Attachment

Included in this attachment are following:

- 2012 State Plan for Sage-Grouse- section on livestock grazing
- State of Nevada Alternative for the EIS- section on livestock grazing
- DEIS Goals and Objectives for the NTT and BLM/USFS alternatives related to livestock grazing
- DEIS Management Actions for the NTT and BLM/USFS alternatives related to livestock grazing

2012 State Plan for Sage-Grouse
-section on livestock grazing

4. Address and eliminate conflicting regulations between the Migratory Bird Treaty Act and the Endangered Species Act. Pursue additional take permits in excess of the current 2,000 bird limit from the USFWS for raven control.

5. Identify and apply appropriate habitat management practices (e.g. livestock management, vegetation treatments, control of artificial nest and roost sites) that decrease the effectiveness of predators. Monitor effects of predator control to determine causal relations with sage-grouse survivability and adapt control strategies accordingly.

6. When downward population trends and nesting success are detected in occupied sage-grouse habitat areas initiate predator surveys and identify responsible predator species to target and implement an effective predator control effort.

6.4 Wild Horse and Burro Management

Grazing by wild horses and burros and expansive herd populations can impact vegetation cover of herbaceous and shrub species, damage riparian habitat and stringer meadows, and adversely affect sage-grouse habitat if not managed within appropriate management levels (AML). Current regulatory mechanisms to manage horse herds at appropriate management levels in herd management areas are difficult to enforce due to prolonged litigation and limiting program capacity for successful placement and adoption of excess horses.

OBJECTIVE: ***Manage wild horses at appropriate management levels (AML) to avoid and minimize impacts to Sage-grouse Management Areas.***

Federal Agency Actions

1. Maintain wild horses at appropriate management levels in designated herd management areas (HMA) throughout Sage-grouse Management Areas.

2. Evaluate conflicts with HMA designations in occupied, suitable, and potential sage-grouse habitat areas and modify Land Use Plans and Resource Management Plans to avoid negative impacts to sage-grouse. If necessary, resolve conflicts between the Wild and Free Roaming Horse and Burro Act and the Endangered Species Act.

6.5 Improper Livestock Grazing

Livestock grazing is the most wide-spread use on pubic lands and is managed under federal agency permits, which provide schedules, numbers, areas, and adjustment clauses for drought, fire, etc. Livestock permits are monitored for permit compliance and periodically reviewed and modified as needed.

Improperly managed livestock grazing is problematic to sage-grouse and can remove desired vegetation and change plant communities from desired ecological states to undesirable states where invasive and other undesirable plant species predominate. Where those relationships can be documented, corrective measures are best addressed through existing Standards and Guidelines identified by local Resource Advisory Committees (RAC), Local Area Working Groups, and Permit Terms and Conditions.

The NRCS Sage-grouse Initiative (SGI) includes Conservation Practice Standards to alleviate threats to sage-grouse while improving the sustainability of working ranches (USFWS 2010). The Committee recognizes that proper grazing practices as described in the NRCS SGI Prescribed Grazing Practice 528 (Attachment E) may be applied to improve or maintain desired species composition and vigor of plant communities, improve or maintain quantity and quality of food and cover available for wildlife, and manage fine fuel loads to achieve desired conditions.

OBJECTIVES:

Ensure that existing grazing permits maintain or enhance sage-grouse habitat in Sage-grouse Management Areas.

Utilize livestock grazing as a management tool to improve sage-grouse habitat quantity, quality, or to reduce wildfire threats.

Based on a comprehensive understanding of seasonal sage-grouse habitat requirements and in conjunction with flexibility of livestock operators, encourage land management agencies to cooperatively make timely, seasonal range management decisions to respond to vegetation management objectives, including fuels reduction.

Federal Land Management Agencies and Allotment Permittee Actions

1. Implement appropriate prescribed grazing conservation actions at scales sufficient to influence a positive population response in occupied and suitable sage-grouse habitat areas such as NRCS Conservation Practice Standard 528 for prescribed grazing.

2. Allow flexibility in management that will utilize targeted grazing management to reduce the fuel load and fire risk to enhance and protect seasonal habitats for sage-grouse.

3. Address incompatible grazing strategies when compelling and credible cause-and-effect relations have been identified cooperatively by the land management agency and the allotment permittee through rangeland management monitoring techniques appropriate in the Great Basin and consistent with sage-grouse habitat objectives.

4. To the extent possible, design water developments (springs/well overflow areas, etc.) to include water and mesic habitats for sage-grouse in Sage-grouse Management Areas.

5. Assess fences for high potential for bird strikes near lek areas and mark appropriately.

6.6 Mineral Development

Development of mineral resources in Nevada is a vital component of the State economy, and most mineral development can be managed temporally or spatially to minimize impacts to sage-grouse. The nature of mineral exploration is such that new understanding of geologic terrains, geology, geophysics, geochemistry, orogenesis, and other aspects of mineral exploration will result in areas not currently identified with exploration activity and/ or mineral potential becoming exploration targets and potentially mineral developments (i.e. mines).

State of Nevada Alternative for the EIS
-section on livestock grazing

Management – *Federal Agency Actions*	**Plan)** **TMA-11.1:** Maintain wild horses at appropriate management levels in designated herd management areas (HMA) throughout SGMAs. **(2012 Plan)** **TMA-11.2:** Evaluate conflicts with HMA designations in SGMAs and modify Land Use Plans and Resource Management Plans to avoid negative impacts to Sage-Grouse. If necessary, resolve conflicts between the Wild and Free Roaming Horse and Burro Act and the Endangered Species Act. **(2012 Plan)**
Livestock Grazing	**TMA-12:** Ensure that existing grazing permits maintain or enhance SGMAs. Utilize livestock grazing when appropriate as a management tool to improve Sage-Grouse habitat quantity, quality or to reduce wildfire threats. Based on a comprehensive understanding of seasonal Sage-Grouse habitat requirements, and in conjunction with flexibility of livestock operators, encourage land management agencies to cooperatively make timely, seasonal range management decisions to respond to vegetation management objectives, including fuels reduction. **(2012 Plan)** **TMA-12.1:** Expand the promotion of proper livestock grazing practices that promote the health of perennial grass communities as this condition has been found to suppress the establishment of cheatgrass (*Blank and Morgan,* 2012). **TMA-12.2:** Grazing management strategies for riparian areas should, at a minimum, maintain or achieve riparian proper functioning condition (PFC). Specific management actions include riparian fencing to provide control of the season, duration or degree of herbivory, providing alternate water sources away from the riparian area, changing the grazing system, or other grazing management practices that promote herbage removal within acceptable limits. **(2004 Plan)**
Livestock Grazing – *Federal Agency Actions*	**TMA-13:** On BLM and USFS-administered lands, meet the standards for riparian vegetation such as outlined in the various Resource Advisory Council (RAC) Standards and Guidelines for Ecological Health to meet the Sage-Grouse habitat requirements. **(2004 Plan)**
Wild Ungulate Grazing	**TMA-14:** See Wild Horse and Burro (TMA-11) Section
Mineral Development	**TMA-15:** Through the Nevada Sagebrush Ecosystem Council, encourage the strong conservation ethic in the mining industry by implementing effective avoidance management, and enhancement and reclamation of disturbed lands to preserve, protect, and improve habitat in SGMAs. On Federal lands, activities that have an approved BLM notice, plan of operation, right-of-way, or drilling plan, and on State/Private lands, projects with an approved Nevada Division of Environmental Protection permit, are exempt from any new mitigation requirements above and beyond what has already been stipulated in the projects' approvals. **(2012 Plan)** **TMA-15.1:** Implement a centralized impact assessment process overseen by the Nevada Sagebrush Ecosystem Council that provides consistent evaluation, reconciliation, and guidance for project development that avoids or minimizes conflicts with Sage-Grouse in SGMAs. **(2012 Plan)** **TMA-15.2:** Consistent with BLM 43 CFR 3809 regulations for Notice-level operations, and USFS 36 CFR 228A regulations, governing mining and exploration, allow exploration and other mineral-related activities that create not more than five acres of surface disturbance. The BLM and USFS may exercise existing discretionary authority to consider other information, including cumulative impacts. **(2012 Plan)** **TMA-15.3:** Follow a strategy that seeks to avoid conflict with Sage-Grouse by locating facilities and activities in Non Habitat

DEIS Goals and Objectives for the NTT and BLM/USFS alternatives related to livestock grazing

Alternative B –NTT report

- None Listed

Alternative D – BLM/USFS Agency Alternative (currently the preferred alternative)

- Goal: Manage livestock grazing to maintain and/or enhance PPMAs and PGMAs to meet all life cycle requirements of the GRSG during permit administration.
- Objective: In PPMAs and PGMAs, manage for vegetation composition and structure consistent with ecological site potential to achieve GRSG seasonal habitat objectives (see Table 2-6).
- Objective: Manage lentic and lotic riparian areas in PPMAs and PGMAs to maintain a component of perennial forbs with diverse species richness and maintain suitable cover; manage adjacent upland habitat to promote adjacent cover relative to site potential to facilitate brood rearing (see Table 2-6).

DEIS <u>Management Actions</u> for the NTT and BLM/USFS alternatives related to livestock grazing

Alternative B NTT report

- Within PPMAs, incorporate GRSG habitat objectives and management considerations into all BLM and Forest Service grazing allotments through AMPs or permit renewals and/or Forest Service Annual Operating Instructions.
- In priority habitat, work cooperatively on integrated ranch planning within GRSG habitat so operations with deeded/BLM and/or Forest Service allotments can be planned as single units.
- Prioritize completion of land health assessments (Forest Service may use other analyses) and processing grazing permits within PPMAs. Focus this process on allotments that have the best opportunities for conserving, enhancing or restoring habitat for GRSG. Utilize BLM Ecological Site Descriptions (ESDs) (Forest Service may use other methods) to conduct land health assessments to determine if standards of range-land health are being met.
- In PPMAs, conduct land health assessments that include (at a minimum) indicators and measurements of structure/condition/ composition of vegetation specific to achieving GRSG habitat objectives (Doherty et al. 2011). If local/state seasonal habitat objectives are not available, use GRSG habitat recommendations from Connelly et al. 2000b and Hagen et al. 2007.
- Develop specific objectives to conserve, enhance or restore PPMAs based on BLM ESDs (Forest Service may use other methods) and assessments (including within wetlands and riparian areas). If an effective grazing system that meets GRSG habitat requirements is not already in place, analyze at least one alternative that conserves, restores or enhances GRSG habitat in the NEPA document prepared for the permit renewal (Doherty et al. 2011; Williams et al. 2011).
- In PPMAs, manage for vegetation composition and structure consistent with ecological site potential and within the reference state to achieve GRSG seasonal habitat objectives.
- Implement management actions (grazing decisions, Annual Operating Instructions [Forest Service only], AMP/Conservation Plan development, or other agreements) to modify grazing management to meet seasonal GRSG habitat requirements (Connelly et al. 2011). Consider singly, or in combination, changes in: 1. Season or timing of use; 2. Numbers of livestock (includes temporary nonuse or livestock removal); 3. Distribution of livestock use; 4. Intensity of use; and 5. Type of livestock (e.g., cattle, sheep, horses, llamas, alpacas and goats; Briske et al. 2011).
- During drought periods, prioritize evaluating effects of the drought in PPMAs relative to their needs for food and cover. Since there is a lag in vegetation recovery following drought (Thurow and Taylor 1999; Cagney et al. 2010), ensure that post-drought management allows for vegetation recovery that meets GRSG needs in PPMAs.

- Manage riparian areas and wet meadows for proper functioning condition or other similar methodology (Forest Service only) within PPMAs.
- Within PPMAs and PGMAs, manage wet meadows to maintain a component of perennial forbs with diverse species richness relative to site potential (e.g., reference state) to facilitate brood rearing. Also conserve or enhance these wet meadow complexes to maintain or increase amount of edge and cover within that edge to minimize elevated mortality during the late brood rearing period (Hagen et al. 2007; Kolada et al. 2009a; Atamian et al. 2010).
- Where riparian areas and wet meadows meet PFC or meet standards using other similar methodology (Forest Service only), strive to attain reference state vegetation relative to the ecological site description.
- Within PPMAs, reduce hot season grazing on riparian and meadow complexes to promote recovery or maintenance of appropriate vegetation and water quality. Utilize fencing/herding techniques or seasonal use or livestock distribution changes to reduce pressure on riparian or wet meadow vegetation used by GRSG in the hot season (summer) (Aldridge and Brigham 2002; Crawford et al. 2004; Hagen et al. 2007).
- Authorize new water development for diversion from spring or seep source only when PPMAs would benefit from the development. This includes developing new water sources for livestock as part of an AMP/conservation plan to improve GRSG habitat.
- Analyze springs, seeps and associated pipelines to determine if modifications are necessary to maintain the continuity of the predevelopment riparian area within PPMAs. Make modifications where necessary, considering impacts on other water uses when such considerations are neutral or beneficial to GRSG.
- In PPMAs, only allow treatments that conserve, enhance or restore GRSG habitat (this includes treatments that benefit livestock as part of an AMP/Conservation Plan to improve GRSG habitat).
- Evaluate the role of existing seedings that are currently composed of primarily introduced perennial grasses in and adjacent to PPMAs to determine if they should be restored to sagebrush or habitat of higher quality for GRSG. If these seedings are part of an AMP/Conservation Plan or if they provide value in conserving or enhancing the rest of the PPMAs, then no restoration would be necessary. Assess the compatibility of these seedings for GRSG habitat or as a component of a grazing system during the land health assessments (or other analyses [Forest Service only]) (Davies et al. 2011).
- In PPMAs, design any new structural range improvements and location of supplements (salt or protein blocks) to conserve, enhance, or restore GRSG habitat through an improved grazing management system relative to GRSG objectives. Structural range improvements, in this context, include but are not limited to: cattle guards, fences, exclosures, corrals or other livestock handling structures; pipelines, troughs, storage tanks (including moveable tanks used in livestock water hauling), windmills, ponds/reservoirs, solar panels and spring developments. Potential for invasive species establishment or increase following construction must be considered in the project planning process and monitored and treated post-construction.

- When developing or modifying water developments in PPMAs, use applicable BMPs (see Appendix C of NTT report) to mitigate potential impacts from West Nile virus (Clark et al. 2006; Doherty 2007; Walker et al. 2007; Walker and Naugle 2011).
- In PPMAs, evaluate existing structural range improvements and location of supplements (salt or protein blocks) to make sure they conserve, enhance or restore GRSG habitat.
- To reduce outright GRSG strikes and mortality, remove, modify or mark fences in high risk areas within PPMAs based on proximity to lek, lek size, and topography (Christiansen 2009; Stevens 2011).
- In PPMAs, monitor for, and treat invasive species associated with existing range improvements (Gelbard and Belnap 2003; Bergquist et al. 2007).
- Maintain retirement of grazing privileges as an option in priority GRSG areas when the current permittee is willing to retire grazing on all or part of an allotment. Analyze the adverse impacts of no livestock use on wildfire and invasive species threats (Crawford et al. 2004) in evaluating retirement proposals.

Alternative D – BLM/USFS Agency Alternative (currently the preferred alternative)

- Within PPMAs and PGMAs containing 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).
- Continue land health assessments on BLM public lands or other monitoring methods on Forest Service-administered lands in PPMAs 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.
- Manage riparian areas and wet meadows for proper functioning condition (Forest Service may use other analysis) within PPMAs and PGMAs.
- In PPMAs 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.
- Authorize new water development for diversion from spring or seep source when PPMAs and PGMAs would benefit from the development.
- 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.

- In PPMAs and PGMAs, assess and modify as needed existing structural range developments to make sure they conserve, enhance, or restore GRSG habitat.
- Modify existing water development projects as needed or feasible to ensure riparian habitats in PPMAs and PGMAs are being maintained or improved.
- 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 active leks in PPMAs and PGMAs. The distance can be greater based on local conditions.
- Remove, modify, or mark permanent and/or temporary fences in areas of high risk for bird strikes within PPMAs 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.
- Consider retirement of grazing privileges on all voluntary relinquishments in PPMAs and PGMAs where removal of livestock grazing would enhance the ability to achieve GRSG habitat objectives (see Table 2-6).
- Establish vegetation treatment project monitoring sites prior to project implementation. Measure project monitoring sites annually during the livestock grazing closure period.
- Within PPMAs and PGMAs, incorporate terms and conditions into grazing permits to meet GRSG habitat objectives (see Table 2-6).
- Grazing permit transfers would not be approved without review of 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.
- 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.
- Under appropriate conditions implement Drought Policy (BLM 2011c) to protect GRSG PPMAs and PGMAs. Implement post-drought management to allow for vegetation recovery that meets GRSG life cycle needs in PPMAs and PGMAs.
- 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.

- During the permit renewal process, include terms and conditions language regarding livestock use during the lekking period.