APPENDIX E

GRAZING MANAGEMENT OPTIONS FOR GrSG

Grazing Management Options for GrSG

If habitat assessments and monitoring indicate forage use and habitat guidelines are being met with the current grazing system, changes may not be needed. Use by wild ungulates may limit or alter the effectiveness and design of grazing management alternatives (see "Grazing" strategy, Objective 6.2.2, pg. 346). Consult with local range conservationists and local work groups to assess local site conditions and capability.

- 1. If habitat assessments and monitoring indicate a change in forage or other habitat element use may be needed, consider changing the distribution of livestock, duration of use, and time of year that livestock graze a particular location by using grazing systems such as rest-rotation, deferred rotation, or high intensity/short duration. Allow for growth or re-growth in each pasture during each growing season to provide quality vegetation and vegetation height requirements during periods of sage-grouse seasonal use (refer to "GrSG Structural Habitat Guidelines", Appendix A).
- 2. Develop grazing banks to provide alternative forage and facilitate adaptive management for situations discussed within this list of alternatives.
- 3. When alternative forage is available and/or other incentives can facilitate changes, consider delaying spring grazing of occupied breeding habitat and/or avoid using sage-grouse seasonal use areas during or immediately before important use periods.
- 4. Where possible, do not graze the same pasture at the same time of year for consecutive years. If not possible, develop smaller grazing units within large pastures using salting, supplements, water, herding, or fencing to facilitate desired grazing management.
- 5. Consider the impact to sage-grouse when locating and constructing new fences and livestock watering and handling facilities. Consider moving existing facilities and fences if they are affecting (increasing) grouse mortality, especially near leks.
- 6. If sage-grouse mortality due to collision with fences is documented or likely to occur, consider marking the appropriate fence section with permanent flagging or other suitable material that will increase visibility of the fence for GrSG.
- 7. Water developments, placement of supplements, fencing, and season of use are just some of the tools that can be used to discourage over-utilization around riparian areas, water sources, bottoms and draws.
- 8. If needed, defer livestock use from pastures or allotments in occupied GrSG habitat, or change management plans when abnormal environmental events occur (e.g., drought, heavy snow fall, flooding) and stress vegetation.
- 9. As necessary, periodically graze lek sites moderate to heavy in late fall, to maintain site openness that GrSG require. Note: temporary fencing, herding, or increased stocking rate could be used, but needs to be limited to specific lek site, and avoid overgrazing surrounding area.

- 10. Avoid placing salt, minerals or supplements near leks and use them as tools to achieve desired livestock distribution and use in GrSG habitat.
- 11. The timing and location of livestock turnout and trailing should be adjusted to avoid livestock concentrations and other livestock associated disturbances in lek areas during the breeding season (March through May). Work with local wildlife personnel to locate and map lek sites.
- 12. Develop, when needed, alternative water sources to distribute livestock and improve water availability for wildlife and GrSG. Ensure wildlife accessibility to water and install escape ramps in all new and existing water troughs. Consider water development design to minimize WNV risk to GrSG.
- 13. Spring developments (both new and old) can be constructed and/or modified to maintain their free-flowing and wet meadow characteristics. Consider project design to minimize WNV risk to GrSG.
- 14. If monitoring data indicate forb vigor is not at proper condition or is declining, defer spring grazing periodically to increase forb vigor and occurrence. Lightly or moderately graze deferred areas following nesting or in the fall. Monitor to determine actual growth of grass during spring and summer deferment.
- 15. For late-successional sagebrush stands that don't meet habitat objectives for GrSG seasonal habitats, use mechanical, chemical, or grazing treatments that will rejuvenate new sagebrush growth and improve sagebrush quality and age diversity, as well as understory forbs and grasses.
- 16. Treat sagebrush (e.g., mechanical, grazing, or chemical treatments) and manage grazing in historic riparian areas to increase riparian zone and raise the water table to reestablish riparian grasses and shrubs for brood-rearing habitat.
- 17. To improve vegetation composition and forage, plant forb seed in rangelands that lack forbs and have enough moisture and the soil characteristics to establish and support forbs.
- 18. Defer grazing in wildfire and treatment areas until desired understory and overstory are established.