Greater Sage-Grouse Proposed Habitat Objectives

Questions and Answers

1. How were the Proposed Habitat Objectives for GRSG developed?

The proposed habitat objectives are a synthesis of existing data across the state of Nevada and portions of the Bi-State in California. The U.S. Geological Survey was primarily responsible for much of the synthesis and in translating often complex habitat relationships and GRSG responses into the proposed habitat objectives which could be summarized and applied on the ground. A team consisting of representatives from the U.S. Fish and Wildlife Service, BLM, Nevada Department of Wildlife, and U.S. Forest Service reviewed the Connelly et al. 2000 guidelines and also reviewed a bibliography of Nevada-based research made available by the U.S. Geological Survey. The team then went through each Connelly et al. 2000 guideline and reviewed it with respect to localized data. The Connelly et al. 2000 guidelines remained as a default unless refined by new information.

2. Why are the Proposed Habitat Objectives for GRSG different from Connelly et al. 2000 guidelines?

The Connelly et al. 2000 guidelines were a strong synthesis of research until that time. The guidelines themselves suggest that studies which define GRSG habitat on a more region-specific basis should be used where supported by research. These proposed habitat objectives respond to more localized data than the Connelly et al. 2000 guidelines, which relied heavily on data from the eastern half of the range of GRSG where a perennial grass component is more dominant, and where large-scale ecological changes such as invasive grasses and conifer encroachment are largely absent. The proposed habitat objectives reflect those differences.

3. What are the differences between the Proposed Habitat Objectives for GRSG and Connelly et al. 2000 guidelines?

While numerous differences exist, they are driven primarily by three elements: 1) the reduced role of perennial grasses for nest concealment as revealed by many nesting habitat studies throughout Nevada; 2) the increased habitat fragmentation and degradation as a result of invasive grasses and conifer encroachment; and 3) the elevated importance of late-summer brood-rearing habitats in the lower precipitation zones of Nevada. The proposed habitat objectives also reflect recent research into more complex aspects of habitat juxtaposition, such as the interspersion of meadow habitat with adjacent sagebrush cover, and the attempt to quantify other scale-dependent relationships such as the degree of conifer encroachment.

4. Are the Proposed Habitat Objectives for GRSG supported by science?

The proposed habitat objectives are supported by numerous studies throughout Nevada from the Bi-State area in southwestern Nevada and California through the Elko District into northeastern Nevada. Much of the synthesis of research which resulted in these proposed habitat objectives for GRSG was conducted by the U.S. Geological Survey.

5. Are the Proposed Habitat Objectives for GRSG consistent with the BLM National Technical Team report (NTT)?

The NTT report suggests the use of local and state seasonal GRSG habitat objectives when they are available and references the habitat recommendations from Connelly et al. 2000 if they are not.

6. How will these Proposed Habitat Objectives for GRSG by used?

The guidelines rely on the latest Nevada-specific research on GRSG habitat selection and species persistence and success throughout their seasonal life histories. They can be used to characterize the condition of particular sites or of whole landscapes as to their suitability as GRSG habitat. While some of these objectives can be measured at the site scale and reflect the effects of on-the-ground use authorizations such as livestock grazing systems, others are included as a broader reflection of suitable habitat parameters for GRSG. The proposed habitat objectives themselves are not regulatory and do not describe a methodology for their application. It is anticipated that they will be used to characterize habitat suitability, to be adapted where applicable into Rangeland Health Assessments, and as a guide to desired future conditions in habitat restoration efforts.

7. What is the rationale for eliminating the residual cover standard (7 in/18cm) from GRSG nesting habitat?

Localized data indicate that sagebrush canopy cover was the primary indicator of nesting success within Nevada. Research indicates that the primary deterrent to successful nesting was predation, specifically by common ravens, an aerial predator. Thus, the research demonstrated that overhead concealment was the primary indicator of nesting success and that the lateral concealment component of perennial grasses drove nesting success only when sagebrush canopy was deficient.

8. How will the Proposed Habitat Objectives for GRSG affect grazing?

The proposed habitat objectives will be applied in a variety of management and monitoring activities including Rangeland Health Assessments. Some habitat parameters are directly linked to utilization levels by livestock or other ungulates. Where those parameters are not being met and the causal factor found to be attributable to grazing levels, adjustments in grazing intensity or season of use may be warranted.

9. How will the Proposed Habitat Objectives for GRSG be measured during Rangeland Health Assessments?

These proposed habitat objectives will provide the interdisciplinary assessment team an index of overall suitability of an allotment or range site as GRSG habitat just as the Connelly et al. 2000 guidelines did. The Connelly et al. 2000 guidelines were also further interpreted by BLM in the Sage-grouse Habitat Assessment Framework (Stiver et al. 2010) document which stepped down those guidelines into an on-the-ground methodology for assessing GRSG habitat and linking it to causal factors pertinent to Rangeland Health Assessments. No such methodology exists for the proposed habitat objectives for GRSG to date. It is assumed that development of a similar methodology will occur during initial implementation of the GRSG Land Use Plan Amendments/Environmental Impact Statement.

10. How can some parameters, e.g., sagebrush canopy cover or conifer encroachment, be linked to livestock grazing as a causal factor?

These are examples of factors which may not be linked to grazing as a causal factor in most cases, but which are of importance to the assessment of GRSG habitat suitability in general. These parameters may inform the BLM in potential restoration activities. Other parameters such as perennial forb diversity, Proper Functioning Condition for riparian, perennial forb cover, etc. may be objectives which link to grazing activities.

11. What is the difference between tall trees and powerlines?

These differ in degree of impact. Generally, powerlines are larger and have much greater visibility. They contribute to fragmentation and provide potential predators with larger scale, more pervasive access to habitats.