

NWCC Sage-Grouse Research Collaborative Awards \$533,500 in Funding for Research in 2012

WASHINGTON, DC – After a successful year of research at three sites to examine the potential impacts of wind energy development on sage-grouse, the National Wind Coordinating Collaborative (NWCC) Sage-Grouse Research Collaborative has awarded a total of \$533,500 to continue the research in 2012. These funds will support continuing research for the following two projects:

- "Ecology of male Greater Sage-Grouse in relation to wind energy development in Wyoming," led by Dr. Joshua Millspaugh, professor of wildlife conservation at the University of Missouri; and
- "A study of the impacts of a wind energy development on Greater Sage-Grouse populations in southeastern Wyoming," led by Dr. Matt Holloran, Wyoming Wildlife Consultants LLC.

Both teams will continue research in 2012, and the Collaborative will continue to oversee these studies through regular check-ins and reports from the research teams. The Collaborative is also planning for a combined analysis of data from all studies to develop a more comprehensive understanding of the potential 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.

Project Update

"Power Company of Wyoming LLC proposes to construct and operate the Chokecherry and Sierra Madre Wind Energy Project on the Overland Trail Ranch south of Rawlins, Wyoming," said Dr. Joshua Millspaugh, lead researcher for the project and professor of wildlife conservation at the University of Missouri. "Our objectives are to investigate and quantify construction and operational effects of wind energy development on male sage-grouse through study of survival, movements, habitat use, lek dynamics, and sightability on the site, using a Before-After Control-Impact design."

As of the end of 2011, Dr. Millspaugh's team had deployed 110 very high frequency (VHF) transmitters and 20 Global Positioning System (GPS) Platform Transmitter Terminal (PTT) transmitters on 36 adult/yearling male sage-grouse on the Overland Trail Ranch. The team had also completed lek counts on 48 leks and completed sightability surveys on occupied leks to estimate the probability of detecting males on leks and to determine factors affecting sightability. This long-term study will include 2-4 years total of pre-construction study and 5 or more years of post-construction research.

"We are studying greater sage-grouse inhabiting areas near the PacifiCorp Seven Mile Hill wind project located approximately 15 km west of Medicine Bow, WY," said Dr. Matt Holloran, lead researcher and senior ecologist at Wyoming Wildlife Consultants LLC. "Research was initiated in April 2009, and the NWCC joined the effort in 2011. We expect to continue research through at least the 2013 breeding season."

Dr. Holloran's team is tracking female greater sage-grouse equipped with VHF radio-transmitters to document seasonal habitats (e.g., nesting, brood-rearing, summer, winter) and population demographics (e.g., survival, nesting success, chick productivity). In 2011, the team equipped 100 female greater sage-grouse with radio-transmitters. In addition to radio-tracking greater sage-grouse, they collected vegetation data at 181 use and random plots and conducted avian predator (e.g., *Corvidae* and raptors) nest and point count surveys throughout the study area. "We will compare greater sage-grouse using habitats near wind turbines to grouse using habitats away from wind turbines to assess population-level effects of the wind energy development. Vegetation and avian predator data will be used to generate covariates for inclusion in wind energy development impact modeling," said Dr. Holloran.

In 2011, the Collaborative also supported the project, "Response of Greater Sage-Grouse to wind power development," led by David Musil, Idaho Department of Fish and Game, and centered around the proposed China Mountain wind project. Because the Bureau of Land Management has delayed its final decision on the proposed project for two to three years, the Collaborative decided not to continue funding this research for the time being. Using funds already provided by the Collaborative, the research team will continue scaled-back research (with a focus on survival data, nesting, and broods) until August 2012.

Funding Sage-Grouse Research

The Collaborative is committed to raising additional funds to support these multi-year research projects in future years, and funding awards will be made on an annual basis. To date, the Collaborative has raised over \$1.5 million in funds to support the research from the U.S. Bureau of Land Management (BLM), the U.S. Department of Energy National Renewable Energy Laboratory (NREL), and grant funds from the U.S. Fish & Wildlife Service (USFWS). These funds are administered by NREL, the National Fish and Wildlife Foundation (NFWF), and the Western Association of Fish and Wildlife Agencies (WAFWA).

The research teams have also received research-supporting funds from: the Agricultural Experiment Station and Wyoming Reclamation and Restoration Center at the University of Wyoming, 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, PacifiCorp, Power Company of Wyoming LLC, RES Americas, South Central Local Sage-grouse Working Group, University of Missouri, U.S. Forest Service Rocky Mountain Research Station, and Wyoming Game and Fish Department.

The research teams will build on existing sage-grouse research conducted at the research sites, which has benefited from the support of the Bates Hole/Shirley Basin Local Sage-grouse Working Group, EDP Renewables, Iberdrola Renewables, Idaho Department of Fish and Game, Pathfinder Renewable Wind

Energy, Power Company of Wyoming LLC, The Overland Trail Cattle Company LLC, RES Americas, School of Energy Resources at the University of Wyoming, and U.S. Department of Energy.

Background on the Sage-Grouse Research Collaborative

The SGC was formed in 2010 under the NWCC's Wildlife Workgroup's Grassland and Shrub Steppe Species Subgroup to conduct research on potential wind energy impacts to sage-grouse. The SGC is working in coordination with the Western Association of Fish and Wildlife Agencies. For complete information on the SGC, please visit <u>http://www.nationalwind.org/sagegrouse.aspx</u>.

EDP Renewables 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 through NREL and by the American Wind Wildlife Institute.

Background on the NWCC

The National Wind Coordinating Collaborative provides a neutral forum so a wide range of stakeholders can pursue the shared objective of developing environmentally, economically, and politically sustainable commercial markets for wind power in the United States. The Grassland and Shrub Steppe Species subgroup of the NWCC's Wildlife Workgroup brings together representatives from state and federal agencies, private industry, academic institutions and nongovernmental organizations in a collaborative effort to identify critical research questions; secure and administer cooperative funding to conduct research; encourage peer-reviewed collaborative research; and identify both potential impacts and mitigation strategies to address any impacts. More information on the National Wind Coordinating Collaborative is available at http://www.nationalwind.org.

Disclaimer

Collaborative funding of research projects tied to proposed wind energy projects does not imply any position on the proposed projects by the Collaborative or the researchers involved.