

## **WAFWA/FWS Greater Sage-Grouse Collaboration Effort**

Fish and Wildlife Service (FWS) Region 6 is sponsoring a collaboration with the Western Association of Fish and Wildlife Agencies (WAFWA) designed to facilitate Greater sage-grouse conservation range-wide in cooperation with our resource management partners.

FWS and WAFWA have successfully entered into an agreement to develop an integrated effort to:

1. Identify, organize and compile appropriate existing data, (including spatial planning data) regarding Greater Sage-grouse and their habitat;
2. Identify high priority short-term research needs for Greater Sage-grouse; and,
3. Integrate with an FWS-sponsored effort to forecast future habitat conditions for Greater Sage-grouse.

It is at least one measure of good government that efforts are made to avoid duplication of effort and financial expenditures among local, state and federal agencies. This effort serves just such a purpose by providing a pathway to review and access the extensive research, planning, and modeling efforts undertaken throughout the range of Greater Sage-grouse. As such, this effort will facilitate coordinated and effective resource stewardship across the range of the species.

The collaboration will locate, catalog, and provide a unified point of access for sage-grouse data to those developing Greater Sage-grouse conservation strategies. The specific outcomes of this multi-year effort will include: 1) a synthetic digital clearinghouse for sage-grouse population and sagebrush ecosystem data; 2) an applied analysis of future habitat condition and population vectors useful to guide conservation planning at multiple temporal and spatial scales; and 3) decision support tools to assist management agency partners to make science-informed decisions about allocating resources for grouse conservation.

We expect this collaboration will support the coordinated accumulation, interrogation, management and application of ecological data to underwrite all phases of scientific knowledge as applied to the conservation of Greater Sage-grouse.

### **1. Coordinated Conservation under Current Conditions**

FWS and WAFWA will work with the four Landscape Conservation Cooperatives (LCCs) that overlap the range of the Greater Sage-grouse to develop an effective, facilitated data compilation and sharing effort, to ensure consistent use of spatial data and analysis tools, coordinate science projects and be the focal point for sage-grouse and sagebrush connectivity discussions, analyses and tool development. Cooperative efforts among the four LCCs (Figure 1) can serve to accumulate and synthesize much of the extant and novel data necessary for the successful long-term conservation of Greater Sage-grouse. This process will provide data and planning tools as the basis for Greater Sage-grouse assessment and conservation planning that extends into the future.

This phase of the collaboration effort will initially accumulate, summarize and serve as a central access point for those sage-grouse management and science activities that are already underway by entities engaged in sage-grouse conservation. Initially, we propose to develop a process to identify, assess and compile the relevant information/data sources, and key questions/data gaps

regarding sage-grouse management (both habitat and population metrics) and identified science needs described by sage-grouse management teams. The data portal *LC MAP* will be vital to integrating such efforts across LCCs, across state lines, and national boundaries.

## 2. Conservation Science Facilitated by a Coordinated LCC Effort

The 4 LCCs that overlap Greater Sage-grouse distribution are a partner driven landscape level conservation platform that can effectively engage all those interested in designing conservation actions for sage-grouse for 2015 and beyond. The LCCs provide a platform to discuss the information needs and challenges of resource conservation in the LCC area. LCCs provide a useful forum to exchange information and discuss information needs that can be expertly and efficiently prioritized on a regional basis. Therefore, the 4 LCCs within the range of the Greater Sage-grouse will be represented in an expert group convened under the auspices of the WAFWA/FWS collaborative to facilitate identification and access to relevant existing information and assist in the prioritization of new short-term research.

## 3. Decision Support Tools to Manage Greater Sage-Grouse

The collaboration will also engage with BLM RMP, Forest Service LRMP, and state planning efforts on an ongoing basis to provide a platform for partner engagement and ensure continuity among planning units/efforts across the broader landscape. Additionally, integration with the mutually agreed upon data and spatial planning efforts will ensure the efforts of NRCS and their private partners will be included into the sage-grouse population/habitat matrix. In summary, the collaboration will act as a centralized information clearinghouse for both status and condition assessments for the species, as well as provide a consistent “situational analysis” of ongoing and planned management actions leading to coordinated conservation at scales biologically relevant to sage-grouse. This effort would build upon the assessments and recommendations of the Local Sage-Grouse Working Groups and other information incorporated into SageMap. Collaboration and coordination will network these scattered data and provide an open and consistent platform for access to enable research, modeling, and risk assessment efforts. Furthermore, having such tools and a repository of information will allow the LCCs to foster and prioritize efforts to implement sage-grouse conservation and management at the local, landscape and range-wide level.

## 4. Greater Sage-Grouse and Climate Change – Evaluation of Changed Conditions and Forecasting the Future

An important corollary to the WAFWA/FWS effort is to assess and plan for the effects of climate change on Greater Sage-grouse and their habitats. The FWS is supporting an effort to provide information needed to inform the decision-making and planning processes regarding sage-grouse habitat under changing climate conditions.

Conceptually, sage-grouse habitat currently exists along a continuum from poor and declining habitat to viable habitat. The entire continuum is challenged by anthropomorphic degradation and fragmentation, resulting in a few highly functional habitat areas. This continuum of sagebrush habitat is further challenged by a changing climate that may skew the distribution of the habitat

integrity towards occupied habitat areas in the poor and marginal category. A successful conservation strategy for sage-grouse will require information regarding the most relevant habitat parameters to inform efforts to maintain or enhance current and future habitats and inform efforts to defer and redesign human development proposals.

To address this need for consolidated climate and ecological information, the FWS will work in collaboration with NOAA, USGS, the North-Central Climate Science Center, the University of Wyoming and our other climate science partners to help identify and develop the best available science to support planning for sage-grouse and habitat into the future. This effort will consider multiple lines of evidence, such as trends in anthropomorphic use and development, different climate model projections, (e.g. multiple GCMs, statistical and dynamic downscaling), and potential shifts in vegetation assemblages/net primary productivity as a result of climate change.

### Organizing and Managing the WAFWA/FWS Collaboration

Our initial task will be to convene a WAFWA/FWS Oversight Committee. The charge of this committee will be to assemble and begin work on our first two goals:

1. Identify, organize and compile appropriate existing data, (including spatial planning data) regarding Greater Sage-grouse and their habitat, and;
2. Identify high priority short-term research needs for Greater Sage-grouse.

We envision a committee of fewer than 25 agency managers and researchers, knowledgeable about the state of knowledge of Greater Sage-grouse and their habitats. Representatives of federal wildlife and land management agencies, state wildlife agencies, USGS and universities will be asked to participate in the committee. Further, there will be one representative from each of the LCCs that overlap the range of Greater Sage-grouse. Finally, the collaborative will retain the services of a Collaboration Coordinator who will manage the data identification, compilation and organization effort and facilitate research projects. This coordinator will serve as a contractor to WAFWA. WAFWA and FWS and their partners have already begun to assemble a spreadsheet summarizing current research projects and existing, but unfunded research needs.

We understand and acknowledge the tremendous demands on the Greater Sage-grouse conservation community and that all are working nights and weekends to provide information and insight into conservation planning for Greater Sage-grouse. We have designed this committee to work via conference calls and webinars. We expect approximately 3 electronic meetings over the next few months.

- The first meeting would be to gather and review the charge of the team, review the already existing spreadsheet of sage-grouse research projects and information needs for completeness.
- A second meeting will be held to finalize the identification and locations of existing data that could be made available through LC MAP, and prioritize a list of short-term research needs that could be considered for funding support and the design of the resulting RFP.

- A third meeting would review proposals submitted in response to the RFP and provide recommendations of funding of the best proposals.

We anticipate inviting the appropriate committee members and holding our first meeting during the first quarter of 2013. Our goal is to release the RFPs to the 4 LCC and sage-grouse states to fund data gathering and compilation and to address priority research needs within 45 days of the first committee meeting and notify successful submissions within another 45 days. We would like to encourage the 4 LCCs to identify their best-positioned role in conducting research and working with partners to discover, acquire and expose data to LC MAP. Ideally, LCC submissions in response to the RFP would be complementary to their respectively identified science priorities. Also, we believe that the LCCs are ideally suited to identify the most appropriate entities and/or research institutions to efficiently fulfill the identified priorities for research and data acquisition.

The climate futures analysis will be managed by a team of regional climate, wildlife and ecological experts. As results from this analysis are made available, the FWS will ensure that resultant data and/or findings are made available through LCMAP in order that they are available for integration with extant data, so as to support decision making of management partners at desired spatial and temporal resolutions.

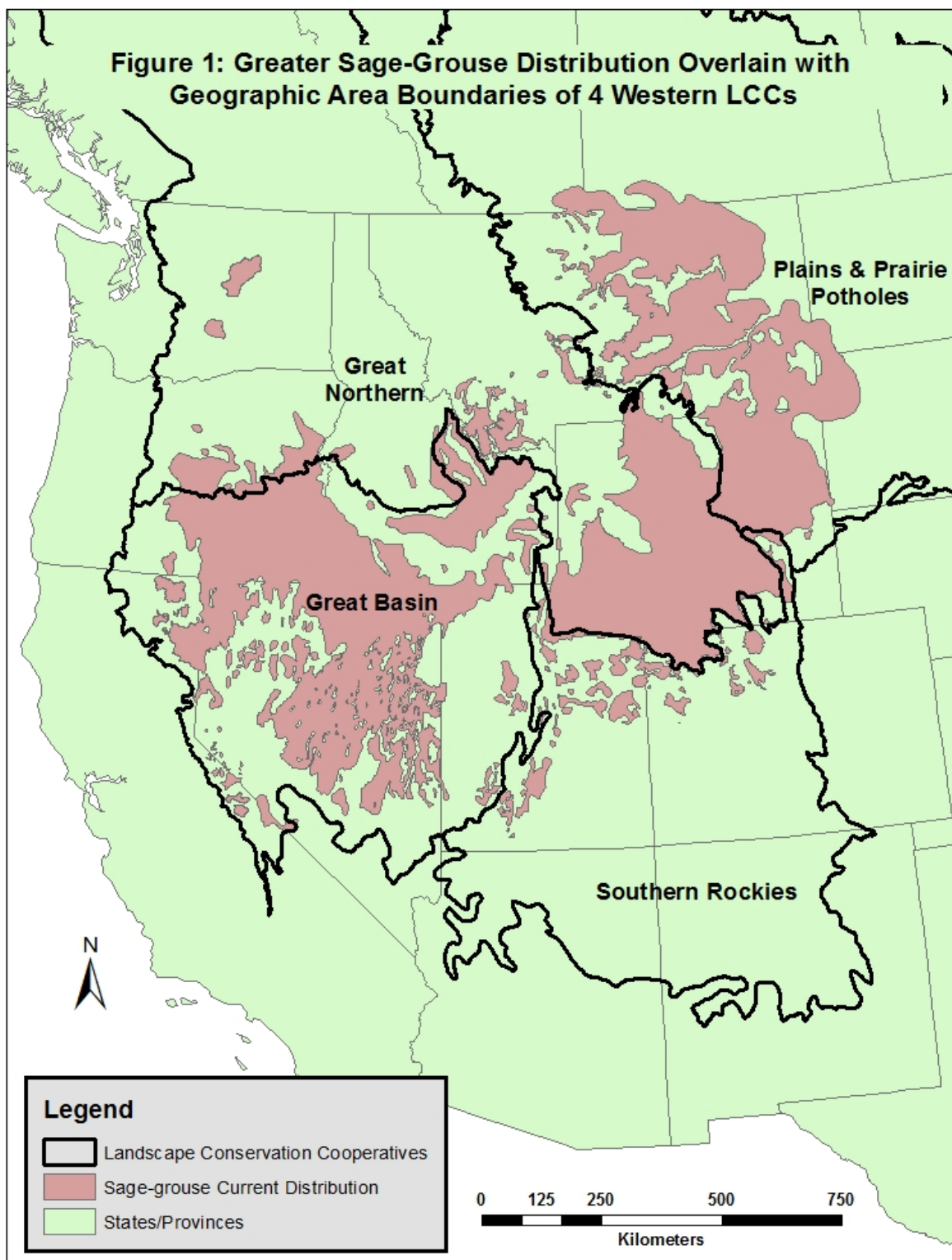


Figure 1.