Appendix B
Forest Service Alternative D Language
APPENDIX B
FOREST SERVICE ALTERNATIVE D LANGUAGE

ACTIONS THAT DO NOT FIT AS FOREST SERVICE LRMP/LUP STANDARDS OR GUIDELINES

The actions listed here do not fit the definition of “standards” or “guidelines.” Some describe continuation of current management (CM). Some describe actions that could be initiated to implement the Forest Plan amendment (IMP). Some could be modified to become Objectives (OBJ). Some fit better as Required Design Features (RDF). Some belong in a Monitoring Plan (MP).

Action D-SSS 1: Identify seasonal habitat areas where an array of conservation actions can be completed to improve habitat conditions. (IMP)

Action D-SSS 2: Work cooperatively to establish and maintain a GRSG telemetry database to help prioritize habitat conservation actions. (IMP)

Action D-SSS-AM 1: Establish a protocol for incorporating new science and changes over time, to update and keep State-wide habitat maps current. (IMP)

Action D-SSS-AM 2: Continue to consult with the Nevada Department of Wildlife (NDOW) for all development or habitat restoration proposals in PPMAs and PGMA. Also, coordinate with the Nevada Sagebrush Ecosystem Council, the California Department of Fish and Wildlife (CDFW) and tribes on projects proposed within sagebrush ecosystems. (CM)

Action D-SSS-AM 3: Identify off-site mitigation areas within PGMA with reasonable potential to achieve vegetation objectives and meet the seasonal habitat needs of GRSG. (IMP)

Action D-SSS-AM 4: NRCS, BLM, and Forest Service will engage private landholders to improve habitat conditions. (IMP)

Action D-SSS-CC 1: As climate change data become available through Rapid Ecoregional Assessments or other ecological studies, identify areas of unfragmented GRSG habitat and key habitat linkages that provide the life-cycle and genetic transfer needs for GRSG. Manage the identified areas as PPMAs. (IMP)
Action D-SSS-CC 2: Work cooperatively with multiple agencies and stakeholders to establish and maintain a network of climate monitoring sites and stations. (IMP)

Action D-SSS-DIS 1: When developing or modifying water developments on public lands in PPMA and PGMAs, use RDFs to mitigate potential impacts from West Nile virus. (RDF)

Action D-SSS-OPM 1: Identify seasonal habitat areas where an array of conservation actions can be completed to improve habitat conditions. (IMP)

Action D-SSS-OPM 2: Consider the use of a GRSG telemetry database to help prioritize habitat conservation actions. (RDF)

Action D-SSS-OPM 3: Establish a protocol for incorporating new science and changes over time, to update and keep State-wide habitat maps current. (IMP)

Action D-SSS-OPM 4: Continue to consult with the Nevada Department of Wildlife (NDOW) for all development or habitat restoration proposals in PPMA and PGMAs. Also, coordinate with the Nevada Sagebrush Ecosystem Council and the California Department of Fish and Game (CDFG) on projects proposed within sagebrush ecosystems. (CM)

Action D-SSS-OPM 5: Identify areas within PGMAs where off-site mitigation should occur to ensure GRSG habitat goals are met. When providing guidance to applicants, ensure project proponents that may be contributing to potential mitigation are aware of such areas. (IMP)

Action D-VEG 1: In PPH and PGH, coordinate, plan, design, and implement vegetation treatments (e.g., juniper removal, fuels treatments, green stripping) and associated effectiveness monitoring between Resources, Vegetation Management, Emergency Stabilization, and Burned Area Rehabilitation programs to:

- Promote the maintenance of large intact sagebrush communities;
- Limit the expansion or dominance of invasive species, including conifers, cheat grass and medusa head;
- Maintain or improve soil site stability, hydrologic function, and biological integrity; and
- Enhance the native plant community with appropriate shrub, grass, and forb composition identified in the applicable ESD where available. (RDF)

Action D-VEG 2: Utilize BLM/Forest Service agency GRSG habitat maps to prioritize habitat restoration projects (see Table 2-6 for objectives of restoration) with emphasis in PPMA, and to connect seasonal ranges regardless of habitat designation. (IMP)

Habitat restoration would include but is not limited to:

- Restoration of sagebrush canopy in areas within GRSG nesting and brood-rearing habitat.
- Re-establishment of perennial grasses and native forbs in areas within GRSG nesting, early and late-brood rearing habitat.
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- Pinyon or juniper in areas to enhance seasonal range connectivity, improve security at leks, and to maintain sagebrush canopy and understory integrity in nesting and brood-rearing habitats.
- Restoration of all GRSG habitat objectives in areas affected by wildfire and the continuing cheat-grass fire cycle.

Priority would be on restoration areas that have not crossed an ecological threshold. (RDF)

**Action D-VEG 3:** Incorporate GRSG habitat objectives as described in Table 2-6 in the design of habitat restoration projects in PPMA and PGMAs. (RDF)

**Action D-VEG 6:** Within PPMA and PGMAs, prioritize and implement seeding and planting treatments in low sage communities that have been affected by wildfire. To the extent feasible or available, use local seed collected from intact stands or greenhouse cultivation. To increase seeding success, consider the use of specialized seed drills to ensure effective soil and seed contact. (RDF)

**Action D-VEG 16:** Within PPMA and PGMAs, when closing and reseeding roads, primitive roads, and trails not designated in travel management plans, evaluate the location for strategic protection of the overall habitat and consider using fire resistant species to provide for fire break on a case-by-case basis. (RDF)

**Action D-VEG 17:** Evaluate vegetation treatments (including greater GRSG habitat treatments) in a landscape-scale context to address habitat fragmentation, effective patch size, invasive species presence, and protection of intact sagebrush communities. (RDF)

Coordinate vegetation treatments with adjacent land owners and agencies to avoid any unintended negative landscape effects to greater GRSG. (RDF)

**Action D-VEG 18:** Establish restoration areas where reseeding can be applied to improve impaired GRSG habitat. (IMP)

**Action D-VEG 19:** In PPMA and PGMAs, rest allotments or pastures for one growing season year prior to initiating vegetation treatments, as needed, to increase resiliency of vegetation communities prior to treatment, unless grazing is part of the vegetation treatment design. (RDF)

**Action D-VEG 20:** In PPMA and PGMAs, rest treated areas from livestock grazing for a minimum of two full growing seasons following treatment or until vegetation or habitat objectives are met. (RDF)

**Action D-VEG 21:** In PPMA and PGMAs, monitor and control noxious weeds and invasive annual grasses post-treatment to meet and sustain greater GRSG habitat and vegetation objectives (see Table 2-6). (CM)

**Action D-VEG 22:** Where winter range has been identified as a limiting factor, emphasize vegetation treatments in known winter range to enhance habitat quality or reduce wildfire risk around or within winter range habitat. (RDF)
**Action D-VEG 23**: Manage lotic riparian habitats in conjunction with adjacent terraces and/or valley bottoms as natural fuel breaks to reduce size and frequency of wildfires in PPMA and PGMAs. (RDF)

**Action D-VEG 24**: In lentic and lotic riparian systems, conserve or enhance these systems to maintain or increase amount of edge and cover. (RDF)

**Action D-VEG 25**: In PPMA and PGMAs, in riparian and wet meadows, inventory, monitor for, and control invasive species. When treating invasive species, use the standard operating procedures and best management practices outlined in the 2007 Vegetation Treatments Using Herbicides on BLM Lands in 17 States Environmental Impact Statement Record of Decision and for the Forest Service-administered lands adhere to the Humboldt-Toiyabe Forest Directive for Herbicide Application and applicable practices found in its accompanying Biological Assessment. (CM)

**Action D-VEG 26**: In PPMA and PGMAs, design water developments to maintain ecological integrity of lentic riparian habitats. See management actions in the Range section. (RDF)

**Action D-VEG 27**: In PPMA and PGMAs, design and implement vegetation treatments to restore, enhance, and maintain riparian areas to meet seasonal life history requirements (e.g. late summer brood rearing habitat) for GRSG. (RDF)

**Action D-VEG 28**: In PPMA and PGMAs, where riparian extent is limited by shrub encroachment consider fuels treatments including prescribed burning or other means to increase edge and expand mesic areas to improve late summer brood-rearing habitat (see Table 2-6). (RDF)

**Action D-VEG 29**: For Wyoming, Mountain, and Basin Big Sage Communities in PPMA and PGMAs:

- Priority for treatment would focus on enhancing, reestablishing or maintaining the most limiting habitat component.
- Reestablish sagebrush to meet habitat objectives in Table 2-6).
- Manipulate sagebrush communities to achieve age-class, structure, cover, and species composition objectives in GRSG habitat (see Table 2-6).
- Restore herbaceous understory in brush dominated areas to meet habitat objectives (see Table 2-6).
- Establish and maintain fuel breaks to limit fire size and mitigate fire behavior to increase suppression effectiveness. When possible, establish fuel breaks adjacent to roads or other previously disturbed areas.
- Treat areas with cheat grass, other invasive and noxious species presence to minimize competition and favor establishment of desired species.
- Treat disturbed areas as soon as possible but within one year of the disturbance.
- Select the appropriate treatment method(s) that meets the vegetative objective per the decisions identified in the Vegetation Treatments on BLM Lands in 17 Western States Programmatic EIS and Associated ROD (BLM 2007a). (RDF)
**Action D-VEG 30**: Where pinyon and juniper trees are encroaching on sagebrush plant communities, design treatments to decrease conifer encroachment, and increase cover of sagebrush and/or understory to (1) improve habitat for Greater GRSG; and (2) minimize avian predator perches and predation opportunities on Greater GRSG. (RDF)

**Action D-VEG 31**: For Low Sage/Black Sage Communities monitor and treat cheat grass and other invasive species in low sage vegetation communities in PPMA and PGMAs before it becomes a dominant species. (CM)

**Action D-VEG-ISCE 1**: Treat sites within PPMA and PGMAs that are dominated by invasive species through an IVM approach using fire, chemical, mechanical and biological methods based on site potential. (CM)

**Action D-VEG-ISCE 2**: Targeted early season grazing would be allowed to suppress cheat grass (Bromus tectorum) or other vegetation that are hindering achieving GRSG objectives in PPMA and PGMAs. Sheep, cattle, or goats may be used as long as the animals are intensely managed and removed when the utilization of desirable species reaches 35%. (RDF)

**Action D-VEG-ISCE 4**: Pinyon and juniper treatment in PPMA and PGMAs would focus on enhancing, reestablishing, or maintaining habitat components (e.g. cover, security, food, etc.) in order to achieve habitat objectives identified in Table 2-6. Treatment design should focus on addressing the most limiting habitat component. (RDF)

**Action D-VEG-ISCE 7**: Manage pinyon and juniper stands in encroached sagebrush vegetation communities to meet GRSG habitat objectives as described in Table 2-6. In areas with a sagebrush component, select treatment methods that maintain sagebrush and shrub cover and composition. (RDF)

**Action D-VEG-ISCE 8**: In Phase II and III pinyon and/or juniper stands in PPMA and PGMAs:

- Remove or reduce biomass to meet fuel and GRSG habitat objectives (see Table 2-6).
- Take appropriate action to establish desired understory species composition, including seeding and invasive species treatments.
- In areas with a sagebrush component, select a treatment method that maintains or improves sagebrush and shrub cover and composition. (RDF)

**Action D-VEG-CC 1**: As climate change data become available through Rapid Ecoregional Assessments or other ecological studies, identify areas of unfragmented GRSG habitat and key habitat linkages that provide the life-cycle and genetic transfer needs for GRSG. (IMP)

**Action D-VEG-CC 2**: Implement prevention and suppression actions to prevent additional loss to wildlife and cheat grass domination in areas that are progressing towards recovery to build resiliency to climate change. Also, implement various treatments, such as seeding and shrub plantings, to restore GRSG habitat. (IMP)

**Action D-VEG-CC 3**: Implement juniper removal treatments in areas with high potential to restore GRSG habitat. Priority for treatments area:
• Highest Priority - Phase 2 Pinyon and/or Juniper stands to prevent long term loss of GRSG habitat due to the area crossing a restoration threshold.
• Second Priority – Phase 1 Pinyon and/or Juniper stands to prevent the spread of the woodlands into GRSG habitat. (IMP)

Action D-VEG-CC 4: Implement treatments to reduce the presence of cheat grass and restore sagebrush and native forbs and grasses in fragmented habitat with high potential for success. Also implement fuel treatments to protect these areas for wildlife. (IMP)

Action D-VEG-CC 5: Implement hazardous fuels, noxious weed, and cheat grass treatments as well as adjusting uses to protect native vegetation communities that provide high quality GRSG habitat.

Priorities for treatments are:

• Highest priority – Areas of high quality habitat where forecasted bioclimatic conditions are predicted to persist through at least 2050.
• Second Priority – Areas of high to moderate value for GRSG habitat in lower elevations that are susceptible to cheat grass domination and less likely to recover naturally from disturbance.
• Third Priority – Areas of high to moderate value for GRSG in higher elevations as that are more resistant to cheat grass domination and more likely to recover naturally from disturbance. (IMP)

Action D-VEG-CC 6: Build resiliency into restoration and enhancement seed mixes to ensure high value habitat persistence in light of anticipated climate change effects. (RDF)

Action D-VEG-CC 7: Work cooperatively with multiple agencies and stakeholders to establish and maintain a network of climate monitoring sites and stations. (IMP)

Action D-VEG-D 2: In sagebrush ecosystems containing PPMA and PGMAs, follow guidance in the Resource Management During Drought Handbook H-1730-1 (BLM 2011c). Apply appropriate drought mitigation measures to authorized uses and activities to reduce impacts on GRSG habitat and populations. (CM)

Action D-VEG-D 3: Initiate emergency management measures during times of drought to protect GRSG PPMA and PGMAs. Implement post-drought management to allow for vegetation recovery that meets GRSG life cycle needs in PPMA and PGMAs. (CM)

Action D-WHB 1: For all HMAs, HAs and WHTs within or that contain PPMA and PGMAs, manage wild horse and burro populations within established AML to meet GRSG habitat objectives. In HMAs, HAs, and WHTs not meeting standards due to degradation that can be at least partially contributed to wild horse or burro populations, consider adjustments to AML through the NEPA process. Adjustments would be based on monitoring data and would seek to protect and enhance PPMA and PGMAs and establish a thriving ecological balance. (IMP)
**Action D-WHB-CC 1:** As climate change data become available through Rapid Ecoregional Assessments or other ecological studies, identify areas of unfragmented GRSG habitat and key habitat linkages that provide the life-cycle and genetic transfer needs for GRSG. Manage the identified areas as PPMAs. (IMP)

**Action D-FFM 4:** Implement a coordinated inter-agency approach to fire restrictions based upon National Fire Danger Rating System (NFDRS) thresholds (fuel conditions, drought conditions and predicted weather patterns) for GRSG habitat. (CM)

**Action D-FFM 5:** Develop wildfire prevention plans that explain the resource value of GRSG habitat and include fire prevention messages and actions to reduce human-caused ignitions. (IMP)

**Action D-FFM 6:** Fuel treatments will be designed through an interdisciplinary process to expand, enhance, maintain, and protect GRSG habitat. Use green strips and/or fuel breaks, where appropriate, to protect seeding efforts from subsequent fire events.

In coordination with FWS and relevant state agencies, BLM/Forest Service planning units (Districts/Forests) with large blocks of Greater GRSG habitat will develop, by December 2014, using the assessment process described in Appendix F, a fuels management strategy which considers an up-to-date fuels profile, land use plan direction, current and potential habitat fragmentation, sagebrush and GRSG ecological factors, and active vegetation management steps to provide critical breaks in fuel continuity, where appropriate. When developing this strategy, planning units will consider the risk of increased habitat fragmentation from a proposed action versus the risk of large scale fragmentation posed by wildfires if the action is not taken. (IMP)

**Action D-FFM 7:** Implement fuel breaks inside and outside of PPMAs to prevent large scale loss of habitat. During implementation adhere to local seasonal activity restrictions. Locate fuel breaks, where feasible, adjacent to existing rights of way (power lines, roads, fence lines, etc.). (IMP)

**Action D-FFM 8:** Develop state-specific GRSG toolboxes containing maps, a list of resource advisors, contact information, local guidance, and other relevant information. (IMP)

**Action D-FFM 9:** Threatened, endangered, and sensitive species (including GRSG) and associated habitats would continue to be a high priority for National and Geographic Multi-Agency Coordination Groups. (CM)

**Action D-FFM 10:** Within acceptable risk levels utilize a full range of fire management strategies and tactics, including the management of wildfires to achieve resource objectives, across the range of GRSG habitat consistent with land use plan direction. (CM)

**Action D-FFM 12:** Within GRSG habitat, PPH (and PACs, if so determined by individual LUP efforts) are the highest priority for conservation and protection during fire operations and fuels management decision making. The PPH (and PACs, if so determined by individual LUP efforts) will be viewed as more valuable than PGH when priorities are established. When suppression resources are widely available, maximum efforts will be placed on limiting fire growth in PGH polygons as well. These priority areas will be further refined following completion of the GRSG Landscape Wildfire & Invasive Species Habitat Assessments described in Appendix F. (CM)
**Action D-FFM 13**: In post-fire rehabilitation plans within PPMA and PGMAs, design re-vegetation projects to (1) maintain and enhance unburned intact sagebrush communities when at risk from adjacent threats; (2) stabilize soils; (3) re-establish hydrologic function; (4) maintain and enhance biological integrity; (5) promote plant resiliency; (6) limit expansion or dominance of invasive species; and (7) reestablish native species. (RDF)

**Action D-FFM 14**: In PPMA and PGMAs, use native plant seeds for post-fire restoration, based on availability, adaptation (site potential), and probability of success. Where probability of success or native seed availability is low, non-native seeds may be used as long as they meet GRSG habitat objectives (see Table 2-6). In all cases, seed must be certified weed-free. (RDF)

**Action D-FFM 16**: In PPMA and PGMAs, following post-fire restoration treatments, monitor and implement management actions as necessary to ensure long term persistence of seeded or pre-burn native plants. (RDF)

**Action D-FFM 17**: Within PPMA and PGMAs, ensure that post-fire effectiveness monitoring continues until treatment objectives are met. (MP)

**Action D-FFM 18**: Increase post-fire restoration activities within PPMA and PGMAs through the use of integrated funding opportunities with other resource programs and partners. (IMP)

**Action D-FFM 19**: BLM and Forest Service planning units (Districts and Forests), in coordination with the FWS and relevant state agencies, by December 2014, would complete and continue to update GRSG Landscape Wildfire & Invasive Species Habitat Assessments to prioritize at risk habitats, and identify fuels management, preparedness, suppression and restoration priorities necessary to maintain sagebrush habitat to support interconnecting GRSG populations. These assessments and subsequent assessment updates would also be a coordinated effort with an interdisciplinary team to take into account other GRSG priorities identified in this plan. Appendix F describes a minimal framework example and suggested approach for this assessment. (IMP)

**Action D-FFM-HFM 1**: Implement as “required design features”, the measures identified in Appendix A. (RDF)

**Action D-FFM-HFM 3**: Utilizing an interdisciplinary approach, a full range of fuel reduction techniques will be available. Fuel reduction techniques such as grazing, prescribed fire, chemical, biological and mechanical treatments are acceptable. (RDF)

**Action D-FFM-HFM 4**: Identify opportunities for prescribed fire; including where prescribed fire has been identified as the most appropriate tool to meet fuels management objectives and Greater GRSG conservation objectives, and the potential expansion or dominance of invasive species has been determined to be minimal through an invasive species risk determination for the treatment project (see BLM Manual Section 9015). (IMP)

**Action D-FFM-HFM 5**: Upon project completion, monitor and manage fuels projects to ensure long-term success, including persistence of seeded species and/or other treatment components. Control invasive vegetation post-treatment. (IMP)
Action D-FFM-HFM 8: In coordination with FWS and relevant state agencies, BLM/Forest Service planning units (Districts/Forests) will identify annual treatment needs for wildfire and invasive species management as identified in local unit level Landscape Wildfire and Invasive Species Assessments. Annual treatment needs will be coordinated across state/regional scales and across jurisdictional boundaries for long-term conservation of GRSG. (IMP and RDF)

Action D-FFM-HFM 9: Implementation actions will be tiered to the Local (District/Forest) GRSG Landscape Wildfire & Invasive Species Assessment described in GEN-1, utilizing best available science related to the conservation of GRSG. (RDF)

Action D-FFM-HFM 20: Implement as “required design features”, the measures identified in Appendix A. (RDF)

Action D-FFM-CC 1: Work cooperatively with multiple agencies and stakeholders to establish and maintain a network of climate monitoring sites and stations. (IMP)

Action D-FFM-CC 2: As climate change data become available through Rapid Ecoregional Assessments or other ecological studies, identify areas of unfragmented GRSG habitat and key habitat linkages that provide the life-cycle and genetic transfer needs for GRSG. Manage the identified areas as PPMAs. (IMP)

Action D-LG 2: Within PPMA and PGMAs containing greater GRSG nesting habitat, implement the following management actions, if not meeting GRSG habitat objectives:

- Provide periods of rest or deferment during critical herbaceous growth period
- Limit grazing duration to allow plant growth sufficient to meet GRSG habitat objectives (see Table 2-6)
- Employ herd management techniques to minimize impacts of livestock on nesting habitat during the nesting season (March 1 – June 30). (IMP)

Action D-LG 4: Continue land health assessments on BLM public lands or other monitoring methods on Forest Service-administered lands in PPMA and PGMAs to evaluate current conditions as compared to GRSG habitat objectives described in Table 2-6. Incorporate the results of BLM and Forest Service monitoring and land health assessments into future management applications to ensure progress toward meeting GRSG habitat objectives. (CM)

Action D-LG 10: Manage riparian areas and wet meadows for proper functioning condition (Forest Service may use other analysis) within PPMA and PGMAs. (CM)

Action D-LG 18: In PPMA and PGMAs, assess and modify as needed existing structural range developments to make sure they conserve, enhance, or restore GRSG habitat. (IMP)

Action D-LG 19: Modify existing water development projects as needed or feasible to ensure riparian habitats in PPMA and PGMAs are being maintained or improved. (IMP)

Action D-LG 23: Consider retirement of grazing privileges on all voluntary relinquishments in PPMA and PGMAs where removal of livestock grazing would enhance the ability to achieve GRSG habitat objectives (see Table 2-6). (IMP)
**Action D-LG 24**: Establish vegetation treatment project monitoring sites prior to project implementation. Measure project monitoring sites annually during the livestock grazing closure period. (MP)

**Action D-LG 25**: Within PPMA and PGMAs, incorporate terms and conditions into grazing permits to meet GRSG habitat objectives (see Table 2-6). (IMP)

**Action D-LG 26**: Grazing permit transfers would not be approved without review of greater GRSG habitat conditions. Where GRSG objectives (See Table 2-6) are not being met in an allotment and causal factors are attributable to livestock grazing, adjust the annual grazing authorization or operating instructions to reflect the allowable use levels as identified in Table 2-7 prior to the next grazing season. The Habitat Assessment Framework will be the tool to determine the level to which standards are or not being met. (IMP)

**Action D-LG 27**: Utilize the GRSG habitat assessment framework and adjust terms and conditions in the grazing permit renewal process where GRSG objectives (See Table 2-6) are not being met in an allotment and causes are attributable to livestock grazing. Where habitat conditions as defined in Table 2-6 are not being met, and causal factors are attributable to livestock grazing, adjust the annual grazing authorization or operating instructions to reflect the allowable use levels as identified in Table 2-7 prior to the next grazing season. The Habitat Assessment Framework will be the tool to determine the level to which standards are or not being met. (IMP)

**Action D-LG 28**: Under appropriate conditions implement Drought Policy (BLM IM No. 2013-094) to protect GRSG PPMA and PGMAs. Implement post-drought management to allow for vegetation recovery that meets GRSG life cycle needs in PPMA and PGMAs. (CM)

**Action D-LG 29**: Utilize land features and roads on maps provided to the permittee to help demarcate livestock use avoidance areas. Require terms and conditions language for affected livestock grazing permits regarding livestock use during the lekking period. (IMP)

**Action D-LG 30**: During the permit renewal process, include terms and conditions language regarding livestock use during the lekking period. (IMP)

**Action D-LG-CC 1**: As climate change data become available through Rapid Ecoregional Assessments or other ecological studies, identify areas of unfragmented GRSG habitat and key habitat linkages that provide the life-cycle and genetic transfer needs for GRSG. Manage the identified areas as PPMAs. (IMP)

**Action D-LG-CC 2**: Work cooperatively with multiple agencies and stakeholders to establish and maintain a network of climate monitoring sites and stations. (IMP)

**Action D-LG-D 1**: Due to drought conditions, changes in livestock management may be required to protect PPMAs. The Field Manager or the Forest Service District Ranger should encourage permittees to take voluntary measures to delay turnout, reduce numbers, and adjust livestock operations. Absent voluntary measures to change livestock management by permittees, the District Manager or Forest Service District Ranger would implement appropriate changes to livestock grazing through decision or Annual Operating Instructions. (IMP)
**Action D-CTTM 4:** In priority and general greater GRSG habitat, new travel management plans would evaluate vehicle routes and determine the need for permanent or seasonal road closures, and mode of travel (e.g. motorcycle, ATV, UTV, etc.) restrictions, including noise levels and speed. Where such closures or restrictions are infeasible due to administrative or public need, consider re-routing road to improve or protect greater GRSG habitat. Periods of seasonal road closures would be identified in the travel management plan taking into account the adverse effect on the particular life-cycle need of GRSG in the area of the seasonal closure. Routes in PPMA not required for public access or recreation with current administrative/agency purpose or need should be evaluate for administrative access only in the implementation-level transportation management plans. (CM)

**Action D-CTTM 9:** In PPMA and PGMAs, close primitive roads and trails not designated in travel management plans so they are effectively closed to motorized travel. (CM)

**Action D-CTTM 10:** In PPMA and PGMAs, obliterate and seed roads, primitive roads and trails not designated in travel management plans, with appropriate seed mixes and transplanted sagebrush when applicable. Use fire resistant species to provide for fire breaks where appropriate. Seed must be certified weed-free. (RDF)

**Action D-LR-LUA 3:** In PPMA and PGMAs where existing and developed leases or ROWs are no longer in use, coordinate with the lease holder or Forest Service Special Use Permit (SUP) holder to relinquish the lease or ROW and reclaim the site by removing overhead lines and other infrastructure. (CM)

**Action D-LR-LUA 7:** Manage landfills and transfer stations on public lands to reduce opportunities for nesting, cover, or perches for predators. Identify and close trespass landfills and dumps on public lands. (RDF)

**Action D-LR-LUA 15:** Eliminate existing raven nesting opportunities created by anthropogenic development on public lands (e.g., Remove powerline and communication facilities no longer in service). (RDF)

**Action D-LR-W 5:** Within PPMA and PGMAs, allow industrial coal-fired or natural gas-fired energy facilities associated with existing industrial infrastructure (e.g. a mine site) to provide on-site power generation. (IMP)

**Action D-LOC 12:** Close or mitigate abandon mines sites within PPMA and PGMAs to reduce predation of greater GRSG by eliminating physical structures that could provide nesting opportunities and perching sites for predators. (IMP)

**Action D-SAL 2:** In PPMA, reclaim saleable mineral materials sites no longer in use to meet GRSG habitat objectives (see Table 2-6). (IMP)

**Action D-SAL 4:** Close or mitigate abandoned mines sites within PPMA and PGMAs to reduce predation of greater GRSG by eliminating physical structures that could provide nesting opportunities and perching sites for predators. (IMP)
**Action D-MSE 1:** Where the federal government owns the mineral estate in PPMA and PGMAs and the surface is in non-federal ownership and adjacent to public lands, apply the appropriate conservation measures and required design features that are applied on public lands. (N/A)

**Action D-MSE 2:** Where the federal government owns the surface and the mineral estate is in non-federal ownership in PPMA and PGMAs, apply appropriate surface use stipulations and required design features to surface development. (CM)

**DRAFT GRSG STANDARDS AND GUIDELINES FOR THE HUMBOLDT-TOIYABE NATIONAL FOREST LAND AND RESOURCE MANAGEMENT PLAN – PREFERRED ALTERNATIVE – ALTERNATIVE D**

**Action D-VEG 5:** In order to determine effectiveness of actions within PPMA and PGMAs, encourage seeding and planting research and demonstration plots on public lands for restoration and conservation of key vegetation communities, including but not limited to low, gray, and black sage, and riparian areas, with academia, Tribes, public agencies and approved private companies or individuals.

Forest Service Language - Seeding and Planting Research Guideline - In order to determine effectiveness of actions within PPMA and PGMAs, encourage seeding and planting research and demonstration plots on public lands for restoration and conservation of key vegetation communities, including but not limited to low, gray, and black sage, and riparian areas, with academia, Tribes, public agencies and approved private companies or individuals.

**Action D-VEG 15:** No new roads (temporary or permanent) would be constructed or created during project implementation for vegetation treatments. Administrative access including off-road travel with heavy equipment and vehicles would occur during implementation. Loading and unloading of all equipment would occur on existing roads to minimize disturbance to vegetation and soil.

Forest Service Language – Road Construction Limitation Standard – For vegetation treatment projects:

- Do not allow construction or creation of new temporary or permanent roads.
- Allow administrative access, including off-road travel with heavy equipment and vehicles.
- Require loading and unloading of all equipment on existing roads to minimize disturbance to vegetation and soils.

**Action D-VEG 32:** For existing Non-Native Seeding: Allow natural establishment of sagebrush to occur in non-native seedings within or adjacent to GRSG habitat. Manage seedings to allow succession toward sagebrush canopy cover more favorable for GRSG nesting and early brood-rearing needs.

Forest Service Language – Non-native Seeding Area Rehabilitation Standard - Allow natural establishment of sagebrush to occur in existing non-native seedings within or adjacent to GRSG habitat. Manage seedings to allow succession toward sagebrush canopy cover more favorable for GRSG nesting and early brood-rearing needs.

**Action D-VEG-ISCE 3:** In perennial grass, invasive annual grass, and conifer-invaded cover types, restore sagebrush steppe with sagebrush seedings where feasible.
Forest Service Language – Sagebrush Steppe Restoration Guideline - In perennial grass, invasive annual grass, and conifer-invaded cover types, restore sagebrush steppe with sagebrush seedings where feasible.

**Action D-FFM 7:** Implement fuel breaks inside and outside of PPMAs to prevent large scale loss of habitat. During implementation adhere to local seasonal activity restrictions. Locate fuel breaks, where feasible, adjacent to existing rights of way (power lines, roads, fence lines, etc.).

**Action D-FFM-HFM 7:** Apply appropriate seasonal restrictions for implementing fuels management treatments in PPMA and PGMAs according to the type of GRSG seasonal habitats present.

Forest Service Language – Activity Restriction Standard - Adhere to local seasonal activity restrictions when constructing fuel breaks and implementing fuels management treatments.

**Action D-FFM 12:** Within GRSG habitat, PPH (and PACs, if so determined by individual LUP efforts) are the highest priority for conservation and protection during fire operations and fuels management decision making. The PPH (and PACs, if so determined by individual LUP efforts) will be viewed as more valuable than PGH when priorities are established. When suppression resources are widely available, maximum efforts will be placed on limiting fire growth in PGH polygons as well. These priority areas will be further refined following completion of the GRSG Landscape Wildfire & Invasive Species Habitat Assessments described in Appendix F.

Forest Service Language – Wildfire Suppression Standard (ADH) - Having provided for firefighter and public safety, PPH and PACs are the highest priority for conservation and protection during fire suppression and fuels management project decision making. Suppression efforts should attempt to limit fire growth in PGH when possible.

**Action D-FFM-HFM 6:** In PPMA and PGMAs, require use of native seeds for fuels management treatment based on availability, adaptation (site potential), and probability of success. Non-native seeded species may be used as a fire resistant fuels treatment. In all cases, seed must be certified weed-free.

Forest Service Language – Native Seed Use Guideline - In PPMA and PGMAs, native seeds should be used for fuels management treatment based on availability, adaptation (site potential), and probability of success. Non-native seeded species may be used as a fire resistant fuels treatment. Where probability of success or adapted seed availability is low, non-native seeds may be used as long as they support GRSG habitat objectives. If currently available supplies are limited, use the materials that provide the greatest benefit for greater GRSG. In all cases, seed must be certified weed-free.

**Action D-FFM-HFM 18 and 19:** Fire fighter and public safety are the highest priority. Greater GRSG habitat will be prioritized commensurate with property values and other critical habitat to be protected, with the goal to restore, enhance, and maintain areas suitable for Greater GRSG.

Forest Service Language – Wildfire Suppression Standard – Having provided for firefighter and public safety, prioritize wildfire suppression in GRSG habitat commensurate with and property values and other critical habitat. Suppress wildfire in in PPMA and PGMA to restore, enhance, and maintain areas suitable for GRSG.
Action D-FFM-HFM 21: In PPMA and PGMAs, give preference to use of native seeds for restoration based on availability, adaptation (ecological site potential), and probability of success. Where probability of success or adapted seed availability is low, non-native seeds may be used as long as they support GRSG habitat objectives. Choose native plant species outlined in ESDs (Forest Service may use a similar process), where available, to re-vegetate sites. If the commercial supply of appropriate native seed/plants is limited, work with the BLM Native Plant Materials Development Program (NPMDP) or NRCS Plant Material Program through your respective State or Forest Supervisor’s Office Plant Conservation Program Lead. If currently available supplies are limited, use the materials that provide the greatest benefit for greater GRSG. In all cases seed must be certified weed-free.

Forest Service Language – Native Seed Use Guideline - In PPMA and PGMAs, native seeds should be used for fuels management treatment based on availability, adaptation (site potential), and probability of success. Non-native seeded species may be used as a fire resistant fuels treatment. Where probability of success or adapted seed availability is low, non-native seeds may be used as long as they support GRSG habitat objectives. If currently available supplies are limited, use the materials that provide the greatest benefit for greater GRSG. In all cases, seed must be certified weed-free.

Action D-LG 13: In PPMA and PGMAs, apply principles of prescriptive livestock grazing that control time and timing of grazing so that hot season use does not occur on an annual basis.

Forest Service Language – Grazing Use Timing Restriction – Do not allow recurring hot season grazing use on an annual basis.

Action D-LG 14: Authorize new water development for diversion from spring or seep source when PPMA and PGMAs would benefit from the development.

Forest Service Language – Water Development Standard - Do not allow new water development for diversion from spring or seep source in PPMA and PGMAs unless GRSG would benefit from the development.

Action D-LG 16: Unless targeted grazing is the preferred treatment, livestock grazing would not be authorized within treatment areas during implementation of each treatment. Any livestock grazing closure for the purpose of a vegetation treatment would be done through the grazing decision prior to treatment. Livestock grazing would be authorized to resume within a treatment project area after resource monitoring data verifies the treatment objectives are being met and an appropriate grazing regime has been developed.

Forest Service Language – Vegetation Treatment Recovery Standard - Do not authorize livestock grazing within treatment areas during treatment implementation unless targeted grazing is the preferred treatment. Authorize resumption of livestock grazing within a treatment project area after resource monitoring data verifies the treatment objectives are being met and an appropriate grazing regime has been developed.

Action D-LG 20: Salting and supplemental feeding locations, livestock watering and handling facilities (corrals, chutes, etc.) would be located at least 1/2-mile from riparian zones, springs, and meadows, or on active leks in PPMA and PGMAs. The distance can be greater based on local conditions.
Appendix B. Forest Service Alternative D Language

Forest Service Language – Grazing Management Standard - Do not allow salting and supplemental feeding, livestock watering and handling facilities (corrals, chutes, etc.) within 1/2-mile of riparian zones, springs, meadows or active leks in PPMA and PGMAs. The restricted distance can be greater based on local conditions.

**Action D-LG 21**: Remove, modify, or mark permanent and/or temporary fences in areas of high risk for bird strikes within PPMA and PGMAs.

Permanent and/or temporary fences would not be located on or across active GRSG leks. Remove and re-locate existing fences that are located on or across GRSG active leks.

Forest Service Language – Fence Standard – Require removal, modification, or marking of permanent and temporary fences in areas of high risk for bird strikes within PPMA and PGMAs. Do not authorize new fences on or across active GRSG leks. Require removal/relocation of existing fences on or across GRSG leks.

**Action D-LG 29**: During the annual grazing application, work with permittees to avoid concentrated turn-out locations for livestock within approximately 3 miles of known lek areas during the March 1 to May 15 period. Avoid domestic sheep use and bedding areas, and herder camps within at least 1.24 miles (2 kilometers) of known lek locations. Utilize land features and roads on maps provided to the permittee to help demarcate livestock use avoidance areas. Require terms and conditions language for affected livestock grazing permits regarding livestock use during the lekking period.

Forest Service Language – Grazing Area/Timing Guideline – Authorization of concentrated turn-out locations for livestock should be avoided within approximately 3 miles of known lek areas during the March 1 to May 15 period. Authorization of domestic sheep use and bedding areas, and herder camps should be avoided within at least 1.24 miles (2 kilometers) of known lek locations.

**Action D-REC 1**: Allow SRPs and Forest Service Recreation Special Use Authorization (RSUA) in PPMA and PGMAs that have neutral or beneficial effects to greater GRSG.

Forest Service Language – Recreation Special Use Authorizations Standard – Do not authorize Recreation Special Use that have negative effects to GRSG.

**Action D-REC 2**: No new recreation facilities would be constructed in PPMA and PGMAs (e.g. Campgrounds, day use areas, scenic pullouts, trailheads, etc.).

Forest Service Language – Recreation Facilities Standard – Do not authorize construction of new recreation facilities in PPMA and PGMAs (e.g. Campgrounds, day use areas, scenic pullouts, trailheads, etc.).

**Action D-CTTM 6**: In PPMA and PGMAs, no new roads would be allowed except those necessary for public safety, administrative or public need to accommodate valid existing rights. Limit route construction to realignments of existing routes if the realignment:

1. maintains or enhances PPMA,
2. eliminates the need to construct a new road, or
3. is necessary for public safety,

4. Minimize impacts on GRSG habitat through application of required design features (see Appendix A) and other mitigation measures.

**Action D-CTTM 7:** In PPMA and PGMA, access to valid existing rights would be addressed to provide the minimum access necessary to exercise the right and maintain or enhance GRSG habitat through mitigation necessary to off-set loss to PPMA.

**Action D-CTTM 8:** In PPMA and PGMA, allow no upgrading of existing routes that would change route category (road, primitive road, or trail) or capacity unless the upgrade would maintain or enhance GRSG habitat, provide a fuel break to protect native vegetation, is necessary for public safety, or eliminates the need to construct a new road.

Forest Service Language – Road Construction Standard – Do not authorize new road construction in PPMA and PGMA except those necessary for public safety, administrative or public need to accommodate valid existing rights. Authorize access to valid existing rights that provides the minimum access necessary to exercise the right. Maintain or enhance GRSG habitat through mitigation necessary to off-set loss to PPMA.

Forest Service Language – Road Reconstruction Standard – Do not allow realignments of existing routes in PPMA and PGMA unless the realignment:

1. maintains or enhances PPMA,
2. eliminates the need to construct a new road, or
3. is necessary for public safety,

Do not allow upgrading of existing routes that would change route category (road, primitive road, or trail) or capacity unless the upgrade:

1. maintains or enhances GRSG habitat,
2. provides a fuel break to protect native vegetation,
3. is necessary for public safety, or
4. eliminates the need to construct a new road.

Minimize impacts on GRSG habitat through application of required design features (see Appendix A) and other mitigation measures.

**Action D-LR-LUA 1:** Designate PPMA as right of way avoidance areas for all other ROWs or SUA.

Development within avoidance areas could occur if the development incorporates appropriate RDFs in design and construction (e.g. noise, tall structure, seasonal restrictions, etc.) and development results in no net un-mitigated loss of PPMA and PGMA.
Subject to valid, existing rights: where new ROWs or SUAs associated with valid existing rights are required, co-locate new ROWs or SUAs within existing ROWs or SUAs to achieve no net unmitigated loss of PPMAs.

Forest Service Language - Easement and Special Use Authorization Guideline - Avoid allowing new easement or special use authorizations in PPMA. Authorization could occur if the development incorporates appropriate RDFs in design and construction (e.g. noise, tall structure, seasonal restrictions, etc.) and development results in no net un-mitigated loss of GRSG habitat in PPMA and PGMAs.

Subject to valid, existing rights: where new ROWs or SUAs associated with valid existing rights are required, co-locate new ROWs or SUAs within existing ROWs or SUAs to achieve no net un-mitigated loss of PPMAs.

Action D-LR-LUA 2: Where appropriate, bury new and existing utility lines as mitigation unless not feasible.

Forest Service Language – Utility Line Guideline - Where appropriate, bury new and existing utility lines as mitigation unless not feasible.

Action D-LR-LUA 5: Designate PGMAs as right of way avoidance areas for new communication site ROWs or SUAs.

Development within avoidance areas could occur if the development incorporates appropriate RDFs in design and construction (e.g. noise, tall structure, seasonal restrictions, etc.) and development results in no net un-mitigated loss of PPMA or PGMAs.

Forest Service Language – Communication Site Guideline - Avoid authorizing new communication site SUAs in PGMAs. Development could occur if the development incorporates appropriate RDFs in design and construction (e.g. noise, tall structure, seasonal restrictions, etc.) and development results in no net un-mitigated loss of PPMA or PGMAs.

Action D-LR-LUA 6: In PPMA and PGMAs, co-locate new utility (power, telephone, etc.) lines with other existing linear surface rights of way, such as roads and pipelines.

Forest Service Language – Utility Line Standard – In PPMA and PGMAs, require co-location of new utility (power, telephone, etc.) lines with other existing linear surface rights-of-way, such as roads and pipelines.

Action D-LR-LT 1: In PPMA and PGMAs, require ROW holders to retro-fit existing power lines and other utility structure with perch-deterring devices during ROW renewal process.

Forest Service Language – Utility Authorization Perch Deterrent Standard - Require permit holders to fit existing power lines and other utility structures with perch-deterring devices during ROW renewal process.

Action D-LR-LT 3: Do not designate new utility corridors in PPMA and PGMAs.
Forest Service Language – Utility Corridor Standard - Do not designate new utility corridors in PPMA and PGMAs.

**Action D-LR-LT 4:** Retain public ownership of PPMA and PGMAs. Consider exceptions when:

- Disposal and/or acquisitions of public lands would allow for more contiguous federal ownership patterns within the GRSG habitat area, or where a land tenure adjustment would result in a net gain in amount or quality of GRSG habitat.

**Action D-LR-LT 5:** Where significant conservation actions could be achieved in PPMAs, seek to acquire lands with intact subsurface mineral estate by donation, purchase, or exchange in order to best conserve, enhance or restore GRSG habitat.

Forest Service Language – Land Ownership Adjustment Standard - Retain public ownership of PPMA and PGMAs. Consider exceptions when disposal and/or acquisitions of public lands would allow for more contiguous federal ownership patterns within the GRSG habitat area, or where a land tenure adjustment would result in a net gain in amount or quality of GRSG habitat. Where significant conservation actions could be achieved in PPMAs, seek to acquire lands with intact subsurface mineral estate by donation, purchase, or exchange in order to best conserve, enhance or restore GRSG habitat.

**Action D-LR-W 6:** Lands that are acquired (exchange, purchase or easement) for GRSG habitat, would be managed as PPMAs.

Forest Service – Acquired Lands Standard - Lands that are acquired (exchange, purchase or easement) for GRSG habitat, would be managed as PPMAs.

**Action D-LR-WED 1:** Designate PPMA and PGMAs as right of way exclusion for utility-scale commercial wind energy facilities (facilities that generate large amounts of electricity that is delivered to many users through transmission and distribution systems).

**Action D-LR-WED 3:** Within PPMA and PGMAs allow industrial wind facilities associated with existing industrial infrastructure (e.g. a mine site) to provide on-site power generation.

Forest Service Language – Wind Energy Standard – Within PPMA and PGMA, do not authorize utility-scale commercial wind energy facilities (facilities that generate large amounts of electricity that is delivered to many users through transmission and distribution systems). Industrial wind facilities associated with existing industrial infrastructure (e.g. a mine site) may be authorized to provide on-site power generation.

**Action D-LR-IS 1:** Designate PPMA and PGMAs as right of way exclusion for utility-scale solar energy facilities.

**Action D-LR-IS 2:** Within PPMA and PGMAs, allow industrial solar energy facilities associated with existing industrial infrastructure (e.g. a mine site) to provide on-site power generation.

Forest Service Language – Solar Energy Standard – Do not authorize utility-scale solar energy facilities in PPMA and PGMAs. Industrial solar energy facilities associated with existing industrial infrastructure (e.g. a mine site) may be authorized to provide on-site power generation.
**Action D-FFME 3:** Apply requisite seasonal restriction on exploratory drilling that prohibits surface-disturbing activities in winter habitat and during the lekking, nesting, and early brood-rearing season in all PPMAs. See Appendix G for fluid mineral stipulations.

Forest Service Language - Exploratory Drilling Standard - Apply requisite seasonal restriction on exploratory drilling that prohibits surface-disturbing activities in winter habitat and during the lekking, nesting, and early brood-rearing season in all PPMAs. See Appendix G for fluid mineral stipulations.

**Action D-FFME 6:** On leased federal fluid mineral estate, when permitting Master Development Plans in PPMAs on leases not yet developed, the proposed surface disturbance must achieve no net unmitigated loss of PPMAs. Apply requisite seasonal restrictions on exploratory drilling that prohibits surface-disturbing activities in winter habitat and during the lekking, nesting, and early brood-rearing season in all PPMAs.

When necessary, prioritize and conduct additional mitigation:

- Within the same population area where the impact is realized.
- Within the same WAFWA Management Zone as the impact.

**Action D-FFME 10:** On leased federal fluid mineral estate (where no APD has been issued), RDFs would be attached as lease notices.

**Action D-FFME 14:** On leased federal fluid mineral estate within PPMAs complete Master Development Plans in lieu of Application for Permit to Drill (APD)-by-APD processing for all but wildcat wells.

Forest Service Language – Undeveloped Leased Fluid Minerals Standard - On leased federal fluid mineral estate within PPMAs require completion of Master Development Plans in lieu of Application for Permit to Drill (APD)-by-APD processing for all but wildcat wells. When permitting Master Development Plans in PPMAs on fluid mineral leases not yet developed, require the proposed surface disturbance to achieve no net unmitigated loss of PPMAs. Apply requisite seasonal restrictions on exploratory drilling that prohibits surface-disturbing activities in winter habitat and during the lekking, nesting, and early brood-rearing season in all PPMAs. Where no APD has been issued, RDFs would be attached as lease notices. When necessary, prioritize and conduct additional mitigation:

- Within the same population area where the impact is realized.
- Within the same WAFWA Management Zone as the impact.

**Action D-FFME 15:** On leased federal fluid mineral estate within PPMAs, require a full reclamation bond specific to the site. Insure bonds are sufficient for costs relative to reclamation that would result in full restoration. Base the reclamation costs on the assumption that contractors for the BLM will perform the work.

Forest Service Language - Fluid Mineral Reclamation Bond Standard - Within PPMAs, require a reclamation bond specific to the site, sufficient for costs relative to reclamation that would result in full restoration. Base the reclamation costs on the assumption that contractors will perform the work.
**Action D-FM 1:** In un-leased federal fluid mineral estate in PPMAs apply a No Surface Occupancy stipulation and do not allow for waivers, exceptions, or modifications to that stipulation. Upon expiration or termination of existing leases within PPMAs, apply the same stipulation as above.

**Action D-FM 2 and 4:** In un-leased federal fluid mineral estate in PGMAs, apply a No Surface Occupancy stipulation, but allow for waivers, exception, or modifications consistent with the objective. Upon expiration or termination of existing leases within PGMAs, apply the same stipulation as above.

Forest Service Language – Fluid Mineral Surface Occupancy Standard – In PPMAs, do not authorize surface occupancy for un-leased federal fluid mineral estate. Do not allow for waivers, exceptions, or modifications to this NSO stipulation. Upon expiration or termination of existing leases within PPMAs, apply this standard to the new lease. In un-leased federal fluid mineral estate in PGMAs, apply a No Surface Occupancy stipulation, but allow for waivers, exception, or modifications consistent with the objective. Upon expiration or termination of existing leases within PGMAs, apply this standard to the new lease.

**Action D-FM 3:** Allow geophysical exploration within PPMA and PGMAs that does not result in crushing of sagebrush vegetation or create new or additional surface disturbance. Heli-portable drilling methods, articulated rubber-tired vehicles that “leave no trace”, and vibro-seis geophysical operations conducted on existing roads and bladed shoulders would be allowed. Geophysical operations would be subject to timing and controlled surface use limitations established for greater GRSG in PPMA and PGMAs.

Allow no use of surface shot methods within PPMAs.

Forest Service Language – Geophysical Exploration Standard – Do not authorize geophysical exploration within PPMA and PGMAs that crushes sagebrush vegetation or creates new or additional surface disturbance. Heli-portable drilling methods, articulated rubber-tired vehicles that “leave no trace”, and vibro-seis geophysical operations conducted on existing roads and bladed shoulders may be authorized. Subject geophysical operations to timing and controlled surface use limitations established for GRSG in PPMA and PGMAs. Do not authorize use of surface shot methods within PPMAs.

**Action D-LOC 1:**

BLM Public Lands- Authorize locatable mineral development activity per the 43 CFR 3809 regulations through Plan of Operation Approvals and apply mitigation and greater GRSG best management practices (BMPs) that minimizes the loss of PPMAs or provides for enhancement of PPMAs through off-site mitigation within the WAFWA management zone.

Forest Service: Require that new plans of operation on forest service-administered lands authorized under 36 CFR 228 Subpart A – Locatable Minerals, include measures to avoid or minimize adverse effects to greater GRSG populations or their habitat.

Forest Service – Locatable Minerals Standard - Require that new plans of operation authorized under 36 CFR 228 Subpart A – Locatable Minerals, include measures to avoid or minimize adverse effects to GRSG populations or their habitat.

**Action D-SAL 1:** Allow no new saleable mineral material sites in PPMA and PGMAs.
**Appendix B. Forest Service Alternative D Language**

**Action D-SAL 3:** On existing mineral materials sites, allow mineral materials sales in PPMA and PGMAs as required, to meet Federal, Tribal, State, County and public needs. Loss of habitat through disturbance in PPMA and PGMAs would be off-set through mitigation.

Additional mitigation, including off-site mitigation would be required to off-set any net loss of habitat as a result of authorizing expansion of existing materials pits. Habitat loss in PPMA and PGMAs would be off-set through mitigation to ensure no net un-mitigated loss.

All mineral materials activities would be subject to compliance with standard surface use stipulations (general occupancy, seasonal and yearlong timing restrictions, and controlled surface use restrictions) for GRSG in PPMA and PGMAs.

Forest Service Language – Common Variety Minerals Standard – Do not authorize development of new common variety (saleable) mineral material sites in PPMA and PGMAs. Continued operations and expansion of existing mineral materials sites in PPMA and PGMAs may be authorized, however, require additional mitigation (including off-site mitigation) to offset any net loss of habitat through disturbance. Ensure no net unmitigated loss. Require compliance with standard surface use stipulations (general occupancy, seasonal and yearlong timing restrictions, and controlled surface use restrictions) for GRSG in PPMA and PGMAs for all mineral materials activity.

**Action D-NEL 1:** Close PPMA and PGMAs to non-energy leasable mineral leasing.

**Action D-NEL 2:** Issue no non-energy leasable prospecting permits within PPMA and PGMAs.

Forest Service Language – Non-energy Leasable Minerals Standard - Do not authorize non-energy leasable mineral leasing and prospecting in PPMA and PGMAs.
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