

SCOPE OF WORK (4/24/13)

The Western Association of Fish and Wildlife Agencies (WAFWA) possesses the unique capability to coordinate and leverage the capacity and research capabilities of multiple Western state fish and game management agencies, in collaboration with the U.S. Fish and Wildlife Service (Service), to address management and conservation needs of Federal and State trust species. The Service expects that collaborative research and information gathering with WAFWA will enhance the Service's mission through provision of access to information and expertise held by the cooperator's member agencies. As demonstrated in past cooperative agreements (see agreement #601818J128), the Service's collaboration with WAFWA has afforded access to data and expertise relative to the conservation of Greater Sage-grouse.

Purpose:

As an ecosystem of management interest to both the Service and WAFWA, this agreement initially supports collaborative assessment of management options for the conservation of sagebrush-steppe (*Artemisia spp.*) habitats across multiple ownerships. The work is essential not only for the conservation of sage-grouse (*Centrocercus spp.*), but for other sagebrush dependent species of mutual management interest to the Service and WAFWA member agencies.

The overall fragmentation and decline in vigor of the sage-steppe and the attendant impacts on wildlife that depend on sage-steppe habitats has triggered an enormous amount of activity by federal, state, local and private entities across the sage-steppe. One of the most critical challenges facing conservation of the sage-steppe and sage-grouse is the invasive plant/fire complex that can eliminate valuable habitat in a short time. The invasive plant/fire complex is the subject of many research and management efforts that attempt to develop improved habitat management and fire response tools. These wide-spread efforts are not highly coordinated, integrated nor is there a central repository for managers to turn to and learn about new and effective techniques and opportunities. Given the level of investment, concern and interest in sage-grouse habitats, it is important to increase the level of coordination and technical communication of all those involved in its conservation. Compilation, integration and access-to the invasive plant/fire complex information is critical to successful conservation of sage-grouse by summarizing what is known, elucidating critical data gaps, and looking ahead to future opportunities and strategies to maintain or improve the integrity of sage-steppe habitat across the range of sage-grouse and concomitantly other species that rely on the sagebrush ecosystem.

As an example of the problem, invasion of cheat-grass (*Bromus tectorum*) and the associated changes in fire regime currently pose one of the significant threats to sage-grouse and the sagebrush-steppe habitats. The cheat-grass/wildfire disturbance cycle has been identified as one of the major threats to the long-term viability of sage-grouse (SG) habitats in the western portion of their range. One major mechanism facilitating the transition from cheat-grass presence to cheat-grass dominance in the sage-steppe is larger, more frequent wildfires. This increased frequency reduces or eliminates regeneration of sagebrush and native bunchgrasses in favor of annual grasses. Through comprehensive assessment of management tools and options to address the invasive plant/wildfire disturbance cycle, this project will significantly contribute to other efforts supported by WAFWA and the Landscape Conservation Cooperatives supporting the

coordinated accumulation, interrogation and application of ecological data for the conservation of Greater Sage-grouse and other sagebrush dependent species. Compilation of these data, along with other relevant sage-grouse data, and accessibility to these data in LC MAP by range managers, wildlife managers and fire managers will greatly increase the coordination of all and will improve the collaborative efforts to maintain or restore sage-steppe habitats. Fire managers will have access to as much current information for pre-fire tactical planning and operational insight during active suppression. This effort will also seek to reveal policy and fiscal barriers (at both the state and federal level) that hinder efforts to reduce the impact of the invasive plant/fire complex.

The Project: The goal of this project is to not recreate what is currently being done, but rather compile and coordinate existing information and management efforts to ascertain what work is currently being done and by whom to address this threat. WAFWA will develop a report of the current work and strategically develop a set of concise, concrete, prioritized and integrated actions land managers and policy makers can take to effectively preclude the dominance of invasive species and reduce their influence on the fire cycle in sagebrush ecosystems. Through interviews with a variety of state and federal managers, university and experts, WAFWA will summarize and integrate current information regarding the following components of the invasive plant/fire issue:

1. Compile and assess the tools and current work directed towards preventing, suppressing and ultimately restoring areas with invasive annual grasses, such as cheat-grass, in different sagebrush habitats at various elevations in the Great Basin. While much of this effort will focus on the invasive plant/fire issue in the Great Basin, important work in other geographic areas will be included, where applicable.
2. Summarize how fire prevention, suppression, and restoration efforts can be strategically implemented to reduce or help control the dominance of invasive species and describe what intra-agency coordination and funding is necessary to support the reduction and control of invasive species.
3. List and assess the level of success of existing management actions and programs that have successfully achieved reduction and control of invasive species intended to reduce wildfire frequency, intensity and spread.
4. Identify the critical information gaps that hinder more successful control and/or reduction of invasives and fire. These information gaps may include identification of new information and mechanisms and how that scientific knowledge can be integrated into land management agency action and the creation of effective policy and funding decisions.

5. Identify any current limitations and roadblocks that hinder improved control and reduction of invasive species and fire, including identification of solutions needed to overcome those roadblocks. Identification will include those policy and fiscal barriers to improved management and control of the invasive plant/fire complex. Within 45 days of the signing of this agreement by all parties, the contractor will deliver to the Service a report that summarizes the policy, fiscal and science challenges that hinder the improved control, reduction and effective fire-fighting strategies of the invasive plant/fire complex. This report will also include suggested options for addressing these challenges.

Objectives:

WAFWA will establish, in coordination with the Service, a cooperative initiative to discover, compile, integrate, synthesize and summarize the five objectives described in the Project description above. This information will be used by the FWS as part of their listing decision process for the Greater sage-grouse. Moreover, the results of the project will ultimately be used to influence the size, frequency and intensity of wildfire in the sage-steppe. FWS will provide \$150,000 for a designated project coordinator (includes salary, travel, etc.) for the invasive plant/fire management effort. Selection of the coordinator by WAFWA is subject to the approval of Region 6 FWS. Under this agreement, the coordinator will work closely with the USFWS management and scientific staff and applicable partners to review, update and allow feedback on the execution of the prioritized actions. The project term will be 18 months from the signature date.

The coordinator will deliver interim reports to WAFWA and FWS at regular 6-month intervals, at a minimum, to provide verbal updates on progress. The coordinator will also provide information updates to the Service upon request. Ninety days prior to the expiration of the 18 month period of performance, the contractor will deliver a draft final report to WAFWA and FWS for their review and comment. The coordinator will receive the feedback from WAFWA and FWS within 30 days so that he/she may make final adjustments to the report.