

Nevada and Northeastern California Greater Sage-Grouse

Draft

Land Use Plan Amendment and
Environmental Impact Statement



Forest Service

BLM

US Department of the Interior
Bureau of Land Management

US Department of Agriculture
Forest Service

October 2013



The Bureau of Land Management's multiple-use mission is to sustain the health and productivity of the public lands for the use and enjoyment of present and future generations. The Bureau accomplishes this by managing such activities as outdoor recreation, livestock grazing, mineral development, and energy production, and by conserving natural, historical, cultural, and other resources on public lands.

The mission of the USDA Forest Service is to sustain the health, diversity, and productivity of the Nation's forests and grasslands to meet the needs of present and future generations

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**Draft Resource Management
Plan Environmental Impact
Statement**

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Nevada and Northeast California Greater Sage-Grouse Draft Land Use Plan Amendment and Environmental Impact Statement

Responsible Agencies: United States Department of the Interior
Bureau of Land Management

United States Department of Agriculture
Forest Service

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Abstract: This draft land use plan amendment and environmental impact statement has been prepared by the Bureau of Land Management (BLM) and United States Department of Agriculture, Forest Service with assistance from 25 cooperating agencies. It describes and analyzes six alternatives for managing approximately 17.7 million acres of BLM- and Forest Service-administered lands in Nevada and Northeast California. Federal lands in the planning are managed by five Nevada BLM district offices (Battle Mountain, Carson City, Elko, Ely, and Winnemucca), three California BLM field offices (Alturas, Eagle Lakes, and Surprise), two Idaho BLM field offices (Jarbidge and Bruneau) via an MOU, and one national forest (Humboldt-Toiyabe). The sub-regional planning area spans portions of 16 Nevada counties, four California Counties, and one Idaho County (Owyhee). Alternative A is a continuation of current management (No Action Alternative); use of public lands and resources would continue to be managed under the current BLM and Forest Service land use plans, as amended. Alternative B describes management actions from the Sage-Grouse National Technical Team's *A Report on National Greater Sage-Grouse Conservation Measures*. Alternative C describes management actions submitted by various citizen groups. Alternative D is the agencies' preferred alternative and describes management actions developed by adapting the National Technical Team measures to the Nevada and Northeast California sub-region. Alternative E is based on the State of Nevada's Conservation Plan for Greater Sage-Grouse and would apply to lands within Nevada only. Alternative F describes management actions submitted by individuals and conservation groups. While Alternative D is the agencies' preferred alternative, it is not a final agency decision but instead an indication of the agencies' preliminary preference that reflects the best combination of decisions to achieve BLM and Forest Service goals and policies, meet the purpose and need, address the key planning issues, and consider the recommendations of cooperating agencies and BLM and Forest Service specialists. The alternatives present a range of management actions to achieve the goal of Greater Sage-Grouse conservation for the Nevada and Northeast California sub-region. Major planning issues addressed in the document correspond with threats identified in a report by the US Fish and Wildlife Service's Sage-Grouse Conservation Objective Team; these include wildland fire management, livestock grazing, vegetation management, and lands and realty actions.

Review Period: Comments on the Nevada and Northeast California Draft Land Use Plan Amendment and Environmental Impact Statement will be accepted for 90 calendar days following publication of the United States Environmental Protection Agency's Notice of Availability in the *Federal Register*.

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Executive Summary

ES.1 Introduction

The Federal Land Policy and Management Act of 1976 (FLPMA) directs the United States (US) Department of the Interior (DOI), Bureau of Land Management (BLM) to develop and periodically revise or amend its resource management plans (RMPs), which guide management of BLM-administered lands. The National Forest Management Act of 1976 (NFMA) directs the US Department of Agriculture, Forest Service (Forest Service) to develop and periodically revise or amend its land and resource management plans (LRMPs), which guide management of Forest Service-administered lands. These two agencies' plans will be generically referred to as land use plans (LUPs) throughout the remainder of this document, unless the reference is to a specific BLM or Forest Service LUP.

This initiative is the result of the March 2010 US Fish and Wildlife Service (USFWS) 12-Month Finding for Petitions to List the Greater Sage-Grouse (*Centrocercus urophasianus*) (GRSG) as Threatened or Endangered (75 *Federal Register* 13910, March 23, 2010). In that finding, the USFWS concluded that GRSG was “warranted, but precluded” for listing as a threatened or endangered species. A “warranted, but precluded” determination is one of three results that may occur after a petition is filed by the public to list a species under the Endangered Species Act (ESA). This finding indicates that immediate publication of a proposed rule to list the species is precluded by higher-priority listing proposals; that is, a species should be listed based on the available science, but listing other species takes priority because they are more in need of protection.

The USFWS reviewed the status of and threats to the GRSG in relation to the five listing factors provided in Section 4(a)(1) of the ESA. Of the five listing factors reviewed, the USFWS determined that Factor A, “the present or threatened destruction, modification, or curtailment of the habitat or range of the GRSG,” and Factor D, “the inadequacy of existing regulatory mechanisms,” posed “a significant threat to the GRSG now and in the foreseeable future” (USFWS 2010a). The USFWS identified the principal regulatory mechanisms for the BLM and Forest Service as conservation measures in LUPs.

Consistent with the National Greater Sage-Grouse Planning Strategy (BLM 2011), the BLM as the lead agency, together with the Forest Service as a cooperating agency, is preparing several environmental impact statements (EISs), with associated plan amendments. These documents will address a range of alternatives focused on specific conservation measures across the range of the GRSG. The amendments will be coordinated under two administrative planning regions across the entire range of the GRSG. The Great Basin Region and the Rocky Mountain Region boundaries are drawn roughly to correspond with the threats identified by the USFWS in the 2010 listing decision, along with the Western Association of Fish and Wildlife Agencies (WAFWA) management zones framework (Stiver et al. 2006). The management zones reflect ecological and biological issues and similarities. In addition, management challenges within management zones are similar, and GRSG and their habitats are likely responding similarly to environmental factors and management actions. The Great Basin Region consists of land use plans in California, Nevada, Oregon, and Idaho and in portions of Utah and Montana. The Rocky Mountain Region consists of land use plans in North Dakota, South Dakota, Wyoming, and Colorado and in portions of Montana and Utah.

ES.2 Description of the Greater Sage-Grouse Planning Area

The planning area is the geographic area within which the BLM and Forest Service would make decisions during this planning effort. The planning area boundary includes all lands regardless of jurisdiction. For this LUP Amendment (LUPA)/EIS, the planning area is the entire Nevada and Northeast California sub-region. Lands addressed in the LUPAs are BLM- and Forest Service-administered lands in GRSG habitats, including surface and split-estate lands with BLM subsurface mineral rights. Any decisions in the LUPAs would apply only to BLM- and Forest Service-administered lands (the decision area). The LUPAs would be limited to making land use planning decisions specific to the conservation of GRSG and their habitat.

The Battle Mountain, Carson City, Elko, Ely, and Winnemucca BLM district offices in Nevada and the Alturas, Eagle Lake, and Surprise BLM field offices in California administer the 11 pertinent RMPs being amended by this LUPA/EIS. In addition, the Humboldt-Toiyabe National Forest administers two forest LRMPs that would also be amended by this LUPA/EIS. The Nevada and Northeastern California sub-regional GRSG planning area covers all or a portion of 16 counties in Northern Nevada and portions of 4 counties in northeastern California. Of these 20 counties, 12 contain GRSG habitat. Lands within the planning area include a mix of private, federal, and state lands.

There are approximately 77,800 acres of public lands in Elko County, Nevada, located north of the Humboldt-Toiyabe National Forest and south of the Idaho-Nevada state line, adjacent to the Bruneau and Jarbidge field offices in Idaho. Due to their remoteness from other BLM-administered lands in Nevada and because they are contiguous to major blocks of public lands in Idaho, a Memorandum of Understanding between the BLM Nevada and BLM Idaho State Offices transfers administration of those lands to the BLM Idaho State Office. For purposes of the GRSG LUPAs in Idaho and in Nevada, planning for these lands will occur through the Nevada and Northeastern California Greater Sage-Grouse LUPA/EIS, and the regulatory measures/decisions that are put in place for the GRSG through the record of decision will be implemented and administered by the Jarbidge and Bruneau field offices in Idaho. Therefore, the mapped decision and analysis area for the Nevada and Northeastern California LUPAs/EIS will include lands administered by the Jarbidge Field Office in Nevada and end at the Nevada state line (see Table ES-1, Land Management within the Planning Area, and Figure ES-1, Nevada and Northeastern California Greater Sage-Grouse Sub-region Planning Area, which includes mapped preliminary priority habitat [PPH] and preliminary general habitat [PGH]). PPH and PGH are defined as follows:

- PPH: Areas that have been identified as having the highest conservation value to maintain sustainable GRSG populations. These areas include those for breeding, late brood-rearing, and winter concentration.
- PGH: Areas of occupied seasonal or year-round habitat outside of PPH.

GRSG habitat on BLM- and Forest Service-administered lands in the decision area consists of 12,693,500 acres of PPH and 5,039,400 acres of PGH.

Table 1. ES-1 Land Management within the Planning Area

Surface Land Management	PPH Acres	PGH Acres	Total Surface Land Management Acres
BLM	11,516,900	4,501,200	45,360,200
Forest Service	1,176,600	538,200	4,508,400
Private	2,198,500	870,900	11,844,800
Bureau of Indian Affairs (tribal)	63,300	24,300	921,600

Surface Land Management	PPH Acres	PGH Acres	Total Surface Land Management Acres
USFWS	54,600	3,300	805,900
Other	4,700	2,500	310,800
State	5,400	300	238,400
National Park Service	0	2,500	160,000
Other federal	0	1,100	3,200
Bureau of Reclamation	0	200	439,800
Local government	200	0	17,600
Department of Defense	0	0	393,700
Total Acres	15,020,200	5,944,200	65,004,400

Source: BLM and Forest Service GIS 2013

(PDF Map 1–2)

Figure 1.

ES.3 Purpose and Need

The BLM and the Forest Service are preparing LUPAs with associated EISs for LUPs containing GRSG habitat. This is needed to respond to the USFWS’s March 2010 “warranted, but precluded” ESA listing petition decision. Inadequacy of regulatory mechanisms was identified as a significant threat in the USFWS finding on the petition to list the GRSG. The USFWS identified the principal regulatory mechanisms for the BLM and the Forest Service as conservation measures embedded in LUPs. Changes in management of GRSG habitats are necessary to avoid the continued decline of populations across the species’ range. These plan amendments will focus on areas affected by threats to GRSG habitat identified by the USFWS in the March 2010 listing decision.

The major threats identified by USFWS within BLM- and Forest Service-administered lands in the Nevada and Northeastern California Sub-region include:

- Wildfire – loss of large areas of GRSG habitat due to wildfire
- Invasive Species – conversion of GRSG habitat to cheatgrass dominated plant communities
- Conifer Invasion – encroachment of pinyon and/or juniper into GRSG habitat
- Infrastructure – fragmentation of GRSG habitat due to human development activities such as right-of-way (ROW) and renewable energy development
- Climate Change – fragmentation of GRSG habitat due to climate stress
- Grazing – loss of habitat components due to livestock, wild horse and burro, and large wildlife use
- Hard Rock Mining – fragmentation of GRSG habitat due to mineral exploration and development
- Oil and Gas Development -fragmentation of GRSG habitat due to mineral exploration and development
- Human Uses – fragmentation of GRSG habitat and/or modification of GRSG behavior

The purpose for the LUPAs is to identify and incorporate appropriate conservation measures in LUPAs to conserve, enhance, and restore GRSG habitat by reducing, eliminating, or minimizing threats to that habitat.

Because the BLM and Forest Service administer a large portion of GRSG habitat within the affected states, changes in BLM and Forest Service management of GRSG habitats are anticipated to have a considerable beneficial impact on present and future GRSG populations and could reduce the need to list the species as threatened or endangered under the ESA.

ES.4 Proposed Action

This draft Nevada and Northern California Greater Sage-Grouse LUPA/EIS provides future management direction to maintain or increase GRSG abundance and distribution by conserving, enhancing, or restoring the sagebrush ecosystem on which populations depend throughout WAFWA Management Zone(s) III, IV, and V in the planning area (Stiver et al. 2006).

The federal action is the selection of management actions that will provide a consistent framework for managing GRSG and its habitat on BLM- and Forest Service-administered lands. This would be in concert with its allocation of resources, in accordance with the multiple-use and sustained yield mandates of FLPMA and the National Forest Management Act of 1976. The alternatives identify the range of management actions, restrictions, and constraints that would be placed on allowable uses on BLM- and Forest Service-administered lands to conserve, restore, and enhance GRSG habitat.

ES.5 Scoping

Scoping is an early and open process for determining the scope, or range, of issues to be addressed and for identifying the significant issues to consider in the planning process. Scoping identifies the public and agency concerns, defines the relevant issues and alternatives that would be examined in detail in the EIS, and eliminates those that are not relevant. A planning issue is defined as a major controversy or dispute regarding management or uses on public lands that can be addressed through a range of alternatives. The environmental impacts of these alternative management scenarios are analyzed and addressed in this EIS.

A public scoping period for the Nevada and Northeastern California Sub-region GRSG LUPAs was initiated on December 9, 2011, with the publication of a Notice of Intent to begin a planning effort in the Federal Register. Scoping is designed to be consistent with the public involvement requirements of FLPMA, NFMA, and NEPA. The cooperative process included soliciting input from interested state and local governments, tribal governments, other federal agencies and organizations, and individuals to identify the scope of issues to be addressed in the plan amendment, and to assist in the formulation of a reasonable range of alternatives. The scoping process is an excellent method for opening dialogue between the BLM, Forest Service, and the general public about management of GRSG and their habitats on public lands and for identifying the concerns of those who have an interest in GRSG conservation and habitat. As part of the scoping process, the BLM also requested that the public submit nominations for potential Areas of Critical Environmental Concern for GRSG and their habitats.

The scoping period was extended through a Notice of Correction published February 10, 2012, and ended on March 23, 2012. Scoping included scheduled open-house meetings in the following locations:

- Tonopah, Nevada – January 9, 2012
- Ely, Nevada – January 10, 2012
- Elko, Nevada – January 11, 2012
- Winnemucca, Nevada – January 12, 2012
- Alturas, CA – January 18, 2012
- Susanville, CA – January 19, 2012
- Reno, Nevada – January 30, 2012

Comments obtained from the public during the scoping period were used to define the relevant issues that would be addressed by a reasonable range of alternatives. The BLM and Forest Service published the final Scoping Summary Report in May 2012. This report is available at the BLM's GRSG conservation website:

http://www.blm.gov/wo/st/en/prog/more/sagegrouse/documents_and_resources.html

ES.6 Issues

During the range-wide public scoping process and during the statewide planning effort, the BLM and Forest Service identified issues for consideration in the Nevada and Northeastern California Sub-Region Greater Sage-Grouse LUPAs. The final Scoping Summary Report, prepared in conjunction with these LUPAs, summarizes the scoping and issue-identification process. The issues identified in the Scoping Report fall into 1 of 13 broad categories. Other resource and use issues are identified in the BLM Planning Handbook and Manual (H-1610-1). All of the following issues were considered in developing the alternatives brought forward for analysis:

- Greater Sage-Grouse and GRSG habitat—Using sound science to determine habitat requirements and restrictions needed to protect GRSG habitat
- Energy and Mineral Development—Limitations on energy and mineral development
- Livestock Grazing—Restrictions on forage availability, grazing practices and facilities and the socioeconomic impacts on the ranching industry
- Vegetation Management—Protecting life-stage habitat requirements for the GRSG and preventing noxious and invasive species
- Fish and Wildlife—Predation and wildlife competition for resources
- Lands and Realty—ROW avoidance and exclusion areas; land disposal, acquisition and withdrawal availability
- Social, Economic, and Environmental Justice Considerations—Limitations on land uses and the socioeconomic impacts
- Recreation and Travel Management—Limitations on off-highway vehicle use and certain recreation activities
- Fire Management—Identifying appropriate fuels management techniques and restoration

- Special Management Areas—Evaluating existing and proposing new areas for special management (e.g., Areas of Critical Environmental Concern)
- Water and Soil—Protection of water and soil to support adequate GRSG habitat and prevent the spread of West Nile virus
- Drought Management/Climate Change—Establishing management decisions that incorporate climate change effects on GRSG habitat
- Wild Horses and Burros—Increased management of wild horses and burros in GRSG habitat

In addition to issues identified for consideration in this EIS, scoping also identified issues to be address through policy or administrative action. Policy or administrative actions are those that the BLM and Forest Service implement because federal law requires them or because they are BLM policy. They are, therefore, issues that are eliminated from detailed analysis in this planning effort. Administrative actions do not require a planning decision to implement.

Finally, some issues were eliminated from detailed analysis because they are beyond the scope of the LUPAs or outside the authority of the BLM or Forest Service. The following issues were determined to be outside the scope of the range-wide planning effort:

- Hunting GRSG—Commenters questioned why GRSG hunting is allowed if the bird is in need of protection. The Nevada Department of Wildlife (NDOW) and California Department of Fish and Wildlife (CDFW) regulate hunting activities. NDOW follows the guidelines established by WAFWA that suggest hunter harvest should not exceed 10 percent of the estimated fall population, populations should not be hunted where fewer than 300 individuals comprise the breeding population, and GRSG hunting seasons should be 1 to 4 weeks with a low bag limit (1 to 2 birds per day). The season in Nevada has generally fluctuated between 10 and 15 days for most areas and the bag limit has remained at 2 per day and 4 birds in possession.

NDOW also identifies an ancillary benefit of the hunting season as an opportunity to collect important population demographic data. Each year, NDOW collects wings from hunter-harvested birds. Data collected from these wings are used to help estimate fall population size in specific areas. Examination of wings from adult hens allows NDOW to determine whether or not the bird nested successfully during the previous breeding season. Collectively, this information helps to determine population health and formulate future management recommendations (NDOW 2012). GRSG hunting permits also provide NDOW with a revenue source for further GRSG conservation.

CDFW also uses the GRSG hunting season to collect wings to estimate important demographic data. CDFW uses a permit system which prevents legal harvest from exceeding 5 percent of the estimated fall population. Permit quotas are adjusted annually by the Fish and Wildlife Commission to prevent overharvest. A permit is required to hunt GRSG in all California hunt zones. California also complies with WAFWA guidelines with a short season of 2 days and low bag limit of 2 birds per permit. Within the two northeastern zones (Central and East Lassen). CDFW did not authorize any GRSG permits in 2012 and 2013 in the Central and East Lassen hunt zones due to two large fires within the Buffalo Skedaddle Population Management Unit. It is unlikely that CDFW will recommend issuing GRSG hunting permits in future years without significant habitat and population recovery within the two hunt zones.

- Predator control— Commenters stated that control was needed to protect GRSG from predation. NDOW and CDFW manage wildlife within Nevada and California, respectively, while the BLM and Forest Service focus on managing habitat. Consistent with a Memorandum of Understanding between the BLM and the US Department of Agriculture, Animal and Plant Health Inspection Service-Wildlife Services, the BLM and Forest Service will continue to work with NDOW and CDFW to meet state wildlife population objectives. Predator control is allowed on BLM-administered lands and is regulated by NDOW and CDFW. These comments, therefore, relate to state-regulated actions and are outside the scope of the plan amendment. 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.
- Warranted but precluded decision and management under ESA listing—Commenters questioned population levels and the need to incorporate range-wide conservation measures. Others questioned the effectiveness of ESA listing as a method of species conservation. These comments relate to decisions under the purview of the USFWS and are not addressed in this LUPA. The listing of GRSG by the USFWS may include conservation measures identified by the USFWS, however, those conservation measures are not known at this time. Therefore, the BLM cannot address those speculative measures as part of its land use planning effort
- Reform national livestock grazing policies on all BLM- and Forest Service-administered Lands—Commenters stated that national grazing policies should be reformed as the requirements are too limiting and impact ranchers' livelihoods. Decisions about livestock grazing national policies are outside the scope of this amendment and are not made in this planning effort.

However, the reduction or elimination of livestock (i.e., permitted grazing use) in GRSG habitat is considered. This is consistent with IM No. 2012-169, RMP Alternative Development for Livestock Grazing (BLM 2012a).

- Renewable energy policies—Commenters stated concerns about renewable energy development, including economic instability due to government subsidies and risk of wildlife deaths, specifically bats and birds. General policy decisions about renewable energy management on BLM-administered lands, such as impacts on other wildlife species, will be determined by national policy and are not addressed in this plan amendment.

ES.7 Development of Planning Criteria

Planning criteria are based on appropriate laws, regulations, BLM and Forest Service Manual and Handbook sections, and policy directives as well as on public participation and coordination with cooperating agencies; other federal agencies, state, and local governments; and Native American tribes. Planning criteria are the standards, rules, and factors used as a framework to resolve issues and develop alternatives. Planning criteria are prepared to ensure decision making is tailored to the issues and to ensure that the BLM and Forest Service avoid unnecessary data collection and analysis.

Preliminary Planning Criteria include the following:

- The BLM and Forest Service will utilize the WAFWA Conservation Assessment of GRSG and Sagebrush Habitats (Connelly et al. 2004; Coates and D. J. Delehanty 2004, 2008, 2010)

and any other appropriate resources, to identify GRSG habitat requirements and required design features.

- The approved LUPAs will be consistent with the BLM’s National GRSG Conservation Strategy.
- The approved LUPAs will comply with BLM direction, such as FLPMA, NEPA, and Council of Environmental Quality (CEQ) regulations at 40 Code of Federal Regulation (CFR), Parts 1500 through 1508; DOI regulations at 43 CFR, Part 46, and 43 CFR, Part 1600; the BLM H-1601-1 Land Use Planning Handbook, “Appendix C: Program-Specific and Resource-Specific Decision Guidance Requirements” for affected resource programs (BLM 2005a); the 2008 BLM NEPA Handbook (H-1790-1; BLM 2008e); and all other applicable BLM policies and guidance.
- The approved LUPAs will comply with Forest Service direction such as NFMA, NEPA, CEQ regulations at 40 CFR, Parts 1500 through 1508, Regulations of the Secretary of Agriculture at 36 CFR, Part 219, Forest Service NEPA regulations at 36 CFR, Part 220, the Forest Service Manual 1920, Forest Service Handbook 1909.12, and Forest Service Handbook 1909.15 (Forest Service 2006a, 2006b, 2012a).
- The LUPAs will be limited to making land use planning decisions specific to the conservation of GRSG species and habitats.
- The BLM and Forest Service will consider allocative and prescriptive standards to conserve GRSG and its habitat as well as objectives and management actions to restore, enhance, and improve GRSG habitat.
- The LUPAs will recognize valid existing rights.
- Lands addressed in the LUPAs will be BLM- and Forest Service-administered land in GRSG habitats, including surface and split-estate lands with BLM subsurface mineral rights. Any decisions in the LUPAs will apply only to BLM- and Forest Service-administered lands.
- The BLM and Forest Service will use a collaborative and multi-jurisdictional approach, where appropriate, to determine the desired future condition of BLM- and Forest Service-administered lands for the conservation of GRSG and their habitats.
- As described by law and policy, the BLM and Forest Service will strive to ensure that conservation measures are as consistent as possible with other planning jurisdictions within the planning area boundaries.
- The BLM and Forest Service will consider a range of reasonable alternatives, including appropriate management prescriptions that focus on the relative values of resources while contributing to the conservation of the GRSG and GRSG habitat.
- The BLM and Forest Service will address socioeconomic impacts of the alternatives. Socioeconomic analysis will use the input-output quantitative models Impact analysis for Planning (IMPLAN) and National Renewable Energy Laboratory’s Jobs and Economic Development Impact model (JEDI, for renewable energy analysis) where quantitative data is available.

- The BLM and Forest Service will use the best available scientific information, research, technologies, and results of inventory, monitoring, and coordination to determine appropriate local and regional management strategies that will enhance or restore GRSG habitats.
- Management of GRSG habitat that intersects with any component of the National Landscape Conservation System (National Conservation Lands, including Wilderness Areas, Wilderness Study Areas, Wild and Scenic Rivers, National Scenic and Historic Trails, National Conservation Areas, National Monuments, or similar designation) on BLM-administered lands will be managed in accordance with applicable laws, regulations, and policies.
- For BLM-administered lands, all activities and uses within GRSG habitats will follow existing land health standards. Standards and guidelines for livestock grazing and other programs that have developed standards and guidelines will be applicable to all alternatives for BLM-administered lands. For Forest Service-administered lands, all activities with GRSG habitat will achieve the GRSG habitat objectives.
- The BLM and Forest Service will consult with Native American tribes to identify sites, areas, and objects important to their cultural and religious heritage within GRSG habitats.
- The BLM and Forest Service will coordinate and communicate with state, local, and tribal governments to ensure that the BLM and Forest Service consider provisions of pertinent plans, seek to resolve inconsistencies between state, local, and tribal plans, and provide ample opportunities for state, local, and tribal governments to comment on the development of amendments.
- The BLM and Forest Service will develop vegetation management objectives, including objectives for managing noxious weeds and invasive species (including identification of desired future condition for specific areas), within GRSG habitat.
- The LUPAs will be based on the principles of adaptive management.
- Reasonable Foreseeable Development Scenarios and planning for fluid minerals will follow the BLM Handbook H-1624-1 and current fluid minerals manual guidance for fluid mineral (oil and gas, coal-bed methane, oil shale) and geothermal resources (BLM 1990a). For Forest Service-administered lands, the Forest Service will comply with 36 CFR 228.102 for making a leasing decision.
- The LUPAs will be developed using an interdisciplinary approach to prepare reasonable foreseeable development scenarios, ensure cooperating agency review of the proposed alternatives, and analyze resource impacts, including cumulative impacts on natural and cultural resources and the socio-economic environment.
- The most current BLM and Forest Service and State of Nevada spatial data will be supported by current metadata and will be used to ascertain GRSG habitat extent and quality. Data will be consistent with the principles of the Information Quality Act of 2000.
- State fish and wildlife agencies' GRSG data and expertise will be considered in making management determinations on BLM- and Forest Service-administered lands.

ES.8 Management Alternatives

The Nevada and Northeastern California Sub-region GRSG LUPA/EIS planning team employed the BLM 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 1500 in the development of alternatives for this draft 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 is specifically to 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.

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:

1. Developed one No Action Alternative (Alternative A) and two preliminary action alternatives. The first action alternative (Alternative B) is based on A Report on National Greater Sage-Grouse Conservation Measures (National Technical Team [NTT] 2011), and the second action alternative (Alternative C) is based on a proposed alternative submitted by a coalition of conservation groups.
2. Customized the goals, 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.
3. Incorporated proposed GRSG protection measures recommended by the State of Nevada as a fifth alternative (Alternative E).
4. Separated Alternative C into two distinct alternatives and developed Alternative F, the sixth alternative, which includes similar goals, objectives, and actions as Alternative C, but with key differences mainly related to grazing, lands and realty, and minerals.

Each of the preliminary action alternatives was designed to:

- Address the 13 planning issues (identified in **Section ES.6**, Issues)
- Fulfill the purpose and need for the LUPA (outlined in **Section ES.3**, Purpose and Need)
- Meet the multiple use mandates of the FLPMA (43 CFR 1716)
- Respond to USFWS-identified issues and threats to GRSG and their habitat

The five resulting action alternatives (Alternatives B, C, D, E, and F) offer a range of possible management approaches for responding to planning issues and concerns identified through public scoping, and to maintain or increase GRSG abundance and distribution in the planning area. While the goal is the same across 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.

Each of the action alternatives identifies areas for focusing GRSG conservation. Management actions for each of the alternatives are based on mapped GRSG habitat, as described in Section 1.1.1, *BLM and Forest Service Habitat Mapping*. Under Alternative A, the No Action Alternative, PPH and PGH are identified; however, neither the BLM nor the Forest Service would apply new management actions to protect the mapped GRSG habitat. Under Alternatives B, C, D, and F, the BLM and Forest Service would apply a range of management actions to PPH and PGH.

Under Alternatives B, C, D, and F, areas where management would be applied to PPH are referred to as preliminary priority management areas (PPMAs), and areas where management would be applied to PGH are referred to as preliminary general management areas (PGMAs). Accordingly, PPMAs are identified as having the highest value to maintaining sustainable GRSG populations. PPMAs generally follow PPH boundaries but may be modified based on the objectives of each alternative. PGMAs are also identified as requiring special management attention to sustain GRSG populations, but they are less critical than PPMAs. PGMAs generally follow PGH boundaries, but they may be modified based on the objectives of each alternative. Management strategies applied to PPMAs and PGMAs vary by alternative.

Under Alternative E, the Nevada State Alternative, management actions apply to Sage-Grouse Management Areas (SGMAs), which are occupied, suitable, potential, and non-GRSG habitat within the range of the GRSG (as identified in the State of Nevada's Strategic Plan for Conservation of GRSG in Nevada [State of Nevada 2012]).

The effects of these variations on PPMA, PGMA, and SGMA acreages are reflected in **Table 2-3**.

ES.8.1 Alternative A: No Action

Alternative A meets the CEQ requirement that a No Action Alternative be considered. This alternative continues current management direction and prevailing conditions derived from the existing field/district office and forest planning documents. Goals and objectives for resources and resource uses are based on the most recent LUP decisions, along with associated amendments, activity- and implementation-level plans, and other management decision documents. Laws, regulations, and BLM and Forest Service policies that supersede LUP decisions would apply. The No Action Alternative highlights those decisions that can be shown to have a direct effect or link to conserving or restoring GRSG habitat or sagebrush vegetation communities that support GRSG throughout its life cycle. Because there are few management decisions that are common to all 13 LUPs, a summary of the general management per threat is discussed.

Goals and objectives for BLM- and Forest Service-administered lands and mineral estate would not change. Appropriate and allowable uses and restrictions pertaining to activities

such as mineral leasing and development, recreation, construction of utility corridors, and livestock grazing would also remain the same. The BLM and Forest Service would not modify existing or establish additional criteria to guide the identification of site-specific use levels for implementation activities.

ES.8.2 Alternative B

GRSG conservation measures in *A Report on National Greater Sage-Grouse Conservation Measures* (NTT 2011) were used to form BLM and Forest Service management direction under Alternative B. Management actions by the BLM and Forest Service in concert with other federal, state, and local agencies, tribes, and private land owners play a critical role in the future trends of GRSG populations. To ensure BLM and Forest Service management actions are effective and based on the best available science, the BLM's National Policy Team created the NTT in August 2011. The BLM's objective for chartering this planning strategy effort was to develop new or revised regulatory mechanisms, through LUPs, to conserve and restore GRSG and its habitat on BLM- and Forest Service-administered lands on a range-wide basis over the long term. The complete NTT report can be reviewed online at:

<http://www.blm.gov/pgdata/etc/medialib/blm/co/programs/wildlife.Par.73607.File.dat/GrSGTechTeamReport.pdf>.

Because conservation measures in the report are focused primarily on PPH, Alternative B primarily applies management actions to PPMAs, and to a lesser extent PGMAs. The alternative includes all mapped PPH and PGH within PPMAs and PGMAs with no adjustments.

The best management practices (BMPs) proposed in the NTT report are included as required design features as part of Alternative B and are listed in **Appendix A**, Required Design Features, of this document. The RDFs mirror the NTT BMPs with one exception: the locatable mineral BMPs are carried forward as BMPs because the General Mining Act of 1872 prevents the agencies from imposing use restrictions on mining claims.

Management actions from the NTT Report concerning coal are not applicable to the Nevada and Northeastern California Sub-region since there are no reasonably developable coal resources within the planning area. Accordingly, the portion of the NTT Report that addresses coal leasing will not be carried forward as part of Alternative B.

ES.8.3 Alternative C

During scoping individuals and conservation groups submitted management direction recommendations for protection and conservation of GRSG and its habitat. The recommendations, in conjunction with resource allocation opportunities and internal sub-regional BLM and Forest Service input, were reviewed to develop BLM and Forest Service management direction for GRSG under Alternative C. Management actions in Alternative C are applied to PPMAs and focus on the removal of livestock grazing from the landscape to alleviate threats to GRSG. Under Alternative C, PPMAs are the sum of PPH and PGH.

ES.8.4 Alternative D

Alternative D is the BLM and Forest Service, Nevada and Northeastern California Sub-region's adjustments alternative, which emphasizes balancing resources and resource use among competing human interests, land uses, and the conservation of natural and cultural resource values, while sustaining and enhancing ecological integrity across the landscape, including plant,

wildlife, and fish habitat. This alternative provides a balanced level of protection, restoration, enhancement, and use of resources and services to meet ongoing programs and land uses.

The alternative adjusts the delineation of PPMAs and PGMA to reflect existing land uses, use authorizations, land allocations, and habitat considerations. Areas of PPH next to large-scale mining or EIS-level mine expansions or within developed utility/transportation corridors would be managed as PGMA. PGH within designated Wilderness or within Wilderness Study Areas would be managed as PPMA. Mapped PPH within the isolated and highly fragmented Northwest Interior population would be managed as PGMA. PGH in an area of high potential for ensuring genetic connectivity across the I-80/checkerboard landownership corridor would be managed as PPMA.

This alternative also provides for no unmitigated loss of PPH/PGH. No unmitigated loss is described as follows:

Continued losses of GRSG habitat through natural events such as wildfire are expected to continue. Therefore, it is incumbent on the BLM and Forest Service to minimize loss of habitat or habitat functionality arising from discretionary agency actions or authorizations.

The concept of no unmitigated loss includes a suite of actions that can be taken at the project level to offset or restore direct and indirect disturbances on GRSG habitat. This may include conducting restoration or other appropriate actions (e.g., fence marking to reduce collision risk, and avian predator diverters) in advance of or concurrent with site-specific/project level disturbances caused by anthropogenic activities that disrupt GRSG behavior and/or remove habitat or degrade habitat quality or functionality.

In order to achieve the goal of no unmitigated loss, the following actions will be considered as part of the site-specific analysis of a proposed project:

- Siting activities in landscapes that do not provide habitat currently and are not likely to be restorable to habitat
- Rejecting use applications or nominations that cannot be adequately mitigated and where the agencies have discretion to do so
- Applying required design features and mitigation measures at a level that will offset immediate and long-term effects of the disturbance
- On-site measures to minimize disturbance footprints and taking actions to restore the disturbed areas concurrently (such as revegetation and weed treatments while burying power lines)
- Through off-site mitigation agreements developed cooperatively with the state wildlife and conservation agencies
- Prescribed mitigation ratios to offset the immediate and long-term effects of the disturbance
- Conducting restoration in advance of disturbance (such as through the State of Nevada's mitigation banking process)
- Coordination with the state(s) on required restoration (disturbance credits)

The BLM will consider the following to mitigate natural disturbances:

- Taking actions to prevent or reduce human-caused wildfire ignitions

- Conducting treatments (e.g., fuel breaks) to prevent and reduce the spread of wildfires and to augment fire suppression tactics
- Conducting restoration treatments in areas burned (including post-fire uses, such as grazing management)
- Conducting treatments to control the spread and dominance of cheatgrass
- Applying habitat restoration or enhancement treatments, such as seeding/planting of perennial grasses, forbs, and shrubs to improve habitat conditions

Because the Nevada and Northeastern California Sub-region GRSG LUPA/EIS is predominantly written in BLM planning language, an appendix (**Appendix B**, Forest Service Alternative D Language) has been added to the document that lays out the BLM and Forest Service preferred alternative in Forest Service nomenclature.

ES.8.5 Alternative E

Alternative E is based on the State of Nevada’s Conservation Plan for GRSG in Nevada (State of Nevada Alternative, Management Actions for the Conservation of the GRSG in the Nevada and Northeastern California Sub-region [State of Nevada 2012]; see **Appendix C**, State of Nevada Alternative) and would apply to all BLM- and Forest Service-administered lands in Nevada. The State of California did not submit a proposal for a complete alternative and as such, Alternative E would only apply to BLM- and Forest Service-administered lands in Nevada. If this alternative was selected as the preferred alternative, then BLM- and Forest Service-administered lands in California would be managed as described under the No Action Alternative (current management actions). The goals, objectives, and actions under Alternative E reflect concurrent state-level planning efforts for the protection of GRSG and its habitat. Since state-level planning efforts focus on all lands within the state, regardless of ownership, certain actions under Alternative E would have to be coordinated with the appropriate agency and incorporated into a federal decision.

The Nevada State Plan identifies 15 SGMAs across the state. The SGMA map defines the overall area where the state would like resources to be managed to maintain and expand GRSG populations. The State of Nevada SGMA map is based on the best biological information and knowledge at this time, taking into account the 85 percent breeding bird density, NDOW PPH and PGH maps, and areas of known resource conflicts.

Key elements of this alternative are:

- Achieving “no net loss” of GRSG habitat by implementing a strategy to avoid, minimize, and mitigate impacts on GRSG
- Establishing the Conservation Credit System
- Establishing the Sagebrush Ecosystem Technical Team

ES.8.6 Alternative F

Similar to Alternative C, Alternative F is based on recommendations submitted by individuals and conservation groups for the protection and conservation of GRSG and its habitat. Alternative F includes similar goals, objectives, and actions as Alternative C, but with notable differences, particularly related to grazing, lands and realty, and minerals. As under Alternative C,

conservation measures in Alternative F are mostly focused on designated GRSG Preliminary Priority Management Areas and Preliminary General Management Areas.

ES.9 Preferred Alternative

Alternative D is the preferred alternative of the BLM and Forest Service. They selected the preferred alternative based on meeting the purpose and need, the agencies' multiple use mission, interdisciplinary team recommendations, environmental consequences analysis of the alternative, and Cooperating Agency comments provided on the Administrative Draft EIS. Based on public/agency/tribal comments on the Draft EIS, the BLM and Forest Service will make the final selection of the preferred alternative, which may include elements of other alternatives.

ES.10 Environmental Consequences

The purpose of the environmental consequences analysis in this LUPA/EIS is to form the scientific and analytic basis for comparing the alternatives (including the No Action Alternative) and their possible impacts on the human environment. CEQ regulations for implementing NEPA state that the human environment is interpreted comprehensively to include the natural and physical environment and the relationship of people with that environment (40 CFR, Part 1508.14). The federal action is the BLM and Forest Service's selection of management actions that will provide a consistent framework for management of GRSG and its habitat on BLM and Forest Service-administered lands. This would be in concert with its allocation of resources, in accordance with the multiple-use and sustained yield mandates of FLPMA and NFMA.

Management actions proposed in **Chapter 2**, Alternatives, are planning-level decisions and typically would not result in direct on-the-ground changes. However, by planning for uses on BLM and Forest Service-administered surface estate and federal mineral estate during the planning horizon, this impact analysis focuses on impacts that could eventually result in on-the-ground changes. Impacts for some resources or resource uses, such as livestock grazing and off-highway vehicle use, could be confined to the BLM and Forest Service-administered surface estate. Other impacts, such as energy and minerals and requirements to protect GRSG from such activity, could apply to all BLM-administered federal mineral estate (including split-estate). Some management actions may affect only certain resources under certain alternatives.

Chapter 4, Environmental Consequences, identifies impacts that may enhance or improve a resource as a result of management actions, as well as those impacts that have the potential to impair a resource. Certain resources and resources uses were not carried forward for detailed review (see **Table 4-1**, Resources and Resource Uses Not Carried Forward for Detailed Analysis); these include fish and wildlife, visual resources, special designation areas, lands with wilderness characteristics, air quality, and cultural heritage resources. For these resources, management actions would not change across the alternatives or the effect of GRSG management actions would have neutral or positive effects. The effects on these resources will be analyzed in the implementation of conservation projects or applicable project-level planning process.

The following is a brief summary of the environmental consequences by alternative for those resources and resource uses carried forward for detailed analysis in **Chapter 4**, focusing on the effects on GRSG habitat from specific resource and resource use areas identified as a threat to GRSG.

ES.10.1 Alternative A: No Action

Under Alternative A, neither the BLM nor Forest Service would develop new management actions for to protect GRSG habitat. Management of existing threats to GRSG populations and habitat, such as cross-county motorized travel, grazing, infrastructure, invasive species, mineral development, and wildfire, would continue in accordance with existing land use planning documents.

ES.10.2 Alternative B

Alternative B would apply management actions to PPMAs and PGMAs, including actions that would limit motorized travel to existing routes, exclude ROW development in PPMAs and avoid development in PGMAs, close PPMAs to fluid mineral leasing, solid materials disposal, and nonenergy leasable minerals, and petition for withdrawal from locatable mineral entry in PPMAs.

These management actions would substantially reduce surface disturbance in PPMAs and would minimize disturbance in PGMAs, thereby maintaining GRSG habitat. At the same time, management actions would preclude energy and mineral development on the more than 12 million acres of PGMAs. The result would be an overall decrease in energy and mineral development potential throughout the sub-region.

Management actions for wildfire would focus on suppression in PPMAs and PGMAs, while limiting certain types of fuels treatments. Vegetation management would emphasize sagebrush restoration. Collectively, vegetation and wildfire management would conserve GRSG habitat.

Impacts from grazing and wild horse and burro management under Alternative B are the same as Alternative A.

ES.10.3 Alternative C

Alternative C would result in the greatest impacts on such resource uses as lands and realty, renewable energy development, minerals, travel management, and grazing, while providing the largest protections from activities that would disturb GRSG habitat. Management actions under Alternative C would apply to all PPMAs (under Alternative C, PPMAs have the acreage equivalent to PPMAs and PGMAs under Alternatives B, D, and F). Alternative C would also establish Areas of Critical Environmental Concern (ACECs) as a means to further demarcate and preserve GRSG habitat.

Alternative C would require the BLM and Forest Service to take a passive management approach to vegetation management and fuels treatments, resulting in the potential for larger, more intense fires. Larger fire sizes with greater intensity would eliminate larger areas of GRSG habitat, while increasing the risk to firefighters and the public.

ES.10.4 Alternative D

Alternative D, the agencies' preferred alternative, presents a balanced approach to maintaining and enhancing GRSG populations and habitat while managing for multiple uses. Under Alternative D, BLM and Forest Service management would support sagebrush/perennial grass ecosystems enhancements, increased fire suppression in PPMAs and PGMAs, and grazing management designed to maintain or enhance sagebrush and perennial grass ecosystems.

Alternative D would limit disturbance in GRSG habitat by use of the following:

- Limiting motorized travel to existing routes
- Excluding wind and solar energy development, while avoiding all other ROW development
- Applying no surface occupancy stipulations to fluid mineral development in PPMAs
- Closing PPMAs and PGMAs to nonenergy leasable mineral exploration and development

These management actions to protect GRSG habitat would decrease or eliminate certain development potential in GRSG habitat, such as wind and solar projects, but it would allow other activities, such as fluid mineral leasing, subject to conditions.

ES.10.5 Alternative E

Alternative E, which applies to SGMAs on BLM- and Forest Service-administered lands within Nevada, would use an “avoid, minimize, or mitigate strategy” to reduce direct and indirect impacts on GRSG from surface-disturbing activities. This alternative also seeks a balance between GRSG habitat protection and continued resource use. Accordingly, effects on GRSG habitat from many resource programs are similar to Alternative D. Specifically, these are wildfire management, lands and realty (except wind and solar), travel management, locatable minerals, and fluid mineral leasing.

However, compared to Alternative D and the other action alternatives, Alternative E would apply fewer restrictions on surface-disturbing activities, particularly renewable energy development, nonenergy leasable mineral exploration and development, and mineral material disposal.

ES.10.6 Alternative F

Proposed management actions under Alternative F for many resource programs would restrict development in ways similar to those proposed under Alternative C. Alternative F would apply the following management actions to PPMAs and PGMAs:

- Limit motorized travel to existing routes
- Exclude ROW development (including wind energy ROWs)
- Close PPMAs and PGMAs to fluid mineral leasing, solid materials disposal, and non-energy leasable minerals
- Petition for withdrawal from locatable mineral entry in PPMAs

Similar to Alternative C, these management actions would limit surface disturbance in PPMAs and PGMAs, thereby maintaining GRSG habitat. At the same time, management actions would preclude energy and mineral development on the nearly 18 million acres of PGMAs. The result would be an overall decrease in energy and mineral development potential throughout the sub-region.

Also similar to Alternative C, the BLM and Forest Service would establish ACECs and sagebrush reserves to increase awareness of GRSG habitat within those areas. Total ACEC acreages under Alternative F would be approximately one-tenth the size of the area proposed under Alternative C.

Alternative F would prioritize wildfire suppression in PPMAs, while limiting certain types of fuels treatments. Concurrent vegetation management would emphasize sagebrush restoration and enhancement. The combined effect would be an enhanced sagebrush cover critical to GRSG survival; however, increased sagebrush cover would result in a greater fuels load, which could increase the extent and severity of wildfires.

Impacts on GRSG from grazing and wild horse and burro management would be less than Alternative A. This would mainly be due to a 25 percent reduction in the established appropriate management levels for wild horses and burros and a reduction in utilization levels for livestock within PPMAs and PGMAs. Alternative F does not include timing restrictions on livestock grazing, which could result in impacts on GRSG habitat from livestock grazing during GRSG nesting periods.

Chapter 1.

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1.1. Introduction

The Federal Land Policy and Management Act of 1976 (FLPMA) directs the United States (US) Department of the Interior (DOI), Bureau of Land Management (BLM) to develop and periodically revise or amend its resource management plans (RMPs), which guide management of BLM-administered lands. The National Forest Management Act of 1976 (NFMA) directs the US Department of Agriculture (USDA), Forest Service (Forest Service) to develop and periodically revise or amend its land and resource management plans (LRMPs), which guide management of Forest Service-administered lands. These two agencies' plans will be generically referred to as land use plans (LUPs) throughout the remainder of this document, unless the reference is to a specific BLM RMP or Forest Service LRMP.

This initiative is the result of the March 2010 US Fish and Wildlife Service (USFWS) 12-Month Finding for Petitions to List the Greater Sage-Grouse (*Centrocercus urophasianus*) (GRSG) as Threatened or Endangered (75 *Federal Register* 13910, March 23, 2010; USFWS 2010a). In that finding, the USFWS concluded that GRSG was “warranted, but precluded” for listing as a threatened or endangered species. A “warranted, but precluded” determination is one of three results that may occur after a petition is filed by the public to list a species under the Endangered Species Act of 1973 (ESA, 16 United States Code [USC] 1531-1544). This finding indicates that immediate publication of a proposed rule to list the species is precluded by higher-priority listing proposals; that is, a species should be listed based on the available science, but listing other species takes priority because they are more in need of protection.

The USFWS reviewed the status of and threats to the GRSG in relation to the five listing factors provided in Section 4(a)(1) of the ESA. Of the five listing factors reviewed, the USFWS determined that Factor A, “the present or threatened destruction, modification, or curtailment of the habitat or range of the GRSG,” and Factor D, “the inadequacy of existing regulatory mechanisms,” posed “a significant threat to the GRSG now and in the foreseeable future” (USFWS 2010a). The USFWS identified the principal regulatory mechanisms for the BLM and Forest Service as conservation measures in LUPs.

1.1.1. National Greater Sage-Grouse Planning Strategy

On December 9, 2011, a Notice of Intent was published in the *Federal Register* to initiate the BLM/Forest Service GRSG Planning Strategy across ten western states, including Northeast California, Oregon, Nevada, Idaho, Utah, and Southwest Montana in the Great Basin Region and Northwest Colorado, Wyoming, Montana, South Dakota, and North Dakota in the Rocky Mountain Region. The BLM is the lead agency for this planning effort, and the Forest Service is participating as a cooperating agency. On February 10, 2012, the BLM published a Notice of Correction that changed the names of the regions that are coordinating the environmental impact statements (EISs), extended the scoping period, and added 11 Forest Service LRMPs to this process. This Nevada and Northeastern California LUP amendment (LUPA) and Draft EIS is one of fifteen separate EISs that are currently being conducted to analyze and incorporate specific conservation measures across the range of the GRSG, consistent with National BLM and Forest Service policies.

Figure 1-1, BLM USFS GRSG Planning Strategy Sub-region/EIS Boundaries, shows the boundaries of the fifteen sub-regions, including the Nevada and Northeastern California Sub-region. The blue lines on Figure 1-1 depict the seven management zones developed by the Western Association of Fish and Wildlife Agencies (WAFWA) in its *Greater Sage-grouse Comprehensive Conservation Strategy* (Stiver et al. 2006); these zones are described in more detail, below.

On December 27, 2011, the BLM Washington Office released Instruction Memorandum (IM) No. 2012-044, which directed all of the planning efforts on BLM-administered lands across the GRSG range to consider all applicable conservation measures when revising or amending its RMPs in GRSG habitat (BLM 2011a), including the measures developed by the interagency National Technical Team (NTT) that were presented in their December 2011 document – *A Report on National Greater Sage-Grouse Conservation Measures* (NTT 2011).

Along with the applicable measures that were outlined in the NTT Report, planning efforts associated with this National GRSG Planning Strategy will also analyze applicable conservation measures that were submitted to the BLM and Forest Service from various state governments and from citizens during the public scoping process. It is the goal of the BLM and Forest Service to make a final decision on these plans by the end of 2014. This is so the USFWS will have enough evidence to consider in 2015 a potential listing for GRSG as a threatened or endangered species.

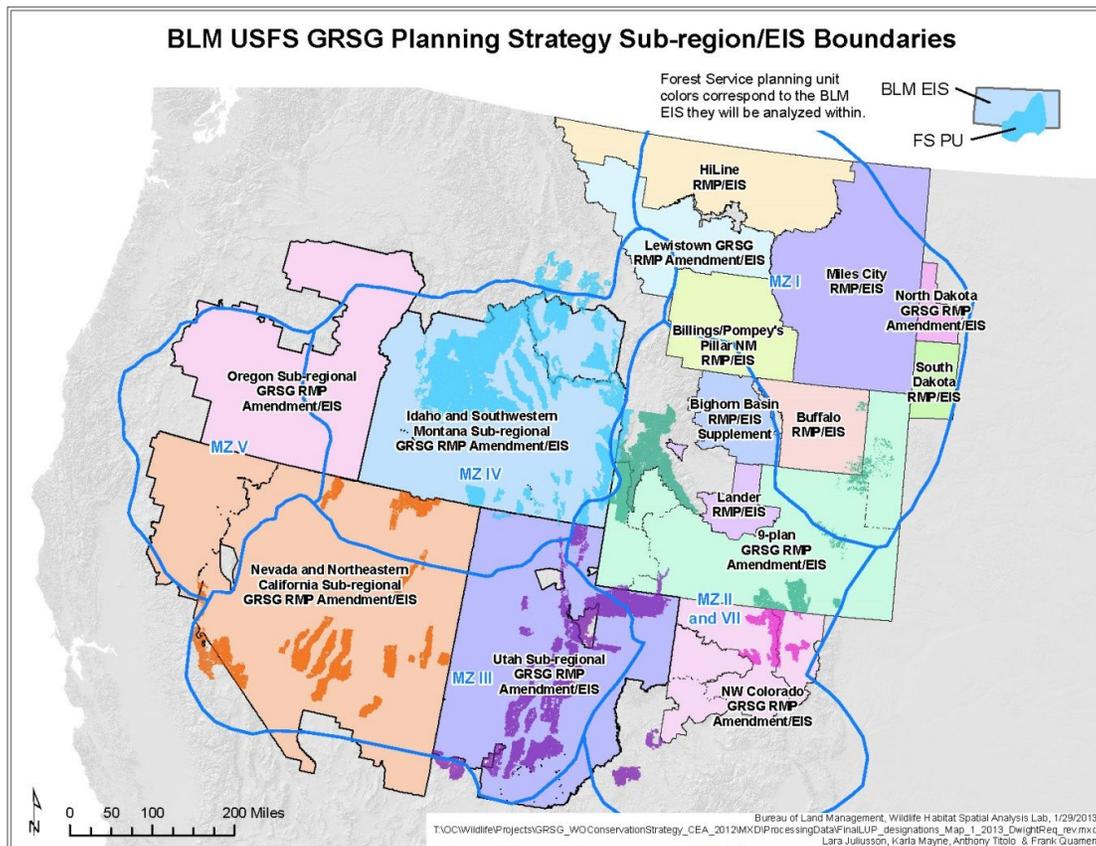


Figure 1.1. BLM USFS GRSG Planning Strategy Sub-region/EIS Boundaries

The Rocky Mountain and Great Basin Regions are drawn roughly to correspond with the threats identified by the USFWS in the 2010 listing decision, along with the WAFWA Management Zones framework (Stiver et al. 2006). The Rocky Mountain Region comprises the WAFWA Management Zones I (Great Plains), II (Wyoming Basin) and a portion of VII (Colorado Plateau) (see **Figure 1-1**). The USFWS has identified a number of threats in this region, the major ones being habitat loss and fragmentation caused by development (e.g., oil and gas development, energy transmission, and wind energy development).

The Great Basin Region comprises WAFWA Management Zones III (Southern Great Basin), IV (Snake River Plain), and V (Northern Great Basin). The USFWS has identified a number of threats in this region, including wildfire, loss of native habitat to invasive species, and habitat fragmentation.

Both the Rocky Mountain and Great Basin regions are further divided into sub-regions; this National Environmental Policy Act (NEPA) analysis is being conducted on the sub-region level. These sub-regions are generally based on the identified threats to the GRSG and the WAFWA Management Zones. On a sub-regional level, the BLM Nevada State Office, BLM California State Office, and Forest Service Humboldt-Toiyabe National Forest are proposing to complete this Nevada and Northeastern California Sub-region EIS to analyze the effects of amending up to 13 LUPs in order to provide consistent sub-region-wide management of GRSG habitat for all included BLM- and Forest Service-administered lands. These proposed LUPAs would identify and incorporate appropriate regulatory mechanisms to conserve, enhance, and restore GRSG habitat and would be designed to eliminate, reduce, or minimize threats to GRSG habitat on BLM- and Forest Service-administered lands within the sub-region.

The proposed LUPAs address both Listing Factors A and D (above) and are intended to provide consistency in the management of GRSG habitats across Nevada and Northeastern California Sub-region BLM- and Forest Service-administered lands. The BLM Nevada, BLM California, and Forest Service each intend to issue separate Records of Decision (RODs) for the LUPAs. The targeted date for finalization of the RODs is September 30, 2014. As described in detail in **Section 1.3**, Purpose and Need, one of the purposes of this planning effort is to provide sufficient evidence for USFWS to consider preclusion of a potential listing for GRSG as a threatened or endangered species under the ESA. The following LUPs are proposed to be amended during this effort to incorporate appropriate conservation measures:

California RMPs

- Alturas RMP (BLM 2008a)
- Eagle Lake RMP (BLM 2008b)
- Surprise RMP (BLM 2008c)

Nevada RMPs

- Black Rock Desert-High Rock Canyon Emigrant Trails National Conservation Area RMP (BLM 2004a)
- Carson City Consolidated RMP (BLM 2001a)
- Elko RMP (BLM 1987a)

- Ely RMP (BLM 2008d)
- Paradise-Denio Management Framework Plan (MFP; BLM 1982a)
- Shoshone-Eureka RMP (BLM 1986a)
- Sonoma Gerlach MFP (BLM 1982b)
- Tonopah RMP (BLM 1997a)
- Wells RMP (BLM 1985a)

Forest Plans

- Humboldt National Forest LRMP (Forest Service 1986a)
- Toiyabe National Forest LRMP (Forest Service 1986b)

The BLM and Forest Service have identified GRSG habitat in coordination with respective state fish and wildlife agencies. This habitat falls into one of the two following categories:

- Preliminary Priority Habitat (PPH): Areas that have been identified as having the highest conservation value to maintaining sustainable GRSG populations. These areas include breeding, late brood-rearing, and winter concentration areas.
- Preliminary General Habitat (PGH): Areas of occupied seasonal or year-round habitat outside of PPH.

Through this LUPA process, the BLM and Forest Service will identify and analyze management actions within GRSG habitat. These management actions will be designed to conserve and, where appropriate, improve GRSG habitat functionality. This will provide for major life history requirements and movements (e.g., breeding, migration, and winter survival) to maintain genetic diversity needed for sustainable GRSG populations.

USFWS Conservation Objectives Team Report

In 2012, the Director of the USFWS asked the Conservation Objectives Team (COT), consisting of state and USFWS representatives, to produce recommendations regarding the degree to which the threats need to be reduced or ameliorated to conserve GRSG so that it would no longer be in danger of extinction or likely to become in danger of extinction in the foreseeable future. The COT Report (USFWS 2013a) provides objectives based upon the best scientific and commercial data available at the time of its release. The BLM/FS planning decisions analyzed in the LUP/EISs are intended to ameliorate threats identified in the COT report (See Appendix I) and to reverse the trends in habitat condition. The COT Report can be viewed online at the following address:

<http://www.fws.gov/mountain-prairie/species/birds/sagegrouse/COT/COT-Report-with-Dear-Interested-Reader-Letter.pdf>

The highest level objective in the COT Report is identified as meeting the objectives of WAFWA's 2006 GRSG Comprehensive Strategy of "reversing negative population trends and achieving a neutral or positive population trend."

The COT Report provides a Management Zone and Population Risk Assessment. The report identifies localized threats from sagebrush elimination, fire, conifer encroachment, weed and

annual grass invasion, mining, free-roaming wild horses and burros, urbanization, and widespread threats from energy development, infrastructure, grazing, and recreation (USFWS 2013a, p. 18).

The COT Report identifies key areas across the landscape that are considered “necessary to maintain redundant, representative, and resilient populations.” The USFWS identified these Priority Areas for Conservation (PACs) with the respective state wildlife management agencies. Within the sub-region, PACs are not coincident with PPH and PGH or with Preliminary Priority Management Areas/Preliminary General Management Areas (PPMAs and PGMAs), with the exception of Alternative E, the state-provided alternative. PPH and PGH were mapped in a separate process, using the criteria identified in Chapter 3. PACs do not include all PPH and PGH but do include additional areas of potential habitat and nonhabitat. The COT Report recognizes these differences in mapping and acknowledges the potential for future modifications or additions of PACs through ongoing interagency coordination and the results of LUP planning process.

1.2. Description of the Greater Sage-Grouse Planning Area

The planning area is the geographic area within which the BLM and Forest Service would make decisions during this planning effort. The planning area boundary includes all lands regardless of jurisdiction. For this LUPA/EIS, the planning area is the entire sub-region. Lands addressed in the LUPAs are BLM- and Forest Service-administered lands in GRSG habitats, including surface and split-estate lands with BLM subsurface mineral rights. Any decisions in the LUPAs would apply only to BLM- and Forest Service-administered lands (the decision area). The LUPAs would be limited to providing land use planning direction specific to the conservation of GRSG and their habitat.

The Battle Mountain, Carson City, Elko, Ely, and Winnemucca BLM district offices in Nevada and the Alturas, Eagle Lake, and Surprise BLM field offices in California administer the 11 pertinent RMPs being amended by this LUPA/EIS. In addition, the Humboldt-Toiyabe National Forest administers two forest LRMPs that would also be amended by this LUPA/EIS. The Nevada and Northeastern California sub-regional GRSG planning area covers all or a portion of 16 counties in Northern Nevada and portions of 4 counties in northeastern California. Of these 20 counties, 12 contain GRSG habitat. Lands within the planning area include a mix of private, federal, and state lands.

There are approximately 77,800 acres of public lands in Elko County, Nevada, located north of the Humboldt-Toiyabe National Forest and south of the Idaho-Nevada state line, adjacent to the Bruneau and Jarbidge field offices in Idaho. Due to their remoteness from other BLM-administered lands in Nevada and because they are contiguous to major blocks of public lands in Idaho, a Memorandum of Understanding (MOU) between the BLM Nevada and BLM Idaho State Offices transfers administration of those lands to the BLM Idaho State Office. For purposes of the GRSG LUPAs in Idaho and in Nevada, planning for these lands will occur through the Nevada and Northeastern California Greater Sage-Grouse LUPA/EIS, and the regulatory measures/decisions that are put in place for the GRSG through the ROD will be implemented and administered by the Jarbidge and Bruneau field offices in Idaho. Therefore, the mapped decision and analysis area for the Nevada and Northeastern California LUPAs/EIS will include lands administered by the Jarbidge Field Office in Nevada and end at the Nevada state line (see **Tables 1-1 and 1-2** and **Figure 1-2**, which includes mapped PPH and PGH).

Table 1.1. PPH and PGH within the Planning Area

Surface Land Management	PPH Acres	PGH Acres	Total Acres (PPH + PGH)
BLM	11,516,900	4,501,200	16,018,100
Forest Service	1,176,600	538,200	1,714,800
Private	2,198,500	870,900	3,069,400
Bureau of Indian Affairs (tribal)	63,300	24,300	87,600
USFWS	54,600	3,300	57,900
Other	4,700	2,500	7,100
State	5,400	300	5,700
National Park Service	0	2,500	2,500
Other Federal	0	1,100	1,100
Bureau of Reclamation	0	200	200
Local Government	200	0	200
Department of Defense	0	0	0
Total Acres	15,020,200	5,944,200	20,964,700

Source: BLM and Forest Service GIS 2013

Table 1.2. Land Management within the Planning Area

Surface Land Management	Total Surface Land Management Acres
BLM	45,360,200
Forest Service	4,508,400
Private	11,844,800
Bureau of Indian Affairs (tribal)	921,600
USFWS	805,900
Other	310,800
State	238,400
National Park Service	160,000
Other Federal	3,200
Bureau of Reclamation	439,800
Local Government	17,600
Department of Defense	393,700
Total Acres	65,004,400

Source: BLM and Forest Service GIS 2013

Tables 1-3, 1-4, and 1-5 display acres of PPH and PGH within the planning area.

(PDF Map 1-2)

Figure 1.2. Nevada and Northeastern California Greater Sage-Grouse Subregion Planning Area

Table 1.3. Acres of Greater Sage-Grouse Habitat by County

County Name	PPH Acres	PGH Acres	Total Acres
Carson City	0	0	0
Churchill	192,500	92,700	285,200
Douglas	0	0	0
Elko	5,897,900	1,974,200	7,872,100
Esmeralda	0	0	0
Eureka	811,200	640,900	1,452,100
Humboldt	1,509,700	365,400	1,875,100

County Name	PPH Acres	PGH Acres	Total Acres
Lander	1,438,800	482,700	1,921,500
Lassen	681,100	69,300	750,400
Lincoln	362,700	362,500	725,200
Lyon	0	0	0
Mineral	0	0	0
Modoc	75,600	38,200	113,800
Nye	617,500	739,700	1,357,000
Pershing	79,000	148,700	227,700
Plumas	0	0	0
Sierra	0	0	0
Storey	0	0	0
Washoe	1,579,300	273,800	1,853,100
White Pine	1,775,200	756,200	2,531,400
Total Acres	15,020,300	5,944,200	20,964,700

Source: BLM and Forest Service GIS 2013

Table 1.4. Acres of Greater Sage-Grouse Habitat by District/Field Office

Land Management Office	PPH Acres	PGH Acres	Total Acres
BLM Alturas Field Office	116,600	45,700	162,300
BLM Battle Mountain District Office	2,578,800	1,349,100	3,927,900
BLM Carson City District Office	301,000	196,300	497,300
BLM Eagle Lake Field Office	762,000	75,400	837,400
BLM Elko District Office	6,113,300	2,262,200	8,376,400
BLM Ely District Office	2,147,900	1,302,600	3,450,500
BLM Jarbidge Field Office*	48,200	23,900	72,100
BLM Surprise Field Office	960,600	130,900	1,091,500
BLM Winnemucca District Office	1,991,800	558,100	2,549,900
Total Acres	15,020,200	5,944,200	20,965,300

*Only that part of Jarbidge Field Office that falls within the Nevada state line.

Source: BLM and Forest Service GIS 2013

Table 1.5. Acres of Greater Sage-Grouse Habitat by Forest

Forest	PPH Acres	PGH Acres	Total Acres
Humboldt-Toiyabe Forest	1,183,500	539,500	1,723,000

Source: BLM and Forest Service GIS 2013

1.3. Purpose and Need

The BLM and the Forest Service are preparing LUPAs with associated EISs for LUPs containing GRSG habitat. This effort is needed to respond to the USFWS’s March 2010 “warranted, but precluded” ESA listing petition decision. Inadequacy of regulatory mechanisms was identified as a significant threat in the USFWS finding on the petition to list the GRSG. The USFWS identified the principal regulatory mechanisms for the BLM and the Forest Service as conservation measures embedded in LUPs. Changes in management of GRSG habitats are necessary to avoid the continued decline of populations across the species’ range. These plan amendments will focus on areas affected by threats to GRSG habitat identified by the USFWS in the March 2010 listing decision.

The major threats identified within BLM- and Forest Service-administered lands in the Nevada and Northeastern California Sub-region include the following (the major threats were identified by the BLM interdisciplinary team in coordination with the USFWS):

- Wildfire—loss of large areas of GRSG habitat due to wildfire
- Invasive Species—conversion of GRSG habitat to cheatgrass- dominated plant communities
- Conifer Invasion—encroachment of pinyon and/or juniper into GRSG habitat
- Infrastructure—fragmentation of GRSG habitat due to human development activities such as right-of-way and renewable energy development
- Climate Change—fragmentation of GRSG habitat due to climate stress
- Grazing—loss of habitat components due to livestock and wild horse and burro use
- Hard Rock Mining—fragmentation of GRSG habitat due to mineral exploration and development
- Oil and Gas Development—fragmentation of GRSG habitat due to mineral exploration and development
- Human Uses—fragmentation of GRSG habitat and/or modification of GRSG behavior due to human presence and activities

The purpose for the LUPAs 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.

Because the BLM and Forest Service administer a large portion of GRSG habitat within the affected states, changes in BLM and Forest Service management of GRSG habitats are anticipated to have a considerable beneficial impact on present and future GRSG populations and could reduce the need to list the species as threatened or endangered under the ESA.

1.4. Planning Process

1.4.1. BLM Planning Process

FLPMA requires the BLM to use LUPs as tools by which “present and future use is projected” (43 USC 1701[a][2]). FLPMA’s implementing regulations for planning state that LUPs are a preliminary step in the overall process of managing public lands in a way that is “designed to guide and control future management actions and the development of subsequent, more detailed and limited scope plans for resources and uses” (43 CFR 1601.0-2). Public participation and input are important components of land use planning.

Under BLM regulations, approval of an LUP revision or amendment is considered a major federal action significantly affecting the quality of the human environment and therefore requires disclosure and documentation of environmental effects as described in NEPA. The BLM has determined that an EIS is the appropriate NEPA analysis.

This EIS accompanies the amendment of the existing LUPs and analyzes the impacts of six alternatives for the Nevada and Northeastern California Sub-region LUPAs, including the No Action Alternative.

The BLM uses a nine-step planning process (**Figure 1-3**, Nine-Step Planning Process) to develop or revise LUPs (43 CFR Part 1600; BLM Handbook H-1601-, [BLM 2005a]). The planning process is designed to help the BLM identify the uses of BLM-administered lands desired by the public and to consider these uses to the extent they are consistent with the laws established by Congress and the policies of the executive branch of the federal government.

Once a LUP is approved, it may be changed through amendment. An amendment can be initiated in response to monitoring and evaluation findings, new data, new or revised policy, a change in circumstances or a proposed action that may result in a change in the scope of resource uses or a change in the terms, conditions, and decisions of the approved plan. If the BLM decides to prepare an EIS, the amending process shall follow the same procedure required for preparation and approval of the plan, but the focus shall be limited to that portion of the plan being amended (43 CFR 1610.5-5).

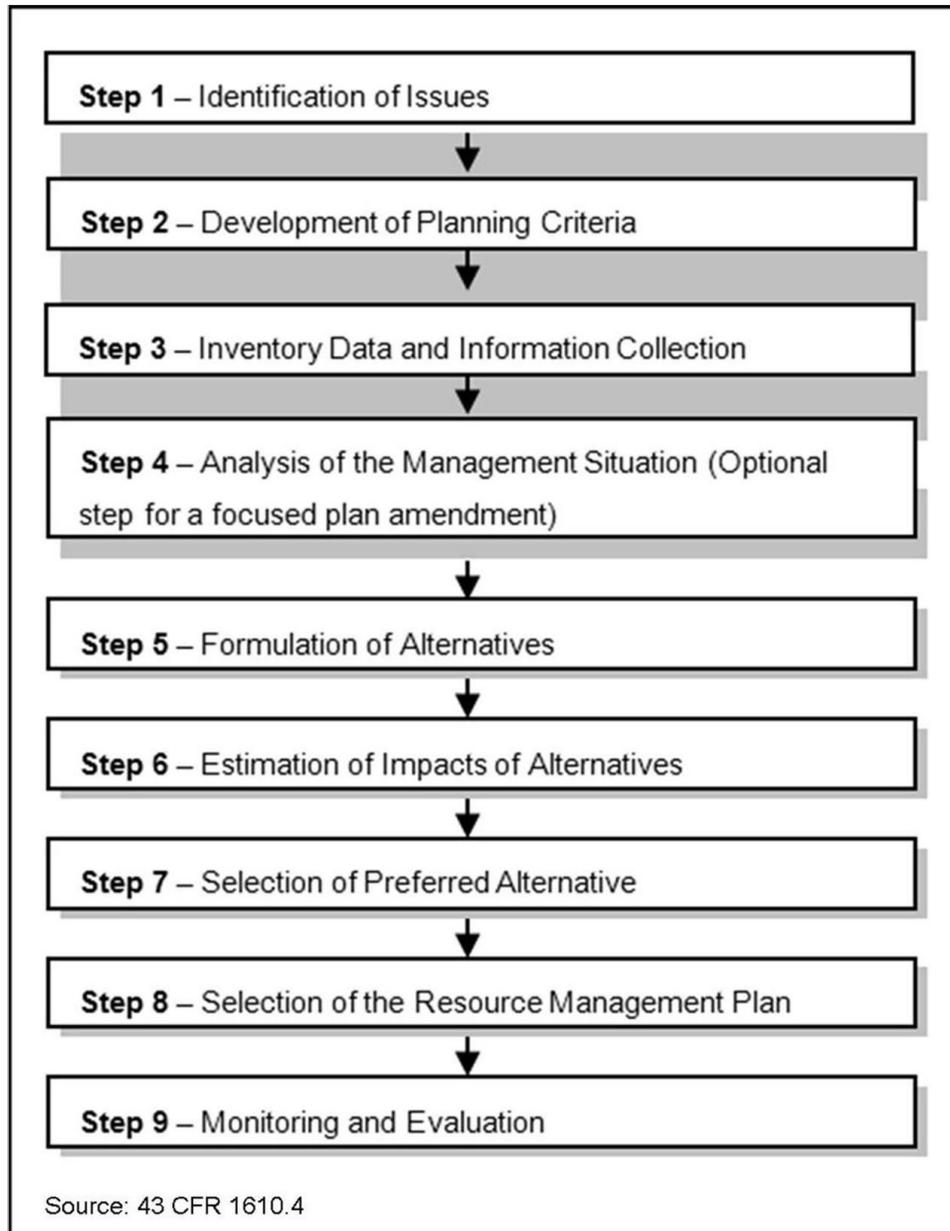


Figure 1.3. Nine-Step Planning Process

As depicted in **Figure 1-3**, the planning process is issue-driven (Step 1). The planning process is undertaken to resolve management issues and problems as well as to take advantage of management opportunities. The BLM utilizes the public scoping process to identify planning issues to direct (drive) a revision or amendment of an existing plan. The scoping process is also used to introduce the public to preliminary planning criteria, which set the parameters for conducting the planning process (Step 2).

The BLM uses existing data from files and other sources and collects new data to address planning issues and to fill data gaps identified during public scoping (Step 3). Using these data, information concerning the resource management programs, and the planning criteria, the BLM completes an Analysis of the Management Situation (AMS) (Step 4) to describe current

management and develop or inform the affected environment portion of the LUP. Typically, the AMS is conducted at the outset of planning for an entire LUP or LUP revision and is incorporated by reference into development of a single focus plan amendment. AMSs are required for plan revisions but not necessarily for plan amendments. In this case, direction for the plan amendment is provided through new national policy (BLM 2011a) and an AMS will not be written. The affected environment is also incorporated by reference into the amendment and updated with new information to the degree necessary to set the context for the analysis in the accompanying EIS.

Results of the first four steps of the planning process clarify the purpose and need and identify key planning issues that need to be addressed by the amendment. Key planning issues reflect the focus of the LUPA and are described in more detail in **Section 1.5.2**.

Alternatives constitute a range of management actions that set forth different priorities and measures to emphasize certain uses or resource values over other uses or resource values (usually representing a continuum from extraction and development to preservation/conservation) pursuant to the multiple-use and sustained yield mandate to achieve certain goals or objectives consistent with the purpose and need. During the formulation of alternatives (Step 5), the BLM collaborates with cooperating agencies to identify goals and objectives (or desired outcomes) for resources and resource uses within the planning area. The alternatives represent a reasonable range of planning strategies for managing resources and resource uses. **Chapter 2**, Alternatives, describes and summarizes the Preferred Alternative and the other draft alternatives considered in detail.

This draft LUPA/EIS also includes an estimation of impacts of alternatives in **Chapter 4**, Environmental Consequences of Draft Plan and Draft Alternatives (Step 6). With input from cooperating agencies and BLM specialists, and consideration of planning issues, planning criteria, and the impacts of alternatives, the BLM identifies and recommends selecting a Preferred Alternative from among the alternatives presented in the EIS (Step 7). This is documented in the draft LUPA/EIS, which is then distributed for a 90-day public review and comment period.

Selecting the resource management plan (Step 8) is the step in which the NEPA decision is made. Step 8 occurs following receipt and consideration of public comments on the draft LUPA/EIS. In preparing the Proposed LUPA/Final EIS, the BLM will consider all comments received during the public comment period. The Proposed LUPA will be crafted from the draft alternatives.

Step 9 is the monitoring and evaluation process. Monitoring is the repeated measurement of activities and conditions over time. Evaluation is a process in which the plan and monitoring data are reviewed to see if management goals and objectives are being met and if management direction is sound. Monitoring data gathered over time are examined and used to draw conclusions on whether management actions are meeting stated objectives and if not, why. Conclusions are then used to make recommendations on whether to continue current management or what changes need to be made in management practices to meet objectives.

The two types of monitoring that are tied to the planning process include implementation and effectiveness monitoring. LUP monitoring is the process of tracking the implementation of land use planning decisions and collecting and assessing information necessary to evaluate the effectiveness of land use planning decisions.

Implementation monitoring is the most basic type of monitoring and simply determines whether planned activities have been implemented in the manner prescribed by the plan. Some agencies call this compliance monitoring. This monitoring documents the BLM's progress toward full

implementation of the LUP decision. There are no specific thresholds or indicators required for this type of monitoring.

Effectiveness monitoring is done to determine whether the implementation of activities has achieved the desired goals and objectives. Effectiveness monitoring asks the question, “Was the specified activity successful in achieving the objective?” This requires knowledge of the objectives established in the LUP as well as indicators that can be measured. Indicators are established by technical specialists in order to address specific questions, and thus to focus on collection of only necessary data. Success is measured against the benchmark of achieving desired future conditions established by the plan.

Regulations at 43 CFR 1610.4-9 require that the proposed plan establish intervals and standards, as appropriate, for monitoring and evaluation of the plan, based on the sensitivity of the resource decisions involved. Progress in meeting the plan objectives and adherence to the management framework established by the plan is reviewed periodically. Council on Environmental Quality (CEQ) regulations implementing NEPA state that agencies may provide for monitoring to assure that their decisions are carried out and should do so in important cases (40 CFR 1505.2[c]). To meet these requirements, the BLM will review the plan on a regular schedule in order to provide consistent tracking of accomplishments and provide information that can be used to develop annual budget requests to continue implementation.

LUP evaluations would be used by the BLM to determine if the decisions in the LUP, supported by the accompanying NEPA analysis, are still valid. Evaluation of the LUP would generally be conducted every five years per BLM policy unless unexpected actions, new information, or significant changes in other plans, legislation, or litigation triggers an evaluation. LUP evaluations determine if decisions are being implemented, whether mitigation measures are satisfactory, whether there are significant changes in the related plans of other entities, whether there are new data of significance to the plan, and if decisions should be changed through amendment or revision. Evaluations would follow the protocols established by the BLM Land Use Planning Handbook H-1601-1 (BLM 2005a) in effect at the time the evaluation is initiated. Specific monitoring and evaluation needs are identified by resource/uses throughout Chapter 2.

1.4.2. US Forest Service Planning Process

The Forest and Rangeland Renewable Resources Planning Act of 1974, as amended by the NFMA (16 USC 1600 et seq.), requires the Forest Service to develop, maintain, and, as appropriate, revise LRMPs using a systematic interdisciplinary approach to achieve integrated consideration of physical, biological, economic, and other sciences. A key element of the Forest Service planning process is to ensure that species viability is maintained. (36 CFR 219.19). Consistent with the Multiple-Use Sustained-Yield Act of 1960 (16 USC 528-531), the overall goal of managing Forest Service-administered lands is to sustain the multiple uses of its renewable resources in perpetuity while maintaining the long-term productivity of the land. LRMPs provide broad guidance and information for project and activity decision-making. In particular, LRMPs coordinate outdoor recreation, range, timber, watershed, wildlife and fish, and wilderness. Public participation and input are important components of land use planning.

LRMPs developed under the 1982 planning rule procedures (36 CFR Parts 200 to 299, revised July 1, 2000) have resulted in:

- Establishment of forest multiple-use goals and objectives

- Establishment of forest-wide management requirements (standards and guidelines)
- Establishment of management areas and direction applying to future activities in that management area
- Designation of suitable timber land and establishment of allowable timber sale quantity
- Nonwilderness allocations or wilderness recommendations
- Establishment of monitoring and evaluation requirements

A Forest Plan does not authorize projects or activities or commit the Forest Service to take action. However, a plan may constrain the agency from authorizing or carrying out projects and activities or the manner in which they may occur.

The NFMA requires plans to be maintained, amended, and revised. Adaptive management requires ongoing adjustment of goals, objectives, management area prescriptions, standards, and guidelines constraining land uses. An amendment can be started in response to monitoring and evaluation findings, new data, new or revised policy, a change in circumstances or a proposed action that may result in a change in the scope of resource uses, or a change in the standards and guidelines of the approved LUP.

The responsible Forest Service official may amend a plan in response to the need for change. For this amendment, the process involves eight steps:

1. Consideration of need for change
2. Public notice for initiating plan amendment
3. Development of the proposed plan amendment
4. Documentation of affected environment and environmental consequences in an EIS
5. Public notice for proposed plan amendment, draft EIS, and 90-day comment period
6. Response to comments
7. Public notice of the beginning of the 60-day objection period begins with issuance of the final EIS and the draft plan decision document; this amendment is subject to the objection procedures in 36 CFR 219, subpart B. This disclosure is in addition to the public notice that begins the objection filing period, as required at Part 219.16
8. Upon resolution of the objection (36 CFR 219, subpart B), approval of the plan by the responsible official

Because the Forest Service is a cooperating agency and thus a participant in the multi-federal agency effort, the responsible officials for the Forest Service have waived the objection procedures of 36 CFR 219 Subpart B and adopt the administrative review procedure of the BLM, as provided for by 36 CFR 219.59(a). This is in agreement with the responsible officials of the BLM. A joint agency response will be provided to those who file for administrative review of this effort.

Under Forest Service regulations, an LRMP revision or amendment is a federal action requiring appropriate NEPA documentation. This EIS provides the NEPA documentation for amending the Toiyabe National Forest LRMP (Forest Service 1986b) and the Humboldt National Forest

LRMP (Forest Service 1986a). This EIS analyzes the impacts of various alternatives for the plan amendment, including the no action alternative.

1.4.3. Ecoregional Context and Landscape Planning Approach

Public lands are undergoing complex environmental challenges that go beyond traditional management boundaries. In response, the BLM is instituting a landscape-scale management approach which evaluates large areas to better understand the ecological values, human influences, and opportunities for resource conservation. This approach frequently allows identification of environmental changes that might not be apparent in smaller areas.

The BLM's landscape approach includes Rapid Ecoregional Assessments (REAs), which provide a framework for integrating science and management. REAs evaluate landscape-scale ecoregions, which are large areas with similar environmental characteristics. The BLM has initiated 14 REAs since 2010. The Nevada and Northeastern California Sub-region lies within the Central Basin and Range (CBR) and the Northern Basin and Range (NBR) ecoregions.

REAs synthesize the best available information to examine ecological values, conditions, and trends within the ecoregion. Assessments of these larger areas provide land managers additional information and tools to use in subsequent resource planning and decision-making.

REAs describe and map conservation elements, which are areas of high ecological value. REAs look across all lands in an ecoregion to identify regionally important habitats for fish, wildlife, and species of concern. REAs then gauge the potential of these habitats to be affected by four overarching environmental change agents: climate change, wildfires, invasive species, and development (both energy development and urban growth). REAs also help identify areas that do not provide essential habitat, that are not ecologically intact or readily restorable, and areas where development activities may be directed to minimize impacts on important ecosystem values.

In the Nevada and Northeastern California Sub-region, the CBR REA has been completed (Comer et al. 2012a) while the NBR REA is still in progress. The CBR REA will be used to inform and enhance the quality of resource management and environmental analysis at the landscape level. The REA information is considered in the development of management objectives that can be adapted to the changing environment. This REA will aid in identifying priority areas for conservation and development, including important areas for wildlife habitat and migration corridors. It also might aid in identifying sites for mitigation.

The Nevada and Northeastern California Sub-region covers a vast territory, and the BLM and Forest Service are responsible for managing approximately 70 percent of the area. In order to effectively manage it, the BLM and Forest Service are taking a cohesive management approach based on partnerships and built on the principles of conserving and improving natural resources across the landscape. The landscape-level REAs allow the BLM and Forest Service to collaborate beyond the usual jurisdictional boundaries with the goal of conserving the native ecological communities, traditional uses, and helping maintain the rural culture that makes this area unique.

For additional information about the BLM's Landscape Approach see the website at http://www.blm.gov/wo/st/en/prog/more/Landscape_Approach.html.

As REAs are completed the information is posted on the REA website. The website includes published REA reports and the REA Data portal. The data portal

provides access to an interactive map and downloadable data. The website is http://www.blm.gov/wo/st/en/prog/more/Landscape_Approach/reas.html.

1.5. Scoping and Identification of Issues For Development of the Proposed Plan and Draft Alternatives

1.5.1. The Scoping Process

Scoping is an early and open process for determining the scope, or range, of issues to be addressed and for identifying the significant issues to consider in the planning process. Scoping identifies the public and agency concerns, defines the relevant issues and alternatives that would be examined in detail in the EIS, and eliminates those that are not significant or that have been covered by prior environmental review. A planning issue is defined as a major controversy or dispute regarding management or uses on public lands that can be addressed through a range of alternatives. The environmental impacts of these alternative management scenarios are analyzed and addressed in this EIS.

A public scoping period for the Nevada and Northeastern California Sub-region GRSG LUPAs was initiated on December 9, 2011, with the publication of a Notice of Intent to begin a planning effort in the Federal Register. Scoping is designed to be consistent with the public involvement requirements of FLPMA, NFMA, and NEPA. The cooperative process included soliciting input from interested state and local governments, tribal governments, other federal agencies and organizations, and individuals to identify the scope of issues to be addressed in the plan amendment, and to assist in the formulation of reasonable alternatives. The scoping process is an excellent method for opening dialogue between the BLM, Forest Service, and the general public about management of GRSG and their habitats on public lands and for identifying the concerns of those who have an interest in GRSG conservation and habitat. As part of the scoping process, the BLM also requested that the public submit nominations for potential Areas of Critical Environmental Concern (ACECs) for GRSG and their habitats.

The scoping period was extended through a Notice of Correction published February 10, 2012, and ended on March 23, 2012. Scoping included scheduled open-house meetings in the following locations:

- Tonopah, Nevada – January 9, 2012
- Ely, Nevada – January 10, 2012
- Elko, Nevada – January 11, 2012
- Winnemucca, Nevada – January 12, 2012
- Alturas, CA – January 18, 2012
- Susanville, CA – January 19, 2012
- Reno, Nevada – January 30, 2012

Comments obtained from the public during the scoping period were used to define the relevant issues that would be addressed by a reasonable range of alternatives. The BLM

and Forest Service published the final Scoping Summary Report in May 2012 (BLM and Forest Service 2012). This report is available at the BLM's GRSG conservation website (http://www.blm.gov/wo/st/en/prog/more/sagegrouse/documents_and_resources.html).

1.5.2. Issues Identified for Consideration in the Nevada and Northeastern California Sub-region Greater Sage-Grouse LUPAs

Some important issues to be addressed in the LUPAs were identified by the public and the agencies during the range-wide public scoping process and during the statewide planning effort. The final Scoping Summary Report, prepared in conjunction with these LUPAs, summarizes the scoping and issue-identification process. The issues identified in the Scoping Report were grouped into 13 broad categories. Other resource and use issues are also identified in the BLM Planning Handbook and Manual (H-1610-1, BLM 2005a). All of the following issues were considered in developing the alternatives brought forward for analysis:

- Greater Sage-Grouse and GRSG Habitat—Using sound science to determine habitat requirements and restrictions needed to protect GRSG habitat
- Energy and Mineral Development—Limitations on energy and mineral development
- Livestock Grazing—Restrictions on forage availability, grazing practices and facilities and the socioeconomic impacts on the ranching industry
- Vegetation Management—Protecting life-stage habitat requirements for the GRSG and preventing noxious and invasive species
- Fish and Wildlife—Predation and wildlife competition for resources
- Lands and Realty—Right-of-way (ROW) avoidance and exclusion areas; land disposal, acquisition and withdrawal availability
- Social, Economic, and Environmental Justice Considerations—Limitations on land uses and the socioeconomic impacts
- Recreation and Travel Management—Limitations on off-highway vehicle (OHV) use and certain recreation activities
- Fire Management—Identifying appropriate fuels management techniques and restoration
- Special Management Areas—Evaluating existing and proposing new areas for special management (e.g., ACECs)
- Water and Soil—Protection of water and soil to support adequate GRSG habitat and prevent the spread of West Nile virus
- Drought Management/Climate Change—Establishing management decisions that incorporate climate change effects on GRSG habitat
- Wild Horses and Burros—Increased management of wild horses and burros in GRSG habitat

Chapter 1

Issues Identified for Consideration in the Nevada and Northeastern California Sub-region Greater Sage-Grouse LUPAs

1.5.3. Issues to Be Addressed Through Policy or Administrative Action (and Therefore Not Addressed in the LUPAs)

Policy or administrative actions are implemented by the BLM or Forest Service because they are standard operating procedure, federal law requires them, or they are BLM or Forest Service policy. These issues are, therefore, eliminated from detailed analysis in this planning effort. Administrative actions do not require a planning decision to implement.

Issues raised during scoping that are considered to be policy or administrative actions include the following:

- **Reform national livestock grazing policies**—Commenters stated that national grazing policies should be reformed, as the requirements are too limiting and impact ranchers' livelihoods. Decisions about livestock grazing national policies are outside the scope of this amendment and are not made in this planning effort.

However, the reduction or elimination of livestock (i.e., permitted grazing use) in GRSG habitat is considered. This is consistent with IM No. 2012-169, RMP Alternative Development for Livestock Grazing (BLM 2012a).

- **Renewable energy policies**—Commenters stated concerns about renewable energy development, including economic instability due to government subsidies and risk of wildlife deaths, specifically bats and birds. General policy decisions about renewable energy management, such as impacts on other wildlife species on BLM-administered lands, will be determined by national policy and are not addressed in this plan amendment.

In addition, comments were received related to other out of scope topics that would be determined by national policy, including the following:

- Compensation of private land owners for conservation efforts and off-site mitigation
- BLM and Forest Service funding
- Designation of Special Management Areas
- NEPA procedures and costs

1.5.4. Issues Eliminated from Detailed Analysis Because They Are Beyond the Scope of the LUPAs (and Therefore Not Addressed in the LUPAs)

The following issues were determined to be not significant, covered by separate environmental review, outside the BLM and Forest Service's authority to address, or outside the scope of the range-wide planning effort, including the Nevada and Northeastern California Greater Sage-Grouse LUPAs/EIS:

- **Hunting Greater Sage-Grouse**—Commenters questioned why GRSG hunting is allowed if the bird is in need of protection. Neither the BLM nor the Forest Service has the authority to regulate hunting activities on federal lands; this authority resides with Nevada Department of Wildlife (NDOW) and California Department of Fish and Wildlife (CDFW). NDOW follows

the guidelines established by WAFWA that suggest hunter harvest should not exceed 10 percent of the estimated fall population, populations should not be hunted where less than 300 individuals comprise the breeding population, and GRSG hunting seasons should be 1 to 4 weeks with a low bag limit (1 to 2 birds per day). The season in Nevada has generally fluctuated between 10 to 15 days for most areas and the bag limit has remained at 2 per day and 4 birds in possession.

NDOW also identifies an ancillary benefit of the hunting season as an opportunity to collect important population demographic data. Each year, NDOW collects wings from hunter-harvested birds. Data collected from these wings are used to help estimate fall population size in specific areas. Examination of wings from adult hens allows NDOW to determine whether or not the bird nested successfully during the previous breeding season. Collectively, this information helps to determine population health and formulate future management recommendations (NDOW 2012a). Hunting also provides limited revenue for GRSG conservation.

California Department of Fish and Wildlife also uses the GRSG hunting season to collect wings to estimate important demographic data. CDFW uses a permit system which prevents legal harvest from exceeding 5 percent of the estimated fall population. Permit quotas are adjusted annually by the Fish and Wildlife Commission to prevent overharvest. A permit is required to hunt GRSG in all California hunt zones. California also complies with WAFWA guidelines with a short season of 2 days and low bag limit of 2 birds per permit. Within the two northeastern zones (Central and East Lassen), CDFW did not authorize any GRSG permits in 2012 and 2013 in the Central and East Lassen hunt zones due to two large fires within the Buffalo Skedaddle Population Management Unit (PMU). It is unlikely that CDFW will recommend issuing GRSG hunting permits in future years without significant habitat and population recovery within the two hunt zones.

- **Predator population control**—Commenters stated that control was needed to protect GRSG from predation. NDOW and CDFW possess primary authority and responsibility for managing the wildlife within Nevada and California, respectively, while the BLM and Forest Service are responsible for managing habitat. Consistent with an MOU between the BLM and the USDA, Animal and Plant Health Inspection Service-Wildlife Services, the BLM and Forest Service will continue to work with NDOW and CDFW to meet state wildlife population objectives. Predator control is allowed on BLM-administered lands and is regulated by NDOW and CDFW. These comments, therefore, relate to state-regulated actions and are outside the scope of the plan amendment. The BLM and Forest Service will continue to work with these 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.
- **Warranted but precluded decision and management under ESA listing**—Commenters questioned population levels and the need to incorporate range-wide conservation measures. Others questioned the effectiveness of ESA listing as a method of species conservation. These comments relate to decisions under the purview of the USFWS and are not addressed in this LUPA. The listing of GRSG by the USFWS may include conservation measures identified by the USFWS, however, those conservation measures are not known at this time. Therefore, the BLM cannot address those speculative measures as part of its land use planning effort.

1.6. Development of Planning Criteria

Planning criteria are based on appropriate laws, regulations, BLM and Forest Service Manual and Handbook sections, and policy directives as well as on public participation and coordination

with cooperating agencies; other federal agencies, state, and local governments; and Native American tribes. Planning criteria are the standards, rules, and factors used as a framework to resolve issues and develop alternatives. Planning criteria are prepared to ensure decision making is tailored to the issues and to ensure that the BLM and Forest Service avoid unnecessary data collection and analysis.

Preliminary Planning Criteria developed for this LUPA/EIS are as follows:

- The BLM and Forest Service will utilize the WAFWA Conservation Assessment of GRSG and Sagebrush Habitats (Connelly et al. 2004; Coates and D. J. Delehanty 2004, 2008, 2010) and any other appropriate resources, to identify GRSG habitat requirements and required design features.
- The approved LUPAs will be consistent with the BLM's National GRSG Conservation Strategy.
- The approved LUPAs will comply with BLM direction, such as FLPMA, NEPA, and CEQ regulations at 40 CFR Parts 1500-1508; DOI regulations at 43 CFR Part 4, and 43 CFR Part 1600; the BLM H-1601-1 Land Use Planning Handbook, "Appendix C: Program-Specific and Resource-Specific Decision Guidance Requirements" for affected resource programs (BLM 2005a); the 2008 BLM NEPA Handbook (H-1790-1; BLM 2008e); and all other applicable BLM policies and guidance.
- The approved LUPAs will comply with Forest Service direction, such as NFMA, NEPA, CEQ regulations at 40 CFR Parts 1500-1508, Regulations of the Secretary of Agriculture at 36 CFR Part 219, Forest Service NEPA regulations at 36 CFR Part 220, Forest Service Manual (FSM) 1909.15 (Forest Service 2012a), FSM 1920 (Forest Service 2006a), and Forest Service Handbook (FSH) 1909.12 (Forest Service 2006b).
- The LUPAs will be limited to providing direction specific to the conservation of GRSG species and habitats.
- The BLM and Forest Service will consider land allocations and prescriptive standards to conserve GRSG and its habitat as well as objectives and management actions to restore, enhance, and improve GRSG habitat.
- The LUPAs will recognize valid existing rights.
- Lands addressed in the LUPAs will be BLM- and Forest Service-administered land in GRSG habitats, including surface and split-estate lands with BLM subsurface mineral rights. Any decisions in the LUPAs will apply only to BLM- and Forest Service-administered lands.
- The BLM and Forest Service will use a collaborative and multi-jurisdictional approach, where appropriate, to determine the desired future condition of BLM- and Forest Service-administered lands for the conservation of GRSG and their habitats.
- As described by law and policy, the BLM and Forest Service will strive to ensure that conservation measures are as consistent as possible with other planning jurisdictions within the planning area boundaries.

- The BLM and Forest Service will consider a range of reasonable alternatives, including appropriate management prescriptions that focus on the relative values of resources while contributing to the conservation of the GRSG and GRSG habitat.
- The BLM and Forest Service will address socioeconomic impacts of the alternatives. Socioeconomic analysis will use the input-output quantitative models IMPLAN and the National Renewable Energy Laboratory's Jobs and Economic Development Impact model (JEDI) (for renewable energy analysis) where quantitative data is available.
- The BLM and Forest Service will use the best available scientific information, research, technologies, and results of inventory, monitoring, and coordination to determine appropriate local and regional management strategies that will enhance or restore GRSG habitats.
- Management of GRSG habitat that intersects with designated Wilderness Areas on BLM-administered lands will be guided by BLM Manual 6340, Management of Designated Wilderness Areas (BLM 2012b). Land use allocations made for GRSG must be consistent with BLM Manual 6340 and other laws, regulations, and policies related to Wilderness Area management.
- Management of GRSG habitat that intersects with National Conservation Areas (NCAs) on BLM-administered lands will be guided by BLM Manual 6220, Management of National Conservation Areas (BLM 2012c). Land use allocations made for GRSG must be consistent with BLM Manual 6220 and other laws, regulations, and policies related to NCA management.
- Management of GRSG habitat that intersects with eligible, suitable, or designated Wild and Scenic Rivers (WSR) will be guided by BLM Manual 6400, Wild and Scenic Rivers – Policy and Program Direction for Identification, Evaluation, Planning, and Management (BLM 2012d). Land use allocations made for GRSG must be consistent with BLM Manual 6400 and other laws, regulations, and policies related to WSR management.
- Management of GRSG habitat that intersects with National Historic Trails (NHT), or trails under study for possible designation (study trails), will be guided by BLM Manual 6280, Management of National Scenic and Historic Trails and Trails Under Study or Recommended as Suitable for Congressional Designation (BLM 2012e). Land use allocations made for GRSG must be consistent with BLM Manual 6280 and other laws, regulations, and policies related to NHT management.
- Management of GRSG habitat that intersects with Lands with Wilderness Characteristics on BLM-administered lands will be guided by BLM Manuals 6310 and 6320, Conducting Wilderness Characteristics Inventory on BLM Lands and Considering Lands with Wilderness Characteristics in the BLM Land Use Planning Process (BLM 2012f, 2012g). Land use allocations made for GRSG must be consistent with BLM Manuals 6310 and 6320 and other laws, regulations, and policies related to Lands with Wilderness Characteristics management.
- For BLM-administered lands, all activities and uses within GRSG habitats will follow existing land health standards. Standards and guidelines (S&G) for livestock grazing and other programs that have developed S&Gs will be applicable to all alternatives for BLM-administered lands. For Forest Service-administered lands, all activities within GRSG habitat will achieve the GRGS habitat objectives.

- The BLM and Forest Service will consult with Native American tribes to identify sites, areas, and objects important to their cultural and religious heritage within GRSG habitats.
- The BLM and Forest Service will coordinate and communicate with state, local, and tribal governments to ensure that the BLM and Forest Service consider provisions of pertinent plans, seek to resolve inconsistencies between state, local, and tribal plans, and provide ample opportunities for state, local, and tribal governments to comment on the development of amendments.
- The BLM and Forest Service will develop vegetation management objectives, including objectives for managing noxious weeds and invasive species (including identification of desired future condition for specific areas), within GRSG habitat.
- The LUPAs will incorporate the principles of adaptive management.
- Reasonable Foreseeable Development Scenarios (RFDSs) and planning for fluid minerals will follow the BLM Handbook H-1624-1 and current fluid minerals manual guidance for fluid mineral (oil and gas, coal-bed methane, oil shale) and geothermal resources (BLM 1990a). For lands that it administers, the Forest Service will comply with 36 CFR 228.102, and other applicable environmental requirements for making decisions about the availability of lands for leasing.
- The LUPAs will be developed using an interdisciplinary approach to prepare reasonable foreseeable development scenarios, ensure cooperating agency review of the proposed alternatives, and analyze resource impacts, including cumulative impacts on natural and cultural resources and the socio-economic environment.
- The most current BLM and Forest Service spatial data will be supported by current metadata and will be used to ascertain GRSG habitat extent and quality. Data will be consistent with the principles of the Information Quality Act of 2000 (Public Law [PL] 106-554, Section 515). State data was used as the basis for PPH and PGH identification.
- State fish and wildlife agencies' GRSG data and expertise will be considered in making management determinations on BLM- and Forest Service-administered lands.

1.7. Relationship to Other Policies, Plans, and Programs

This planning process will recognize the many ongoing programs, plans, and policies that are being implemented in the planning area by other land managers and government agencies. The BLM and Forest Service will seek to be consistent with or complementary to other management actions whenever possible. Plans that need to be considered during the GRSG planning effort include the following programmatic nation-wide EISs:

- Approved RMP Amendments/ROD for Designation of Energy Corridors on BLM-Administered Lands in the 11 Western States. January 2009 (BLM 2009a) and ROD on Forest Service Designation of Section 368 Energy Corridors on National Forest System Lands in 10 Western States (Forest Service 2009a).
- Programmatic EIS/ROD for Solar Energy Development in Six Southwestern States. October 2012 (BLM 2012h).

- Final Programmatic EIS on Wind Energy Development on BLM-administered Lands in the Western US. FES 05-11. June 2005 (BLM 2005b).
- Final Vegetation Treatments on BLM Lands in 17 Western States Programmatic EIS and Associated ROD (FES 07-21; BLM 2007a).
- The Programmatic EIS for Geothermal Resources in the Western United States. BLM, Washington, DC (BLM and Forest Service 2008).
- Vegetation Treatment on BLM Lands in Thirteen Western States, 1991 (common to the Proposed Plan and draft alternatives; BLM 1991a).

1.7.1. State Plans

The BLM and Forest Service also recognize the importance of state and local plans as well as plans developed by other federal agencies and tribal governments. The BLM and Forest Service will strive to be consistent with or complementary to the management actions in these plans whenever possible. State plans considered during the GRSG planning effort include the following:

- Nevada's 2003 Statewide Comprehensive Outdoor Recreation Plan—Assessment and Policy Plan (Nevada Department of Conservation and Natural Resources 2003)
- Nevada Comprehensive Preservation Plan (Nevada State Historic Preservation Office 2003)
- Nevada Sage-Grouse Conservation Strategy (State of Nevada 2001)
- Nevada's Coordinated Invasive Weed Strategy (Nevada Weed Action Committee 2000)
- Nevada Division of State Lands, Lands Identified for Public Acquisition (Nevada Department of Conservation & Natural Resources 1999)
- State of Nevada Drought Plan (Nevada Department of Conservation and Natural Resources 1993)
- Nevada Division of State Lands, Nevada Statewide Policy Plan for Public Lands (Nevada Department of Conservation & Natural Resources 1985)

1.7.2. Local Land Use Plans

Local land use plans considered during the GRSG planning effort include the following:

- Carson City Comprehensive Master Plan, Nevada (Carson City 2006)
- Churchill County Master Plan, Nevada (Churchill County 2010)
- Churchill County Water Resource Plan, Nevada (Churchill County 2007)
- City of Caliente Master Plan, Nevada (City of Caliente 2011)
- Douglas County Comprehensive Master Plan, Nevada (Douglas County 2012)
- Douglas County Open Space Plan, Nevada October (Douglas County 2007)

- Elko County General Open Space Plan, Nevada (Elko County 2003)
- Elko County Public Lands Policy Plan, Nevada (Elko County 2008)
- Elko County Water Resource Management Plan, Nevada (Elko County 2007)
- Esmeralda County Master Plan, Nevada (Esmeralda County 2011)
- Esmeralda County Public Lands Policy Plan, Nevada (Esmeralda County 2013)
- Eureka County Master Plan, Nevada (Eureka County 2010)
- Humboldt County Master Plan, Nevada (Humboldt County 2002)
- Humboldt County Master Plan Open Space Element Amendment, Nevada (Humboldt County 2003)
- Lander County Master Plan, Nevada (Lander County 2010)
- Lander County Policy Plan for Federally Administered Lands, Nevada (Lander County 2005)
- Lander County Water Resources Plan, Nevada (Lander County 2011)
- Lassen County Fire Safe Plan, California (Lassen County 2012)
- Lassen County General Plan, California (Lassen County 1999)
- Lincoln County Master Plan, Nevada (Lincoln County 2007)
- Lincoln County Open Space and Community Lands Plan, Nevada (Lincoln County 2011)
- Lincoln County Public Lands Policy Plan, Nevada (Lincoln County 2010)
- Lyon County Comprehensive Master Plan, Nevada (Lyon County 2010)
- Modoc County General Plan, California (Modoc County 1988)
- Nye County Comprehensive Master Plan, Nevada (Nye County 2011)
- Pershing County Master Plan, Nevada (Pershing County 2002)
- Pershing County Natural Resources Management Plan: Natural Resources and Federal or State Land Use, Nevada (Pershing County 2010)
- Shasta County General Plan, California (Shasta County 2004)
- Siskiyou County General Plan, California (Siskiyou County 2010)
- Storey County Master Plan, Nevada (Storey County 1994)
- Title 7 of the Nye County Code (Comprehensive Land Use and Management Plan for Federal and State Lands within Nye County), Nevada (Nye County 2009)
- Tri-Party Framework for Interactions to Address Public Lands Issues in Nye County, Nevada (includes Nye County, BLM and Forest Service), Nevada (Nye County 1996)

- Truckee Meadows Regional Plan (Washoe County Only), Nevada (TMRPA 2007)
- Washoe County Comprehensive Plan, Nevada (Washoe County 2005a)
- Washoe County Open Space & Natural Resource Management Plan, Nevada (Washoe County 2008)
- Washoe County Water Resources Management Plan, Nevada (Washoe County 2005b)
- White Pine County Comprehensive Master Plan, Nevada (White Pine County 2009)
- White Pine County Public Lands Policy Plan, Nevada (White Pine County 2007)
- White Pine County Water Resources Plan, Nevada (White Pine County 2006)

1.7.3. Other Federal Plans

- BLM Northern California Region Fire Management Plan, 2012 (BLM 2012i)
- Humboldt-Toiyabe National Forest Fire Management Plan, 2013 (Forest Service 2013a)
- Rangeland Health Standards and Guidelines for California and Northwestern Nevada Final EIS (BLM 1998a)
- Sage Steppe Ecosystem Restoration Strategy Final EIS, California (BLM 2008f)

1.7.4. Fish and Wildlife Species Recovery or Management Plans

Plans related to the conservation, management or recovery of wildlife, including threatened and endangered species are prepared by the USFWS, state fish and wildlife agencies, and local governments to manage, conserve, and, as appropriate, promote the recovery of threatened and endangered species. The following wildlife conservation, management, action, and recovery plans have been identified:

- Big Spring Spinedace Recovery Implementation Plan (Draft), 1999 (USFWS 1999)
- Big Spring Spinedace Recovery Plan (USFWS 1994a)
- California Department of Fish and Wildlife State Wildlife Action Plan (CDFW 2005)
- Conservation Agreement and Conservation Strategy for Columbia Spotted Frog (*Rana luteiventris*) Toiyabe Great Basin Subpopulation, Nevada (USFWS 2003)
- Conservation Strategy for Sage-grouse and Sagebrush Ecosystems within the Buffalo-Skedaddle Population Management Unit (Armentrout and Hall 2005)
- Conservation Strategy for Sage-grouse and Sagebrush Ecosystems within the Massacre Population Management Unit (Northeast California Sage-Grouse Working Group 2006a)
- Conservation Strategy for Sage-Grouse and Sagebrush Ecosystems within the Vya Population Management Unit (Northeast California Sage-Grouse Working Group 2006b)
- Desert Tortoise Recovery Plan (USFWS 1994b)

- Elko County, Nevada Division of Natural Resource Management Greater Sage Grouse Management and Conservation Strategy Plan (Elko County 2012)
- Lahontan Cutthroat Trout Species Management Plan for the Quinn River/Black Rock Basins and North Fork Little Humboldt River Sub-Basin (Sevon et al. 1999)
- Lahontan Cutthroat Trout Species Management Plan for the Upper Humboldt River Drainage Basin (NDOW 2004a)
- Management Plan for Mule Deer (NDOW 2006a)
- Nevada Elk Species Management Plan (NDOW 1997)
- Nevada Wildlife Action Plan (NDOW 2013)
- Pacific States Bald Eagle Recovery Plan (USFWS 1986a)
- Pahrnagat National Wildlife Refuge Wildland Fire Management Plan (USFWS 2001a)
- Railroad Valley Springfish Recovery Plan (USFWS 1997a)
- Recovery Plan for the Aquatic and Riparian Species of Pahrnagat Valley (USFWS 1998a)
- Recovery Plan for the Carson Wandering Skipper (USFWS 2007)
- The Revised Nevada Bat Conservation Plan (Nevada Bat Working Group 2006)
- Ruby Lake Management Plan(USFWS 1986b)
- Ruby Lake National Wildlife Refuge Fire Management Plan (USFWS 2001b)
- Ruby Lake National Wildlife Refuge Water Management Plan (USFWS 1988)
- Sheldon National Wildlife Refuge Final Comprehensive Conservation Plan (USFWS 2012)
- Southwestern Willow Flycatcher Recovery Plan (USFWS 2002)
- State of Nevada, Conservation Agreement and Conservation Strategy for Bonneville Cutthroat Trout (NDOW 2006b)
- State of Nevada, Department of Wildlife, Bighorn Sheep Management Plan (NDOW 2001)
- State of Nevada, Department of Wildlife, Greater Sage-Grouse Conservation Plan for Nevada and Eastern California (NDOW 2004b)
- State of Nevada, Department of Wildlife, Lincoln County Elk Management Plan (NDOW 1999a)
- State of Nevada, Department of Wildlife, Pahrnagat Valley Native Fishes Management Plan (NDOW 1999b)
- State of Nevada, Department of Wildlife, White Pine County Elk Management Plan (NDOW 1999c)

- State of Nevada, Division of Environmental Protection, Nevada Smoke Management Program Plan (Nevada Division of Environmental Protection 1999)
- State of Nevada, Division of Environmental Protection, Solid Waste Management Plan (Nevada Division of Environmental Protection 2007)
- State of Nevada Strategic Plan for Conservation of Greater Sage-Grouse (State of Nevada 2012)
- USFWS Lahontan cutthroat trout (*Oncorhynchus clarki henshawi*) Recovery Plan (USFWS 1995)
- USFWS Recovery Plan for the Native Fishes of the Warner Basin and Alkali Subbasin (USFWS 1998b)
- USFWS Recovery Plan for the Rare Species of Soldier Meadows (USFWS 1997b)

1.7.5. Tribal Plans

Tribal plans considered during the GRSG planning effort include the following:

- Pyramid Lake Indian Reservation Comprehensive RMP (Pyramid Lake Paiute Tribe and USDA 2005)
- Summit Lake Paiute Land Use Plan (Summit Lake Paiute Tribal Council et al. 2000)

1.7.6. Memorandums of Understanding

The following MOUs have been identified as being applicable to the GRSG planning effort:

- Between the BLM and the Forest Service (BLM and Forest Service 2011): The MOU documents the cooperation between the parties to plan, develop, implement, and monitor landscape-level programs and projects in accordance within the following initiatives:
 1. BLM REAs
 2. Forest Service Climate Change Strategy
 3. Landscape Conservation Cooperatives
 4. Juniper-Pinyon Partnership Project
 5. BLM Nevada's Landscape Approach
 6. GRSG Conservation
- Between the BLM and the Forest Service Concerning Oil and Gas Leasing Operations: The purpose of this MOU is to establish joint BLM and Forest Service policies and procedures for managing oil and gas leasing and operational activities pursuant to oil and gas leases on Forest Service-administered lands consistently with applicable law and policy. The MOU was signed in 2006 for the purpose of efficient, effective compliance with statutory and regulatory

requirements. The MOU establishes the roles of the Forest Service and the BLM in processing Applications for Permits to Drill and review of subsequent operations.

- Between the DOI, the USDA, and the US Environmental Protection Agency (EPA): Through the MOU, Regarding Air Quality Analyses and Mitigation for Federal Oil and Gas Decisions through the National Environmental Policy Act Process, the signatories commit to a clearly defined, efficient approach to compliance with the NEPA regarding air quality and air quality related values (AQRVs), such as visibility, in connection with oil and gas development on federal lands (BLM, Forest Service, and USEPA 2011).
- MOU for Water Quality Management Activities within the State of Nevada, September 2004 (BLM and Nevada Department of Environmental Protection 2004).

1.7.7. Activity Plans and Amendments

Both agencies have a number of activity-level plans and amendments that implement their respective resource management plan direction. Similar to the broad-scale plans, these activity-level plans may also be amended to reflect new information or changed circumstances. The need to amend will be determined on a site-specific analysis.

The BLM and Forest Service develop activity-level plans to provide more specific direction to localized management units for the implementation of RMPs. As part of this project, existing allotment management plans and herd management plans that fall within occupied GRSG habitat would be evaluated for consistency with management actions set forth in this plan and updated as needed.

The BLM and Forest Service have identified the following activity plans from forest, district, and field offices within the sub-regional planning areas as being applicable to the Nevada and Northeastern California GRSG planning effort:

- Battle Mountain District Office
 - Battle Mountain Drought Environmental Assessment (BLM 2012j)
 - Central Nevada Communications Sites Amendment (BLM 1998b)
 - Geothermal Leasing Shoshone-Eureka Planning Area (BLM 2002a) Geothermal Leasing -Tonopah Planning Area (BLM 1997b)
 - Alturas Field Office Integrated Weed Management Program (BLM 2009b)
 - Oil and Gas Leasing - East side Shoshone-Eureka Planning Area (BLM 2006)
 - Oil and Gas Leasing - West side Shoshone Eureka Planning Area (BLM 2008g)
 - Shoshone-Eureka Rangeland Program Summary (BLM 1988a)
 - Shoshone-Eureka RMP Amendment (BLM 1987b)
 - Shoshone-Eureka RMP Amendment for Fire Management (SERA FLUPA and Decision Record) (BLM 2002b)
 - Shoshone-Eureka Wilderness Recommendations (BLM 1987d)

- Carson City District Office
 - BLM/Navy Fallon Range Training Complex Requirements EIS (BLM and US Navy 2000)
 - Carson City District Drought Management Plan (BLM 2013a)
 - Carson City District 2011 Geothermal Leasing (BLM 2010a)
 - Carson City Field Office Fire Management Plan (BLM 2004b)
 - Denton-Rawhide Mine Land Sale Plan Amendment (BLM 2007b)
 - Desatoya Mountains Ecosystem Management Plan (BLM 1999)
 - Geothermal Resources Leasing in Churchill, Mineral, and Nye Counties, Nevada (BLM 2008h)
 - Interdisciplinary Management Plan for the Silver Saddle Ranch and the Ambrose Carson River Natural Area (BLM 2000)
 - North Douglas County Specific Management Plan Amendment (BLM 2001b)
 - Southern Washoe County Urban Interface Plan Amendment (BLM 2001c)
- Eagle Lake Field Office
 - Eagle Lake Basin Plan. Susanville, CA: BLM Eagle Lake Field Office (BLM 1991b)
 - Nobles Trail/Humboldt Wagon Road Management Plan (BLM 2011b)
 - Pine Dunes Research Natural Area Management Plan. Susanville, CA: BLM Susanville District (BLM 1987c)
- Winnemucca District Office
 - Geothermal Leasing Programmatic Environmental Assessment for Low Sensitivity Application, (BLM 2002b)
 - Normal Year Fire Rehabilitation Plan (BLM 2004c)2004
 - Oil and Gas Leasing Environmental Assessment (BLM 2005c)
 - Pine Forest Recreation Management Plan (BLM 1992a)
 - Pine Forest Recreation Activity Plan for Pine Forest Recreation Area (BLM 2001d)
 - Water Canyon Implementation Plan Amendment (BLM 2005d)
 - Water Canyon Management Plan (BLM 1997c)
 - Winnemucca District Office Forestry Plan Amendment (BLM 2003a)
- Humboldt-Toiyabe National Forest
 - Aurora Area Geothermal Leasing Project (Forest Service 2011a)

- Austin and Tonopah Ranger Districts Combined Travel Management Project (Forest Service 2009b)
- Elkhorn Vegetation Treatment Project (Forest Service 2010)
- Ely Ranger District Travel Management Project (Forest Service 2009c)
- Geothermal Leasing On the Humboldt-Toiyabe National Forest (Forest Service 2012b)
- McGinness Hills Geothermal Power Plant Project (Forest Service 2011b)
- Mountain City, Ruby Mountains, and Jarbidge Districts Combined Travel Management Project (Forest Service 2012c)
- North Schell Restoration Project (Forest Service 2012d)
- Santa Rosa Ranger District Travel Management Plan (Forest Service 2007a)
- White Pine and Grant-Quinn Oil and Gas Leasing Project (Forest Service 2007b)

1.7.8. Habitat Management Plans

A habitat management plan provides guidance for the management of a defined habitat for a target wildlife species, protecting and improving habitat for that species and for other species utilizing the habitat. These plans are usually written in coordination with state fish and wildlife agencies.

- Aquatic Habitat Management Plan; Mahogany Creek Revised, Nevada (BLM 1974)
- Aquatic Habitat Management Plan; North Fork, Little Humboldt River, Nevada (BLM 1982c)
- Big Game Habitat Management Plan, Nevada (NDOW 1993)
- Condor Canyon Habitat Management Plan, Nevada (BLM 1990b)
- Desatoya Range Bighorn Sheep Habitat Management Plan, Nevada (NDOW 1986)
- Habitat Management Plan, Disaster Peak Wildlife Habitat Area, Nevada (BLM 1969)
- Fox Mountain—Granite Range Habitat Management Plan, Nevada 1970 (revised 1989)
- Jackson Mountains Wildlife Habitat Management Plan, Nevada 1979 (revised 1981)
- Little Owyhee/Snowstorm Habitat Management Plan, Nevada (BLM 1987e)
- Montana-Double H Wildlife Habitat Area (BLM 1990c)
- Bighorn Sheep Habitat Management Plan, Nevada (NDOW 2001)
- Owyhee Desert Habitat Management Plan, Nevada (BLM 1976)
- Pine Forest Habitat Management Plan, Nevada (BLM 1981)
- Pine Nut Habitat Management Plan, Nevada (BLM 1987f)
- Soldier Meadows Desert Dace Habitat Management Plan, Nevada 1983

- Sonoma Creek Aquatic Habitat Management Plan, Nevada (BLM 1985b)
- Sonoma Mountain Habitat Management Plan, Nevada (BLM 1975)

1.8. Vegetation Management Policies

BLM vegetation management involves all programs that rely on healthy plant species and communities to meet their objectives. The BLM's overarching goal for vegetation management is, through an interdisciplinary collaborative process, to plan and implement a set of actions that improve biological diversity and ecosystem function and which promote and maintain native plant communities that are resilient to disturbance and invasive species (BLM 2007a). Federal laws and regulations guiding vegetation management include the following:

- Carlson-Foley Act, 1968
- Federal Land Policy and Management Act, 1976
- Federal Noxious Weed Act, 1974
- National Environmental Policy Act, 1969
- Noxious Weed Control Act, 2004
- Plant Protection Act, 2000
- Public Rangelands Improvement Act, 1978
- Taylor Grazing Act, 1934
- Healthy Forests Restoration Act of 2003 (Public Law 108-148)

Vegetation treatment is fundamental to BLM vegetation management. Policies and plans related to vegetation treatment include the following:

- A Collaborative Approach for Reducing Wildland Fire Risks to Communities and the Environment 10-Year Comprehensive Strategy Implementation Plan (Forests and Rangelands 2006)
- BLM Manual 620 - Wildland Fire Management, Chapter 3, Interagency Burned Area Emergency Stabilization and Rehabilitation (BLM 2003b)
- BLM Manual 9015, Integrated Weed Management (BLM 1992b)
- Burned Area Emergency Stabilization and Rehabilitation Handbook (H-1742-1; BLM 2007c)
- EIS Vegetation Treatment on BLM Lands in Thirteen Western States (BLM 1991a)
- Interagency Burned Area Rehabilitation Guidebook (DOI 2006)
- National Fire Plan (DOI et al. 2001)
- Protecting People and Sustaining Resources in Fire Adapted Ecosystems: A Cohesive Strategy (Forest Service 2000)

- Pulling Together: National Strategy for Management of Invasive Plants (BLM 1998c)