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Sage-Grouse Restoration Project: Evaluating the Effects of the Farm Bill Conservation Practices on Sage-Grouse

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Abstract: The Office of Management and Budget is demanding increased accountability of funds used to implement conservation practices and strategies. Although current Farm Bill policy provides priority funding for projects that are designed to enhance species conservation, it does not allocate funds to conduct the evaluations needed to document the effect of conservation practices on wildlife. The Sage-Grouse Restoration Project (SGRP) is a cooperative agreement with the Natural Resource Conservation Service (NRCS), designed specifically to facilitate evaluations to determine the effect of conservation practices and technologies implemented under the 2002 Farm Bill on restoring or enhancing sage-grouse habitat on private lands. Information gained through SGRP projects will be used to assist private landowners, NRCS, Soil Conservation Districts, and state wildlife agency field staff in planning and implementing habitat projects and practices on private lands to benefit wildlife species dependent upon sagebrush-steppe. Completion of the projects will result in the development of the SGRP Library, which will provide conservation planners with information regarding the effects of integrating 2002 Farm Bill conservation practices on wildlife, agricultural productivity, and natural resource conservation.

Key Words: *Centrocercus* spp., conservation, Farm Bill, funding assistance, grants-in-aid, Natural Resource Conservation Service, sagebrush-steppe, sage-grouse, Sage-Grouse Restoration Project

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Sage-grouse (*Centrocercus* spp.) are restricted to the sagebrush rangelands of western North America. Sage-grouse once inhabited 15 states and three Canadian provinces (Connelly et al. 2004). Currently, populations exist in only 10 states and one province. There are two species of sage-grouse. All birds located north and west of the Colorado River are known as greater sage-grouse (*C. urophasianus*; Connelly et al. 2004). A newly-described species, the Gunnison sage-grouse (*C. minimus*), is found only south and east of the Colorado River in Utah and Colorado (Connelly et al. 2004). The scientific literature clearly indicates that sage-grouse are dependent upon large expanses of sagebrush. However, more information is needed regarding the appropriate sagebrush-steppe patch sizes that are needed to provide for seasonal habitat requirements (Connelly et al. 2004).

In 1999, the Western Association of Fish and Wildlife Agencies (WAFWA) in a memorandum of understanding among its members regarding sage-grouse conservation, recognized a need to conduct experiments of sufficient scale that demonstrate how habitats can be managed to stabilize and enhance sage-grouse distribution and abundance (WAFWA 1999). Approximately 30% of the sagebrush lands in the western United States are privately owned. The greatest percent of privately-owned sagebrush lands occurs in Montana, Colorado, Washington, and South Dakota (Connelly et al. 2004). Because of private landowners' ability to access Farm Bill funds to develop and implement conservation projects, privately-owned lands may provide the greatest opportunity to implement landscape level experiments called for by WAFWA.

Addressing Management Information Needs

The Sage-Grouse Restoration Project (SGRP) was established specifically to provide funds for the design and implementation of research and demonstration projects that evaluate and communicate the effectiveness of 2002 Farm Bill conservation practices and technologies in restoring or enhancing sage-grouse habitat on private lands. It is a cooperative effort involving private landowners, universities, and conservation agencies and organizations, in a process to identify, integrate, evaluate, and document the effects of 2002 Farm Bill conservation practices in restoring sagebrush-steppe ecosystems to benefit sage-grouse and other sagebrush obligates. Partners in this venture include: U.S. Department of Agriculture

(USDA), Natural Resources Conservation Service (NRCS), Utah State University (USU), USU College of Natural Resources, USU Extension Services, Jack H. Berryman Institute, Western Governors' Association, WAFWA, Western States Sage and Columbian Sharp-tailed Grouse Technical Committee, North American Grouse Partnership, and Utah Division of Wildlife Resources (UDWR). NRCS has the lead role in establishing and overseeing the SGRP and coordinates with USU to implement the Project.

Goals of the SGRP include:

1. To implement and conduct multi-state management experiments of sufficient scale to demonstrate how conservation provisions of the 2002 Farm Bill can benefit sagebrush-steppe obligate species.
2. To develop a multi-state grants-in-aid program to assist researchers and landowners in integrating and evaluating the effects of conservation provisions of the 2002 Farm Bill on sagebrush-steppe obligate species.
3. To develop a web-based Project Library that documents the effects of conservation provisions of the 2002 Farm Bill on sagebrush-steppe obligate species.

Information gained through SGRP projects will be used to assist NRCS, Soil Conservation Districts (SCD), and state wildlife agency field staff, as well as private landowners, in the planning and implementation of habitat projects and practices on private lands to benefit wildlife species dependent upon sagebrush-steppe. The projects implemented also will contribute to range-wide sage-grouse conservation efforts. The evaluation of current working lands technology and proposed technology development is important to NRCS and state wildlife agency field staffs. Therefore, each project must provide letters of endorsement from the NRCS state conservationist(s) and the state wildlife agency director(s) associated with the study site(s).

Process

All SGRP grants will be awarded on the federal fiscal year in 1-year increments. Multi-year (up to 3 years) grants will be considered for funding but will be awarded in annual increments, pending availability of funds. All grants are cost-reimbursable for up to 75% of the award amount; the final 25% of the grant will be reimbursed when all products (e.g., reports, products, etc.) are submitted.

Products

Each funded project will be required to submit the following products:

1. Annual and final reports
2. Photos of practices, resource management systems, research activities, etc.
3. A photo-ready 2- to 4-page wildlife technical note describing project outcomes for use by NRCS and partners
4. A PowerPoint presentation describing project objectives, implementation, and outcomes for use in NRCS training
5. Copies of publications, theses, dissertations, manuals, handbooks, technical notes or popular articles that arise from project
6. During the duration of the project grant recipients must host at least one field tour, on-farm demonstration day, or on-site training course for landowners, natural resource management professionals, and/or NRCS field personnel. These must be documented with date, photos of participants, and summary of number of participants, affiliations, and agenda.

Project Library

Completion of the projects will result in the development of the Project Library, which will provide visitors with visual information regarding the effects of integrating 2002 Farm Bill conservation practices on wildlife, agricultural productivity, and natural resource conservation (e.g., soil and water). The Project Library contains case histories or chapters regarding evaluations conducted through habitat or range improvement projects completed under conservation provisions of the 2002 Farm Bill. Each case study

chapter contains the actual project proposal that was submitted to obtain funding, includes the costs of completing the project, and any NEPA or archeological surveys that may have been required. The library contains actual video footage and photographs of the treatments as they are being conducted and of the project sites before and after treatment. These footage and photographs are matched up with data on vegetation, sage-grouse, and other wildlife responses to the treatments.

Visitors to the site will be able to follow each project from planning and implementation through completion. This information will allow NRCS, SCD, state wildlife agency biologists, farmers, and ranchers to optimize the benefits of conservation planning.

Project Proposals

In 2005, we received 7 proposals, from California, Colorado, and Utah. Of these, 3 proposals were selected to receive a total of \$200,000 in funding. The proposals selected for funding were:

1. "Grazing Sagebrush with Sheep to Enhance Greater Sage-Grouse Brood-Rearing Habitat." This project will be conducted by Utah State University on Parker Mountain in Garfield, Sevier, Piute and Wayne counties of Utah to determine if sheep grazing can be used to enhance sagebrush habitat for greater sage-grouse and other sagebrush obligate species while maintaining animal performance.
2. "Development of a Sagebrush Habitat Improvement Guide for the Gunnison Sage-Grouse by Evaluating Recently and Historically Treated Areas within the Gunnison Basin." This project will be conducted by Colorado State University at numerous locations within the Gunnison Basin of western Colorado. This work will evaluate the habitat conditions within recently- and historically-treated sagebrush areas in the Gunnison Basin, and it will relate those findings to the habitat requirements of sage-grouse as outlined in the Gunnison Sage-Grouse Rangewide Conservation Plan.
3. "Greater Sage-grouse Use of Restored Sagebrush Areas in Rich County Utah." This project will be conducted by the UDWR in Rich County in northeastern Utah. The UDWR will evaluate methods to assess habitat use by greater sage-grouse in areas where sagebrush cover has been treated to benefit the species.

Anticipated Project Benefits

The SGRP will result in the development of a "living landscape library" that will provide farmers and ranchers with visual information and real time data regarding the role NRCS conservation practices in increasing their productivity and natural resource conservation. This information will allow them optimize the benefits of conservation planning.

The SGRP will benefit NRCS field staff by providing current information on the role of existing conservation practices and technologies relative to conserving sage-grouse and other sagebrush obligate species. In addition, SGRP will result in new technology that will assist NRCS field staff and other partners in their conservation planning efforts.

Lastly, the SGRP will identify private lands conservation planning needs to a much wider research audience. This ultimately will increase the awareness and involvement of the best researchers in the field to address field level technology needs. Additionally, the agency partners, private landowners, graduate students, and undergraduate technicians involved in these research efforts will develop a new appreciation for conservation planning and evaluation. The students involved in the SGRP are a source of future NRCS employees that will already have experience in conservation planning.

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