



**Greater Sage-Grouse Conservation Assessment and Strategy for Oregon:
A Plan to Maintain and Enhance Populations and Habitat – 2010 Evaluation**

STAFF SUMMARY OF ISSUES RAISED BY STAKEHOLDERS AND PUBLIC
September 30, 2010

Introduction

This document summarizes the issues and concerns raised by stakeholders during the 2010 review of the Greater Sage-Grouse Conservation Assessment and Strategy for Oregon (Plan). This document focuses on input from specific stakeholders as well as public meetings held in 2009 and 2010 on Plan recommendations. These stakeholder and public meetings are listed in chronological order:

- Oregon Sage Grouse and Sagebrush Habitat Team – Oct 23, 2009
- Oregon Sage Grouse and Sagebrush Habitat Team – July 22, 2010
- Malheur County Court –July 28, 2010
- Renewable Energy Opportunities & Eastern Oregon Landscape Conservation Partnership–July 30, 2010
- Lake County Commission – Aug 3, 2010
- Lakeview Public Meeting –Aug 3, 2010
- Renewable Northwest Project–Aug 3, 2010
- Harney County Court–Aug 5, 2010
- Burns Public Meeting–Aug 5, 2010
- Oregon Natural Desert Association–Aug 5, 2010
- Baker County Commission–Aug 11, 2010
- Baker City Public Meeting–Aug 11, 2010
- Oregon Department of Agriculture – Aug 11, 2010
- Crook County Commission–Aug 18, 2010
- Bend Public Meeting –Aug 18, 2010
- Jordan Valley Public Meeting–Aug 24, 2010
- Portland Public Meeting–Aug 26, 2010
- Oregon Department of Agriculture (Nat Res. Sub-committee)–Sep 8, 2010
- Burns Public Meeting (2nd by request)– Sep 14, 2010
- United States Fish and Wildlife Service – Sep 16, 2010
- Steens Mountain Advisory Council– Sep 17, 2010

Background

The Commission adopted the Plan and its associated Oregon Administrative Rules (OAR) in August 2005. The OARs require the department to review the Plan every five years, similar to other department plans, with the first review due in 2010.

These issues discussed below address stakeholder's specific concerns on Plan recommendations and implementation. Some comments received by stakeholders were general in nature and these comments ranged from concerns about the planning process to how management of greater sage-grouse might differ on private and public lands or impact private property rights. Some general comments are discussed below or applied in the draft revision of the Plan scheduled to be given to the Commission for review in December.

Policy Issues Related to Plan Implementation

The only components of the Plan adopted into rule are the population and habitat objectives. There are two changes with regard to these rules for the Commission to consider.

Issue 1: Population Objectives:

Staff have implemented and recommend the use of a stratified sampling approach to estimating minimum population sizes for greater sage-grouse. This approach is more conservative and a comparison of the two methods is discussed in the Plan and the objectives have been revised to reflect the new estimation method.

Stakeholder input:

There has been full support of the State Team on the revised population objectives and no comments from other stakeholders or public on these objectives.

Discussion/Analysis:

Since adoption of the 2005 Plan, a new approach has been developed to provide a minimum estimate of the Oregon sage-grouse populations. Thus, a revised estimate of the 2003 population, and a 2009 estimate are provided. The revised population estimate for Oregon sage-grouse was calculated using a stratified random estimator for each management unit. Four strata were delineated based on lek size within each unit. Leks were assigned to the following lek size strata, 0, 1-10, 11-25, 25-50, and >50 based on the average number of maximum males counted during years 2002–2009. For those leks not counted in past 8 years, lek size was estimated by taking the number of males at last count and adjusting that number by the average proportional change from that year to 2009.

Implementing the stratified random estimator assumes that surveys are drawn from a random sample. Lek surveys are not randomly selected at this time, thus the bias associated with these counts are unknown. As a result, the range of values presented must be viewed as conservative, the variation around these estimates is likely larger than the estimates generated. However, making these assumptions and developing strata are more reasonable than those estimates provided in 2005. At that time population size was generated by extrapolating the average number of males per active lek to an estimated number of active leks, which was likely biased high because several large (>50 males) leks in each unit weighted those averages. The revised stratified approach helped to control the influence of a few large leks on estimating population size, and included the number of inactive leks in the estimate.

Based on the best available information, in spring of 2009 there was a minimum spring population estimate of 18,000 (range = 15,000 to 20,000) sage-grouse in Oregon. A revised estimate for 2003 suggests a minimum statewide breeding population estimate of 29,000 (range = 24,500 to 34,000) sage-grouse. This is approximately 11,000 less than previously estimated in 2003 (34,000 to 45,000). It is important to note that the trends do NOT change, only the absolute values in terms of population size.

Alternatives:

- No change to current OAR or Plan. Maintain the existing population objective language.
- Adopt OAR and Plan language that reflects the revised population goals.

Issue 2: Habitat Objectives:

Staff recommends a change in language with regard to the regional habitat objectives from the 2005 Plan, and additional refinement of the 6 July 2010 draft.

Stakeholder input:

The State Team suggested that “*no net loss*” language be included in the revised habitat objectives and no comments from other stakeholders or public on these objectives. Per the State Team the language in the 2010 draft is too vague regarding habitat objectives, and requires some clarification.

Discussion/Analysis:

The language in 2005 resulted in unintended restrictions on land managers to conduct habitat management that would benefit grouse. The 2005 objective is stated as,

“Regionally: Maintain 100% of existing sagebrush habitats and enhance potential habitats that have been disturbed in the following regions. Existing conditions are:...”

And the current language of the objective in the 6 July 2010 draft is,

“Regionally: manage lands to improve existing sagebrush habitats and enhance potential habitats that have been disturbed in the following regions. Existing conditions are...”

The intent of this change in language was to provide greater flexibility for land managers to pursue actions for the benefit of sage-grouse habitat needs. However, the input from the State Team suggests it is too vague. As such the following language is proposed for the habitat objectives for the updated Plan;

“Regionally: manage lands to improve existing sagebrush habitats and enhance potential habitats that have been disturbed such that there is no net loss of sagebrush habitat in the following regions. Existing conditions are:...”

Providing direction of *no net loss* on a per district basis decreases the risk of large losses being accrued in any one region and placing the onus on other regions to maintain all remaining habitat.

Alternatives:

- No change to current OAR or Plan. Maintain the existing habitat objective language from the 2005 Plan.
- Adopt OAR and Plan language stated in the 6 July 2010 draft of the revised habitat objectives.
- Adopt OAR and Plan language of the revised regional habitat objective language (6 July 2010) to read, “Regionally: manage lands to improve existing sagebrush habitats and enhance potential habitats that have been disturbed *such that there is no net loss of sagebrush habitat* in the following regions. Existing conditions are:...”

Conservation Guideline Issues Related to Plan Implementation

Conservation guidelines outlined in the Plan are recommendations to those interested in enhancing or restoring sage-grouse habitats and in some cases they are recommendations to minimize or avoid potentially negative impacts to populations or their habitats. It is important to remember that these guidelines and mitigation recommendations are strictly advisory to land managers and planners. Only in the case of an Energy Facility Siting Council permitting process do ODFW mitigation recommendations have any regulatory authority, and even then EFSC has the ability to waive ODFW's recommendations. Listed below are concerns raised over some of the conservation guidelines in the Plan.

Core Area Habitat Mapping

Stakeholders and publics had identified two primary concerns with this guideline. First, the language tied to the recommendations for each habitat category was too restrictive and inconsistent with the language within the department's Mitigation Policy. Additionally, there was general concern for the vague definition of “development” as it pertains to these recommendations.

Issue 1: Restrictive Nature of Core Areas:

Stakeholder input:

The Core Area maps are too restrictive and will not allow for viable economic development in southeastern Oregon.

Staff Discussion and Analysis:

The maps and data provide a tool for planning and identifying appropriate mitigation in the event of human development in sage-grouse habitats. These maps show both Category 1 and Category 2 habitats. Category 1 habitats are recommended as “avoid development;” Category 2 habitats are recommended as limited development with “no net loss with net benefit.”

The goal of the Core Area recommendations is to protect essential habitats to meet habitat and population objectives identified in the Plan. The objective of these recommendations is to avoid, minimize or mitigate for impacts on sage-grouse habitats from energy developments, its associated infrastructure or other industrial and commercial developments.

Recently, a landscape approach to sage-grouse habitat protection has been developed across the Western states. This landscape approach is commonly referred to as *Core Areas*. Specifically, this approach prioritizes habitats based on measures that assess breeding bird density of sage-grouse populations and associated habitats. ODFW's Core Area approach is consistent with range-wide efforts to map important population strongholds by the Western Association of Fish and Wildlife Agencies.

The strength of the Core Area approach is that it uses biological information to identify important habitats with the objective of protecting the highest density breeding areas. It also enables managers, at the landscape scale, to map and analyze the risks and necessary conservation measures for each core area.

The Core Area approach protects high density sage-grouse habitat areas while allowing for development to occur in other sage-grouse areas with appropriate mitigation. Previously, per the 2009 "White Paper," all leks received a 3-mile radius of "no development." The new Core Area approach takes a more scientific approach to lek sites by mapping individual areas based on seasonal use. The goal of the Core Area approach protects 90% or 533 leks of the population (concentrated in 7 million acres) and leaves 10% or 123 leks (>6 million acres) open to development through the Mitigation Policy. Core Area designations are advisory to land use planners and regulators consistent with Mitigation Policy.

Currently the language in the draft Plan is with respect to the Habitat Categories is inconsistent with the language in the Mitigation Policy. There is a need to reconcile these differences.

Alternatives:

- Retain existing language that states "*no development*" in Category 1 habitats.
- Rephrase current language to reflect the language *verbatim* in the mitigation policy as it pertains to Habitat Categories 1 and 2. Such language refers to "*avoid*" development in these habitats.
- Do not use mitigation policy category language to describe any of these priority areas

Issue 2: What does development mean in the context of mitigation?

Stakeholder input:

Several publics and stakeholder have expressed concern as to what is meant (exactly) by "development." Is it a water trough for livestock, a fence, or a wind farm?

Staff Discussion and Analysis:

The intent of the Core Area maps is to provide a strategic framework for land managers to site large scale industrial type developments that would result in the loss and/or fragmentation of sagebrush habitats at a landscape scale. In part, the vagueness of defining “development” was done because of the uncertainty as to what the next type of impact may be in the sagebrush biome. Currently, renewable energy developments or electrical transmission corridors would be an example of the type of development for which these recommendations are intended. Fencing, guzzlers, water troughs or other small scale developments associated with livestock or wildlife management would not be considered “*development*” in this context, unless of course such actions lead to the loss or avoidance of large areas of habitat.

Alternatives:

- Additionally, clearly define a *development action* again relying on the Mitigation policy language,
- Again rely on the mitigation policy language, and add some clarifying language as to the size and type of these developments
- Do not clarify the definition of development.

Issue 3: How will habitat mapping influence land use and land use policies?**Stakeholder/Public Comment:**

There are concerns from stakeholders and the public as to how these categories will be used or misused to develop land use policies or file suit in court of law to hinder land use activity. Most of these comments were in the context of renewable energy development, rural county social economic issues, and private property rights.

Discussion/Analysis:

Much of the input received was related to habitat mapping that identifies Category 1 and Category 2 habitats for greater sage-grouse. Much of this discussion is addressed above. However, there are likely opportunities to further clarify the intent and limitations of ODFW's recommendations in the Plan.

Alternatives:

- Use additional language in the Core Area section of the plan to clarify intent and use of core areas.
- Forego any additional clarification with regard to intent or use of Core Areas in the Plan.

Issue 4: Why was climate change not included as a threat to the species or considered in the guidelines section?**Stakeholder Input:**

Stakeholders with this issue identified two primary concerns. First, the lack of a climate scientist on the contributor list to the document. Additionally, there was general concern

for the lack of discussion as to how climate change will impact sage-grouse habitats (e.g., increased fire frequency, increase juniper, reductions in sagebrush, etc.).

Staff Discussion and Analysis:

The primary reason climate change was not included in the Plan is that aside from altering the carbon footprint there is little that can be done in the context of sage-grouse management to alter the course of climate change. Clearly there are actions to minimize impacts of climate change but are beyond the scope of a biological plan to conserve sage-grouse. Notwithstanding, staff recommends some discussion and analysis as to the threats to the sagebrush biome as a result of climate change, and to that end emphasize the need to protect those habitats projected to be the most resilient to climate change in the future.

Alternatives:

- Retain no discussion of climate change in the Plan
- Provide discussion and analysis of impacts of climate change to sagebrush habitats and identify those areas most likely to be resilient to the effects of climate change.

Comments Related to Plan Recommendations

Policy Issue 1: Why did you generalize the sage-grouse response from oil and gas development to renewable energy development when they are different?

Stakeholder Input:

Renewable energy stakeholders are concerned that impacts from oil and developments are not representative of the impacts that wind farms will have on sage-grouse.

Staff Discussion and Analysis:

Currently there is a lack of specific information about the effects of renewable energy development on sage-grouse ecology. Thus, studies from oil and natural gas exploration in areas of the intermountain West were used as a surrogate to estimate impacts from renewable energy developments in Oregon.

Generally, oil and gas developments within 2-4 miles leks and/or nesting areas had deleterious effects on populations. Oil and gas fields may differ in the overall vertical structure and vehicle traffic relative to wind energy developments, but they are similar from the standpoint that roads and infrastructure fragment native habitat. They also differ in that oil and gas fields expand over time and well density may change over time, whereas wind energy developments are constrained by a set density of wind turbines that is established during the planning phase, and that density is realized quickly during construction of the facility. Thus, the rapid rate of a wind energy development may mean more rapid declines in sage-grouse populations.

As illustrated in the previous example, when sage-grouse are impacted by nearby land development, the breeding unit (lek-nesting complex) does not typically disappear all at once, but slowly disappears over time through attrition. Recent research from oil and gas

developments in Wyoming further describes the ecological mechanisms involved in the sage-grouse decline.

As oil/gas development has progressed in parts of the West, research has documented that adult female sage-grouse remain in traditional nesting areas regardless of increasing levels of development. However, yearling females avoid development by nesting farther from main haul roads and other infrastructure. Additionally, yearling males avoid leks inside developed areas and are displaced to the periphery of gas fields. Recruitment of males to leks also declines the closer a lek is to the center of a development.

Perhaps the most important finding from these studies is that sage-grouse declines are partially explained by lower annual survival of female sage-grouse, and those impacts have resulted in population-level declines. Strong site fidelity and reduced survival of adult sage-grouse combined with lek avoidance by yearling birds may explain the observed time lags of three to four years between development activities and lek loss.

Sage-grouse occupy seasonal habitats that maximize survival and reproductive success. As studies have indicated displacement to other sagebrush habitats yields lower survival and may reduce carrying capacity.

Comprehensive reviews of the impacts of “human-footprint” on sage-grouse populations clearly indicate that anthropogenic features are negatively correlated with population trends and productivity. It is not to say that all development is equal but that until empirical studies are available to demonstrate the impacts (or lack thereof) from renewable energy developments, managers must proceed under the precautionary principle with regard to the siting of such facilities in sage-grouse core area habitats.

Alternatives:

- Remove all discussion regarding renewable energy development and comparisons to oil and gas development.
- Retain current discussion of renewable energy development, and expand on the differences and similarities between the two.
- Retain current discussion without further explanation on similarities and differences.

Other issues

- Concern by stakeholders (Association of Oregon Counties and Renewable Northwest Project) that Plan development and the public process has been too closed and exclusive rather than inclusive.
 - Original multi-stakeholder group was extensively involved in the updated version. Per the 2005 Plan there were no public concerns over the composition of the steering committee, thus there was no impetus to change or add members to the group.
 - See list above on the extensive public and stakeholder meetings that have been held.

- Public comment period has been extended from July 6, 2010 to December 3, 2010 (originally comment period would have ended 1 October).
- Plan adoption postponed from 1 October to 3 December 2010.
- Conservation Guideline that speaks to County and federal agencies consideration of adopting core area recommendations into their planning processes.
 - This guideline is a recommendation that has been developed for entities interested in addressing primary threats identified by US Fish & Wildlife Service in their finding of “warranted but precluded” from listing under the ESA for greater sage-grouse. It is strictly advisory.
- Some publics would like for mitigation recommendations to have more regulatory authority.
 - In order for ODFW mitigation policy to have more regulatory authority would require legislative action, this is beyond the scope of this document.
- Shouldn't more emphasis be placed on wild horses and burros?
 - The wild horse and burro issue is an important one, but often limited to localized areas, to date no specific areas of conflict have been identified for sage-grouse and horses.
- Why didn't the plan include cumulative effects of wind farms?
 - In brief, there are no empirical data on the impacts of a single wind farm let alone any data to indicate what the cumulative effects of multiple wind farms would be on sage-grouse populations. See comments above about oil and gas development impacts for more detail.
- Why not use the most recent lek data through 2010?
 - Because Plan adoption has been postponed until the end of 2010, lek trend data will be updated through spring 2010 and reported in the final version of the Plan