

**Western Association of Fish and Wildlife Agencies
& U.S. Fish and Wildlife Service
Sagebrush Science Initiative
Request for Proposals**

This is an announcement of an additional call to prepare and submit proposals for funding research and technical assistance projects through the Western Association of Fish and Wildlife Agencies (WAFWA) and U.S. Fish and Wildlife Service (FWS) Sagebrush Science Initiative. The Sagebrush Science Initiative is a collaborative effort coordinated by WAFWA to identify and prioritize science needed for conservation of sagebrush dependent species and fund and/or obtain funding for the highest priority needs. Existing and newly funded science will be incorporated into a Sagebrush Conservation Strategy that WAFWA is coordinating.

Projects that synthesize existing data sets at landscape scales (provide technical assistance such as priority habitat mapping, modeling, adaptive management constructs, decision support tools, compilation or analysis of existing data sets, etc.) that have a clear tie to sagebrush dependent species conservation planning or management are most likely to be successful. Proposals will be considered for traditional research (original data collection), but the inherently local scale of many field projects will be at odds with the goals outlined above.

Because of the recent and ongoing focus on sage-grouse science and management, this initiative **will not fund sage-grouse** projects, but projects evaluating the effectiveness of sage-grouse management prescriptions at conserving other sagebrush dependent species (“umbrella species concept”) will be considered and are encouraged. Sage-grouse are, and will likely remain a focus for sagebrush management into the foreseeable future, consequently proposals advocating other species as potential “umbrella” species for sagebrush or grassland obligates should demonstrate that management actions are likely to be oriented around the umbrella species or they will likely compete poorly.

Investigators should review the draft Actionable Science Plan developed by the Department of Interior in response to SO 3336 for science needs identified for sagebrush dependent species, as projects responsive to these needs will receive higher priority. Proposals will be evaluated generally on the extent to which they contribute meaningfully to conservation of sagebrush and the development of a Sagebrush Conservation Strategy under the FWS Strategic Habitat Conservation paradigm (for more info see: https://www.fws.gov/nc-es/habreg/NEAT_FinalRpt.pdf). This is an adaptive management process which includes identifying priority species, assessing limiting factors and current state of populations of these species, and compilation of models describing population-habitat relationships. This process leads to species-habitat decision support tools that support formulation of habitat objectives and identification of program priority areas for conservation delivery. Finally, monitoring of the biological effects of conservation delivery to habitat use and population response of priority species allows managers to understand which programs are meeting our stated goals.

The Strategic Habitat Conservation (SHC) framework suggests a common body of science to implement habitat conservation for priority species:

1. Assess current state of species population
 - a. Population status (size and/or trend) and/or
 - b. Cost-effective methodologies to obtain size and/or trend estimates for species with limited existing data.
 - c. For rarer or understudied species, we will need an understanding of basic vital rates to better understand life history strategies.
2. Identification of key areas of conservation for priority species by developing or applying models which describe population-habitat relationships.
 - a. When data allows these models should include mapped relative density estimates across seasons.
 - b. Seasonal habitats known to limit populations are of particular importance. For example, location of wintering areas for migratory species/populations and land use trends in those wintering areas would further allow prioritization of resources.
3. Identify which factors are *limiting priority species populations and key areas of conservation*.
 - a. Spatially explicit risk assessment models for key threats within the sagebrush ecosystem
 - b. Spatially explicit estimates of current and future rates of habitat loss or change.
 - c. Models describing relationship between occupancy and/or population size/density and habitat quality, including anthropogenic features that may degrade habitat or reduce habitat effectiveness.
4. Development of species-habitat decision support tools to aid land use managers evaluating which Habitat Program Priority Areas are most likely to have resources and established methods to positively influence habitat conditions.
5. Targeted research for critical assumption in steps 1-4 above.
6. Monitor effects of management actions on populations.
 - a. Likely response to sage-grouse management prescriptions within BLM Land Use Plans as amended and state sage-grouse plans or strategies, including response to pinyon-juniper removal, fuel break or other fire prevention/control strategies, and grazing, oil and gas, right of way, and other programmatic prescriptions

Studies that synthesize and therefore leverage existing bodies of work across broad extents are strongly encouraged. Proposals will be evaluated on scientific merit and quality of proposed research, management significance, coordination and engagement with resource managers, study team qualifications, and budget and work plans. Projects satisfying the following criteria will be prioritized above those that do not:

- Projects with a larger extent
- Projects with meaningful cost-share
- Projects conducted collaboratively with wildlife or land management agencies. We believe this is critical because past experience has shown the science is more likely to be

implemented when there is a meaningful collaboration between researchers and decision makers.

- Projects fulfilling a need identified in the draft actionable science plan referenced above

This funding is intended to support relatively short-term projects. We are not capping maximum budgets, but keep in mind we have approximately \$200,000 in science funding for grants and we expect to make 2-4 awards. We are currently developing an RFP for social science and economics related to human dimensions of sagebrush conservation. *Proposals from both RFPs will compete for this funding opportunity.*

Project results will be included in the Sagebrush Conservation Strategy and are expected to inform collaborative, inter-organizational efforts to sustainably manage sagebrush systems and obligate species. Data sets, maps, and other products are expected to be delivered to the LC MAP and potentially other Federal data repositories. LC MAP enhances and facilitates data sharing and synthetic analyses while retaining access control in the hands of each investigator.

We anticipate prioritizing projects that do not duplicate science gaps already funded by the Sagebrush Science Initiative OR science gaps filled by a recent special addition on the effects of conifer removal (*Rangeland Ecology & Management special edition: Volume 70, Issue 1, Pages 1-148 (January 2017), "Woody invasion of western rangelands: Using grouse as focal species for ecosystem restoration"*). Six projects have been previously funded from an initial Request for Proposals (RFP) (see list on page 4). Investigators interested in submitting proposals concerning quantifying relative abundance of sagebrush obligate birds, or sage-grouse as an umbrella species for sagebrush obligate songbirds, should consider if they duplicate already funded projects, as well as the publication by Donnelly et al. in the volume referenced above. Investigators interested in submitting proposals relative to impacts of conifer removal on sagebrush obligate or pinyon juniper obligate species should review the special edition of *Rangeland Ecology and Management*, as well as the funded project by Shoemaker. For either conifer removal or sagebrush obligate bird proposals, researchers should indicate the extent and manner in which value is added above and beyond these works.

An opportunity to discuss concepts for proposals with members of the Oversight Committee will be afforded to project proponents prior to the submission deadline. This is a good opportunity to refine proposals to make them more competitive and perhaps to find collaborative partners. In many cases the addition of collaborative partners may be needed to achieve the extent of projects the SSI hope to fund. Project proponents are encouraged, but not required to participate. Format for this pre-proposal discussion will be either a webinar or conference call at a date and time negotiated with investigators. If interested in participating please submit a 1-page concept proposal that summarizes key aspects of the proposal to Tom Remington by 31 March, 2017.

Full proposals and budgets must be received by **21 April, 2017**, and must address all elements described in the attached Proposal Template. Proposal narratives will be accepted only in WORD or PDF format and budget details will be accepted in EXCEL or PDF format. Proposals

should be submitted to the WAFWA Sagebrush Science Coordinator, Dr. Tom Remington (remingtontom@msn.com). Proposals will be reviewed and ranked by the Sagebrush Science Initiative Oversight Committee, a group of scientists and managers familiar with sagebrush conservation from Federal and State agencies as well as Universities. Final selection of project awards will be made approximately May 1st, 2017. If you should have any questions, please contact Tom Remington at remingtontom@msn.com or at 970-221-3310.

Projects Funded by Sagebrush Science Initiative Previously

Building a decision support tool for pinyon-juniper removal: maximizing benefits to sagebrush- and forest-obligate songbirds. Principal Investigators; Michael J. Falkowski, David E. Naugle, Kevin E. Doherty, and Jason D. Tack

Evaluating biodiversity of sagebrush-dependent species within sage-grouse habitat: an example from the Wyoming Basins. Principle Investigator, Cameron Aldridge

The influence of climatic conditions on reproduction of sagebrush-dependent birds: Implications for climate vulnerability assessments and habitat prioritization efforts. Principle Investigator, Anna Chalfoun

Effects of cattle grazing on sagebrush-obligate and sagebrush-dependent birds. Principle Investigator, Courtney J. Conway

Assessing the regional response of avian and small mammal sagebrush communities to pinyon and juniper removal. Principal Investigator, Kevin Shoemaker

Pygmy Rabbits under the Sage-grouse Umbrella: Assessment at Range-wide and Regional Scales. Principal Investigators; Janet Rachlow, and Leona K. Svancara,

**Western Association of Fish and Wildlife Agencies
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Sagebrush Science Initiative RFP**

PROPOSAL FORMAT

GENERAL INSTRUCTIONS: We encourage collaborative development of proposals among the Great Basin LCC, Great Northern LCC, Southern Rockies LCC, Plains and Prairie Potholes LCC, State and Provincial Wildlife Management Agencies, Universities, and Non-Governmental organizations. Letters or other expressions of support from State, Provincial and Federal Management Agencies, and from the Steering Committee of the respective LCC(s) are also encouraged and recommended.

Electronically submit the proposal to Dr. Tom Remington, WAFWA Sagebrush Science Initiative Project Coordinator, at remingtontom@msn.com as soon as complete but no later than 5 p.m. MDT on 21 April, 2017.

Proposals may not exceed 7 pages (6 page maximum for proposal, 1 page for budget breakout, no appendices beyond page limit), must be in 10 point or larger font, with margins of half-inch or larger. Complete proposal must not exceed 10 mb in size so that they can be readily shared electronically among reviewers. If maps or other illustrations exceed this limit please include links to URLs where they can be retrieved. Proposals must contain the following elements:

1. **TITLE:** Provide a brief descriptive title for the project.
2. **PRINCIPLE INVESTIGATOR:** Provide the name, title, mailing address, telephone, fax, and e-mail of the principal investigator or in the case of multiple principal investigators, the name of the contact person.
3. **PARTNERSHIPS AND ROLES:** Provide the names, titles, mailing addresses, telephones faxes, email addresses, and the specific roles of each partner that will be involved in this project through added expertise, funding, in-kind contributions, etc. Itemize and identify contributions in the budget section of the proposal by partner. Indicate if partners are supportive but otherwise not directly involved in conduct of the project.
4. **TYPE OF SUPPORT REQUESTED:** Identify whether this proposal is a request for research support, management support and/or extant data integration/interrogation. There may be aspects of all three in a proposal, please indicate if this is the case.

Research is a systematic investigation designed to test a hypothesis, address specific questions, represent a descriptive inventory, status survey, or model development; permit accurate conclusions to be drawn; and thereby to develop or contribute to the base of knowledge. Research is usually described in a formal protocol that sets forth an objective and a set of procedures designed to reach that objective.

Management Support is the process of scientists working in close cooperation with land and resource managers and other scientists to interpret, implement, and evaluate research results, technical information, findings, techniques, recommendations and/or provide special equipment and assist with its operation.

Extant Data Integration/Interrogation is the acquisition of extant data sets from one or more sources and the analysis and/or reformatting or rescaling of data for delivery and use by the LC MAP platform, along with the appropriate and standard-compliant metadata to adequately describe the delivered data sets.

- 5. PROBLEM STATEMENT AND IMPLICATIONS:** Clearly describe the focal species being addressed, the exact management problem and how the proposed project will address this need? If relevant, describe the geographic area(s).
- 6. OBJECTIVES:** Clearly describe the goals and objectives and how they will address the management problem. Objective statements are specifications of the primary products or results to be derived from research. They should be directly and obviously linked to management needs described in the Problem Statement. Objectives drive the development of methods, particularly sampling plans, identification of data to be collected, determination of sample sizes, and methods of data analysis. Tasks such as reviewing existing literature, locating a suitable study site, or evaluating the effectiveness of gear are not objectives, but should be described in Methods.
- 7. METHODS AND STUDY AREA:** Clearly describe methodologies and how they will achieve the stated objectives. Methods must detail the means by which each of the objectives will be achieved. Provide sufficient detail so that the likelihood of achieving each of the objectives can be fully evaluated. Include a description of the proposed study area(s).
- 8. PROJECT DURATION:** Provide the start date and completion date (the completion date is when deliverables are provided to WAFWA).
- 9. PRIORITY:** State how project and deliverables satisfy one or more of the research, management, and/or data needs of sagebrush focal species described above, and how the project deliverables will support the development or implementation of a Sagebrush Conservation Strategy as described in the Request for Proposals.
- 10. PRODUCTS AND SCHEDULE:** Products resulting from the proposed research or other project should be clearly defined, and a delivery date specified. Vague terms such as 'final report' as a product are not adequate since such terms leave a great deal of latitude in both format and content, sometimes resulting in a less than desired report. Electronic products streamline product dissemination as well as enable incorporation of products into the LC MAP portal.

11. BUDGET: Provide, in a separate .xls or PDF file, realistic costs and itemize in the following budget categories: (1) Operating Expenses; (2) Supplies & Equipment; (3) Salaries and fringe benefits, (4) Travel, and (5) Overhead.

- Salaries for technical support, temporary and/or contract employees are eligible for funding.
- If a project involves researchers with different overhead rates, please apply the appropriate rates to each portion.
- Itemize partner contributions in the budget breakout.
- Include details on matching funds and in-kind contributions as indicators of partner commitments and indication of the leverage the project brings.