas within SFAs including non-habitat.
[3] Plan buffer distances reflect lower-interpreted range from Manier, D. J., Bowen, Z. H., Brooks, M. L., Casazza, M. L., Coates, P. S., Deibert, P. A., Hanser, S. E., and Johnson, D. H. 2014. Conservation buffer distance estimates for Greater Sage-Grouse—A review: U.S. Geological Survey Open-File Report 2014-1239, 14 p., http://dx.doi.org/10.3133/ofr20141239.

Table 2-6
Seasonal Habitat Desired Conditions for GRSG on National Forest System Lands

ATTRIBUTE	INDICATORS	DESIRED CONDTION
BREEDING AND NESTING [1,2,3] (Seasonal Use Period March 1-June 15) Apply 6.2 miles from active leks.[4]		
Lek Security	Proximity of trees [5]	Trees or other tall structures are absent to uncommon within 1.86 miles of leks [6,7]
	Proximity of sagebrush to leks [6]	Adjacent protective sagebrush cover within 328 feet of lek [6]
Cover	Seasonal habitat extent [7] (Percent of seasonal habitat meeting desired conditions)	>80% of the breeding and nesting habitat
	Sagebrush canopy cover [6,7,8]	15 to 25%
	Sagebrush height [7] Arid sites [6,7,9] Mesic sites [6,7,10]	 12 to 32 inches 16 to 32 inches
	Predominant sagebrush shape [6]	>50% in spreading [11]
	Perennial grass canopy cover [6,7] Arid sites [7,9] Mesic sites [7,10]	 ≥10% ≥15%
	Perennial grass height [6,7,8]	Provide overhead and lateral concealment from predators [7, 15]
	Perennial forb canopy cover [6,7,8] Arid sites [9] Mesic sites [10]	 ≥5% [6,7] ≥10%[6,7]
BROOD-REARING/SUMMER[1] (Seasonal Use Period June 16-October 31)		
Cover	Seasonal habitat extent [7] (Percent of seasonal habitat meeting desired conditions)	>40% of the brood-rearing/summer habitat
	Sagebrush canopy cover [6,7,8]	10 to 25%
	Sagebrush height [7,8]	16 to 32 inches
	Perennial grass canopy cover and forbs[7,8]	>15%
	Riparian areas/mesic meadows	Proper Functioning Condition [12]
	Upland and riparian perennial forb availability [6,7]	Preferred forbs are common with several preferred species present [13]
WINTER[1] (Seasonal Use Period November 1-February 28)		
Cover and Food	Seasonal habitat extent [6,7,8] (Percent of seasonal habitat meeting desired conditions)	>80% of the winter habitat
	Sagebrush canopy cover above snow [6,7,8]	>10%
	Sagebrush height above snow [6,7,8]	>10 inches [14]

[1]Seasonal dates can be adjusted; that is, start and end dates may be shifted either earlier or later, but the amount of days cannot be shortened or lengthened by the local unit.
[2] Doherty, K. 2008. *Sage-grouse and Energy Development: Integrating Science with Conservation Planning to Reduce Impacts*. University of Montana. Missoula, MT.
[3] Holloran and Anderson. 2005. *Spatial Distribution of Greater Sage-grouse nests in relatively contiguous sagebrush habitats*. Condor 107:742-752.

Table 2-6
Seasonal Habitat Desired Conditions for GRSG on National Forest System Lands

ATTRIBUTE	INDICATORS	DESIRED CONDTION
BREEDING AND NESTING [1,2,3] (Seasonal Use Period March 1-June 15) Apply 6.2 miles from active leks.[4]		
[4] Buffer distance may be changed only if 3 out of 5 years of telemetry studies indicate the 6.2 miles is not appropriate. [5] 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*: A proactive solution to reducing a key threat to a candidate species. Biological Conservation 167: 233-241. [6] Stiver, S.J., E.T. Rinkes, D.E. Naugle, P.D. Makela, D.A. Nance, and J.W. Karl, eds. [In press]. Sage-Grouse Habitat Assessment Framework: A Multiscale Assessment Tool. Technical Reference 6710-1. Bureau of Land Management and Western Association of Fish and Wildlife Agencies, Denver, Colorado. [7] Connelly, J. M. A. Schroweder, A.R. Sands, and C.E. Braun.2000. Guidelines to manage sage-grouse populations and their habitats. Wildlife Society Bulletin 28 (4): 967-985. [8] Connelly, J. K. Reese, and M. Schroder. 2003. *Monitoring of Greater sage-grouse habitats and populations*. Station Bulletin 80, Contribution 979. University of Idaho, College of Natural Resources Experiment Station. Moscow, ID. [9] 10–12 inch precipitation zone; *Artemisia tridentata wyomingensis* is a common big sagebrush sub-species for this type site (Stiver et al, 2015). [10] ≥12 inch precipitation zone; *Artemisia tridentata vaseyana* is a common big sagebrush sub-species for this type site (Stiver et al, 2015). [11] Sagebrush plants with a spreading shape provide more protective cover than sagebrush plants that are more tree- or columnar shaped (Stiver et al. 2015). [12] Existing land management plan desired conditions for riparian areas/wet meadows (spring seeps) may be used in place of properly functioning conditions, if appropriate for meeting greater sage-grouse habitat requirements. [13] Preferred forbs are listed in Table III-2 (Stiver et al. 2015). Overall total forb cover may be greater than that of preferred forb cover since not all forb species are listed as preferred in Table III-2. [14] The height of sagebrush remaining above the snow depends upon snow depth in a particular year. Intent is to manage for tall, healthy, sagebrush stands. [15]Projects will be designed to provide overhead and lateral concealment of nests on a site specific basis.		

GRSG-GEN-GL-009-Guideline – Development of tall structures within 2.0 miles from the perimeter of occupied leks, as determined by local conditions (e.g., vegetation or topography), with the potential to disrupt breeding or nesting by creating new perching/nesting opportunities for avian predators or by decreasing the use of an area, should be restricted within nesting habitat.

Adaptive Management

GRSG-AM-ST-010-Standard – If a hard trigger is identified, immediate action is necessary to stop a severe deviation from GRSG conservation objectives. Upon reaching a hard trigger, an appropriate component of a more restrictive alternative analyzed in the environmental impact statement will be implemented. The Forest Service will review available and pertinent data in coordination with greater sage-grouse biologists from multiple agencies (**Appendix G**).

GRSG-AM-ST-011-Standard – If a soft trigger is identified, apply more conservative or restrictive implementation measures (e.g., extending seasonal restrictions for seasonal surface disturbing activities, modifying seasons of use for livestock grazing, and applying additional restrictions on discretionary activities) for the specific causal factor in the decline of populations and/or habitats, considering local knowledge and conditions (**Appendix G**).

Lands and Realty

Special Use Authorizations (Non-Recreation)

GRSG-LR-SUA-O-012-Objective - In PHMA, IHMA and SFAs, retrofit existing tall structures (e.g., power poles, cellular towers) with perch deterrents or other anti-perching devices within 2 years of signing the Record of Decision.

GRSG-LR-SUA-ST-013-Standard – In PHMA, IHMA and SFAs, restrict issuance of new lands special use authorizations for infrastructure, such as high-voltage transmission lines, major pipelines, hydropower, distribution lines, and cellular towers. Exceptions must be limited and based on rationale (e.g., monitoring, modeling, or best available science) that explicitly demonstrates that adverse impacts to GRSG will be avoided by the exception. Existing authorized uses will continue to be recognized.

GRSG-LR-SUA-ST-014-Standard – In GHMA, new lands special use authorizations may be issued for infrastructure, such as high-voltage transmission lines, major pipelines, hydropower, distribution lines, and cellular towers, if they can be located within existing designated corridors or ROWs and the authorization includes stipulations to protect GRSG and their habitats. Existing authorized uses will continue to be recognized.

GRSG-LR-SUA-ST-015-Standard – In PHMA, IHMA and SFAs, do not authorize temporary lands special uses (i.e., facilities or activities) that result in loss of habitat or would have long-term (i.e., greater than 5 years) negative impact on GRSG or their habitats.

GRSG-LR-SUA-ST-016-Standard – In PHMA, IHMA, GHMA and SFAs, require protective stipulations (e.g., noise, tall structure, guy wire removal, perch deterrent installation) when issuing new authorizations or during renewal, amendment, or reissuance of existing authorizations that authorize infrastructure (e.g., high-voltage transmission lines, major pipelines, roads, distribution lines, and cellular towers).

GRSG-LR-SUA-ST-017-Standard – In PHMA, IHMA, GHMA and SFAs, locate upgrades to existing transmission lines within the existing designated corridors or ROWs unless an alternate route would benefit GRSG or their habitats.

GRSG-LR-SUA-ST-018-Standard - In PHMA, IHMA, GHMA and SFAs, when a lands special use authorization is revoked or terminated and no future use is contemplated, require the authorization holder to remove overhead lines and other infrastructure in compliance with 36 CFR 251.60(i).

GRSG-LR-SUA-ST-019-Standard - In PHMA, IHMA, GHMA and SFA, if the potential long-term (i.e., greater than 5 years) impacts of mitigation (e.g., relocating or burying transmission lines and pipelines) to GRSG or their habitats are greater than the potential impacts from infrastructure associated with a new lands special use authorization, do not pursue the mitigation. If mitigation is not feasible or would result in short-term (i.e., less than 5 years) or long-term impacts, incorporate additional terms and conditions in the special use authorization for protection of GRSG or their habitats.

GRSG-LR-SUA-ST-020-Standard – In PHMA, IHMA, GHMA and SFA, co-locate new infrastructure (e.g., high-voltage transmission lines, major pipelines, roads, distribution lines, and cellular towers) with existing infrastructure to limit disturbance to the smallest footprint, or where it best limits impacts to greater sage-grouse or their habitats. If co-location of new infrastructure cannot be accomplished, locate it adjacent to existing infrastructure, roads, or already disturbed areas.

GRSG-LR-SUA-GL-021-Guideline – In PHMA and SFA, outside of existing designated corridors and ROWs, new transmission lines and pipelines should be buried to limit disturbance to the smallest footprint unless explicit rationale is provided that the biological impacts to GRSG and its habitat are being avoided. When new transmission lines and pipelines are not buried, locate them adjacent to existing transmission lines and pipelines.

Land Ownership Adjustments
GRSG-LR-LOA-ST-022-Standard – In PHMA, IHMA, GHMA and SFA, do not approve landownership adjustments unless the action results in a net conservation gain to GRSG or it will not directly or indirectly adversely impact GRSG conservation.

GRSG-LR-LOA-GL-023-Guideline – In PHMA, IHMA, GHMA and SFA with minority federal ownership, consider landownership adjustments to achieve a landownership pattern (e.g., consolidation, reducing fragmentation) that supports improved GRSG population trends and habitats.

Land Withdrawal
GRSG-LR-LW-GL-024-Guideline – In PHMA, IHMA and SFAs use land withdrawals as a tool, where appropriate, to prevent activities that will be detrimental to GRSG or their habitats.

Wind and Solar
GRSG-WS-ST-025-Standard – In PHMA and SFA do not authorize new solar and wind utility-scale and/or commercial energy development except for on-site power generation associated with existing industrial infrastructure (e.g., mine site).

GRSG-WS-GL-026-Guideline – In IHMA, new solar and wind energy utility-scale and/or commercial development should be restricted. If development cannot be restricted due to existing authorized use, adjacent developments, or split estate issues, then ensure that stipulations are incorporated into the authorization to protect GRSG and their habitats.

Greater Sage-Grouse Habitat
GRSG-GRSGH-O-027-Objective – Every 10 years for the next 50 years, improve GRSG habitat by removing invading conifers and other undesirable species based upon the number of acres shown in **Table 2-7**, Treatment Acres per Decade on National Forest System Lands.

Table 2-7
Treatment Acres per Decade on National Forest System Lands

Forest	Mechanical[1]	Prescribed Fire [2]	Grass Restoration[3]
Boise	1,000	2,000	0
Caribou-Targhee-Curlew	3,000	2,000	3,000
Salmon-Challis	5,000	1,000	0
Sawtooth	7,000	1,000	7,000
Beaverhead-Deerlodge	0	0	0

[1] These are estimates of treatments required to achieve and/or maintain desired habitat conditions over a period of ten years. There are many dynamic and highly variable disturbances that may happen over that period of time that could have a significant effect on the amount, type, and timing of treatment needed. Those disturbances are factored into the ten-year simulation using stochastic, not deterministic, techniques. Probabilities of events such as large wildfires are used in the model to make the simulation as realistic as possible, given empirical data about such events in the past, but the results of the simulation cannot be used to predict the future occurrence of such events, including their timing, size, or location, which are essentially random.
[2] Removal of conifers that have invaded sagebrush including phase one juniper that is 10 percent or less and reducing sagebrush cover in areas over 30 percent canopy cover
[3] Acres are those that are greater than 30 percent sagebrush canopy cover and/or invaded by 10 percent or greater conifer.
[4] Acres presently dominated by annual grasses that could be improved by herbicide application and seeding of perennial vegetation.

GRSG-GRSGH-ST-028-Standard – Design habitat restoration projects to move towards desired conditions (**Table 2-6**) and incorporate the concepts outlined in **Appendix D** - *Using resistance and resilience concepts to reduce impacts of invasive annual grasses and altered fire regimes on the sagebrush ecosystem and greater sage-grouse: A strategic multi-scale approach*.

GRSG-GRSGH-GL-029-Guideline – Sagebrush removal in GRSG breeding and nesting and wintering habitats should be avoided unless necessary to support attainment of desired habitat conditions (**Table 2-6**).

GRSG-GRSGH-GL-030-Guideline – When removing conifers that are encroaching into GRSG habitat, avoid persistent woodlands (i.e., old growth relative to the site or more than 100 years old).

GRSG-GRSGH-GL-031-Guideline – In PHMA, IHMA, GHMA and SFAs, actions and authorizations should include design features to limit the spread and effect of non-native undesirable plant species.

GRSG-GRSGH-GL-032-Guideline - To facilitate safe and effective fire management actions, in PHMA, IHMA, and GHMA and SFAs, fuels treatments in high-risk areas (i.e., areas likely to experience wildfire at an intensity level that might result in movement away from the GRSG desired conditions in **Table 2-6**) should be designed to reduce the spread and/or intensity of wildfire or the susceptibility of GRSG values to move away from desired conditions (**Table 2-6**).

GRSG-GRSGH-GL-033-Guideline - In PHMA, IHMA, GHMA and SFAs, native plant species should be used, when possible, to restore, enhance, or maintain desired conditions (**Table 2-6**).

GRSG-GRSGH-GL-034-Guideline – In PHMA, IHMA and SFAs, vegetation treatment projects should only be conducted if they restore, enhance, or maintain desired conditions (**Table 2-6**).

Livestock Grazing

GRSG-LG-DC-035-Desired Condition – In PHMA, IHMA and SFAs, livestock grazing is managed to ensure adequate nesting cover and does not conflict with the attainment of other vegetation attributes (**Table 2-6**).

GRSG-LG-ST-036-Standard – In PHMA, IHMA and SFAs, do not approve construction of water developments unless beneficial to GRSG habitat.

GRSG-LG-GL-037-Guideline - Grazing guidelines should be applied in each of the seasonal habitats in **Table 2-8**, Grazing Guidelines for GRSG Seasonal Habitat. If values in **Table 2-8** guidelines cannot be achieved based upon a site-specific analysis using Ecological Site Descriptions, long-term ecological site capability analysis, or other similar analysis, adjust grazing management to move towards desired habitat conditions in **Table 2-6** consistent with the ecological site capability. Do not use drought and degraded habitat condition to adjust values. Grazing guidelines in **Table 2-8** would not apply to isolated parcels of National Forest System lands that have less than 200 acres of GRSG habitat.

GRSG-LG-GL-038-Guideline – In PHMA, IHMA, GHMA and SFAs, consider closure of grazing allotments, pastures, or portions of pastures, or managing the allotment as a forage reserve as opportunities arise under applicable regulations, where removal of livestock grazing would enhance the ability to achieve desired habitat conditions (**Table 2-6**).

GRSG-LG-GL-039-Guideline – Bedding sheep and placing camps within 1.2 miles from the perimeter of a lek during lekking (March 1 to April 30) should be restricted.

GRSG-LG-GL-040-Guideline – During the breeding and nesting season (March 1 to June 15), trailing livestock through breeding and nesting habitat should be minimized. Specific routes should be identified, existing trails should be used, and stopovers on active leks should be avoided.

GRSG-LG-GL-041-Guideline – Fences should not be constructed or reconstructed within 1.2 miles from the perimeter of occupied leks, unless the collision risk can be mitigated through design features or markings (e.g., mark, laydown fences, or other design features).

GRSG-LG-GL-042-Guideline – New permanent livestock facilities (e.g., windmills, water tanks, corrals) should not be constructed within 1.2 miles from the perimeter of occupied leks.

Table 2-8
Grazing Guidelines for GRSG Seasonal Habitat

Seasonal Habitat	Grazing Guidelines
Breeding and nesting [1] within 6.2 miles of occupied leks	Perennial grass height: [2] When grazing occurs during breeding and nesting season (March 1 to June 15) manage for upland perennial grass height of 7 inches [3,4,5] When grazing occurs post breeding and nesting season (June 16 to October 30) manage for 4 inches [4,5,6] of perennial grass height.
Brood rearing and summer [1]	Retain an average stubble height of 4 inches for herbaceous riparian/mesic meadow vegetation [7,8]
Winter [1]	≤35% utilization of sagebrush

[1] For descriptions of Seasonal Habitat and Seasonal Periods of greater sage-grouse see table 1.
[2] Grass heights only apply in breeding and nesting habitat with ≥10% sagebrush cover to support nesting.
[3] Holloran et al. 2005. *Greater sage-grouse nesting habitat selection and success in Wyoming.*
[4] Average droop height, assuming current vegetation composition has the capability to achieve these heights. Heights will be measured at the end of the nesting period (Connelly et al. 2000).
[5] Hagen C., 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(1): 42-50.
[6] Stubble height to be measured at the end of the growing season.
[7] In riparian brood-rearing habitat, sage-grouse prefer the lower vegetation (5–15 cm vs. 30–50 cm; Oakleaf 1971, Neel 1980, Klebenow 1982, Evans 1986) and succulent forb growth stimulated by moderate livestock grazing (Neel 1980, Evans 1986); moderate use equates to a 10-cm residual stubble height for most grasses and sedges and 5-cm for Kentucky bluegrass (Mosley et al. 1997, Clary and Leininger 2000) (Crawford et al. 2004. Ecology and Management of sage-grouse grouse habitat).
[8] Stubble height to be measured in the meadow areas used by greater sage-grouse for brood-rearing (not on the hydric greenline).

Fire Management

GRSG-FM-DC-043-Desired Condition – In PHMA, IHMA, GHMA and SFA, the extent and spread of wildfire resulting in loss of sagebrush is minimized, considering firefighter and public safety and other high priority values.

GRSG-FM-ST-044-Standard – In PHMA, IHMA, GHMA and SFA, do not use prescribed fire, except for pile burning, in 12-inch or less precipitation zones unless necessary to facilitate site preparation for restoration of GRSG habitat consistent with desired conditions in **Table 2-6**.

GRSG-FM-ST-045-Standard – In PHMA, SFA, GHMA, if it is necessary to use prescribed fire to facilitate site preparation for restoration of greater sage-grouse habitat consistent with desired conditions in **Table 2-6**, the associated NEPA analysis must identify how the project would move towards GRSG desired conditions, why alternative techniques were not selected, and how potential threats to GRSG habitat would be minimized.

GRSG-FM-GL-046-Guideline – In wintering or breeding and nesting habitat, sagebrush removal or manipulation, including prescribed fire, should be restricted unless the removal strategically reduces the potential impacts from wildfire.

GRSG-FM-GL-047-Guideline – In PHMA, IHMA, GHMA and SFA, when reseeding in fuel breaks, fire resistant native plant species should be used if available, or consider using fire resistant non-native species to meet resource objectives, if analysis demonstrates that non-native plants will not damage GRSG habitat in the long term.

GRSG-FM-GL-048-Guideline – In PHMA, IHMA, GHMA and SFA, fuel treatments should be designed to restore, enhance, or maintain GRSG habitat.

GRSG-FM-GL-049-Guideline – Locating temporary wildfire suppression facilities (e.g., incident command posts, spike camps, helibases, mobile retardant plants) in PHMA, SFA, and GHMA should be avoided.

GRSG-FM-GL-050-Guideline - In PHMA, IHMA, GHMA and SFAs cross-country vehicle travel during fire operations should be restricted, whenever safe and practical to do so, as determined by fireline leadership and incident commanders.

GRSG-FM-GL-051-Guideline – In PHMA, IHMA, GHMA and SFA, use fire management tactics and strategies that seek to minimize loss of existing sagebrush habitat. The safest and most practical means to do so will be determined by fireline leadership and incident commanders.

GRSG-FM-GL-052-Guideline – In PHMA, IHMA, GHMA and SFA, prescribed fire prescriptions should minimize undesirable effects on vegetation and/or soils (e.g., minimize mortality of desirable perennial plant species and reduce risk of hydrophobicity).

GRSG-FM-GL-053-Guideline - In PHMA, IHMA, GHMA and SFA, roads and natural fuel breaks should be incorporated into fuel break design to improve effectiveness and minimize loss of existing sagebrush habitat.

GRSG-FM-GL-054-Guideline - In PHMA, IHMA, GHMA and SFA, all fire-associated vehicles and equipment should be inspected and cleaned using standardized protocols and procedures and approved vehicle/equipment decontamination systems before entering and exiting the area to minimize the introduction of invasive annual grasses and other invasive plant species and noxious weeds.

GRSG-FM-GL-055-Guideline - Unit-specific GRSG fire management toolboxes containing maps, lists, contact information for qualified resource advisors, local guidance, and relevant information should be developed and used.

GRSG-FM-GL-056-Guideline – Localized maps of PHMA, IHMA, GHMA and SFA should be provided to dispatch officers and extended attack incident commanders to use when prioritizing wildfire suppression resources and designing suppression tactics.

GRSG-FM-GL-057-Guideline - In or near PHMA, IHMA, GHMA and SFA, a GRSG resource advisor should be assigned to all extended attack fires.

GRSG-FM-GL-058-Guideline – On critical fire weather days, protection of GRSG habitat should receive high consideration, along with other high values, when positioning resources.

GRSG-FM-GL-059-Guideline – Line officers should be involved in setting pre-season wildfire response priorities and, during periods of multiple fires, prioritizing protection of PHMA, GHMA and SFA.

GRSG-FM-GL-060-Guideline – In PHMA, IHMA, GHMA and SFA, consider using fire retardant and mechanized equipment only if it is likely to result in minimizing burned acreage.

GRSG-FM-GL-061-Guideline – In PHMA, IHMA GHMA, to minimize sagebrush loss, mop-up should be conducted where the burned areas adjoin unburned islands, doglegs, or other habitat features, as safety and available resources allows.

Wild Horse and Burro

GRSG-HB-GL-062-Guideline – In PHMA, IHMA, GHMA and SFA, wild horse and burro populations should be managed within established appropriate management levels to restore, enhance, or maintain GRSG desired habitat conditions (**Table 2-6**).

GRSG-HB-GL-063-Guideline – In PHMA, IHMA, GHMA and SFA, appropriate management levels should be adjusted if GRSG management standards are not met due to degradation that can be at least partially be attributed to wild horse or burro populations.

Recreation

GRSG-R-DC-064-Desired Condition – In PHMA, IHMA, GHMA and SFA, existing and new recreation special use authorizations and expansion of special use authorizations avoids effects to GRSG and their habitats.

GRSG-R-ST-065-Standard – In PHMA, IHMA and SFA, do not authorize temporary recreation uses (i.e., facilities or activities) that result in loss of habitat or would have long-term (i.e., greater than 5 years) negative impacts on GRSG or their habitats.

GRSG-R-GL-066-Guideline – In PHMA, IHMA, GHMA and SFA, terms and conditions that protect and/or restore GRSG habitat within the permit area should be included in new recreation special use authorizations. During renewal, amendment, or reauthorization, terms and conditions in existing permits and operating plans should be modified to protect and/or restore GRSG habitat.

GRSG-R-GL-067-Guideline – In PHMA, SFA, and IHMA, new recreational facilities or expansion of existing recreational facilities (e.g., roads, trails, campgrounds), including special use authorizations for facilities and activities, should not be approved unless the development results in a net conservation gain to GRSG and/or their habitats or the development is required for visitor safety.

Roads/Transportation

GRSG-RT-DC-0068-Desired Condition - In PHMA, IHMA, GHMA and SFAs, within the travel management system, GRSG experience minimal disturbance during breeding and nesting (March 1 to June 15) and wintering (November 1 to February 28) periods.

GRSG-RT-ST-069-Standard – In PHMA, IHMA, GHMA and SFAs, do not conduct or allow new road or trail construction (does not apply to realignments for resource protection) except when necessary for administrative access, public safety, or to access valid existing rights. If necessary to construct new roads and trails for one of these purposes, construct them to the minimum standard, length, and number and avoid, minimize, and mitigate impacts.

GRSG-RT-ST-070-Standard – Do not conduct or allow road and trail maintenance activities within 2 miles from the perimeter of active leks during lekking (March 1 to April 30) from 6 pm to 9 am.

GRSG-RT-ST-071-Standard – In PHMA, IHMA and SFAs, prohibit public access on temporary energy development roads, unless consistent with all other terms and conditions included in the forest plan.

GRSG-RT-GL-072-Guideline – In PHMA, IHMA and SFAs, new roads and road realignments should be designed and administered to reduce collisions with GRSG.

GRSG-RT-GL-073-Guideline – In PHMA, IHMA, and SFAs, road construction within riparian areas and mesic meadows should be restricted. If not possible to restrict construction within riparian areas and mesic meadows, roads should be designed and constructed at right angles to ephemeral drainages and stream crossings, unless topography prevents doing so.

GRSG-RT-GL-074-Guideline – In PHMA, IHMA, GHMA and SFAs, when decommissioning roads and unauthorized routes, restoration activity should be designed to move habitat towards desired conditions (**Table 2-6**).

GRSG-RT-GL-075-Guideline – In PHMA, IHMA, GHMA and SFAs, dust abatement terms and conditions should be included in road use permits when dust has the potential to impact GRSG.

GRSG-RT-GL-076-Guideline - In PHMA, IHMA, GHMA and SFAs, road and road-way maintenance activities should be designed and implemented to reduce the risk of vehicle or human-caused wildfires and the spread of invasive plants. Such activities include but are not limited to the removal or mowing of vegetation a car-width off the edge of roads; use of weed-free earth-moving equipment, gravel, fill, or other materials; and blading or pulling roadsides and ditches that are infested with noxious weeds only if required for public safety or protection of the roadway.

Minerals

Fluid Minerals - Unleased

GRSG-M-FMUL-ST-077-Standard - In PHMA, and IHMA any new oil and gas leases must include an NSO stipulation. There will be no waivers or modifications. An exception could be granted by the authorized officer with unanimous concurrence from a team of agency GRSG experts from the USFWS, Forest Service, and State wildlife agency if:

- There would be no direct, indirect, or cumulative effects to GRSG or their habitats or
- Granting the exception provides an alternative to a similar action occurring on a nearby parcel and
- The exception provides a clear net conservation gain to GRSG.

GRSG-M-FMUL-ST-078-Standard – In GHMA, any new leases must include appropriate CSU and TL stipulations to protect GRSG and their habitat.

GRSG-M-FMUL-ST-079-Standard – In SFA, there will be NSO and no waivers, exceptions, or modifications for fluid mineral leasing.

Fluid Minerals - Leased

GRSG-M-FML-ST-080-Standard – In PHMA, IHMA, and SFA, when approving the Surface Use Plan of Operation portion of the Application for Permit to Drill on existing leases that are not yet developed, require that leaseholders avoid and minimize surface disturbing and disruptive activities consistent with the rights granted in the lease.

GRSG-M-FML-ST-081-Standard – In PHMA, IHMA, and SFA, when facilities are no longer needed or leases are relinquished, require reclamation plans to include terms and conditions to restore habitat to desired conditions as described in **Table 2-6**.

GRSG-M-FML-ST-082-Standard – In GHMA, authorize new transmission line corridors, transmission line ROWs, transmission line construction, or transmission line-facility construction associated with fluid mineral leases with stipulations necessary to protect GRSG and their habitats, consistent with the terms and conditions of the permit.

GRSG-M-FML-ST-083-Standard – Locate compressor stations on portions of a lease that are non-habitat and are not used by GRSG, and if there would be no direct, indirect, or cumulative effects on GRSG or their habitat. If this is not possible, work with the operator to use mufflers, sound insulation, or other features to reduce noise, consistent with GRSG-GEN-ST-006-Standard.

GRSG-M-FML-ST-084-Standard – In PHMA, GHMA and SFA, when authorizing development of fluid mineral resources, work with the operator to minimize impacts to GRSG and their habitat, such as locating facilities in non-habitat areas first and then in the least suitable habitat.

GRSG-M-FML-GL-085-Guideline – In PHMA, IHMA, GHMA and SFA, operators should be encouraged to reduce disturbance to GRSG habitat. At the time of approval of the Surface Use Plan of Operation portion of the Application for Permit to Drill, terms and conditions should be included to reduce disturbance to GRSG habitat, where appropriate and feasible and consistent with the rights granted to the lessee.

GRSG-M-FML-GL-086-Guideline – On existing federal leases in PHMA, IHMA, and SFA, when surface occupancy cannot be restricted due to valid existing rights or development requirements, disturbance and surface occupancy should be limited to areas least harmful to GRSG based on vegetation, topography, or other habitat features.

GRSG-M-FML-GL-087-Guideline - In PHMA, SFA, and GHMA, where the federal government owns the surface and the mineral estate is in non-federal ownership, coordinate with the mineral estate owner/lessee to apply appropriate stipulations, conditions of approval, conservation measures and RDFs to the appropriate surface management instruments to the maximum extent permissible under existing authorities.

Fluid Minerals - Operations

GRSG-M-FMO-ST-088-Standard – In PHMA, IHMA and SFA, do not authorize employee camps.

GRSG-M-FMO-ST-089-Standard – In PHMA, IHMA and SFA, when feasible, do not locate tanks or other structures that may be used as raptor perches. If this is not feasible, use perch deterrents.

GRSG-M-FMO-GL-090-Guideline – In PHMA, IHMA and SFA, closed-loop systems should be used for drilling operations with no reserve pits, where feasible.

GRSG-M-FMO-GL-091-Guideline – In PHMA, IHMA, GHMA and SFA, during drilling operations, soil compaction should be minimized and soil structure should be maintained using the best available techniques to improve vegetation reestablishment.

GRSG-M-FMO-GL-092-Guideline – In PHMA, IHMA, GHMA and SFA, dams, impoundments and ponds for mineral development should be constructed to reduce potential for West Nile virus. Examples of methods to accomplish this include:

- Increase the depth of ponds to accommodate a greater volume of water than is discharged.
- Build steep shorelines (greater than 2 feet) to reduce shallow water and aquatic vegetation around the perimeter of impoundments to reduce breeding habitat for mosquitoes.
- Maintain the water level below that of rooted aquatic and upland vegetation. Avoid flooding terrestrial vegetation in flat terrain or low-lying areas.

- Construct dams or impoundments that restrict down-slope seepage or overflow by digging ponds in flat areas rather than damming natural draws for effluent water storage or lining constructed ponds in areas where seepage is anticipated.
- Line the channel where discharge water flows into the pond with crushed rock or use a horizontal pipe to discharge inflow directly into existing open water.
- Line the overflow spillway with crushed rock and construct the spillway with steep sides.
- Fence pond sites to restrict access by livestock and other wild ungulates.
- Remove or re-inject produced water.
- Treat waters with larvicides to reduce mosquito production where water occurs on the surface.

GRSG-M-FMO-GL-0093-Guideline – In PHMA, IHMA, GHMA and SFA to keep habitat disturbance at a minimum, a phased development approach should be applied to fluid mineral operations, wherever possible, consistent with the rights granted under the lease. Disturbed areas should be reclaimed as soon as they are no longer needed for mineral operations.

Coal Mines - Unleased

GRSG-M-CMUL-ST-094-Standard – In PHMA, IHMA and SFA, do not authorize surface disturbances (e.g., appurtenant facilities) for new underground coal mines.

Coal Mines - Leased

GRSG-M-CML-ST-095-Standard – In PHMA, IHMA and SFA, do not authorize new appurtenant facilities for existing underground mines unless no technically feasible alternative exists. If new appurtenant facilities associated with existing mine leases cannot be located outside of PHMA, IHMA and SFA, co-locate them with any existing disturbed areas, if possible. If co-location is not possible, then construct new facilities to minimize disturbed areas while meeting mine safety standards and requirements, as identified by Mine Safety and Health Administration mine-plan approval process, and locate the facilities in an area least harmful to GRSG habitats based on vegetation, topography, or other habitat features.

GRSG-M-CML-GL-096-Guideline – In PHMA, IHMA, GHMA and SFA, when coal leases are subject to readjustment, additional requirements should be included in the readjusted lease to conserve, enhance, and restore GRSG and their habitat for long-term viability.

Locatable Minerals

GRSG-M-LM-ST-097-Standard – In PHMA, IHMA and SFA, only approve Plans of Operation if they include mitigation to protect GRSG and their habitats, consistent with the rights of the mining claimant as granted by the General Mining Act of 1872, as amended.

GRSG-M-LM-GL-098-Guideline – In PHMA, IHMA, GHMA and SFA to keep habitat disturbance at a minimum, a phased development approach should be applied to operations consistent with the rights granted under the General Mining Act of 1872, as amended. Disturbed areas should be reclaimed as soon as they are no longer needed for mineral operations.

GRSG-M-LM-GL-099-Guideline - In PHMA, IHMA, GHMA and SFA, abandoned mine sites should be closed or mitigated to reduce predation of GRSG by eliminating tall structures that could provide nesting opportunities and perching sites for predators.

Nonenergy Leasable Minerals

GRSG-M-NEL-GL-100-Guideline – In PHMA, IHMA, GHMA and SFA, at the time of issuance of prospecting permits, exploration licenses and leases, or readjustment of leases, the Forest Service should provide recommendations to the BLM for the protection of GRSG and their habitats.

GRSG-M-NEL-GL-101-Guideline - In PHMA, SFA, GHMA, the Forest Service should recommend to the BLM that expansion or readjustment of existing leases avoid, minimize, or mitigate the effects to GRSG and their habitat.

Mineral Materials

GRSG-M-MM-ST-0102-Standard – In PHMA and SFA, do not allow new mineral material disposal or development.

GRSG-M-MM-ST-103-Standard – In PHMA, IHMA and SFA, free-use mineral material collection permits may be issued and expansion of existing active pits may be allowed, except from March 1 to April 30 between 6 pm and 9 am within 2 miles from the perimeter of occupied leks, within the BSU and proposed project area, if doing so does not exceed the disturbance cap.

GRSG-M-MM-ST-104-Standard - In PHMA, IHMA, GHMA and SFA, any permit for existing mineral material operations must include appropriate requirements for operation and reclamation of the site to restore, enhance, or maintain desired habitat conditions (**Table 2-6**).

2.7 Adaptive Management, Monitoring, and Mitigation

The adaptive management, monitoring, and mitigation descriptions below apply to Alternatives D, E, and the Proposed Plan. In making amendments to this plan, the BLM will coordinate with the USFWS as BLM continues to meet its objective of conserving, enhancing and restoring GRSG habitat by reducing, minimizing or eliminating threats to that habitat.

If the BLM finds that the State of Montana is implementing a GRSG Habitat Conservation Program that is effectively conserving the GRSG, the BLM will review the management goals and objectives to determine if they are being met and whether amendment of the BLM

plan is appropriate to achieve consistent and effective conservation and GRSG management across all lands regardless of ownership.

2.7.1 Adaptive Management Plan

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/Forest Services' National Greater Sage-grouse Planning Strategy, adaptive management will help identify if GRSG 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/Forest Service's adaptive management strategy for the Idaho and southwestern Montana sub-region.

Adaptive Management and Monitoring

This EIS contains a monitoring framework plan (**Appendix E**) 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 (US Department of the Interior 2004; Stiver et al. 2006; USFWS 2013). The information collected through the Monitoring Framework Plan outlined in **Appendix E** will be used by the BLM/Forest Service to determine when adaptive management hard and soft triggers (discussed below) are met.

The State of Idaho adaptive management plan is presented in **Appendix Q**. The Montana Sage Grouse habitat Conservation Program established by Governor's Executive Order # 10-2014, states under the General Provisions heading, item # 22 "Montana Sage Grouse Oversight Team (MSGOT) shall regularly reevaluate the effectiveness of the Conservation Strategy, at a minimum annually, as new science, information and data emerge regarding the habitats and behavior of sage grouse, and shall recommend such changes as are appropriate."

Adaptive Management Triggers

Soft Triggers
Soft triggers represent an intermediate threshold indicating that management changes are needed at the project/implementation level to address habitat and population losses. If a soft trigger is identified, the BLM/Forest Service will apply more conservative or restrictive implementation conservation measures to mitigate for the specific causal factor in the decline of populations and/or habitats, with consideration of local knowledge and conditions. For example, monitoring data within an already federally authorized project area within a given GRSG population area indicates that there has been a slight decrease in GRSG numbers in this area. Data also suggests the decline may be attributed to GRSG collisions with monitoring tower guy-wires from this federally authorized project. BLM then receives an application for a new tower within the same GRSG population area. The response would be to require the new authorization's tower guy-wires to be flagged. Monitoring data then shows the decline is curtailed. The adaptive management soft trigger response is to require future applications to flag for guy-wires. These types of adjustments will be made to preclude tripping a "hard" trigger (which signals more severe habitat loss or population declines). While there should be no expectation of hitting a hard trigger, if unforeseen circumstances occur that trip either a habitat or population hard trigger, more restrictive management will be required.

Hard Triggers
Hard triggers represent a threshold indicating that immediate action is necessary to stop a severe deviation from GRSG conservation objectives as set forth in the BLM and Forest Service plans. The hard trigger and the proposed management response to this trigger are presented in **Section 2.6.2**, AM-7, AM-9, AM-12, AM-15, and AM-16.

2.7.2 Monitoring for the Greater Sage-grouse Planning Strategy

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 GRSG, 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 (US Department of the Interior 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 2013), the BLM and Forest Service will monitor implementation and effectiveness of conservation measures in GRSG 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 Federal Register notice (75 Federal Register 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, Forest Service, and other conservation partners use the resulting information to guide implementation of conservation activities.

Monitoring strategies for GRSG 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 *Federal Register* 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 Forest Service have finalized a monitoring framework, which can be found in **Appendix E**. This framework describes the process that the BLM and Forest Service will use to monitor implementation and effectiveness of RMP/LUP 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 Forest Service 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/LUP 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 Forest Service will measure and track attributes of occupied habitat, PHMA, IHMA, and GHMA 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.

2.7.3 Regional Mitigation

Consistent with the Proposed Plan's goal outlined in **Section 2.6.2**, the intent of the Idaho and southwestern Montana GRSG LUPA/EIS is to provide a net conservation gain to the species. To do so, in undertaking BLM and Forest Service 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. 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

Mitigation Standards. In undertaking BLM and Forest Service 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. Actions which result in habitat loss and degradation include those identified as threats which contribute to GRSG disturbance as identified by the USFWS in its 2010 listing decision (75 FR 13910) and shown in **Table 1** in **Appendix G**. 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 and Forest Service 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 J**).

Greater Sage-Grouse Conservation Team. The BLM and Forest Service will establish a WAFWA Management Zone Greater Sage-Grouse Conservation Team (hereafter, Team) to help guide the conservation of GRSG, within 90 days of the issuance of the Record of Decision. 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 MON-1 through MON-7 and **Appendix E**). Subsequently, the Team will use these data to either modify the appropriate Regional Mitigation Strategy or recommend adaptive management actions (see AM-1 through AM-16 and **Appendix G**).

The BLM and Forest Service 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 and Forest Service will strive for a collaborative and unified approach between Federal agencies (e.g. USFWS, BLM, and Forest Service), Tribal governments, state and local government(s), and other stakeholders for GRSG conservation. The Team will provide advice, and will not make any decisions that impact Federal lands. The BLM and Forest Service 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 and Forest Service 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 Record of Decision. 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 J**.

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 and Forest Service will include the avoidance, minimization, and compensatory recommendations from the Regional Mitigation Strategy in one or more of the NEPA analysis' alternatives for BLM and Forest Service 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 and Forest Service need 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 and Forest Service 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 Record of Decision. The selection of the third-party compensatory mitigation administrator will conform to all relevant laws, regulations, and policies. The BLM and Forest Service will remain responsible for making decisions that affect Federal lands.

2.8 Draft LUPA/EIS Alternatives

The following are alternatives to the Proposed Plan and were presented and analyzed in the Draft LUPA/EIS. Alternative F has been refined based on public comment to clarify grazing and ACEC management.

2.8.1 Alternative A (No Action)

The No Action Alternative (Alternative A) represents the continuation of current management direction in the 21 BLM Field Office LUPs and 8 Forest Service LUPs, and proposes no new plan or management actions. Existing GRSG-related management direction is provided in BLM WO IM 2012-043, Greater Sage-Grouse Interim Management Policies and Procedures; Forest Service WO 2600 Memo, Interim Conservation Recommendations for Greater Sage-Grouse and Greater Sage-Grouse Habitat; BLM WO IM 2013-128, Sage-Grouse Conservation in Fire Operations and Fuels Management; Forest Service WO letter 5100, Sage-Grouse Conservation Methods 2013; Idaho BLM IM 2013-036, Greater Sage-Grouse Habitat and Wildland Fire Objectives; and Idaho BLM Information Bulletin (IB) 2013-036, Interim Framework for Evaluating Proposed Activities Within Greater Sage-Grouse Preliminary Priority and Preliminary General Habitats on Bureau of Land Management (BLM) Land in Idaho). A no action alternative is required by CEQ regulations and provides a baseline for comparison of the other alternatives (CEQ 1981).

2.8.2 Management Common to Action Alternatives

The following would be common to all action alternatives:

- Allowable uses and management actions from the existing LUPs that remain valid and do not require amending are carried forward
- Where more restrictive land use allocations or decisions are made in existing RMPs, those more restrictive land use allocations or decisions will remain in effect and will not be amended by this LUPA.
- Existing requirements regarding site-specific environmental analysis, public involvement, consultation with tribes and other agencies, or compliance with applicable laws without waiver are maintained

- Appropriate, site-specific analysis as described in NEPA and any requisite site-specific decision making (i.e., 43 CFR Subpart 4160, or 36 CFR Part 251) would be conducted prior to approving proposed management actions
- Impacts analysis on other sagebrush steppe species and impacts on state endowment trust lands managed by the Idaho Department of Lands would be analyzed during site-specific project NEPA review
- Activities not specifically addressed by the alternative would still be subject to the allowances and restrictions of the applicable resource management plans
- Information in the Management Plan and Conservation Strategies for Sage-Grouse in Montana would be considered when designing projects that may affect sensitive species or federally listed species in Montana
- An oil and gas leasing decision would be made and would be consistent with the BLM and Forest Service requirements for a leasing decision as found in 43 CFR Part 3101 and 36 CFR 228.102, respectively.

Habitat boundary adjustments are described in **Appendix F**.

2.8.3 Alternative B

BLM and Forest Service management actions, in concert with other state and federal agencies and private landowners, play a critical role in the future trends of GRSG populations. The BLM National Policy Team, as part of the National Greater Sage-Grouse Planning Strategy, established the NTT in August 2011. The NTT's mission was to develop and describe conservation measures to be considered while new or revised range-wide and long term regulatory mechanisms were developed through LUPAs to conserve, enhance, and restore the portions of GRSG habitat on BLM- and Forest Service-administered lands. The BLM and Forest Service used GRSG conservation measures in A Report on National Greater Sage-Grouse Conservation Measures (Sage-Grouse National Technical Team 2011, also referred as to the NTT Report) to form management direction under Alternative B.

Conservation measures under Alternative B are focused on PHMAs (areas that have the highest conservation value to maintaining or increasing GRSG populations) and on Great Basin-wide concerns for GRSG. GRSG GHMAs are also identified, encompassing seasonal or year-round habitat. Acreages of each management area are shown in Table 2-9, Comparative Summary of Alternatives by Acres Allotted1 (Within GRSG Habitat). The BLM and Forest Service would apply a three percent surface disturbance cap on anthropogenic disturbances (not including fire) in PHMAs.

2.8.4 Alternative C

During scoping for this LUPA/EIS, individuals and conservation groups submitted management direction recommendations for protecting and conserving GRSG and habitat range-wide. The recommendations, in conjunction with resource allocation opportunities and internal sub-regional BLM and Forest Service input, were reviewed in order to develop

BLM and Forest Service management direction for GRSG under Alternative C. Management actions in Alternative C are applied to all occupied habitat (PHMA) and focus on the removal of livestock grazing from the landscape to alleviate threats to GRSG. The acreage of PHMA is shown in **Table 2-9**. Similar to Alternative B, the BLM and Forest Service would apply a three percent surface disturbance cap on anthropogenic disturbances (not including fire) in PHMAs. The BLM would designate 4 new ACECs.

2.8.5 Alternative D

This is the Idaho and Southwestern Montana Sub-region alternative. It describes conservation measures to conserve, enhance, and restore GRSG habitat on BLM- and Forest Service-administered lands, while balancing resources and resource use among competing human interests, land uses, and the conservation of natural and cultural resource values, and sustaining and enhancing ecological integrity across the landscape, including plant, wildlife, and fish habitat. This alternative incorporates the NTT strategy and includes local adjustments to A Report on National Greater Sage-Grouse Conservation Measures (NTT 2011) and habitat boundaries to provide a balanced level of protection, restoration, enhancement, and use of resources and services to meet ongoing programs and land uses.

Conservation measures under Alternative D apply to three GRSG management areas – preliminary priority management area, GHMA, and IHMA. PHMAs contain the most important and relatively intact habitats and potential restoration areas for conserving GRSG, IHMAs have some level of development or disturbance that reduces the effective character for GRSG but still provides better quality habitat than GHMAs. GHMAs represent the remaining occupied or potentially occupied habitat outside of PHMAs and IHMAs. Acreages of each management area are shown in **Table 2-9**. Under Alternative D, the BLM and Forest Service would require no net unmitigated loss of PHMAs instead of a disturbance cap.

2.8.6 Alternative E

The Idaho Governor's Alternative (Governor's Alternative), which provides the basis for Alternative E in this EIS, was developed from recommendations by the State of Idaho's GRSG Task Force and provides recommendations and policies to aid the State of Idaho in developing a conservation plan specifically adapted to Idaho GRSG populations with the objective of precluding the need to list the species under the ESA (Idaho Governor's Sage-grouse Task Force 2012). Conservation measures under Alternative E for lands in Idaho would apply to three GRSG management areas: CHZ, IHZ, and GHZ. Acreages of each habitat zone are shown in **Table 2-9**. The three proposed habitat zones represent a management continuum that includes at one end, a relatively restrictive approach aimed at providing a high level of protection to the most important CHZ. On the other end is a relatively flexible approach for GHZ, allowing for more multiple-use activities. Management under IHZ contemplates greater flexibility than in CHZ, but the overall quality and ecological importance of most of the habitat within this theme is more closely aligned with the habitat in CHZ than in GHZ. Alternative E includes a three percent disturbance cap on fluid mineral development in CHZ in Idaho and a five percent disturbance cap for IHZ. Since the sub-regional planning boundary extends into southwestern Montana and the

Sawtooth National Forest portion of Utah, management for these areas in this alternative reflect the approaches described through coordination with Montana Fish Wildlife and Parks (as part of previous planning) and the State of Utah. Lands in Montana would be managed under Alternative A. For the portion of the sub-region within Utah, PHMA and GHMA would be delineated, with the same definitions as under Alternative B.

2.8.7 Alternative F

Similar to Alternative C, Alternative F was derived from individual and conservation group scoping comments. This alternative contains a mixture of management actions from *A Report on National Greater Sage-Grouse Conservation Measures* as well as additional restrictions on resource uses and increased resource protection. As such, Alternative F provides greater restrictions on allowable uses and less resource management flexibility than Alternative B. Conservation measures in Alternative F are focused on PHMAs, GHMAs, and RHMAs. Acreages of each management area are shown in **Table 2-9**. The BLM and Forest Service would apply a three percent disturbance cap on surface disturbances (including fire) in PHMAs.

2.9 Summary Comparison of Proposed Plan Amendment and Draft Alternatives

This section summarizes and compares Alternatives A through F and the BLM and Forest Service Proposed Plans considered in the Final EIS. Combined with the appendices and maps, **Table 2-9**, Comparative Summary of Allocation Decisions of the Proposed Plan Amendment and Draft Alternatives, provides the differences among the alternatives relative to what they establish and where they occur. The table compares the differences with the most potential to affect resources among the alternatives.

Table 2-9
Comparative Summary of Alternatives by Acres Allotted[1] (Within GRSG Habitat)

Resource or Resource Use *Resources*	Total Planning Area[6]	Alternative A[7]	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F	Proposed Plan
GRSG Habitat Areas (acres)		***Figure 2-17***	***Figure 2-18***	***Figure 2-19***	***Figure 2-20***	***Figure 2-21***	***Figure 2-22***	***Figure 2-3***
Planning Area Acres	**25,711,800**							
BLM	12,449,000							
Forest Service	13,262,800							
Total GRSG Management Areas		**11,338,300**	**11,106,900**	**11,106,900**	**11,338,300**	**11,149,400**	**11,607,200**	**11,106,400**
BLM		9,290,100	9,243,900	9,243,900	9,290,100	9,281,100	9,744,100	9,544,500
Forest Service		2,048,200	1,863,000	1,863,000	2,048,200	1,868,300	1,863,100	1,561,900
Priority Habitat Management Area[2]		**8,235,900**	**8,235,900**	**11,106,900**	**6,849,200**	**4,908,100**	**8,235,900**	**5,192,600**
BLM		7,272,100	7,272,100	9,243,900	6,143,500	4,367,400	7,272,100	4,627,200
Forest Service		963,900	963,900	1,863,000	705,700	540,800	963,900	565,500
Preliminary General Management Area[3]		**3,102,400**	**2,870,900**		**3,102,400**	**4,908,100**	**2,870,900**	**2,760,500**
BLM		2,018,100	1,971,800		2,018,100	4,367,400	1,971,800	2,179,700
Forest Service		1,084,300	899,100		1,084,300	540,800	899,100	580,800
Important Habitat Management Area[8]					**1,386,800**	**2,743,800**		**3,153,300**
BLM					1,128,600	2,369,500		2,737,600
Forest Service					258,200	374,300		415,700
Restoration Habitat Management Area[4]							**500,300**	
BLM							500,200	
Forest Service							150	
Sagebrush Focal Area								**3,842,900**
BLM								3,606,100
Forest Service								236,800
Livestock Grazing		***Figure 2-23***	***Figure 2-24***	***Figure 2-25***	***Figure 2-26***	***Figure 2-27***	***Figure 2-28***	***Figure 2-5***
Acres available for livestock grazing (Total)		**PHMA: 8,054,100** **GHMA: 3,019,700**	**PHMA: 8,054,100** **GHMA: 2,801,000**	**PHMA: 0**	**PHMA: 6,673,500** **IHMA: 1,380,600** **GHMA: 3,019,700**	**PHMA: 4,739,000** **IHMA: 2,712,000** **GHMA: 3,446,500**	**PHMA: 8,054,100** **GHMA: 2,801,000** **RHMA: 500,300**	**PHMA: 5,021,400** **IHMA: 3,113,500** **GHMA: 2,732,300**
Acres available for livestock grazing (BLM)		PHMA: 7,125,700 GHMA: 2,015,200	PHMA: 7,125,700 GHMA: 1,967,900	PHMA: 0	PHMA: 5,999,800 IHMA: 1,125,900 GHMA: 2,015,200	PHMA: 4,216,900 IHMA: 2,356,200 GHMA: 2,557,600	PHMA: 7,125,700 GHMA: 1,967,900 RHMA: 500,200	PHMA: 4,474,400 IHMA: 2,719,800 GHMA: 2,194,600

Table 2-9
Comparative Summary of Alternatives by Acres Allotted[1] (Within GRSG Habitat)

Resource or Resource Use	Total Planning Area[6]	Alternative A[7]	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F	Proposed Plan
Acres available for livestock grazing (Forest Service)		PHMA: 928,400 GHMA: 1,004,600	PHMA: 928,400 GHMA: 833,100	PHMA: 0	PHMA: 673,800 IHMA: 254,700 GHMA: 1,004,600	PHMA: 522,100 IHMA: 355,800 GHMA: 888,900	PHMA: 928,400 GHMA: 833,100 RHMA: 140	PHMA: 547,0100 IHMA: 393,800 GHMA: 537,700
Acres unavailable for livestock grazing (Total)		**PHMA: 179,800** **GHMA: 107,800**	**PHMA: 179,800** **GHMA: 94,500**	**PHMA: 11,132,500**	**PHMA: 173,900** **IHMA: 5,900** **GHMA: 107,800**	**PHMA: 168,000** **IHMA: 31,100** **GHMA: 75,200**	**PHMA: 179,800** **GHMA: 94,500** **RHMA: 0**	**PHMA: 169,800** **IHMA: 39,200** **GHMA: 53,100**
Acres unavailable for livestock grazing (BLM)		PHMA: 146,300 GHMA: 29,500	PHMA: 146,300 GHMA: 29,500	PHMA: 9,269,500	PHMA: 143,600 IHMA: 2,680 GHMA: 29,500	PHMA: 150,400 IHMA: 13,300 GHMA: 12,200	PHMA: 146,300 GHMA: 29,500 RHMA: 0	PHMA: 152,800 IHMA: 17,800 GHMA: 10,700
Acres unavailable for livestock grazing (Forest Service)		PHMA: 33,500 GHMA: 78,300	PHMA: 33,500 GHMA: 64,900	PHMA: 1,863,000	PHMA: 30,300 IHMA: 3,240 GHMA: 78,300	PHMA: 17,600 IHMA: 17,800 GHMA: 63,000	PHMA: 33,500 GHMA: 65,000 RHMA: 0	PHMA: 17,000 IHMA: 21,300 GHMA: 42,400
Travel and Transportation		***Figure 2-29***	***Figure 2-30***	***Figure 2-31***	***Figure 2-32***	***Figure 2-33***	***Figure 2-34***	***Figure 2-16***
Acres open to cross-county OHV travel (Total)		**PHMA: 2,215,000** **GHMA: 666,600**	**PHMA: 790** **GHMA: 560**	**PHMA: 1,350**	**PHMA: 0** **IHMA: 790** **GHMA: 560**	**PHMA: 530** **IHMA: 708,700** **GHMA: 1,075,100**	**PHMA: 790** **GHMA: 560** **RHMA: 254,800**	**PHMA: 0** **IHMA: 4,160** **GHMA: 420**

Table 2-9
Comparative Summary of Alternatives by Acres Allotted[1] (Within GRSG Habitat)

Resource or Resource Use	Total Planning Area[6]	Alternative A[7]	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F	Proposed Plan
Open to cross-country OHV travel (BLM)		PHMA: 2,214,200 GHMA: 666,100	PHMA: 0 GHMA: 50	PHMA: 50	PHMA: 0 IHMA: 0 GHMA: 50	PHMA: 530 IHMA: 707,900 GHMA: 1,074,600	PHMA: 0 GHMA: 50 RHMA: 254,800	PHMA: 0 IHMA: 3,360 GHMA: 0
Open to cross-country OHV travel (Forest Service)		PHMA: 790 GHMA: 500	PHMA: 790 GHMA: 500	PHMA: 1,300	PHMA: 0 IHMA: 790 GHMA: 500	PHMA: 0 IHMA: 800 GHMA: 500	PHMA: 790 GHMA: 500 RHMA: 0	PHMA: 0 IHMA: 800 GHMA: 420
Acres closed to OHV travel (Total)		**PHMA: 551,600** **GHMA: 166,000**	**PHMA: 551,600** **GHMA: 154,500**	**PHMA: 706,200**	**PHMA: 519,700** **IHMA: 31,900** **GHMA: 166,000**	**PHMA: 505,600** **IHMA: 96,600** **GHMA: 105,600**	**PHMA: 551,600** **GHMA: 154,500** **RHMA: 10,700**	**PHMA: 556,000** **IHMA: 82,500** **GHMA: 72,200**
Closed to OHV travel (BLM)		PHMA: 551,600 GHMA: 159,800	PHMA: 551,600 GHMA: 154,500	PHMA: 706,200	PHMA: 519,700 IHMA: 31,900 GHMA: 159,800	PHMA: 505,600 IHMA: 96,600 GHMA: 105,600	PHMA: 551,600 GHMA: 154,500 RHMA: 10,700	PHMA: 556,000 IHMA: 82,500 GHMA: 72,200
Closed to OHV travel (Forest Service)		PHMA: 0 GHMA: 6,190	PHMA: 0 GHMA: 0	PHMA: 0	PHMA: 0 IHMA: 0 GHMA: 6,190	PHMA: 0 IHMA: 0 GHMA: 0	PHMA: 0 GHMA: 0 RHMA 0	PHMA: 0 IHMA: 0 GHMA: 0

Table 2-9
Comparative Summary of Alternatives by Acres Allotted[1] (Within GRSG Habitat)

Resource or Resource Use	Total Planning Area[6]	Alternative A[7]	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F	Proposed Plan
Acres limited to existing or designated routes (Total)		**PHMA: 5,469,300** **GHMA: 2,296,500**	**PHMA: 7,683,500** **GHMA: 2,741,400**	**PHMA: 10,425,000**	**PHMA: 6,329,400** **IHMA: 1,354,100** **GHMA: 2,962,500**	**PHMA: 4,402,000** **IHMA: 1,938,500** **GHMA: 2,342,300**	**PHMA: 7,683,500** **GHMA: 2,741,400** **RHMA: 234,900**	**PHMA: 4,636,600** **IHMA: 3,066,700** **GHMA: 2,713,500**
Limited to existing roads and trails (BLM)		PHMA: 4,506,200 GHMA: 1,218,800	PHMA: 6,720,400 GHMA: 1,842,800	PHMA: 8,563,300	PHMA: 5,623,700 IHMA: 1,096,700 GHMA: 1,884,900	PHMA: 3,861,200 IHMA: 1,565,000 GHMA: 1,389,600	PHMA: 6,720,400 GHMA: 1,842,800 RHMA: 234,700	PHMA: 4,071,200 IHMA: 2,651,800 GHMA: 2,133,200
Limited to designated routes (Forest Service)		PHMA: 963,100 GHMA: 1,077,600	PHMA: 963,100 GHMA: 898,600	PHMA: 1,861,700	PHMA: 705,700 IHMA: 257,400 GHMA: 1,077,600	PHMA: 540,800 IHMA: 373,500 GHMA: 952,700	PHMA: 963,100 GHMA: 898,600 RHMA: 150	PHMA: 565,400 IHMA: 414,900 GHMA: 580,300
Total Acres		**11,365,000**	**11,132,500**	**11,132,500**	**11,365,000**	**11,175,000**	**11,632,800**	**11,132,000**
Lands and Realty (acres)								
High Voltage Transmission Line and Large Pipeline ROW		***Figure 2-35***	***Figure 2-36***	***Figure 2-37***	***Figure 2-38***	***Figure 2-39***	***Figure 2-40***	***Figure 2-8***
Right-of-way (ROW) exclusion areas (Total)		**PHMA: 685,000** **GHMA: 343,500**	**PHMA: 8,191,300** **GHMA: 292,700**	**PHMA: 11,023,100**	**PHMA: 544,800** **IHMA: 140,300** **GHMA: 343,400**	**PHMA: 491,100** **IHMA: 178,000** **GHMA: 310,000**	**PHMA: 8,191,300** **GHMA: 292,700** **RHMA: 39,400**	**PHMA: 4,542,000** **IHMA: 2,994,900** **GHMA: 828,100**

Table 2-9
Comparative Summary of Alternatives by Acres Allotted[1] (Within GRSG Habitat)

Resource or Resource Use	Total Planning Area[6]	Alternative A[7]	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F	Proposed Plan
ROW exclusion areas (BLM)		PHMA: 609,300 GHMA: 191,000	PHMA: 7,229,300 GHMA: 191,000	PHMA: 9,162,100	PHMA: 469,700 IHMA: 139,600 GHMA: 191,000	PHMA: 417,500 IHMA: 176,300 GHMA: 208,200	PHMA: 7,229,300 GHMA: 191,000 RHMA: 39,400	PHMA: 472,400 IHMA: 130,600 GHMA: 247,200
ROW exclusion areas (Forest Service)		PHMA: 75,700 GHMA: 152,500	PHMA: 962,100 GHMA: 101,700	PHMA: 1,860,900	PHMA: 75,100 IHMA: 670 GHMA: 152,500	PHMA: 73,600 IHMA: 1,730 GHMA: 101,800	PHMA: 962,100 GHMA: 101,700 RHMA: 0	PHMA: 77,400 IHMA: 1,760 GHMA: 84,300
ROW exclusion with limited exceptions (BLM)		PHMA: 0 GHMA: 0	PHMA: 6,616,100 GHMA: 0	PHMA: 0	PHMA: 0 IHMA: 0 GHMA: 0	PHMA: 0 IHMA: 0 GHMA: 0	PHMA: 0 GHMA: 0 RHMA: 0	PHMA: 0 IHMA: 0 GHMA: 0
ROW exclusion with limited exceptions (Forest Service)		PHMA: 0 GHMA: 0	PHMA: 884,900 GHMA: 0	PHMA: 0	PHMA: 0 IHMA: 0 GHMA: 0	PHMA: 0 IHMA: 0 GHMA: 0	PHMA: 0 GHMA: 0 RHMA: 0	PHMA: 0 IHMA: 0 GHMA: 0
ROW avoidance areas (Total)		**PHMA: 1,117,800** **GHMA: 838,400**	**PHMA: 0** **GHMA: 2,539,000**	**PHMA: 0**	**PHMA: 0** **IHMA: 1,241,800** **GHMA: 2,718,000**	**PHMA: 3,974,200** **IHMA: 2,553,100** **GHMA: 816,100**	**PHMA: 0** **GHMA: 2,539,000** **RHMA: 17,300**	**PHMA: 4,542,000** **IHMA: 2,994,900** **GHMA: 828,100**
ROW avoidance areas (BLM)		PHMA: 601,900 GHMA: 258,900	PHMA: 0 GHMA: 1,741,900	PHMA: 0	PHMA: 0 IHMA: 986,100 GHMA: 1,786,400	PHMA: 3,507,700 IHMA: 2,182,300 GHMA: 274,600	PHMA: 0 GHMA: 1,741,900 RHMA: 17,100	PHMA: 4,125,900 IHMA: 2,583,200 GHMA: 365,200

Table 2-9
Comparative Summary of Alternatives by Acres Allotted[1] (Within GRSG Habitat)

Resource or Resource Use	Total Planning Area[6]	Alternative A[7]	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F	Proposed Plan
ROW avoidance areas (Forest Service)		PHMA: 515,900 GHMA: 579,500	PHMA: 0 GHMA: 797,200	PHMA: 0	PHMA: 0 IHMA: 255,700 GHMA: 931,600	PHMA: 466,600 IHMA: 370,800 GHMA: 541,500	PHMA: 0 GHMA: 797,200 RHMA: 140	PHMA: 416,100 IHMA: 411,700 GHMA: 462,900
ROW avoidance with limited exclusion (BLM)		PHMA: 0 GHMA: 0	PHMA: 0 GHMA: 0	PHMA: 0	PHMA: 5,633,900 IHMA: 0 GHMA: 0	PHMA: 0 IHMA: 0 GHMA: 0	PHMA: 0 GHMA: 0 RHMA: 0	PHMA: 0 IHMA: 0 GHMA: 0
ROW avoidance with limited exclusion (Forest Service)		PHMA: 0 GHMA: 0	PHMA: 0 GHMA: 0	PHMA: 0	PHMA: 630,600 IHMA: 0 GHMA: 0	PHMA: 0 IHMA: 0 GHMA: 0	PHMA: 0 GHMA: 0 RHMA: 0	PHMA: 0 IHMA: 0 GHMA: 0
Minor ROW		***Figure 2-35***	***Figure 2-36***	***Figure 2-37***	***Figure 2-38***	***Figure 2-39***	***Figure 2-40***	***Figure 2-9***
Right-of-way (ROW) exclusion areas (Total)		**PHMA: 685,000** **GHMA: 343,500**	**PHMA: 690,400** **GHMA: 292,700**	**PHMA: 11,023,100**	**PHMA: 544,800** **IHMA: 140,300** **GHMA: 343,400**	**PHMA: 491,100** **IHMA: 178,000** **GHMA: 310,000**	**PHMA: 8,191,300** **GHMA: 292,700** **RHMA: 39,400**	**PHMA: 549,800** **IHMA: 132,400** **GHMA: 331,500**
ROW exclusion areas (BLM)		PHMA: 609,300 GHMA: 191,000	PHMA: 613,200 GHMA: 191,000	PHMA: 9,162,100	PHMA: 469,700 IHMA: 139,600 GHMA: 191,000	PHMA: 417,500 IHMA: 176,300 GHMA: 208,200	PHMA: 7,229,300 GHMA: 191,000 RHMA: 39,400	PHMA: 472,400 IHMA: 130,600 GHMA: 247,200

Table 2-9
Comparative Summary of Alternatives by Acres Allotted[1] (Within GRSG Habitat)

Resource or Resource Use	Total Planning Area[6]	Alternative A[7]	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F	Proposed Plan
ROW exclusion areas (Forest Service)		PHMA: 75,700 GHMA: 152,500	PHMA: 77,200 GHMA: 101,700	PHMA: 1,860,900	PHMA: 75,100 IHMA: 670 GHMA: 152,500	PHMA: 73,600 IHMA: 1,730 GHMA: 101,800	PHMA: 962,100 GHMA: 101,700 RHMA: 0	PHMA: 77,400 IHMA: 1,760 GHMA: 84,300
ROW exclusion with limited exceptions (BLM)		PHMA: 0 GHMA: 0	PHMA: 6,616,100 GHMA: 0	PHMA: 0	PHMA: 0 IHMA: 0 GHMA: 0	PHMA: 0 IHMA: 0 GHMA: 0	PHMA: 9 GHMA: 0 RHMA: 0	PHMA: 0 IHMA: 0 GHMA: 0
ROW exclusion with limited exceptions (Forest Service)		PHMA: 0 GHMA: 0	PHMA: 884,900 GHMA: 0	PHMA: 0	PHMA: 0 IHMA: 0 GHMA: 0	PHMA: 0 IHMA: 0 GHMA: 0	PHMA: 0 GHMA: 0 RHMA: 0	PHMA: 0 IHMA: 0 GHMA: 0
ROW avoidance areas (Total)		**PHMA: 1,117,800 GHMA: 838,400**	**PHMA: 0 GHMA: 2,539,000**	**PHMA: 0**	**PHMA: 0 IHMA: 1,241,800 GHMA: 2,718,000**	**PHMA: 3,974,200 IHMA: 2,553,100 GHMA: 816,100**	**PHMA: 0 GHMA: 2,539,000 RHMA: 17,300**	**PHMA: 4,613,900 IHMA: 2,994,900 GHMA: 664,500**
ROW avoidance areas (BLM)		PHMA: 601,900 GHMA: 258,900	PHMA: 0 GHMA: 1,741,900	PHMA: 0	PHMA: 0 IHMA: 986,100 GHMA: 1,786,400	PHMA: 3,507,700 IHMA: 2,182,300 GHMA: 274,600	PHMA: 0 GHMA: 1,741,900 RHMA: 17,100	PHMA: 4,125,900 IHMA: 2,583,200 GHMA: 168,000
ROW avoidance areas (Forest Service)		PHMA: 515,900 GHMA: 579,500	PHMA: 0 GHMA: 797,200	PHMA: 0	PHMA: 0 IHMA: 255,700 GHMA: 931,600	PHMA: 466,600 IHMA: 370,800 GHMA: 541,500	PHMA: 0 GHMA: 797,200 RHMA: 140	PHMA: 488,000 IHMA: 411,700 GHMA: 496,400

Table 2-9
Comparative Summary of Alternatives by Acres Allotted[1] (Within GRSG Habitat)

Resource or Resource Use	Total Planning Area[6]	Alternative A[7]	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F	Proposed Plan
ROW avoidance with limited exclusion (BLM)		PHMA: 0 GHMA: 0	PHMA: 0 GHMA: 0	PHMA: 0	PHMA: 5,633,900 IHMA: 0 GHMA: 0	PHMA: 0 IHMA: 0 GHMA: 0	PHMA: 0 GHMA: 0 RHMA: 0	PHMA: 0 IHMA: 0 GHMA: 0
ROW avoidance with limited exclusion (Forest Service)		PHMA: 0 GHMA: 0	PHMA: 0 GHMA: 0	PHMA: 0	PHMA: 630,600 IHMA: 0 GHMA: 0	PHMA: 0 IHMA: 0 GHMA: 0	PHMA: 0 GHMA: 0 RHMA: 0	PHMA: 0 IHMA: 0 GHMA: 0
Wind and Solar ROW		***Figure 2-41***	***Figure 2-42***	***Figure 2-43***	***Figure 2-44***	***Figure 2-45***	***Figure 2-46***	***Figure 2-4***
Wind / Solar Exclusion Area (Total)		**PHMA: 523,700** **GHMA: 1,419,900**	**PHMA: 8,139,300** **GHMA: 460,400**	**PHMA: 10,983,000**	**PHMA: 6,756,600** **IHMA: 0** **GHMA: 0**	**PHMA: 1,046,900** **IHMA: 253,700** **GHMA: 588,400**	**PHMA: 8,139,300** **GHMA: 460,400** **RHMA: 59,300**	**PHMA: 5,120,700** **IHMA: 778,400** **GHMA: 453,100**
Wind / Solar Exclusion Area (BLM)		PHMA: 371,700 GHMA: 1,344,100	PHMA: 7,248,500 GHMA: 359,000	PHMA: 9,193,100	PHMA: 6,122,800 IHMA: 0 GHMA: 0	PHMA: 973,300 IHMA: 251,900 GHMA: 486,900	PHMA: 7,248,500 GHMA: 359,000 RHMA: 59,300	PHMA: 4,627,200 IHMA: 362,700 GHMA: 369,000
Wind / Solar Exclusion Area (Forest Service)		PHMA: 152,000 GHMA: 75,700	PHMA: 890,800 GHMA: 101,400	PHMA: 1,789,900	PHMA: 633,800 IHMA: 0 GHMA: 0	PHMA: 73,600 IHMA: 1,730 GHMA: 101,500	PHMA: 890,800 GHMA: 101,400 RHMA: 0	PHMA: 493,500 IHMA: 415,700 GHMA: 84,100
Wind / Solar Avoidance Area (Total)		**PHMA: 716,500** **GHMA: 622,700**	**PHMA: 0** **GHMA: 2,383,200**	**PHMA: 0**	**PHMA: 0** **IHMA: 1,382,700** **GHMA: 3,075,100**	**PHMA: 3,384,600** **IHMA: 2,478,500** **GHMA: 684,000**	**PHMA: 0** **GHMA: 2,383,200** **RHMA: 6,880**	**PHMA: 0** **IHMA: 2,374,900** **GHMA: 610,300**

Table 2-9
Comparative Summary of Alternatives by Acres Allotted[1] (Within GRSG Habitat)

Resource or Resource Use	Total Planning Area[6]	Alternative A[7]	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F	Proposed Plan
Wind / Solar Avoidance Area (BLM)		PHMA: 140,800 GHMA: 179,400	PHMA: 0 GHMA: 1,585,600	PHMA: 0	PHMA: 0 IHMA: 1,125,700 GHMA: 1,990,800	PHMA: 2,990,000 IHMA: 2,107,000 GHMA: 144,700	PHMA: 0 GHMA: 1,585,600 RHMA: 6,740	PHMA: 0 IHMA: 2,374,900 GHMA: 113,600
Wind / Solar Avoidance Area (Forest Service)		PHMA: 575,600 GHMA: 443,300	PHMA: 0 GHMA: 797,600	PHMA: 0	PHMA: 0 IHMA: 257,100 GHMA: 1,084,300	PHMA: 394,700 IHMA: 371,500 GHMA: 539,200	PHMA: 0 GHMA: 797,600 RHMA: 140	PHMA: 0 IHMA: 0 GHMA: 496,700
Wind / Solar Open Area (Total)		**PHMA: 1,862,300 GHMA: 6,121,500**	**PHMA: 24,700 GHMA: 27,300**	**PHMA: 52,000**	**PHMA: 20,600 IHMA: 4,050 GHMA: 27,300**	**PHMA: 404,700 IHMA: 11,700 GHMA: 2,225,000**	**PHMA: 24,700 GHMA: 27,300 RHMA: 434,100**	**PHMA: 0 IHMA: 0 GHMA: 1,697,000**
Wind / Solar Open Area (BLM)		PHMA: 1,505,500 GHMA: 5,748,500	PHMA: 23,600 GHMA: 27,200	PHMA: 50,800	PHMA: 20,600 IHMA: 2,940 GHMA: 27,200	PHMA: 404,100 IHMA: 10,600 GHMA: 1,912,600	PHMA: 23,600 GHMA: 27,200 RHMA: 434,100	PHMA: 0 IHMA: 0 GHMA: 1,697,000
Wind / Solar Open Area (Forest Service)		PHMA: 356,700 GHMA: 372,900	PHMA: 1,110 GHMA: 40	PHMA: 1,160	PHMA: 0 IHMA: 1,110 GHMA: 40	PHMA: 590 IHMA: 1,110 GHMA: 312,400	PHMA: 1,110 GHMA: 40 RHMA: 0	PHMA: 0 IHMA: 0 GHMA: 0
Existing Designated Utility Corridors		***Figure 2-47***	***Figure 2-48***	***Figure 2-49***	***Figure 2-50***	***Figure 2-51***	***Figure 2-52***	***Figure 2-7***

Table 2-9
Comparative Summary of Alternatives by Acres Allotted[1] (Within GRSG Habitat)

Resource or Resource Use	Total Planning Area[6]	Alternative A[7]	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F	Proposed Plan
Utility Corridors (Total)		**PHMA: 44,600** **GHMA: 41,000**	**PHMA: 44,600** **GHMA: 39,200**	**PHMA: 83,800**	**PHMA: 39,800** **IHMA: 4,750** **GHMA: 41,000**	**PHMA: 31,000** **IHMA: 12,800** **GHMA: 40,000**	**PHMA: 44,600** **GHMA: 39,200** **RHMA: 6,450**	**PHMA: 28,900** **IHMA: 26,000** **GHMA: 33,600**
Utility corridors (BLM)		PHMA: 42,800 GHMA: 40,700	PHMA: 42,800 GHMA: 39,000	PHMA: 81,700	PHMA: 39,800 IHMA: 2,940 GHMA: 40,700	PHMA: 31,000 IHMA: 11,000 GHMA: 39,800	PHMA: 42,800 GHMA: 39,000 RHMA: 6,450	PHMA: 28,900 IHMA: 23,800 GHMA: 33,600
Utility corridors (Forest Service)		PHMA: 1,800 GHMA: 250	PHMA: 1,800 GHMA: 250	PHMA: 2,050	PHMA: 0 IHMA: 1,800 GHMA: 250	PHMA: 0 IHMA: 1,800 GHMA: 250	PHMA: 1,800 GHMA: 250 RHMA: 0	PHMA: 0 IHMA: 2,200 GHMA: 0
Fluid Mineral Leasing (acres)[1]		***Figures 2-53, 2-59***	***Figures 2-54, 2-60***	***Figures 2-55, 2-61***	***Figures 2-56, 2-62***	***Figures 2-57, 2-63***	***Figures 2-58, 2-64***	***Figures 2-11, 2-12***
<u>Closed</u> to fluid mineral leasing (Total)		**PHMA: 1,723,900** **GHMA: 990,800**	**PHMA: 9,101,600** **GHMA: 1,090,400**	**PHMA: 20,168,900**	**PHMA: 6,545,200** **IHMA: 1,355,700** **GHMA: 990,800**	**PHMA: 1,142,800** **IHMA: 424,200** **GHMA: 1,045,000**	**PHMA: 8,056,200** **GHMA: 878,100** **RHMA: 32,100**	**SFA: 936,000** **PHMA: 260,300** **IHMA: 607,800** **GHMA: 549,100**

Table 2-9
Comparative Summary of Alternatives by Acres Allotted[1] (Within GRSG Habitat)

Resource or Resource Use	Total Planning Area[6]	Alternative A[7]	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F	Proposed Plan
BLM		PHMA: 1,177,200 GHMA: 295,400	PHMA: 7,203,600 GHMA: 287,400	PHMA: 10,011,300	PHMA: 5,947,700 IHMA: 1,112,100 GHMA: 295,400	PHMA: 809,100 IHMA: 238,900 GHMA: 420,700	PHMA: 7,203,600 GHMA: 287,400 RHMA: 32,100	SFA: 804,500 PHMA: 45,100 IHMA: 394,200 GHMA: 203,100
Forest Service		PHMA: 546,700 GHMA: 695,400	PHMA: 852,600 GHMA: 590,700	PHMA: 10,157,600	PHMA: 597,500 IHMA: 243,600 GHMA: 695,300	PHMA: 333,600 IHMA: 185,300 GHMA: 624,300	PHMA: 852,600 GHMA: 590,700 RHMA: 0	SFA: 130,900 PHMA: 208,700 IHMA: 209,700 GHMA: 338,300
<u>Open</u> to fluid mineral leasing (Total)		**PHMA: 6,973,000** **GHMA: 2,531,000**	**PHMA: 0** **GHMA: 2,384,600**	**PHMA: 6,093,000**	**PHMA: 217,100** **IHMA: 0** **GHMA: 2,531,000**	**PHMA: 4,032,300** **IHMA: 2,461,100** **GHMA: 2,898,000**	**PHMA: 0** **GHMA: 2,384,600** **RHMA: 509,500**	**SFA: 3,162,400** **PHMA: 1,579,500** **IHMA: 3,104,700** **GHMA: 2,667,000**
BLM		PHMA: 6,667,100 GHMA: 2,161,200	PHMA: 0 GHMA: 2,093,300	PHMA: 3,238,100	PHMA: 205,700 IHMA: 0 GHMA: 2,161,200	PHMA: 3,897,400 IHMA: 2,304,000 GHMA: 2,593,700	PHMA: 0 GHMA: 2,093,300 RHMA: 509,300	SFA: 2,924,200 PHMA: 1,379,700 IHMA: 2,761,700 GHMA: 2,435,500

Table 2-9
Comparative Summary of Alternatives by Acres Allotted[1] (Within GRSG Habitat)

Resource or Resource Use	Total Planning Area[6]	Alternative A[7]	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F	Proposed Plan
Forest Service		PHMA: 305,900 GHMA: 369,800	PHMA: 0 GHMA: 291,300	PHMA: 2,854,900	PHMA: 11,500 IHMA: 0 GHMA: 369,800	PHMA: 134,900 IHMA: 157,200 GHMA: 304,300	PHMA: 0 GHMA: 291,300 RHMA: 150	SFA: 238,200 PHMA: 199,800 IHMA: 343,100 GHMA: 231,500
Open to fluid mineral leasing subject to standard lease stipulations		**PHMA: 4,942,000** **GHMA: 1,385,500**	**PHMA: 0** **GHMA: 1,361,100**	**PHMA: 2,741,600**	**PHMA: 0** **IHMA: 0** **GHMA: 0**	**PHMA: 54,500** **IHMA: 0** **GHMA: 1,752,500**	**PHMA: 0** **GHMA: 1,361,100** **RHMA: 462,500**	**SFA: 0** **PHMA: 0** **IHMA: 0** **GHMA: 0**
BLM		PHMA: 4,884,240 GHMA: 1,324,028	PHMA: 0 GHMA: 1,318,211	PHMA: 1,883,674	PHMA: 0 IHMA: 0 GHMA: 0	PHMA: 54,420 IHMA: 0 GHMA: 1,707,682	PHMA: 0 GHMA: 1,318,211 RHMA: 462,504	SFA: 0 PHMA: 0 IHMA: 0 GHMA: 0
Forest Service		PHMA: 57,700 GHMA: 61,500	PHMA: 0 GHMA: 42,900	PHMA: 857,900	PHMA: 0 IHMA: 0 GHMA: 0	PHMA: 60 IHMA: 0 GHMA: 44,900	PHMA: 0 GHMA: 42,900 RHMA: 0	SFA: 0 PHMA: 0 IHMA: 0 GHMA: 0
Open to leasing subject to No Surface Occupancy (NSO)		**PHMA: 587,700** **GHMA: 343,300**	**PHMA: 0** **GHMA: 271,100**	**PHMA: 928,600**	**PHMA: 62,600** **IHMA: 0** **GHMA: 368,700**	**PHMA: 3,380,400** **IHMA: 2,260,500** **GHMA: 338,500**	**PHMA: 0** **GHMA: 271,100** **RHMA: 5,480**	**SFA: 3,138,700** **PHMA: 4,292,500** **IHMA: 2,913,900** **GHMA: 321,200**

Table 2-9
Comparative Summary of Alternatives by Acres Allotted[1] (Within GRSG Habitat)

Resource or Resource Use	Total Planning Area[6]	Alternative A[7]	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F	Proposed Plan
BLM		PHMA: 546,100 GHMA: 192,500	PHMA: 0 GHMA: 180,300	PHMA: 273,100	PHMA: 51,200 IHMA: 0 GHMA: 216,800	PHMA: 3,245,800 IHMA: 2,103,300 GHMA: 247,400	PHMA: 0 GHMA: 180,300 RHMA: 5,480	SFA: 2,900,500 PHMA: 3,854,500 IHMA: 2,570,800 GHMA: 239,700
Forest Service		PHMA: 41,600 GHMA: 150,800	PHMA: 0 GHMA: 90,800	PHMA: 655,500	PHMA: 11,400 IHMA: 0 GHMA: 152,000	PHMA: 134,500 IHMA: 157,200 GHMA: 91,100	PHMA: 0 GHMA: 90,800 RHMA: 0	SFA: 238,200 PHMA: 438,000 IHMA: 343,100 GHMA: 81,600
Open to leasing subject to Controlled Surface Use (CSU)		**PHMA: 206,400** **GHMA: 150,400**	**PHMA: 0** **GHMA: 150,400**	**PHMA: 1,306,500**	**PHMA: 92,700** **IHMA: 0** **GHMA: 149,500**	**PHMA: 0** **IHMA: 0** **GHMA: 161,500**	**PHMA: 0** **GHMA: 150,400** **RHMA: 140**	**SFA: 0** **PHMA: 0** **IHMA: 0** **GHMA: 1,861,900**
BLM		PHMA: 350 GHMA: 1,380	PHMA: 0 GHMA: 1,380	PHMA: 4,300	PHMA: 92,600 IHMA: 0 GHMA: 1,370	PHMA: 0 IHMA: 0 GHMA: 1,730	PHMA: 0 GHMA: 1,380 RHMA: 0	SFA: 0 PHMA: 0 IHMA: 0 GHMA: 1,716,000
Forest Service		PHMA: 206,100 GHMA: 149,000	PHMA: 0 GHMA: 149,000	PHMA: 1,302,200	PHMA: 40 IHMA: 0 GHMA: 148,200	PHMA: 0 IHMA: 0 GHMA: 159,800	PHMA: 0 GHMA: 149,000 RHMA: 0	SFA: 0 PHMA: 0 IHMA: 0 GHMA: 145,900
Open to leasing subject to Timing		**PHMA:**	**PHMA: 0**	**PHMA:**	**PHMA: 0**	**PHMA:**	**PHMA: 0**	**SFA: 0**

Table 2-9
Comparative Summary of Alternatives by Acres Allotted[1] (Within GRSG Habitat)

Resource or Resource Use	Total Planning Area[6]	Alternative A[7]	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F	Proposed Plan
Limitations (TL)		**596,200** **GHMA: 192,500**	**GHMA: 172,600**	**193,700**	**IHMA: 0** **GHMA: 1,553,300**	**218,900** **IHMA: 0** **GHMA: 152,100**	**GHMA: 172,600** **RHMA: 0**	**PHMA: 0** **IHMA: 0** **GHMA: 4,030**
BLM		PHMA: 595,700 GHMA: 183,900	PHMA: 0 GHMA: 164,000	PHMA: 154,300	PHMA: 0 IHMA: 0 GHMA: 1,483,600	PHMA: 218,500 IHMA: 0 GHMA: 143,500	PHMA: 0 GHMA: 164,000 RHMA: 0	SFA: 0 PHMA: 0 IHMA: 0 GHMA: 0
Forest Service		PHMA: 430 GHMA: 8,600	PHMA: 0 GHMA: 8,570	PHMA: 39,300	PHMA: 0 IHMA: 0 GHMA: 69,700	PHMA: 360 IHMA: 0 GHMA: 8,580	PHMA: 0 GHMA: 8,570 RHMA: 0	SFA: 0 PHMA: 0 IHMA: 0 GHMA: 4,030
Locatable Minerals, Mineral Materials, and Non-Energy Solid Leasable Minerals (acres)								
Locatable minerals		***Figure 2-65***	***Figure 2-66***	***Figure 2-67***	***Figure 2-68***	***Figure 2-69***	***Figure 2-70***	***Figure 2-13***
Locatable minerals - withdrawn or recommended for withdrawal		**PHMA: 1,365,000** **GHMA: 433,200**	**PHMA: 9,365,600** **GHMA: 417,600**	**PHMA: 13,337,700**	**PHMA: 1,217,300** **IHMA: 147,800** **GHMA: 433,200**	**PHMA: 958,700** **IHMA: 321,200** **GHMA: 511,200**	**PHMA: 9,365,600** **GHMA: 417,600** **RHMA: 82,600**	**SFA: 3,861,300** **PHMA: 91,800** **IHMA: 447,700** **GHMA: 316,300**

Table 2-9
Comparative Summary of Alternatives by Acres Allotted[1] (Within GRSG Habitat)

Resource or Resource Use	Total Planning Area[6]	Alternative A[7]	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F	Proposed Plan
BLM		PHMA: 1,343,200 GHMA: 390,200	PHMA: 8,403,700 GHMA: 382,200	PHMA: 11,481,100	PHMA: 1,207,600 IHMA: 135,600 GHMA: 390,200	PHMA: 951,700 IHMA: 307,300 GHMA: 474,800	PHMA: 8,403,700 GHMA: 382,200 RHMA: 82,600	SFA: 3,624,600 PHMA: 88,700 IHMA: 432,800 GHMA: 276,500
Forest Service		PHMA: 21,800 GHMA: 43,000	PHMA: 962,000 GHMA: 35,400	PHMA: 1,856,600	PHMA: 9,680 IHMA: 12,100 GHMA: 43,000	PHMA: 7,040 IHMA: 13,800 GHMA: 36,400	PHMA: 962,000 GHMA: 35,400 RHMA: 0	SFA: 236,700 PHMA: 3,080 IHMA: 14,900 GHMA: 39,800
Mineral Materials		***Figure 2-77***	***Figure 2-78***	***Figure 2-79***	***Figure 2-80***	***Figure 2-81***	***Figure 2-82***	***Figure 2-15***
Closed to mineral materials disposal		**PHMA: 1,038,400** **GHMA: 820,400**	**PHMA: 8,772,500** **GHMA: 718,600**	**PHMA: 12,015,700**	**PHMA: 3,004,800** **IHMA: 359,600** **GHMA: 934,700**	**PHMA: 819,500** **IHMA: 261,000** **GHMA: 686,100**	**PHMA: 8,127,400** **GHMA: 717,100** **RHMA: 14,100**	**PHMA: 5,583,000** **IHMA: 283,100** **GHMA: 405,400**
BLM		PHMA: 542,300 GHMA: 168,500	PHMA: 7,848,200 GHMA: 168,500	PHMA: 10,209,700	PHMA: 2,583,500 IHMA: 209,300 GHMA: 270,600	PHMA: 504,700 IHMA: 103,700 GHMA: 105,900	PHMA: 7,203,200 GHMA: 167,000 RHMA: 14,100	PHMA: 5,018,100 IHMA: 86,500 GHMA: 72,900

Table 2-9
Comparative Summary of Alternatives by Acres Allotted[1] (Within GRSG Habitat)

Resource or Resource Use	Total Planning Area[6]	Alternative A[7]	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F	Proposed Plan
Forest Service		PHMA: 496,100 GHMA: 651,900	PHMA: 550,100 GHMA: 924,200	PHMA: 1,806,000	PHMA: 421,300 IHMA: 150,300 GHMA: 664,100	PHMA: 314,800 IHMA: 157,300 GHMA: 580,200	PHMA: 924,200 GHMA: 550,100 RHMA: 0	PHMA: 564,800 IHMA: 196,600 GHMA: 332,500
Nonenergy Leasable Minerals		***Figure 2-71***	***Figure 2-72***	***Figure 2-73***	***Figure 2-74***	***Figure 2-75***	***Figure 2-76***	***Figure 2-14***
Closed to non-energy mineral leasing		**PHMA: 1,351,600** **GHMA: 893,100**	**PHMA: 8,055,600** **GHMA: 782,700**	**PHMA: 10,887,500**	**PHMA: 1,154,800** **IHMA: 196,800** **GHMA: 893,100**	**PHMA: 1,046,800** **IHMA: 308,600** **GHMA: 788,900**	**PHMA: 8,055,600** **GHMA: 782,700** **RHMA: 29,800**	**PHMA: 5,079,100** **IHMA: 369,800** **GHMA: 465,000**
BLM		PHMA: 855,100 GHMA: 225,300	PHMA: 7,203,200 GHMA: 217,300	PHMA: 9,153,400	PHMA: 805,300 IHMA: 49,800 GHMA: 225,300	PHMA: 732,000 IHMA: 150,800 GHMA: 193,500	PHMA: 7,203,200 GHMA: 217,300 RHMA: 29,800	PHMA: 4,586,100 IHMA: 172,600 GHMA: 116,800
Forest Service		PHMA: 496,500 GHMA: 667,800	PHMA: 852,400 GHMA: 565,400	PHMA: 1,734,100	PHMA: 349,500 IHMA: 147,000 GHMA: 667,800	PHMA: 314,800 IHMA: 157,800 GHMA: 595,400	PHMA: 852,400 GHMA: 565,400 RHMA: 0	PHMA: 493,000 IHMA: 197,200 GHMA: 348,300
Special Designations								
Areas of Critical Environmental Concern (acres, BLM only)		***Figure 2-83***		***Figure 2-84***			***Figures 2-85, 2-86***	

Table 2-9
Comparative Summary of Alternatives by Acres Allotted[1] (Within GRSG Habitat)

Resource or Resource Use	Total Planning Area[6]	Alternative A[7]	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F	Proposed Plan
ACEC		PHMA: 342,400 GHMA: 126,800	PHMA: 342,400 GHMA: 126,800	PHMA: 3,118,700	PHMA: 317,300 IHMA: 25,100 GHMA: 126,800	PHMA: 356,900 IHMA: 51,400 GHMA: 62,000	Alternative F1 PHMA: 6,929,600 GHMA: 0 RHMA: 0 Alternative F2 PHMA: 1,379,100 GHMA: 0 RHMA: 0	PHMA: 331,900 IHMA: 79,400 GHMA: 57,900
Zoological Areas		PHMA: 0 GHMA: 0	PHMA: 0 GHMA: 0	PHMA: 38,800	PHMA: 0 IHMA: 0 GHMA: 0	PHMA: 0 IHMA: 0 GHMA: 0	Alternative F1 PHMA: 963,800 GHMA: 0 RHMA: 0 Alternative F2 PHMA: 223,700 GHMA: 0 RHMA: 0	PHMA: 0 IHMA: 0 GHMA: 0
Wilderness Study Areas								
Wilderness Study Areas		**PHMA: 420,100** **GHMA: 98,000**	**PHMA: 420,100** **GHMA: 90,000**	**PHMA: 510,200**	**PHMA: 397,600** **IHMA: 22,600** **GHMA: 98,000**	**PHMA: 335,500** **IHMA: 58,300** **GHMA: 119,200**	**PHMA: 420,100** **GHMA: 90,000** **RHMA: 14,100**	**PHMA: 318,700** **IHMA: 110,200** **GHMA: 53,100**

Table 2-9
Comparative Summary of Alternatives by Acres Allotted[1] (Within GRSG Habitat)

Resource or Resource Use	Total Planning Area[6]	Alternative A[7]	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F	Proposed Plan
BLM		PHMA: 420,100 GHMA: 98,000	PHMA: 420,100 GHMA: 90,000	PHMA: 510,100	PHMA: 397,600 IHMA: 22,500 GHMA: 98,000	PHMA: 335,400 IHMA: 58,300 GHMA: 119,200	PHMA: 420,100 GHMA: 90,000 RHMA: 14,100	PHMA: 318,700 IHMA: 110,200 GHMA: 53,100
Forest Service		PHMA: 20 GHMA: 70	PHMA: 20 GHMA: 50	PHMA: 70	PHMA: 10 IHMA: 10 GHMA: 70	PHMA: 10 IHMA: 0 GHMA: 70	PHMA: 20 GHMA: 50 RHMA: 0	PHMA: 30 IHMA: 30 GHMA: 0

Source: BLM GIS 2015
[1]Table presents acres of allocations within GRSG habitat. Acres outside occupied GRSG habitat are noted where applicable.
[2]Priority Habitat under Alternative A is managed on BLM-administered lands in Montana only. This row also includes Core Habitat Zones under Alternative E.
[3]General Habitat under Alternative A is managed on BLM-administered lands in Montana only. This row also includes General Habitat Zones under Alternative E.
[4]All acres in Restoration Habitat under Alternative F are outside occupied GRSG habitat and are presented separately in this table.
[5]Travel management decisions under Alternative D in Idaho would apply to BLM-administered lands within the entire state of Idaho regardless of GRSG habitat; travel management decisions under Alternative D in southwestern Montana would apply to only GRSG habitat in the Dillon Field Office.
[6]The planning area includes acres within both GRSG habitat and nonhabitat.
[7]Acres under Alternative A represent an overlay with PPH/PGH as well as the inclusion of several Forest Service GRSG management areas that are outside of PPH/PGH.
[8] This row also includes Important Habitat Zones under Alternative E.

Note: Figures referenced in this table are presented in **Appendix A**.

2.10 Detailed Description of Draft Alternatives

2.10.1 How to Read Tables 2-10 and 2-11

The following describes how **Table 2-10**, Goals and Objectives by Alternative, and **Table 2-11**, Management Actions by Alternative, below, are written and formatted to show the land use plan decisions proposed for each alternative.

In accordance with Appendix C of the BLM's *Land Use Planning Handbook* (H-1601-1), land use plan and plan amendment decisions are broad-scale decisions that guide future land management actions and subsequent site-specific implementation decisions (BLM 2005). Land use plan decisions fall into two categories, which establish the base structure for desired outcomes (goals and objectives), and allowable uses and actions to achieve outcomes.

- Goals are broad statements of desired outcomes that usually are not quantifiable.
- Objectives identify specific desired outcomes for resources. They may be quantifiable and measurable and may have established timeframes for achievement, as appropriate.
- Allowable uses identify uses, or allocations, that are allowable, restricted, or prohibited on BLM-administered lands and mineral estate.
- Actions identify measures or criteria to achieve desired objectives, including actions to maintain, restore, or improve land health.

Stipulations (NSO and CSU, which fall under the allowable uses category) are also applied to surface-disturbing activities to achieve desired outcomes (i.e., objectives).

In general, only those resources and resource uses that have been identified as planning issues have notable differences between the alternatives.

Actions that are applicable to all alternatives are shown in one cell across a row. These particular objectives and actions would be implemented regardless of which alternative is ultimately selected.

Actions that are applicable to more than one but not all alternatives are indicated by either combining cells for the same alternatives, or by denoting those objectives or actions as the "same as Alternative A," for example.

In some cells, "No Similar Action" is used to indicate that there is no similar goal, objective or action to the other alternatives, or that the similar goal, objective or action is reflected in another management action in the alternative.

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2.10.2 Goals and Objectives

Table 2-10
Goals and Objectives by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
Goals					
A-GOAL-1: No common goal across LUPs within the sub-region	**B-GOAL-1:** Maintain and/or increase GRSG abundance and distribution by conserving, enhancing or restoring the sagebrush ecosystem upon which populations depend in cooperation with other conservation partners.	**C-GOAL-1**: Same as Alternative A.	**D-GOAL-1:** Maintain and/or increase GRSG abundance and distribution by conserving, enhancing or restoring the sagebrush ecosystem upon which populations depend in cooperation with other conservation partners.	**E-GOAL-1:** Conserve the GRSG and its habitat to avoid a listing under the ESA (see NTT 2011).	**F-GOAL -1:** Maintain and increase current GRSG abundance and distribution by conserving, enhancing or restoring the sagebrush ecosystem
Objectives					
A-OBJ-1: No common objective across LUPs within the sub-region.	**B-OBJ-1:** Protect priority GRSG habitats from anthropogenic disturbances that will reduce distribution or abundance of GRSG.	**C-OBJ-1:** —	**D-OBJ-1:** Manage anthropogenic development and human disturbance in priority habitat to minimize the likelihood of adverse local population-level effects on GRSG.	**E-OBJ-1:** CHZ: Provide a level of protection sufficient to conserve at least 65% of the current known leks occurring in the State within CHZ through implementation of regulatory mechanisms. IHZ: Provide a population buffer to CHZ to minimize the risk of habitat loss from wildfire, invasive species while providing the opportunity to consider limited high-value infrastructure development.	**F-OBJ-1:** —
A-OBJ-2: No common objective across LUPs within the sub-region.	**B-OBJ-2:** Manage land uses, habitat treatments, and anthropogenic disturbances below thresholds necessary to conserve local GRSG populations, sagebrush communities and landscapes	**C-OBJ-2:** —	**D-OBJ-2:** —	**E-OBJ-2:** CHZ and IHZ: Limit habitat loss in CHZ and IHZ during the first three-year period of implementation (2014-2017) to no more than 10% loss due to fire and/or infrastructure development resulting in a proportionate reduction of males counted on leks within a particular CA.	**F-OBJ-2:** —
A-OBJ-3: No common objective across LUPs within the sub-region.	**B-OBJ-3**: Sub-objective: Manage priority GRSG habitats so that discrete anthropogenic disturbances cover less than 3% of the total GRSG habitat regardless of ownership. Anthropogenic features include but are not limited to paved highways, graded gravel roads, transmission lines, substations, wind turbines, oil and gas wells, geothermal wells and associated facilities, pipelines, landfills, homes, and mines. In priority habitats where	**C-OBJ-3:** —	**D-OBJ-3:** —	**E-OBJ-3:** —	**F-OBJ-3:** —

Table 2-10
Goals and Objectives by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
	the 3% disturbance threshold is already exceeded from any source, no further anthropogenic disturbances will be permitted by BLM or Forest Service until enough habitat has been restored to maintain the area under this threshold (subject to valid existing rights). In this instance, an additional objective will be designated for the priority area to prioritize and reclaim/restore areas affected by anthropogenic disturbances so that 3% or less of the total priority habitat area is disturbed within 10 years.				
A-OBJ-4: No common objective across LUPs within the sub-region.	**B-OBJ-4:** Maintain or increase current distribution and abundance of GRSG on BLM administered lands in support of the range-wide goals	**C-OBJ-4:** —	**D-OBJ-4:** —	**E-OBJ-4:** —	**F-OBJ-4:** —
A-OBJ-5: No common objective across LUPs within the sub-region.	**B-OBJ-5:** Sub-objective: Develop quantifiable habitat and population objectives with WAFWA and other conservation partners at the management zone and/or other appropriate scales. Develop a monitoring and adaptive management strategy to track whether these objectives are being met, and allow for revisions to management approaches if they are not.	**C-OBJ-5:** —	**D-OBJ-5:** —	**E-OBJ-5:** —	**F-OBJ-5:** —
A-OBJ-6: No common objective across LUPs within the sub-region.	**B-OBJ-6:** Sub-objective: Designate priority GRSG habitats for each WAFWA management zone (Stiver et al. 2006) across the current geographic range of GRSG that are large enough to stabilize populations in the short term and enhance populations over the long term.	**C-OBJ-6:** —	**D-OBJ-6:** Sub-objective: Designate priority GRSG habitats for each WAFWA management zone (Stiver et al. 2006) across the current geographic range of GRSG that are large enough to stabilize populations in the short term and enhance populations over the long term.	**E-OBJ-6:** CHZ: Focus management by Federal and State agencies on the maintenance and enhancement of habitats, populations and connectivity in areas within this management zone. IHZ: Focus management by Federal and State agencies on areas within this zone that have the best opportunities for conserving, enhancing or restoring habitat for GRSG. Provide management flexibility to permit high-value infrastructure projects.	**F-OBJ-6:** —

Table 2-10
Goals and Objectives by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
A-OBJ-7: No common objective across LUPs within the sub-region.	**B-OBJ-7:** Sub-objective: To maintain or increase current populations, manage or restore priority areas so that at least 70% of the land cover provides adequate sagebrush habitat to meet GRSG needs.	**C-OBJ-7:** —	**D-OBJ-7:** Identify and expand sagebrush areas to increase the extent and condition of available habitat on the landscape.	**E-OBJ-7:** —	**F-OBJ-7:** —
A-OBJ-8: No common objective across LUPs within the sub-region.	**B-OBJ-8:** —	**C-OBJ-8:** —	**D-OBJ-8:** Manage GHMAs in a way that buffers adjoining PHMAs from disturbances.	**E-OBJ-8:** —	**F-OBJ-8:** —
A-OBJ-9: No common objective across LUPs within the sub-region.	**B-OBJ-9:** —	**C-OBJ-9:** —	**D-OBJ-10:** Reconnect and expand areas of higher native plant community integrity/rangeland health to increase the extent of high quality habitat and, where possible, to accommodate the future effects of climate change.	**E-OBJ-9:** —	**F-OBJ-9:** —
A-OBJ-10: No common objective across LUPs within the sub-region.	**B-OBJ-10:** —	**C-OBJ-10:** —	**D-OBJ-10:** Increase the amount and functionality of seasonal habitats. a. Increase canopy cover and average patch size of sagebrush in perennial grasslands. b. Increase the amount, condition and connectivity of seasonal habitats. c. Protect or improve GRSG migration/movement corridors. d. Reduce conifer encroachment within GRSG seasonal habitats. e. Improve understory (grass, forb) and/or riparian condition within breeding and late brood-rearing habitats. f. Reduce the extent of annual grasslands adjacent to priority habitat.	**E-OBJ-10:** —	**F-OBJ-10:** —
A-OBJ-11: No common objective across LUPs within the sub-region.	**B-OBJ-11:** —	**C-OBJ-11:** —	**D-OBJ-11:** Minimize the loss of existing priority sagebrush habitat. In particular, identify and strategically protect larger in-tact sagebrush areas and areas of lower fragmentation to maintain GRSG population persistence.	**E-OBJ-11:** CHZ: Implement the regulatory mechanisms to maintain and enhance GRSG habitats, populations and connectivity in areas within CHZ, buffered by strategic areas within IHZ, dominated by sagebrush. IHZ: Provide strategic buffers in areas dominated by sagebrush to CHZ where regulatory mechanisms maintain and enhance GRSG habitats, populations and connectivity in areas within CHZ.	**F-OBJ-11:** Establish a system of sagebrush reserves to anchor recovery efforts by protecting the highest quality habitats.

Table 2-10
Goals and Objectives by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
A-OBJ-12: No common objective across LUPs within the sub-region.	**B-OBJ-12:** —	**C-OBJ-12:** —	**D-OBJ-12:** Conserve, enhance or restore GHMAs to improve habitat condition and connectivity between PHMAs.	**E-OBJ-12:** —	**F-OBJ-12:** Restore and maintain sagebrush steppe to its ecological potential in occupied GRSG habitat.
A-OBJ-13: No common objective across LUPs within the sub-region.	**B-OBJ-13:** —	**C-OBJ-13:** —	**D-OBJ-13:** Reduce or minimize risk of West Nile Virus or other diseases.	**E-OBJ-13:** —	**F-OBJ-13:** —

2.10.3 Management Actions

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
SSS – GRSG					
A-SSS-1: There is no consistent mapping representation of GRSG habitat across the sub-region, nor is there any consistent designation of habitat within the sub-region (see **Table 2-9**). Idaho BLM, in coordination with IDFG and LWGs, has developed and maintained a Key Sage-Grouse map over the last 12 years which depicts areas important to GRSG (Key areas) and areas where restoration could potentially occur to restore habitat conditions (R1 perennial grass dominated areas; R2 – annual grass dominated areas; and R3 – conifer encroachment areas) Montana BLM in coordination with MFWP has developed a Core Habitat map that depicts important areas for GRSG (Core areas). These maps (the Idaho Key Habitat and Montana Core Habitat) do not represent any habitat designation with associated management direction, but instead are used as and information tool to help prioritize site specific management, suppression and rehabilitation efforts. Several National Forests have designated GRSG habitat with associated management guidance. These include the Beaverhead-Deerlodge, Caribou-Targhee and Sawtooth NFs. The habitat designations were typically define as buffers around existing leks and adjusted managed within those areas.	**B-SSS-1: PHMA:** Designate PHMAs on 8,235,900 acres (see **Table 2-9**). PHMA includes areas that have the highest conservation value to maintaining or increasing GRSG populations. These areas include breeding, late brood-rearing, winter concentration areas, and where known, migration or connectivity corridors. **GHMA:** Designate GHMAs on 3,102,400 acres (see **Table 2-9**). GHMA is occupied (seasonal or year-round) habitat outside of PHMA.	**C-SSS-1: PHMA:** Designate PHMA on 11,106,900 acres (see **Table 2-9**). PHMA is all occupied (seasonal or year-round) GRSG habitat.	**D-SSS-1: PHMA:** Designate PHMA on 6,849,200 acres (see **Table 2-9**). PHMA includes areas that have the highest conservation value to GRSG. Key characteristics include areas of higher lek attendance and lek connectivity, lower habitat fragmentation, important movement corridors and winter habitat. **IHMA:** Designate Important Habitat Management Areas (IHMA) on 1,386,800 acres (see **Table 2-9**). IHMA includes areas of moderate to high conservation value to GRSG that are generally adjacent to PHMAs but reflect reduced GRSG population and/or habitat characteristics. **GHMA:** Designate GHMA on 2,934,100 acres (see **Table 2-9**). GHMA is occupied (seasonal or year-round) habitat outside of PHMA and IHMA.	**E-SSS-1: Idaho – CHZ:** Designate CHZ on 4,908,100 acres (see **Table 2-9**). CHZ focuses on conserving each of the two key meta-populations in the State. These meta-populations consist of a large aggregation of interconnected breeding subpopulations of GRSG that have the highest likelihood of long-term persistence. One meta-population is located north of the Snake River and includes the Mountain Valley and Desert CAs; the other is located south of the Snake River and includes the West Owyhee and Southern CAs. **Idaho –IHZ:** Designate IHZ on 2,743,800 acres (see **Table 2-9**). IHZ, while permitting more management flexibility, also contains important habitat for the species and is an important buffer against the threat of wildfire. IHZ captures high quality habitat and populations that provide a management buffer for CHZ, connect patches of CHZ, and support important populations and habitat independent of CHZ. **Idaho – GHZ:** Designate GHZ on 4,908,100 acres (see **Table 2-9**). GHZ generally includes few active leks, and fragmented or marginal habitat. It includes habitat for two isolated populations of GRSG in the East Idaho Uplands and West Central Idaho. **Montana Habitat:** All goals, objectives and management actions are the same	**F-SSS-1: PHMA:** Designate PHMA on 8,235,900 acres (see **Table 2-9**). PHMA conserves large expanses of sagebrush steppe and all active GRSG leks, and brood-rearing, transitional, and winter habitats. **GHMA:** Designate GHMA on 2,870,900 acres (see **Table 2-9**). GHMA is occupied (seasonal or year-round) habitat outside of PHMA. **RHMA:** Designate Restoration Habitat Management Areas (RHMA) on 500,300 acres (see **Table 2-9**). RHMA is degraded or fragmented habitat that is currently unoccupied by GRSG but might be useful to the species if restored to its potential natural community.

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
				as Alternative A and are summarized in **Appendix U**. **Utah Habitat:** Designate PHMA on 71,800 acres. All lands with GRSG habitat in the portion of the Sawtooth National Forest sub-region in Utah are PHMA (see **Table 2-9**).	

A-SSS-2: —.	**B-SSS-2: PHMA:** —.
	
	GHMA: —.
		C-SSS-2: PHMA: —.	**D-SSS-2: PHMA:** —.
			
			IHMA: —.
			
			GHMA: —.
				E-SSS-2: Idaho – Common to All Habitats: —.
				
				Utah Habitat: Limit or ameliorate impacts from activities as identified in this matrix through the use of the following stipulations:
				• New permanent disturbance, including structures, fences, and buildings, should not be located within the occupied lek itself.
				• No permanent disturbance within 1 mile of an occupied lek, unless it is not visible to the GRSG using the lek.
				• New permanent tall structures should not be located within one mile of the lek, if visible by the birds within the lek.
				• A disturbance outside the lek should not produce noise more than 10 dBs above the ambient (background) level at the edge of the lek during breeding season.
				• Apply time-of-day stipulations when the lek is active (e.g., no activity from 2-hours before sunrise to 2-hours after sunrise).
				• Avoid activities (construction, vehicle noise, etc.) in the following seasons and habitats:
				  ○ On leks from February 15 – May 15 to avoid activities that will disturb lek attendance or breeding.
				  ○ In nesting and brood-rearing
					F-SSS-2: PHMA: —.
					
					GHMA: —.
					
					RHMA: —.

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
				areas from April 1 – August 15. ○ In winter habitat from November 15 – March 15. • Specific time and distance determinations for seasonal stipulations would be based on site-specific conditions, in coordination with the local Utah Department of Wildlife Resources biologist. • Avoid disturbance within PHMA (nesting and brood-rearing areas, winter habitat, other habitat), if possible. Project proponents must demonstrate why avoidance is not possible. If avoidance in PHMA is not possible, minimize as appropriate to the area (e.g., try to minimize effects by locating development in habitat of the least importance, take advantage of topographic to screen the disturbance, or maintaining and enhancing wet meadow and riparian vegetation). • After minimization, mitigation is required (see mitigation section). • Cumulative new permanent disturbance should not exceed 5% of surface area of nesting, winter, or other habitat, within the population area's PHMA. • Manage PHMA to avoid barriers to migration, if applicable.	

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
A-SSS-3: No disturbance cap is managed across the sub-region.	**B-SSS-3: PHMA:** Apply a three percent surface disturbance cap on anthropogenic disturbances (not including fire). **GHMA:** —.	**C-SSS-3:** Same as Alternative B.	**D-SSS-3: PHMA:** Require no net unmitigated loss of PHMAs. **IHMA:** —. **GHMA:** —.	**E-SSS-3: Idaho – CHZ:** Apply a three percent surface disturbance cap on fluid mineral development. **Idaho – IHZ:** Apply a five percent surface disturbance cap on fluid mineral development. **Idaho – GHZ:** —. **Utah Habitat:** —.	**F-SSS-3: PHMA: A**pply a three percent disturbance cap on surface disturbances, including fire.
Monitoring					
A-SSS-4: —.	**B-SSS-4:** Develop a Monitoring Framework to include: methods, data standards, and intervals of monitoring at broad and mid scales; consistent indicators to measure and metric descriptions for each of the scales [see Habitat Assessment Framework (HAF) and Assessment, Inventory and Monitoring core indicators]; analysis and reporting methods; and the incorporation of monitoring results into adaptive management.	**C-SSS-4:** Same as Alternative B.	**D-SSS-4:** Same as Alternative B.	**E-SSS-4:** Utilize lek monitoring and habitat monitoring to annually assess adaptive management triggers.	**F-SSS-4:** Same as Alternative B.
Adaptive Management					
A-SSS-5: —.	**B-SSS-5:** Develop an adaptive management strategy to provide certainty that unintended negative impacts on GRSG will be addressed before consequences become severe or irreversible and to provide regulatory certainty to the USFWS that appropriate action will be taken by the BLM and Forest Service.	**C-SSS-5:** Same as Alternative B.	**D-SSS-5:** Use habitat and population triggers to adjust management in IHMA. All management identified for PHMAs would apply to IHMAs in response to triggers. See **Section 2.6.4** for details.	**E-SSS-5:** Use hard and soft population and habitat triggers to adjust management in IHZ. Management from CHZs, primarily for infrastructure, would apply to IHZ in response to triggers. Develop the following: • Fuel Break Strategy • Response Time Analysis • Water Availability Analysis • Restoration Strategy (see **Appendix Q**)	**F-SSS-5:** Same as Alternative B.

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
Vegetation					
A-VG-1: —.	**B-VG-1: PHMA:** --. **GHMA:** —.	**C-VG-1: PHMA:** —.	**D-VG-1: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-VG-1: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-VG-1: PHMA:** In PHMA, ensure that soil cover and native herbaceous plants are at their Ecological Site Description potential to help protect against invasive plants. In areas without Ecological Site Descriptions, reference sites would be utilized to identify appropriate vegetation communities and soil cover. **GHMA:** —. **RHMA:** —.
Habitat Restoration					

A-VG-2: In most LUPs, either no priorities are established or prioritization is given to projects that benefit multiple resources (e.g., livestock, wildlife, wild horses and burros, special status species).
 	
All LUPs which recognize conifer expansion and its effects on sagebrush steppe habitat uniformly identify the need for controlling conifer expansion through various methods including: hand cutting, wood cutting, mechanical, prescribed fire, chemical treatments, and through the use of wildfire where feasible.
 	
Montana BLM: Restore vegetation to benefit multiple uses. Promote the use of native species where possible (See ROD pg. 51 Actions 3, 12, 14 and Appendix X of Dillon ROD/RMP). Restore and maintain desired ecological conditions and fuel loadings. Evaluate benefits against loss of sagebrush in NEPA process. Do not burn Wyoming sagebrush.
	B-VG-2: PHMA: Prioritize implementation of restoration projects based on environmental variables that improve chances for project success in areas most likely to benefit GRSG (Meinke et al. 2009). Prioritize restoration in seasonal habitats that are thought to be limiting GRSG distribution and/or abundance.
	
	GHMA: —.
		C-VG-2: PHMA: Same as Alternative B.	**D-VG-2: PHMA:** Prioritize implementation of vegetation rehabilitation projects to achieve the greatest improvement in GRSG habitat. Factors contributing to higher emphasis for implementation include:
			• Sites where environmental variables contribute to improved chances for project success (Meinke et al. 2009).
			• Improvement of seasonal habitats that are thought to be limiting GRSG distribution and/or abundance (wintering areas , wet meadows and riparian areas, nesting areas, leks, etc.).
			• Re-establishment of sagebrush cover in otherwise suitable GRSG with consideration to local needs and conditions using the general priorities in the following order:
			  • Native grassland with suitable forb component
			  • Nonnative grassland with suitable forb component
			  • Recently burned native areas
			  • Native grassland
			  • Nonnative grassland
				E-VG-2: Idaho – CHZ: Prioritize the removal of conifers through methods appropriate for the terrain and most likely to facilitate expeditious GRSG population and habitat recovery. To the extent possible, utilize removal methods creating the least amount of disturbance.
				a. Efforts should focus on areas with highest restoration potential typically evidenced by low canopy cover, existing sagebrush understory, and adjacent current populations.
				b. Refrain from using prescribed fire and conducting removal projects in juniper stands older than one hundred years.
				c. Maximize the use of Natural Resource Conservation Service funding through permittee grants under the Environmental Quality Incentives Program and Wildlife Habitat Improvement programs.
				
				Idaho – IHZ: Prioritize the removal of conifers through methods appropriate for the terrain and most likely to facilitate expeditious GRSG habitat recovery. Especially prioritize and target
					F-VG-2: PHMA: Prioritize implementation of restoration projects based on environmental variables that improve chances for project success in areas most likely to benefit GRSG (Meinke et al. 2009).
					
					Prioritize restoration in seasonal habitats that are thought to be limiting GRSG distribution and/or abundance and where factors causing degradation have already been addressed (e.g., changes in livestock management).
					
					GHMA: —.
					
					RHMA: —.

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
			• Where desirable perennial bunchgrasses and/or forbs are deficient in existing sagebrush stands, use appropriate mechanical, aerial or other techniques to re-establish them. Examples include but are not limited to, use of a Lawson aerator with seeding, harrow or chain with seeding, drill seeding, hand planting plugs, aerial seeding or other appropriate technique. • Cooperative efforts that may improve GRSG habitat quality over multiple ownerships. • Projects in GHMA that may provide connectivity between suitable habitats or expand existing good quality habitats. • Projects that address conifer encroachment into important GRSG habitats. In general the priority for treatment is 1) Phase 1 (≤10% conifer cover), 2) Phase 2 (10-30%), and 3) Phase 3 (>30%). • Replacing stands of annual grasses within otherwise good quality habitats with desirable perennial species. Other factors that contribute to the importance of the restoration project in maintaining or improving GRSG habitat. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	removal treatments adjacent to CHZ. To the extent possible, utilize methods creating the least amount of disturbance. a. Areas with highest restoration potential will typically have low canopy cover, existing sagebrush understory, and adjacent current populations. b. Refrain from using prescribed fire and conducting removal projects in juniper stands older than one-hundred years. c. Maximize the use of Natural Resource Conservation Service funding through permittee grants under the Environmental Quality Incentives Program and Wildlife Habitat Improvement programs. **Idaho – GHZ:** —. **Montana Habitat:** Same as Alternative A. **Utah Habitat:** Protection of GRSG habitat is the primary focus of conservation efforts, but many locations can be reclaimed or restored by active vegetation management actions. For example: • removal of encroaching conifers may create new habitat or increase the carrying capacity of habitat and thereby expand GRSG populations, or • the distribution of water into wet meadow areas may improve seasonal brood-rearing range and enhance GRSG recruitment. Aggressively remove encroaching conifers and other plant species to expand GRSG habitat where possible.	

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
				Sagebrush treatment projects within nesting and winter habitat should be limited and require pre-approval by the appropriate regulatory agency in discussions with DWR. Sagebrush treatment projects should maintain 80% of the available habitat as sagebrush within the project area; 20% of the habitat can be managed for younger age classes of sagebrush, if appropriate. These treatments are generally recommended only to improve brood-rearing habitat, but need to be carefully considered before use in winter and other habitat.	
A-VG-3: Guidance and management direction for general vegetation is fairly broad and trends toward maintaining the components of the vegetative community in the same relative proportion as those which would have historically occurred in the area. Some LUPs contain objectives for maintaining, improving, or restoring sagebrush plant communities. The level of detail varies depending on the age of the land use plan.	**B-VG-3: PHMA:** —. **GHMA:** —.	**C-VG-3: PHMA:** Composition, function, and structure of native vegetation communities will be consistent with the reference state of the appropriate Ecological Site Description and will be maximized to provide for healthy, resilient, and recovering GRSG habitat components.	**D-VG-3: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-VG-3: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-VG-3: PHMA:** —. **GHMA:** —. **RHMA:** —.
A-VG-4: All recent LUPs include management actions that promote use of native species where possible, acknowledging that in some instances, vegetative treatments may not be successful without the use of nonnative desired species. Older plans typically do not include a similar management action.	**B-VG-4: PHMA:** Require use of native seeds for restoration based on availability, adaptation (ecological site potential), and probability of success (Richards et al. 1998). Where probability of success or adapted seed availability is low, nonnative seeds may be used as long as they support GRSG habitat objectives (Pyke 2011). **GHMA:** —.	**C-VG-4: PHMA:** Same as Alternative B.	**D-VG-4: PHMA:** Same as Alternative B. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	**E-VG-4: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-VG-4: PHMA:** Same as Alternative B. **GHMA:** —. **RHMA:** —.

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
A-VG-5: All LUPs, which are written in accordance with applicable program direction, include management actions that allow the administrating agency to make adjustments to livestock grazing, wild horse and burro management, and travel management on a case-by case basis following restoration activities.	**B-VG-5: PHMA:** Design post restoration management to ensure long term persistence. This could include changes in livestock grazing management, wild horse and burro management and travel management, etc., to achieve and maintain the desired condition of the restoration effort that benefits GRSG (Eiswerth and Shonkwiler 2006). **GHMA:** —.	**C-VG-5: PHMA:** Same as Alternative B.	**D-VG-5: PHMA:** Implement management changes, as necessary, to maintain suitable GRSG habitat, improve unsuitable GRSG habitat and to ensure long-term persistence of improved GRSG habitat achieved through restoration efforts (Eiswerth and Shonkwiler 2006). Management changes could be considered for livestock grazing, wild horse and burros, travel planning, and other resources. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	**E-VG-5: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-VG-5: PHMA:** Same as Alternative B. **GHMA:** —. **RHMA:** —.
A-VG-6: —.	**B-VG-6: PHMA:** Consider potential changes in climate (Miller et al. 2011) when proposing restoration seedings when using native plants. Consider collection from the warmer component of the species current range when selecting native species (Kramer and Havens 2009). **GHMA:** —.	**C-VG-6: PHMA:** Same as Alternative B.	**D-VG-6: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-VG-6: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-VG-6: PHMA:** Same as Alternative B. **GHMA:** —. **RHMA:** —.
A-VG-7: Most LUPs do not include specific management actions related to seedings. Plans do include generic decisions that allow maintenance of existing range improvements, which includes maintenance of historical seedings. Recently completed LUPs promote use of native species when conducting restoration activities. This would include restoration projects conducted in areas that have perennial grass cover. Older plans do not include a similar management action.	**B-VG-7: PHMA:** Restore native (or desirable) plants and create landscape patterns which most benefit GRSG. **GHMA:** —.	**C-VG-7: PHMA**: Exotic seedings will be rehabbed, interseeded, restored to recover sagebrush in areas to expand occupied habitats.	**D-VG-7: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-VG-7: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-VG-7: PHMA:** —. **GHMA:** —. **RHMA:** —.

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
A-VG-8: Some LUPs contain objectives for maintaining improving, or restoring sagebrush plant communities. The level of detail varies depending on the age of the land use plan. All LUPs address vegetation treatments for improvement of wildlife habitat overall or to provide increased forage for wildlife, livestock, and wild horses and burros. Recent LUPs may include management actions that purposely restore or enhance GRSG habitat.	**B-VG-8: PHMA:** Make re-establishment of sagebrush cover and desirable understory plants (relative to ecological site potential) the highest priority for restoration efforts. **GHMA:** —.	**C-VG-8: PHMA**: Same as Alternative B.	**D-VG-8: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-VG-8: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-VG-8: PHMA:** —. **GHMA:** —. **RHMA:** —.
A-VG-9: —.	**B-VG-9: PHMA:** In fire prone areas where sagebrush seed is required for GRSG habitat restoration, consider establishing seed harvest areas that are managed for seed production (Armstrong 2007) and are a priority for protection from outside disturbances. **GHMA:** —.	**C-VG-9: PHMA**: Same as Alternative B.	**D-VG-9: PHMA:** In fire prone areas where sagebrush seed is required for GRSG habitat restoration, consider establishing seed harvest areas that are managed for seed production (Armstrong 2007). **IHMA:** Same as PHMA. **GHMA:** —.	**E-VG-9: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-VG-9: PHMA:** Same as Alternative B. **GHMA:** —. **RHMA:** —.
A-VG-10: —.	**B-VG-10: PHMA:** —. **GHMA:** —.	**C-VG-10: PHMA:** Active restoration practices: • Removal of livestock water troughs, pipelines, and wells. • Where possible, without further damage to springs/water sources, remove waterline piping and maximize water at spring/stream sources supporting diverse riparian and meadow vegetation. • Promote natural healing of headcuts to the maximum extent possible by limiting disturbance throughout the watershed. At times, a combination of methods may need to be used – but gabions and structural devises and boulder dumping should be limited, and restoration should strive for a	**D-VG-10: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-VG-10: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-VG-10: PHMA:** —. **GHMA:** —. **RHMA:** —.

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
		functioning system. • Ripping/recontouring of roads and seeding with native local ecotypes of shrubs and grasses.			
A-VG-11: —.	**B-VG-11: PHMA:** —. **GHMA:** —.	**C-VG-11: PHMA:** Active restoration of crested wheatgrass seedings. This can be accomplished, following targeted restoration planning to expand, reconnect or recover habitats required by GRSG by: • Inter-seeding sagebrush seed or seedlings. • Removal of crested wheatgrass through plowing while minimizing use of herbicides. Subsequent re-seeding with local native ecotypes. • Active restoration of cheatgrass infestation areas. • In all cases, local native plant ecotype seeds and seedlings must be used.	**D-VG-11: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-VG-11: Idaho – Common to All Habitats:** —. **Utah Habitat:** Limit or ameliorate impacts through the use of the general stipulations identified in the GRSG section. Engage in reclamation efforts as projects advance or are completed. Recognize that stipulations for other species (e.g., raptors) may impede the ability to effectively reclaim disturbed areas, and remove those barriers in order to achieve immediate and effective reclamation, if otherwise allowable by law. Prioritize areas for habitat improvement to make best use of mitigation funds.	**F-VG-11: PHMA:** —. **GHMA:** —. **RHMA:** —.
A-VG-12: —.	**B-VG-12: PHMA:** —. **GHMA:** —.	**C-VG-12: PHMA:** —.	**D-VG-12: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-VG-12: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-VG-12: PHMA Habitat:** Avoid sagebrush reduction/treatments to increase livestock or big game forage in PHMA and include plans to restore high-quality habitat in areas with invasive species. **GHMA:** —. **RHMA:** —.
A-VG-13: —.	**B-VG-13: PHMA:** —. **GHMA:** —.	**C-VG-13: PHMA:** —.	**D-VG-13: PHMA:** Utilize cooperative planning efforts to develop and implement habitat restoration projects. Expertise and ideas from local landowners, working groups, and other federal, state, county, and private organizations should be solicited and considered in development of projects. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	**E-VG-13: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-VG-13: PHMA:** —. **GHMA:** —. **RHMA:** —.
A-VG-14: —.	**B-VG-14: PHMA:** —.	**C-VG-14: PHMA:** —.	**D-VG-14: PHMA:** Consider design	**E-VG-14: Idaho – Common to All**	**F-VG-14: PHMA:** —.

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
	GHMA: —.		features that will contribute to the most favorable conditions for success when planning and implementing rehabilitation projects. Considerations should include: • Careful review of available plant species and their adaptation to the site when developing seed mixes. (Lambert 2005; VegSpec). • The impacts of potential climate changes (Miller et al. 2011), consider utilizing the warmer component of a species' current range when selecting native species for restoration (Kramer and Havens 2009). • The need to reduce annual grass densities and competition through herbicide, targeted grazing, tillage, prescribed fire, etc. (Pyke 2011). • The need to reduce density and competition of perennial grasses and techniques to accomplish this reduction (Pellant and Lysne 2005). • Techniques to introduce desired species to the site such as drill seeding, broadcast seeding followed by a seed coverage technique, such as harrowing, chaining or livestock trampling, and transplanting container or bare-root seedlings • Assessment of on-site vegetation to ascertain if enough desirable perennial vegetation exists to consider techniques to increase on-site seed production to facilitate an increase in density of desired species. • Use of site preparation techniques that retain existing desirable vegetation. • Use of "mother plant" techniques or planting of satellite populations of desirable plants to serve as seed	**Habitats:** —. **Utah Habitat:** —.	**GHMA:** —. **RHMA:** —.

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
			sources. • The need for post-treatment control of annual grass and other invasive species. The availability of new tools and use of new science and research as it becomes available. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.		
A-VG-15: Recently completed LUPs promote use of native species when conducting restoration activities. This would include restoration projects conducted in areas that have perennial grass cover. Older plans do not include a similar management action.	**B-VG-15: PHMA:** —. **GHMA:** —.	**C-VG-15: PHMA:** —.	**D-VG-15: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-VG-15: Idaho – CHZ:** Emphasize the use of native seeds for fuels management treatment based on availability, adaptation (site potential), and probability of success. **Idaho – IHZ:** Same as Idaho – CHZ. **Idaho – GHZ:** —. **Utah Habitat:** —.	**F-VG-15: PHMA:** —. **GHMA:** —. **RHMA:** —.
A-VG-16: —.	**B-VG-16: PHMA:** —. **GHMA:** —.	**C-VG-16: PHMA:** —.	**D-VG-16: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-VG-16: Idaho – CHZ:** Reallocate native plant seeds for ESR from outside the Sage-Grouse Management Area and GHZ to this management zone if necessary. **Idaho – IHZ:** Same as Idaho - CHZ. **Idaho – GHZ:** —. **Utah Habitat:** —.	**F-VG-16: PHMA:** —. **GHMA:** —. **RHMA:** —.

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
A-VG-17: —.	**B-VG-17: PHMA:** Prioritize native seed allocation for use in GRSG habitat in years when preferred native seed is in short supply. This may require reallocation of native seed from ESR (BLM) and/or BAER (Forest Service) projects outside of PHMA to those inside it. Use of native plant seeds for ESR or BAER seedings is required based on availability, adaptation (site potential), and probability of success (Richards et al. 1998). Where probability of success or native seed availability is low, nonnative seeds may be used as long as they GRSG habitat conservation objectives (Pyke 2011). Re-establishment of appropriate sagebrush species/subspecies and important understory plants, relative to site potential, shall be the highest priority for rehabilitation efforts. **GHMA:** —.	**C-VG-17: PHMA:** Same as Alternative B.	**D-VG-17: PHMA:** Prioritize native seed allocation for use in GRSG habitat in years when preferred native seed is in short supply. This may require reallocation of native seed from ESR (BLM) and/or BAER (Forest Service) projects outside of PHMA to those inside it. Where probability of success or native seed availability is low, nonnative seeds may be used as long as they meet GRSG habitat conservation objectives (Pyke 2011). Re-establishment of appropriate sagebrush species/subspecies and important understory plants, relative to site potential, shall be the highest priority for rehabilitation efforts. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	**E-VG-17: Idaho – CHZ:** Where the probability of obtaining sufficient native seed is low, nonnative seeds may be used provided GRSG habitat objectives are met. **Idaho – IHZ:** Same as Idaho - CHZ. **Idaho – GHZ:** —. **Utah Habitat:** —.	**F-VG-17: PHMA:** Same as Alternative B. **GHMA:** —. **RHMA:** —.

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
A-VG-18: All LUPs, which are written in accordance with applicable program direction, include management actions that allow the administrating agency to make adjustments to livestock grazing, wild horse and burro management, and travel management on a case-by case basis following restoration activities.	**B-VG-18: PHMA:** Design post ESR and BAER management to ensure long term persistence of seeded or pre-burn native plants. This may require temporary or long-term changes in livestock grazing, wild horse and burro, and travel management, etc., to achieve and maintain the desired condition of ESR and BAER projects to benefit GRSG (Eiswerth and Shonkwiler 2006). **GHMA:** —.	**C-VG-18: PHMA:** Same as Alternative B.	**D-VG-18: PHMA:** Design post fuel, restoration, and ESR management to ensure long term persistence of seeded or pre-burn native plants. Use chemical, mechanical, and seeding treatments with appropriate plant materials to attempt to stabilize sites and prevent dominance of invasive, annual vegetation, and noxious weeds. Use native plant materials were determined to be appropriate and practical at the project-implementation level. This may require temporary or long-term changes in livestock grazing, wild horse and burro, and travel management, fuels and rehabilitation, etc., to achieve and maintain the desired condition of ESR projects to benefit GRSG (Eiswerth and Shonkwiler 2006). **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	**E-VG-18: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-VG-18: PHMA:** Same as Alternative B. **GHMA:** —. **RHMA:** —.
A-VG-19: —.	**B-VG-19: PHMA:** Consider potential changes in climate (Miller at al. 2011) when proposing post-fire seedings using native plants. Consider seed collections from the warmer component within a species' current range for selection of native seed. (Kramer and Havens 2009). **GHMA:** —.	**C-VG-19: PHMA:** Same as Alternative B.	**D-VG-19: PHMA:** Consider utilizing the warmer component of a species' current range where feasible (financially, seed availability, etc.) when selecting native species for restoration and when such a strategy would not jeopardize the success of the seeding. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	**E-VG-19: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-VG-19: PHMA:** Same as Alternative B. **GHMA:** —. **RHMA:** —.
A-VG-20: —.	**B-VG-20: PHMA:** —. **GHMA:** —.	**C-VG-20: PHMA:** —.	**D-VG-20: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-VG-20: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-VG-20: PHMA:** Establish and strengthen networks with seed growers to assure availability of native seed for ESR projects. **GHMA:** —. **RHMA:** —.

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
A-VG-21: All LUPs, which are written in accordance with applicable program direction, include management actions that allow the administrating agency to make adjustments to livestock grazing, wild horse and burro management, and travel management on a case-by case basis following restoration activities.	**B-VG-21: PHMA:** —. **GHMA:** —.	**C-VG-21: PHMA:** —.	**D-VG-21: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-VG-21: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-VG-21: PHMA:** Post fire recovery must include establishing adequately sized exclosures (free of livestock grazing) that can be used to assess recovery. **GHMA:** —. **RHMA:** —.
A-VG-22: All LUPs, which are written in accordance with applicable program direction, include management actions that allow the administrating agency to make adjustments to livestock grazing, wild horse and burro management, and travel management on a case-by case basis following restoration activities.	**B-VG-22: PHMA:** —. **GHMA:** —.	**C-VG-22: PHMA:** —.	**D-VG-22: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-VG-22: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-VG-22: PHMA:** Livestock grazing should be excluded from burned areas until woody and herbaceous plants achieve GRSG habitat objectives. **GHMA:** —. **RHMA:** —.
A-VG-23: All LUPs, which are written in accordance with applicable program direction, include management actions that allow the administrating agency to make adjustments to livestock grazing, wild horse and burro management, and travel management on a case-by case basis following restoration activities.	**B-VG-23: PHMA:** —. **GHMA:** —.	**C-VG-23: PHMA:** —.	**D-VG-23: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-VG-23: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-VG-23: PHMA:** Where burned GRSG habitat cannot be fenced from other unburned habitat, the entire area (e.g., allotment/pasture) should be closed to grazing until recovered. **GHMA:** —. **RHMA:** —.

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
A-VG-24: Most LUPs do not include specific management actions related to seedings. Plans do include generic decisions that allow maintenance of existing range improvements, which includes maintenance of historical seedings. Recently completed LUPs promote use of native species when conducting restoration activities. This would include restoration projects conducted in areas that have perennial grass cover. Older plans do not include a similar management action.	**B-VG-24: PHMA:** Evaluate the role of existing seedings that are currently composed of primarily introduced perennial grasses in and adjacent to PHMA to determine if they should be restored to sagebrush or habitat of higher quality for GRSG. If these seedings are part of an AMP/Conservation Plan or if they provide value in conserving or enhancing the rest of PHMA, then no restoration would be necessary. Assess the compatibility of these seedings for GRSG habitat or as a component of a grazing system during the land health assessments (or other analyses [Forest Service only]) (Davies et al. 2011). **GHMA:** —.	**C-VG-24: PHMA:** —.	**D-VG-24: PHMA:** Assess the compatibility of existing nonnative seedings for GRSG habitat or as a component of a grazing system or forage reserve during land health assessments (Davies et al. 2011). Evaluate existing seedings currently dominated by introduced perennial grasses in and adjacent to PHMA to determine if they should be diversified with native grasses, forbs, and shrubs, including sagebrush. If these seedings are part of an AMP/Conservation Plan and if they provide value in conserving or enhancing the rest of PHMA, restoration may not be appropriate. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	**E-VG-24: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-VG-24: PHMA:** Evaluate the role of existing seedings that are currently composed of primarily introduced perennial grasses in and adjacent to PHMA to determine if they should be restored to sagebrush or habitat of higher quality for GRSG. If these seedings are part of an AMP/Conservation Plan or if they provide value in conserving or enhancing the rest of PHMA, then no restoration would be necessary. Assess the compatibility of these seedings for GRSG habitat or as a component of a grazing system during the land health assessments (Davies et al. 2011). **GHMA:** —. **RHMA:** —.
A-VG-25: —.	**B-VG-25: PHMA:** —. **GHMA:** —.	**C-VG-25: PHMA:** —.	**D-VG-25: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-VG-25: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-VG-25: PHMA:** Any vegetation treatment plan must include pretreatment data on wildlife and habitat condition, establish non-grazing exclosures, and include long-term monitoring where treated areas are monitored for at least three years before grazing returns. Continue monitoring for five years after livestock are returned to the area, and compare to treated, ungrazed exclosures, as well as untreated areas. **GHMA:** —. **RHMA:** —.

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
A-VG-26: Many older LUPs include specific objectives for vegetation treatments that increased desirable forage species for livestock, usually focusing on reducing the sagebrush overstory. More recent LUPs generally prescribe management that moves rangeland communities toward historical vegetative conditions.	**B-VG-26: PHMA:** —. **GHMA:** —.	**C-VG-26: PHMA:** —.	**D-VG-26: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-VG-26: Idaho – CHZ:** Initiate vegetative manipulation projects where sagebrush canopy cover exceeds optimal characteristics to promote grass and forb understory growth only where the project can be achieved without negatively impacting GRSG. **Idaho – IHZ:** Same as Idaho - CHZ. **Idaho – GHZ:** —. **Utah Habitat:** —.	**F-VG-26: PHMA:** —. **GHMA:** —. **RHMA:** —.
A-VG-27: All LUPs address vegetation treatments for improvement of wildlife habitat overall or to provide increased forage for wildlife, livestock, and wild horses and burros.	**B-VG-27: PHMA:** —. **GHMA:** —.	**C-VG-27: PHMA:** —.	**D-VG-27: PHMA:** Implement rehabilitation projects in areas that have the potential to provide for GRSG habitat. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	**E-VG-27: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-VG-27: PHMA:** —. **GHMA:** —. **RHMA:** —.
A-VG-28: —.	**B-VG-28: PHMA:** —. **GHMA:** —.	**C-VG-28: PHMA:** —.	**D-VG-28: PHMA:** Make progress toward desired future condition in the Low-elevation Shrub, Perennial Grass, Invasive Annual Grass, Mid-Elevation Shrub, Mountain Shrubs, and Juniper vegetation types. Use chemical, mechanical, seeding, and prescribed fire treatments as appropriate to enhance and restore habitats that are currently in Fire Regime Condition Class (FRCC) 2 and FRCC3. In Perennial Grass, Invasive Annual Grass, and juniper-invaded cover types, restore sagebrush steppe with an aggressive sagebrush seeding effort, using the appropriate sagebrush subspecies for the treatment area. Conduct vegetation treatments in areas that pose a wildland fire risk to GRSG habitats. Treat areas within GRSG habitats that have low resiliency to disturbance (i.e., areas characterized by lower native plant species diversity than expected for the site, undesirable plant species composition, and dead or	**E-VG-28: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-VG-28: PHMA:** —. **GHMA:** —. **RHMA:** —.

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
			decadent sagebrush) to improve long-term habitat suitability for GRSG. Treat GRSG habitat and potential restoration areas to expand PHMA. Improve GRSG potential restoration habitats (perennial grassland, annual grassland, conifer encroachment areas) and maintain or improve sagebrush portions of PHMA. Conduct vegetation treatments (including fuel breaks) in restoration and key habitats to reduce risk of wildland fire and reconnect PHMA. Make progress toward Desired Future Condition in historically frequent fire regimes (Aspen/Conifer, Dry Conifer, Mid-Elevation Shrub encroached by juniper, Mountain Shrub by increasing wildfire managed for LUP objectives and prescribed fire to create a fire regime within the historical range of variability. Use mechanical and chemical treatments to prepare areas in FRCC2 and FRCC3 for prescribed fire. Monitor and control invasive vegetation post-treatment. Rest treated areas from grazing or modify grazing until vegetation objectives have been met. Ensure that any proposed sagebrush treatment acreage is conservative in the context of surrounding seasonal habitats and landscape. Monitor and if necessary control invasive vegetation post-treatment. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.		

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
A-VG-29: Allow treatments that provide benefits for multiple resources. Additional forage will be appropriated to livestock, wild horses and burros (where applicable), and wildlife.	**B-VG-29: PHMA:** Only allow treatments that conserve, enhance or restore GRSG habitat (this includes treatments that benefit livestock as part of an AMP/Conservation Plan to improve GRSG habitat). **GHMA:** —.	**C-VG-29: PHMA:** —.	**D-VG-29: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-VG-29: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-VG-29: PHMA:** Ensure that vegetation treatments Restore native (or desirable) plants and create landscape patterns which most benefit GRSG. Only allow treatments that conserve, enhance, or restore GRSG habitat are demonstrated to benefit GRSG and retain sagebrush height and cover consistent with GRSG habitat objectives (this includes treatments that benefit livestock as part of an AMP/Conservation Plan to improve GRSG habitat). **GHMA:** —. **RHMA:** —.
A-VG-30: —.	**B-VG-30: PHMA:** —. **GHMA:** —.	**C-VG-30: PHMA:** —.	**D-VG-30: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-VG-30: Idaho – Common to All Habitats:** The State will establish a mitigation bank of GRSG habitation restoration projects that future development projects would repay through compensatory mitigation requirements. **Utah Habitat:** —.	**F-VG-30: PHMA:** —. **GHMA:** —. **RHMA:** —.
Integrated Invasive Species					
A-IIS-1: Implement noxious weed and invasive species control using integrated weed management actions per national guidance and local weed management plans in cooperation with State and Federal agencies, affected counties, and adjoining private lands owners. In most LUPs, either no priorities are established or prioritization is given to projects that benefit multiple resources (e.g., livestock, wildlife, wild horses and burros, special status species). Montana BLM: Implement noxious weed and invasive species control, using integrated weed management, in cooperation with state and federal agencies, counties, and private	**B-IIS-1: PHMA:** Integrated Vegetation Management would be used to control, suppress, and eradicate, where possible, noxious and invasive species per BLM Handbook H-1740-2. **GHMA:** —.	**C-IIS-1: PHMA:** —.	**D-IIS-1: PHMA:** Implement integrated weed management actions for noxious and invasive weed populations that are impacting or threatening GRSG habitat quality. In concert with partners and/or weed management areas as appropriate apply education, inventory, prevention, control, rehabilitation, and monitoring strategies that protect or enhance GRSG habitat. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	**E-IIS-1: Idaho – CHZ:** Actively manage exotic undesirable species sufficiently to limit presence and prevent invasion. **Idaho – IHZ:** Actively manage exotic undesirable species to limit presence and prevent invasion in CHZ without impairing GRSG populations. **Idaho – GHZ:** Aggressively manage exotic undesirable species in conjunction with coordinated weed management areas to limit presence and prevent invasion into other management zones. **Montana Habitat:** Same as Alternative	**F-IIS-1: PHMA:** —. **GHMA:** —. **RHMA:** —.

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
landowners (ROD, p. 49, Action 11.). Emphasize control of invasive weeds in occupied GRSG breeding habitat				A. **Utah Habitat:** Aggressively respond to new infestations to keeping invasive species from spreading. Every effort should be made to identify and treat new infestations before they become larger problems. Containment of known infestations in or near sagebrush habitats should be a high priority for all land management agencies.	
A-IIS-2: —.	**B-IIS-2: PHMA:** —. **GHMA:** —.	**C-IIS-2: PHMA:** —.	**D-IIS-2: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-IIS-2: Idaho – CHZ:** Control invasive vegetation within post-wildfire treatment areas for at least three years post treatment. **Idaho – IHZ:** Same as Idaho - CHZ. **Idaho – GHZ:** —. **Utah Habitat:** Immediate, proactive means to reduce or eliminate the spread of invasive species, particularly cheatgrass, after a wildfire, is a high priority.	**F-IIS-2: PHMA:** —. **GHMA:** —. **RHMA:** —.
A-IIS-3: Implement noxious weed and invasive species control using integrated weed management actions per national guidance and local weed management plans in cooperation with State and Federal agencies, affected counties, and adjoining private lands owners.	**B-IIS-3: PHMA:** —. **GHMA:** —.	**C-IIS-3: PHMA:** —.	**D-IIS-3: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-IIS-3: Idaho – CHZ:** —. **Idaho – IHZ:** Eradicate or control noxious weeds and/or invasive species posing a risk to GRSG habitats using a variety of chemical, mechanical and other appropriate means in coordination with the local Cooperative Weed Management Area. **Idaho – GHZ:** Same as IHZ. **Utah Habitat:** —.	**F-IIS-3: PHMA:** —. **GHMA:** —. **RHMA:** —.

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
A-IIS-4: Implement noxious weed and invasive species control using integrated weed management actions per national guidance and local weed management plans in cooperation with State and Federal agencies, affected counties, and adjoining private lands owners.	**B-IIS-4: PHMA:** Monitor for, and treat invasive species associated with existing range improvements (Gelbard and Belnap 2003; Bergquist et al. 2007). **GHMA:** —.	**C-IIS-4: PHMA:** —.	**D-IIS-4: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-IIS-4: Idaho – CHZ:** Treat and monitor invasive species associated with existing range improvements. **Idaho – IHZ:** Same as Idaho - CHZ. **Idaho – GHZ:** —. **Utah Habitat:** —.	**F-IIS-4: PHMA:** Same as Alternative B. **GHMA:** —. **RHMA:** —.
A-IIS-5: —.	**B-IIS-5: PHMA:** —. **GHMA:** —.	**C-IIS-5: PHMA:** —.	**D-IIS-5: PHMA:** Following project construction treat noxious weeds and invasive species, establish desirable perennial vegetation to compete with invasive species on disturbed areas, and monitor and continue treating the project area for noxious weed and invasive species for at least 3 years, unless control is achieved earlier. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	**E-IIS-5: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-IIS-5: PHMA:** —. **GHMA:** —. **RHMA:** —.
Wild Horse and Burro					
A-WHB-1: Prepare or amend herd management area plans on an as-needed basis.	**B-WHB-1: PHMA:** Develop or amend BLM Herd Management Area Plans and Forest Service Wild Horse Territory Plans to incorporate GRSG habitat objectives and management considerations for all BLM HMAs) and Forest Service Wild Horse Territories. **GHMA:** —.	**C-WHB-1: PHMA:** Same as Alternative A.	**D-WHB-1: PHMA:** Same as Alternative B. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	**E-WHB-1: Idaho – Common to All Habitats:** —. **Utah Habitat:** Same as Alternative A.	**F-WHB-1: PHMA:** Reduce AMLs within HMAs within occupied GRSG habitat by 25 percent to meet habitat objectives. **GHMA:** Same as PHMA **RHMA:** —.
A-WHB-2: Periodically evaluate and make adjustments to AMLs based on monitoring data.	**B-WHB-2: PHMA:** For all BLM HMAs and Forest Service Wild Horse Territories within PHMA, prioritize the evaluation of all AMLs based on indicators that address structure/condition/composition of vegetation and measurements specific to achieving GRSG habitat objectives. **GHMA:** —.	**C-WHB-2: PHMA:** Same as Alternative A.	**D-WHB-2: PHMA:** When evaluating AML on HMAs within PHMA, evaluate indicators that address structure/condition/composition of vegetation and measurements specific to achieving GRSG habitat objectives. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	**E-WHB-2: Idaho – Common to All Habitats:** —. **Utah Habitat:** Same as Alternative A.	**F-WHB-2: PHMA:** —. **GHMA:** —. **RHMA:** —.

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
A-WHB-3: —.	**B-WHB-3: PHMA:** Coordinate with other resources (Range, Wildlife, and Riparian) to conduct land health assessments to determine existing structure/condition/composition of vegetation within all BLM HMAs and Forest Service Wild Horse Territories. **GHMA:** —.	**C-WHB-3: PHMA:** Same as Alternative A.	**D-WHB-3: PHMA:** Utilize interdisciplinary land health assessments in HMAs containing GRSG habitat to determine whether vegetation characteristics are meeting appropriate seasonal habitat objectives. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	**E-WHB-3: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-WHB-3: PHMA:** Same as Alternative B. **GHMA:** —. **RHMA:** —.
A-WHB-4: —.	**B-WHB-4: PHMA:** —. **GHMA:** —.	**C-WHB-4: PHMA:** —.	**D-WHB-4: PHMA:** Do not expand HMAs. **IHMA:** Analysis of proposed additions to existing HMA boundaries should consider the direct, indirect and cumulative impacts on GRSG habitat, including the need for additional infrastructure such as boundary fencing, and consider alternative areas outside of PHMA and IHMA. **GHMA:** —.	**E-WHB-4: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-WHB-4: PHMA:** —. **GHMA:** —. **RHMA:** —.
A-WHB-5: —.	**B-WHB-5: PHMA:** When conducting NEPA analysis for wild horse and burro management activities, water developments or other rangeland improvements for wild horses in PHMA, address the direct and indirect effects on GRSG populations and habitat. Implement any water developments or rangeland improvements using the criteria identified for domestic livestock identified above in PHMA. **GHMA:** —.	**C-WHB-5: PHMA:** —.	**D-WHB-5: PHMA:** Refer to livestock grazing actions for guidance on water and rangeland developments for wild horse management. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	**E-WHB-5: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-WHB-5: PHMA:** Same as Alternative B. **GHMA:** —. **RHMA:** —.

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
Wildland Fire					
General					
A-WFM-1: Follow BMPs for fire and fuels (BLM Washington Office IM 2013-128, see **Appendix B**).	**B-WFM-1: PHMA:** Follow RDFs for fire and fuels (BLM Washington Office IM 2013-128 and Forest Service Washington Office letter 5100, see **Appendix B**). **GHMA:** —.	**C-WFM-1: PHMA:** Same as Alternative B.	**D-WFM-1: PHMA:** Same as Alternative B. **IHMA:** BMPs in PHMA would apply to both IHMA and GHMA. **GHMA:** BMPs in PHMA would apply to both IHMA and GHMA.	**E-WFM-1: Idaho – CHZ:** Reduce the number and size of wildfires in GRSG habitat through incorporation of the BLM Washington Office IM 2013-128. **Idaho – IHZ:** Same as Idaho - CHZ. **Idaho – GHZ:** Same as Idaho - CHZ. **Utah Habitat:** —.	**F-WFM-1: PHMA:** Same as Alternative B. **GHMA:** —. **RHMA:** —.
A-WFM-2: —.	**B-WFM-2: PHMA:** —. **GHMA:** —.	**C-WFM-2: PHMA:** Lands will be managed to be in good or better ecological condition to help minimize adverse impacts of fire.	**D-WFM-2: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-WFM-2: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-WFM-2: PHMA:** —. **GHMA:** —. **RHMA:** —.
A-WFM-3: —.	**B-WFM-3: PHMA:** —. **GHMA:** —.	**C-WFM-3: PHMA:** —..	**D-WFM-3: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-WFM-3: Idaho – CHZ:** Decrease wildfire response time through: a. Prioritizing, maintaining and improving a high initial attack success rate in suppression response and staging decisions; b. Utilizing available Sage-Grouse Management Area maps and spatial data depicting GRSG habitats within this zone in accordance with action 31 (**Appendix Q**); c. Redeploying firefighting resources not being fully utilized outside the SGMA to the extent such redeployment will not cause harm to human safety and structure protection; and d. Requesting the necessary federal appropriations to achieve this objective. Develop a consistent wildfire suppression plan that improves upon the current baseline, and a fuel and restoration strategy within 1 year of the ROD. **Idaho – IHZ:** Same as Idaho- CHZ.	**F-WFM-3: PHMA:** —. **GHMA:** —. **RHMA:** —.

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
				Idaho – GHZ: —. **Utah Habitat:** —.	
A-WFM-4: —.	**B-WFM-4: PHMA:** —. **GHMA:** —.	**C-WFM-4: PHMA:** —.	**D-WFM-4: PHMA:** Use knowledgeable resource advisors during extended attack. Resource Advisors should also be available on short notice during red flag conditions. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	**E-WFM-4: Idaho Common to All Habitats:** —. **Utah Habitat**: —.	**F-WFM-4: PHMA:** —. **GHMA:** —. **RHMA:** —.
A-WFM-5: —.	**B-WFM-5: PHMA:** —. **GHMA:** —.	**C-WFM-5: PHMA:** —.	**D-WFM-5: PHMA:** During high fire danger conditions, stage initial attack and secure additional resources closer to the Idaho Desert, Southern Idaho, and Owyhee populations to ensure quicker response times in or near GRSG habitat. **IHMA:** —. **GHMA:** —.	**E-WFM-5: Idaho -- Common to All Habitats:** —. **Utah Habitat:** —.	**F-WFM-5: PHMA:** —. **GHMA:** —. **RHMA:** —.
A-WFM-6: —.	**B-WFM-6: PHMA:** —. **GHMA:** —.	**C-WFM-6: PHMA:** —.	**D-WFM-6: PHMA:** —. **IHMA:** Follow Standard procedures described in Fire Management Plan. **GHMA:** —.	**E-WFM-6: Idaho -- Common to All Habitats:** —. **Utah Habitat:** —.	**F-WFM-6: PHMA:** —. **GHMA:** —. **RHMA:** —.
A-WFM-7: —.	**B-WFM-7: PHMA:** —. **GHMA:** —.	**C-WFM-7: PHMA:** —.	**D-WFM-7: PHMA:** Consider conifer (juniper) encroachment areas as areas to manage wildfire for resource benefit. **IHMA**: Same as PHMA. **GHMA**: Same as PHMA.	**E-WFM-7: Idaho -- Common to All Habitats:** —. **Utah Habitat:** —.	**F-WFM-7: PHMA:** —. **GHMA:** —. **RHMA:** —.
A-WFM-8: —.	**B-WFM-8: PHMA:** —. **GHMA:** —.	**C-WFM-8: PHMA:** —.	**D-WFM-8: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-WFM-8: Idaho – Common to All Habitats:** Reduce the number and size of wildfires, especially in the West Owyhee CA, by marshaling existing and targeting future federal resources. **Idaho – CHZ:** Utilize and employ more aggressive wildfire and invasive	**F-WFM-8: PHMA:** —. **GHMA:** —. **RHMA:** —.

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
				species management practices to prevent further encroachment of these two primary threats into CHZ on Federal lands. **Idaho – IHZ:** Same as Idaho - CHZ. **Idaho – GHZ:** —. **Utah Habitat:** Create and implement a statewide fire agency agreement(s) that will eliminate jurisdictional boundaries and allow for immediate response to natural fire in PHMA. These should include fire suppression actions recommended locally, including, but not limited to: • first strike agreements that allow aggressive fire control on an all-land jurisdictional basis; • allocation of resources to maintain enhanced abilities of all fire agencies to combat ignitions in PHMA. • allocation of resources to immediately commence restoration of habitats impacted by wildfire by all responsible agencies; and • removal or establishment of waiver provisions for procedural barriers that may impact the ability of responsible agencies to respond to wildfire with effective reclamation or rehabilitation, such as federal raptor stipulations, cultural assessments, and the like.	
A-WFM-9: —.	**B-WFM-9: PHMA:** —. **GHMA:** —.	**C-WFM-9: PHMA:** —.	**D-WFM-9: PHMA:** BLM and Forest Service planning units (Districts and Forests), in coordination with the USFWS and relevant state agencies, would complete and continue to update GRSG Landscape Wildfire and Invasive Species Habitat Assessments to	**E-WFM-9: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-WFM-9: PHMA:** —. **GHMA:** —. **RHMA:** —.

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
			prioritize at risk habitats, and identify fuels management, preparedness, suppression and restoration priorities necessary to maintain sagebrush habitat to support interconnecting GRSG populations. These assessments and subsequent assessment updates would also be a coordinated effort with an interdisciplinary team to take into account other GRSG priorities identified in this plan. **Appendix D** describes a minimal framework example and suggested approach for this assessment. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.		
A-WFM-10: —.	**B-WFM-5: PHMA:** —. **GHMA:** —.	**C-WFM-10: PHMA:** —.	**D-WFM-10: PHMA:** Implementation actions will be tiered to the Local (District/Forest) GRSG Landscape Wildfire and Invasive Species Assessment described in D-WFM-1, utilizing best available science related to the conservation of GRSG. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	**E-WFM-10: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-WFM-10: PHMA:** —. **GHMA:** —. **RHMA:** —.

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
A-WFM-11: —.	**B-WFM-11: PHMA:** —. **GHMA:** —.	**C-WFM-11: PHMA:** —.	**D-WFM-11: PHMA:** In coordination with the USFWS and relevant state agencies, BLM and Forest Service planning units (Districts/Forests) will identify annual treatment needs for wildfire and invasive species management as identified in local unit level Landscape Wildfire and Invasive Species Assessments. Annual treatment needs will be coordinated across state/regional scales and across jurisdictional boundaries for long-term conservation of GRSG. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	**E-WFM-11: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-WFM-11: PHMA:** —. **GHMA:** —. **RHMA:** —.
A-WFM-12: —.	**A-WFM-12: PHMA:** —. **GHMA:** —.	**C-WFM-12: PHMA:** —.	**D-WFM-12: PHMA:** Annually complete a review of landscape assessment implementation efforts with appropriate USFWS and state agency personnel. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	**E-WFM-12: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-WFM-12: PHMA:** —. **GHMA:** —. **RHMA:** —.
Fuels Management					
A-FM-1: Under current management, there is no designated GRSG habitat. Design projects to minimize the size of wildfire and prevent the further loss of sagebrush. Existing LUPs typically do not include specific management decisions regarding implementation of fuels treatments in sagebrush habitat. In general, both prescribed fire and non-fire fuels treatments are allowed. Montana BLM: Restore and maintain desired ecological conditions and fuel loadings. Evaluate benefits against loss of sagebrush in EA process. Do not	**B-FM-1: PHMA:** Design and implement fuels treatments with an emphasis on protecting existing sagebrush ecosystems. Do not reduce sagebrush canopy cover to less than 15% (Connelly et al. 2000, Hagen et al. 2007) unless a fuels management objective requires additional reduction in sagebrush cover to meet strategic protection of PHMA and conserve habitat quality for the species. Closely evaluate the benefits of the fuel break against the additional loss of sagebrush cover in future NEPA documents. Apply appropriate seasonal restrictions for implementing fuels management treatments according to the type of seasonal habitats present in PHMA.	**C-FM-1: PHMA:** Same as Alternative B.	**D-FM-1: PHMA:** Design and implement fuels treatments with an emphasis on maintaining, protecting, and expanding sagebrush ecosystems and successfully rehabilitated areas and strategically and effectively reduce wildfire threats in the greatest area. Enhance (or maintain/retain) sagebrush canopy cover and community structure to match expected potential for the ecological site and consistent with GRSG habitat objectives unless fuels management objectives requires additional reduction in sagebrush cover to meet strategic protection of GRSG habitat. Closely evaluate the benefits of the fuel management treatments against the additional loss of sagebrush cover	**E-FM-1: Idaho – CHZ:** Implementation of specific, more aggressive wildlife and invasive species management practices to prevent further encroachment into CHZ should be driven by local planning efforts at the field office and ranger district level. **Idaho – IHZ:** Same as Idaho - CHZ. **Idaho – GHZ:** —. **Montana Habitat:** Same as Alternative A. **Utah Habitat:** Habitat loss due to fire and replacement of (burned) native vegetation by invasive plants is the	**F-FM-1: PHMA:** Design and implement fuels treatments with an emphasis on protecting existing sagebrush ecosystems. Do not reduce sagebrush canopy cover to less than 15% (Connelly et al. 2000, Hagen et al. 2007) unless a fuels management objective requires additional reduction in sagebrush cover to meet strategic protection of PHMA and conserve habitat quality for the species. Closely evaluate the benefits of the fuel break against the additional loss of sagebrush cover in the EA process. Apply appropriate seasonal restrictions for implementing fuels management treatments according to the type of seasonal habitats present in PHMA.

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
burn Wyoming sagebrush.	Allow no fuels treatments in known winter range unless the treatments are designed to strategically reduce wildfire risk around or in the winter range and will maintain winter range habitat quality. Do not use fire to treat sagebrush in less than 12-inch precipitation zones (e.g., Wyoming big sagebrush or other xeric sagebrush species; Connelly et al. 2000, Hagen et al. 2007, Beck et al. 2009). However, if as a last resort and after all other treatment opportunities have been explored and site specific variables allow, the use of prescribed fire for fuel breaks that would disrupt the fuel continuity across the landscape could be considered, in stands where cheatgrass is a very minor component in the understory (Brown 1982). Monitor and control invasive vegetation post-treatment. Rest treated areas from grazing for two full growing seasons unless vegetation recovery dictates otherwise (WGFD 2011). Require use of native seeds for fuels management treatment based on availability, adaptation (site potential), and probability of success (Richards et al. 1998). Where probability of success or native seed availability is low, nonnative seeds may be used as long as they meet GRSG habitat objectives (Pyke 2011). Design post fuels management projects to ensure long term persistence of seeded or pre-treatment native plants. This may require temporary or long-term changes in livestock grazing management, wild horse and burro management, travel management, or other activities to achieve and maintain the desired condition of the fuels management project (Eiswerth and Shonkwiler 2006).		on the local landscape in the NEPA process. Apply appropriate seasonal restrictions for implementing fuels management treatments according to the type of seasonal habitats present in PHMA. Allow no treatments in known winter range unless the treatments are designed to strategically reduce wildfire risk around and/or in the winter range and will maintain, increase, or enhance winter range habitat quality. Ensure chemical applications are utilized where they would assist in success of fuels treatments. Strategically place treatments on a landscape scale to prevent fire from spreading into PHMA or WUI. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	single greatest threat to GRSG in Utah. While unscheduled fires may occur, response to fire can have a large impact on the severity of the effects, especially over time as rehabilitation or restoration continues. Implement the following: • Create and implement a statewide fire agency agreement(s) that will eliminate jurisdictional boundaries and allow for immediate response to natural fire in PHMA. • Allow use of fire-retardant vegetation that will buffer areas of high quality GRSG habitat from catastrophic fire. • Use prescriptive fire with caution in sagebrush habitat. The WAFWA has prepared information that explains the risks from using prescribed fire in xeric sagebrush habitats. • Prescribed fire should only be used at higher elevations and in a manner designed prescriptively to benefit GRSG. • Conduct effective research into controlling fire size and protecting remaining GRSG areas that are adjacent to high-risk cheatgrass areas. • Focus research efforts on effective reclamation and restoration of landscapes altered by wildfire. • Within winter habitat, manage to maintain maximum amount of sagebrush, especially tall sagebrush, which would be available to GRSG above snow during a severe winter. Tall sagebrush is capable of standing above heavier than normal snowfall.	Allow no fuels treatments in known winter range unless the treatments are designed to strategically reduce wildfire risk around or in the winter range and will maintain winter range habitat quality. Do not use fire to treat sagebrush in less than 12-inch precipitation zones (e.g., Wyoming big sagebrush or other xeric sagebrush species; Connelly et al. 2000, Hagen et al. 2007, Beck et al. 2009). However, if as a last resort and after all other treatment opportunities have been explored and site specific variables allow, the use of prescribed fire for fuel breaks that would disrupt the fuel continuity across the landscape could be considered, in stands where cheatgrass is a very minor component in the understory (Brown 1982). Monitor and control invasive vegetation post-treatment. Rest treated areas from grazing for two full growing seasons unless vegetation recovery dictates otherwise (WGFD 2011). Require use of native seeds for fuels management treatment based on availability, adaptation (site potential), and probability of success (Richards et al. 1998). Where probability of success or native seed availability is low, nonnative seeds may be used as long as they meet GRSG habitat objectives (Pyke 2011). Design post fuels management projects to ensure long term persistence of seeded or pre-treatment native plants, including sagebrush. This may require temporary or long-term changes in livestock grazing management, wild horse and burro management, travel management, or other activities to achieve and maintain the desired condition of the fuels management project (Eiswerth and Shonkwiler

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
	GHMA: —.			• Sagebrush treatment projects within winter habitat need pre-approval by the appropriate regulatory agency in coordination with the Utah Department of Wildlife Resources. Sagebrush treatment projects within winter habitat should maintain 80% of the available habitat as tall sagebrush; 20% of the habitat can be managed for younger age classes, if appropriate. • Coordinate the needs and efforts related to GRSG with the State of Utah committee that was formed to develop a collaborative process to protect the health and welfare by reducing the size and frequency of catastrophic fires.	2006). **GHMA:** —. **RHMA:** —.
A-FM-2: Design projects to minimize the size of wildfire and prevent the further loss of sagebrush.	**B-FM-2: PHMA:** Design fuels management projects in PHMA to strategically and effectively reduce wildfire threats in the greatest area. This may require fuels treatments implemented in a more linear versus block design (Launchbaugh et al. 2007). **GHMA:** —.	**C-FM-2: PHMA:** Same as Alternative B.	**D-FM-2: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-FM-2: Idaho – CHZ:** Fuel break prioritization should be in areas within the WUI where human life and safety are at risk. Fuel break projects should be designed to secure the WUI and free up firefighting resources to be focused on providing initial attack on wildfires in areas that have the potential to impact GRSG within CHZ and IHZ. Prioritization of fuel breaks should then go to areas of high human ignition. **Idaho – IHZ:** Same as Idaho - CHZ. **Idaho – GHZ:** —. **Utah Habitat:** —.	**F-FM-2: PHMA:** —. **GHMA:** —. **RHMA:** —.
A-FM-3: —.	**B-FM-3: PHMA:** —. **GHMA:** —.	**C-FM-3: PHMA:** —.	**D-FM-3: PHMA:** —. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	**E-FM-3: Idaho – CHZ:** —. **Idaho – IHZ:** Create and maintain effective fuel breaks in strategic locations that will modify fire behavior and increase fire suppression effectiveness through: a. Establishing fuel breaks along existing roads or other disturbances.	**F-FM-3: PHMA:** —. **GHMA:** —. **RHMA:** —.

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
				b. Identifying and targeting higher-risk roads for fuel break construction and maintenance based on fire history maps. c. Implementing a strategic approach to using these roads for rapid fire response. d. Closely evaluating the benefits of the fuel break against the additional loss of sagebrush cover and risk of invasive weeds. e. Maintaining fire breaks properly. **Idaho – GHZ:** Create and maintain effective fuel breaks in strategic locations that will modify fire behavior and increase fire suppression effectiveness through targeting areas necessary to provide a buffer between GHZ and the other management zones: a. Establishing fuel breaks along existing roads or other disturbances. b. Identifying and targeting higher-risk roads for fuel break construction and maintenance based on fire history maps. c. Implementing a strategic approach for using these roads to enable rapid fire response. d. Maintaining fuel breaks properly and siting with consideration of active leks and risk of invasive weeds. **Utah Habitat:** —.	
A-FM-4: —.	**B-FM-4: PHMA:** —. **GHMA:** —.	**C-FM-4: PHMA:** —.	**D-FM-4: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-FM-4: Idaho – CHZ:** —. **Idaho – IHZ:** Coordinate with Federal, State and local jurisdictions on fire and litter prevention programs to reduce human caused ignitions. **Idaho – GHZ:** —. **Utah Habitat:** —.	**F-FM-4: PHMA:** —. **GHMA:** —. **RHMA:** —.

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
A-FM-5: Design fuels treatment projects to minimize the size of wildfire and prevent the further loss of sagebrush.	**B-FM-5: PHMA:** —. **GHMA:** —.	**C-FM-5: PHMA:** Mowing of grass will be used in any fuel break fuels reduction project (roadsides or other areas).	**D-FM-5: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-FM-5: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-FM-5: PHMA:** —. **GHMA:** —. **RHMA:** —.
A-FM-6: —.	**B-FM-6: PHMA:** During fuels management project design, consider the utility of using livestock to strategically reduce fine fuels (Diamond et al. 2009), and implement grazing management that will accomplish this objective (Davies et al. 2011, Launchbaugh et al. 2007). Consult with ecologists to minimize impacts on native perennial grasses. **GHMA:** —.	**C-FM-6: PHMA:** Same as Alternative B.	**D-FM-6: PHMA:** Grazing to achieve fuels management objectives should conform to the following criteria: • Grazing management should be implemented strategically on the landscape, and directly involve the minimum footprint and grazing intensity required to meet fuels management objectives. • Conform to the Idaho Standards for Rangeland Health and Guidelines for Livestock Grazing Management in areas where the Standards apply. • Coordinate with the permittee to coordinate fuels reduction by livestock within the Mandatory Terms and Conditions of the applicable grazing authorizations However, in some cases targeted grazing may be authorized or contracted to a non-permit holder to achieve desired fuels reduction. • Use the appropriate kind and number of animals at the appropriate season, considering vegetation palatability and livestock preferences, to reduce targeted fuels types. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	**E-FM-6: Idaho – CHZ:** Prescribe or target livestock grazing where demonstrated to be appropriate as a tool for reducing fuel loads, reducing invasive species populations and maintaining functional fire breaks and testing the effectiveness and monitoring the results on a site-specific basis through stewardship contracting. **Idaho – IHZ:** Same as Idaho – CHZ. **Idaho – GHZ:** Prescribe or target livestock grazing as a primary tool for reducing fuel loads, reducing invasive species populations and maintaining functional fire breaks to the extent such activities do not adversely affect breeding habitats (i.e., occupied leks, nesting and early brood-rearing). **Utah Habitat:** Consider the use of prescriptive grazing to specifically reduce fire size and intensity on all types of landownership, where appropriate. This could be particularly effective in areas where cheatgrass is encroaching on sagebrush habitat. This will require cooperation and coordination among different land managers and owners and livestock owners. In some cases feed supplementation and water hauling may need to be utilized to obtain the desired results.	**F-FM-6: PHMA:** —. **GHMA:** —. **RHMA:** —.
A-FM-7: —.	**B-FM-7: PHMA:** —. **GHMA:** —.	**C-FM-7: PHMA:** —.	**D-FM-7: PHMA:** Existing and proposed linear ROWs could be considered for use and maintenance as vegetated fuel breaks in appropriate areas to meet fire management goals	**E-FM-7: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-FM-7: PHMA:** —. **GHMA:** —. **RHMA:** —.

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
			and objectives. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.		
A-FM-8: —.	**B-FM-8: PHMA:** —. **GHMA:** —.	**C-FM-8: PHMA:** —.	**D-FM-8: PHMA:** Where appropriate fuel breaks would incorporate existing vegetation treatments (seedings) or be located adjacent to existing linear disturbance areas. Fuel breaks should be placed in areas with the greatest likelihood of intersecting a fire and protecting existing intact habitat. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	**E-FM-8: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-FM-8: PHMA:** —. **GHMA:** —. **RHMA:** —.
A-FM-9: —.	**B-FM-9: PHMA:** —. **GHMA:** —.	**C-FM-9: PHMA:** —.	**D-FM-9: PHMA:** Strategically pre-treat areas to reduce fine fuels through mechanical treatments, grazing strategies, chemical or biological application (brown stripping). **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	**E-FM-9: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-FM-9: PHMA:** —. **GHMA:** —. **RHMA:** —.
A-FM-10: —.	**B-FM-10: PHMA:** —. **GHMA:** —.	**C-FM-10: PHMA:** —.	**D-FM-10: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-FM-10: Idaho – CHZ:** —. **Idaho – IHZ:** Develop more aggressive strategies to reduce fuel loads, where appropriate. **Idaho – GHZ:** —. **Utah Habitat:** —.	**F-FM-10: PHMA:** —. **GHMA:** —. **RHMA:** —.
A-FM-11: —.	**B-FM-11: PHMA:** —. **GHMA:** —.	**C-FM-11: PHMA:** Any fuels treatments will focus on interfaces with human habitation or significant existing disturbances.	**D-FM-11: PHMA:** Fuel treatments will be designed though an interdisciplinary process to expand, enhance, maintain, and protect GRSG habitat. Use green strips and/or fuel breaks, where appropriate, to protect seeding efforts from subsequent fire events. In coordination with the USFWS and	**E-FM-11: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-FM-11: PHMA:** —. **GHMA:** —. **RHMA:** —.

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
			relevant state agencies, BLM and Forest Service planning units (Districts/Forests) with large blocks of GRSG habitat will develop, using the assessment process described in **Appendix D**, a fuels management strategy which considers an up-to-date fuels profile, land use plan direction, current and potential habitat fragmentation, sagebrush and GRSG ecological factors, and active vegetation management steps to provide critical breaks in fuel continuity, where appropriate. When developing this strategy, planning units will consider the risk of increased habitat fragmentation from a proposed action versus the risk of large scale fragmentation posed by wildfires if the action is not taken. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.		
A-FM-12: —.	**B-FM-12: PHMA:** —. **GHMA:** —.	**C-FM-12: PHMA:** —.	**D-FM-12: PHMA:** Utilizing an interdisciplinary approach, a full range of fuel reduction techniques will be available. Fuel reduction techniques such as grazing, prescribed fire, chemical, biological and mechanical treatments are acceptable. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	**E-FM-12: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-FM-12: PHMA:** —. **GHMA:** —. **RHMA:** —.
A-FM-13: —.	**B-FM-13: PHMA:** —. **GHMA:** —.	**C-FM-13: PHMA:** —.	**D-FM-13: PHMA:** Prioritize the use of native seeds for fuels management treatment based on availability, adaptation (site potential), and probability of success. Where probability of success or native seed availability is low, nonnative seeds may be used to meet GRSG habitat objectives to trend toward restoring the fire regime. When reseeding, use fire resistant native and nonnative species,	**E-FM-13: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-FM-13: PHMA:** —. **GHMA:** —. **RHMA:** —.

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
			as appropriate, to provide for fuel breaks. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.		
A-FM-14: —.	**B-FM-14: PHMA:** —. **GHMA:** —.	**C-FM-14: PHMA:** —.	**D-FM-14: PHMA:** Upon project completion, monitor and manage fuels projects to ensure long-term success, including persistence of seeded species and/or other treatment components. Control invasive vegetation post-treatment. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	**E-FM-14: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-FM-14: PHMA:** —. **GHMA:** —. **RHMA:** —.
A-FM-15: —.	**B-FM-15: PHMA:** —. **GHMA:** —.	**C-FM-15: PHMA:** —.	**D-FM-15: PHMA:** Apply seasonal restriction, as needed, for implementing fuels management treatments according to the type of seasonal habitat present. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	**E-FM-15: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-FM-15: PHMA:** —. **GHMA:** —. **RHMA:** —.
Preparedness					
A-PRE-1: —.	**B-PRE-1: PHMA:** —. **GHMA:** —.	**C-PRE-1: PHMA:** —.	**D-PRE-1: PHMA:** Implement a coordinated inter-agency approach to fire restrictions based upon National Fire Danger Rating System thresholds (fuel conditions, drought conditions and predicted weather patterns) for GRSG habitat. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	**E-PRE-1: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-PRE-1: PHMA:** —. **GHMA:** —. **RHMA:** —.
A-PRE-2: —.	**B-PRE-2: PHMA:** —. **GHMA:** —.	**C-PRE-2: PHMA:** —.	**D-PRE-2: PHMA:** Develop wildfire prevention plans that explain the resource value of GRSG habitat and include fire prevention messages and actions to reduce human-caused ignitions.	**E-PRE-2: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-PRE-2: PHMA:** —. **GHMA:** —. **RHMA:** —.

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
			IHMA: Same as PHMA. **GHMA:** Same as PHMA.		
Fire Management (Suppression)					
A-SUP-1: Firefighter and public safety are the highest priority. GRSG habitat will be prioritized commensurate with property values and other critical habitat to be protected, with the goal to restore, enhance, and maintain areas suitable for GRSG. Montana BLM: Emphasis on firefighter and public safety. Decisions based on relative values to be protected commensurate with fire management costs.	**B-SUP-1: PHMA:** Same as Alternative A. **GHMA:** Same as PHMA.	**C-SUP-1: PHMA:** Same as Alternative A.	**D-SUP-1: PHMA:** Same as Alternative A. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	**E-SUP-1: Idaho – Common to All Habitats:** Same as Alternative A. **Montana Habitat:** Same as Alternative A. **Utah Habitat:** Same as Alternative A.	**F-SUP-1: PHMA:** Same as Alternative A. **GHMA:** Same as PHMA. **RHMA:** Same as PHMA.
A-SUP-2: Montana BLM: Approximately 777,000 acres managed with considerations to wildlife habitat, air quality and threatened and endangered species.	**B-SUP-2: PHMA:** —. **GHMA:** —.	**C-SUP-2: PHMA:** —.	**D-SUP-2: PHMA:** Within GRSG, PHMAs (and PACs, if so determined by individual LUP efforts) are the highest priority for conservation and protection during fire operations and fuels management decision making. The PHMAs will be viewed as more valuable than GHMAs when priorities are established. When suppression resources are widely available, maximum efforts will be placed on limiting fire growth in GHMAs polygons as well. These priority areas will be further refined following completion of the GRSG Landscape Wildfire and Invasive Species Habitat Assessments described in **Appendix D**. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	**E-SUP-2: Idaho – Common to All Habitats:** —. **Montana Habitat:** Same as Alternative A. **Utah Habitat:** —.	**F-SUP-2: PHMA:** —. **GHMA:** —. **RHMA:** —.

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
A-SUP-3: —.	**B-SUP-3: PHMA:** —. **GHMA:** —.	**C-SUP-3: PHMA:** —.	**D-SUP-3: PHMA:** Within acceptable risk levels utilize a full range of fire management strategies and tactics, including the management of wildfires to achieve resource objectives, across the range of GRSG habitat consistent with land use plan direction. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	**E-SUP-3: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-SUP-3: PHMA:** —. **GHMA:** —. **RHMA:** —.
A-SUP-4: Prioritize fire suppression to protect firefighter and public safety. Each LUP supports the development and adherence to a more detailed fire management plan that outlines priorities and levels of suppression for particular vegetation classes or resource protection. Montana BLM: Emphasis on firefighter and public safety. Decisions based on relative values to be protected commensurate with fire management costs.	**B-SUP-4: PHMA:** In PHMA, prioritize suppression, immediately after life and property, to conserve the habitat. **GHMA:** In GHMA, prioritize suppression where wildfires threaten PHMA.	**C-SUP-4: PHMA:** Same as Alternative B.	**D-SUP-4: PHMA:** Prioritize firefighter and public safety, followed by suppression of fires in PHMA, with consideration given to threatened and endangered species habitat. **IHMA:** Prioritize suppression of fires in IHMA and threatened and endangered species habitat after PHMA. **GHMA:** Prioritize suppression of fires in GHMA and threatened and endangered species habitat after PHMA and IHMA.	**E-SUP-4: Idaho – CHZ:** Prioritize protection of GRSG habitat after human safety and structure protection. **Idaho – IHZ:** Prioritize protection of GRSG habitat after human safety and structure protection and GRSG habitat in CHZ. **Idaho – GHZ:** Emphasize aggressive fire suppression techniques and efforts, recognizing that other local, regional, and national fire suppression priorities may take precedence. **Montana Habitat:** Same as Alternative A. **Utah Habitat:** Address fire by natural ignition as a serious threat.	**F-SUP-4: PHMA:** Same as Alternative B. **GHMA:** —. **RHMA:** —.
A-SUP-5: —.	**B-SUP-5: PHMA:** —. **GHMA:** —.	**C-SUP-5: PHMA:** —.	**D-SUP-5: PHMA:** Ensure firefighter personnel receive orientation regarding GRSG/sagebrush management issues as related to wildfire suppression. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA**.**	**E-SUP-5: Idaho Common to All Habitats:** —. **Utah Habitat**: —.	**F-SUP-5: PHMA:** —. **GHMA:** —. **RHMA:** —.

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
A-SUP-6: No similar action for sub-region. Montana BLM: Approximately 777,000 acres managed with considerations to wildlife habitat, air quality, and threatened and endangered species.	**B-SUP-6: PHMA:** —. **GHMA:** —.	**C-SUP-6: PHMA:** —.	**D-SUP-6: PHMA:** Suppress wildland fires in intact GRSG habitats and use managed wildfire where needed to improve GRSG habitat. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	**E-SUP-6: Idaho – Common to All Habitats:** —. **Montana Habitat:** Same as Alternative A. **Utah Habitat:** —.	**F-SUP-6: PHMA:** —. **GHMA:** —. **RHMA:** —.
A-SUP-7: —.	**B-SUP-7: PHMA:** —. **GHMA:** —.	**C-SUP-7: PHMA:** —.	**D-SUP-7: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-SUP-7: Idaho – CHZ:** Prioritize funding for fire suppression. **Idaho – IHZ:** —. **Idaho – GHZ:** —. **Utah Habitat:** —.	**F-SUP-7: PHMA:** —. **GHMA:** —. **RHMA:** —.
A-SUP-8: During suppression, protect GRSG habitats from fire through strategic wildfire suppression planning. Planning measures may include: • Conducting burnout/backfiring operations in a manner that minimizes the loss of sagebrush when possible • The agency administrator or duty officer will prioritize the assignment of resources for suppression in the event of multiple wildfire starts in PHMA • Retain all unburned sagebrush islands unless firefighter safety and the success of the suppression operations are compromised	**B-SUP-8: PHMA:** —. **GHMA:** —.	**C-SUP-8: PHMA:** —.	**D-SUP-8: PHMA:** Same as Alternative A. **IHMA:** Same as Alternative A. **GHMA:** Same as Alternative A.	**E-SUP-8: Idaho – CHZ:** Develop a consistent wildfire suppression plan that improves on the current wildfire suppression baseline within 1 year of the ROD through: a. Ensuring close coordination with federal and state firefighters, local fire departments, and local expertise to create the best possible network of strategic fuel breaks and road access to minimize and reduce the size of a wildfire following ignition b. Developing consistent fire response plans and mutual aid agreements c. Requesting and placing additional firefighting resources and establish new incident attack centers, with particular emphasis in the West Owyhee CA; d. Creating and maintaining effective fuel breaks in strategic locations that will modify fire behavior and increase fire suppression effectiveness according to the following criteria: • Targeting establishment of fuel breaks along existing roads or other disturbances • Identifying and targeting higher-risk roads for fuel break construction and maintenance	**F-SUP-8: PHMA:** —. **GHMA:** —. **RHMA:** —.

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
				based on fire history maps • Implementing a strategic approach to using these roads for rapid fire response • Analyzing the benefits of the fuel break against the additional loss of sagebrush cover and risk on invasive weeds • Maintaining fire breaks to meet objectives e. Requesting the necessary federal appropriations to achieve this objective **Idaho – IHZ:** Develop a wildfire suppression plan that improves on the fire suppression baseline through: a. Ensuring close coordination with federal and state firefighters, local fire departments, and local expertise (e.g., livestock grazing permittees and road maintenance personnel) to create the best possible network of strategic fuel breaks and road access to minimize and reduce the size of a wildfire following ignition b. Developing consistent fire response plans and mutual aid agreements c. Requesting the necessary federal appropriations to achieve this objective. **Idaho – GHZ:** —. **Utah Habitat:** —.	

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
Emergency Stabilization and Rehabilitation (ESR-BLM) and Burned Area Emergency Response (BAER-FS)					
A-ESR-1: —.	**B-ESR-1: PHMA:** —. **GHMA:** —.	**C-ESR-1: PHMA:** —.	**D-ESR-1: PHMA:** Incorporate measurable groundcover and vegetation objectives (e.g., density and cover) into ESR/BAER plans. Qualitative objectives, such as plant vigor, seed production, and growing season conditions, should also be considered. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	**E-ESR-1: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-ESR-1: PHMA:** —. **GHMA:** —. **RHMA:** —.
A-ESR-2: —.	**B-ESR-2: PHMA:** —. **GHMA:** —.	**C-ESR-2: PHMA:** —.	**D-ESR-2: PHMA:** Ensure that appropriate GRSG seasonal habitat objectives are considered in ESR (BLM) and BAER (Forest Service) plans that contain PHMA, IHMA, or GHMA. The primary short-term objective is to establish or recover shrubs, grasses, and forbs appropriate for the ecological site. In seedings, native plant material is preferred but introduced species may also be required to compete with invasives, especially on harsher sites. The longer-term objective (i.e., 10 years-plus) is to achieve a robust perennial herbaceous understory with at least 10% sagebrush canopy cover that provides functional GRSG habitat. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	**E-ESR-2: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-ESR-2: PHMA:** —. **GHMA:** —. **RHMA:** —.
A-ESR-3: —.	**B-ESR-3: PHMA:** —. **GHMA:** —.	**C-ESR-3: PHMA:** —.	**D-ESR-3: PHMA:** In the short term, ensure an appropriate rest period from livestock grazing to allow natural recovery of existing seedings or the establishment of new seedings that are within PHMA, IHMA, or GHMA. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	**E-ESR-3: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-ESR-3: PHMA:** —. **GHMA:** —. **RHMA:** —.

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
A-ESR-4: —.	**B-ESR-4: PHMA:** —. **GHMA:** —.	**C-ESR-4: PHMA:** —.	**D-ESR-4: PHMA:** Once seeded or naturally recovered areas within PHMA, IHMA, or GHMA can be reopened to livestock grazing, incorporate long-term management that will maintain the seeding investment, promote long-term plant community health, and promote the achievement of GRSG habitat objectives. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	**E-ESR-4: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-ESR-4: PHMA:** —. **GHMA:** —. **RHMA:** —.
A-ESR-5: —.	**B-ESR-5: PHMA:** —. **GHMA:** —.	**C-ESR-5: PHMA:** —.	**D-ESR-5: PHMA:** Consider adjusting livestock management on adjacent unburned areas to mitigate the effect of the burn on local GRSG populations. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	**E-ESR-5: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-ESR-5: PHMA:** —. **GHMA:** —. **RHMA:** —.
Livestock Grazing					
A-LG/RM-1: Continue to make GRSG habitat available for livestock grazing (see **Table 2-9**). Active AUMs for livestock grazing would remain the same, though the number of AUMs on a permit may be adjusted during site-specific evaluations conducted during term permit renewals, AMP development, or other appropriate implementation activity. Additionally, temporary adjustments can be made annually to livestock numbers, the number of AUMs, season of use, and other aspects of grazing within the terms and conditions of the permit based on the permittees livestock operation and/or an evaluation of a variety of forage and resource site-specific conditions. Montana BLM: Continue to manage under current guidance. Consider	**B-LG/RM-1: PHMA:** Same as Alternative A (see **Table 2-9**). **GHMA:** Same as PHMA.	**C-LG/RM-1: PHMA:** No grazing will be allowed in occupied GRSG habitat (see **Table 2-9**). Grazing will remain unchanged in areas outside of occupied GRSG habitat.	**D-LG/RM-1: PHMA:** Same as Alternative A (see **Table 2-9**). **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	**E-LG/RM-1: Idaho – Common to All Habitats:** Same as Alternative A (see **Table 2-9**). **Montana Habitat:** Same as Alternative A. **Utah Habitat:** Same as Alternative A (see **Table 2-9**).	**F-LG/RM-1: PHMA:** Grazing would be reduced by 25% (see **Table 2-9**). Reductions by allotment will occur by Field Office based on a review of the site-specific information (e.g., range condition, utilization levels, type and condition of GRSG habitat). Based on the Field Office review, the reductions in AUMs would occur in allotments that overlap occupied GRSG habitat, whether partial reductions in active use or closing specific allotments. The reductions would be implemented during renewal of term grazing permits. **GHMA:** Grazing would be reduced by 25% (see **Table 2-9**). **RHMA:** Same as Alternative A.

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
changes in grazing management on a case-by-case basis. 456,100 acres PPH available for livestock grazing and 212,200 acres PGH available for grazing					
A-LG/RM-2: —.	**B-LG/RM-2: PHMA:** Incorporate GRSG habitat objectives and management considerations into all BLM and Forest Service grazing allotments through AMPs or permit renewals and/or Forest Service Annual Operating Instructions. **GHMA:** —.	**C-LG/RM-2: PHMA:** —.	**D-LG/RM-2: PHMA:** Within grazing allotments containing GRSG habitat, incorporate grazing management measures designed to meet GRSG habitat objectives through AMPs, grazing permit renewal or permit modification processes. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	**E-LG/RM-2: Idaho – CHZ:** Prioritize permit renewal and land health assessment processes for allotments with declining GRSG populations in conjunction with scheduled term grazing permit renewals, or where the adaptive regulatory trigger has been tripped and livestock grazing has been identified as a potential causal factor. **Idaho – IHZ:** Prioritize permit renewal and land health assessment processes for allotments with declining GRSG populations. **Idaho – GHZ:** —. **Utah Habitat:** —.	**F-LG/RM-2: PHMA:** Same as Alternative B. **GHMA:** Same as Alternative B. **RHMA:** Same as Alternative B.
A-LG/RM-3: Consider adjustments to allotment boundaries that provide for single unit or landscape level grazing approaches to habitat improvement on a case-by-case basis.	**B-LG/RM-3: PHMA:** Work cooperatively on integrated ranch planning within GRSG habitat so operations with deeded/BLM and/or Forest Service allotments can be planned as single units. **GHMA:** —.	**C-LG/RM-3: PHMA:** —.	**D-LG/RM-3: PHMA:** Work cooperatively with other land managers to allow livestock operations that utilize mixed federal, private and/or state land to be managed at the landscape scale to benefit GRSG and their habitat. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	**E-LG/RM-3: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-LG/RM-3: PHMA:** Same as Alternative B. **GHMA:** —. **RHMA:** —.
A-LG/RM-4: Complete rangeland health assessments for each allotment at least once every ten years for consideration during the permit renewal process. Monitor vegetation trends (including composition, cover, and age class), noxious weeds, riparian Proper Functioning Condition (PFC), etc. as part of the grazing management	**B-LG/RM-4: PHMA:** Prioritize completion of land health assessments (Forest Service may use other analyses) and processing grazing permits within PHMA. Focus this process on allotments that have the best opportunities for conserving, enhancing or restoring habitat for GRSG. Utilize BLM Ecological Site Descriptions (Forest Service may use other methods) to conduct land health assessments to	**C-LG/RM-4: PHMA:** —.	**D-LG/RM-4: PHMA:** PHMA is the highest priority for BLM land health assessments and processing of BLM grazing permits with consideration for threatened and endangered species. Where possible, conduct land health assessments at the watershed, or other meaningful landscape-scale. **IHMA:** Prioritize BLM land health assessments and processing of BLM	**E-LG/RM-4: Idaho – Common to All Habitats:** Complete the allotment assessment process in conjunction with scheduled term grazing permit renewals (i.e., every ten years), giving priority to areas that have the potential to provide the greatest benefit to GRSG. **Idaho – CHZ:** Prioritize and concentrate allocation of resources for assessment and permit renewal on	**F-LG/RM-4: PHMA:** Same as Alternative B. **GHMA:** —. **RHMA:** —.

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
program. BLM plans do not contain grazing management decisions specific to conserving GRSG habitat. Forest Service LUPs contain specific management actions for permitted livestock grazing that take in to consideration established habitat management objectives.	determine if standards of range-land health are being met. **GHMA:** —.		grazing permits after PHMA with consideration for threatened and endangered species. Where possible, conduct land health assessments at the watershed, or other meaningful landscape-scale. **GHMA:** Prioritize BLM land health assessments and processing of BLM grazing permits after IHMA, with consideration for threatened and endangered species. Where possible, conduct land health assessments at the watershed, or other meaningful landscape-scale.	allotments within CHZ that have declining GRSG populations, with secondary priority given to stable or increasing populations within CHZ. **Idaho – IHZ:** Prioritize allotments within IHZ containing breeding habitats that have decreasing lek counts after permits within CHZ. GRSG populations that are stable or trending upward will be a lower priority for permit renewal and the assessment process. **Idaho – GHZ:** —. **Utah Habitat:** —.	
A-LG/RM-5: —.	**B-LG/RM-5: PHMA:** Conduct land health assessments that include (at a minimum) indicators and measurements of structure/condition/composition of vegetation specific to achieving GRSG habitat objectives (Doherty et al. 2011a). If local/state seasonal habitat objectives are not available, use GRSG habitat recommendations from Connelly et al. 2000 and Hagen et al. 2007. **GHMA:** —.	**C-LG/RM-5: PHMA:** —.	**D-LG/RM-5: PHMA:** During the land health assessment process determine whether vegetation structure, condition and composition are meeting GRSG habitat objectives in sagebrush cover types through implementation of the habitat assessment framework, (Stiver et al. 2010 as amended/replaced) or other BLM or Forest Service approved methodology, in accordance with current policy and guidance. **IHMA:** Same as PHMA. **GHMA:** —.	**E-LG/RM-5: Idaho – Common to All Habitats:** Utilize a variety of information sources, when available, in the allotment assessment process, including: published characteristics of GRSG habitat; Ecological Site Descriptions; existing vegetation; habitat inventories/assessments (Stiver et al. 2010); and state and transition models that describe vegetation and other physical attributes for GRSG. Include discussion of whether the allotment (or any pasture/significant area therein) has the existing vegetation and/or existing ecological condition (seral state) to provide GRSG habitat (Category 1); or whether the allotment (or any pasture/significant area therein) has the ecological potential to provide GRSG habitat (Category 2). When either of these categories applies, incorporate GRSG habitat management objectives as the desired conditions for the applicable allotment and pasture. **Utah Habitat:** —.	**F-LG/RM-5: PHMA:** Same as Alternative B. **GHMA:** —. **RHMA:** —.

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
A-LG/RM-6: Consider range improvements and/or adjust permit terms and conditions on a case-by-case basis as necessary to meet land health standards or habitat objectives identified in individual LUPs. Changes may include, but are not limited to: 1) Rotation systems (e.g., rest rotation, deferred rotation) 2) Season or timing of use 3) Distribution of livestock use 5) Type of livestock 6) Class of livestock 7) Duration of grazing use and rest periods	**B-LG/RM-6: PHMA:** Implement management actions (grazing decisions, Annual Operating Instructions [Forest Service only], AMP/Conservation Plan development, or other agreements) to modify grazing management to meet seasonal GRSG habitat requirements (Connelly et al. 2011). Consider singly, or in combination, changes in: 1) Season or timing of use; 2) Numbers of livestock (includes temporary non-use or livestock removal); 3) Distribution of livestock use; 4) Intensity of use; and 5) Type of livestock (e.g., cattle, sheep, horses, llamas, alpacas and goats) (Briske et al. 2011). **GHMA:** —.	**C-LG/RM-6: PHMA:** —.	**D-LG/RM-6: PHMA:** When livestock management practices determined to not be compatible with meeting or making progress towards habitat objectives, implement changes in grazing management through grazing authorization modifications, or AMP implementation. Potential considerations include, but are not limited to, changes in: 1) Season or timing of use; 2) Numbers of livestock; 3) Distribution of livestock use; 4) Duration and/or level of use; 5) Kind of livestock (e.g., cattle, sheep, horses, or goats) (Briske et al. 2011); 6) Voluntary measures such as temporary non-use; and 7) Grazing schedules (including rest or deferment). **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	**E-LG/RM-6: Idaho – CHZ:** Adjust grazing permits during the renewal process to include measures (including but not limited to measures described in **Appendix Q**) to achieve desired habitat conditions, if through the assessment process, livestock grazing is found to be limiting the achievement of the habitat characteristics (**Appendix Q**). Measures must be tailored to address the specific management issues. Where population and habitat triggers are being maintained within a CA, this provides that the current grazing system is adequate to maintain viable GRSG populations and therefore absent compelling information, no further changes to BLM grazing systems would be required pursuant to Standard 8 of the Idaho Rangeland Health Standards with respect to GRSG. **Idaho – IHZ:** Same as Idaho - CHZ. **Idaho – GHZ:** —. **Utah Habitat:** —.	**F-LG/RM-6: PHMA:** Same as Alternative B. **GHMA:** —. **RHMA:** —.

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
A-LG/RM-7: —.	**B-LG/RM-7: PHMA:** Maintain retirement of grazing privileges as an option in PHMA when the current permittee is willing to retire grazing on all or part of an allotment. Analyze the adverse impacts of no livestock use on wildfire and invasive species threats (Crawford et al. 2004) in evaluating retirement proposals. **GHMA:** —.	**C-LG/RM-7: PHMA:** —.	**D-LG/RM-7: PHMA:** Consider retiring an allotment if grazing privileges are relinquished or if an allotment becomes vacant. When grazing privileges are relinquished the associated allotment(s) may be retired from grazing, or converted to a forage reserve/buffer to use during fire rehabilitation or restoration efforts elsewhere (Adopted from Idaho State Plan page 4.64, **Appendix Q**), when such actions are determined to result in a net benefit to GRSG habitat and other priority resources. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	**E-LG/RM-7: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-LG/RM-7: PHMA:** Same as Alternative B. **GHMA:** —. **RHMA:** —.
A-LG/RM-8: —.	**B-LG/RM-8: PHMA:** —. **GHMA:** —.	**C-LG/RM-8: PHMA:** —.	**D-LG/RM-8: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-LG/RM-8: Idaho – CHZ:** Establish strategically located forage reserves focusing on areas unsuitable for GRSG habitat restoration or lower priority habitat restoration areas when feasible. **Idaho – IHZ:** Same as Idaho – CHZ. **Idaho – GHZ:** —. **Utah Habitat:** —.	**F-LG/RM-8: PHMA:** —. **GHMA:** —. **RHMA:** —.

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
A-LG/RM-9: —.	**B-LG/RM-9: PHMA:** —. **GHMA:** —.	**C-LG/RM-9: PHMA:** —.	**D-LG/RM-9: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-LG/RM-9: Idaho – CHZ:** Implement grazing management systems that ensure adequate nesting and early brood rearing habitat within the breeding landscape. Manage allotments only for the primary seasonal habitat that it has the potential to support. BLM will conduct fine and site scale habitat assessments based on these habitat characteristics. **Idaho – IHZ:** Same as Idaho - CHZ. **Idaho – GHZ:** —. **Utah Habitat:** —.	**F-LG/RM-9: PHMA:** —. **GHMA:** —. **RHMA:** —.
A-LG/RM-10: Consider changes in grazing management on a case-by-case basis. Changes may include, but are not limited to: 1) Rotation systems (e.g., rest rotation and deferred rotation) 2) Season or timing of use 3) Distribution of livestock use 5) Type of livestock 6) Class of livestock 7) Duration of grazing use and rest periods.	**B-LG/RM-10: PHMA:** —. **GHMA:** —.	**C-LG/RM-10: PHMA:** —.	**D-LG/RM-10: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-LG/RM-10: Idaho – CHZ:** Modify grazing management through appropriate herding, salting, and water-source management (e.g., turning troughs/pipelines on/off, extending pipelines/moving troughs) when use-pattern mapping or monitoring demonstrates an opportunity to adjust livestock distribution to benefit occupied GRSG breeding habitat. **Idaho – IHZ:** Same as Idaho - CHZ. **Idaho – GHZ:** —. **Utah Habitat:** —.	**F-LG/RM-10: PHMA:** —. **GHMA:** —. **RHMA:** —.
A-LG/RM-11: —.	**B-LG/RM-11: PHMA:** —. **GHMA:** —.	**C-LG/RM-11: PHMA:** —.	**D-LG/RM-11: PHMA:** Coordinate with the permittee to schedule grazing use to avoid the GRSG breeding and nesting period when practical. If a lek is located at a water trough, turn off the trough during the breeding and nesting period to minimize potential impacts on GRSG when possible. **IHMA:** —. **GHMA:** —.	**E-LG/RM-11: Idaho – CHZ:** Graze exotic perennial grass seedings and/or annual grasslands to avoid grazing during breeding season in occupied GRSG habitat if available and feasible. **Idaho – IHZ:** Same as Idaho - CHZ. **Idaho – GHZ:** —. **Utah Habitat:** —.	**F-LG/RM-11: PHMA:** —. **GHMA:** —. **RHMA:** —.

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
A-LG/RM-12: Consider changes in grazing management on a case-by-case basis. Changes may include, but are not limited to: 1) Rotation systems (e.g., rest rotation and deferred rotation) 2) Season or timing of use 3) Distribution of livestock use 5) Type of livestock 6) Class of livestock 7) Duration of grazing use and rest periods	**B-LG/RM-12: PHMA:** —. **GHMA:** —.	**C-LG/RM-12: PHMA:** —.	**D-LG/RM-12: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-LG/RM-12: Idaho – CHZ:** Modify authorized seasons of use within grazing permits to provide greater flexibility in managing livestock for the benefit of GRSG. **Idaho – IHZ:** Same as Idaho - CHZ. **Idaho – GHZ:** —. **Utah Habitat:** —.	**F-LG/RM-12: PHMA:** —. **GHMA:** —. **RHMA:** —.
A-LG/RM-13: —.	**B-LG/RM-13: PHMA:** —. **GHMA:** —.	**C-LG/RM-13: PHMA:** —.	**D-LG/RM-13: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-LG/RM-13: Idaho – CHZ:** Maintain residual herbaceous vegetation at the end of the growing/grazing season to contribute to nesting and brood-rearing habitat during the coming nesting season consistent with conditions described in **Appendix Q**). **Idaho – IHZ:** Same as Idaho - CHZ. **Idaho – GHZ:** —. **Utah Habitat:** —.	**F-LG/RM-13: PHMA:** —. **GHMA:** —. **RHMA:** —.
A-LG/RM-14: Consider changes in grazing management on a case-by-case basis. Changes may include, but are not limited to: 1) Rotation systems (e.g., rest rotation and deferred rotation) 2) Season or timing of use 3) Distribution of livestock use 5) Type of livestock 6) Class of livestock 7) Duration of grazing use and rest periods	**B-LG/RM-14: PHMA:** —. **GHMA:** —.	**C-LG/RM-14: PHMA:** —.	**D-LG/RM-14: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-LG/RM-14: Idaho – CHZ:** Modify grazing management to meet seasonal GRSG habitat requirements (**Appendix Q**). Provide flexibility in grazing management through scheduling the intensity, timing, duration and frequency of grazing use over time that best promotes management objectives. The Implementation Task Force would provide recommendations throughout the process and would be given the ability to review proposed management changes and the implementation of conservation measures to ensure that the measures are being appropriately applied. **Idaho – IHZ:** Same as Idaho – CHZ.	**F-LG/RM-14: PHMA:** —. **GHMA:** —. **RHMA:** —.

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
				Idaho – GHZ: —. **Utah Habitat:** —.	
A-LG/RM-15: —.	**B-LG/RM-15: PHMA:** Develop specific objectives to conserve, enhance or restore PHMA based on BLM Ecological Site Descriptions (Forest Service may use other methods) and assessments (including within wetlands and riparian areas). If an effective grazing system that meets GRSG habitat requirements is not already in place, analyze at least one alternative that conserves, restores or enhances GRSG habitat in the NEPA document prepared for the permit renewal (Doherty et al. 2011b, Williams et al. 2011). **GHMA:** —.	**C-LG/RM-15: PHMA:** —.	**D-LG/RM-15: PHMA:** Use monitoring information and rangeland health assessments to develop specific management objectives and grazing management plans designed to maintain, enhance or restore GRSG habitat. Prioritize implementation of grazing systems or permit modifications that make progress towards meeting habitat objectives, in areas that are not meeting these objectives. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	**E-LG/RM-15: Idaho – CHZ:** Conduct rangeland health assessments utilizing published characteristics of GRSG habitat and the Ecological Site Descriptions, and **Appendix Q**, and where available and applicable, rangeland health determinations made in accordance with 43 C.F.R. 4180.2(c). **Idaho – IHZ:** Same as Idaho – CHZ. **Idaho – GHZ:** —. **Utah Habitat:** Consider GRSG seasonal habitat requirements when managing sagebrush rangelands. Considerations to be taken into account include the following: Leks Be cautious of man-made structures on lek sites. Reduce shrub encroachment and maintain the "open" area that characterizes a typical lek site. Identify the location of leks through discussions with DWR biologists. Nesting/Early Brood-Rearing Maintain and enhance the existing sagebrush/plant communities. Manage these areas to increase herbaceous cover by sustaining a mosaic of sagebrush and open areas. Avoid repeated, annual heavy use of these areas by implementing periodic rest and/or deferment periods during the critical growing season. Late Brood-Rearing Avoid continuous (season-long) grazing of wet meadows and riparian habitats, especially under drought conditions	**F-LG/RM-15: PHMA:** —. **GHMA:** —. **RHMA:** —.

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
				when temperatures are high. Winter Carefully manage levels of browsing or activities in sagebrush areas that constitute GRSG habitat that would reduce GRSG access to these areas for food and cover. The potential impact of livestock grazing on winter habitat can be positive or negative depending on scale and location of use.	
A-LG/RM-16: —.	**B-LG/RM-16: PHMA:** In PHMA, manage for vegetation composition and structure consistent with ecological site potential and within the reference state to achieve GRSG seasonal habitat objectives. **GHMA:** —.	**C-LG/RM-16: PHMA:** —.	**D-LG/RM-16: PHMA:** Manage for vegetation composition (including riparian and lentic areas) and structure consistent with appropriate GRSG seasonal habitat objectives relative to site potential. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	**E-LG/RM-16: Idaho – CHZ:** Maintain existing grazing management absent substantial and compelling information, if, based on the assessment, the current grazing system achieves the habitat characteristics (**Appendix Q**). **Idaho – IHZ:** Same as Idaho – CHZ. **Idaho – GHZ:** —. **Utah Habitat:** Address incompatible grazing strategies through established rangeland management practices consistent with the maintenance or enhancement of habitat. Carefully manage the "time," "timing," and "intensity" of grazing in sagebrush/GRSG habitats to provide for the seasonal needs of GRSG. Specific prescriptions can be applied through more intensive management to address special needs or weak links in the biological year of GRSG production. Where time-controlled grazing is not an option, moderate use of occupied GRSG habitats will usually leave mosaic or patchy areas where some plants are ungrazed. Managing for moderate utilization levels (40%) after the period of rapid vegetation growth may provide enough residual cover for	**F-LG/RM-16: PHMA:** Manage for vegetation composition and structure consistent with ecological site potential and within the reference state to achieve GRSG habitat objectives. **GHMA:** —. **RHMA:** —.

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
				GRSG nesting and early brood-rearing the subsequent spring. Evaluation of GRSG nesting and escape cover must be determined on a site-specific basis. Livestock operations with a small amount of nesting habitat should consider special management activities to protect nesting and early brood-rearing areas. Lighter use of areas may be warranted. In areas with large tracts of contiguous habitat, livestock producers should manage the vegetation on a rotational grazing basis, which may leave 10 - 20 % of the area ungrazed periodically in combination with deferring or altering timing of grazing in other areas. In areas where GRSG nesting is common, managing for moderate use of plant growth across the landscape would be appropriate. Well-managed ranches with comprehensive grazing strategies that include short-term or duration grazing, higher levels of use may be acceptable, provided these higher levels of use include rested vegetation in nearby areas.	
A-LG/RM-17: —.	**B-LG/RM-17: PHMA:** —. **GHMA:** —.	**C-LG/RM-17: PHMA:** —.	**D-LG/RM-17: PHMA:** Outside of occupied or potential bighorn sheep habitat, allow temporary or permanent conversion of cattle AUMs to sheep and/or goat grazing to allow for fuels management opportunities using domestic livestock. Sheep and goat grazing areas must be reviewed and modified as bighorn sheep habitat maps are updated or refined. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	**E-LG/RM-17: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-LG/RM-17: PHMA:** —. **GHMA:** —. **RHMA:** —.
A-LG/RM-18: —.	**B-LG/RM-18: PHMA:** —. **GHMA:** —.	**C-LG/RM-18: PHMA:** —.	**D-LG/RM-18: PHMA:** Incorporate Terms and Conditions in crossing permits to limit disturbance of leks when trailing livestock across BLM-	**E-LG/RM-18: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-LG/RM-18: PHMA:** No action. **GHMA:** —.

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
			and Forest Service-administered lands in the spring. Appropriate Terms and Conditions include, but are not limited to: required herding practices, permitted routes, timing of livestock movements during lekking season, watering, overnighting, and sheep bedding locations. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.		**RHMA:** —.
A-LG/RM-19: —.	**B-LG/RM-19: PHMA:** —. **GHMA:** —.	**C-LG/RM-19: PHMA:** —.	**D-LG/RM-19: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-LG/RM-19: Idaho – Common to All Habitats:** Consider additional options for scheduled grazing based on the three habitat zones in light of unintended consequences of altering grazing use, such as a possible increased risk of wildfire, before adjusting management. **Idaho – CHZ:** Altering grazing schemes in allotments within CHZ, where needed and appropriate, through enhanced grazing opportunities utilizing introduced seedings or areas with lower value to GRSG (e.g., GHZ). **Idaho – IHZ:** Enhance grazing opportunities through utilization of areas with introduced seedings or areas with lower value to GRSG. **Idaho – GHZ:** Same as Idaho – IHZ. **Utah Habitat:** —.	**F-LG/RM-19: PHMA:** —. **GHMA:** —. **RHMA:** —.

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
A-LG/RM-20: —.	**B-LG/RM-20: PHMA:** —. **GHMA:** —.	**C-LG/RM-20: PHMA:** —.	**D-LG/RM-20: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-LG/RM-20: Idaho – Common to All Habitats:** Include measures tailored to address specific management issues (**Appendix Q**), when livestock grazing is limiting achievement of the habitat characteristics (**Appendix Q**), within renewed permits. **Utah Habitat:** —.	**F-LG/RM-20: PHMA:** —. **GHMA:** —. **RHMA:** —.
A-LG/RM-21: Consider changes in grazing management on a case-by-case basis. Changes may include, but are not limited to: 1) Rotation systems (e.g., rest rotation and deferred rotation) 2) Season or timing of use 3) Distribution of livestock use 5) Type of livestock 6) Class of livestock 7) Duration of grazing use and rest periods.	**B-LG/RM-21: PHMA:** —. **GHMA:** —.	**C-LG/RM-21: PHMA:** —.	**D-LG/RM-21: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-LG/RM-21: Idaho – Common to All Habitats:** Maintain flexibility in grazing management and the opportunity to schedule and adjust intensity, timing, duration, and frequency of grazing use over time in a manner that maintains rangeland health and habitat quality. **Utah Habitat:** —.	**F-LG/RM-21: PHMA:** —. **GHMA:** —. **RHMA:** —.
A-LG/RM-22: —.	**B-LG/RM-22: PHMA:** —. **GHMA:** —.	**C-LG/RM-22: PHMA:** —.	**D-LG/RM-22: PHMA:** Utilize existing and appropriate rangeland health assessment and GRSG habitat assessment (currently the Habitat Assessment Framework) processes to quantify GRSG habitat quality. Prioritize assessment completion in PHMA. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	**E-LG/RM-22: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-LG/RM-22: PHMA:** —. **GHMA:** —. **RHMA:** —.

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
A-LG/RM-23: —.	**B-LG/RM-23: PHMA:** —. **GHMA:** —.	**C-LG/RM-23: PHMA:** —.	**D-LG/RM-23: PHMA:** Monitor vegetation utilizing techniques that quantify GRSG habitat attributes to determine if vegetation management objectives are being achieved. This monitoring would occur consistent with appropriate BLM and Forest Service direction which current utilizes the Habitat Assessment Framework and BLM Technical Reference 1734-4. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	**E-LG/RM-23: Idaho – Common to All Habitats:** Conduct fine and site scale-habitat assessments to help inform grazing management based on habitat characteristics described in **Appendix Q**. **Utah Habitat:** —.	**F-LG/RM-23: PHMA:** —. **GHMA:** —. **RHMA:** —.
A-LG/RM-24: Implement noxious weed and invasive species control using integrated weed management actions per national guidance and local weed management plans in cooperation with State and Federal agencies, affected counties, and adjoining private lands owners.	**B-LG/RM-24: PHMA:** —. **GHMA:** —.	**C-LG/RM-24: PHMA:** —.	**D-LG/RM-24: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-LG/RM-24: Idaho – CHZ:** —. **Idaho – IHZ:** Monitor weed eradication program to evaluate the success of weed control efforts in conjunction with the Cooperative Weed Management Areas. **Idaho – GHZ:** Same as Idaho – IHZ. **Utah Habitat:** —.	**F-LG/RM-24: PHMA:** No action. **GHMA:** —. **RHMA:** —.
A-LG/RM-25: —.	**B-LG/RM-25: PHMA:** —. **GHMA:** —.	**C-LG/RM-25: PHMA:** —.	**D-LG/RM-25: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-LG/RM-25: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-LG/RM-25: PHMA:** Encourage partners to monitor effects of retiring grazing permits in GRSG habitat. **GHMA:** —. **RHMA:** —.

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
A-LG/RM-26: —.	**B-LG/RM-26: PHMA:** —. **GHMA:** —.	**C-LG/RM-26: PHMA:** —.	**D-LG/RM-26: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-LG/RM-26: Idaho – Common to All Habitats:** Conduct a determination of factors causing any failure to achieve the habitat characteristics (**Appendix Q**) at a resolution sufficient to document the habitat condition, including consideration of local spatial and inter-annual variability. Determination must utilize data from multiple years or multiple locations within an allotment. **Utah Habitat:** —.	**F-LG/RM-26: PHMA:** —. **GHMA:** —. **RHMA:** —.
Drought Management					
A-LG/RM-27: —. Livestock grazing program/policy direction allows the BLM and Forest Service to make changes to livestock grazing in response to drought conditions. Changes may include adjusting livestock numbers based on available forage or shortening the season of use.	**B-LG/RM-27: PHMA:** During drought periods, prioritize evaluating effects of the drought in PHMA relative to their needs for food and cover. Since there is a lag in vegetation recovery following drought (Thurow and Taylor 1999; Cagney et al. 2010), ensure that post-drought management allows for vegetation recovery that meets GRSG needs in PHMA. **GHMA:** —.	**C-LG/RM-27: PHMA:** —.	**D-LG/RM-27: PHMA:** Adjust grazing management (i.e., delay turnout, adjust pasture rotations, adjust the amount and/or duration of grazing) as appropriate during drought to provide for adequate food and cover for GRSG during drought periods. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	**E-LG/RM-27: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-LG/RM-27: PHMA:** During drought periods, prioritize evaluating effects of the drought in PHMA relative to their biological needs for food and cover, as well as drought effects on ungrazed reference areas. Since there is a lag in vegetation recovery following drought (Thurow and Taylor 1999; Cagney et al. 2010), ensure that post-drought management allows for vegetation recovery that meets GRSG needs in PHMA based on GRSG habitat objectives. **GHMA:** —. **RHMA:** —.
A-LG/RM-28: —.	**B-LG/RM-28: PHMA:** —. **GHMA:** —.	**C-LG/RM-28: PHMA:** —.	**D-LG/RM-28: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-LG/RM-28: Idaho – CHZ:** Prioritize evaluation of CHZ during drought periods relative to GRSG needs for food and cover. Ensure that post-drought management allows for vegetation recovery that meets GRSG needs in priority GRSG habitat areas. **Idaho – IHZ:** Same as Idaho – CHZ. **Idaho – GHZ:** **Utah Habitat:** —.	**F-LG/RM-28: PHMA:** —. **GHMA:** —. **RHMA:** —.

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
Riparian					
A-LG/RM-29: Manage, maintain, protect, and restore riparian and wetland areas to PFC.	**B-LG/RM-29: PHMA:** Manage riparian areas and wet meadows for proper functioning condition or other similar methodology (Forest Service only) within PHMA. **GHMA:** —.	**C-LG/RM-29: PHMA:** —.	**D-LG/RM-29: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-LG/RM-29: Idaho – CHZ:** Implement grazing management adjustments, where management changes are determined necessary (**Appendix Q**), that are narrowly tailored to address the specific habitat objective applied at the allotment and/or activity plan level, including but not limited to the actions outlined in (**Appendix Q**). **Idaho – IHZ:** Same as Idaho – CHZ. **Idaho – GHZ:** —. **Utah Habitat:** Design water developments to enhance mesic habitat for use by GRSG and maintain adequate vegetation in wet meadows. Within PHMA, GRSG stipulations should take precedence over stipulations for other species if conflicts occur, if otherwise allowable by law.	**F-LG/RM-29: PHMA:** Same as Alternative B. **GHMA:** —. **RHMA:** —.
A-LG/RM-30: Manage, maintain, protect, and restore riparian and wetland areas to PFC.	**B-LG/RM-30: PHMA:** Within GRSG habitats, manage wet meadows to maintain a component of perennial forbs with diverse species richness relative to site potential (e.g., reference state) to facilitate brood rearing. Also conserve or enhance these wet meadow complexes to maintain or increase amount of edge and cover within that edge to minimize elevated mortality during the late brood rearing period (Hagen et al. 2007; Kolada et al. 2009; Atamian et al. 2010). **GHMA:** Same as PHMA.	**C-LG/RM-30: PHMA:** —.	**D-LG/RM-30: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-LG/RM-30: Idaho – Common to All Habitats:** —. **Utah Habitat:** Design water developments to enhance mesic habitat for use by GRSG and maintain adequate vegetation in wet meadows. Within PHMA, GRSG stipulations should take precedence over stipulations for other species if conflicts occur, if otherwise allowable by law.	**F-LG/RM-30: PHMA:** Same as Alternative B. **GHMA:** —. **RHMA:** —.
A-LG/RM-31: —.	**B-LG/RM-31: PHMA:** Where riparian areas and wet meadows meet proper functioning condition or meet standards using other similar methodology (Forest Service only),	**C-LG/RM-31: PHMA:** —.	**D-LG/RM-31: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-LG/RM-31: Idaho – Common to All Habitats:** —. **Utah Habitat:** Same as E-LG/RM-30.	**F-LG/RM-31: PHMA:** Same as Alternative B. **GHMA:** —.

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
	strive to attain reference state vegetation relative to the ecological site description. **GHMA:** Same as PHMA.				**RHMA:** —.
A-LG/RM-32: Manage rangeland resources to maintain healthy, sustainable, rangeland ecosystems and to restore degraded rangelands in accordance with Idaho's Standards for Rangeland Health or standards or guidelines established in individual Forest Service LRMPs. Rangeland health standards require that riparian areas be managed for PFC.	**B-LG/RM-32: PHMA:** Reduce hot season grazing on riparian and meadow complexes to promote recovery or maintenance of appropriate vegetation and water quality. Utilize fencing/herding techniques or seasonal use or livestock distribution changes to reduce pressure on riparian or wet meadow vegetation used by GRSG in the hot season (summer) (Aldridge and Brigham 2002; Crawford et al. 2004; Hagen et al. 2007). **GHMA:** —.	**C-LG/RM-32: PHMA:** —.	**D-LG/RM-32: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-LG/RM-32: Idaho – Common to All Habitats:** —. **Utah Habitat:** Continue livestock grazing strategies that have proven effective in maintaining and enhancing GRSG habitat, unless compelling and credible cause-and-effect evidence indicates a disturbance exists. Address incompatible grazing strategies through established rangeland management practices consistent with the maintenance or enhancement of habitat. Design water developments to enhance mesic habitat for use by GRSG and maintain adequate vegetation in wet meadows. Within PHMA, GRSG stipulations should take precedence over stipulations for other species if conflicts occur, if otherwise allowable by law.	**F-LG/RM-32: PHMA:** —. **GHMA:** —. **RHMA:** —.
A-LG/RM-33: Manage, maintain, protect, and restore riparian and wetland areas to PFC.	**B-LG/RM-33: PHMA:** —. **GHMA:** —.	**C-LG/RM-33: PHMA:** —.	**D-LG/RM-33: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-LG/RM-33: Idaho – CHZ:** Manage grazing of riparian areas, meadows, springs, and seeps in a manner that promotes vegetative structure and composition appropriate to the site. **Idaho – IHZ:** Same as Idaho – CHZ. **Idaho – GHZ:** —. **Utah Habitat:** —.	**F-LG/RM-33: PHMA:** —. **GHMA:** —. **RHMA:** —.
Range Improvements					
A-LG/RM-34: Consider structural range improvements on a case-by-case basis to provide for livestock grazing while maintaining rangeland health.	**B-LG/RM-34: PHMA:** Design any new structural range improvements and location of supplements (salt or protein blocks) to conserve, enhance, or restore GRSG habitat through an improved grazing management system relative to	**C-LG/RM-34: PHMA:** —.	**D-LG/RM-34: PHMA:** Design any new structural range improvements to conserve, enhance, or restore GRSG habitat. Structural range improvements, in this context, include but are not limited to: cattle guards, fences,	**E-LG/RM-34: Idaho – Common to All Habitats:** —. **Utah Habitat:** Locate livestock fences away from leks and employ the NRCS fence standards (NRCS 2012).	**F-LG/RM-34: PHMA:** Avoid all new structural range developments in PHMA unless independent peer-reviewed studies show that the range improvement structure benefits GRSG. Design any new structural range

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
	GRSG objectives. Structural range improvements, in this context, include but are not limited to: cattle guards, fences, exclosures, corrals or other livestock handling structures; pipelines, troughs, storage tanks (including moveable tanks used in livestock water hauling), windmills, ponds/reservoirs, solar panels and spring developments. Potential for invasive species establishment or increase following construction must be considered in the project planning process and monitored and treated post-construction. **GHMA:** —.		exclosures, corrals or other livestock handling structures; pipelines, troughs, storage tanks (including moveable tanks used in livestock water hauling), windmills, ponds/reservoirs, solar panels and spring developments. Potential for an increase in invasive species establishment or increase following construction must be considered in the project planning process and monitored and treated post-construction. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.		improvements and location of supplements (salt or protein blocks) to conserve, enhance, or restore GRSG habitat through an improved grazing management system relative to GRSG objectives. Structural range improvements developments, in this context, include but are not limited to cattle guards, fences, exclosures, corrals or other livestock handling structures; pipelines, troughs, storage tanks (including moveable tanks used in livestock water hauling), windmills, ponds/reservoirs, solar panels and spring developments. Potential for invasive species establishment or increase following construction must be considered in the project planning process and monitored and treated post-construction. Consider the comparative cost of changing grazing management instead of constructing additional range developments. **GHMA:** —. **RHMA:** —.
A-LG/RM-35: Consider modifications to existing structural range improvements on a case-by-case basis taking into consideration impacts on other resources.	**B-LG/RM-35: PHMA:** Evaluate existing structural range improvements and location of supplements (salt or protein blocks) to make sure they conserve, enhance or restore GRSG habitat. **GHMA:** —.	**C-LG/RM-35: PHMA:** —.	**D-LG/RM-35: PHMA:** During project inspections, evaluate the design and location of existing structural range improvements with respect to their effect on GRSG habitat, including, but not limited to: • Potential for GRSG collisions with infrastructure. • Avian predation due to creation of roosting, perching or nesting sites. • Introduction of weeds, West Nile Virus and effects on vegetation structure or composition. • Assess existing livestock management fences within PHMA for risk of GRSG collisions based on proximity to leks, lek size, and	**E-LG/RM-35: Idaho – CHZ:** Place salt or mineral supplements to improve management of livestock in existing disturbed sites (areas with reduced sagebrush cover—e.g., seedings or cheatgrass sites) to reduce impacts on GRSG breeding habitat. **Idaho – IHZ:** Same as Idaho – CHZ. **Idaho – GHZ:** —. **Utah Habitat:** —.	**F-LG/RM-35: PHMA:** Same as Alternative B. **GHMA:** —. **RHMA:** —.

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
			topography (Christiansen 2009; Stevens 2011) or existing collision risk models (Stevens et al. 2012). • Prioritize fence removal, modification or marking in areas of high collision risk to reduce the incidence of GRSG mortality due to fence strikes (Stevens et al. 2012). • Avoid building new permanent fences within 2 km of occupied leks or high density fence areas (Stevens 2011). If this is not feasible, ensure that high risk segments are marked with collision diverter devices or as latest science indicates. • Utilize temporary fencing (e.g., ESR, drop down fencing) where applicable and appropriate to meet management objectives. Evaluate the locations where salt/supplements are placed. In coordination with the permittee, have salt/supplements moved to areas which would conserve or improve habitat for GRSG. **IHMA:** Same as PHMA. **GHMA:** During project inspections, evaluate the design and location of existing structural range improvements and location of supplements (salt or protein blocks) with respect to their effect on GRSG habitat, including, but not limited to: • Potential for GRSG collisions. • Avian predation due to creation of roosting, perching or nesting sites. • Introduction of weeds, West Nile Virus and effects on vegetation structure or composition.		

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
			• Avoid building new fences within 2 km of occupied leks or winter concentration areas. If this is not feasible, ensure that high risk segments are marked with collision diverter devices or as latest science indicates.		
A-LG/RM-36: —.	**B-LG/RM-36: PHMA:** To reduce outright GRSG strikes and mortality, remove, modify or mark fences in high risk areas within PHMA based on proximity to lek, lek size, and topography (Christiansen 2009, Stevens 2011). **GHMA:** —.	**C-LG/RM-36: PHMA:** —.	**D-LG/RM-36: PHMA:** Design and locate fences to minimize the potential for GRSG strikes. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	**E-LG/RM-36: Idaho – CHZ:** Mark fences on flat to gently rolling terrain in areas of moderate to high fence densities (i.e., more than one kilometer of fence per square kilometer) located within two kilometers of occupied leks with permanent flagging or other suitable device to reduce GRSG collisions. **Idaho – IHZ:** Same as CHZ. **Idaho – GHZ:** —. **Utah Habitat:** Fences should not be located on or adjacent to leks where bird collisions would be expected to occur. Employ NRCS fence collision risk tool (NRCS 2012).	**F-LG/RM-36: PHMA:** To reduce outright GRSG strikes and mortality, remove, modify or mark fences in high risk areas of moderate or high risk of GRSG strikes within PHMA based on proximity to lek, lek size, and topography (Christiansen 2009; Stevens 2011). **GHMA:** —. **RHMA:** —.
A-LG/RM-37: —.	**B-LG/RM-37: PHMA:** —. **GHMA:** —.	**C-LG/RM-37: PHMA:** —.	**D-LG/RM-37: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-LG/RM-37: Idaho – CHZ:** Avoid constructing new fences within 2 km of occupied leks. Place new, taller structures, such as corrals, loading facilities, water-storage tanks, windmills, etc., at least 2 km from occupied leks to reduce opportunities for perching raptors based on careful consideration of local conditions near other important seasonal habitats (winter-use areas, movement corridors etc.) to reduce potential impacts. **Idaho – IHZ:** Same as CHZ. **Idaho – GHZ:** —. **Utah Habitat:** —.	**F-LG/RM-37: PHMA:** —. **GHMA:** —. **RHMA:** —.

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
A-LG/RM-38: —.	**B-LG/RM-38: PHMA:** —. **GHMA:** —.	**C-LG/RM-38: PHMA:** —.	**D-LG/RM-38: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-LG/RM-38: Idaho – CHZ:** Reduce the impacts of fences and livestock management facilities on GRSG, to the extent practicable. **Idaho – IHZ:** Same as CHZ. **Idaho – GHZ:** —. **Utah Habitat:** —.	**F-LG/RM-38: PHMA:** —. **GHMA:** —. **RHMA:** —.
A-LG/RM-39: —.	**B-LG/RM-39: PHMA:** —. **GHMA:** —.	**C-LG/RM-39: PHMA:** —.	**D-LG/RM-39: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-LG/RM-39: Idaho – CHZ:** Remove unnecessary fences. **Idaho – IHZ:** Same as CHZ. **Idaho – GHZ:** Same as CHZ. **Utah Habitat:** —.	**F-LG/RM-39: PHMA:** —. **GHMA:** —. **RHMA:** —.
A-LG/RM-40: —.	**B-LG/RM-40: PHMA:** —. **GHMA:** —.	**C-LG/RM-40: PHMA:** —.	**D-LG/RM-40: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-LG/RM-40: Idaho – CHZ:** Consider impacts on GRSG when placing new fences and livestock management facilities, including corrals, loading facilities, water tanks and windmills. **Idaho – IHZ:** Same as CHZ. **Idaho – GHZ:** —. **Utah Habitat:** —.	**F-LG/RM-40: PHMA:** —. **GHMA:** —. **RHMA:** —.
A-LG/RM-41: —.	**B-LG/RM-41: PHMA:** —. **GHMA:** —.	**C-LG/RM-41: PHMA:** —.	**D-LG/RM-41: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-LG/RM-41: Idaho – CHZ:** Construct new fences further than one kilometer (0.6 miles) from occupied leks. **Idaho – IHZ:** Same as CHZ. **Idaho – GHZ:** —. **Utah Habitat:** —.	**F-LG/RM-41: PHMA:** —. **GHMA:** —. **RHMA:** —.
A-LG/RM-42: —.	**B-LG/RM-42: PHMA:** —. **GHMA:** —.	**C-LG/RM-42: PHMA:** —.	**D-LG/RM-42: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-LG/RM-42: Idaho – CHZ:** Place new, taller structures, including corrals, loading facilities, water storage tanks, windmills, at least one kilometer from occupied leks, to the extent practicable.	**F-LG/RM-42: PHMA:** —. **GHMA:** —. **RHMA:** —.

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
				Idaho – IHZ: Same as CHZ. **Idaho – GHZ:** —. **Utah Habitat:** —.	

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
Water Development					
A-LG/RM-43: Consider authorization of new water developments on a case-by-case basis taking into consideration impacts on other resources and resource values.	**B-LG/RM-43: PHMA:** Authorize new water development for diversion from spring or seep source only when PHMA would benefit from the development. This includes developing new water sources for livestock as part of an AMP/conservation plan to improve GRSG habitat. **GHMA:** Same as PHMA.	**C-LG/RM-43: PHMA:** —.	**D-LG/RM-43: PHMA:** Limit authorization of new water developments to projects that would benefit, maintain, or have a neutral effect on PHMA (such as by shifting livestock use away from critical areas). New developments that divert surface water must be designed to maintain integrity and functionality riparian or wetland vegetation and hydrology. New developments should also be sited in lower quality habitats or, disturbed areas where possible, and avoid areas that have not had significant prior grazing use (Adopted from Idaho State Plan page 4.64, **Appendix Q**). Ensure that troughs are fitted with wildlife escape ramps to facilitate use of and escape by animals, including GRSG. **IHMA:** Same as PHMA. **GHMA:** New water developments that divert surface water must be designed to maintain integrity and functionality of riparian or wetland vegetation and hydrology. New developments should also be sited in lower quality habitats or disturbed areas where possible (Adopted from Idaho State Plan page 4.64, **Appendix Q**). Ensure that troughs are fitted with wildlife escape ramps to facilitate use of and escape by animals, including GRSG.	**E-LG/RM-43: Idaho – CHZ:** Place and design new water developments in GRSG breeding habitat that provide the greatest enhancement for GRSG and GRSG habitat. **Idaho – IHZ:** Same as CHZ. **Idaho – GHZ:** —. **Utah Habitat:** Design water developments to enhance mesic habitat for use by GRSG and maintain adequate vegetation in wet meadows. Within PHMA, GRSG stipulations should take precedence over stipulations for other species if conflicts occur, if otherwise allowable by law.	**F-LG/RM-43: PHMA:** Authorize no new water developments for diversion from spring or seep sources only when within PHMA would benefit from the development. This includes developing new water sources for livestock as part of an AMP/conservation plan to improve GRSG habitat. **GHMA:** —. **RHMA:** —.

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
A-LG/RM-44: Consider modifications to existing water developments on a case-by-case basis taking into consideration impacts on other resources.	**B-LG/RM-44: PHMA:** Analyze springs, seeps and associated pipelines to determine if modifications are necessary to maintain the continuity of the predevelopment riparian area within PHMA. Make modifications where necessary, considering impacts on other water uses when such considerations are neutral or beneficial to GRSG. **GHMA:** —.	**C-LG/RM-44: PHMA:** —.	**D-LG/RM-44: PHMA:** During project inspections, evaluate the design and condition of existing water developments (headboxes, exclosures, pipelines, ponds, and troughs) at springs, wetlands, or playas to determine if modification, repair or retrofitting or removal is needed to maintain or restore the integrity and functionality of the riparian/lentic areas to current site potential within priority GRSG habitat. Modifications may include, but are not limited to: • Installing float valves on troughs • Reconfiguring exclosure fencing • Moving troughs out of riparian/lentic areas • Modifying the slope at the edge of ponds to reduce mosquito breeding habitat and West Nile virus. Ensure that troughs are fitted with functional wildlife escape ramps to facilitate use of and escape by animals, including GRSG. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	**E-LG/RM-44: Idaho – Common to All Habitat:** —. **Utah Habitat:** —.	**F-LG/RM-44: PHMA:** Analyze springs, seeps and associated water developments pipelines to determine if modifications are necessary to maintain the continuity of the predevelopment riparian area within PHMA. Make modifications where necessary, including dismantling water developments considering impacts on other water uses when such considerations are neutral or beneficial to GRSG. **GHMA:** —. **RHMA:** —.
A-LG/RM-45: Manage, maintain, protect, and restore riparian and wetland areas to PFC.	**B-LG/RM-45: PHMA:** —. **GHMA:** —.	**C-LG/RM-45: PHMA:** —.	**D-LG/RM-45: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-LG/RM-45: Idaho – CHZ:** Design new spring developments in GRSG habitat to maintain or enhance the free-flowing characteristics of springs and wet meadows. Modify developed springs, seeps and associated pipelines to maintain the continuity of the predevelopment riparian area within priority GRSG habitat where necessary. **Idaho – IHZ:** Same as CHZ. **Idaho – GHZ:** —. **Utah Habitat:** —.	**F-LG/RM-45: PHMA:** —. **GHMA:** —. **RHMA:** —.

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
A-LG/RM-46: —.	**B-LG/RM-46: PHMA:** —. **GHMA:** —.	**C-LG/RM-46: PHMA:** —.	**D-LG/RM-46: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-LG/RM-46: Idaho – CHZ:** Install ramps in new and existing livestock troughs and open water storage tanks to facilitate the use of and escape from troughs by GRSG and other wildlife. **Idaho – IHZ:** Same as Idaho - CHZ. **Idaho – GHZ:** —. **Utah Habitat:** —.	**F-LG/RM-46: PHMA:** —. **GHMA:** —. **RHMA:** —.
A-LG/RM-47: —.	**B-LG/RM-47: PHMA:** —. **GHMA:** —.	**C-LG/RM-47: PHMA:** —.	**D-LG/RM-47: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-LG/RM-47: Idaho – CHZ:** Avoid installation of new water developments in higher quality native breeding/early brood habitats that have not had significant prior grazing use except in situations in which water developments may aid in better livestock distribution across the allotment and will not adversely impact the species. **Idaho – IHZ:** Same as CHZ. **Idaho – GHZ:** —. **Utah Habitat:** —.	**F-LG/RM-47: PHMA:** —. **GHMA:** —. **RHMA:** —.
West Nile Virus					
A-LG/RM-48: —.	**B-LG/RM-48: PHMA:** When developing or modifying water developments in PHMA, use applicable best management practices (BMPs, see **Appendix B**) to mitigate potential impacts from West Nile virus (Clark et al. 2006; Doherty 2007; Walker et al. 2007; Walker and Naugle 2011). **GHMA:** —.	**C-LG/RM-48: PHMA:** —.	**D-LG/RM-48: PHMA:** When developing or modifying water developments in PHMA, use BMPs (**Appendix B**) to mitigate potential impacts from West Nile virus (Clark et al. 2006, Doherty 2007, Walker et al. 2007, Walker and Naugle 2011). **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	**E-LG/RM-48: Idaho – Common to All Habitat:** —. **Utah Habitat:** —.	**F-LG/RM-48: PHMA:** Same as Alternative B. **GHMA:** —. **RHMA:** —.
A-LG/RM-49: —.	**B-LG/RM-49: PHMA:** —. **GHMA:** —.	**C-LG/RM-49: PHMA:** —.	**D-LG/RM-49: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-LG/RM-49: Idaho – CHZ:** Return water to the original water source, to the extent practicable, to reduce suitable habitat for mosquitoes. **Idaho – IHZ:** Same as CHZ.	**F-LG/RM-49: PHMA:** No action. **GHMA:** —. **RHMA:** —.

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
				Idaho – GHZ: —. **Utah Habitat:** —.	
A-LG/RM-50: —.	**B-LG/RM-50: PHMA:** —. **GHMA:** —.	**C-LG/RM-50: PHMA:** —.	**D-LG/RM-50: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-LG/RM-50: Idaho – CHZ:** Minimize creation of breeding habitat for mosquitoes in GRSG habitat to reduce the risk of transmission of West Nile virus to GRSG. **Idaho – IHZ:** Same as CHZ. **Idaho – GHZ:** Same as CHZ. **Utah Habitat:** —.	**F-LG/RM-50: PHMA:** —. **GHMA:** —. **RHMA:** —.
A-LG/RM-51: —.	**B-LG/RM-51: PHMA:** —. **GHMA:** —.	**C-LG/RM-51: PHMA:** —.	**D-LG/RM-51: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-LG/RM-51: Idaho – CHZ:** Permit and design new ponds or reservoirs to reduce the potential impacts of West Nile Virus transmission. **Idaho – IHZ:** Same as CHZ. **Idaho – GHZ:** Same as CHZ. **Utah Habitat:** —.	**F-LG/RM-51: PHMA:** —. **GHMA:** —. **RHMA:** —.
A-LG/RM-52: —.	**B-LG/RM-52: PHMA:** —. **GHMA:** —.	**C-LG/RM-52: PHMA:** —.	**D-LG/RM-52: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-LG/RM-52: Idaho – CHZ:** Minimize the construction of new ponds or reservoirs except as needed to meet important resource management and/or restoration objectives. **Idaho – IHZ:** Same as CHZ. **Idaho – GHZ:** —. **Utah Habitat:** —.	**F-LG/RM-52: PHMA:** —. **GHMA:** —. **RHMA:** —.
A-LG/RM-53: —.	**B-LG/RM-53: PHMA:** —. **GHMA:** —.	**C-LG/RM-53: PHMA:** —.	**D-LG/RM-53: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-LG/RM-53: Idaho – CHZ:** Develop and maintain non-pond/reservoir watering facilities, such as troughs and bottomless tanks, to provide high quality water that minimizes the development of habitat for mosquitoes. **Idaho – IHZ:** Same as CHZ.	**F-LG/RM-53: PHMA:** —. **GHMA:** —. **RHMA:** —.

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
				Idaho – GHZ: Same as CHZ. **Utah Habitat:** —.	
A-LG/RM-54: —.	**B-LG/RM-54: PHMA:** —. **GHMA:** —.	**C-LG/RM-54: PHMA:** —.	**D-LG/RM-54: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-LG/RM-54: Idaho – CHZ:** Construct water return features and maintain functioning float valves to prohibit water from being spilled on the ground surrounding the trough and/or tank. **Idaho – IHZ:** Same as CHZ. **Idaho – GHZ:** —. **Utah Habitat:** —.	**F-LG/RM-54: PHMA:** —. **GHMA:** —. **RHMA:** —.
Recreation and Visitor Services					
A-RC-1: Consider BLM SRPs and Forest Service Recreation SUAs on a case-by-case basis. Consider measures that will minimize impacts on important resources or resource values. Montana BLM: Authorize SRPs in accordance with SRPH 2930-1. No acres are excluded from SRPs (Pg. 54 ROD/RMP).	**B-RC-1: PHMA:** Only allow BLM SRPs and Forest Service Recreation SUAs in PHMA that have neutral or beneficial effects on PHMA. **GHMA:** —.	**C-RC-1: PHMA:** Same as Alternative A.	**D-RC-1: PHMA:** SRPs and Forest Service Recreation SUAs would be analyzed on a case-by-case basis per BLM Special Recreation Permit Manual 2930, FSH 2709.11 and through the NEPA process to minimize impacts on GRSG and/or habitat by directing use away from sensitive seasons and/or areas. Coordinate issuance of recreation permits with IDFG and Idaho Outfitter and Guide licensing board when relevant and appropriate. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	**E-RC-1: Idaho – Common to All Habitats:** —. **Montana Habitat:** Same as Alternative A. **Utah Habitat:** Limit or ameliorate impacts from recreation activities through the use of the general stipulations identified in the GRSG section.	**F-RC-1: PHMA:** Same as Alternative B. **GHMA:** —. **RHMA:** —.
A-RC-2: —.	**B-RC-2: PHMA:** —. **GHMA:** —.	**C-RC-2: PHMA:** Action: Same as Alternative A.	**D-RC-2: PHMA:** Designate or design developed recreation sites and associated facilities to direct use away from sensitive areas and provide sustainable recreational opportunities. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	**E-RC-2: Idaho – Common to All Habitat:** —. **Utah Habitat:** —.	**F-RC-2: PHMA:** Seasonally prohibit camping and other non-motorized recreation within 4 miles of active GRSG leks. **GHMA:** —. **RHMA:** —.

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
A-RC-3: —.	**B-RC-3: PHMA:** —. **GHMA:** —.	**C-RC-3: PHMA:** —.	**D-RC-3: PHMA:** Incorporate seasonal restrictions for authorized activities to minimize impacts on GRSG and/or their habitat. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	**E-RC-3: Idaho – Common to All Habitat:** —. **Utah Habitat:** —.	**F-RC-3: PHMA:** —. **GHMA:** —. **RHMA:** —.
A-RC-4: —.	**B-RC-4: PHMA:** —. **GHMA:** —.	**C-RC-4: PHMA:** —.	**D-RC-4: PHMA:** Recreation activities and developed recreation sites and facilities within lands not designated as a recreation management area would be managed and designed to minimize adverse effects on GRSG by directing use away from sensitive areas. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	**E-RC-4: Idaho – Common to All Habitat:** —. **Utah Habitat:** —.	**F-RC-4: PHMA:** —. **GHMA:** —. **RHMA:** —.
Travel Management					
A-TM-1: OHV use will be managed as open, closed, or limited to existing roads, primitive roads, and trails as identified in **Table 2-9**. Montana BLM: All OHV travel is restricted to designated routes. There are 920 miles of designated routes in PPH and 400 miles in PGH. No off-road travel allowed by the public. Forest Service-administered lands: Travel planning is complete and all National Forest System lands with a designated route system are considered the same as the limited designation on BLM-administered lands.	**B-TM-1: PHMA:** Limit OHV travel to existing roads, primitive roads, and trails at a minimum, until such time as travel management planning is complete and routes are either designated or closed (see **Table 2-9**). Same as Alternative A for National Forest System lands. **GHMA:** Same as Alternative A.	**C-TM-1: PHMA:** Same as Alternative B (see **Table 2-9**). Same as Alternative A for National Forest System lands.	**D-TM-1: PHMA:** Limit OHV travel to existing roads, primitive roads, and trails at a minimum until such time as travel management planning is complete and routes are either designated or closed. Existing designated OHV open "play" areas would remain open (see Table **2-9**). Same as Alternative A for National Forest System lands. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	**E-TM-1: Idaho – Common to All Habitats:** Same as Alternative B (see Table **2-9**). Same as Alternative A for National Forest System lands. **Montana Habitat:** Same as Alternative A. **Utah Habitat:** PHMA with nesting and winter habitat that do not have designated routes in a Travel Management Plan would be managed at least as limited to existing roads and trails (i.e., could maintain existing OHV closures) until a Travel Management Plan designates routes. PHMA with nesting and winter habitat that have undergone Travel Management Planning with route designation would be managed at least as limited to designated routes (i.e., could maintain existing OHV closures). In these areas,	**F-TM-1: PHMA:** Same as Alternative B (see Table **2-9**). Same as Alternative A for National Forest System lands. **GHMA:** Same as PHMA. **RHMA:** Same as Alternative A.

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
				existing route designations would be reviewed and adjusted where impacts on GRSG from route presence or use may exist.	
A-TM-2: All LUPs include management actions that encourage the administrating agency to follow best management practices that reduce or minimize the impacts of development, including use of existing roads where possible.	**B-TM-2: PHMA:** —. **GHMA:** —.	**C-TM-2: PHMA:** Same as Alternative B.	**D-TM-2: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-TM-2: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-TM-2: PHMA:** During travel management planning, prohibit new road construction within 4 miles of active GRSG leks, and avoid new road construction in PHMA. **GHMA:** —. **RHMA:** —.
A-TM-3: —. Under current policy, the need for permanent or seasonal road closures is evaluated during travel management planning.	**B-TM-3: PHMA:** Travel management should evaluate the need for permanent or seasonal road closures. **GHMA:** —.	**C-TM-3: PHMA:** Same as Alternative B.	**D-TM-3: PHMA:** Travel management planning would evaluate the need for permanent or seasonal road closures as per Travel Management Handbook 8342.1. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	**E-TM-3: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-TM-3: PHMA:** Same as Alternative B. **GHMA:** —. **RHMA:** —.
A-TM-4: Consider route and trail modifications (new or existing) on a case-by-case basis. Identify travel management areas and prioritize travel management planning in areas where it would provide the most resource benefit.	**B-TM-4: PHMA:** Complete activity level travel plans within five years of the ROD. During activity level planning, where appropriate, designate routes in PHMA with current administrative/agency purpose or need to administrative access only. **GHMA:** —.	**C-TM-4: PHMA:** Same as Alternative B.	**D-TM-4: PHMA:** Prioritize areas for complete transportation management plans as per Travel Management Handbook 8342.1. **IHMA:** Complete Transportation management plans as per Travel Management Handbook 8342.1. **GHMA:** Same as PHMA.	**E-TM-4: Idaho – Common to All Habitats:** —. **Utah Habitat:** Counties should adopt and enforce travel management plans that include consideration for greater GRSG.	**F-TM-4: PHMA:** Same as Alternative B. **GHMA:** —. **RHMA:** —.
A-TM-5: Consider route and trail modifications (new or existing) on a case-by-case basis using the designation criteria.	**B-TM-5: PHMA:** Limit route construction to realignments of existing designated routes if that realignment has a minimal impact on GRSG habitat, eliminates the need to construct a new road, or is necessary for motorist safety. **GHMA:** —.	**C-TM-5: PHMA:** Same as Alternative B.	**D-TM-5: PHMA:** Consider GRSG objectives during subsequent travel management planning. Design and designate a travel system to minimize adverse effects on GRSG (i.e., designate or design routes to direct use away from sensitive areas and still provide for high-quality and sustainable travel routes and administrative access, legislatively mandated requirements, and commercial needs). Allow for route upgrade, closure of existing routes, and creation of new routes to help protect	**E-TM-5: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-TM-5: PHMA:** Limit route construction to realignments of existing designated routes if that realignment has a minimal impact on GRSG habitat, eliminates the need to construct a new road, or is necessary for motorist safety. Mitigate any impacts with methods that have been demonstrated to be effective to offset the loss of GRSG habitat. **GHMA:** —. **RHMA:** —.

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
			habitat and meet user group needs, thereby reducing the potential for pioneering unauthorized routes. The emphasis of the comprehensive travel and transportation planning within PHMA would be placed on having a neutral or positive effect on GRSG habitat. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.		
A-TM-6: All LUPs include management actions that encourage the administrating agency to follow best management practices that reduce or minimize the impacts of development, including use of existing roads where possible.	**B-TM-6: PHMA:** Use existing roads or realignments as described above to access valid existing rights that are not yet developed. If valid existing rights cannot be accessed via existing roads, then build any new road constructed to the absolute minimum standard necessary, and add the surface disturbance to the total disturbance in PHMA. If that disturbance exceeds 3 % for that area, then evaluate and implement additional, effective mitigation necessary to offset the resulting loss of GRSG habitat (see Objectives, **Table 2-10**). **GHMA:** —.	**C-TM-6: PHMA:** Same as Alternative B.	**D-TM-6: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-TM-6: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-TM-6: PHMA:** Same as Alternative B using a 4-mile buffer from leks to determine road route. **GHMA:** —. **RHMA:** —.
A-TM-7: —. The need for restoration of linear disturbances (unauthorized routes) is identified during the implementation level travel management process or on a case-by-case basis.	**B-TM-7: PHMA:** Conduct restoration of roads, primitive roads and trails not designated in travel management plans. This also includes primitive route/roads that were not designated in Wilderness Study Areas and within lands with wilderness characteristics that have been selected for protection in previous LUPs. **GHMA:** —.	**C-TM-7: PHMA:** Same as Alternative B.	**D-TM-7: PHMA:** During subsequent travel management planning, prioritize restoration of linear disturbances (those routes not designated in a Travel Management Plan) in PHMA. **IHMA:** During subsequent travel management planning, prioritize restoration of linear disturbances (those routes not designated in a Travel Management Plan) after PHMA. **GHMA:** During subsequent travel management planning, prioritize restoration of linear disturbances (those	**E-TM-7: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-TM-7: PHMA:** Same as Alternative B. **GHMA:** —. **RHMA:** —.

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
			routes not designated in a Travel Management Plan) after IHMA.		
A-TM-8: —.	**B-TM-8: PHMA:** When reseeding roads, primitive roads and trails in PHMA, use appropriate seed mixes and consider the use of transplanted sagebrush. **GHMA:** —.	**C-TM-8: PHMA:** Same as Alternative B.	**D-TM-8: PHMA:** During subsequent travel management planning, consider using seed mixes or transplant techniques that will maintain or enhance GRSG habitat when rehabilitating linear disturbances. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	**E-TM-8: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-TM-8: PHMA:** When reseeding closed roads, primitive roads and trails, use appropriate native seed mixes and require consider the use of transplanted sagebrush. **GHMA:** —. **RHMA:** —.
A-TM-9: —.	**B-TM-9: PHMA:** —. **GHMA:** —.	**C-TM-9: PHMA:** —.	**D-TM-9: PHMA:** During subsequent travel management planning, schedule road maintenance to avoid disturbance during sensitive periods and times to the extent practicable. Use time of day limits (After 10:00 AM to 7:00 PM) to reduce impacts on GRSG during breeding and nesting. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	**E-TM-9: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-TM-9: PHMA:** No action. **GHMA:** —. **RHMA:** —.
A-TM-10: —.	**B-TM-10: PHMA:** —. **GHMA:** —.	**C-TM-10: PHMA:** —.	**D-TM-10: PHMA:** During subsequent travel management planning, limit snow machine travel to existing routes in GRSG wintering areas from November 1 through March 31. Assess routes during subsequent travel management planning. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	**E-TM-10: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-TM-10: PHMA:** —. **GHMA:** —. **RHMA:** —.
A-TM-11: —.	**B-TM-11: PHMA:** —. **GHMA:** —.	**C-TM-11: PHMA:** —.	**D-TM-11: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-TM-11: Idaho – Common to All Habitats:** —. **Utah Habitat:** Develop an educational process to advise OHV users of the potential for conflict with GRSG.	**F-TM-11: PHMA:** —. **GHMA:** —. **RHMA:** —.

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
Lands and Realty					
Wind and Solar Energy					
A-LR-1: ROW grants are issued for wind and solar energy development on a case-by-case basis.	**B-LR-1: PHMA:** —. **GHMA:** —.	**C-LR-1: PHMA:** —.	**D-LR-1: PHMA:** Solar and wind energy development is not allowed. **IHMA:** Wind and solar energy development would be restricted where adverse effects could not be mitigated. Ancillary facilities such as roads, electric lines, etc. could potentially be authorized provided there is no net loss of GRSG habitat through mitigation. **GHMA:** Lands shall be considered avoidance areas for wind and solar development.	**E-LR-1: Idaho – Common to All Habitats:** See Action E-LR-3. **Utah Habitat:** —.	**F-LR-1: PHMA:** Do not site wind energy development in PHMA (Jones 2012). **GHMA:** —. **RHMA:** —.
A-LR-2: —.	**B-LR-2: PHMA:** —. **GHMA:** —.	**C-LR-2: PHMA:** —.	**D-LR-2: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-LR-2: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-LR-2: PHMA:** Site wind energy development at least five miles from active GRSG leks. **GHMA:** —. **RHMA:** —.
Rights-of-way					
A-LR-3: Continue to manage existing ROW avoidance and exclusion areas (see **Table 2-9**). Montana BLM: Manage designated ROW avoidance areas on 123,300 acres and ROW exclusion areas on 6,470 acres	**B-LR-3: PHMA:** Make PHMA an exclusion area for new BLM ROW or Forest Service SUA permits (see **Table 2-9**). Consider the following exceptions: • Within designated ROW or SUA corridors encumbered by existing ROW or SUA authorizations: new ROWs or SUAs may be co-located only if the entire footprint of the proposed project (including construction and staging), can be completed within the existing disturbance associated with the authorized ROWs or SUAs. • Subject to valid existing rights: where new ROWs or SUAs associated with valid existing rights	**C-LR-3: PHMA:** New corridors/facilities will be sited in non-habitat and bundled with existing corridors to the maximum extent possible (see **Table 2-9**).	**D-LR-3: PHMA:** Designate PHMA as ROW Avoidance areas and exclusion areas for wind and solar development (see **Table 2-9**). New authorizations for the following uses are not allowed: Transmission facilities (greater than 50kV in size), wind energy testing and development, commercial solar development, nuclear development, airports, and ancillary facilities associated with any of the aforementioned development; paved roads and graded gravel roads, landfills, airports, and hydroelectric projects. Communication sites would be allowed. **IHMA:** Designate IHMA as ROW	**E-LR-3: Idaho – CHZ:** Designate CHZ as ROW avoidance areas with limited exceptions permissible and subject to BMPs. Compensatory mitigation would be required (see **Table 2-9**). **Idaho – IHZ:** Designate IHZ as ROW avoidance areas. New ROWs and infrastructure are permissible subject to certain criteria and BMPs similar to those required for habitat in Utah. Mitigate unavoidable impacts. **Idaho – GHZ:** Manage new ROWs consistent with local resource management plans.	**F-LR-3: PHMA:** PHMA shall be an exclusion area for new ROWs permits (see **Table 2-9**). Consider the following exceptions: • Within designated ROW corridors encumbered by existing ROW authorizations: new ROWs may be co-located only if the entire footprint of the proposed project (including construction and staging), can be completed within the existing disturbance associated with the authorized ROWs. • Subject to valid existing rights: where new ROWs associated with valid existing rights are required, co-locate new ROWs within

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
	are required, co-locate new ROWs or SUAs within existing ROWs or SUAs or where it best minimizes GRSG impacts. Use existing roads, or realignments as described above, to access valid existing rights that are not yet developed. If valid existing rights cannot be accessed via existing roads, then build any new road constructed to the absolute minimum standard necessary, and add the surface disturbance to the total disturbance in PHMA. If that disturbance exceeds 3% for that area, then evaluate and implement additional effective mitigation on a case-by-case basis to offset the resulting loss of GRSG habitat. **GHMA:** Make GHMA an avoidance area for new ROWs or SUAs.		Avoidance areas. Access roads or loop roads would be addressed during the ROW authorization processing and on a case-by-case basis. **GHMA:** Same as IHMA.	There are no special conservation measures for GRSG in addition to those measures contained within existing land use plans regarding infrastructure development within GHZ. **Montana Habitat:** Same as Alternative A. **Utah Habitat:** Management stipulations and conditions should focus on mitigating direct disturbance during construction for all ROWs in PHMA. Should new research demonstrate indirect impacts on GRSG production, additional mitigation measures may be required. PHMA would be designated as an avoidance area for new ROWs. Limit or ameliorate impacts from ROW location, including from wind and solar energy development, through the use of the general stipulations identified in the GRSG section, as well as best management practices accepted by industry and state and federal agencies. For electrical transmission lines, and where feasible and consistent with federally required electrical separation standards, site new linear transmission features in existing corridors, or at a minimum, in concert with existing linear features in GRSG habitat. Siting linear features accordingly shall be deemed to be mitigation for the siting of that linear feature. Mitigation for the direct effects of construction is still required. PHMA would be available for wind energy development, though it would be designated as an avoidance area for wind energy development.	existing ROWs or where it best minimizes GRSG impacts. Use existing roads, or realignments as described above, to access valid existing rights that are not yet developed. If valid existing rights cannot be accessed via existing roads, then build any new road constructed to the absolute minimum standard necessary, and add the surface disturbance to the total disturbance in PHMA. If that disturbance exceeds 3% for that area, then make additional effective mitigation necessary that has been demonstrated to be effective to offset the resulting loss of GRSG habitat. **GHMA:** Same as Alternative A. **RHMA:** Same as Alternative A.

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
A-LR-4: The presence of sensitive resources, such as sagebrush habitat, is typically examined before a ROW grant is issued.	**B-LR-4: PHMA:** —. **GHMA:** —.	**C-LR-4: PHMA:** ROWs will be amended to require features that enhance GRSG habitat security.	**D-LR-4: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-LR-4: Idaho – CHZ:** Maintain and improve GRSG populations within CHZ, while allowing, and mitigating, for new and limited infrastructure development identified by the Implementation Commission as high value and where the proposed action can meet certain criteria. **Idaho – IHZ:** Infrastructure is generally permissible, but requires analysis of whether it can be reasonably accomplished outside IHZ. **Idaho – GHZ:** —. **Utah Habitat:** —.	**F-LR-4: PHMA:** —. **GHMA:** —. **RHMA:** —.
A-LR-5: —.	**B-LR-5: PHMA:** —. **GHMA:** —.	**C-LR-5: PHMA:** —.	**D-LR-5: PHMA:** New ROW and land use authorizations, unless otherwise excluded, would be avoided whenever possible. Any new ROW and land use authorizations would not result in a net loss of GRSG habitat of the respective PHMA. **IHMA:** Same as PHMA. **GHMA:** New ROW and land use authorizations would be avoided whenever possible.	**E-LR-5: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-LR-5: PHMA:** —. **GHMA:** —. **RHMA:** —.
A-LR-6: —.	**B-LR-6: PHMA:** —. **GHMA:** —.	**C-LR-6: PHMA:** —.	**D-LR-6: PHMA:** New authorizations and amendments to existing ROW and land use authorizations would be subject to siting prescriptions and design features considered on a case-by-case basis, in subsequent NEPA analysis. This could include amendments to the types of uses that are excluded from consideration as new authorizations. For example upgrade of an existing 50-kV power line to a 115-kV power line, to eliminate the need for an additional line could be considered.	**E-LR-6: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-LR-6: PHMA:** —. **GHMA:** —. **RHMA:** —.

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
			IHMA: New authorizations and amendments to existing ROW and land use authorizations would be considered subject to siting prescriptions and design features considered on a case-by-case basis, in subsequent NEPA analysis. **GHMA:** Same as IHMA.		
A-LR-7: —.	**B-LR-7: PHMA:** —. **GHMA:** Where new ROWs or SUAs are necessary in GHMA, co-locate new ROWs or SUAs within existing ROWs or SUAs where possible.	**C-LR-7: PHMA:** —.	**D-LR-7: PHMA:** New authorizations or amendments to existing ROW and land use authorizations should be sited substantially within an existing disturbance or minimum necessary adjacent to the existing footprint, where feasible. **IHMA:** New authorizations or amendments to existing ROW and land use authorizations should be sited substantially within the existing disturbance footprints where feasible. **GHMA:** Same as IHMA.	**E-LR-7: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-LR-7: PHMA:** —. **GHMA:** —. **RHMA:** —.
A-LR-8: —.	**B-LR-8: PHMA:** —. **GHMA:** —.	**C-LR-8: PHMA:** —.	**D-LR-8: PHMA:** When reauthorizing transmission or authorizing and/or reauthorizing distribution lines, incorporate RDFs into the authorization. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	**E-LR-8: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-LR-8: PHMA:** —. **GHMA:** —. **RHMA:** —.
A-LR-9: —.	**B-LR-9: PHMA:** —. **GHMA:** —.	**C-LR-9: PHMA:** —.	**D-LR-9: PHMA:** Site new authorizations or facilities, not otherwise excluded, outside the 3 km (1.86 miles) occupied lek avoidance buffer areas unless NEPA analysis suggests that a greater or lesser distance is required, based on topographic features or other mitigating factors. If new distribution lines (50 kV or less) cannot be sited outside the 3 km buffer, they should be buried or designed to minimize use by avian predators.	**E-LR-9: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-LR-9: PHMA:** —. **GHMA:** —. **RHMA:** —.

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
			IHMA: Same as PHMA. **GHMA:** Same as PHMA.		
A-LR-10: —.	**B-LR-10: PHMA:** Evaluate and take advantage of opportunities to remove, bury, or modify existing power lines within PHMA. **GHMA:** —.	**C-LR-10: PHMA:** Same as Alternative B.	**D-LR-10: PHMA:** New power and communication lines (50 kV or less), outside of existing ROWs, would be buried, where physically feasible, and associated above-ground disturbance areas would be seeded with perennial vegetation as per vegetation management. **IHMA:** Same as PHMA. **GHMA:** Same as IHMA.	**E-LR-10: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-LR-10: PHMA:** Same as Alternative B. **GHMA:** —. **RHMA:** —.
A-LR-11: All LUPs include management actions that require reclamation/restoration of disturbed areas that are no longer used in support of authorized actions.	**B-LR-11: PHMA:** Where existing leases or ROWs or SUAs have had some level of development (road, fence, well, etc.) and are no longer in use, reclaim the site by removing these features and restoring the habitat. **GHMA:** —.	**C-LR-11: PHMA:** Same as Alternative B.	**D-LR-11: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-LR-11: Idaho – CHZ:** Prohibit the development of infrastructure, except if developed pursuant to valid existing rights or incremental upgrade and/or capacity increase of existing development (authorized prior to the ROD) subject to best management practices in **Appendix Q**. a. Limit impacts of proposed actions to the existing authorized footprint with no more than a fifty percent (50%), depending on industry practice, increase in footprint size and associated impacts; and b. Include compensatory mitigation if new significant and unavoidable impacts are demonstrated to be associated with the project. c. Any exceptions to ROW development in CHZ would conform to the standards set forth for IHZ within the same CA. **Idaho – IHZ:** Authorize new infrastructure development where the following circumstances exist. a. The project cannot reasonably be achieved, technically or economically,	**F-LR-11: PHMA:** Same as Alternative B. **GHMA:** —. **RHMA:** —.

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
				outside of this management zone; and b. The project is co-located within the footprint for existing infrastructure, to the extent practicable. In the event co-location is not practicable, the siting should best reduce cumulative impacts and/or impacts on other high value natural, cultural, or societal resources; and c. The project does not result in unnecessary and undue habitat fragmentation or other impacts causing a decline in the population of the species within the relevant CA; and d. The project design mitigates unavoidable impacts through an appropriate compensatory mitigation plan; and e. The project complies with the applicable best management practices in **Appendix Q**. **Idaho – GHZ:** Authorize infrastructure construction consistent with the relevant land management components as provided for in **Appendix Q**. **Utah Habitat:** —.	
A-LR-12: —.	**B-LR-12: PHMA:** Planning Direction Note: Relocate existing designated ROW corridors crossing PHMA void of any authorized ROWs, outside of PHMA. If relocation is not possible, undesignate that entire corridor during the planning process. **GHMA:** —.	**C-LR-12: PHMA:** Same as Alternative B.	**D-LR-12: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-LR-12: Idaho – CHZ:** Prohibit the development of infrastructure with limited exceptions analyzed by the Implementation Task Force as part of the site-specific NEPA analysis. The following criteria would be used in those assessments: a. The project is developed pursuant to a valid existing authorization; b. The project is an incremental upgrade/capacity increase of existing development; c. Cannot be reasonably accomplished outside of CHZ; d. Can be co-located within the existing infrastructure;	**F-LR-12: PHMA:** Same as Alternative B. **GHMA:** —. **RHMA:** —.

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
				e. Demonstrates the population trend for the species within the relevant CA is stable or increasing over a three-year period; f. Project would benefit the state of Idaho g. Shall mitigate unavoidable impacts according to Idaho's Mitigation Framework (**Appendix Q**). The Governor would consult with the BLM and Forest Service on the Implementation Task Force's recommendation, which the BLM and Forest Service must consider during the project's permit application. **Idaho – IHZ:** —. **Idaho – GHZ:** —. **Utah Habitat:** —.	
A-LR-13: —.	**B-LR-13: PHMA:** —. **GHMA:** —.	**C-LR-13: PHMA:** —.	**D-LR-13: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-LR-13: Idaho – CHZ:** Allow for exemptions to new infrastructure development where a project proponent can satisfy all of the stringent criteria identified in the regulatory language and provide compensatory mitigation.	**F-LR-13: PHMA:** —. **GHMA:** —. **RHMA:** —.
A-LR-14: —.	**B-LR-14: PHMA:** —. **GHMA:** —.	**C-LR-14: PHMA:** —.	**D-LR-14: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-LR-14: Idaho – CHZ:** In allowing for new infrastructure development exemptions, the project proponent must demonstrate that the project would provide a high-value benefit to meet critical existing needs or important societal objectives to the State of Idaho. Coordinate exemptions with the State Implementation Commission.	**F-LR-14: PHMA:** —. **GHMA:** —. **RHMA:** —.
A-LR-15: —.	**B-LR-15: PHMA:** —. **GHMA:** —.	**C-LR-15: PHMA:** —.	**D-LR-15: PHMA:** Process unauthorized use. If the unauthorized use does not serve the best interest of the public, reclaim the site by removing	**E-LR-15: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-LR-15: PHMA:** —. **GHMA:** —.

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
			these features and restoring the habitat. If the use needs to be authorized, management actions for new authorizations would need to be consistent with objectives for conserving GRSG. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.		**RHMA:** —.
A-LR-16: —.	**B-LR-16: PHMA:** —. **GHMA:** —.	**C-LR-16: PHMA:** —.	**D-LR-16: PHMA:** Land authorizations that are temporary in nature (e.g., film permits, apiaries), that do not result in loss of GRSG habitat would be subject to seasonal or timing restrictions and are otherwise exempt from mitigation requirements regarding habitat loss. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	**E-LR-16: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-LR-16: PHMA:** —. **GHMA:** —. **RHMA:** —.
A-LR-17: —.	**B-LR-17: PHMA:** —. **GHMA:** —.	**C-LR-17: PHMA:** —.	**D-LR-17: PHMA:** Guy wires will be avoided were feasible. Where guy wires are necessary and appropriate without causing a human safety risk, bird collision diverters will be required. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	**E-LR-17: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-LR-17: PHMA:** —. **GHMA:** —. **RHMA:** —.
A-LR-18: —.	**B-LR-18: PHMA:** —. **GHMA:** —.	**C-LR-18: PHMA:** —.	**D-LR-18: PHMA:** Design structures and facilities to reduce perching and nesting opportunities for avian predators. Follow APLIC guidelines to minimize electrocution and collision risks. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	**E-LR-18: Idaho – Common to All Habitats:** —. **Utah Habitat:** Predation control and management should be managed by Wildlife Services, Department of Agriculture and Food, in coordination with the Division of Wildlife Resources. Eliminate or minimize external food sources for corvids, particularly dumps, waste transfer facilities, and road kill. Apply habitat management practices (e.g., grazing management, vegetation treatments) that decrease the effectiveness of predators.	**F-LR-18: PHMA:** —. **GHMA:** —. **RHMA:** —.

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
Land Tenure					
A-LR-19: In order to be considered for any form of land tenure adjustment, all lands not specifically identified for disposal must meet criteria included in FLPMA and in each LUP. Montana BLM: Retention Lands identified on 31,600 acres of PPH; 25,400 acres of PGH. Disposal Lands identified on 426 acres of PPH and 2,191 acres of PGH.	**B-LR-19: PHMA:** Retain public ownership of PHMA. Consider exceptions where: There is mixed ownership, and land exchanges would allow for additional or more contiguous federal ownership patterns within PHMA. In PHMA with minority federal ownership, include an additional, effective mitigation agreement for any disposal of federal land. As a final preservation measure, consideration should be given to pursuing a permanent conservation easement. **GHMA:** —.	**C-LR-19: PHMA:** All BLM-administered lands in ACECs, occupied habitats, and identified restoration and rehab land areas will be retained in public ownership.	**D-LR-19: PHMA:** Acquire habitat when possible and retain ownership of habitat, including lands identified for disposal in current land use plans, except if a disposal would allow for additional or more contiguous federal ownership patterns within PHMA. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	**E-LR-19: Idaho – Common to All Habitats:** —. **Montana Habitat:** Same as Alternative A. **Utah Habitat:** —.	**F-LR-19: PHMA:** Same as Alternative B, without exceptions for disposal to consolidate ownership that would be beneficial to GRSG. **GHMA:** —. **RHMA:** —.
A-LR-20: —.	**B-LR-20: PHMA:** —. **GHMA:** —.	**C-LR-20: PHMA:** —.	**D-LR-20: PHMA:** Lands currently identified for retention within PHMA would be retained unless disposal of those lands would increase the extent or provide for connectivity of PHMA. **IHMA:** —. **GHMA:** —.	**E-LR-20: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-LR-20: PHMA:** No action. **GHMA:** —. **RHMA:** —.
A-LR-21: —.	**B-LR-21: PHMA:** —. **GHMA:** —.	**C-LR-21: PHMA:** —.	**D-LR-21: PHMA:** Evaluate potential land exchanges containing historically low-quality GRSG habitat that may be too costly to restore in exchange for lands of higher quality habitat, lands that connect seasonal GRSG habitats or lands providing for threatened and endangered species. These potential exchanges should lead to an increase in the extent or continuity of or provide for improved connectivity of PHMA. Higher priority will be given to exchanges for those in-tact areas of sagebrush that will contribute to the expansion of PHMA sagebrush areas currently in public ownership. Lower priority will be given to those lands that will promote enhancement the other	**E-LR-21: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-LR-21: PHMA:** No action. **GHMA:** —. **RHMA:** —.

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
			PHMA and GHMA areas. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.		
A-LR-22: Most LUPs include a management action that allows for acquisition of lands that have important resource values including crucial wildlife habitat and land tenure adjustments to improve the manageability of BLM- and Forest Service-administered lands. In order to be considered for any form of land tenure adjustment, all lands not specifically identified for disposal must meet criteria included in the LUPs.	**B-LR-22: PHMA:** Where suitable conservation actions cannot be achieved in PHMA, seek to acquire state and private lands with intact subsurface mineral estate by donation, purchase or exchange in order to best conserve, enhance or restore GRSG habitat. **GHMA:** —.	**C-LR-22: PHMA:** Acquisition will be prioritized over easements.	**D-LR-22: PHMA:** —. **IHMA:** Identify lands for acquisition that increase the extent of or provide for connectivity of PHMA. Acquisition of GRSG PHMA will have priority over the acquisition of land for other program purposes subject to the approval of the Authorized officer. **GHMA:** —.	**E-LR-22: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-LR-22: PHMA:** —. **GHMA:** —. **RHMA:** —.
A-LR-23: Most LUPs include a management action that allows for acquisition of lands that have important resource values including crucial wildlife habitat and land tenure adjustments to improve the manageability of BLM- and Forest Service-administered lands. In order to be considered for any form of land tenure adjustment, all lands not specifically identified for disposal must meet criteria included in the LUPs.	**B-LR-23: PHMA:** Conservation Measure: Identify areas where acquisitions (including subsurface mineral rights) or conservation easements, would benefit GRSG habitat. **GHMA:** —.	**C-LR-23: PHMA:** Conservation Measure: Same as Alternative B.	**D-LR-23: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-LR-23: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-LR-23: PHMA:** Conservation Measure: Same as Alternative B. **GHMA:** —. **RHMA:** —.
Withdrawal					
A-LR-24: —.	**B-LR-24: PHMA:** Recommend lands within PHMA for mineral withdrawal. **GHMA:** —.	**C-LR-24: PHMA:** Same as Alternative B.	**D-LR-24: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-LR-24: Idaho – CHZ:** —. **Idaho – IHZ:** —. **Idaho – GHZ:** —. **Utah Habitat:** Do not propose additional federal lands or non-federal lands with federal mineral interests within PHMA for locatable mineral withdrawal. PHMA that is not already withdrawn or recommended for withdrawal would be available for	**F-LR-24: PHMA:** Same as Alternative B. **GHMA:** —. **RHMA:** —.

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
				locatable mineral entry. To the extent allowable by laws and regulations and to the extent the claimant would be willing to apply the standards, limit or ameliorate impacts through the use of the general stipulations identified in the GRSG section. Recognize that surface vents associated with underground mining are essential for human safety, and must be permitted under the provisions of this alternative.	
A-LR-25: —.	**B-LR-25: PHMA:** In PHMA, do not recommend withdrawal proposals not associated with mineral activity unless the land management is consistent with GRSG conservation measures (e.g., in a recommended withdrawal for a military training range buffer area, manage the buffer area with GRSG conservation measures). **GHMA:** —.	**C-LR-25: PHMA:** Same as Alternative B.	**D-LR-25: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-LR-25: Idaho – CHZ:** —. **Idaho – IHZ:** —. **Idaho – GHZ:** —. **Utah Habitat:** —.	**F-LR-25: PHMA:** Do not approve withdrawal proposals not associated with mineral activity unless the land management is consistent with GRSG conservation measures (e.g., in a recommended withdrawal for a military training range buffer area, manage the buffer area with GRSG conservation measures that have been demonstrated to be effective). **GHMA:** —. **RHMA:** —.
Utility Corridors					
A-LR-26: Continue to manage 85,600 acres of utility corridors, including 64,200 acres of West-Wide Energy Corridors.	**B-LR-26: PHMA:** Same as Alternative A. **GHMA:** Manage 39,200 acres of utility corridors.	**C-LR-26: PHMA:** Manage 83,800 acres of utility corridors.	**D-LR-26: PHMA:** Manage 39,800 acres of utility corridors. **IHMA:** Manage 4,750 acres of utility corridors. **GHMA:** Same as Alternative A.	**E-LR-26: Idaho – CHZ:** Manage 31,000 acres of utility corridors. **Idaho – IHZ:** Manage 12,800 acres of utility corridors. **Idaho – GHZ:** Manage 40,000 acres of utility corridors. **Utah Habitat:** Same as Alternative A.	**F-LR-26: PHMA:** Same as Alternative A. **GHMA:** Manage 39,200 acres of utility corridors. **RHMA:** Manage 6,450 acres of utility corridors.
Fluid Minerals - Leased Federal Fluid Mineral Estate					
A-MLS-1: No similar action for sub-region. Montana BLM: When leases expire, apply oil and gas stipulations listed in Table 5 pg. 44 of Dillon Field Office ROD/RMP also refer to Appendix K	**B-MLS-1: PHMA:** Apply the following nine conservation measures through LUP implementation decisions (e.g., approval of an Application for Permit to Drill, Sundry Notice, etc.) and upon completion of the environmental record of review (43	**C-MLS-1: PHMA:** Same as Alternative B.	**D-MLS-1: PHMA:** Use RDFs as COAs for post-leasing actions, such as surface use plan of operations, application for permit to drill, or master development plan. **IHMA:** Same as PHMA.	**E-MLS-1: Idaho – CHZ:** All valid existing rights are protected. In CHZ and IHZ, projects to develop an existing fluid mineral lease (i.e., implementation decisions) would be subject to the following BMPs: i. Utilize existing roads, or realignments	**F-MLS-1: PHMA:** Apply the following conservation measures as COAs at the project and well permitting stages, and through LUP implementation decisions and upon completion of the environmental record of review (43 CFR § 3162.5), including appropriate

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Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
and M of the Dillon ROD/RMP.	CFR 3162.5), including appropriate documentation of compliance with NEPA. In this process evaluate, among other things: • Whether the conservation measure is "reasonable" (43 CFR 3101.1-2) with the valid existing rights; and • Whether the action is in conformance with the approved LUP. **GHMA:** —.		**GHMA:** Same as PHMA.	of existing routes to the extent possible. ii. Construct new roads to minimum design standards needed for production activities. iii. To the extent possible, micro-site linear facilities to reduce impacts on GRSG habitats. iv. Locate staging areas outside CHZ to the extent possible. v. To the extent possible, co-locate linear facilities within one kilometer of existing linear facilities. vi. New transmission lines, excluding those lines under (viii), will be deemed co-located and/or permissible if construction occurs between July 1 and March 14 (or between July 1 and November 30 in winter concentration areas) and within one kilometer either side of existing 115-kilovolt (kV) or larger transmission lines to create a corridor no wider than two kilometers. vii. New transmission lines, excluding those lines under (viii), outside of this two kilometer corridor can only be constructed where it can be demonstrated that the activity will not cause declines in GRSG populations or if the activity reduces cumulative impacts and/or avoids other important natural, cultural or societal resources. viii. Locate essential public services, including but not limited to, distribution lines, domestic water lines and gas lines, at least one kilometer from active GRSG leks. If one kilometer avoidance is not possible, construct lines outside of March 15 to June 30. **Idaho – IHZ:** Same as Idaho – CHZ. **Idaho – GHZ:** —.	documentation of compliance with NEPA. In this process evaluate, among other things: • Whether the conservation measure is "reasonable" (43 CFR § 3101.1-2) with the valid existing rights; and • Whether the action is in conformance with the approved LUP. **GHMA:** —. **RHMA:** —.

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Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
				Montana Habitat: Same as Alternative A. **Utah Habitat:** All existing uses are explicitly recognized by this alternative and shall not be affected by the implementation of this alternative. The GRSG conservation measures identified in the associated NEPA documents for each of these projects would continue to be implemented to protect GRSG and its habitat. Provisions of this plan would not be added to the measures identified each specific project.	
A-MLS-2: —. Measures that reduce or eliminate impacts on GRSG are considered on a case-by-case basis during implementation level planning.	**B-MLS-2: PHMA:** Provide the following conservation measures as terms and conditions of the approved LUP: Do not allow new surface occupancy on federal leases within PHMA, this includes winter concentration areas (Doherty et al. 2008, Carpenter et al. 2010) during any time of the year. Consider an exception: If the lease is entirely within PHMA, apply a 4-mile NSO around the lek, and limit permitted disturbances to 1 per section with no more than 3% surface disturbance in that section. If the entire lease is within the 4-mile lek perimeter, limit permitted disturbances to 1 per section with no more than 3% surface disturbance in that section. Require any development to be placed at the most distal part of the lease from the lek, or, depending on topography and other habitat aspects, in an area that is less demonstrably harmful to GRSG. **GHMA:** —.	**C-MLS-2: PHMA:** Same as Alternative B.	**D-MLS-2: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-MLS-2: Idaho – Common to All Habitats:** —. **Utah Habitat:** All existing uses are explicitly recognized by this alternative and shall not be affected by the implementation of this alternative. The GRSG conservation measures identified in the associated NEPA documents for each of these projects would continue to be implemented to protect GRSG and its habitat. Provisions of this plan would not be added to the measures identified each specific project.	**F-MLS-2: PHMA:** Conservation Measure: Same as Alternative B. **GHMA:** —. **RHMA:** —.
A-MLS-3: Most LUPs include a management action that prohibits surface disturbing or other disruptive within GRSG breeding and nesting	**B-MLS-3: PHMA:** Conservation Measure: Apply a seasonal restriction on exploratory drilling that prohibits surface-disturbing activities during the	**C-MLS-3: PHMA:** Timing avoidance periods will be required.	**D-MLS-3: PHMA:** See D-MLS-1. **IHMA:** See D-MLS-1.	**E-MLS-3: Idaho – Common to All Habitats:** —. **Utah Habitat:** Allow exploratory	**F-MLS-3: PHMA:** Conservation Measure: Apply a seasonal restriction on exploratory drilling that prohibits surface-disturbing activities during the

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Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
habitat within a certain distance and between certain dates. The protect buffers around leks vary.	nesting and early brood-rearing season in PHMA during this period. **GHMA:** —.		**GHMA:** See D-MLS-1.	drilling within PHMA, subject to the same seasonal and controlled surface use stipulations as would be applied to leases within PHMA.	nesting and brood-rearing season in PHMA during this period. This seasonal restriction shall also to apply to related activities that are disruptive to GRSG, including vehicle traffic and other human presence. **GHMA:** —. **RHMA:** —.
A-MLS-4: —.	**B-MLS-4: PHMA:** Conservation Measure: Complete Master Development Plans in lieu of Application for Permit to Drill (APD)-by-APD processing for all but wildcat wells. **GHMA:** —.	**C-MLS-4: PHMA:** Conservation Measure: Same as Alternative B.	**D-MLS-4: PHMA:** Conservation Measure: For leases where a producing field is proposed to be developed, complete a Master Development Plan in lieu of APD-by-APD processing. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	**E-MLS-4: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-MLS-4: PHMA:** Conservation Measure: Same as Alternative B. **GHMA:** —. **RHMA:** —.
A-MLS-5: —.	**B-MLS-5: PHMA:** Conservation Measure: When permitting APDs on existing leases that are not yet developed, the proposed surface disturbance cannot exceed 3% for that area. Consider an exception if: Additional, effective mitigation is demonstrated to offset the resulting loss of GRSG (see Objectives, **Table 2-10**). When necessary, conduct additional, effective mitigation in 1) PHMA or – less preferably – 2) GHMA (dependent upon the area-specific ability to increase GRSG populations). Conduct additional, effective mitigation first within the same population area where the impact is realized, and if not possible then conduct mitigation within the same Management Zone as the impact, per Stiver et al. (2006), pg. 2-17. **GHMA:** —.	**C-MLS-5: PHMA:** Conservation Measure: Same as Alternative B.	**D-MLS-5: PHMA:** Conservation Measure: When approving a Master Development Plan on a lease, if on-site mitigation is inadequate to restore habitat, consider off-site mitigation to improve habitat, in accordance with Stiver et al. (2006), pg. 2-17, and current BLM and/or Forest Service policy regarding compensatory mitigation. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	**E-MLS-5: Idaho – Common to All Habitats:** —. **Utah Habitat:** All existing uses are explicitly recognized by this alternative and shall not be affected by the implementation of this alternative. The GRSG conservation measures identified in the associated NEPA documents for each of these projects would continue to be implemented to protect GRSG and its habitat. Provisions of this plan would not be added to the measures identified each specific project.	**F-MLS-5: PHMA:** Same as Alternative B. **GHMA:** —. **RHMA:** —.

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Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
A-MLS-6: —. Current policy allows unitization to occur on a case-by-case basis.	**B-MLS-6: PHMA:** Conservation Measure: Require unitization when deemed necessary for proper development and operation of an area (with strong oversight and monitoring) to minimize adverse impacts on GRSG according to the Federal Lease Form, 3100-11, Sections 4 and 6. **GHMA:** —.	**C-MLS-6: PHMA:** Conservation Measure: Same as Alternative B.	**D-MLS-6: PHMA:** Conservation Measure: Require unitization when deemed necessary for proper development and operation of an area (with strong oversight and monitoring). The unitization must be designed in a manner to minimize adverse impacts on GRSG according to the Federal Lease Form, 3100-11, Sections 4 and 6. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	**E-MLS-6: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-MLS-6: PHMA:** Conservation Measure: Same as Alternative B. **GHMA:** —. **RHMA:** —.
A-MLS-7: —. Reclamation bonds are currently required under 43 CFR 3104 for all fluid mineral leases.	**B-MLS-7: PHMA:** Conservation Measure: For future actions, require a full reclamation bond specific to the site in accordance with 43 CFR 3104.2, 3104.3, and 3104.5. Insure bonds are sufficient for costs relative to reclamation (Connelly et al. 2000, Hagen et al. 2007) that would result in full restoration of the lands to the condition it was found prior to disturbance. Base the reclamation costs on the assumption that contractors for the BLM or Forest Service will perform the work. **GHMA:** —.	**C-MLS-7: PHMA:** Conservation Measure: Same as Alternative B.	**D-MLS-7: PHMA:** Conservation Measure: If surface disturbing activities are proposed on a future lease, require a full reclamation bond specific to the site. Ensure reclamation bonds are sufficient to cover costs that would result in full rehabilitation. Base the reclamation costs on the assumption that contractors for the BLM will perform the work. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	**E-MLS-7: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-MLS-7: PHMA:** Conservation Measure: Same as Alternative B. **GHMA:** —. **RHMA:** —.
A-MLS-8: —. Individual land use plans may contain an appendix that outlines BMPs that are applied on a case-by-case basis.	**B-MLS-8: PHMA:** Conservation Measure: Make applicable BMPs (**Appendix B**) mandatory as COAs within PHMA. **GHMA:** —.	**C-MLS-8: PHMA:** Conservation Measure: Same as Alternative B.	**D-MLS-8: PHMA:** Conservation Measure: When an APD is submitted for approval on a lease, make applicable BMPs (**Appendix B**) mandatory as COAs. **IHMA:** Same as PHMA. **GHMA:** Conservation Measure: When an APD is submitted for approval on a lease, consider making applicable BMPs mandatory as COAs.	**E-MLS-8: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-MLS-8: PHMA:** Conservation Measure: Same as Alternative B. **GHMA:** —. **RHMA:** —.

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Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
A-MLS-9: —.	**B-MLS-9: PHMA:** —. **GHMA:** —.	**C-MLS-9: PHMA:** Include conditions that require relinquishment of leases/authorizations if doing so will: 1) mitigate the impact of a proposed development, or 2) mitigate the unanticipated impacts of an approved development.	**D-MLS-9: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-MLS-9: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-MLS-9: PHMA:** —. **GHMA:** —. **RHMA:** —.
A-MLS-10: —.	**B-MLS-10: PHMA:** —. **GHMA:** —.	**C-MLS-10: PHMA:** No waivers will be issued.	**D-MLS-10: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-MLS-10: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-MLS-10: PHMA:** —. **GHMA:** —. **RHMA:** —.
A-MLS-11: —.	**B-MLS-11: PHMA:** —. **GHMA:** —.	**C-MLS-11: PHMA:** Any oil, gas, geothermal activity will be conducted to maximize avoidance of impacts, based on evolving scientific knowledge of impacts.	**D-MLS-11: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-MLS-11: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-MLS-11: PHMA:** —. **GHMA:** —. **RHMA:** —.
Unleased Federal Fluid Mineral Estate					
A-MLS-12: Fluid mineral leasing in GRSG habitat will be managed as shown in **Table 2-9**. Additional stipulations, such as CSU, TL, or NSO, may be attached to a lease if the standard lease stipulations do not adequately protect a sensitive resource. If a resource cannot be adequately protected through the use of stipulations, the BLM may close that area to leasing. The Forest Service may choose not to consent to leasing on the lands it administers. Most LUPs include a management action that prohibits surface disturbing or other disruptive within GRSG breeding and nesting habitat within a certain distance and between certain dates. The protect buffers around leks vary. Montana BLM: Current oil and gas stipulations listed in Table 5 pg. 44 of Dillon Field Office ROD/RMP.	**B-MLS-12: PHMA:** Close PHMA to fluid mineral leasing (see **Table 2-9**). Upon expiration or termination of existing leases, do not accept nominations/expressions of interest for parcels within PHMA. **GHMA:** Same as Alternative A.	**C-MLS-12: PHMA:** No new leases or permits will be issued (see **Table 2-9**).	**D-MLS-12: PHMA:** Areas of no and low potential for the discovery of fluid minerals are closed to leasing (see **Table 2-9**). Areas of moderate and high potential for the discovery of fluid minerals are open to leasing subject to CSU, timing restrictions in breeding and winter habitat, disturbance density not to exceed 1/640 acres, maximum 3% disturbance/section, NSO within 0.6 mile of occupied or undetermined status leks. Consider use of low profile structures/facilities. **IHMA:** Same as PHMA. **GHMA:** GHMA is open to leasing subject to timing limitations in breeding and winter habitat, 0.6 mile NSO near occupied and undetermined status leks, and implementation of appropriate BMPs.	**E-MLS-12: Idaho – CHZ:** Fluid mineral leases in CHZ and IHZ shall be subject to an NSO stipulation. The BLM State Director may waive the stipulation only in situations where the development will not accelerate and/or cause declines in GRSG populations within the relevant CA, based on the application of the following criteria-: a. The development cannot be reasonably accomplished outside of the management zone. b. Demonstrates the population trend for the species within the relevant Conservation Area is stable or increasing over a 3-year period. c. Demonstrates the individual or cumulative exceptions under this provision will not result in habitat fragmentation or other impacts causing a decline of the species within the relevant Conservation Area. d. Can be co-located with existing infrastructure to the maximum extent practicable. e. Shall mitigate unavoidable impacts	**F-MLS-12: PHMA:** Upon expiration or termination of existing leases, do not accept nominations/expressions of interest for parcels within PHMA (see **Table 2-9**). **GHMA:** Same as Alternative A. **RHMA:** Same as Alternative A.

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Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
Conservation actions also in Appendix X of Dillon ROD/RMP.				through an appropriate compensatory mitigation plan. f. If the NSO stipulation is waived, any proposed development would be subject to the following BMPs: 1. Evaluate the affected area in accordance with the process outlined in the State of Wyoming's Executive Order 2011-5. 2. In PHMA, surface disturbance will be limited to three percent of suitable habitat per an average of 640 acres. Development within IHZ will be limited to five percent of suitable habitat per an average of 640 acres. 3. NSO within one kilometer of the perimeter of occupied GRSG leks. This distance may be modified, provided it is supported by the best available science at the time the development undergoes site-specific environmental analysis. 4. Activity (production and maintenance activity exempted) will be allowed from July 1 to March 14 outside of the one kilometer perimeter of a lek where brood-rearing, nesting, and early brood-rearing habitat is present. 5. In areas solely used as winter concentration areas, exploration and development activity will be allowed March 14 to December 1. 6. Locate main roads used to transport production and/or waste products over 1.5 kilometers from the perimeter of occupied GRSG leks.	

Table 2-11
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Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
				Locate other roads used to provide facility site access and maintenance over 1.5 kilometers from the perimeter of occupied GRSG leks. Construct roads to minimum design standards needed for production activities. 7. New noise levels, at the perimeter of a lek, should not exceed 10dBA above ambient noise (existing activity included) from 6:00 PM to 8:00 AM during the initiation of breeding (March 1-May 15). Ambient noise level should be determined by measurements taken at the perimeter of a lek at sunrise. 8. Absent some demonstration to the contrary, the proposed sagebrush treatment associated with this activity will not reduce canopy cover to less than 15 percent. **Idaho – IHZ:** Same as Idaho – CHZ. **Idaho – GHZ:** —. **Montana Habitat:** Same as Alternative A. **Utah Habitat:** Unleased Areas within PHMA: PHMA would be designated as open to oil and gas leasing subject to controlled surface use stipulations (see list below) and the timing stipulations (see **Table 2-9**). Avoid activities (construction, vehicle noise, etc.) in the following seasons and habitats (specific time and distance determinations for seasonal stipulations would be based on site-specific conditions, in coordination with the local UDWR biologist):	

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
				• Winter habitat from Nov 15 – Mar 15 • Nesting and brood-rearing areas from Apr 1 – Aug 15 • On leks from Feb 15 – May 15 Where leasing/development is allowed within PHMA, Within PHMA, limit or ameliorate impacts from development through the use of the general stipulations identified in the GRSG section.	
A-MLS-13: Allow geophysical exploration in areas that are not closed to fluid mineral leasing.	**B-MLS-13: PHMA:** Allow geophysical exploration within PHMA to obtain exploratory information for areas outside of and adjacent to PHMA. Allow geophysical operations only by helicopter-portable drilling methods and in accordance with seasonal timing restrictions and/or other restrictions that may apply. **GHMA:** —.	**C-MLS-13: PHMA:** Same as Alternative B.	**D-MLS-13: PHMA:** Allow geophysical exploration subject to seasonal timing restrictions. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	**E-MLS-13: Idaho – Common to All Habitats:** —. **Utah Habitat:** Allow geophysical exploration within PHMA to obtain exploratory information. Geophysical exploration would be subject to the same seasonal and controlled surface use stipulations as would be applied to leases within PHMA.	**F-MLS-13: PHMA:** Allow geophysical exploration within PHMA to obtain exploratory information for areas outside of and adjacent to PHMA. Only allow geophysical operations by helicopter-portable drilling methods and in accordance with seasonal timing restrictions and/or other restrictions that may apply. Geophysical exploration shall be subject to seasonal restrictions that preclude activities in breeding, nesting, brood rearing and winter habitats during their season of use by GRSG. **GHMA:** —. **RHMA:** —.
A-MLS-14: —.	**B-MLS-14: PHMA:** —. **GHMA:** —.	**C-MLS-14: PHMA:** —.	**D-MLS-14: PHMA:** When a surface disturbing activity is proposed on a future fluid mineral lease, include in the NEPA analysis an alternative that sites the activity at the most distal part of the lease from any lek, or in an area that is less harmful to GRSG habitat. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	**E-MLS-14: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-MLS-14: PHMA:** —. **GHMA:** —. **RHMA:** —.

Table 2-11
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Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
Locatable Minerals					
A-MLM-1: Locatable minerals would be managed as shown in **Table 2-9**. Procedures and standards are established to ensure that operators and mining claimants meet their obligation to prevent undue or unnecessary degradation and to reclaim disturbed areas. The existing land use plans identify areas that are closed to mineral entry but are silent on mitigation measures to be taken in GRSG habitat. Montana BLM**:** 2,520 acres of PPH recommended for withdrawal, 320 acres of PGH recommended for withdrawal.	**B-MLM-1: PHMA:** Recommend withdrawal from mineral entry based on risk to the GRSG and its habitat from conflicting locatable mineral potential and development (see **Table 2-9**). Make any existing claims within the withdrawal area subject to validity exams or buy out. Include claims that have been subsequently determined to be null and void in the recommended withdrawal. In plans of operations required prior to any proposed surface disturbing activities, include the following: Additional, effective mitigation in perpetuity for conservation (In accordance with existing policy, WO IM 2008-204). Example: purchase private land and mineral rights or severed subsurface mineral rights within PHMA and deed to US Government). Consider seasonal restrictions if deemed effective. **GHMA:** Same as Alternative A.	**C-MLM-1: PHMA:** Same as Alternative B (see **Table 2-9**).	**D-MLM-1: PHMA:** Lands would remain open to locatable mineral entry (see **Table 2-9**). **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	**E-MLM-1: Idaho – Common to All Habitats:** Same as Alternative A (see **Table 2-9**). **Montana Habitat:** Same as Alternative A. **Utah Habitat:** Same as Alternative A.	**F-MLM-1: PHMA:** Same as Alternative B (see **Table 2-9**). **GHMA:** Same as Alternative A. **RHMA:** Same as Alternative A.
A-MLM-2: The existing land use plans do not identify mitigation measures to be taken in GRSG habitat.	**B-MLM-2: PHMA:** Make applicable BMPs (see **Appendix B**) mandatory as COAs within PHMA. **GHMA:** —.	**C-MLM-2: PHMA:** Same as Alternative B.	**D-MLM-2: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-MLM-2: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-MLM-2: PHMA:** Same as Alternative B. **GHMA:** —. **RHMA:** —.
A-MLM-3: The existing land use plans do not identify mitigation measures to be taken in GRSG habitat.	**B-MLM-3: PHMA:** —. **GHMA:** —.	**C-MLM-3: PHMA:** —.	**D-MLM-3: PHMA:** Ensure compliance with regulations in 43 CFR 3809 and 36 CFR 228 to prevent unnecessary and undue degradation (from WO IM 2012-044). **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	**E-MLM-3: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-MLM-3: PHMA:** No action. **GHMA:** —. **RHMA:** —.

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Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
Salable Minerals					
A-MSM-1: Salable minerals in GRSG habitat will be managed as shown in **Table 2-9**. Most BLM- and Forest Service-administered land in Idaho is available for consideration of mineral material disposal, however existing guidance in many of the LUPs in the planning area encourages the use of existing disposal sites until the material is depleted. Montana BLM: See Appendix N, SOP of Dillon ROD/RMP for Mineral material sites on pg. 169 of ROD/RMP. 30,300 acres of PPH are closed to mineral material disposal; 22,600 acres of PGH are closed to mineral material disposal.	**B-MSM-1: PHMA:** Close PHMA to mineral material sales (see **Table 2-9**). **GHMA:** Same as Alternative A.	**C-MSM-1: PHMA:** Same as Alternative B (see **Table 2-9**).	**D-MSM-1: PHMA:** No new authorizations would be approved within 3 km of an occupied lek (see **Table 2-9**). Newly authorized disposals would be subject to seasonal timing restrictions and BMPs, as appropriate. Sales from existing community pits within PHMA would be subject to seasonal timing restrictions. **IHMA:** Same as PHMA. **GHMA:** No new authorizations would be approved within 3 km of an occupied lek. Disposals would be subject to seasonal timing restrictions, as appropriate.	**E-MSM-1: Idaho – Common to All Habitats:** Same as Alternative A (see **Table 2-9**). **Montana Habitat:** Same as Alternative A. **Utah Habitat:** PHMA would be open to mineral materials (see Table **2-9**). Limit or ameliorate impacts through the use of the general stipulations identified in the GRSG section.	**F-MSM-1: PHMA:** Same as Alternative B (see **Table 2-9**). **GHMA:** Same as Alternative A. **RHMA:** Same as Alternative A.
A-MSM-2: —.	**B-MSM-2: PHMA:** Restore salable mineral pits no longer in use to meet GRSG habitat conservation objectives. **GHMA:** —.	**C-MSM-2: PHMA:** Same as Alternative B.	**D-MSM-2: PHMA:** Restore salable mineral pits no longer in use to meet GRSG habitat conservation objectives. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	**E-MSM-2: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-MSM-2: PHMA:** Same as Alternative B. **GHMA:** —. **RHMA:** —.
A-MSM-3: —.	**B-MSM-3: PHMA:** —. **GHMA:** —.	**C-MSM-3: PHMA:** —.	**D-MSM-3: PHMA:** Reclamation bonding will be required on new authorizations for mineral material sales in PHMA (this would not apply to free use permits issued to a government entity such as a county road district, but would apply to non-profit entities). **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	**E-MSM-3: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-MSM-3: PHMA:** —. **GHMA:** —. **RHMA:** —.

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Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
Non-Energy Leasable Minerals					
A-MNL-1: Manage non-energy leasable minerals on federal lands and non-federal lands with federal mineral interests within GRSG habitat as shown in **Table 2-9**. Montana BLM: All BLM-administered lands in Dillon Field Office are available for development of leasable solid minerals except 124,200 acres of Bear Trap Wilderness and 9 WSA's (see ROD/RMP pg. 44).	**B-MNL-1: PHMA:** Close PHMA to non-energy leasable mineral leasing (see **Table 2-9**). This includes not permitting any new leases to expand an existing mine. **GHMA:** Same as Alternative A.	**C-MNL-1: PHMA:** Same as Alternative B (see **Table 2-9**).	**D-MNL-1: PHMA:** Future leasing and prospecting of non-energy minerals in PHMA is closed (see **Table 2-9**). Exceptions may be made for lease modifications and fringe leases where valid existing rights may be affected. Consider offsite mitigation, CSU and timing restrictions, as appropriate. **IHMA:** Same as PHMA. **GHMA:** Lands are available for leasing subject to applicable timing restrictions (seasonal and daily) for exploration activities and initial mine development, subject to mandatory lease stipulations, timing restrictions and CSU. Consider offsite mitigation opportunities.	**E-MNL-1: Idaho – Common to All Habitats:** Same as Alternative A (see **Table 2-9**). **Montana Habitat:** Same as Alternative A. **Utah Habitat:** Manage non-energy leasable minerals on federal lands and non-federal lands with federal mineral interests within GRSG habitat as shown in **Table 2-9**. Consider leasing federal lands and non-federal lands with federal mineral interests within PHMA for non-energy leasable minerals. Limit or ameliorate impacts from mineral leasing and development through the use of the general stipulations identified in the GRSG section. Recognize that surface vents associated with underground mining are essential for human safety, and must be permitted under the provisions of this alternative. Commercial prospecting activities associated with non-energy leasable minerals would be required to comply with the same stipulations identified for leasing and development, above.	**F-MNL-1: PHMA:** Same as Alternative B (see **Table 2-9**). **GHMA:** Same as Alternative A. **RHMA:** Same as Alternative A.
A-MNL-2: Individual land use plans may contain an appendix that outlines BMPs that are applied on a case-by-case basis. The 2011 Pocatello RMP establishes operational standards and guidelines for reclamation plans; identifies interagency standards for contaminant levels in vegetation, surface, and groundwater; and implements best management practices to control sedimentation and	**B-MNL-2: PHMA:** For existing non-energy leasable mineral leases in PHMA, in addition to the solid minerals BMPs (**Appendix B**), follow the same BMPs applied to Fluid Minerals (**Appendix B**), when wells are used for solution mining. **GHMA:** —.	**C-MNL-2: PHMA:** Same as Alternative B.	**D-MNL-2: PHMA:** For existing undeveloped non-energy mineral leases, require timing restrictions (seasonal and daily) when exploration activities or initial mine development is proposed, as appropriate. Also require appropriate BMPs (**Appendix B**) as COAs to the mine plan, and require restoration of habitat or off-site mitigation, if on-site restoration is not feasible. **IHMA:** Same as PHMA.	**E-MNL-2: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-MNL-2: PHMA:** Same as Alternative B. **GHMA:** —. **RHMA:** —.

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
contaminant release.			**GHMA:** Same as PHMA.		
Mineral Split Estate					
A-MSE–1: Under current management, there is no designated GRSG habitat. Decisions included in current management plans apply to both federal surface and mineral estate.	**B-MSE–1: PHMA:** Where the federal government owns the mineral estate in PHMA, and the surface is in non-federal ownership, apply the conservation measures applied on BLM- and Forest Service-administered lands. **GHMA:** —.	**C-MSE–1: PHMA:** Same as Alternative B.	**D-MSE–1: PHMA:** Where the federal government owns the mineral estate in PHMA and the surface is in non-federal ownership, apply stipulations, conservation measures, and design features consistent with those applied to BLM- and Forest Service-administered lands in PHMA in the area. **IHMA:** Same as PHMA. **GHMA:** Same as PHMA.	**E-MSE–1: Idaho – Common to All Habitats:** —. **Utah Habitat:** Because the surface estate is the key to conservation of habitat, the GRSG habitat has been mapped according to surface ownership. However, implementation of his alternative will have to accommodate the dominant nature of the mineral estate, and react accordingly.	**F-MSE–1: PHMA:** Same as Alternative B. **GHMA:** —. **RHMA:** —.
A-MSE–2: —. Under current management, there is no designated GRSG habitat. Decisions included in current management plans apply to both federal surface and mineral estate. Individual land use plans may contain an appendix that outlines BMPs that are applied on a case-by-case basis.	**B-MSE–2: PHMA:** Where the federal government owns the surface, and the mineral estate is in non-federal ownership in PHMA, apply appropriate Fluid Mineral RDFs (**Appendix B**) to surface development. **GHMA:** —.	**C-MSE–2: PHMA:** Same as Alternative B.	**D-MSE–2: PHMA:** Where the federal government owns the surface, and the mineral estate is in non-federal ownership in PHMA, recommend to the state regulatory entity to apply a timing restriction stipulation, COAs, and restrict activities within 3 km (1.86 miles) of an occupied lek, when concurring to the approval of authorizations for mineral-related surface disturbance on lands in PHMA. **IHMA:** Where the federal government owns the surface, and the mineral estate is in non-federal ownership in IHMA, recommend to the state regulatory agency to apply a timing restriction stipulation and restrict activities within 3 km (1.86 miles) of an occupied lek, when concurring to the approval of authorizations for mineral-related surface disturbance on lands in IHMA. **GHMA:** Recommend to the state regulatory agency to apply a timing restriction stipulation and restrict activities within 3 km (1.86 miles) of an occupied lek, when concurring to the	**E-MSE–2: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-MSE–2: PHMA:** Same as Alternative B. **GHMA:** —. **RHMA:** —.

Table 2-11
Management Actions by Alternative

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F
			approval of authorizations for mineral-related surface disturbance on lands in GHMA.		
ACECs					
A-SD-1: No existing ACECs include GRSG as a relevant and important value. The acres of existing ACECs are shown in **Table 2-9**. Montana BLM: No existing ACECs include GRSG as a relevant and important value. Maintain designation of existing ACECs, including 35,361 acres overlapping PPH and 1,476 acres overlapping PGH.	**B-SD-1: PHMA:** Same as Alternative A (see **Table 2-9**). **GHMA:** Same as Alternative A.	**C-SD-1: PHMA:** Designate and manage ACECs (BLM) and GRSG Zoological Areas (Forest Service) to function as sagebrush reserves to conserve GRSG (see **Table 2-9**).	**D-SD-1: PHMA:** Same as Alternative A (see **Table 2-9**). **IHMA:** Same as Alternative A. **GHMA:** Same as Alternative A.	**E-SD-1: Idaho – Common to All Habitats:** Same as Alternative A (see **Table 2-9**). **Montana Habitat:** Same as Alternative A. **Utah Habitat:** Same as Alternative A.	**F-SD-1, Sub-alternative 1: PHMA:** Designate and manage all PPH as ACECs (BLM) and GRSG Zoological Areas (Forest Service) to function as sagebrush reserves to conserve GRSG (see **Table 2-9**). **F-SD-1, Sub-alternative 2: PHMA:** Designate and manage a system of ACECs (BLM) and GRSG Zoological Areas (Forest Service) to function as sagebrush reserves to conserve GRSG (see **Table 2-9**). This area is a subset of the acreage under sub-alternative 1.
A-SD-2: —.	**B-SD-2: PHMA:** —. **GHMA:** —.	**C-SD-2: PHMA:** Industrial solar projects will be prohibited in ACECs and occupied habitats.	**D-SD-2: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-SD-2: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-SD-2: PHMA:** —. **GHMA:** —. **RHMA:** —.
A-SD-3: —.	**B-SD-3: PHMA:** —. **GHMA:** —.	**C-SD-3: PHMA:** New transmission corridors, ROWs for corridors (oil, gas, water/aquifer mining), and communication or other towers are prohibited in ACECs and occupied habitats.	**D-SD-3: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-SD-3: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-SD-3: PHMA:** —. **GHMA:** —. **RHMA:** —.
A-SD-4: —.	**B-SD-4: PHMA:** —. **GHMA:** —.	**C-SD-4: PHMA:** BLM and Forest Service will strive to acquire important private lands in BLM-designated ACECs and Forest Service Sage-Grouse Special Areas.	**D-SD-4: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-SD-4: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-SD-4: PHMA:** —. **GHMA:** —. **RHMA:** —.
A-SD-5: —.	**B-SD-5: PHMA:** —. **GHMA:** —.	**C-SD-5: PHMA:** Existing designated corridors in BLM ACECs and Forest Service Special Areas may be accessed for maintenance.	**D-SD-5: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-SD-5: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-SD-5: PHMA:** —. **GHMA:** —. **RHMA:** —.
A-SD-6: —.	**B-SD-6: PHMA:** —. **GHMA:** —.	**C-SD-6: PHMA:** Agencies will explore options to amend, cancel, or buy out leases in ACECs and occupied habitats.	**D-SD-6: PHMA:** —. **IHMA:** —. **GHMA:** —.	**E-SD-6: Idaho – Common to All Habitats:** —. **Utah Habitat:** —.	**F-SD-6: PHMA:** —. **GHMA:** —. **RHMA:** —.

2.11 Issues and/or Alternatives Eliminated from Detailed Analysis

The following alternatives were considered but were not carried forward for detailed analysis because (1) they would not fulfill the requirements of FLPMA, NFMA 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. FLPMA requires the BLM and Forest Service to manage the public lands and resources in accordance with the principles of multiple use and sustained yield.

2.11.1 USFWS-Listing Alternative

Comments provided through scoping requested analysis of an alternative based on the assumption that GRSG become listed under the ESA. This is outside the scope; the purpose and need of this plan amendment is to address inadequacy of regulatory mechanisms that were identified as one of the listing factors for GRSG in the USFWS finding on the petition to list GRSG. The USFWS identified the principal regulatory mechanism for the BLM and Forest Service as conservation measures in LUPs. In response to the USFWS findings, as well as the BLM and Forest Service's requirement to manage sensitive species, the BLM and Forest Service are preparing plan amendments with associated EISs to evaluate the incorporation of conservation measures in LUPs for GRSG. Because the purpose of the LUP amendments is to identify and potentially incorporate appropriate conservation measures in LUPs to conserve, enhance and/or restore GRSG habitat by reducing, eliminating, or minimizing threats to that habitat, the alternatives in this EIS, therefore, focus on those conservation measures that can be incorporated into the LUPs. Although the potential listing of GRSG would also include conservation measures identified by the USFWS, those conservation measures are not known at this time. Therefore, an alternative that includes USFWS-listing with associated conservation measures for GRSG is not being analyzed in detail.

2.11.2 Elimination of Recreational Hunting

Neither the BLM nor the Forest Service regulate hunting activities on federal lands; this responsibility resides with IDFG, MFWP, and Utah Division of Wildlife Resources. IDFG, MFWP, and the Utah Division of Wildlife Resources manage wildlife within Idaho, Montana, and Utah, respectively, while the BLM and Forest Service manage wildlife habitat. Recreational hunting of GRSG, including hunting seasons, is directed by the relevant state conservation plans for GRSG and criteria therein.

2.11.3 Predation

Commenters stated that predator control was needed to protect GRSG from predation. IDFG and MFWP possess primary responsibility for managing the wildlife within Idaho and Montana, respectively, while the BLM and Forest Service are responsible for managing habitat. Consistent with an MOU between the BLM and the USDA, APHIS-Wildlife Services, the BLM and Forest Service would continue to work with IDFG and MFWP to meet state wildlife population objectives. Predator control is allowed on BLM-administered lands and is regulated by IDFG and MFWP. Avian predators such as ravens and birds of prey are protected under the Migratory Bird Treaty Act; eagles are protected under the Bald

and Golden Eagle Act. Control of these avian predators is under the jurisdiction of the USFWS. Therefore, these comments relate to state- and federal-regulated actions that are outside of BLM or Forest Service authority and are outside the scope of the LUPA/EIS. The BLM and Forest Service will continue to work with agencies to address current predation of GRSG. The BLM and Forest Service-administered lands in the planning area will remain open to predator control under state laws.

2.11.4 Close All or Portions of PHMA or GHMA to Off-Highway Vehicle Use

Through this LUPA/EIS, the BLM has identified, but has not studied in detail, an alternative to designate new area closures for OHV use within PHMA and GHMA. The BLM has analyzed alternatives to designate all areas within PHMAs and GHMAs as "limited" to existing roads and trails for OHV use, if not already closed by existing planning efforts. Subsequent Travel Management Plans will be developed to identify specific routes within limited areas that will be closed in order to protect and conserve GRSG and its habitat. The BLM and Forest Service have analyzed existing OHV area closures within PHMAs and GHMAs as part of the No Action alternative and as a decision common to all alternatives. The following provides the BLM and Forest Service's rationale:

1. There are areas within PHMAs and GHMAs that are currently closed to OHV use (e.g., Wilderness Areas). While these areas were closed to OHV use for purposes other than GRSG conservation, the BLM and Forest Service will analyze the impacts that these closures have on protection of GRSG and GRSG habitat. These closures are analyzed in the No Action alternative and will be carried forward across all alternatives in this EIS/Amendment.
2. This GRSG Amendment is considering eliminating cross-country travel by analyzing limiting travel to existing roads and trails, as no new areas will be designated as open to OHV use. In at least one alternative, all existing areas that are designated as open will become limited to existing roads and trails.
3. Route inventories in PPH and PGH are currently underway based on coordinated efforts between the BLM, Forest Service, and USFWS staff. Once the inventories are complete, the BLM and Forest Service will initiate travel and transportation planning, which will undergo a NEPA analysis and will include public involvement. Through subsequent Travel and Transportation planning, the BLM will identify and consider closing specific existing routes that may be affecting GRSG habitat. Any decision to close routes to OHV use in the Travel and Transportation plans would be based on consideration of the habitat objectives and the overall goal of conserving, enhancing, or restoring sagebrush ecosystems upon which GRSG populations depend.

   In addition, during the District or Field Office plan revision/amendment process, travel and transportation area decisions (open, limited or closed) would be revisited at the local level based on existing inventory information associated with a myriad of resources and resource uses.

4. During the public scoping period for this LUPA, there were no specific areas identified for closure to carry forward for detailed analysis.

2.11.5 Consideration of Coal Mining

According to 43 CFR 3420.1-4(e), the BLM can only lease coal in areas identified as having development potential. While there are several historic coal developments, including Teton Basin and Goose Creek, to date, no areas have been identified with economic reserves to support future leasing analysis. Site-specific environmental analysis and a plan amendment would be required to lease for coal or oil shale. There are currently no regulations governing the leasing of oil shale. Any leases would be issued under the authority of 30 USC 241, which authorizes the Secretary of the Interior to lease deposits of oil shale. For these reasons, coal leasing and oil shale development are not addressed in this planning effort.

2.12 Incorporated in Whole or In Part

2.12.1 Custer County and Owyhee County Sage-Grouse Plans

Both Custer and Owyhee Counties prepared and submitted county approved GRSG Management Plans to the BLM and Forest Service for consideration and inclusion in the Sub-Regional EIS Amendment effort. These plans were developed and approved in 2013. Custer County consulted several sage-grouse plans during the development of the Custer County Sage-Grouse Comprehensive Plan, including the Challis Local Working Group Plan (2007). During the initial development of the range of alternatives considered in detail the BLM and Forest Service considered the Challis (2007) and Owyhee (2004; revised 2013) Local Working Group Plans. Both Counties' Plans are limited in scope to the specific county areas they address and do not represent a complete management scenario for all of the BLM-administered and National Forest System areas within the sub-region. The plans, their objectives, GRSG habitat mapping and management actions were each evaluated to determine whether the components included in those plans augmented or provided direction outside of the range of detailed alternatives. The results of this analysis showed the Custer County plan objectives and management actions to be consistent with Alternative A. The Custer County mapping is similar to the mapping of Alternative C, with only one habitat category. The extent of identified habitat, based on the LWG Key Habitat map, is most similar to Alternative E and, while within the range of alternatives, it is not exactly reflected within any of the alternatives. The Owyhee County Plan is consistent with Alternative A for mapping, objectives and most management actions. Several management actions identified in the Owyhee County plan are included as parts of Alternatives B, C, D, E and F. Since the direction in these plans is already included within the existing range of alternatives these county plans were not included as additional unique alternatives for detailed analysis. **Appendix R** contains an evaluation of each of these plans and the management actions within those plans in relation to the existing Custer and Owyhee land use plans and the alternatives analyzed in detail.

2.12.2 Greater Yellowstone Coalition ACECs and Audubon Suggested Management Actions

During the scoping period the Greater Yellowstone Coalition and Audubon Society provided management actions that were considered for analysis. The Greater Yellowstone

Coalition proposed several new areas of critical environmental concern that overlap other, broader ACEC proposals that are included for analysis within Alternative F. The Audubon Society also provided management actions that were similar or effectively the same as proposals and management actions included in Alternative B, C or F. These submissions are contained within the existing range of alternatives and will be considered in detail.

2.12.3 Broad-scale Increased Grazing

During scoping and the alternatives development process, a number of individuals and cooperating agencies requested that the BLM and Forest Service consider an alternative that would increase the amount of livestock grazing across all GRSG habitat. This recommendation was based on the supposition that there is a correlation between declines in GRSG and declines in the amount of livestock grazing on public BLM-administered and National Forest System lands. While this alternative was considered but eliminated from detailed analysis for the following reasons, site specific, targeted grazing opportunities are included as parts of Alternatives D and E:

- Alternatives being considered in this LUPA/EIS are science-based conservation measures that would meet the purpose and need for the project, which is to identify and incorporate appropriate conservation measures in LUPs to conserve, enhance, and restore GRSG habitat by reducing, eliminating, or minimizing threats to that habitat. There are currently no science-based studies that demonstrate that increased livestock grazing on public lands would enhance or restore GRSG habitat or maintain or increase GRSG abundance and distribution.
- Actual livestock use within GRSG habitat on BLM-administered lands in the Idaho and Southwestern Montana Sub-region is generally less than permitted use. Actual livestock use in many areas is below permitted use due to restrictions placed on permittees and annual fluctuations in permittee operations. Although no alternative specifically considers an increase in livestock grazing, under all alternatives except Alternative C, the BLM and Forest Service would retain flexibility to consider increases in livestock grazing on a case-by-case basis. Increases would be dependent on permittee interest and rangeland conditions. Increases in livestock grazing may be facilitated in GRSG habitat if there are changes in management, such as changes to existing grazing management systems, that optimize range conditions.

2.13 Summary Comparison of Environmental Consequences

Table 2-12, Comparison of Alleviated Threats to GRSG in the Idaho and Southwest Montana Sub-Region and Table 2-13, Summary of Environmental Consequences, present a comparison summary of impacts from management actions proposed for the management alternatives. **Chapter 4** provides a more detailed impact analysis.

Table 2-12
Comparison of Alleviated Threats to GRSG in the Idaho and Southwest Montana Sub-Region

	Alternative A	Alternative B	Alternative C	Alternative D	Alternative E[1]	Alternative F	Proposed Plan
Fire, Fuels Treatments including Prescribed Fire							
	Varied treatment options – no standard.	In PHMA, there would be no treatments in winter habitat, no prescribed fire in areas with less than 12 inches precipitation, and all projects would use native seeds. GRSG habitat would be a high priority for wildfire suppression efforts and BMPs in IM 2013-128 would be followed. Use of native seed would be required and fuels treatments would be designed for long-term success. Development of a wildfire suppression strategy with regard to GRSG habitat would occur post-decision.	Some actions similar to Alternative B, though provides less guidance on fire suppression and fuels management. Relies on passive restoration efforts to indirectly reduce the risk of wildfires. Restores areas affected by anthropogenic disturbance outside the historic range of viability, such as nonnative seeding, fences, livestock grazing.	Similar to Alternative B with additional fuels management and suppression guidance.	Idaho – Provides guidance to reduce wildfire effects through development of a response time and water availability analysis, along with a consistent wildfire suppression plan and a fuels break strategy. Utah - Prescribed fire would only be considered at high elevations. Statewide fire agency agreements would be implemented. Loss of winter habitat would be limited to approximately 20 percent.	Same as Alternative B.	Similar to Alternatives B and D. In addition, recommendations from the Wildfire, Invasive Annual Grasses and Conifer Expansion Assessment (Appendix D) will direct field offices to prioritize landscapes for fire prevention and fuels management within GRSG habitat to minimize the risk of wildfire in PHMA and IHMA. Prescribed fire in GRSG habitat could be permitted if analysis showed a net benefit to GRSG. Adaptive management would be used to improve management in GRSG habitat.
Summary	All action alternatives will decrease habitat loss from prescribed fire and wildfire by limiting prescribed fire and prioritizing wildfire suppression efforts in the sub-region, which respond to the Conservation Objectives Team report objectives. Alternatives B, D, E, F and the Proposed Plan would also try to lessen the future probability of large fires in GRSG by putting in fire breaks which would further benefit GRSG. Alternatives B, C, D, F and the Proposed Plan all move to lessen habitat loss from treatments within winter habitat to varying degrees, which is consistent with the objective to retain sagebrush. Alternative C is passive toward fire and fuels management emphasizing natural restorative processes following a reduction in anthropogenic disturbance. In Alternative C, reduction in the threat of wildfire would occur over the long term from overall improvement of habitat. The Proposed Plan would allow prescribed fire if net benefit for GRSG, and would use an adaptive management approach.						
Invasive Species							
	Various control measures – no standard. Emergency Stabilization and Rehabilitation plans and strategic wildland fire suppression would be implemented. Invasive annuals would continue to be introduced and spread as a result of ongoing	Invasive weeds would be controlled, suppressed, and eradicated. Limits anthropogenic disturbance to 3 percent. This alternative would also require native seed for restoration efforts, the use of BMPs for fire and fuels treatments, and invasive species prevention measures.	Relies on passive restoration efforts to indirectly reduce the risk of invasive annuals. Minimizes use of herbicides and emphasizes mechanical treatment methods. Reduces spread of invasive annuals by eliminating livestock grazing.	Similar to Alternative B with the additional requirement that noxious weeds and invasive species would be treated and monitored for at least 3 years after project construction.	Idaho - Similar to Alternative D with the additional requirement to treat and monitor invasive species associated with existing range improvements. Utah – Guidance to aggressively respond to new infestations and prevent invasive spread after wildfire.	Similar to Alternative B. Would also prioritize restoring sagebrush steppe invaded by nonnative plants. Limits anthropogenic disturbance to one instance per section and a cumulative 3 percent disturbance cap.	Similar to Alternative D with an adaptive management approach, enhanced monitoring and mitigation.

Table 2-12
Comparison of Alleviated Threats to GRSG in the Idaho and Southwest Montana Sub-Region

	Alternative A	Alternative B	Alternative C	Alternative D	Alternative E[1]	Alternative F	Proposed Plan
	vehicle traffic in and out of the planning area, recreational activities, wildlife, improper livestock grazing, fire, and surface-disturbing activities (energy and infrastructure).						
Summary	All action alternatives respond to the COT report objectives by implementing actions to maintain and restore healthy sagebrush communities. Alternative D provides the lowest surface disturbance threshold (no unmitigated loss of habitat), which would reduce opportunities for incursion of nonnative species. Alternatives B, C, F and the Proposed Plan propose 3 percent thresholds in PHMA. Alternatives B, D, E, F and the Proposed Plan prioritize restoration of areas with invasive weed infestations and emphasize restoration, which would further reduce habitat degradation. Alternative C prioritizes restoration of invasive infestations but limits restoration to natural processes following a reduction in anthropogenic uses (livestock removal, fencing and roads infrastructure removal).						
Pinyon-Juniper Encroachment							
	Varying degrees of habitat objectives identified for maintenance, improvement, and restoration of sagebrush communities – no standard.	Does not provide specific guidance regarding pinyon-juniper encroachment. Would prioritize restoration in seasonal habitats.	Alternative C prioritizes restoration in seasonal habitats as in Alternative B; however, local native plant ecotype seeds and seedlings would be used to restore treated habitats. It could take longer for these habitats to recover and could be a loss of habitat for a certain amount of time. In addition, passive restoration is preferred for restoring these areas over active restoration methods.	Would prioritize projects that address conifer encroachment into important GRSG habitats. Conifer encroachment areas would be considered as areas to manage wildfire for resource benefit.	Idaho - Would prioritize conifer removal in CHZ and IHZ. Utah – Would aggressively remove encroaching conifers and other plant species to expand GRSG habitat where possible.	Same as Alternative B.	Similar to Alternative D with an adaptive management approach, enhanced monitoring and mitigation.
Summary	All action alternatives except Alternative C would respond to the pinyon-juniper objective in the Conservation Objectives Team report. The objective is to remove pinyon-juniper from areas of sagebrush that are most likely to support GRSG at a rate that is at least equal to rate of pinyon-juniper incursion. Alternatives D and E directly address juniper removal and prioritization and the Proposed Plan includes enhanced monitoring and mitigation. Alternatives B, C, and F talk more generally about restoration and thus may not provide the greatest assurance for improvement of GRSG habitat.						
Livestock Grazing, Structure Range Improvements and Wild Horses							
	There is no set direction to specifically consider GRSG in grazing decisions. Structural range improvements are considered on a case-by-case basis while maintaining rangeland	Same open/closed acreages as Alternative A. Rangeland would be managed for vegetation composition and structure consistent with ecological site potential and within the reference state to achieve GRSG	Alternative C would make public lands unavailable to livestock grazing. This could benefit GSRG by improving ground cover, leaving more grass and forbs. However, there could be possible increases in wildfire and invasive species risks.	Same open/closed acreages as Alternative A. PHMA would be the highest priority for BLM land health assessments. Desired cover percentages and heights for sagebrush, grasses, and forbs in seasonal	Idaho - Same open/closed acreages as Alternative A. Similar to Alternative D with emphasis on adaptive management. Wild horse and burro management would be the same as Alternative A. Utah - Livestock grazing would	Alternative F requires a 25% reduction in livestock grazing. Other management would be similar to Alternative B. Wild horse and burro management would be the same as Alternative B.	Similar to Alternative D with enhanced monitoring and mitigation. In SFAs, grazing permit review, rangeland health assessment and HMA review would be prioritized in GRSG habitat.

Table 2-12
Comparison of Alleviated Threats to GRSG in the Idaho and Southwest Montana Sub-Region

	Alternative A	Alternative B	Alternative C	Alternative D	Alternative E[1]	Alternative F	Proposed Plan
	health. Wild horses would be managed within appropriate management levels.	seasonal habitat objectives in Connelly et al. 2000 and Hagen et al. 2007. GRSG would benefit by having the structural components needed for all of their life cycle needs. Structural range improvements must conserve, maintain, enhance or restore GRSG habitat through improved grazing management system. Water development would need to be neutral or beneficial to GRSG. Wild horses would be managed within appropriate management levels and the evaluation of AMLs would be prioritized in PHMA. Herd Management Area Plans would be developed for all HMAs.	Wild horse and burro management would be the same as Alternative A.	habitats will follow habitat guidelines in the habitat assessment framework (Stiver et al. 2010). Any new structural range improvements would be designed to maintain, enhance, or restore GRSG habitat through an improved grazing management system relative to GRSG objectives. Existing structural range improvements and supplements would be reevaluated in PHMA and IHMA. New water developments within PHMA would be limited and need have a neutral effect or be beneficial to PHMA. Wild horse and burro management would be the same as Alternative B with the additional requirement that HMAs would not be expanded in PHMA.	continue using BMPs. Repeated, annual heavy use during critical growing seasons and of season-long grazing on wet meadows and riparian areas would be avoided. Water developments would enhance or maintain GRSG mesic habitat. Range improvement structures would avoid leks. Wild horse and burro management would be the same as Alternative A.		
Summary	All action alternatives would manage grazing to better meet the ecological conditions that maintain or restore healthy sagebrush shrub and native perennial grass and forb communities and conserve the essential habitat components for GRSG (e.g., shrub cover, nesting cover), which responds to the Conservation Objectives Team report objective. All action alternatives emphasize GRSG in decision making for livestock grazing; however, Alternative C would remove grazing from PHMA and Alternative F would reduce grazing. Grazing management would be similar between Alternatives B, D, E, and the Proposed Plan with slightly different guidance or priorities. For wild horses there would be a focus on GRSG habitat and priority for gathers in GRSG habitat for Alternatives B, D, F and the Proposed Plan. These alternatives include evaluation of HMAs and Wild Horse Territories to consider adjustments in AML to meet GRSG habitat standards. Alternatives C and E do not directly address WHB.						
Infrastructure - Right-of-way							
	Various areas managed as ROW avoidance and exclusion, but most are not specific to protect GRSG and GRSG habitat.	In addition to exclusion and avoidance in Alternative A, all PHMA would be managed as ROW exclusion and all GHMA as ROW avoidance. Emphasizes opportunities for co-location within	All GRSG habitat would be managed as ROW exclusion. Provides for review of all existing transmission lines to amend ROWs to require features that enhance GRSG habitat security.	In addition to exclusion and avoidance in Alternative A, all GRSG habitat would be managed as ROW avoidance. New authorizations would not be allowed in PHMA for transmission facilities greater than 50 kV, mineral and energy development, roads,	CHZ (Idaho) and PHMA (Utah) would be ROW avoidance with limited exceptions.	Same as Alternative B.	Similar to Alternative D, with PHMA and IHMA managed as avoidance areas for ROWs, and GHMA open (avoidance for high-voltage ROWs in Montana).

Table 2-12
Comparison of Alleviated Threats to GRSG in the Idaho and Southwest Montana Sub-Region

	Alternative A	Alternative B	Alternative C	Alternative D	Alternative E[1]	Alternative F	Proposed Plan
		designated corridors and within the footprint of existing disturbance. Recommends removing, burying, or modifying existing power lines within priority habitat		airports, and associated ancillary facilities.			
Summary	All alternatives respond to the conservation objective for infrastructure identified in the Conservation Objectives Team report, which is to avoid development within priority areas for conservation. Alternatives B, C, D, and F all close certain areas to new ROWs. The difference between these alternatives is the amount of GRSG habitat that would be closed and the type of ROWs that would be prohibited or restricted. Alternative C closes all occupied GRSG habitat to new ROWs and is the most restrictive. Alternatives B and F include the same restrictions as Alternative C; however, these restrictions would be applied to a smaller geographic area. Alternative D and the Proposed Plan would provide fewer restrictions, as all GRSG habitat would be ROW avoidance with exclusions for certain ROWs in PHMA. Also under Alternative E, some GRSG habitat would be managed as ROW avoidance. This may eliminate habitat loss, degradation, and fragmentation in important seasonal habitats. However, because there are few if any exclusions under this alternative, there is less assurance of protection for GRSG on federal land. All alternatives seek to avoid conflict with GRSG habitat, to utilize existing corridors, and to co-locate within existing development footprints.						
Infrastructure – Roads							
	Some GRSG habitat on BLM-administered land is open to cross-country OHV travel. All Forest Service-administered lands are limited to designated routes. Road ROWs would be issued on a case-by-case basis.	In addition to current limited and closed designations in the No Action alternative, all PHMA would be designated as limited to existing routes pending travel management planning and roads designation. PHMA would be ROW exclusion areas for road ROWs and GHMA would be ROW exclusion areas for road ROWs. Provides guidance for restricting new road construction and mitigation where roads are allowed under prior existing rights. Provides for road closure and rehabilitation. Provides for seasonal road closures. GHMA would be designated as per the	Same as Alternative B. PHMA would be ROW exclusion areas for road ROWs.	All GRSG habitat would be limited to existing routes pending travel management planning and roads designation. PHMA would be ROW exclusion areas for road ROWs. All other GRSG management areas would be ROW avoidance areas for road ROWs. The emphasis of the comprehensive travel and transportation planning would be placed on having a neutral or positive effect on GRSG habitat. Would prioritize restoration of linear disturbances.	Idaho - All GRSG habitat would be limited to existing routes pending travel management planning and roads designation. CHZ (Idaho) and PHMA (Utah) would be ROW avoidance with limited exceptions for road ROWs. Utah: PHMA with nesting and winter habitat that do not have designated routes in a Travel Management Plan would be managed at least as limited to existing routes.	Same as Alternative B, except decisions would be applied to all occupied GRSG habitat. Also no new routes would be allowed within 4 miles of a lek.	Similar to Alternative E, and would prioritize travel planning to designate open and closed routes, similar to Alternative D.

Table 2-12
Comparison of Alleviated Threats to GRSG in the Idaho and Southwest Montana Sub-Region

	Alternative A	Alternative B	Alternative C	Alternative D	Alternative E[1]	Alternative F	Proposed Plan
		travel management plan in the current planning document.					
Summary	All alternatives respond to the Conservation Objectives Team report objective to varying degrees. All alternatives would limit OHV travel to existing or designated routes in certain areas, which would eliminate unauthorized route creation. The difference between alternatives is the amount of GRSG habitat that would be changed from an open to a limited category. Alternative A would have the fewest acres limited to existing roads and trails, followed by Alternatives B and F. Under Alternatives C, D, E, and the Proposed Plan all GRSG habitat would be limited to existing roads and trails.						
Infrastructure - Fences							
	No decisions	Fences would be removed, modified, or marked in high risk areas within PHMA.	No decisions	Fences would be designed and located to minimize the potential for GRSG strikes. Fences would be priorities for removal, modification, or marking in PHMA and IHMA in areas of moderate or high collision risk.	Idaho – Fences would be marked in areas of moderate to high fence densities. Utah – Fences would not be located on or adjacent to leks where bird collisions would be expected to occur.	Same as Alternative B.	Same as Alternative D.
Summary	Some of the alternatives respond to the intent of the Conservation Objectives Team report objectives, which is to minimize impacts from fences on GRSG. Alternatives B, D, and F would consider more of the conservation options identified in the Conservation Objectives Team report. For example, marking fences would decrease bird/fence collisions, and removal of unneeded fences would decrease collisions and opportunities for avian predation. Alternative E in Idaho would only include marking fences.						
Energy Development (Non-renewable)							
	Most areas would be open to energy development. Various stipulations apply, with a range of protective buffers around leks. In general, recently completed plans include a larger protective buffer. Recently completed plans also include a management action that prohibits surface disturbing activities or disruptive activities during certain dates in seasonal habitats.	PHMA would be closed to new leasing, though development of existing leases in PHMA would still cause fragmentation, direct and indirect habitat loss, disruption of GRSG, and degradation of habitat. Required design features would reduce the effects of development. Disturbance would be clustered on the landscape and would be limited to 3 percent per section on average. Seasonal restrictions would decrease seasonal disruption to GRSG populations.	Same as Alternative B, except a larger geographic area would be closed to leasing.	Low potential and no known potential areas would be closed to leasing in PHMA and IHMA. Moderate and high potential areas in PHMA and IHMA would be open to leasing subject to CSU, timing restrictions in breeding and winter habitat, disturbance density not to exceed 1/640 acres, maximum 3% disturbance/section, NSO within 0.6 mile of occupied or undetermined status leks. GHMA would be open to leasing subject to timing limitations in breeding and winter habitat, 0.6 mile NSO near occupied and undetermined status leks, and implementation of	Idaho – Same as Alternative A. Utah – PHMA would be open to leasing subject to CSU and TL stipulations.	Same as Alternative B.	Similar to Alternative D, but BMPS/RDFs would be required on new leases. In SFAs, habitat would be NSO without waiver, modification, or exception. A three percent disturbance cap would apply in PHMA to minimize harm to GRSG populations.

Table 2-12
Comparison of Alleviated Threats to GRSG in the Idaho and Southwest Montana Sub-Region

	Alternative A	Alternative B	Alternative C	Alternative D	Alternative E[1]	Alternative F	Proposed Plan
				appropriate BMPs.			
Summary	To varying degrees all action alternatives respond to the Conservation Objectives Team report objective for energy, which is that energy development should be designed to ensure that it will not impinge on stable or increasing GRSG population trends. Alternatives B, C, and F close areas to new leasing. The difference between these alternatives is the amount of GRSG habitat that would be closed. Alternative C closes all occupied GRSG habitat to new leasing and is the most restrictive. Alternatives B and F include the same restrictions as Alternative C; however, these restrictions would be applied to a smaller geographic area. Management under Alternative D and the Proposed Plan would be less restrictive than Alternatives B, C, and F. Stipulations such as NSO, CSU, and TL would restrict the amount, location, and timing of development. These restrictions would reduce habitat loss, degradation, and fragmentation in seasonal habitats. Alternative E would provide the fewest restrictions on fluid mineral leasing and development. Under Alternatives B, C, F and the Proposed Plan RDFs would be attached to new and existing leases. Applying required design features to existing leases may eliminate habitat loss, degradation, and fragmentation. However, the effectiveness of these measures would be limited in areas where there is already extensive development. Under Alternative D, design features would not be required, but would be discretionary. There would be no restrictions on existing leases under Alternative E.						
Mining – Solid Minerals, Non-energy Leasables, Locatables, and Mineral Materials							
	Various areas recommended for withdrawal/currently withdrawn and closed to mineral material disposal and non-energy mineral leasing. There is no surface disturbance limitation recommendation included in this alternative.	PHMA would be withdrawn from locatable mineral entry, closed to mineral material disposal, and closed to non-energy mineral leasing. Development of existing leases would result in habitat loss and fragmentation. A 3 percent surface disturbance threshold and RDFs would be applied.	Same as Alternative B except decisions would be applied to a larger geographic area (all occupied habitat).	Same as Alternative A for locatable minerals. No new salable mineral authorizations would be approved within 3 km of an occupied lek in all GRSG habitat. Seasonal timing restrictions would be applied in all GRSG habitat. BMPs would be applied in PHMA and IHMA. Future leasing and prospecting of non-energy minerals in PHMA and IHMA is closed	Idaho - Same as Alternative A for locatable, salable, and non-energy leasable minerals. Utah - Same as Alternative A for locatable minerals. PHMA would be open to salable and non-energy leasable minerals; impacts would be reduced through the application of stipulations.	Same as Alternative B.	Similar to Alternative D but would require BMPs and RDFs on new leases. In SFAs, habitat would be recommended for withdrawal.
Summary	To varying degrees all action alternative respond to the COT report objectives, which is to maintain GRSG population and no net loss of GRSG habitat in in areas affected by mining. Alternatives B, C and F would be closed or withdrawn to other minerals. Therefore, future impacts on GRSG would not occur, which address the objectives in the COT report. Under Alternative D and the Proposed Plan, surface use restrictions would be placed on development to protect breeding, and some nesting and early brood-rearing habitat, which would provide opportunities for nest success and chick survival. Additional stipulations (CSU and TL) would restrict the type, amount, location, and timing of development. These restrictions would reduce habitat loss, degradation and fragmentation. Under Alternative E in Idaho, impacts would continue, as management would be the same as Alternative A. Some impacts would be reduced in Utah through the application of stipulations. As such, there is less assurance of protection for nesting GRSG. Alternatives B, C, F and the Proposed Plan would require RDFs along with other conservation measures to reduce habitat loss, fragmentation, degradation, and disturbance to the extent possible on valid rights. Under Alternative D, design features would not be required, but would be discretionary. There would be no restrictions on existing leases under Alternative E.						
Renewable Energy Sources – Wind Energy							
	Most GRSG habitat is open to wind development. There is no surface disturbance limitation	Wind development would be excluded in PHMA under this alternative. There are no restrictions for GHMA under this	Same as Alternative B; however, under this alternative, all GRSG habitat would be excluded from wind development.	PHMA would be excluded from wind development. Other GRSG habitat would be avoidance areas.	Idaho – CHZ would be avoidance areas for wind development. Utah – PHMA would be avoidance areas for wind development.	Same as Alternative B	Similar to Alternative D, PHMA would be excluded from wind development while IHMA would be avoidance and GHMA open (avoidance in Montana).

Table 2-12
Comparison of Alleviated Threats to GRSG in the Idaho and Southwest Montana Sub-Region

	Alternative A	Alternative B	Alternative C	Alternative D	Alternative E[1]	Alternative F	Proposed Plan
	recommendation included in this alternative.	alternative.					
Summary	To varying degrees all alternatives respond to the conservation objective for energy, which is to ensure that development will not impinge upon stable or increasing population trends. Alternatives B, C, D, F and the Proposed Plan provide protection from wind development to GSRG and their habitat since all four stipulate that wind development is excluded from PHMA. Population declines could occur under Alternatives A and E, as wind development would be allowed. Stipulations on development would reduce habitat loss, fragmentation, degradation, and disturbance.						
Recreation/Travel Management							
	Cross-country OHV travel is generally allowed on BLM-administered lands. Forest Service-administered lands are limited to designated routes.	In addition to current limited and closed designations in the No Action alternative, all PHMA would be designated as limited to existing routes pending travel management planning and roads designation. Provides guidance for restricting new road construction and mitigation where roads are allowed under prior existing rights. Provides for road closure and rehabilitation. Provides for seasonal road closures. Recreational permits would only be issued in GRSG priority habitats that have neutral or beneficial effects.	Alternative lacks specificity regarding travel management but states that all lands will be closed to cross-country travel and some roads that intrude into lek or winter habitats will be removed or seasonally closed.	All GRSG habitat would be limited to existing routes pending travel management planning and roads designation. The emphasis of the comprehensive travel and transportation planning would be placed on having a neutral or positive effect on GRSG habitat. Would prioritize restoration of linear disturbances. Recreation would be managed to minimize impacts on GRSG or their habitat.	Idaho - All GRSG habitat would be limited to existing routes pending travel management planning and roads designation. No guidance is provided regarding recreation management. Utah: PHMA with nesting and winter habitat that do not have designated routes in a Travel Management Plan would be managed at least as limited to existing routes. Stipulations would be used to reduce impacts from recreation.	Management would be similar to Alternative B except specifies in priority habitat camping and other non-motorized recreation would be prohibited during certain seasons within 4 miles of a lek. In addition, there would be no new route construction within 4 miles of a lek.	Same as Alternative D.
Summary	To varying degrees, all action alternatives respond to the COT report objective, which is that areas subject to recreation activities should maintain healthy native sagebrush communities based on local ecological conditions and with consideration of drought conditions, and managed direct and indirect human disturbance (including noise) to avoid interruption of normal GRSG behavior. PHMA would be limited to existing roads under Alternatives B and F. Under Alternatives C, D, E, and the Proposed Plan all GRSG habitat would be limited to existing roads. Once travel management planning is completed, this would be changed to a limited to designated routes category. These alternatives would prevent proliferation of new routes, and would include direction for seasonal closures, route realignment, and provisions for valid existing rights. Recreation management under all action alternatives would aim to reduce impacts on GRSG and habitat.						
Agriculture/Urbanization							
	Most LUPs include a management action that allows for	Retains public ownership of PHMA with exceptions for	Same as Alternative B.	Land tenure actions would be similar to Alternative B.	Idaho and Utah – Same as Alternative A.	Same as Alternative B.	Same as Alternative D.

Table 2-12
Comparison of Alleviated Threats to GRSG in the Idaho and Southwest Montana Sub-Region

	Alternative A	Alternative B	Alternative C	Alternative D	Alternative E[1]	Alternative F	Proposed Plan
	acquisition of lands that have important resource values including GRSG. Land tenure adjustments could result in consistent management across the landscape.	considering which improve ownership patterns in a manner which enhances GRSG habitat management. Takes advantage of opportunities to remove or bury existing infrastructure associated with urban/ex-urban development and to collocate infrastructure to consolidate impacts. (See Infrastructure)					
Summary	To varying degrees, all action alternatives respond to the COT report objective to limit urban and exurban development in GRSG habitats and maintain intact native sagebrush communities by managing land tenure, consolidating and otherwise minimizing the impacts of infrastructure supporting adjacent development, and burial/removal of infrastructure. Alternatives B, C, D, F and the Proposed Plan favor land acquisition as a tool for conserving important habitat on private lands. All alternatives prescribe ROW exclusion or avoidance (see Infrastructure) and colocation of infrastructure to minimize footprint. Alternatives B, D, and F contain specific actions directed at burial or removal of existing infrastructure such as power lines. Alternatives B, C, D, F and the Proposed Plan call for retention of all GRSG habitats in public ownership. Impacts would continue to occur under Alternative E, which is the same as Alternative A.						

Table 2-13
Summary of Environmental Consequences

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F	Proposed Plan
Vegetation (Including Noxious Weeds; Riparian and Wetlands)						
In general, Alternative A would rely on management guidance that would not reflect the most up-to-date science regarding GRSG, and older land use plans would be implemented that often would lack a landscape-level approach to land planning. However, several LUPs do contain guidance for specific areas that address GRSG (e.g., Dillon, Pocatello, and Beaverhead-Deerlodge). There is no consistently applied vegetation management across all land use plans, though many incorporate objectives for maintaining, improving, or restoring vegetation communities, particularly sagebrush and riparian and wetland habitats. As a result, there is general direction to preserve and improve vegetation communities; however, discrete anthropogenic disturbances to vegetation, such as road construction, mineral development, and development of ROWs, would continue.	The BLM and Forest Service would manage lands to conserve, enhance, and restore sagebrush ecosystems. Direct protection of sagebrush habitat to support GRSG would limit or modify uses in this habitat type, improving the acreage and condition of desired vegetation communities. Use restrictions would reduce damage to native vegetation communities and individual native plant species in areas that are important for regional vegetation diversity and quality. Likewise, use restrictions would minimize loss of connectivity and would be more likely to retain existing age class distribution within these specific areas. Use restrictions could also minimize the spread of invasive species by limiting human activities that cause soil disturbance or seed introductions. PHMA and GHMA would be designated and the BLM and Forest Service would apply a three percent anthropogenic disturbance cap on discrete activities in PHMA and would implement numerous conservation measures to reduce impacts from human activities, which would reduce the likelihood for	The BLM and Forest Service would manage lands to conserve, enhance, and restore sagebrush ecosystems. Management actions would be applied to all occupied GRSG habitats, a larger area than covered by Alternative B. Management would focus on removing livestock grazing from occupied habitats, with most other management similar to Alternative B.	The BLM and Forest Service would manage lands to conserve, enhance and restore sagebrush ecosystems. Management and impacts would be similar to Alternative B, though Alternative D would incorporate more flexibility and adaptive management to account for sub-regional conditions. PHMA, IHMA, and GHMA would be designated and the BLM and Forest Service would require a no net unmitigated loss of PHMA and IHMA and would implement conservation measures to reduce impacts from human activities in PHMA, which would reduce the likelihood for vegetation removal, degradation, or fragmentation.	The BLM and Forest Service would manage lands to protect, maintain, improve and enhance sagebrush ecosystems. CHZ, IHZ and GHZ would be designated. CHZ would restrict further infrastructure development with narrow exceptions to permit high value infrastructure. This alternative would designate fewer acres of CHZ as compared to Alternatives B, C, D & F designations of PHMA, resulting in fewer acres of sagebrush vegetation preserved from removal, degradation, or fragmentation.	Management under Alternative F would be largely similar to that described for Alternative B, though with more stringent guidance and restrictive management in sagebrush ecosystems. PHMA and GHMA would be the same as for Alternative B. Under Alternative F, RHMA would also be designated. Impacts from implementing the three percent disturbance cap would be similar to those described for Alternative B, but under Alternative F all surface disturbances would count towards the disturbance cap. This would further reduce the acreage of vegetation that would be removed or fragmented within all occupied habitat over the long term.	Management under the Proposed Plan would be similar to that described for Alternative D. Under the Proposed Plan, SFAs would be managed where additional restrictions on resource uses would be applied. Additional measures, such as management to attain vegetation objectives; specified vegetation treatment acres; and a comprehensive mitigation strategy would be implemented and would reduce the likelihood for vegetation removal, degradation, or fragmentation.

Table 2-13
Summary of Environmental Consequences

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F	Proposed Plan
	vegetation removal, degradation, or fragmentation, and maintain the acreage and condition of sagebrush vegetation.					
Wild Horse and Burro Management						
All HMAs would continue to be managed for AML and all adjustments would be based on site-specific conditions as reported in monitoring data. Wild horse management would not be based on GRSG habitat needs. Levels of resource conflict with wild horse would depend on management under individual RMPs. Restrictions on energy and mineral development would be least restrictive under Alternative A, which would result in the greatest impact to horses from energy and mineral development under this alternative.	Under Alternative B vegetation restoration projects to benefit GRSG would likely improve forage conditions and water quality for wild horses in the long term. Restrictions placed on mineral development could also benefit wild horses and burros by reducing disturbance. GRSG management requiring increased fences or prohibiting new water development could limit wild horse access to water. Restrictions on transportation would be greater under this alternative than under Alternative A, which could increase the time and costs required to conduct gathers for population control. AMLs and wild horse management could be impacted if found to not align with GRSG management objectives. However, in general, efforts to improve GRSG habitat would also improve wild horse rangeland conditions.	Vegetation restoration impacts would be similar under Alternative C to those under Alternative B, but would also remove water developments, which could reduce water availability and result in the need to reduce AML within HMAs in occupied habitat. Livestock grazing would be eliminated under this alternative, resulting in additional forage for wild horses. However, this could also result in reduced water availability through the elimination of livestock watering sites. Restrictions on travel management and energy development would result in impacts similar to those described under Alternative B. Lands and realty management under this alternative would reduce disturbance to wild horses. In general, efforts to improve GRSG habitat would also improve wild horse rangeland conditions.	Vegetation management under this alternative would likely improve wild horse forage in the long term. AMLs in some HMAs would be reduced if wild horse management was found to conflict with GRSG objectives. HMA expansion would be prohibited in PHMA, potentially limiting the ability to sustainably manage for increasing horse populations and increasing the need for gathers and cost of the program. Eliminating livestock watering sites could reduce water availability for wild horses and could result in the need to reduce wild horse numbers. Restrictions on transportation, lands and realty, and minerals would result in reduced disturbance to wild horses as compared to Alternative A, but greater disturbance than would be experienced under some of the other action alternatives.	Impacts from vegetation management, wild horse management, and mineral and energy development would be the same as those under Alternative A. Livestock grazing management changes would be applied on a site-specific level and would result in limited impacts to wild horse management. Limitations on new water development could result in a need to reduce AMLs in HMAs where alternative water sources are not available. Restrictions on recreation and lands and realty management could limit disturbance to wild horses.	Under this alternative, AMLs would be directly reduced by 25 percent for all HMAs within PHMA and GHMA, resulting in increased costs for wild horse management due to a need for additional horse gathers and population growth suppression treatments. Under Alternative F, 25 percent of the areas in PHMA and GHMA open to livestock grazing would be rested each year as well, which could reduce the availability of water to wild horses and impact the ability to manage for AML, particularly for HMAs with no alternative water source. Vegetation, wildland fire, and recreation management would have impacts similar to those under Alternative B. Impacts from energy and minerals management would be the same as those under Alternative A.	Under the Proposed Plan restrictions on disturbance would be greatest in SFAs, followed by PHMAs, and IHMAs. This would result in reduced disturbance and additional protections of wild horse forage and water supplies in SFAs, and could result in increased disturbance to wild horses in HMAs within GHMA. Vegetation management would likely improve forage conditions in the long term. Wildland fire management would also be expected to benefit wild horses, though fencing to protect post-burn areas could impact the ability of horses to roam freely and access water. Changes to livestock watering could impact water availability for wild horses and result in the need to reduce wild horse numbers or develop alternative water sources within HMAs. AMLs may be required to change to meet GRSG habitat objectives. The number of gathers needed may need to be increased along with other intensive management actions to maintain AML, potentially increasing disturbance to populations and the cost of the program.
Wildland Fire Ecology and Management						
Current impacts would continue and there would continue to be	Long-term frequency and intensity of wildland fire	Under Alternative C, no livestock grazing would be	Alternative D contains a defined set of tools for wildland	Developing a fuels break strategy, response time	Impacts from fire management would be the	Impacts from fire management would be similar to those under

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Summary of Environmental Consequences

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F	Proposed Plan
a high risk of human-caused ignitions associated with human uses. Vegetation management and weed treatments would continue to decrease fuels across the planning area, which would decrease the intensity of wildland fires and allow fires to be more easily controlled. Similarly, treatments for habitat improvement and forage would reduce fuels and reduce the likelihood for stand-replacing fire. The wildland fire management program would continue to be impacted by the spread of invasive annuals, which results in a longer fire season and the need for more resources to respond to wildfire. There would also be a continued decrease in the capability of the proactive hazardous fuels reduction program to maintain reactive suppression and rehabilitation efforts in the wildland-urban interface (WUI).	would be similar to historic conditions because post fuel and restoration management would be designed to ensure long-term persistence of seeded or pre-burn native plants. GRSG management in PHMA would focus on fire suppression and limitations on fuels treatments, resulting in higher level of protection from wildland fire, but reduced wildland fire and fuels management options. Managing PHMA so that discrete anthropogenic disturbances cover less than 3 percent of the total PHMA regardless of ownership would decrease the chance of human-caused ignition in PHMA. In addition, managing or restoring PHMA so that at least 70 percent of the land cover provides adequate sagebrush habitat to meet GRSG needs would promote a shift towards historic fire regimes in sagebrush ecosystems. Limiting OHV travel in PHMA to existing roads and trails until travel management planning is complete, as well as limiting road upgrades or new roads in this area, would reduce the risk of human-caused ignition in PHMA on BLM-administered and Forest Service-administered lands.	permitted within occupied GRSG habitat. As a result, fine fuels would increase throughout occupied habitat and size, intensity, and occurrence of fire would potentially increase. However, because the prohibition on grazing could reduce weed spread, some areas may experience a shorter fire season and less frequent and/or intense wildfires.	fire management. Alternative D would allow for management flexibility in designing fuels treatments and response to wildland fire. Strategic wildfire suppression planning would help return PHMA to natural fire intensities and intervals. Impacts from limiting OHV travel to existing roads would be the same as those described for Alternative B.	analysis and water availability analysis would help focus suppression activities in areas with the greatest likelihood of reducing wildfire spread. Use of native vegetation for restoration and controlling invasive species for three years after wildfire treatments would reduce the likelihood for weed invasion in burned or treated areas, thus reducing the frequency and intensity of wildland fires. This alternative promotes active and aggressive control of invasive species, which would likely result in a reduced likelihood of large-scale wildland fires. Targeted grazing would be allowed to reduce fine fuels, resulting less need for mechanical or chemical fuels treatments.	same as those described under Alternative B.	Alternatives B and D. Because anthropogenic disturbance excludes habitat disturbance from wildfire and fuels management activities, the wildland fire and fuels program will retain management flexibility and a greater chance to meet goals and objectives over the life of the plan. The 3 percent anthropogenic disturbance cap should limit human-caused ignitions in GRSG habitat over the long-term and decrease the probability of wildfire occurrence and the need for fire-suppression activities. Coordination with other land management agencies and landowners may promote improved habitat conditions across land management boundaries, thus improving the efficiency and effectiveness of fire and fuels treatments across the landscape. Additionally, implementation of the Wildfire, Invasive Annual Grasses and Conifer Expansion Assessment will improve wildland fire management across the landscape via improved coordination across agencies.

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Summary of Environmental Consequences

Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F	Proposed Plan
Wilderness Characteristics						
Management actions to protect other resources and special designation areas offer some protection of wilderness characteristics. Alternative A includes the fewest GRSG protections and is least restrictive of surface-disturbing activities that have the potential to alter the natural setting, as well as reduce opportunities for solitude or primitive recreation, of lands with wilderness characteristics. Therefore, degradation of wilderness characteristics is most likely under this alternative.	Under Alternative B, restrictions on resource uses, such as ROW exclusion and closure to mineral exploration and development, would offer more protection of lands with wilderness characteristics compared to Alternative A.	Impacts from Alternative C would be similar those described for Alternative B, but would be applied across a larger geographic area. As such, Alternative C would provide greater protection from surface-disturbing activities on lands with wilderness characteristics. In addition, livestock grazing would be prohibited in PHMA (i.e., all occupied habitat). This would eliminate the need for livestock developments (e.g., fences, cattle guards, guzzlers, stock ponds, and access roads) and would enhance wilderness characteristics.	Under Alternative D, the BLM and Forest Service would apply restrictions on resource uses similar to, though less than, Alternative B. Restrictions would include ROW avoidance areas and stipulations on mineral leasing. Such restrictions would provide more protection to lands with wilderness characteristics compared to Alternative A.	Under Alternative E, impacts from restrictions on resource uses would be similar to Alternative B, though restrictions would apply to a smaller area of lands with wilderness characteristics.	Impacts would be the same as those described for Alternative B.	Under the Proposed Plan, wilderness characteristics would receive indirect, incidental protections from the restrictions placed on management actions. Areas in PHMA and IHMA would remain open to fluid mineral leasing, with fewer acres closed leasing than any other alternative, including Alternative A. Any indirect protections wilderness characteristics might experience from closing acres to fluid mineral leasing would be experienced the least under the Proposed Plan.
Livestock Grazing/Range Management						
In general, Alternative A would be the least restrictive on livestock grazing. Under Alternative A, livestock grazing would continue to be managed under current guidance, with AUMs and acres open to grazing remaining at current levels. Grazing allotments would continue to be subject to permit renewals and assessments of rangeland health.	Acres open to grazing and permitted AUMs would be the same as for Alternative A. PHMA would be managed so that at least 70 percent of the land cover provides adequate sagebrush habitat to meet GRSG needs. Where cover requirements do not meet forage objectives for livestock grazing, this would result in the need to modify grazing practices with increased costs for permittees. Consideration of GRSG habitat objectives and management would be required in grazing management in PHMA and incorporated into grazing allotments through BLM	Under Alternative C, grazing would be eliminated from all allotments completely or partially within occupied habitat. Closures would impact permittees' current seasonal rotations or other management strategies that utilize both federal and private lands. The elimination of permitted grazing in PHMA under Alternative C may result in permittees' going out of business, with impacts on both individual permittees as well as local communities as a whole. Additional details of the economic impacts are discussed in Section 4.14, Social and Economic Conditions. Beneficial or adverse impacts on range management from other resource uses (e.g., ROW or fluid mineral development) would be diminished in scale	Acres open to grazing and permitted AUMs would be the same as for Alternative A. Impacts from management actions would be similar to those described under Alternative B. A moderate decline in permitted grazing would be anticipated over time as grazing permits are modified to incorporate GRSG objectives at renewal or allotment analysis. Coordination with the state should decrease conflicts in standards and provide a location appropriate framework, assisting permittees' ability to adopt these standards and reducing impacts. Reconnection and expansion of native plant communities would be an objective across all GRSG habitat types and restoration of	Under Alternative E, allotment renewal in CHZ and IHZ would be prioritized where populations are declining. Alternative E would allow for greater flexibility in management options, limiting impacts on range management. Changes could be required to grazing timing and intensity to meet GRSG habitat requirements, with the potential for some increased time and costs to permittees as compared to Alternative A. However, due to the increased flexibility in management actions under this alternative, permittees would have more options to address GRSG habitat	In areas where grazing is permitted, management would be similar to that described in Alternative B but increased in intensity due to increased restrictions on prohibitions to grazing after fire and the prohibition on all new range improvements. These actions are likely to further limit the abilities of permittees/lessees to fully utilize permitted AUMs and result in increased time and cost for management.	Acres open to grazing and permitted AUMs would be the same as for Alternative A. Grazing management actions and impacts are similar to those described in Alternatives B and D. GRSG habitat objectives would be incorporated into grazing allotments through allotment management plans or permit renewals, or Forest Service NEPA processes, a moderate decline in permitted grazing is anticipated over time as permits are modified to meet objectives. In the proposed plan, specific guideline for GRSG seasonal habitat with impacts determined at implementation level for BLM lands. Priority for land health assessment and permit renewal would include SFAs first followed by PHMAs

Table 2-13
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Alternative A	Alternative B	Alternative C	Alternative D	Alternative E	Alternative F	Proposed Plan
	AMPs or permit renewals or BLM and Forest Service NEPA processes. As a result, impacts would occur over time at a site- specific level as measures are incorporated into individual allotments. Land Health assessment and permit renewals would be prioritized in PHMA, but there is potential for further degradation of lands outside of PHMA that are not meeting land health standards or desired conditions.	and intensity because of the elimination of grazing in all allotments intersecting occupied habitat.	seasonal habitats would be emphasized in both priority and medial habitats. Should treatments in this habitat not match with vegetation objectives for livestock grazing, forage quality would decrease. However, in most cases, treatment (e.g., conifer removal) would improve forage conditions in the long term.	requirements, and impacts on range management would be limited.		outside the SFAs. Changes in management would follow this priority order. The Proposed Plan would also include additional vegetation treatment measures such as conifer removal, and annual grass treatment, with specific vegetation objectives in PHMA. FIAT assessments will also be used at implementation to determine site specific fire management measures. Where vegetation and fire management objectives do not meet forage objectives for livestock grazing, this would result in the need to modify grazing practices However, in most cases, treatments (e.g., conifer removal) would improve forage conditions in the long term. Disturbance of livestock grazing and livestock forage from development activities would be minimized in the Proposed Plan due to the inclusion of a cap on anthropogenic disturbance, mitigation for conservation gain to GRSG, and conservation measures such as adaptive management and defined monitoring, RDFs, and lek buffers.
Travel Management						
Areas currently designated as open to cross-country OHV use would continue to be managed as such. There would be no new restrictions related to GRSG habitat management and no change in current levels of access under Alternative A. All Forest Service-administered lands would be limited to	The BLM and Forest Service would limit OHV travel to existing roads and trails in PHMA. This would reduce cross-country access in those portions of PHMA that were previously managed as open for cross-country travel. Applications for the upgrading or	The BLM and Forest Service would limit OHV travel to existing roads and trails in PHMA. Additionally, in PHMA, new road construction within 4 miles of active leks would be prohibited. Upgrading of existing routes in occupied habitat where such action would damage GRSG habitat would	All BLM lands in Field Offices containing GRSG habitat would be limited to existing routes and off-road OHV travel prohibited with the exception of specific areas managed as open for recreation purposes. Impacts on Forest Service-administered lands would be the	Impacts under Alternative E would be similar to Alternative D, with fewer acres identified as limited to existing routes in GRSG habitat.	Impacts under Alternative F on BLM-administered lands would be the same as Alternative B. Impacts on Forest Service-administered lands would be the same as for Alternative A.	Impacts under the Proposed Plan would be the same as Alternative D

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designated routes.	realignment of existing routes would be required to meet certain design, location, and mitigation criteria intended to protect GRSG habitat. These requirements may preclude the construction of some new routes, but would be unlikely to reduce access across the decision area. Impacts on Forest Service-administered lands would be the same as for Alternative A.	also be precluded. Together, these actions would result in site-specific losses of opportunity for motorized travel and future route construction and improved access. Impacts on Forest Service-administered lands would be the same as for Alternative A.	same as for Alternative A.			
Lands and Realty						
ROW avoidance and exclusion restrictions would not be applied in GRSG habitat, thus, not preventing the BLM or Forest Service from accommodating future demand for ROW development within the planning area. Existing transportation routes would continue to provide motorized access to ROW infrastructure and communication sites for construction and maintenance with no additional impacts on lands and realty from travel and transportation management. GRSG habitat would remain available for withdrawal or disposal as needed to serve BLM or other agency objectives.	Managing PHMA as ROW exclusion would prevent the BLM and Forest Service from accommodating new ROW development in those areas. With a continuing demand for new ROWs in the planning area, including major inter- and intra-state electrical transmission and pipeline ROW developments would be prevented or diverted to adjacent non-federal lands. Development on adjacent lands could result in more extensive direct and indirect impacts on GRSG populations and habitat (e.g., vehicle traffic on roads crossing public lands), especially if the development is within close proximity to GRSG habitat on BLM-administered or Forest Service-administered lands, or the ROW route is longer to avoid federal lands.	The BLM would not authorize new ROWs in exclusion areas unless the infrastructure could be located in an existing ROW authorization footprint. Impacts under Alternative C would be similar to Alternative B, but over a greater area. Alternative C would further limit opportunities for communication facilities, pipelines, fiber optic cables, electrical transmission lines, and similar ROW development in response to ongoing needs. Impacts on land tenure would be the same as Alternative B but cover a wider area (all occupied habitat).	Lands and Realty management under Alternative D would establish avoidance areas in GRSG habitat, impacting the BLM- and Forest Service-administered lands and realty programs by reducing the BLM and Forest Service's ability to authorize above-ground linear ROWs, such as electrical transmission lines in PHMA. Within avoidance areas, additional stipulations for the development of electrical transmission lines could result in the denial of projects that cannot meet ROW grant requirements for the protection of GRSG habitat. Limitations on electrical transmission line development, renewable energy development, and new roadways under Alternative D would be less than Alternative C which creates exclusion areas, Impacts from travel management would be the same	Stipulations associated with ROW avoidance areas under Alternative E would limit the BLM's ability to accommodate the demand for new infrastructure development in GRSG habitat, but less than establishing exclusion areas. With demand for new ROWs in the planning area, including major inter- and intra-state electrical transmission and pipeline ROW developments, expected to continue and increase over time, new ROW development would be diverted to adjacent non-federal lands or blocked. If new ROW development could not be feasibly developed, the result would be reduced energy and communication opportunities to meet growing needs. Impacts from travel	With establishment of ROW exclusion areas, neither the BLM nor Forest Service would authorize new ROW development in occupied habitat. Therefore, Alternative F would further reduce opportunities for renewable energy, communication facilities, pipelines, fiber optic cables, electrical transmission lines, and similar ROW development from occurring in the planning area, to meet growing energy and communication needs, similar to Alternative B. Impacts from Travel and Transportation Management under Alternative F would be the same as Alternative A. Impacts on land tenure would be the same as Alternative B.	Similar to Alternative D, the Proposed Plan would reduce the amount of land within GRSG habitat available to ROW/SUA development without restrictions, compared to Alternative A. Within avoidance areas, additional stipulations for the development of electrical transmission lines could result in the denial of projects that cannot meet ROW/SUA grant requirements for the protection of GRSG habitat. Limitations on electrical transmission line development, renewable energy development, and new roadways under the Proposed Plan would be less than other alternatives, such as Alternative C, which creates exclusion areas. GRSG conservation measures under the Proposed Plan, such as the requirement for activities to promote net conservation gain for GRSG, RDFs, buffers, and tall structure limitations, would likely discourage limit future

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	Within exclusion areas, BLM and Forest Service would only consider new ROW authorizations where the proposed infrastructure could be co-located entirely within the footprint of an existing ROW. BLM and Forest Service would require co-location in GHMAs where possible. Impacts on the lands and realty program under Alternative B would include the need to locate proposed facilities outside exclusion areas or within existing ROWs, which limits the BLM's ability to accommodate the demand for new infrastructure development, including wind energy development. PHMA lands would not be available for disposal or withdrawal, limiting BLM's ability to accommodate other management objectives with land tenure changes.		as those described above under Alternative B. Impacts on land tenure would be the same as Alternative B.	management would be the same as those described under Alternative A. Impacts on land tenure would be the same as Alternative A.		development PHMA and IHMA. Projects that are proposed in PHMA or IHMA would incur added costs and more complex and lengthy review periods. Restrictions on surface activities for fluid minerals, closure of PHMA to mineral materials, and the proposed withdrawal of SFAs for locatable minerals would reduce the short- and long-term demand for ROWs/SUAs to support mineral development. By allowing land tenure actions that result in the net conservation gain of GRSG habitat, the BLM and Forest Service could carry out actions that consolidate land ownership or acquire lands with higher quality GRSG habitat.
Minerals						
Fluid Minerals (Oil and Gas)						
Under Alternative A, 289,500 unleased medium potential acres would continue to be closed to fluid mineral leasing. New leases in most BLM field offices and Forest Service districts within the decision area would continue to be subject to TLs, and NSO buffers would be applied for varying distances around leks. Acres closed have the greatest impact on the fluid minerals	All federal mineral estate within PHMA, including 496,300 unleased medium potential acres, would be closed to oil and gas leasing. Closure of these acres would directly impact the fluid minerals program as described under Alternative A. However, because the acreage closed would increase under Alternative B, the magnitude of these	All federal mineral estate in the decision area, including 601,000 unleased medium potential acres, would be closed to oil and gas leasing. Closure of these acres would directly impact the fluid minerals program as described under Alternative A; however, because Alternative C would close the most acres out of any alternative, the magnitude of these impacts would also increase.	Fluid mineral allocations in PHMA and IHMA would vary depending on oil and gas development potential. 289,500 unleased medium potential acres would be closed to oil and gas leasing. An NSO stipulation would apply within 0.6 mile of leks to 176,900 acres. New leases within PHMA and IHMA would be subject to density limitations and a 3-percent disturbance cap for	Within the planning area, 289,500 unleased medium potential acres would be closed to fluid mineral leasing under this alternative. Management existing leases in the decision area would be similar to that under Alternative A. Unleased areas in CHZ and IHZ would be open to leasing subject to an NSO	Impacts of closures under Alternative F would be the same as under Alternative B. Management actions applicable to existing leases under Alternative F would be similar to those under Alternative C. However, under Alternative F, TLs would prohibit human presence as well as surface-disturbing activities during the nesting and brood-rearing	Within the planning area, 257,400 unleased medium potential acres would be closed to oil and gas leasing. Closure of these acres would directly impact the fluid minerals program as described under Alternative A; however, because more acres would be closed under the proposed plan, the magnitude of these impacts would increase. The same RDFs would be applied to the same acreage as under

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program by prohibiting oil and gas development on portions of federal mineral estate with high potential for such development. In areas closed to leasing, oil and gas operations would be restricted in their choice of project locations and may be forced to develop in areas that are challenging to access or have less economic resources because more ideal areas could be closed to leasing. This could raise the cost of fluid mineral development in the planning area and could result in operators moving to nearby private or state minerals that are open to leasing.	impacts would also increase. Existing leases would remain valid through their term but could not be renewed, resulting in further long-term restrictions on the development of fluid mineral resources. Conservation measures in addition to RDFs would be applied as COAs to existing leases on PHMA overlying federal mineral estate. Application of these requirements would impact fluid mineral operations by increasing costs if it resulted in the application of additional requirements and/or use of more expensive technology. To avoid these costs, operators may move to nearby state or private minerals, resulting in lost royalties for the BLM and Forest Service.	Management actions applicable to existing leases under Alternative C would be similar to those under Alternative B, but they would apply to all existing leases in the decision area. Alternative C would also call for COAs implementing seasonal restrictions on vehicle traffic and human presence associated with exploratory drilling. This alternative also would limit new surface disturbance on existing leases to 3 percent per section, with some exceptions. Impacts of these operating and siting restrictions would be the same type as those described under Alternative B, although the magnitude of the impacts would increase.	each section. Management of existing fluid mineral leases under Alternative D would be the same as that under Alternative B except that all management actions other than RDFs would apply to all 101 existing leases within GRSG habitat.	stipulation.	season. This management would be the most restrictive management out of all the alternatives.	Alternative B. However, the only conservation measures applied would relate to master development plans and unitization. Application of the three percent disturbance cap and NSO with limited exception in PHMA and IHMA, and lek buffers in GHMA could impact both new and existing fluid mineral activities by preventing or restricting new surface development. Management of existing fluid mineral leases under the Proposed Plan would be the same as that under Alternative B with the same impacts.
Fluid Minerals (Geothermal)						
Under Alternative A, 12,513,900 acres of the planning area would be closed to geothermal leasing. This includes 2,939,400 acres of available moderate to high potential areas and 9,574,600 acres of available low to no potential areas. New leases in most BLM field offices and Forest Service districts within the decision area would continue to be subject to TLs, CSUs, and NSO buffers would be applied for varying distances around leks.	Under Alternative B, 19,598,800 acres of the planning area would be closed to geothermal leasing. This includes 5,287,800 acres of available moderate to high potential areas and 14,311,000 of available low to no potential areas. Existing leases would remain valid through their term but could not be renewed, resulting in further long-term restrictions on the development of fluid	Under Alternative C, 21,901,100 acres of the planning area would be closed to geothermal leasing. This includes 6,137,200 acres of available moderate to high potential areas and 15,763,900 acres of available low to no potential areas. Management actions applicable to existing leases under Alternative C would be similar to those under Alternative B, but they would apply to all existing leases in the decision area. Alternative C would also call for COAs implementing	Under Alternative D, 17,526,500 acres of the planning area would be closed to geothermal leasing. This includes 3,215,600 acres of available moderate to high potential areas and 14,311,000 acres of available low to no potential areas. New leases within PHMA and IHMA would be subject to density limitations and a 3-percent disturbance cap for each section. Management of existing fluid	Acres of moderate to high and low to no potential areas closed to geothermal leasing would be the same as Alternative A. Acres subject to types of stipulations would differ; more acres would be open subject to NSO stipulations, less acres would be open subject to CSU/TL stipulations, and less acres would be open subject to standard terms and conditions. Unleased areas in CHZ and IHZ would be open to	Under Alternative F, 12,513,900 acres of the planning area would be closed to geothermal leasing. This includes 2,939,400 acres of available moderate to high potential areas and 9,574,600 acres of available low to no potential areas. Management actions applicable to existing leases under Alternative F would be similar to those under Alternative C. However, under Alternative F, TLs would prohibit human	Under the Proposed Plan 11,296,800 acres of the planning area would be closed to geothermal leasing. This includes 2,832,800 acres of available moderate to high potential areas and 8,464,000 acres of available low to no potential areas. Under the proposed plan, RDFs and BMPs would be applied as COAs when a geothermal drilling permit or other post-lease activity is approved. In addition to affecting new leases, the COAs would be applied to the 25,571 acres of existing leases within

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	mineral resources. Conservation measures in addition to RDFs would be applied as COAs to existing leases on PHMA overlying federal mineral estate. Application of these requirements would impact fluid mineral operations by increasing costs if it resulted in the application of additional requirements and/or use of more expensive technology. To avoid these costs, operators may move to nearby state or private minerals, resulting in lost royalties for the BLM and Forest Service.	seasonal restrictions on vehicle traffic and human presence associated with exploratory drilling. This alternative also would limit new surface disturbance on existing leases to 3 percent per section, with some exceptions. Impacts of these operating and siting restrictions would be the same type as those described under Alternative B, although the magnitude of the impacts would increase.	mineral leases under Alternative D would be the same as that under Alternative B except that all management actions other than RDFs would apply to all 101 existing leases within GRSG habitat.	leasing subject to an NSO stipulation.	presence as well as surface-disturbing activities during the nesting and brood-rearing season.	GRSG habitat, consistent with existing lease terms and special stipulations. These RDFs and conservation measures would include such requirements as noise restrictions, structure height limitations, design requirements, water development standards, remote monitoring requirements, and reclamation standards as described in Appendix A. This alternative also would limit new surface disturbance on existing leases to 3 percent per section, with some exceptions.
Nonenergy Leasables						
Under Alternative A, no changes would be made to the acres open and closed to leasing consideration. Currently, 11,799,500 acres are closed to non-energy mineral leasing. Existing federal non-energy leasable mineral leases in the decision area would continue to be subject to any stipulations or BMPs contained in those leases. Application of BMPs could alter how mineral resources are accessed and extracted and result in the use of different technology than would otherwise have been used. Non-energy leasable mineral development operations may also move to nearby private or state minerals containing non-energy leasable mineral resources within GRSG habitat. This change would result in lost	Under Alternative B, PHMA would be closed to prospecting and leasing (19,167,400 acres). Management under this alternative would close more federal mineral estate to non-energy leasable mineral prospecting and leasing than management under Alternative A. Closing areas to non-energy mineral prospecting and leasing would result in the same type of impacts as under Alternative A, but over a larger area. However, the majority of acres in unleased KPLAs, where interest in non-energy leasable mineral development is most likely, would remain open to leasing. Therefore, impacts	Impacts under Alternative C would be the same as those described under Alternative B except that more acres would be closed (21,629,700 acres). As a result, the magnitude of impacts under this alternative would increase. However, similar to Alternative B, the majority of unleased acres in KPLAs would remain open to leasing. Therefore, impacts would be mitigated.	Under Alternative D, PHMA and IHMA would be closed to prospecting and leasing. Management under this alternative would close more federal mineral estate (8,308,600 acres) to non-energy leasable mineral prospecting and leasing than management under Alternative A. Impacts in unleased KPLAs would be similar to those under Alternative A except that CSUs and seasonal and daily TLs would be applied to all lands available for leasing in GHMA. Additionally, TLs would be applied to the ten federal phosphate leases within GRSG habitat. Applying BMPs as Conditions of Approval on any new mine plan and requiring restoration of habitat or off-site mitigation	Non-energy leasable mineral allocations under Alternative E would be the same as those under Alternative A and would result in the same impacts. Impacts in unleased KPLAs would be similar to those under Alternative A except that lands open to leasing would be subject to several stipulations that include prohibiting permanent structures within occupied leks, prohibiting tall structures within one mile of leks, restrictions on noise disturbances, and various TLs specific to protecting leks. Stipulations would restrict the ability of mineral resources to be developed or extracted.	Impacts under Alternative F would be the same as those described under Alternative C, but would impact a smaller area (19,167,400 acres). However, similar to Alternative B, the majority of unleased acres in KPLAs would remain open to leasing. Therefore, impacts would be mitigated.	Impacts under the Proposed Plan would be similar to those described under Alternative B except that fewer acres would be closed (16,270,500 acres) and the disturbance cap and lek buffers would apply. Because more acres would be closed compared to Alternative A and additional restrictions would be added, impacts would increase under the Proposed Plan. Because KPLAs would remain open to nonenergy solid mineral leasing, impacts on federal nonenergy solid leasable mineral development would be mitigated. Application of RDFs and TLs to existing phosphate leases in GRSG habitat would result in the same impacts described under Alternative D.

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royalties for the BLM and Forest Service.	would be mitigated. Existing federal non-energy leasable mineral leases in PHMA would be subject to RDFs. Application of RDFs would increase costs of non-energy leasable development if it delayed resource development or resulted in the use of more expensive technology or less efficient development than would otherwise have been used.		could alter how mineral resources are accessed and extracted and result in the use of different (potentially more expensive) technology than would otherwise have been used.			
Locatable Minerals						
Under Alternative A, no change would be made to the acres of federal mineral estate with high potential that are withdrawn or petitioned for withdrawal (currently 5,380,200 acres). Withdrawal or closure of an area to mining development eliminates the ability to access and extract the mineral resources in that area under new claims. This represents an impact on the potential discovery, development, and use of those resources by decreasing the availability of mineral resources. In addition, validity exams must be completed on all existing claims in withdrawn areas. The need for these exams adds costs and delays for the BLM, Forest Service, and claimant. This alternative would be the least restrictive to locatable minerals because a larger percentage of the decision area would be open to locatable mineral entry and no additional restrictions would be applied to	Under Alternative B, PHMA (7,928,700 acres) would be recommended for withdrawal in addition to the 5,380,200 acres currently withdrawn. The large increase in areas petitioned for withdrawal under this alternative compared with Alternative A would increase the development delays and costs of validity exams on the BLM, Forest Service, or claimant. Accessing and extracting locatable minerals of federal mineral estate would not be impacted by applying BMPs; however, mining operations and practices could be affected and costs increased if an operator agrees to apply any of the BMPs on a project-specific basis.	Impacts under Alternative C would be the same as those described under Alternative B except that more acres (11,555,000 acres) would be recommended for withdrawal. The magnitude of impacts under this alternative would increase since more acreage would be affected. Impacts from applying BMPs would be the same as those described under Alternative B.	Impacts under Alternative D would be the same as those described under Alternative A, except that additional measures to avoid or minimize adverse effects on GRSG and their habitat would be required for 3809 notices and plans of operations in all habitat types. A total of 11,555,000 acres would be recommended for withdrawal under this alternative. Impacts from these additional measures would be highly variable depending on the extent of the additional requirements. If these measures resulted in the mineral resource not being able to be accessed or extracted, an impact on the potential discovery, development, and use of those resources would occur because the availability of mineral resource would decrease. Impacts from applying BMPs would be the same as those described under Alternative B.	Impacts under Alternative E would be the same as those described under Alternative A.	Impacts under Alternative F would be the same as those described under Alternative B.	Under the Proposed Plan 2,968,200 acres would be recommended for withdrawal. The increase in areas petitioned for withdrawal compared with Alternative A would result in the types of impacts described under Alternative B. Impacts from applying BMPs would be the same as those described under Alternative B.

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mining operations.						
Salable Minerals (Mineral Materials)						
Under Alternative A, no change would be made to the acres that would open or closed (currently 10,707,600 acres closed) to mineral material disposal.	Under Alternative B, all PHMA would be closed to mineral material disposal (18,589,300 acres). Closing these acres would prevent access to the mineral resources underlying them and reduce mineral material development in the decision area. Management of mineral materials on federal mineral estate outside of PHMA would be the same as that under Alternative A.	Under Alternative C, all GRSG habitat would be closed to mineral material disposal (21,174,000 acres). This alternative would close the most acres to mineral material disposal of all the alternatives. Therefore, impacts on mineral materials would be the highest under Alternative C.	Under Alternative D, areas within 3 km of occupied leks would be closed to mineral materials disposal (13,211,100 acres). All other areas in GRSG habitat would be subject to TLs.	Alternative E would close the same acres as under Alternative A (10,707,600 acres). Under Alternative E, mineral materials management would differ between portions of the decision area in Idaho and Montana and portions in Utah. Within Idaho and southwest Montana, CHZ would be closed to mineral material disposal. Closure of the 114 existing community pits in CHZ (23 percent of existing community pits in GRSG habitat) would also be recommended. Within Utah, mineral material operations within PHMA would be subject to TLs and other restrictions.	Under Alternative F, 18,589,300 acres would be closed to mineral materials disposal. Impacts of these closures would be the same type as those described under Alternative B. Because more acres would be closed under Alternative F than under Alternative A, impacts on the mineral materials programs would increase.	Under the Proposed Plan, all PHMA would be closed to mineral material disposal (15,529,000 acres). The impacts described under Alternative B would be mitigated in the Montana portion of the decision area because new free use permits would still be allowed and existing pits would be able to expand. Because 45 percent more acres of federal mineral estate would be closed under the Proposed Plan compared with Alternative A, the magnitude of these impacts would increase. Application of the disturbance threshold in IHMA and RDFs, buffers, and timing restrictions in IHMA and GHMA would increase restrictions on mineral material activities compared with Alternative A, thereby increasing impacts.
Special Designations						
Areas of Critical Environmental Concern						
The BLM would continue managing the 53 existing ACECs containing 325,000 acres of occupied GRSG habitat to protect the identified relevant and important values. Sagebrush habitat is not identified as a relevant and important value in any of these existing ACECs.	No new ACECs would be designated. Impacts would be similar to those described under Alternative A, however existing ACECs and the identified relevant and important values for which they were designated could experience indirect, beneficial impacts from restrictions placed on GRSG habitat within or adjacent to ACECs.	Under Alternative C, 39 new BLM ACECs encompassing approximately 4,200,000 acres of occupied GRSG habitat would be designated as sagebrush reserves, for the relevant and important value of conserving GRSG.	No new ACECs would be designated. Impacts would be the same as those described under Alternative B.	No new ACECs would be designated. Impacts would be the same as those described under Alternative B.	Under Alternative F, up to 18 new BLM ACECs and Forest Service GRSG Zoological Areas encompassing up to 8.3 million acres of occupied GRSG habitat would be designated as sagebrush reserves for the relevant and important value of conserving GRSG.	No new ACECs would be designated. Impacts would be the same as those described under Alternative B.

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Socioeconomic Impacts						
Under Alternative A, current management would continue for grazing, mineral leasing and development, and other activities in GRSG habitat areas. The economic benefits of these activities would be maintained, and communities would not suffer losses in income or jobs associated with GRSG conservation efforts.	Under Alternative B, grazing would not be restricted on GRSG habitat, so permittees would not suffer economic losses. Under Alternative B, mineral leasing for fluid minerals, salable minerals and mineral materials would be closed or restricted in PHMA. These restrictions would reduce the opportunity to develop minerals on federal land and reduce the revenue and jobs to local communities.	Alternative C would eliminate grazing from all allotments in occupied habitat. The elimination of permitted grazing in PHMA under Alternative C may result in permittees' going out of business, with impacts on both individual permittees as well as local communities as a whole. Socioeconomic impacts from reduced mineral leasing and development would be similar to Alternative B but would cover a wider area, all occupied habitat.	Under Alternative D, grazing would be maintained at current levels, maintaining the economic benefits of grazing to permittees and communities. Mineral leasing acreage would not be reduced under Alternative D, but would be subject to stipulations regarding timing and proximity to GRSG lek sites. Maintaining current acreage open to leasing would minimize economic harm to workers and communities from GRSG conservation measures.	Under Alternative E, grazing would be maintained at current levels, maintaining the economic benefits of grazing to permittees and communities. Mineral leasing acreage would not be reduced under Alternative E, but limited areas would be subject to stipulations regarding timing and proximity to GRSG lek sites. Maintaining current acreage open to leasing would minimize economic harm to workers and communities from GRSG conservation measures.	Alternative F restrictions on grazing could also harm permittees' economic well-being and may drive some out of business, causing harm to individuals and communities in GRSG habitat areas. Socioeconomic impacts from reduced mineral leasing and development would be similar to Alternative B.	Under the Proposed Plan, grazing would be maintained at current levels, maintaining the economic benefits of grazing to permittees and communities. Mineral leasing acreage would not be reduced under the Proposed Plan, but would be subject to stipulations regarding timing and proximity to GRSG lek sites. Maintaining current acreage open to leasing would minimize economic harm to workers and communities from GRSG conservation measures.