

OREGON SAGE GROUSE FRAMEWORK

Protecting sage grouse habitat from human disturbance

1. Existing Conditions

Oregon has effectively protected Greater Sage Grouse core habitat from most human disturbance. In contrast to most other western states, the level of human development in Sage Grouse habitat in Oregon is extremely low. In the seven Oregon counties that contain Sage Grouse habitat, there are only 900 homes located in core and low-density habitat. In Deschutes County, the most populous and fastest-growing county, only 63 people (out of a population of 160,000) live in the 438,000 acres of Sage Grouse habitat in the county. The lack of ex-urban development in Sage Grouse habitat is the result of Oregon's land use system, which has steered almost all residential use into cities and towns. The importance of this system in terms of sage grouse extends beyond the immediate impacts of homes. The lack of homes on the landscape also means that there are fewer roads, concentrated recreation uses, power and phone lines, domestic animals, and other activities associated with ex-urban development.

Counties regulate land use in rural areas of Oregon under the umbrella of the statewide land use program. This program limits all forms of land development (not just residential development) in ex-urban areas to uses that are related to ranching and farming, and a limited range of other rural uses. As a result, the potential for additional human disturbance in Sage Grouse habitat in Oregon is limited:



renewable energy development (including wind, solar and geothermal); new transmission lines; mining; recreation; infrastructure; and conversion from ranching to cultivated agriculture. This report focuses on these uses, and presents a proposed framework to assure that conservation goals for sage grouse habitat are met, while the current and future economic base of Eastern Oregon is safeguarded.¹ This framework is intended to assure a net positive outcome for the conservation of Sage Grouse habitat in Oregon.

¹ In addition to limiting land development in rural areas generally, Oregon's land use program includes statewide planning goal 5. Several Oregon counties already have programs that protect sage grouse habitat. In other counties, impacts to sage grouse habitat are considered when a change in zoning is proposed, or a non-farm use (such as an energy facility) is proposed that triggers consideration of conditional use criteria.

2. Potential Threats to Sage Grouse Habitat from Human Disturbance

2.1. Renewable Energy Development, Transmission and Distribution Lines

Wind generation is the predominant form of renewable energy development in Oregon. Oregon's utilities have largely met existing requirements for renewable development, and with the combination of low natural gas prices, the expiration of federal tax incentives, transmission constraints, and a California regulatory structure that makes out-of-state renewable generation to serve that state's renewable standards unlikely, development of additional utility-scale wind is unlikely in the next five to ten years in Oregon. This situation is unlikely to change until and unless both regulatory structures and transmission capacity constraints are resolved. Smaller-scale solar development and geothermal development is possible in the nearer term. Other than the Boardman to Hemmingway transmission line and a potential upgrade to the Pacific Direct Connect Intertie, no other major transmission facilities are planned in this area of Oregon. The potential for renewable energy development is described in more detail in Exhibit __ to this report.²

Larger energy generation facilities in Oregon are sited through the state's Energy Facilities Siting Council (EFSC). Similarly, larger electric transmission lines and natural gas lines also are sited through EFSC (or FERC for interstate gas lines). EFSC's siting standards include a fish and wildlife standard that effectively prevents these larger facilities from locating within or adjacent to core Sage Grouse habitat.³

For smaller renewable energy projects and transmission lines, siting decisions are made at the county level. Some counties have adopted land use regulations that expressly protect sage grouse habitat, while in others the degree of protection is dependent on case-by-case considerations. As a general matter, most counties have (like EFSC for larger projects) followed the ODFW habitat mitigation recommendations and policy.

2.2. Mining

Mining operations are regulated at both the state and local levels in Oregon. Surface mining and larger hard rock mining operations are regulated by the Oregon Department of Geology and Mineral Industries (DOGAMI) through operating permits. There are no express DOGAMI standards relating to impacts of proposed operations on Sage Grouse habitat. According to DOGAMI, there is little or no potential for oil and gas exploration and development in Oregon.

At the local level, mining operations generally require land use approval. As noted above, some local governments have standards relating to impacts to Sage Grouse habitat, while others generally evaluate such effects on a case-by-case basis.

² ODOE Report dated January 2014 (Carver).

³ EFSC's Fish and Wildlife standard (OAR 345-022-0060) applies the Habitat Mitigation Policy of Oregon's Fish and Wildlife Commission. That policy, OAR 635-415-0025, requires denial of proposed development it cannot be sited to avoid category 1 habitat (core area habitat for Sage Grouse). ODFW interprets this policy to include both direct and indirect impacts of proposed development. The mitigation policy is summarized at: http://www.dfw.state.or.us/lands/docs/mitigation_category_flow.pdf. In low density Sage Grouse habitat (category 2), the policy requires no net loss of habitat quality and quantity if the proposed development cannot avoid the habitat.

Aggregate sites for road construction and maintenance are normally permitted at the local level through a conditional use process. The Oregon Department of Transportation maintains approximately ___ existing sites, and likely will need to develop ___ new sites over the next ten years.

2.3. Conversion to Irrigated Agriculture

Development of new irrigated farmland in central and eastern Oregon is generally limited by the availability of water rather than through land use. The Oregon Water Resources Department (OWRD) is not issuing new surface water rights in most areas where core Sage Grouse habitat is located. New groundwater rights are, however, still available in some areas. OWRD water right permit standards do not expressly address terrestrial impacts of water use, including impacts of newly-irrigated areas on Sage Grouse habitat.

2.4. Concentrated Recreation and OHV Use

[In development]

3. Proposed Sage Grouse Disturbance Framework

3.1. Overview

Concentrated human disturbance from development and uses is one future threat to sage grouse identified by the federal government. This document describes a proposed framework that will assure the federal government that future development in Sage Grouse habitat is consistent with long-term conservation objectives, while also sustaining economic opportunities and community interests. This framework does not apply to ongoing dispersed activities, such as grazing and ranching, and dispersed recreation, which are being addressed through other mechanisms such as Candidate Conservation Agreements (and Candidate Conservation Agreements with Assurances). However, the framework is intended to support such agreements.

The framework consists of two parts. The first part is to: (a) avoid and/or minimize new anthropogenic disturbance to Sage Grouse habitat; and (b) establish an overall limit on new human disturbance in core habitat of Sage Grouse. The second part is to adopt a consistent, landscape-level, mitigation framework. The framework is designed to be co-adopted with the Bureau of Land Management in the RMP revisions for BLM lands, and by Oregon and/or Oregon counties on non-federal lands. The framework would apply to all new uses requiring approval, funding, or being proposed by, federal, state or local agencies. The framework would be administered cooperatively by the Oregon BLM state office, the State of Oregon, and Oregon counties.

Because Oregon's existing land use system has been successful in limiting development within Sage Grouse habitat in rural areas of the state, this new framework is not expected to significantly affect economic development opportunities in eastern and central Oregon. Instead, the framework will provide a regulatory backstop, assuring that past large-scale patterns of land use in the state will not change in a manner detrimental to Sage Grouse conservation, and that this category of threats to Sage Grouse is well-controlled in Oregon, eliminating the need for additional federal limitations.

The second part of the proposed framework includes a new, supplemental, mitigation policy for the Oregon Fish and Wildlife Commission. This supplemental mitigation policy for proposed development affecting Sage Grouse habitat would continue the current policy hierarchy of avoidance, minimization and mitigation, but would recognize that, given the extent of Sage Grouse habitat, complete avoidance may not be possible in many cases. In addition, the policy would focus mitigation requirements on actions and in places that maximize its benefits. As further described below in section 3.5, mitigation would be required for impacts to sage grouse habitat attributable to the discrete anthropogenic threats identified in the COT Report.

The draft framework and modification to ODFW's current policy relative to Sage Grouse Habitat, are each one component of a landscape approach to greater sage grouse habitat protection and mitigation that is being developed as part of Oregon's All Lands All Threats Plan. This framework is focused on disturbance associated with human development actions. Other non-anthropogenic threats, particularly threats from fire and invasive plant and tree species, are being addressed through programmatic measures designed to reduce the risks to the Sage Grouse population in Oregon.

3.2. Sage Grouse Disturbance Framework - Overview

Ninety-eight percent of core Sage Grouse habitat is located on land zoned for farm use under Oregon's land use system. As described above, this zoning already significantly protects sage grouse habitat from most forms of disturbance from development that would require land use approval.

To assure that the past success Oregon has enjoyed in conserving rural lands is continued in a manner consistent with long-term conservation of Sage Grouse habitat and populations, Oregon (working with Oregon counties) would implement two new special rules.

3.3. Proposed Sage Grouse Ordinances or Rules for Project-Level Review

The first element of the framework is based on existing state mitigation policy. The purpose of this element is to guide new development activity and concentrated uses to locations that avoid or minimize disturbance to Sage Grouse habitat.

Local governments have the option of developing their own sage grouse ordinance(s) or relying on a state rule for review of new proposed uses. If a county opts to develop or use its own ordinance, the ordinance would be reviewed to assure that it meets minimum requirements. In the absence of a county program, state rules would apply. The framework also applies to new activities proposed by a state agency or requiring approval by a state agency.

This framework is planned to apply to all lands. It anticipates that the BLM will adopt similar prescriptions for BLM lands, and administer the framework in a cooperative manner with Oregon, much as the State of Wyoming has done, maintaining a coordinated system for monitoring and administration.

This framework follows the existing avoid, minimize, mitigate hierarchy in state mitigation policy, with adjustments that recognize the large spatial scale of Sage Grouse habitat. By incorporating this framework, Oregon will ensure consistent application of the same policy across all lands and all uses.

3.3.1. Avoidance

(1) Can the proposed development (including direct and indirect impacts of the development) occur in another location that avoids impacts to sage grouse habitat *altogether*? If so, the development must be located to avoid direct and indirect impacts to core and low density habitat, with emphasis on core areas in particular. In the context of avoidance, minimization and mitigation (see below), disturbance means the area of **direct** impact (the physical footprint of the development or activity), and the area of **indirect** impacts that are known to affect essential behavioral aspects of sage grouse life stages (breeding, foraging, shelter, and migration) as set forth in the supplemental ODFW sage grouse policy. For indirect impacts, this framework will include specific impact areas for the most common types of indirect impacts: noise and predation.⁴

In considering whether the development must be located within core or low density areas, the regulating entity may consider the following factors:

(a) Technical and engineering feasibility;

(b) The proposed development is locationally dependent. Development is locationally dependent if it must cross core area in order to achieve a reasonably direct route or to meet unique geographical needs that cannot be satisfied on other lands;

(c) Lack of available urban and nonresource lands;

(d) Availability of existing rights of way;

(e) Public health and safety; and

(f) Other requirements of state or federal agencies.

(2) Costs associated with any of the factors listed above may be considered, but cost alone may not be the only consideration in determining that development must be located such that it will have direct or indirect impacts on Sage Grouse habitat.

3.3.2. Minimization

If the proposed development cannot be located to avoid core or low density sage grouse habitat altogether (including direct and indirect impacts), it should be located to minimize the amount of such habitat directly or indirectly disturbed, *and* to minimize fragmentation of the core or low density area(s) in question by locating the development adjacent to existing development and at the edge of the core area when possible. Projects would be required to minimize impacts through micro-siting and the use of guidance on the timing and methods of construction. Costs associated with minimization may be considered, but cost alone may not be the only consideration in determining that location of development cannot further minimize direct or indirect impacts to Sage Grouse habitat.

3.3.3. Compensatory Mitigation

To the extent that proposed new development will have direct or indirect adverse impacts on Sage Grouse habitat after application of the avoidance and minimization framework, above, the development

⁴ For wind generation, the area of indirect impact is __ feet from each turbine. For transmission, the area of indirect impact is __ feet from the conductor(s) for every __ feet of height of the transmission towers. For aggregate operations, the area is __ feet from the edge of the permitted mining boundary. Etc.

(if permitted) must be conditioned to fully offset the direct and indirect adverse effects of the development to Sage Grouse habitat in a manner that is consistent with the supplemental Sage Grouse mitigation policy adopted by the Oregon Fish and Wildlife Commission.⁵

3.4. Landscape-Level Disturbance Thresholds

The framework in section 3.3., above, is designed to *minimize* the amount of future disturbance from anthropogenic sources to Sage Grouse habitat. Consistent with available science concerning the relation between human disturbance and sage grouse population levels, the following overall limits on direct disturbance in sage grouse habitat are also proposed to assure that even with disturbance levels minimized, the disturbance from new development does not exceed sustainable levels. Unlike the project-level siting elements described above, the disturbance thresholds are based on *direct* disturbance – the physical footprint of the use or activity. The difference stems from the science on disturbance levels and Sage Grouse populations, which considers indirect effects, but which also evaluates population effects based on direct disturbance.

The state and counties, in cooperation with BLM, will maintain a central registry, tracking disturbance from existing (baseline) and new development affecting Sage Grouse habitat. This will include clear, up-front, metrics for direct impacts counted as disturbance to Sage Grouse habitat. Those metrics likely will be set based on the supplemental ODFW Sage Grouse policy described below, in section 3.5. In addition, the registry will include baseline calculations of direct disturbance as of the date of the proposed listing of Sage Grouse, in 2010. BLM and the State will enter into a cooperative management agreement to administer the system.

All governmental entities responsible for permitting or carrying out new development (federal, state, and local) will report the proposal to the registry, and the responsible permitting entity will review the proposal to assure that disturbance within the area of each subpopulation of Sage Grouse remains below the thresholds described below.

3.4.1. Overall Limit on Disturbance for Each Subpopulation

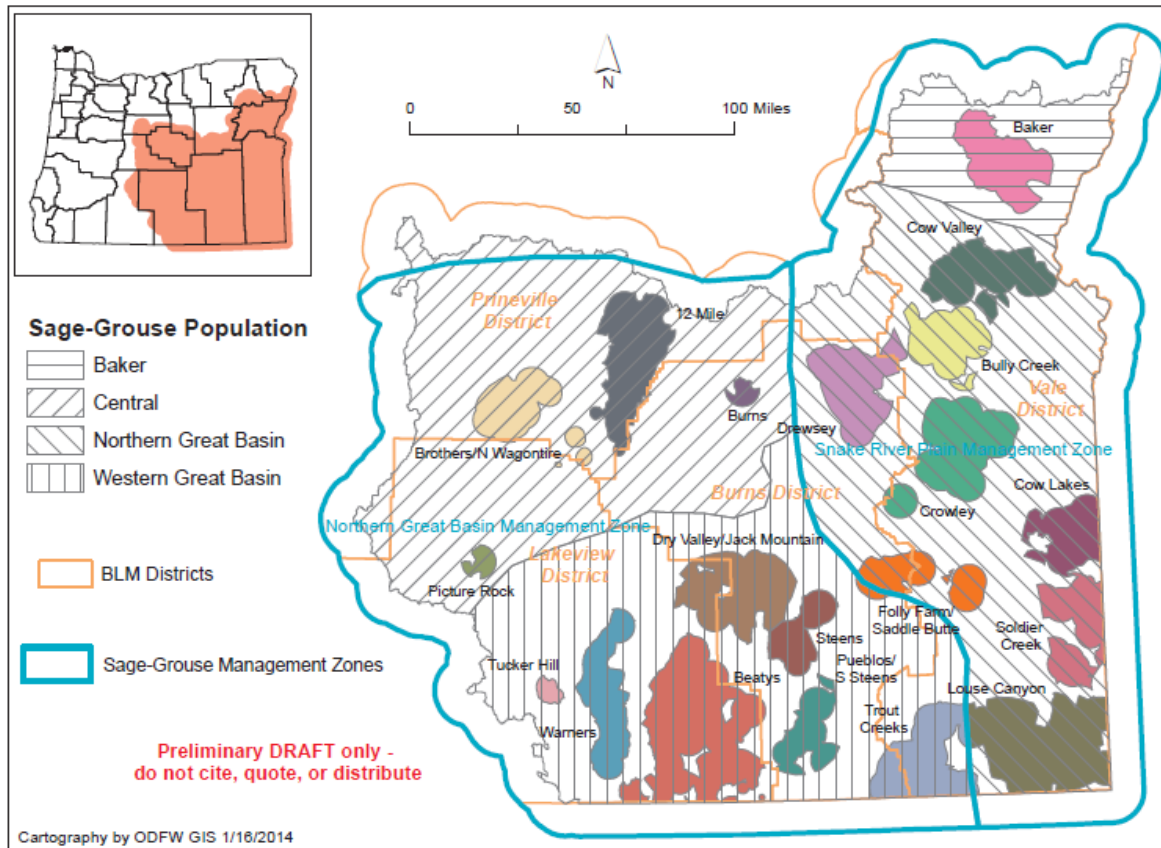
Anthropogenic disturbance within each of the core area groupings (Biologically Significant Units (BSUs)) shown in the following exhibit may not exceed __ percent, including existing baseline levels of disturbance.

Purpose: Conserve existing sage grouse populations.

Example: Level of existing anthropogenic disturbance within a BSU is X%. Limit is Y%. No more than Y-X % of additional BSU area may be disturbed by future development, on both federal and non-federal lands.

⁵ The details of compensatory mitigation crediting and debiting will be contained in the supplemental ODFW mitigation policy. The disturbance framework will cover siting decisions, while the ODFW policy will address compensatory mitigation.

Core Area Names, Populations, BLM Districts, and Management Zones



3.4.2. Limit on Increase in Disturbance Over Baseline

In addition to the overall limit on disturbance in 3.4.1. above, the proposed framework limits the *increase* in existing disturbance within each BSU to no more than X% above the 2010 baseline over the first two ten-year periods. After twenty years, the limit will be reevaluated and adjusted based on the then-current status of the species and habitat conditions.

Purpose: Conserve existing intact and relatively undisturbed habitat.

Example: Existing disturbance within a BSU is X%

- 100,000 acres of core sage grouse habitat in PAC
- Existing area of disturbance is 1,600 acres (1.6%)
- Allowable new disturbance (Z% of baseline) = ___ acres
- Increases potential total disturbance to ___% of core area.

3.4.3. Adjustments for Measures to Reduce Threats from Fire and Invasives

In order to best achieve net positive conservation for Sage Grouse, this framework proposes to incent positive work to address the threats of fire and invasive species, two of the main threats to the future viability of Sage Grouse in the Great Basin, including Oregon. In order to do so, the framework will allow an increase the disturbance limits where quantifiable and durable measures to address fire and/or invasives have been completed and outcomes achieved. These measures could include:

- Demonstrable likelihood of avoided loss of core area habitat to fire through:
 - Greenstripping
 - Improvements in resilience to fire through elimination of invasive annual grasses to X% of the measured area and restoration of suitable native plant habitat to X% of acreage.

- Achievement of restored functional habitat acres through:
 - Re-seeding with appropriate seed mixtures and successful re-establishment of appropriate native plant species composition and ratios;
 - Removal of juniper in priority areas based on a “Phase I,II, III” approach;
 - Invasive annual grass elimination and restoration of suitable habitat 70/30 ratio.
 - Restoration of suitable habitat 70/30 ratio (as measured from baseline that is below that) through improved livestock management

Due to uncertainties inherent in efforts to address fire and invasive species threats, this approach relies upon robust monitoring of whether such actions are effective in avoiding habitat losses due to fire, eliminating invasive species, and restoring suitable habitat. Demonstration of results attained on-the-ground would need to occur before the disturbance thresholds would be adjusted. This may include a combination of demonstrated efficacy in attaining improved habitat conditions or protections along with an improving trend in Sage Grouse population numbers within the core area grouping.

3.4.5 Periodic Review and Adaptive Management

The framework will be reviewed periodically to ensure that human disturbance does not threaten the viability of subpopulations of Sage Grouse in Oregon. For example, in 2025, an assessment of Sage Grouse population trends and habitat conditions would occur, with results compared to the baseline conditions in 2015. Adjustments to the framework would occur at that time as necessary.

3.5. Supplemental ODFW Sage Grouse Policy

The proposed framework described above will guide the location of new human activity, and would establish basic mitigation requirements where activity cannot be located to avoid Sage Grouse habitat. The proposed new, supplemental, mitigation policy for the Oregon Fish and Wildlife Commission will establish the mitigation “debit” and “credit” metrics for Sage Grouse, including a central system for tracking both. Also included in the policy will be clear metrics for how documented indirect impacts (disturbance) of new human activity will be counted, including: noise impacts, impacts from predators as a result of new human activity (perching on structures), and changes in vegetation.

Decisions concerning specific mitigation conditions for each activity would continue to be made by the particular responsible entity, but would be done in consultation with an interagency mitigation team

and would be reported to the central registry. In addition, the policy would allow mitigation to be focused on actions and in places that maximize its benefits – encouraging the formation of mitigation banks and similar mechanisms.

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