

**Record of Decision
and
Land Use Plan Amendment
for the Nevada and California Greater Sage-
Grouse Bi-State Distinct Population Segment
in the
Carson City District and Tonopah Field Office**

Prepared by
**U.S. Department of the Interior
Bureau of Land Management
Nevada**

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It is the mission of the Bureau of Land Management (BLM) to sustain the health, diversity, and productivity of the public lands for the use and enjoyment of present and future generations.

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BUREAU OF LAND MANAGEMENT

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In reply refer to: LLNVC0000.1610

May 27, 2016

Dear Reader:

Enclosed is the Nevada California Greater Sage Grouse Distinct Population Segment Land Use Plan Amendment (LUPA) and Record of Decision (ROD). The ROD approves the LUPA which amends the Carson City Field Office Consolidated Resource Management Plan (RMP) and the Tonopah Field Office RMP. The BLM was a cooperating agency on the United States Forest Service (USFS) led planning effort and the LUPA was developed using a collaborative planning process that included input from the Nevada Department of Wildlife and the United States Fish and Wildlife Service as well as consideration of public comments received from the issuance of the Draft Environmental Impact Statement (EIS) and protests received on the LUPA/Final EIS.

The Federal Land Policy and Management Act (FLPMA) requires the development and maintenance, and, as appropriate, the revision of land use plans for public lands. The National Environmental Policy Act (NEPA) requires Federal agencies to prepare an Environmental Impact Statement (EIS) for major Federal actions that could significantly affect the environment. In fulfillment of these requirements, the draft EIS/LUPA was issued on August 23, 2013 with a revised draft EIS/LUPA released on July 11, 2014 for a 90-day public comment period. All comments were reviewed, summarized and considered in preparing the Proposed RMP/Final EIS.

The final EIS/LUPA was made available to the public on February 13, 2015 for a 30-day protest period. Three protest letters were received. Protest issues are addressed in the Protest Summary Report, available online at: http://www.blm.gov/nv/st/en/fo/carson_city_field.html

The LUPA encompasses approximately 280,000 acres of public land administered by the BLM Nevada, located in Carson City, Douglas, Esmeralda, Lyon, and Mineral counties in Nevada and Alpine County, California. The decision area does not include private lands, state lands, Indian reservations, or federal lands not administered by BLM. The LUPA/ ROD adds goals, objectives, action, and best management practices specifically designed to conserve, enhance, and/or restore habitats to provide for the long-term viability of the Greater Sage Grouse Bi-State Distinct Population Segment (BSSG). The LUPA provides direction at the land use plan level for the management and conservation of BSSG habitats within the BLM Carson City and Battle Mountain Districts to support the BSSG population management objectives within the states of Nevada and California.

After much consideration and adjustment, the BLM now approves the LUPA as the BLM Nevada's land use planning document that will provide direction for the management and conservation of BSSG habitats on public land administered by the BLM Nevada. The approved plan provides an optimal balance between the protection of BSSG habitat and authorized resource uses.

Copies of the ROD/Approved LUPA are available upon request from the Carson City District Manager, Bureau of Land Management, 5665 Morgan Mill Road, Carson City, NV 89701, Battle Mountain District Manager, Bureau of Land Management, 50 Bastian Road, Battle Mountain, NV 89820 or via the Internet at http://www.blm.gov/nv/st/en/fo/carson_city_field.html. Copies of the ROD/Approved LUPA are available for public inspection at the Carson City or Battle Mountain District Offices at the above addresses.

The BLM appreciates the involvement from the public, State and other Federal agencies who contributed to the completion of this LUPA. This participation informed and improved the planning process and the planning documents. Your continued involvement is encouraged as the LUPA becomes implemented and monitored as we move forward in managing the public lands together in the Carson City District and the Tonopah Field Office.

Sincerely,

A handwritten signature in black ink, appearing to read 'John F. Ruhs', with a long horizontal line extending to the right.

John F. Ruhs
State Director
BLM Nevada

Enclosure

1. Nevada California Greater Sage Grouse Distinct Population Segment Record of Decision and Land Use Plan Amendment

RECORD OF DECISION

Summary

The Nevada California Greater Sage-Grouse Bi-State Distinct Population Segment Land Use Plan Amendment (LUPA)/Record of Decision (ROD) will amend the Carson City Field Office Consolidated Resource Management Plan (RMP) (2001) and the Tonopah Field Office RMP (1997). The LUPA and associated environmental impact statement (EIS) were developed using a collaborative planning process. The United States Forest Service (USFS) was the lead agency for preparing the EIS and LUPA. The BLM was a cooperating agency. The LUPA encompasses approximately 280,000 acres of public land administered by the BLM Nevada, located in Carson City, Douglas, Esmeralda, Lyon, and Mineral counties in Nevada and Alpine County, California. The decision area does not include private lands, state lands, Indian reservations, or federal lands not administered by BLM. The LUPA/ROD will add goals, objectives, actions, and best management practices (BMPs) specifically designed to conserve, enhance, and/or restore habitats to provide for the long-term viability of the Greater Sage-Grouse Bi-State (BSSG). The LUPA provides direction at the land use plan level to include regulatory mechanisms for the management and conservation of BSSG habitat within the BLM Carson City and Battle Mountain Districts to support the BSSG habitat management objectives within the states of Nevada and California.

Concurrent land use planning efforts for the Carson City and Battle Mountain District (which includes the Tonopah Field Office) RMPs are underway. The BSSG ROD will immediately amend current RMPs and will be brought forward as part of the No Action Alternative (Current Management) into the revised RMPs. The BLM has regularly communicated with partners and the interested public that the BSSG ROD will be the final decision on management of BSSG in the planning area.

Public Involvement

The USFS, as the lead federal agency on the EIS, developed a list of public individuals, organizations, governments, and agencies that would likely be interested or affected by the project. These included other landowners, advocacy and user-group organizations, county governments, Tribal governments, other Federal agencies, Nevada State agencies, grazing permittees, livestock industry groups, and local news media. Extensive public outreach was conducted during the EIS preparation. Highlights are provided below.

The Notice of Intent to prepare an EIS was published in the Federal Register on November 30, 2012 (Federal Register, volume 77, number 231). The notice invited public comment on the proposal through January 30, 2013. Additionally, a scoping letter describing the proposed action and asking for comments on this proposal was sent out to the public on November 30, 2012. This letter was sent to approximately 200 organizations and individuals. A joint press release between the BLM and USFS was published in the Reno Gazette Journal on December 6, 2012 (with a stop date of January 30, 2013). The press release described the project and invited public comment. The USFS and the BLM hosted two public meetings during the scoping period. One was held on January 9, 2013, in Minden, Nevada, and the other on January 10, 2013, in Smith Valley, Nevada. A total of 15 people attended these meetings. Public notification of the proposed action was posted online from November 29, 2012, to January 30, 2013, at http://www.fs.fed.us/nepa/nepa_project_exp.php?project=40683.

The Notice of Availability for the draft EIS was published in the Federal Register August 23, 2013. This publication started the 90-day formal comment period that ended November 20, 2013. This comment period was extended twice and ended on January 17, 2014. Additionally, public notification of the draft EIS was posted online from August 16, 2013, through the end of the extended comment period at http://www.fs.fed.us/nepa/nepa_project_exp.php?project=40683. A news release was published in the Reno Gazette Journal starting August 16, 2013 (with an original stop date of November 20, 2013). With each extension (first extension from November 20 to December 27, 2013; and the second from December 27, 2013, to January 17, 2014) a news release notified the public and was published in the Reno Gazette Journal to notify the public of the comment period extension. A notice regarding the comment period extension was also published in the Federal Register on December 27, 2013.

On March 21, 2014, Tony Wasley, Co-chairman of the Bi-State Executive Oversight Committee, sent a letter to Ren Lohofener, Regional Director of the US Fish and Wildlife Service (USFWS), requesting in part the USFWS provide an additional 6 months to analyze new information before making a final decision on the potential listing of the Bi-State DPS. On March 31, 2014, the USFWS added 6 months beyond the original October 2014 deadline, which extended the new deadline to April 2015. With the additional information gathered during the twice-extended comment period, as well as the additional time provided by the USFWS, the decision was made to prepare a revised draft EIS. The intent of the revised draft EIS was to allow the USFS and BLM to analyze and present new information since the original draft EIS was published and provide this new information and analysis to the public for formal comment.

The Notice of Availability for the revised draft EIS was published in the Federal Register on July 11, 2014, for another 90-day comment period. This comment period ended on October 9, 2014. A news release regarding the revised draft EIS availability to the public was published in the Reno Gazette Journal starting July 30, 2014, with a stop date of August 29, 2014.

A press release was published in the Reno Gazette Journal on February 6, 2015 announcing the public availability of the final EIS/LUPA. The Notice of Availability for the final EIS/LUPA was published in the Federal Register on February 13, 2015. During the 30-day protest period, three valid protests were received with seven issues identified and resolved in the Protest Report approved by the BLM Director on May 27, 2016.

On April 23, 2015, the USFWS withdrew the proposed rule to list the Bi-State DPS of greater sage-grouse as threatened under the Endangered Species Act as well as the proposed rule to designate critical habitat for the Bi-State DPS of greater sage-grouse. This was due to the efforts of Federal, state and private partners coming together to proactively conserve key habitat and significantly reduces long-term threats to this distinct population segment of greater sage-grouse through the implementation of the Bi-State Action Plan and the land use planning efforts.

In response to the protests and based on additional policy discussions, the BLM determined that it needed to clarify and make changes to the Proposed Plan. On November 13, 2015, a Notice was published in the Federal Register announcing a 30-day comment period on the significant changes to the proposed plan. The proposed changes were previously analyzed in the final EIS, therefore, a supplemental EIS was not necessary. The comment period was extended to January 29, 2016 at the request of several stakeholders. Thirty-nine comment letters were received and comments did not result in further changes to the Proposed Plan.

Decision

In the final EIS, the USFS and BLM considered two action alternatives and the no-action alternative. The action alternatives included the proposed action which was developed first in the draft EIS, then modified in the revised draft EIS in response to comments received during the public comment period. Alternative B (modified) retained many elements of the original proposed action. Modifications included more specificity to limiting activities that may be proposed to occur in BSSG habitat, and less ambiguity regarding the application of standards and guidelines to discretionary actions. Alternative C was added between the draft EIS and the revised draft EIS. This alternative, also developed in response to comments, includes more prohibitions on discretionary actions. It is from these three alternatives that I have selected my decision. The proposed alternative identified in the Final EIS at Table 2-5 was marked with an asterisk and is a combination of alternatives B and C. The BLM's Proposed Action is this proposed alternative with the language modified to be consistent with BLM planning language. Additionally, several modifications were added to the proposed alternative based on policy discussions.

In this LUPA, the Distinct Population Segment reference has been dropped from the plan components because "distinct population segment" is a taxonomic delineation identified by the Endangered Species Act and used by the USFWS during the Endangered Species Act listing process. Since the species was not listed the reference to the distinct population segment does not apply. Nothing in this name changes or diminished the intent or application of the plan components in the LUPA.

The BLM and the USFS, in partnership with USFWS, U.S. Geological Survey, Nevada Department of Wildlife, California Department of Fish and Wildlife, and researchers specializing in the Bi-State sage grouse, have prepared a comprehensive monitoring strategy for the species. The Monitoring Sage-Grouse Response to Management Actions Prescribed by the Bi-State Action Plan (Appendix A) is a plan which establishes a program to monitor population and habitat condition metrics across the range of the BSSG and is based on the latest scientific information. Changes to the methods or protocols in the guide would be made as necessary to maintain effectiveness and efficiency of the monitoring for the monitoring questions and indicators. The monitoring plan is not a land use planning decision and therefore not included as part of the land use plans. Changes to the monitoring plan can occur without amending the land use plan or requiring an administrative change.

The BLM and the USFS have been fully engaged with the USFWS, U.S. Geological Survey, Nevada Department of Wildlife, and California Department of Fish and Wildlife for the last decade or more working on sage grouse issues in the Bi-State DPS habitat area. The BLM will continue to work with all of our partners to improve our understanding about the sage grouse, and conduct work to

restore habitat. The Bi-State Local Area Working Group has been helping the agencies and private landowners preserve habitat for years. They helped define the population management units back in the early 2000s. They organized and participated in work days to improve habitat. They have remained together all of this time with common cause to help understand the species. Individual members have taken steps on their private property to improve habitat and they have helped their neighbors to do the same. Their combined efforts have done much for the continued existence of the species. This decision is but a small step that the BLM is taking to help guide future decisions that will help conserve, enhance, and restore BSSG habitat. The BLM is committed to the implementation of the LUPA and continuing to work with our partners on BSSG issues.

The approved amendment meets the purpose and need by providing management direction that limits potential effects from site specific projects or activities in BSSG habitat. The desired conditions, goals, objectives, actions and BMPS in the approved amendment increase the regulatory certainty and reduce the former amount of implementation flexibility that the USFWS described in their 2010 finding. Actions and BMPs have been developed to provide direction for many of the potential activities that can occur in the habitat. The actions and BMPs in this decision provide guidance for future authorization of site-specific projects, which must be consistent with this plan. These actions and BMPs are intended to reduce the disturbances occurring in the habitat, and for the disturbances that do occur, there are limits to the duration, timing, and location of activities to best protect the BSSG during all of its life stages.

As projects/activities are proposed on public land managed by the BLM, the authorized officer will determine if the proposal is consistent with the RMP (as amended). When a proposed project is found to be inconsistent with the management direction in the plan the BLM will consider several outcomes:

- Whether or not to analyze the proposal further;
- If the project proposal can be modified so that it is consistent with the RMP direction;
- If there are valid existing rights which influence the BLMs evaluation of the proposal;
- Alternatives to the proposed action that are consistent with the plan; and
- If the preparation of a site specific RMP amendment is warranted to authorize the proposal.

As the plan amendment, described in this ROD, does not make activity/project specific decisions, all future activity/project proposals within the BLM authority will be considered and, if carried forward, analyzed for consistency with the RMP as well as any potential environmental effects. Potential inconsistencies with the plan direction do not automatically mean a project could not be authorized; however, if a proposal is inconsistent with the plan, a plan amendment would be needed before such an activity/proposal could be approved.

For project proposals involving valid existing rights, the authorized officer will work with the project proponent to consider all feasible options to avoid, minimize, or compensate for potential impacts to BSSG habitat, including voluntary mitigation.

The RMP (as amended) includes plan level decisions that future proposed actions must be consistent with. Authorizing projects/activities that are inconsistent with the decisions set forth in this RMP amendment may require a RMP amendment. The “no permanent net loss of habitat due to project disturbance” action (All Resources 3) would assure that the conservation and protection of habitat is foremost during the plan consistency review, project design, NEPA analysis and decision making process for site-specific projects and activities.

This decision/LUPA does the following:

- Adopts the Goals and Objectives Table ROD-1 (as displayed in Table 2-3 of the final EIS);
- Adopts the Actions Table ROD-2 (as displayed in Table 2-5 of the final EIS);
- Adopts the BMPs in Table ROD-3 (as displayed in Table 2-5 of the final EIS);
- Adopts the desired habitat conditions Table ROD-4 (as displayed in Table 2-1 of the final EIS);
- Adopts the seasonal dates Table ROD-5 (as displayed in Table 2-2 of the final EIS); and
- Adopts the forage utilization standards Table ROD-6 (as shown in Table 2-6 of the final EIS); and
- Adopts Appendix A *Monitoring Sage-Grouse Response to Management Actions Prescribed by the Bi-State Action Plan*.

This decision provides the overall guidance to manage the sagebrush ecosystem for the long-term persistence of the BSSG in their habitat. Recognizing that all BSSG habitat is of high value and needs to be managed accordingly, the actions and BMPs apply to public land managed by Nevada BLM mapped as habitat and connective areas (Figure-1) within the plan amendment area. The habitat map in the LUPA/ROD was developed by the Technical Advisory Committee (TAC) in 2012 using the best available scientific information (modeling, telemetry, and field surveys/verification) at that time. During the development of the habitat map the TAC considered all related habitat conditions needed by the BSSG to fulfill their annual life cycle. This habitat map includes habitat centered around the leks, nesting habitat adjacent to the lek, brood rearing habitat, and connective habitat that facilitates movement between larger patches of habitat. Connective areas described in the final EIS, and adopted in this ROD, are intended to: a) spatially locate areas where management opportunities may exist to enhance BSSG movement between mapped habitat polygons, and b) retain small pockets of sagebrush inclusions within connective areas, if they exist, that may currently

be facilitating some unknown level of BSSG movement between adjacent suitable habitats.

When authorized land uses cause habitat loss or degradation, the BLM will require mitigation that provides a no permanent net loss to the BSSG habitat. Analysis of mitigation will include consideration of any uncertainty associated with the effectiveness of such mitigation at both the project and habitat scales. This will be achieved by avoiding, minimizing, and compensating for impacts by applying beneficial mitigation actions. The BLM will coordinate with the Sagebrush Ecosystem Technical Team on the application of a compensatory mitigation program, such as the Nevada Conservation Credit System for mitigating activities that result in habitat loss and degradation of BSSG habitat, where the application of compensatory mitigation will occur on or the credit will be applied to disturbance on BLM-administered lands. The Monitoring Strategy, Appendix A to the amendment, describes the expected management approach to implement these standards.

This amendment does not authorize any on-the-ground actions. Implementation of the actions and BMPs described in this amendment apply to all future proposed actions public lands administered by the BLM occurring within BSSG habitat on the Carson City District and the Tonopah Field Office. Any future proposed on-the-ground actions within the Burbank Canyon Wilderness Study Area will be designed to be in conformance with BLM Manual 6330. Consideration of wilderness characteristics are outside of the scope of this plan amendment. This resource will be addressed in project level environmental analysis as well as in the Carson City and Battle Mountain District RMP revisions.

Figure -I. Nevada California BSSG Habitat and Connective Areas managed by Nevada BLM

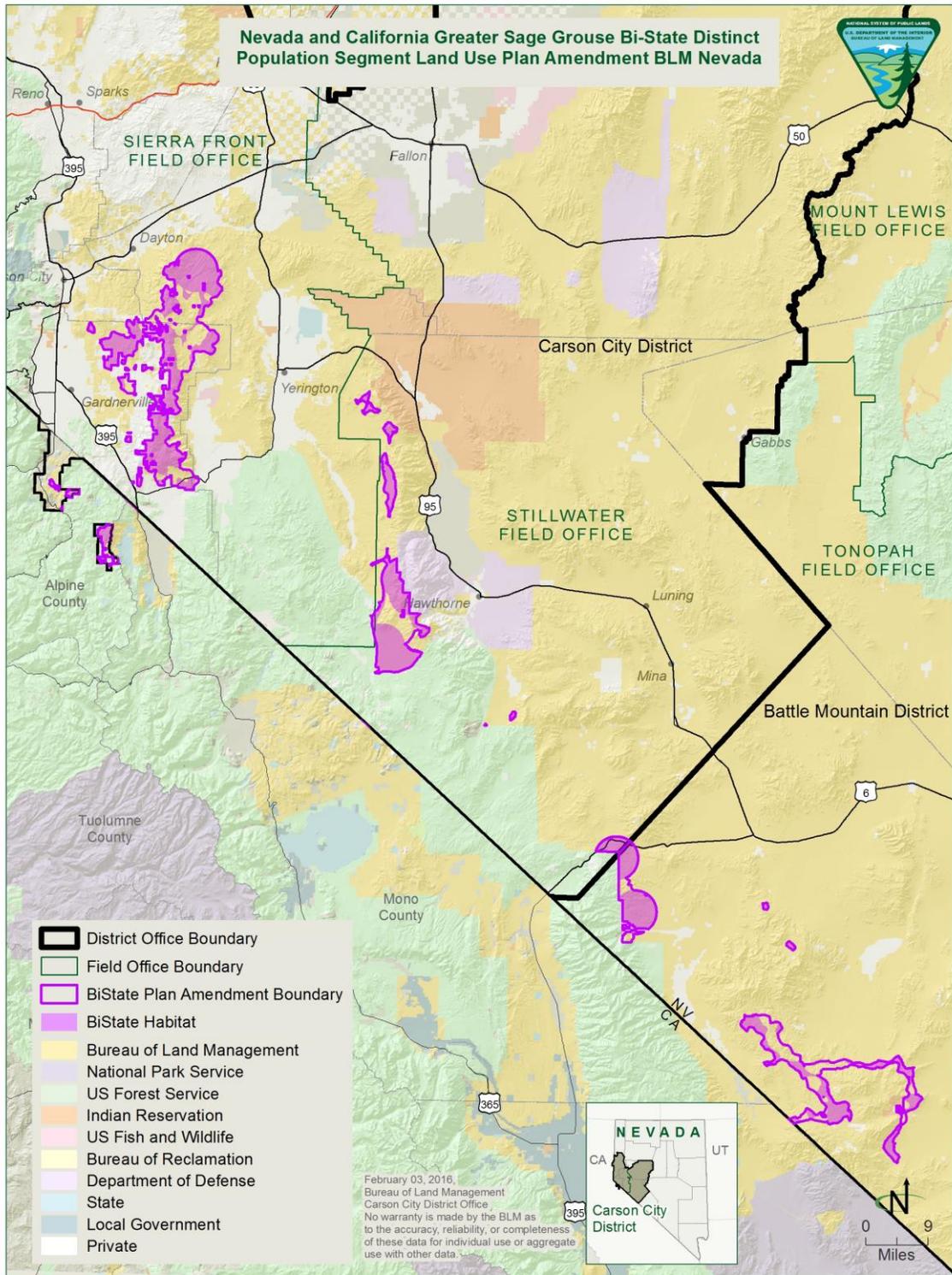


Table ROD-I. Goals and Objectives for the Bi-State DPS and Bi-State DPS Habitat

Goals and Objectives
<p>Goal 1: BSSG habitat and movement corridors are managed to bring vegetation communities to their ecological site potential and to maintain or increase the species.</p> <ul style="list-style-type: none"> ▪ Objective 1a: By 2024, 200,000 acres of degraded habitat (i.e., areas with conifer encroachment, invasive annual grasses, and/or altered fire regimes) have been improved through changes in management or restoration activities to meet habitat objectives. ▪ Objective 1b: By 2024, BSSG populations will be at or above current levels.
<p>Goal 2: BSSG and habitats will benefit from standards and guidelines (which BLM identifies in land use plans as Actions and Best Management Practices) adopted to eliminate or reduce negative impacts and increase positive impacts from discretionary and nondiscretionary actions.</p> <ul style="list-style-type: none"> ▪ Objective 2a: By 2020, BSSG productivity, survival, or use of seasonal habitats will be at least at the same level as they are in 2014. ▪ Objective 2b: By 2019, water developments (tanks and troughs) will be designed or retrofitted to decrease the risks of drowning or disease or as breeding sites for vectors such as mosquitos. ▪ Objective 2c: Saleable mineral pits determined to be no longer in use shall be reclaimed by the operator to meet sage grouse conservation objectives within 5 years of such determination.
<p>Goal 3: In habitat, fuels treatments are used as a management tool when the benefits to BSSG clearly outweigh the risks; otherwise fire is suppressed in habitat after life and property.</p> <ul style="list-style-type: none"> ▪ Objective 3a: By 2024, proactive fire prevention treatments will have been implemented in or adjacent to 30% of the identified habitat. ▪ Objective 3b: By 2019, risk of unwanted fire in habitat shall be 20% lower compared to conditions in 2014.
<p>Goal 4a: Areas at risk of conversion to a degraded, disturbed, or invaded state are declining in size and distribution.</p> <ul style="list-style-type: none"> ▪ Objective 1a: By 2024, 200,000 acres of degraded habitat (i.e., areas with conifer encroachment, invasive annual grasses, and/or altered fire regimes) have been improved through changes in management or restoration activities to meet habitat objectives.
<p>Goal 4b: Reduction of fuel loads has reduced the risk of high severity fires in BSSG habitat.</p> <ul style="list-style-type: none"> ▪ Objective 4b: Over the next 10 years, areas with annual invasive grass dominance are reduced across 20,000 acres of habitat.
<p>Goal 4c: BSSG habitat has moderate to high resilience to disturbance and resistance to invasive annual grasses.</p> <ul style="list-style-type: none"> ▪ Objective 4b: Over the next 10 years, areas with annual invasive grass dominance are reduced across 20,000 acres of habitat.

Goals and Objectives

Goal 5: Over the next 25 years, areas with ≥ 25 -65% and areas with $> 65\%$ sage brush cover are increasing through the implementation of integrated restoration strategies.

- **Objective 1a:** By 2024, 200,000 acres of degraded habitat (i.e., areas with conifer encroachment, invasive annual grasses, and/or altered fire regimes) have been improved through changes in management or restoration activities to meet habitat objectives.
- **Objective 4b:** Over the next 10 years areas with annual invasive grass dominance are reduced across 20,000 acres of habitat.
- **Objective 5a:** Over the next 10 years manage or restore habitat so that land cover provides adequate sagebrush habitat to meet sage grouse needs to maintain or increase current populations.

Table ROD-2. Actions for the Bi-State DPS and Bi-State DPS Habitat

Actions

All Resources:

1. Project proposals shall include best management practices for each resource as appropriate to restore, conserve, and enhance BSSG and its habitat.
2. In connective areas¹, maintain vegetation characteristics suitable to sage grouse to the extent technically feasible.
3. Require site-specific project mitigation to insure no permanent net loss of habitat due to project disturbance.
4. Require buffers, timing limitations, or offsite habitat restoration for new or renewed discretionary actions to mitigate potential long-term negative impacts.
5. Total anthropogenic disturbances² shall affect no more than 3% of the total BSSG habitat on Federal lands within the Bodie/Mount Grant, Desert Creek/Fales, and White Mountains population management unit boundaries.
6. Total anthropogenic disturbances² shall affect no more than 1.5% of the total BSSG habitat on Federal lands within the Pine Nut Mountains population management unit boundary.

¹ Connective Areas-

Areas of unsuitable habitat that fragment or separate suitable habitat areas, both within and between population management units. These connective areas are identified because they are located where connections between suitable habitats are most important and because they often contain habitats unsuitable to sage-grouse and may prevent or inhibit movement across the landscape. Examples of unsuitable habitats include: agricultural and urbanized areas, and areas with naturally occurring and expanding pinyon-juniper forest. Connective areas represent areas that habitat management could focus on improving suitability, minimizing fragmentation, and improving opportunities for sage-grouse movement, thus increasing the connections between suitable habitats.

² Anthropogenic disturbances –

Human-created features within 4.7 miles of active or pending leks that include but are not limited to paved highways, graded gravel roads, transmission lines, substations, oil and gas wells, geothermal wells and associated facilities, pipelines, landfills, agricultural conversion, homes, and mines.

Actions
<p><u>Vegetation:</u></p> <ol style="list-style-type: none"> 1. Any vegetation treatment shall maintain, improve, or restore BSSG habitat. 2. Vegetation treatments and post-disturbance restoration shall seed and/or transplant sagebrush to restore large patches of sagebrush cover and connect existing patches. 3. Habitat restoration projects shall meet one or more of the following habitat needs: Promote the maintenance of large, intact sagebrush communities; limit the expansion or dominance of invasive species, including cheatgrass; maintain or improve soil site stability, hydrologic function, and biological integrity; and enhance the native plant community. 4. Time implementation of habitat restoration projects so that impacts to BSSG individuals and populations are limited by duration, scope, and scale. 5. When re-seeding use genetically and climatically appropriate and certified weed-free plant and seed materials. Use native seed when available. 6. After severe soil disturbances or seeding, do not authorize soil-disturbing uses for a minimum of two annual growing cycles or until desired habitat conditions and project objectives have been met, whichever is longer.
<p><u>Weeds:</u></p> <ol style="list-style-type: none"> 1. Treatment methodologies are based on the treatment area's resistance to annual invasive grasses and the resilience of native vegetation to respond after disturbance: (1) use mechanical treatments (i.e., do not use fire) in areas with relatively low resistance to annuals, and (2) treat areas in early- to mid-phase pinyon-juniper expansion. 2. Use pesticides/herbicides only outside of the critical disturbance periods and only if other integrated pest management approaches are inadequate or infeasible. Only use chemicals with the lowest toxicity to birds that still provide control in coordination with USDA or APHIS, depending on the targeted pest. 3. Agency personnel, contractors, and permit holders working in areas with known weed infestations shall clean vehicles of dirt, mud, and visible plant debris before entering a different area to reduce the spread of noxious weeds. 4. Annual invasive grasses shall be controlled or suppressed using an integrated strategy.
<p><u>Wildlife:</u></p> <ol style="list-style-type: none"> 1. Water developments (tanks/troughs) shall be drained when not in use, unless they are needed by other species, so they do not create a breeding ground for mosquitoes that carry West Nile Virus. 2. Wildlife escape ramps shall be installed and maintained in water troughs or open water facilities with vertical embankments that pose a drowning risk to birds. 3. Water developments at springs and seeps shall be maintained to preserve the continuity of predevelopment riparian areas. Modifications to the developments shall be neutral or beneficial to the BSSG.
<p><u>Wildland Fire:</u></p> <ol style="list-style-type: none"> 1. Fires in moderate to low resilience and resistance sagebrush and wooded shrublands shall be suppressed to prevent an invasive annual grass-fire cycle. 2. Do not reduce sagebrush canopy cover to less than 15% (Connelly et al. 2000; Hagen et al. 2007) unless a fuels management objective requires additional reduction in sagebrush cover to meet

Actions
<p>strategic protection of BSSG habitat and conserve habitat quality for the species.</p> <p>3. Enhance and restore habitat while reducing the potential for severe wildfires in habitat.</p>
<p><u>Wild Horse and Burros:</u></p> <p>1. Appropriate management levels in herd management areas shall be based on the structure, condition, and composition of vegetation needed to achieve BSSG habitat objectives.</p>
<p><u>Livestock Grazing:</u></p> <ol style="list-style-type: none"> 1. New and renewed grazing permits, annual operating instructions, or other appropriate mechanism for livestock management shall include terms, conditions, and direction to move toward or maintain BSSG habitat desired conditions. 2. Manage livestock grazing to maintain residual cover of herbaceous vegetation so as to reduce predation during breeding/nesting season (March 1 to June 30). 3. Manage livestock grazing in accordance with the utilization standards in Table ROD-4. 4. Remove fences and other infrastructure associated with livestock grazing negatively impacting BSSG and its habitats. 5. Any new structural range improvements and location of supplements (salt or protein blocks) shall not hinder the conservation, enhancement, or restoration of BSSG habitat. 6. To reduce BSSG mortality, remove, modify, or mark fences in sage-grouse habitat based on nearest proximity to lek, lek size, and topography where fence densities exceed 1.6 miles of fence per section (640 acres). 7. Livestock watering and handling facilities (corrals, chutes, dipping vats, etc.) or sheep bedding grounds shall not be located within 2 miles of an active lek and 0.6 miles from riparian areas. 8. Salting or supplemental feeding stations shall not be located within 2 miles of an active lek and 0.6 miles from riparian areas.
<p><u>Minerals:</u></p> <ol style="list-style-type: none"> 1. For new and existing leases in habitat, limit offsite noise to less than 10 decibels (dbA) above ambient measures from 2 hours before until 2 hours after at sunrise at the perimeter of a lek during active lek season. 2. Control fugitive dust on roads and pads. 3. Require a full reclamation bond specific to the site. Insure bonds are sufficient for costs relative to reclamation that would result in full restoration in habitat.
<p><u>Fluid Minerals (Oil, Gas and Geothermal):</u></p> <ol style="list-style-type: none"> 1. For new leases, apply a No Surface Occupancy stipulation for fluid mineral leasing in BSSG habitat with no exceptions, modifications, and waivers. 2. Upon expiration or termination of existing leases, apply a No Surface Occupancy stipulation for fluid mineral leasing in BSSG habitat with no exceptions, modifications, and waivers. 3. Require seasonal restriction November 1 to March 1 on geophysical exploration within winter habitats. 4. Apply the least invasive seismic exploratory method in habitat. 5. New fences will not be authorized unless necessary for safety or environmental protection reasons.
<p><u>Non-energy Solid Leasable Minerals:</u></p> <ol style="list-style-type: none"> 1. Close BSSG habitat to non-energy leasable minerals.

Actions
<p><u>Mineral Material Disposal:</u></p> <ol style="list-style-type: none"> 1. Close BSSG habitat to mineral material disposal. 2. Ensure no permanent unmitigated net loss of BSSG habitat due to existing mineral material sites. 3. Permits for existing mineral material sites shall require an approved pit development operating plan that minimizes impacts to BSSG and other resources. 4. Authorize existing mineral material use and expansion of existing pits only with no unmitigated net loss of habitat. 5. Any contract or permit for mineral material operations, except for disposals from existing community sites and common-use areas, shall include requirements for reclamation of the site to meet BSSG habitat objectives. 6. Where the Federal government owns the surface, and the mineral estate is in non-Federal ownership, require an approved pit development plan.
<p><u>Locatable Minerals:</u></p> <ol style="list-style-type: none"> 1. Mitigate long-term negative impacts to habitat from locatable mining operations to the extent practicable.
<p><u>Lands and Realty:</u></p> <ol style="list-style-type: none"> 1. ROWs no longer in use will be relinquished and reclaimed, where such reclamation work does not have unwanted adverse effects. 2. Subject to valid existing rights, do not install tall structures³ that could serve as predator perches or decrease the use of the area within 4 miles of an active or pending lek. 3. Require proper containment and prompt removal of refuse to avoid attracting predators. 4. New communication sites will not be authorized within BSSG habitat. 5. Manage as a ROW avoidance area. New high-voltage (120kV) transmission line corridors, right-of-ways, facilities, or construction areas in habitat (outside of existing corridors) will not be authorized. 6. Federal lands shall be retained unless a public interest determination identifies a net benefit to BSSG habitat. 7. Acquire lands or interests in lands when there is an opportunity to protect and/or enhance BSSG habitat.
<p><u>Renewable Energy (Wind and Solar):</u></p> <ol style="list-style-type: none"> 1. Manage BSSG habitat as a ROW exclusion area for utility-scale commercial wind development. 2. Manage BSSG habitat as a ROW exclusion area for utility-scale solar development.
<p><u>Recreation and Visitor Services:</u></p> <ol style="list-style-type: none"> 1. Implement time-of-year and time-of-day travel restrictions from March 1 and June 30, for special recreation permits and project-related activities that pass within 4 miles of an active or pending lek. Time of year restrictions and distance may be expanded to include wintering, nesting, or brood-rearing habitat.

³ **Tall structures** – A wide array of infrastructure (e.g., poles that support lights, telephone and electrical distribution, communication towers, meteorological towers, and high-tension transmission towers) that have the potential to disrupt lekking or nesting birds by creating new perching/nesting opportunities and/or decreasing the use of an area. A determination as to whether something is considered a tall structure would be based on local conditions such as vegetation or topography.

Actions
<ol style="list-style-type: none"> 2. Special recreation permits will not be authorized within occupied winter BSSG habitat between November 1 and March 1. 3. Prohibit new recreation facilities in BSSG habitat (e.g., campgrounds, day use areas, scenic pullouts, trailheads, trails, etc.).
<p><u>Comprehensive Travel and Transportation Management:</u></p> <ol style="list-style-type: none"> 1. Designate BSSG habitat as an OHV Limited Area; prohibiting any new surface disturbance, unless authorized through a separate implementation-level decision. Subsequent implementation decisions will further define the allowable uses within this area, including specific decisions allowing, prohibiting, or restricting OHV use on individual routes.

Table ROD-3. Best Management Practices for the Bi-State DPS and Bi-State DPS Habitat

Best Management Practices
<p><u>Vegetation:</u></p> <ol style="list-style-type: none"> 1. Use seed for perennial grasses and forbs adapted to local conditions to increase cover of these species. 2. Restore native (or desirable) plants and create landscape patterns which most benefit the BSSG. 3. Consider seed collection from the warmer component of the species current range when selecting native species for restoration (Kramer and Havens 2009). 4. Remove phase 1 and 2 pinyon-juniper located in habitat during habitat restoration projects, with the intent to maintain sagebrush habitat prior to establishment of forest species.
<p><u>Weeds:</u></p> <ol style="list-style-type: none"> 1. Grazing may be used to target removal of cheatgrass or other vegetation hindering BSSG objectives to move habitat toward desired habitat conditions (Table I) where monocultures occur to reduce risk of fire and achieve or move towards desired habitat conditions. Sheep, goats, or cattle may be used as long as the animals are intensely managed and removed when the utilization of desirable species reaches 25%. 2. Require aggressive treatment of new weed or annual grass infestation for any surface-disturbing or other activity that is likely to cause or promote the introduction or infestation and to control the potential spread of noxious and invasive annual grass species.
<p><u>Wildlife:</u></p> <ol style="list-style-type: none"> 1. Authorize new water development for diversion from spring or seep source only when habitat would benefit from the development.
<p><u>Wildland Fire:</u></p> <ol style="list-style-type: none"> 1. The protection of human life is the single, overriding priority. Setting priorities among protecting human communities and community infrastructure, other property and improvements, and natural and cultural resources will be done based on the values to be protected, human health and safety, and the costs of protection. 2. Do not use fire as a management tool in areas where the risk of escaped fire could cause negative long-term impacts during wildfire situations. 3. In BSSG habitat areas, prioritize suppression, immediately after life and property, to conserve the

Best Management Practices
<p>habitat during wildfire situations.</p> <ol style="list-style-type: none"> 4. Suppress wildfire threatening unburned habitat contained within a broader burn perimeter. 5. Vegetation treatments should include fuel breaks to provide anchor points for wildland fire suppression to protect areas meeting or moving toward desired conditions. 6. Fuels treatments should emphasize protecting existing sagebrush ecosystems to provide protection for habitat that is moving towards or meeting desired conditions. 7. Do not use prescribed fire, except for pile burning, in 12-inch or less precipitation zones, in areas where there is threat of cheatgrass invasion, sagebrush areas with less than 12 inches of annual precipitation or 12 inches of soil, or areas where the sagebrush cover would be reduced to less than 15% unless necessary to facilitate site preparation for restoration of BSSG habitat consistent with desired conditions. 8. Focus fuels management projects in habitat to reduce wildfire threats. 9. Manage post-treatment areas to increase perennial herbaceous species and minimize secondary weed invasion.
<p><u>Livestock Grazing:</u></p> <ol style="list-style-type: none"> 1. Do not install fences unless to protect habitat or for human health and safety. If fences must be installed, they should be at least 1.2 miles from active and pending leks and should be let-down fences when not needed.
<p><u>Minerals:</u></p> <ol style="list-style-type: none"> 1. Concentrate disturbance/facilities to reduce spatial impact to habitat. 2. Use areas with prior disturbance to site infrastructure. 3. Camps for workers shall be located outside habitat
<p><u>Fluid Minerals (Oil, Gas, and Geothermal):</u></p> <ol style="list-style-type: none"> 1. Allow geophysical exploration to obtain exploratory information for areas outside of and adjacent to habitat to provide continued opportunities outside that would not disturb BSSG habitat.
<p><u>Lands and Realty:</u></p> <ol style="list-style-type: none"> 1. Use existing roads and co-locate new powerlines, pipelines, other linear features, and utility structures to reduce disturbance and habitat fragmentation and to minimize disturbance footprint of rights-of-way (ROWs) in BSSG habitat. 2. Authorize new roads only when necessary for public safety, administrative, or public need to accommodate valid existing rights and to minimize disturbance footprint of ROWs in BSSG habitat. 3. Existing powerlines and other utility structures will be retro-fitted with perch-detering devices during the ROW renewal process. 4. Require proper containment and prompt removal of refuse to avoid attracting predators. 5. Where feasible, bury new powerlines to reduce overhead perches.

Table ROD-4. BSSG Desired Habitat Conditions

Category	Desired Condition
General	Rangeland health assessments are meeting all standards
	Sagebrush communities are large and intact with >65% of the landscape in sagebrush cover (Aldridge and Boyce 2007).
	The extent and dominance of invasive species, including cheatgrass, is limited to <5% (Blomberg et al. 2012).
	For security of nesting there is <3% phase I (>0% to <25% cover), no phase II (25–50% cover), and no phase III (>50% cover), within a 0.53-mile (850-meter) buffer from center of data collection plot (Baruch-Mordo et al. 2013).
	For winter cover and food there is <5% phase I (>0% to <25% cover), no phase II (25–50% cover), no phase III (>50% cover) within a 0.53-mile (850-meter) buffer from center of data collection plot (USGS [in prep](a)).
	For winter cover and food the extent of the sagebrush is as follows: >85% sagebrush land cover within 0.53-mile (850-meter) buffer from center of data collection plot (USGS [in prep](a)), Doherty et al. 2008).
Leks	There is adjacent sagebrush cover (Connelly et al. 2000; Blomberg et al. 2012).
	No tall structures are within line-of-sight of the lek or within 4 miles (6.5 kilometers) (Coates et al. 2013; Nevada Governor’s Sage-grouse Conservation Team 2010).
	Trees >3.3 feet (1 meter) above shrub canopy and should be <4% of landscape canopy cover within 1 kilometer of leks (Braun 2006; Connelly et al. 2000; Stiver et al. (in press); Baruch-Mordo et al. 2013).
Nesting (Breeding)	Sagebrush canopy cover is greater than 20 percent (Coates et al. 2010; Kolada et al. 2009a, 2009b; Connelly et al. 2000; Connelly et al. 2003; Hagen et al. 2007).
	Sagebrush species present include <i>Artemesia tridentate</i> subspecies (Coates et al. 2013; Kolada et al. 2009a, 2009b).
	Total shrub canopy cover is greater than 40 percent (Kolada et al 2009a, 2009b).
	Perennial grass cover (live and residual) is not less than 5 percent, but is greater than 10 percent if total shrub cover is less than 25 percent (Coates et al. 2013; Coates and Delehanty 2010; Kolada et al 2009a, 2009b).
	Annual grass cover is less than 5 percent (Lockyer et al. [in press] and Blomberg et al. 2012).
	Perennial grass height provides overhead and lateral concealment from predators (Connelly et al. 2000; Stiver et al. [in press]; Connelly et al. 2000; Hagen et al. 2007).
Brood-Rearing/ Summer	Proximity of tall structures (1 meter above shrub canopy) is not within 4 miles (Manier et al. buffer distances USGS report, 2014).
	Sagebrush canopy cover is 10 to 25 percent (Connelly et al. 2000).
	Perennial grass and forb cover is greater than 15 percent combined (Connelly et al. 2000; Hagen et al. 2007).
	Perennial forb canopy cover is >5% arid and >15% mesic for cover and food (Casazza et al. 2011; Lockyer et al. [in press])
	Grass and forb heights provide lateral and overhead concealment (Connelly et al. 2000; Kolada et al. 2009 b, Stivers et al. 2015).
	Manage for proper functioning condition in riparian areas/meadows for food ((Connelly et al, 2000).
	Understory species in the vicinity of riparian areas/meadows diversity is greater than five species present (Casazza et al. 2011; Stiver et al. [in press]).
Has adjacent sagebrush cover (Connelly et al, 2000)	
Winter	Winter habitat is composed of sagebrush plant communities with sagebrush canopy cover greater than 10% and sagebrush height greater than 25 centimeters (9.8 inches) above snow level (Connelly et al. 2000; USGS [in preparation]).

Source: (For nesting, brood-rearing, and winter habitat condition) USDI Fish and Wildlife Service (2013). Braun, C.E. 2006. Blueprint for sage-grouse conservation and recovery. Grouse: Tucson, AZ. Coates, P.S. and D.J. Delehanty. 2010. Nest predation of greater sage-grouse in relation to microhabitat factors and predators. Journal of Wildlife Management 74(2): 240-248.

Table ROD-5. Seasonal Dates for BSSG

Date	Impacts to Consider
March 1–May 15	Breeding (critical disturbance period; dates may shift 2 weeks back or forward in atypically dry or wet years based on observations of lek activity)
April 1–June 30	Nesting and early brood-rearing (critical disturbance period; dates may shift 2 weeks back or forward in atypically dry or wet years based on observations of lek activity)
July 1–September 15	Late brood-rearing
September 1–October 31	Fall
November 1–March 1	Winter

Table ROD-6. Forage Utilization Standards for BSSG Habitat

Community Type	Percent Utilization of Key Species	Terms and Conditions
Mountain Big Sagebrush	<45% herbaceous species; <35% shrub species	Livestock removed in 3–5 days of reaching utilization level
Wyoming and Basin Big Sagebrush	<35% herbaceous species; <35% shrub species	Livestock removed in 3–5 days of reaching utilization level
Black Sagebrush	<35% herbaceous species; <35% shrub species	Livestock removed in 3–5 days of reaching utilization level
Riparian and Wet Meadows	<50% herbaceous species; <35% woody species; or average stubble height of at least 4–6 inches (depending on site capability and potential) for herbaceous riparian vegetation	Average stubble height 4–6 inches: Livestock removed in 3–5 days of reaching utilization level based on site; or (sequential action) no grazing from May 15–August 30 in brood-rearing habitat

Note: Monitoring would be conducted using accepted protocols (including but not limited to: Burton et al. 2011; USDI BLM 1996; Platts 1990).
Sources: Holechek (1988); Holechek et al. (1998); Burton et al. (2011); USDI BLM (1996); Platts (1990).

Rationale

The selected alternative has been chosen on the basis of the following factors: consistency with federal legal requirements, policy, and directive, the stated purpose and need (see Chapter I of the Final EIS), a balanced use and protection of resources based on the analysis of potential environmental impacts as presented in the Final EIS, and consideration of formal comments and recommendations from agencies and the public. The selected alternative is in conformance with the Federal Land Policy and Management Act (FLPMA) of 1976, the regulation at 43 CFR 1600, the National Environmental Policy Act (NEPA) of 1969, and with current BLM policies, plans and programs.

The LUPA provide a comprehensive, coordinated, and effective conservation strategy for addressing the threats to the BSSG identified by the FWS such that the need for additional protections under the ESA may be avoided. The LUPA strive to conserve BSSG and their habitat on BLM-administered lands in Nevada and California. This is consistent with measures identified or recommended in the NTT Report, the COT Report, recent USGS studies, and other relevant research and analysis. The BLM land use plan is an essential component to conserve the BSSG and its habitat. The conservation measures in the LUPA

reflect over a decade of research, analysis, and recommendations for BSSG conservation.

The LUPA is the product of extensive coordination, including the active engagement of the FWS in helping to inform land allocation and related management decisions by the land management agencies to ensure they limit or eliminate new surface disturbance as well as improve habitat condition in the most important habitat areas. The LUPA also benefits from strong collaboration with partners (such as the Bi-State Local Area Working Group).

Overview of the Alternatives

Based on public comments, agency policy, and the Council on Environmental Quality regulations implementing NEPA, the interdisciplinary team developed three alternatives (including the proposed action) for detailed analysis in the EIS.

Alternative A – No Action: Continuation of Current Management

Under the No-Action Alternative, current land use plans would continue to guide management of the amendment area which includes sensitive species direction (USDA Forest Service 1986 [as amended], Carson City Field Office Consolidated RMP 2001 and the Tonopah Field Office RMP 1997). No forest plan or RMP amendment would be approved for the purpose of conserving, enhancing, and/or restoring sagebrush and associated habitats to provide for the long-term viability of the Bi-State DPS.

Alternative B – Proposed Action

The Proposed Action was to amend the Toiyabe National Forest Land and Resource Management Plan (Forest Plan), and the BLM proposed to amend the Carson City Field Office Consolidated RMP and the Tonopah Field Office RMP by adding to or changing some of the regulatory mechanisms to reduce, eliminate, or minimize threats to Bi-State DPS habitat on Federal lands administered under those plans. The regulatory mechanisms would apply to Bi-State DPS habitat, described below, on Forest Service- and BLM-administered lands within the plan amendment area boundary. The BLM Proposed is the same as Alternative B with the language modified to be consistent with BLM planning language.

The Toiyabe National Forest Plan and BLM RMP amendments apply only to Federal lands administered by either the Forest Service or the BLM and will recognize valid existing rights. Lands addressed in the amendments include NFS lands and public lands (including surface- estate, split-estate lands) managed by the Forest Service and BLM, respectively, in habitats of the Bi-State DPS.

The alternative includes the adoption of the desired habitat conditions as presented in (Final EIS) Table 2-1, the dates used to evaluate impacts presented in Table 2-2, the goals and objectives presented in Table 2-3, and the standards and guidelines presented in Table 2-4 under the alternative B (modified) heading.

Alternative C – The Conservation Alternative

This alternative proposed goals and objectives and standards and guidelines that address the purpose and need of this plan amendment by focusing on a more conservation-conservative approach to land management than the proposed action by including more requirements for project design and establishing a more detailed schedule for accomplishments. This alternative allows for the analysis and disclosure of a range of methods to achieve the purpose and need of providing regulatory mechanisms to reduce, eliminate, or minimize threats to Bi-State DPS habitat on Federal lands. The regulatory mechanisms would apply to Bi-State DPS habitat, described below, on Forest Service- and BLM-administered lands within the plan amendment area boundary.

Alternative C also establishes the lands within the plan amendment area boundary that were transferred under the Nevada Enhancement Act as being under the management direction of the Toiyabe Forest Plan, with allocation to the Bridgeport Pinyon/Juniper Management Area #6 (see Appendix B, Final EIS, for map) and as amended by this alternative.

Alternatives Considered but Eliminated from Detailed Analysis

Public comments received in response to the proposed action provided suggestions for alternative methods for achieving the purpose and need. Some of these alternatives were considered outside the scope to conserve, enhance, and/or restore habitat for the Bi-State DPS; duplicative of the alternatives considered in detail; or determined to be components that would cause unnecessary environmental harm. Therefore, five alternatives were considered, but dismissed from detailed consideration for reasons summarized below.

1 & 2) Two alternatives were discussed involving the use of buffers. One would extend buffers for various conservation actions, and the other would limit/remove these buffers altogether. The original proposed amendment presented at the beginning of scoping had language about specific buffers for various potential actions. The standards and guidelines have since been rewritten to buffer habitat components instead of projects. By buffering habitat components the effects analysis becomes consistent across alternatives and is less speculative. Buffering projects would require a great deal of speculation in the analysis concerning the number, extent, and duration of different types of projects potentially occurring in the plan amendment area over time.

3) Several groups and individuals suggested in the public comments that the agencies no longer allow certain types of activities to occur within the amendment area. Based on these public scoping comments, the interdisciplinary team considered an alternative that would eliminate all discretionary actions within the amendment area. Discretionary actions are actions where the Forest Service and the BLM have discretion whether to allow the particular use and under what circumstances. These include almost everything the agencies do, from the authorization of special-use permits to cross public lands managed by the USFS and the BLM, to planning and implementing projects to restore sagebrush habitat for the benefit of the Bi-State DPS.

This alternative was discussed as a way to illustrate the trade-offs of not allowing any discretionary actions to occur within the amendment area. The current land use plans allow for various types of resource management and recreation. The Forest Service and the BLM are multiple-use agencies by definition. An alternative that would practically eliminate all of those activities, regardless of relationship to the conservation of the Bi-State DPS, would be outside the scope and intent of the proposed amendment and would not meet the overall management goals and objectives for the amendment area.

Alternative C does adopt and analyze some of the elements that would be included here.

4) An alternative was considered as the “habitat exclusion” alternative. A geographically based alternative was discussed that would redraw the habitat map to exclude areas that have a high degree of ongoing activity. Areas that would have been excluded from habitat include developed mine sites, areas with intense mineral exploration activity, areas with high recreation use, and areas with potential for geothermal lease and development. This alternative would have removed those habitat areas from the protections the proposed action offered. This alternative was eliminated from detailed consideration because it would have resulted in fragmentation to the habitat and would not meet the purpose and need of this proposal to conserve, enhance, and/or restore sagebrush and associated habitats of the Bi-State DPS, regardless of the habitat’s relative location to various human activities.

5) An alternative was considered that was for the Nevada Enhancement Act only. This alternative was the same as the no-action alternative, except for the application of Toiyabe Forest Plan general management direction and Bridgeport Pinyon/Juniper Management Area #6-specific direction to Enhancement Act lands in the plan amendment area. The regulatory mechanisms for the conservation of Bi-State DPS would not have been included in the amendment. Because for the same reason as provided for the no-action alternative, this alternative would not meet the purpose and need for this project. In addition, the analysis would have been redundant with the no-action alternative because

the management direction would be the same as that of the no-action alternative. Therefore, this alternative was eliminated from detailed consideration.

Environmentally Preferred Alternative

Alternative C, the conservation alternative, is the environmentally preferred alternative, as defined in 36 CFR 220.3. Alternative C would prohibit many ongoing discretionary uses on BLM-administered public land that would be allowed to continue under the Proposed Action and the No-Action alternatives. Alternative C would prohibit leasing for fluid mineral, geothermal, or saleable minerals in Bi-State DPS habitat and end livestock grazing on the allotments in the plan amendment area with Bi-State DPS habitat. Cessation of these activities would result in fewer disturbances in habitat and result in less biological and physical harm when compared to alternatives A or B. For this reason, alternative C would best conserve, enhance, and restore sagebrush and associated habitats to provide for the long-term viability of the Bi-State DPS.

Alternative C was not selected as it was too restrictive. While it may result in a faster route to conservation of the habitat, it would adversely impact the livelihood of many people in the plan amendment area (Final EIS, page 80). The Local Area Working Group and the multiple agencies have accomplished numerous projects over the last 10 years to improve habitat. The selected alternative combines actions and BMPs from alternatives B and C that would conserve, enhance, and restore Bi-State DPS habitat, but would also allow for other uses of BLM-administered public land in the plan amendment area.

Notice of Modifications Made to the Proposed Plan

The LUPA/ROD focuses on continuing to meet the BLM's and the USFS's legal and regulatory mandates. The Proposed LUPA/Final EIS is a variation of the preferred alternative (Alternative B) and the conservation alternative (Alternative C). Therefore the Proposed Plan does not require a supplement to the EIS. After careful review of the information provided during the protest period, best science and additional policy discussions, the BLM has incorporated the following modifications and clarifications to the BLM's proposed alternative:

Modification: The BLM is setting a total anthropogenic disturbance¹ of no more than 3% of the total BSSG habitat on Federal lands within the Bodie Mountain/Grant, Desert Creek/Fales, and White Mountains population management unit boundaries (PMU) and a total anthropogenic disturbance of no more than 1.5% of the total BSSG habitat on Federal lands within the Pine Nut Mountains population management unit (PMU) boundaries.

Modification: The BLM is identifying a buffer distance for tall structures as 4 miles from active or pending leks. Specifically, tall structures, which could serve as predator perches, will not be authorized within 4 miles of an active or pending lek. The 4-mile lek buffer accords with other prescriptions of surface disturbance in sage-grouse habitat and is consistent with best science available.

Modification: The BLM is designating exclusion areas for new high-power (120kV) transmission lines in BSSG habitat. Specifically, new high-power (120kV) transmission line corridors, right-of-ways, facilities, or construction areas in habitat (outside of existing corridors) will not be authorized.

Clarification: The BSSG landscape is fragmented by areas of agriculture and urbanization, as well as areas of naturally-occurring and encroaching pinyon-juniper vegetation. Sage-grouse habitats within and between areas are often separated by stretches of unsuitable areas that may inhibit sage-grouse movements across the landscape. The BLM is providing direction specific to connectivity. Given the fragmented nature of the BSSG landscape and the level of apparent isolation of subpopulations, additional management direction for connective areas is necessary and could provide opportunities to improve suitability, minimize fragmentation, and improve opportunities for sage-grouse movement, thus increasing the connections between suitable habitats.

Consistency and Consultation Review

Concurrent Land Use Planning Efforts

Concurrent land use planning efforts for the Carson City and Battle Mountain District (which includes the Tonopah Field Office) RMPs are underway. The BSSG ROD will immediately amend the Carson City Consolidated and the Tonopah Field Office RMPs that are currently in effect. Land use allocations will be brought forward as part of the No Action Alternative (Current Management) into the Carson City and Battle Mountain District revised RMPs.

The BLM has regularly communicated with our partners and the public that the BSSG ROD will be the final decision on management of BSSG in the planning area.

Governor's Consistency Review

During the 60-day Governor's consistency review, no changes were requested by the Offices of the Governor for the States of California or Nevada.

National Historic Preservation Act

Cultural resource surveys have not been completed for this project. Nothing in this ROD implements or authorizes ground-disturbing activities that could

impact historic properties located in the planning area. Cultural resource inventories will continue to be required for all site-specific project activities.

Endangered Species Act — Section 7 Compliance

Federally threatened or endangered species known to reside or nest in the plan amendment area will not be affected by adoption of the regulatory measures proposed in this ROD. Consultation with the USFWS is not needed for this plan amendment. No federally listed threatened, endangered, proposed, or candidate terrestrial wildlife species or their proposed or designated critical habitats would be affected by the proposed action or alternatives. A determination of no effect applies to the following species due to either the project area being outside the species range, a lack of suitable habitat, or lack of potential effects from the project to the species or its habitats: Sierra Nevada yellow-legged frog, Yosemite toad, western yellow-billed cuckoo, Sierra Nevada bighorn sheep and Webber Ivesia.

Clean Water Act

Nothing in this ROD will change or modify goals, objections, and actions contained in the RMPs, best management practices, and applicable BLM manual and handbook direction. Ongoing and future site-specific projects will adhere to these goals, objectives, and actions, and by doing so will continue to be consistent with the Clean Water Act and amendments. No permits are required for any of the alternatives.

Clean Air Act

There are no emissions related to implementation of this ROD. Implementation of the selected goals, objectives, and actions will not result in exceedance of State of Nevada Ambient Air Quality Standards (46 FR 43141).

Adaptive Management

The LUPA would be implemented using an adaptive management process. The BLM Land Use Planning Handbook (H-1601-1) defines adaptive management as “. . . a system of management practices based on clearly identified outcomes, monitoring to determine if management actions are meeting outcomes, and, if not, facilitating management changes that will best ensure that outcomes are met or to re-evaluate the outcomes.”

Under adaptive management, decisions, plans and proposed activities are treated as working hypotheses rather than final solutions to management of resources and uses. For the purposes of this plan, adaptive management would represent a process that tests, evaluates and adjusts the assumptions, objectives, actions, and subsequent on-the-ground results from the implementation of RMP decisions. Used effectively, adaptive management would provide resource

managers with the flexibility to respond quickly and effectively to changing resource and user conditions. Changes in management actions would be based on site-specific resource monitoring and evaluation. On February 1, 2008, the DOI published its Adaptive Management Implementation Policy (DOI 2008). This LUPA/ROD complies with agency adaptive management policy.

As previously noted, adaptive management requires ongoing adjustment of goals, objectives, management area prescriptions, constraining land uses. A land use plan amendment could 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 standards and guidelines of the approved RMP. Implementation-level planning may also address findings from adaptive management and thus eliminate the need for additional land use plan amendments.

Mitigation

When authorized land uses cause habitat loss or degradation, the BLM will require mitigation that provides a no permanent unmitigated net loss to the BSSG habitat. Analysis of mitigation will include consideration of any uncertainty associated with the effectiveness of such mitigation at both the project and habitat scales. This will be achieved by avoiding, minimizing, and compensating for impacts by applying beneficial mitigation actions. For the Nevada portion of the habitat, the Forest Service and BLM have developed a framework to use the State's Conservation Credit System (CCS). The BLM may pilot the use of the CCS to enhance mitigation options, improve habitat on public lands managed by BLM Nevada by authorizing credit development projects. The Monitoring Strategy, Appendix A, describes the expected management approach to implement these standards

Availability of the Record of Decision

Copies of the Approved LUPA/ROD are available upon request from the Carson City District Manager, Bureau of Land Management, 5665 Morgan Mill Road, Carson City, NV 89701 or the Battle Mountain District Manager, Bureau of Land Management, 50 Bastian Road, Battle Mountain, NV 89820.

Copies of the Approved LUPA/ROD are available for public inspection at the Carson City or Battle Mountain District Offices at the above addresses or via the Internet at http://www.blm.gov/nv/st/en/fo/carson_city_field.html.

Approval of the Record of Decision

Based on the analysis of these alternatives in the draft, revised draft and final EIS documents, it is my decision to implement a mixture of actions and BMPs as described above in this document. Table ROD-1, states the actions and best management practices (BMPs) I have chosen to implement for this decision. This decision will amend the Carson City Field Office Consolidated Resource Management Plan (RMP) (2001) and the Tonopah Field Office RMP (1997).

Implementation of the Nevada and California Greater Sage-Grouse Bi-State Distinct Population Segment LUPA will begin upon the signing of this Record of Decision and public notification via the Notice of Availability published in the Federal Register.



John F. Ruhs
State Director
BLM Nevada

MAY 27 2016

Date

Appendix A

Monitoring Sage-Grouse Response to Management Actions Prescribed by the Bi-State Action Plan

Prepared for the: Bi-State Executive Oversight Committee for Conservation of Greater Sage-Grouse

Prepared by the: Bi-State Technical Advisory Committee Nevada and California (USGS Western Ecological Research Center, lead)

Justification and Need

Greater sage-grouse are considered a landscape species requiring ecological integrity of sagebrush ecosystems, and in 2013 the USFWS proposed to list the Bi-State distinct population segment (DPS) of greater sage-grouse (*Centrocercus urophasianus*) as threatened under the Endangered Species Act due to the loss and fragmentation of sagebrush ecosystems and declining lek attendance trends for some sub-populations (CFR 2013, Garton et al. 2011). Bi-State sage-grouse occur along the border of California and Nevada (i.e., ‘the Bi-State’), and represent the extreme southwestern extent of the species’ range (Schroeder et al. 2004). Strong geographic isolation and loss of contiguous sagebrush habitat has led to genetic divergence from the rest of the species range across the Great Basin (Benedict et al. 2003, Oyler-McCance et al. 2005) resulting in the classification of the Bi-State populations as a Distinct Population Segment (DPS).

The Bi-State Action Plan (2012) identified a suite of threats to the persistence of Bi-State sage-grouse, and potential management actions designed to ameliorate those threats. Chief among those threats is the synergy between encroachment of pinyon-juniper on sagebrush habitat, accelerated wildfire frequency, urbanization/ex-urbanization, and annual grass invasion. Unlike many cases involving conservation of imperiled species, however, threats of pinyon-juniper and related increases in wildfire and annual grasses represent a scenario where proactive habitat management can stem the decline of sage-grouse in the Bi-State area without the need for additional regulation. Consequently, several agencies within the Department of Interior (USFWS, BLM, USGS) and Department of Agriculture (NRCS, USFS), along with state wildlife agencies, recently announced a \$45 million plan to fund management actions identified in the Bi-State Action Plan (2012), including the thinning and removal of thousands of acres of pinyon-juniper encroachment into sagebrush habitat. These actions, in part, prompted withdrawal of the proposed listing in April 2015 (CFR 2015)

The Bi-State Action Plan (2012) also called for a science-based adaptive management plan based on the results of comprehensive research and monitoring. Importantly, data derived from the Action Plan would ultimately feed into a conservation planning tool (CPT) designed to quantitatively predict and validate the effectiveness of management actions for sage-grouse and their habitat. The Bi-State Technical Advisory Committee, with leadership from researchers with the USGS Western Ecological Research Center (P. Coates lab), have developed a spatially-explicit CPT that uses empirically derived estimates of sage-grouse resource selection and probability of space use across the Bi-State to evaluate

how proposed management actions can best benefit sage-grouse. The core of the CPT relies on location data obtained from radio- and GPS-marked sage grouse coupled with lek counts across multiple sites in the Bi-State. In addition, new input layers have been developed that enable finer-scale and more powerful analyses of the effects of conifer encroachment, wildfire intensity, and annual grass invasion on sage-grouse habitat quality and probability of sage-grouse use within the context of the CPT. USGS researchers have also developed an integrated population model (IPM) that rigorously estimates sage-grouse population trajectories using a combination of lek count data and vital rates (Coates et al. 2014a). The ultimate goal is to combine IPM output into the CPT to ask how management actions ultimately affect sage-grouse population performance (in addition to resource selection and space use). The information from these two tools currently represents the best available science as decisions regarding Bi-State sage-grouse management and policy move forward.

However, for continual effectiveness, the CPT and IPM require a steady-stream of new data describing sage-grouse movements and demography relative to changing environmental conditions, including those resulting from management activities (e.g., pinyon-juniper removal, translocations) and those stemming from environmental stochasticity (e.g., wildfire, climate change). The current versions of the CPT and IPM rely on high quality and multi-year data collected during the 2000's. Data collected from field studies across multiple sub-populations of Bi-State sage grouse outlined in this monitoring plan will fill the current need for more contemporary knowledge to refine the CPT and IPM; ultimately leading to better management decisions. Implementation of these new studies will allow for a more comprehensive monitoring program using standardized procedures, rather than a piece-meal approach, to evaluate the effectiveness of management actions across the Bi-State.

Objective

We will monitor sage-grouse demographic patterns, movements, and habitat associations from sub-populations across the Bi-State in a manner that allows for assessment of management actions using before-after-control-impact design (i.e., BACI) that will allow inference to individual populations and the entire Bi-State. For example, demographic and spatial responses of sage-grouse can be efficiently assessed by having a pool of telemetered (VHF or GPS) individuals marked across multiple sites prior to conifer removal, which comprise a baseline reference. With sufficient re-marking efforts, short- and- long term responses of sage-grouse in relation to implemented conifer removal projects can be continually assessed in comparison to measured pre-treatment conditions at the treated site, and to conditions at other treated and non-treated sites across the Bi-State. Importantly, costs will be efficiently allocated because of existing efforts in place for collecting baseline monitoring data. In addition, continuing a time series of field-data collection across multiple sites will allow for continued assessment of population trajectories relative to changing environmental conditions. Specifically, we will:

- Monitor at least 30 sage-grouse annually (or bi-annually) at targeted subpopulations (Table 1). Selection and number of subpopulations for field study and numbers of grouse tagged with VHF or GPS will be adaptive and adjusted by the TAC according to identified objectives, implementation of land-treatments, new information, and available funding.

- Re-establish a viable and sustainable population of sage-grouse in Parker Meadows by translocating sage-grouse from nearby populations to bolster demographic vital rates and genetic diversity, and conduct a multi-year field-based evaluation of translocation effects on demographic performance, resource utilization, and genetic diversity to aid in the recovery of sage-grouse in the Bi-State DPS.

Field Methods

- The monitoring strategy will comprise field study of ca. 7 subpopulation sites within the Bi-State DPS (California and Nevada). Sites will be divided among those slated for management action with extensive prior monitoring (e.g., Bodie Hills), those slated for management action but with less extensive prior monitoring (e.g., Desert Creek), translocation (e.g., Parker Meadows), and reference areas.
- All captured grouse will be marked with standard VHF transmitters, which will allow for accurate estimation of demographic vital rates (e.g., nest success, brood success, juvenile and adult survival), and provide additional data necessary to model resource selection probabilities and space use. A subsample of VHF birds will be marked with additional GPS platforms that allow more detailed modeling of resource selection and movement rates in time and space use in relation to environmental covariates.
- Conduct intensive ‘on-the-ground’ and aerial tracking of radio-marked sage-grouse and associated micro-habitat features associated with nesting and early and late brood-rearing areas, as well as monitoring during the winter period with additional support. Conduct concomitant surveys of avian and mammalian predators. Incorporate nest-videography where applicable for specific study objectives.
- Translocate a minimum of 25 sage-grouse Parker Meadows from nearby source populations (e.g., Bodie Hills, Long Valley), with supplement translocations (10 – 25 birds) occurring annually for at least 3 years. Populations targeted as source populations will be made in consultation with project partners. In addition, we will artificially inseminate ~50% of females of prior to translocation to help bolster the probability of successful nesting and fidelity to Parker Meadows, and conduct least 3-years of post-translocation monitoring to quantify the efficacy of the translocation program in terms of changes in demographic performance using integrated population modeling techniques, habitat selection and movements, and genetic diversity for radio-marked sage grouse at Parker Meadows and translocation source populations. Blood and feather samples will be collected for collaborative genetic analyses that assess changes in neutral and functional genetic diversity that may increase population persistence.
- Continue standardized annual surveys of male sage-grouse attendance across all known lek sites in the Bi-State, coupled with aerial and ground-based searches for new leks.
- All field study components (e.g., capture, radio-marking, lek surveys, habitat assessments, predator indices) will follow well-established and repeatable USGS protocols.

Expected Products

- Continue development of GIS input layers for the CPT that will allow more accurate modeling of how dynamic environmental conditions in the Bi-State influence sage grouse, including refinements to USGS-developed high resolution maps of pinyon-juniper encroachment, using downscaled PRISM climate data to map climatic variation (e.g., 250 - 800 m blocks of temperature, precipitation, climatic water deficit, transpiration rate, etc.), and implementing Monitoring Burn Severity and Intensity (MTBS) methods to calculate up-to-date spatially explicit estimates of wildfire frequency and intensity.
- Update (annually or bi-annually) spatially-explicit resource selection function maps that predict the seasonal probability of occurrence of sage-grouse based on environmental covariates using all telemetry data (e.g., Bi-State 2012, Coates et al. 2014b).
- Update (annually or bi-annually) the IPM to include new vital rate information. The IPM uses Bayesian statistics to integrate demographic and survey data with estimated error that are used to ultimately derive sub- and whole-population estimates of growth, along with life-stage specific vital rate parameters most responsible for variation in growth trajectories (Coates et al 2014a).
- Update (annually or bi-annually) space use models with lek survey data using the methods described by Coates et al. (2014b), which combine estimates of lek density (weighted by average of male lek attendance) with the non-linear probability of space-use relative to distance to lek .
- Refine the CPT to include multiple metrics, including life-history demographic data, space-use indices, and seasonal resource selection functions. This model will be used to evaluate efficacy of Bi-State management actions, and will be used as a framework for developing similar tools for use range-wide.
- Using model derived estimates, conduct additional in-depth analyses of threats to Bi-State sage-grouse populations, including
 - Thresholds for the amount of conifer on the landscape required to influence avoidance behavior, movement rates, and survival of sage-grouse.
 - Effects of climatic conditions on sage-grouse population performance, and projected population growth rates under different climatic scenarios.
 - Effects of wildfire on population growth rate and resource utilization.
 - Reduction of gene flow.
- Produce annual reports and presentations to the Bi-State EOC, along with multiple peer-reviewed scientific journal articles and presentations at scientific meetings.

- Build upon existing strong collaborative relationships with academic partners (i.e., University of California-Davis, Idaho State University, University of Nevada-Reno), and provide opportunities for graduate-level research.
- Host workshops and outreach activities with local, state, and federal resource managers on applications of the CPT and related tools for sage-grouse management.

Budget and Rationale

USGS-WERC will provide lead responsibility for implementing the monitoring design and protocols, field data collection, data management and analysis (including CPT and IPM development and refinement), and reporting results to agencies. Additional support, particularly with field monitoring of sage-grouse, data compilation, and technical advisory will be provided by BLM, NDOW, CDFW, and USFS. Interagency agreements between the BLM and USGS allow for significant reductions in indirect cost rates.

Funding allocations are based on a land-ownership based model that proportionately (and objectively) allocate funding contributions among federal and state agencies. Project costs were first divided between federal and state land and wildlife management agencies using a 75% to 25% ratio. The rationale for this ratio was based on a threat based model for management actions within the Bi-State DPS, where the majority of management actions to reduce threats will be implemented by federal agencies. To allocate funding obligations for federal agencies (75% of total) we calculated percentages of land managed by BLM, USFS, and private using the Bi-State Project Area and verified with telemetry locations (Figure 1). NRCS was recognized as providing support for the privately owned proportion of land. Similarly, for the state allocation (25% of total) we calculated the proportion of land jurisdiction of NDOW and CDFW within the PMU boundaries. The allocation of funds described here reflects an example of an objective approach and, thus, serves as a starting point for modifications based on actual agency commitments and available funding. Funding may support: 1) site-specific annual field studies; 2) project management to support USGS biologists and GIS analysts responsible for sophisticated and time-intensive statistical analyses and geo-processing of data obtained from the field studies (e.g., data management, development of GIS layers, survival, space-use, and resource selection modeling, and continued development of the CPT and IPM); and 3) science advisory (meetings, maps, reports, other information products).

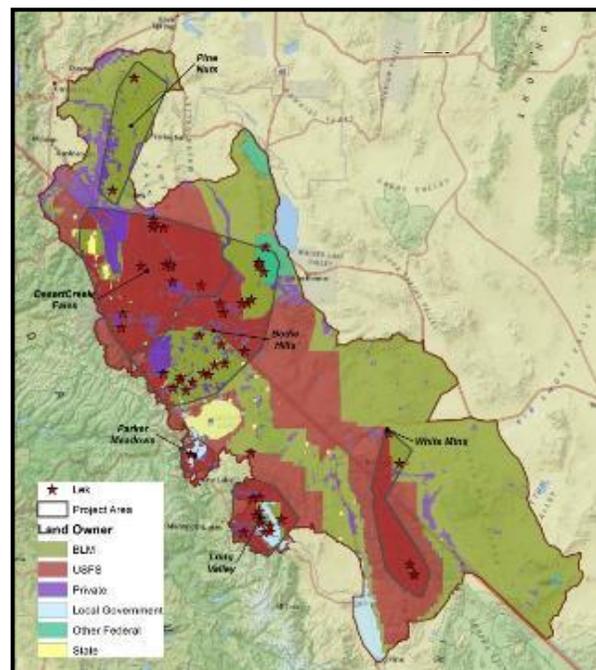


Table 1. Preliminary schedule for field studies of Bi-State sage-grouse. Yearly selection of study areas is subject to change according to TAC identified objectives, land-treatments, new information, and funding.

Field Study Area	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25
Pine Nut	Intensive	Light	No	No	No	Intensive	Intensive	Intensive	Light	No	No
Desert	No	Intensive	Intensive	Intensive	Light	No	No	No	Intensive	Intensive	Intensive
Creek/Sweetwater	No	Intensive	Intensive	Intensive	Light	No	No	No	Intensive	Intensive	Intensive
Mount Grant/Ninemile	Light	Intensive	Intensive	Intensive	Light	No	No	No	Intensive	Intensive	Intensive
Bodie Hills	Light	Intensive	Intensive	Intensive	Light	No	No	No	Intensive	Intensive	Intensive
Parker	Light	Intensive	Intensive	Intensive	Light	No	No	No	Intensive	Intensive	Intensive
Sagehen	Intensive	No	No	No	No	No	No	No	No	No	No
Long Valley	No	Intensive	Intensive	Intensive	Light	No	No	No	Intensive	Intensive	Intensive
White Mountains	No	Intensive	Intensive	Intensive	Light	No	No	No	Intensive	Intensive	Intensive

	Intensive monitoring. Maintain 30 birds per year or 10-20% of population, with about 1/4 GPS collars. New trapping and collaring as necessary to maintain at least 30 birds per year.
	Light monitoring. Continue following birds collared in previous years, but no or minimal trapping and collaring.
	No monitoring planned.

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