

Sage-Grouse Research Collaborative

FACT SHEET



Background

The Sage-Grouse Research Collaborative (Collaborative) was formed under the National Wind Coordinating Collaborative Wildlife Workgroup’s Grassland and Shrub Steppe Species Subgroup (GS3). The Collaborative is overseen by an Oversight Committee with representatives from academia, state and federal agencies, conservation organizations, and wind developers.

Overview

The NWCC Sage-Grouse Research Collaborative was formed to coordinate studies examining the potential impacts of wind energy development on sage-grouse across their range with the goal of informing wind development and sage-grouse management strategies. Through a competitive process, the Collaborative has selected three research projects to support with funds raised from federal, state, and industry sources. The Collaborative will oversee the individual research studies and a combined analysis of data from all three studies

to develop a more comprehensive understanding of the impacts of wind power on sage-grouse across their range. The ultimate goal of the Collaborative’s efforts in sponsoring studies and a combined analysis is to inform wind power development and sage-grouse management strategies.

Funded Research Projects

The projects were selected through a competitive process, with proposals submitted in response to the Request for Proposals, “[Protocols for Assessing Impacts of Wind Energy Development on Greater Sage-Grouse](#).” The Collaborative used the following four criteria to select the three research projects: research approach, confirmation of a partnership with a developer of a qualified study site, strong credibility of the research team, and project cost. It should be noted that funding of research projects tied to wind energy projects does not imply any position on the proposed projects by the Collaborative or the researchers involved.

Oversight Committee

Zachary Bowen
U.S. Geological Survey

Christina Calabrese
Horizon Wind Energy

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Invenergy

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Wyoming Outdoor Council

Rich Rayhill
Ridgeline Energy

Brian Rutledge
Audubon Wyoming

Jim Sedinger
University of Nevada

Robin Sell
BLM Colorado State Office

Karin Sinclair
NREL (Technical Monitor)

The funded research projects include:

“Response of Greater Sage-Grouse to wind power development,” led by David Musil, Senior Wildlife Research Biologist, Idaho Department of Fish and Game.

This before-after-control-impact (BACI) study will center around RES Americas’ proposed China Mountain Wind Project located on private, state, and federal land in Twin Falls County, Idaho, and Elko County, Nevada. The main objectives of this study are to determine the effects of wind farm development (pre-, during, and post-construction) on sage-grouse vital rates (including survival, production, and growth rates); seasonal movement patterns and habitat use; and nest and brood survival, location patterns, and habitat use.



“Ecology of male Greater Sage-Grouse in relation to wind energy development in Wyoming,”

led by Joshua Millspaugh, School of Natural Resources, Department of Fisheries and Wildlife Sciences, University of Missouri. This BACI study will center around Power Company of Wyoming LLC’s proposed Chokecherry and Sierra Madre Wind Energy Project, to be located south of Rawlins, Wyoming. The objectives of this study are to 1) investigate and quantify construction and operational effects of wind energy development to male sage-grouse through study of survival, movements, and habitat use, 2) develop models that account for movements between leks by male sage-grouse and that predict the detectability of sage-grouse on leks to improve estimates of population, and 3) combine pre-, during, and post-

construction data to assess population dynamics and potential impacts to sage-grouse. This project complements similar studies already under way at the site with female sage-grouse using the Collaborative’s approved research protocols.

“A study of the impacts of a wind energy development on Greater Sage-Grouse populations in southeastern Wyoming,”

led by Matt Holloran, Senior Ecologist, Wyoming Wildlife Consultants LLC. This controlled post-construction study centers around the PacifiCorp Seven Mile Hill wind project located near Medicine Bow, Wyoming. The main goal of this study is to establish the short-term effects of a wind energy development on Greater Sage-Grouse seasonal habitat selection and demography.

In addition to conducting their individual studies, the researchers have committed to partnering on their data collection efforts to ensure that all data collected through these studies can be combined and used to inform an overarching analysis on the effects of wind energy development on sage-grouse.

Research Funding and Fundraising Goals

For 2011, the Collaborative has awarded a total of \$715,537 in funding to the three research projects. The Collaborative is committed to raising additional funds to support these multi-year research projects in future years. The funds being distributed for research in 2011 will be administered by the U.S. Department of Energy National Renewable Energy Laboratory (NREL), the Western Association of Fish and Wildlife Agencies (WAFWA), and the National Fish and Wildlife Foundation (NFWF).

The research teams have also raised funds to support the research from: the Agricultural Experiment Station and Wyoming Reclamation and Restoration Center at the University of Wyoming,

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Bates Hole/Shirley Basin Local Sage-grouse Working Group, enXco (an EDF Energies Nouvelles Company), Iberdrola Renewables, Idaho Department of Fish and Game, Nevada Department of Wildlife, PacificCorp, Power Company of Wyoming LLC, RES Americas, University of Missouri, U.S. Forest Service Rocky Mountain Research Station, and Wyoming Game and Fish Department.



Wind energy is a clean, affordable, and reliable domestic energy source that results in much-needed job creation and a reduction in our nation's greenhouse gas emissions.

The research teams will build on existing sage-grouse research conducted at the research sites. This research has benefited from the support of the Bates Hole/Shirley Basin Local Sage-grouse Working Group, Horizon Wind Energy, Iberdrola Renewables, Idaho Department of Fish and Game, Pathfinder Renewable Wind Energy, Power Company of Wyoming LLC, RES Americas, School of Energy Resources at the University of Wyoming, and U.S. Department of Energy.

Since its inception, the Collaborative has raised \$1,001,000 in funds from NREL, the U.S. Bureau of Land Management, and grant funds from the U.S. Fish & Wildlife Service (USFWS). However, because each research project will cost approximately \$250,000 per year and last up to 10 years, the Collaborative is currently working to identify as many potential funding sources as possible within all relevant sectors.

Collaborative Funding

Horizon Wind Energy provided seed funding to convene the Collaborative. Additional funding for facilitation support has been provided by Iberdrola Renewables, Oregon Department of Fish and Wildlife, Power Company of Wyoming LLC, RES Americas, Ridgeline Energy LLC, Utah Division of Wildlife Resources, and Wyoming Game and Fish Department. Current facilitation funding support is provided by the U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy.

Need

Wind energy is a clean, affordable, and reliable domestic energy source that results in much-needed job creation and a reduction in our nation's greenhouse gas emissions, yet many of the western states that have some of the greatest

wind resource potential also have sage-grouse populations. The USFWS designation of Greater Sage-Grouse as a Candidate Species under the Endangered Species Act coupled with the current lack of data regarding potential impacts from wind energy to sage-grouse has stalled new wind energy development in portions of these states.

The Collaborative recognizes the need for immediate and high-quality data collection to determine the potential impacts of wind energy development on the species. Research results will fill a current data gap, providing the information needed to help advance and guide wind energy development and inform protection and management of sage-grouse.

Contacts

Please contact facilitators **Lauren Flinn**, lflinn@resolv.org, or **Abby Arnold**, aarnold@kearnswest.com, for more information about the Sage-Grouse Research Collaborative or to donate funds.