

Wyoming's Sage-Grouse Conservation Strategy



Executive Summary: Governor Mead signed the current state plan, the Sage-Grouse Core Area Protection Executive Order, in June 2011. The Wyoming Plan is based on the best available science, has legislative surety, involves ongoing engagement by stakeholders (includes procedure in place for updating state strategy) and addresses all primary threats identified by the U.S. Fish & Wildlife Service¹ in its 2010 listing decision.

The Wyoming Core Area Plan was developed on the basis of overlapping 5.3 mile radii on known leks (breeding grounds). This contains 40% more land than 4 mile radii used in other plans and is important because the habitats around leks are critical to development of grouse chicks. The State developed the [Density and Disturbance Calculation Tool](#) (DDCT)², a unique spatially based tool that calculates both the number of disruptive activities averaged per square mile (640 acres) and total surface disturbance within a proposed project area.

Overview: The State of Wyoming, along with federal agencies and other stakeholders, developed a statewide conservation strategy for the Greater Sage-grouse, which has now been incorporated into Executive Orders issued by two Wyoming Governors and resulted in the creation of a standing *Sage-grouse Implementation Team*. The overall approach of this strategy is to focus on directing development outside of Core Areas, which have been identified as having the highest conservation value to maintaining sustainable populations. In addition, the Core Area Strategy has provisions for incorporating additional data and adjusting management. By establishing this regulatory framework, the State of Wyoming has created more certainty about conservation and management; and, to date, results indicate that the approach is succeeding.

I. How the Wyoming Core Area Strategy was Developed

The State of Wyoming began aggressive management planning for Greater sage-grouse in 2000 with development of the first statewide conservation strategy (included the ongoing work of Local Working Groups), adopted by the Wyoming Game and Fish Commission in 2003. In 2007, in response to concerns of potential listing of Greater sage-grouse associated with declining population trends, then Wyoming Governor Dave Freudenthal launched an unprecedented effort to develop stronger policies for Greater sage-grouse that would protect the species and its habitat while sustaining the state's economy. Following a 2007 public forum, which included representatives of state and federal agencies, non-governmental organizations, and industries, a broad stakeholder group, the Sage-grouse Implementation Team (or "SGIT") was established. The SGIT was tasked with developing a regulatory mechanism for the protection and conservation of the sage-grouse within Wyoming. The SGIT first designated Core Areas based on grouse density mapping data (on leks – annual breeding grounds) and major energy development areas. Based on these data, SGIT identified 31 core populations (Core Areas), which cover approximately 24 percent of the surface land area and include approximately 82 percent of the grouse population in Wyoming.

¹ USFWS submitted a letter of support in June 2011, noting "If fully implemented, we believe the Executive Order can provide the conservation program necessary to achieve your goal of precluding listing of the Greater sage-grouse in Wyoming."

² The DDCT is used to ensure compliance with the 5% disturbance cap allowed on the 15 million acres (23.4% of the State) and is an important means to provide accountability and transparency to the process. The planning strategy emphasizes avoidance then minimization strategies. As a last resort, mitigation should be employed. The DDCT enables managers to emphasize development outside of Core first, followed by use of "unsuitable habitat", and requires mitigation for any projects allowed that must occur in suitable habitat.



Then Governor Freudenthal’s 2008 Executive Order for Greater sage-grouse (SGEO) provided a process for protecting sage-grouse within Core Areas. A revised SGEO was signed in 2011 by current Governor Mead, which further refined core area boundaries. The Core Area Strategy addresses the threats³ (habitat loss and fragmentation and insufficient regulatory mechanisms) specifically identified by the U.S. Fish and Wildlife Service in its 2010 decision that the Greater Sage-grouse warrants listing for protection under the Endangered Species Act. The Executive Order will remain in effect until August 18, 2015, at which time all provisions will be reevaluated.

II. Key Operating Principles

The primary focus of Wyoming’s efforts are 1) maintenance and restoration of suitable habitats within Core Areas, 2) maintenance of active breeding and nesting birds within Core Areas, 3) identification and conservation of other important habitat outside Core Areas, and 4) maintenance of potential for restoration and reclamation outside Core Areas.

The Wyoming Core Area Strategy includes protective stipulations for sage-grouse (limitations on development activities), based upon their biological needs and a GIS-based procedure⁴ for determining levels of anthropogenic (man-made) disturbance on the landscape within the Core Areas. These disturbances consist of roads, well pads, pipelines, mine pits, and other similar surface alterations. Per the SGEO, these disturbances are limited in Core Areas to minimize anthropogenic activities and disturbances within high density population areas. Habitats and populations outside Core Areas are monitored and managed for future rehabilitation.

Specifically, surface disturbances in Core Areas are not to exceed an average density of 1 per square mile (640 acres) across the disturbance analysis area defined in the SGEO. Total accumulation of surface area affected (both existing and proposed) within an analysis area is not to exceed 5 percent (this is known as the “disturbance cap”). In addition, surface disturbances are not permitted within 0.6 miles of any active/occupied sage-grouse lek. Wind energy development is not permitted in Core Areas. Outside of the Core Areas there is greater flexibility and less stringent application of conservation measures, thus providing incentives for development outside of Core Areas.

In recognition of the new transmission infrastructure to transport electricity generated in Wyoming to out-of-state load centers, transmission lines (115kV+) are prohibited in Core Areas except in through designated transmission corridors. Connectivity Areas have also been identified, to improve population connectivity to grouse in Montana and the Dakotas.

This Core Area Strategy established a precedent by establishing a transparent process for cooperation, proactive management and incorporating science. The SGIT continues to meet regularly, in a public forum, to develop and refine protocols and processes to use in implementing the SGEO within the core population areas. There is a mandatory review of the process, Core Area boundaries, and new information in 2015.

³ According to the State, 6 primary issues are identified as “actionable” items that should be addressed in the conservation strategy for Wyoming (in no particular order): 1) wildfire and invasive species, 2) energy and mineral development, 3) rural residential development, 4) improper grazing by wildlife, livestock, and feral horse, 5) West Nile virus, and 6) direct loss of sage-grouse due to excessive predation.

⁴ The primary focus of the Density Disturbance Calculation Tool (DDCT) is on protection of suitable habitats and protection from habitat fragmentation. The DDCT is an online analysis tool used to direct actions toward the least suitable habitat and to aggregate disturbances outside key habitats. <https://ddct.wygisc.org/home.aspx>

III. Indicators of Success

The SGIT has adopted a two-pronged analysis approach to determine if the State has been successful in ameliorating or abating potential threats to grouse and their habitats. This consists of 1) a general review of threat abatement measures, and 2) a specific review of individual activities, with a focus on actions undertaken to eliminate potential threats. This evaluation, consistent with guidance from the U.S. Fish and Wildlife Service's Conservation Objectives Team and with the evaluation methods applied to make a listing determination under the Endangered Species Act, was begun in mid-2013 and is ongoing.

Providing Regulatory Certainty

In Wyoming, state agencies are bound by the Executive Order of the Governor. Federal partners, including the Bureau of Land Management, have adopted regulatory mechanisms that are similar in many ways to the State's management plan. While the Wyoming Game and Fish Department does not hold authority to approve or decline development permits, consultation is required and other state and federal agencies have consistently applied stipulations and restrictions that address grouse conservation. In 2012 (per State's cursory analysis), WGFD review 244 potential permits, with 143 (59%) designed initially to be compliant with Wyoming restrictions.

Threat Abatement

While the threats have been addressed, energy development is the most visible and prominent threat. Wind development is not allowed in Core Area and high voltage transmission lines are geographically restricted. Oil and gas development continues in Wyoming, but increasingly outside of Core Areas. Between 2006⁵ and 2012, vertically-drilled single well permits declined statewide from 1272 to 446 – a potential disturbance reduction of 65%. At the same time, direction drilling, which allows multiple wells from a single disturbance area, increased by 66% (595 to 986 wells) across the state. Horizontal drilling permits, also allowing multiple wells from a single location, increased more than tenfold (1337%) from 65 applications to 869.

IV. Important Dates for the Implementation of Core Areas/Support from USFWS



- April 17th, 2008 - The Office of the Governor requested that the U.S. Fish and Wildlife Service review the "Core Population Area" strategy to determine if it was a "sound policy that should be moved forward".
- May 7th, 2008 – The U.S. Fish and Wildlife Service responded that the "core population area strategy, as outlined in the Implementation Team's correspondence to the Governor, is a sound framework for a policy by which to conserve greater sage-grouse in Wyoming".
- November 10th, 2010 – The U.S. Fish and Wildlife Service again confirmed that "This long term, science-based vision for the conservation of greater sage-grouse has set the stage for similar conservation efforts across the species range," and that "the Core Population Area Strategy for the greater sage-grouse provides an excellent model for meaningful conservation of sage-grouse if fully supported and implemented".

V. For more information:

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⁵ the year prior to development of the Wyoming Core Area Strategy