# United States Department of the Interior

FISH AND WILDLIFE SERVICE
Washington, D.C. 20240

In Reply Refer To
FWS/WSFR/POP: 057561

JUN 3 0 2014

Memorandum

To: Director

From: Assistant Director – Wildlife and Sport Fish Restoration Program — Hannibal Bolton

Subject: State Wildlife Grants Competitive Program – Fiscal Year 2014

This memorandum seeks your review and approval of awards for the Fiscal Year (FY) 2014 State Wildlife Grants (SWG) Competitive Program. The Wildlife and Sport Fish Restoration Program (WSFR) recommends fully funding 14 projects and partially funding two additional projects with remaining available funds (see Enclosures).

WSFR received 23 eligible proposals from 16 States in response to the Request for Applications. A national panel consisting of Service Region SWG Specialists scored and ranked the applications.

The total FY 2014 funds available for the State Wildlife Grants Competitive Program are $5,656,000. The awarded Federal funds for these proposals will be matched by at least $2.9 million in non-Federal funds. This will result in over $8.5 million to be expended for projects that address species of greatest conservation need and their habitats, as described and included in these States' Wildlife Action Plans.

If you have questions, please contact Tom Busiahn, Chief, Division of Policy and Programs, Wildlife and Sport Fish Restoration Program, at (703) 358-2231.

Approved: Rowan W Gould Date: 7/9/2014

Enclosure

Enclosure 1 FY 2014 Competitive State Wildlife Grants Program Recommended Projects

| Region | State | Project Title | SWG Federal Request | Non-Federal Match | Total Project Costs |
|---|---|---|---|---|---|
| 1 | ID | Modeling Connectivity to Enhance Idaho's State Wildlife Action Plan | $ 100,000 | $ 36,500 | $ 136,500 |
| 1 | WA | Conserving Species in Pacific Northwest Prairie and Oak Habitats | $ 499,893 | $ 353,849 | $ 853,742 |
| 1 | WA | Enhancing the Washington State Wildlife Action Plan | $ 60,000 | $ 20,000 | $ 80,000 |
| 2 | AZ | North American Bat Monitoring Pilot Expansion Project | $ 499,839 | $ 212,435 | $ 712,274 |
| 2 | AZ | Developing Landscape Tools for Prairie Dog Management* | $ 400,750 | $ 172,569 | $ 573,319 |
| 3 | IA | Prioritizing Iowa Wildlife Habitats to Manage for Priority Species* | $ 38,120 | $ 12,792 | $ 50,912 |
| 3 | MI | Eastern Massasauga Conservation | $ 500,000 | $ 243,253 | $ 743,253 |
| 3 | MN | Conservation on Public and Private Lands in the Driftless Area | $ 496,939 | $ 346,361 | $ 843,300 |
| 4 | KY | Targeted Mussel Restoration: A Four-State Partnership | $ 397,420 | $ 167,698 | $ 565,118 |
| 4 | SC | Carolinas Regional Bat Acoustic Surveys | $ 265,480 | $ 116,596 | $ 382,076 |
| 4 | SC | Developing a DNA-Based Monitoring Tool for Blackbanded Sunfish | $ 465,418 | $ 207,906 | $ 673,324 |
| 4 | SC | Relative Abundance and Trophic Ecology of Hammerhead Sharks | $ 394,948 | $ 266,526 | $ 661,474 |
| 5 | MA | Conserving the Wood Turtle and Associated Riparian Species | $ 499,693 | $ 177,591 | $ 677,284 |
| 5 | ME | Range-Wide New England Cottontail Initiative | $ 500,000 | $ 269,340 | $ 769,340 |
| 6 | CO | Colorado Wildlife Action Plan Mapping Enhancements | $ 37,500 | $ 12,500 | $ 50,000 |
| 6 | NE | Improving and Protecting Key Habitats for At-Risk Bat Species | $ 500,000 | $ 299,696 | $ 799,696 |
| | | **Totals** | **$ 5,656,000** | **$ 2,915,612** | **$ 8,571,612** |

* Partial funding recommended.

Enclosure 2

# *Summaries of Proposed Projects*

Competitive State Wildlife Grant (SWG) Program FY 2014
Total Amount Available: $5,656,000

**Recommended for Funding (16 projects):**

## Region 1

### Idaho Department of Fish and Game

**Title**: Modeling Connectivity and Enhancing the Usability and Accessibility of Idaho's State Wildlife Action Plan
**State(s):** Idaho

**Goals and Objectives**: In a paper published in the journal, *Conservation Biology* in 2013, researchers pointed out that emphasis on wildlife linkages in the State Wildlife Action Plans was often cursory despite the fact that they collectively listed habitat fragmentation as a leading threat. Addressing this issue for Idaho, the agency will develop a regional connectivity map, develop crucial habitat data layers for at least 14 Species of Greatest Conservation Need, and increase the usability and accessibility of the Plan by improving Idaho Department of Fish and Game's web sites and applications.

**Federal Funds requested**: $100,000; **Non-Federal Match**: $36,500

### Washington Department of Fish and Wildlife

**Title**: Conserving State Strategy Species in Pacific Northwest Prairie and Oak Habitats
**State(s):** Washington, Oregon

**Project Goals:** Partners seek to substantially improve the population status of rare or imperiled species inhabiting the prairie-oak habitats of the Willamette Valley and Puget Trough regions of western Oregon and Washington, thus reducing the likelihood they may need to be listed under the Endangered Species Act. The partnering States will implement habitat management actions on over 400 acres of public and private lands. Actions will target a range of species including the Service-listed Mazama Pocket Gopher and Streaked Horned Lark (Threatened) as well as Taylor's Checkerspot butterfly (Endangered). Like most other SWG-funded landscape conservation initiatives, Washington and Oregon fish and wildlife agencies will implement a standardized monitoring framework to evaluate the effects of restoration activities on targeted species. This approach exemplifies an adaptive management process, where interim project results help modify land management approaches and ultimately improve the outcomes of future conservation actions.

**Federal Funds Requested:** $499,893; **Non-Fed Match:** $353,849

**Washington Department of Fish and Wildlife**

**Title**: Enhancing the Washington State Wildlife Action Plan by Adding a Spatial Component and Tools for Prioritizing Conservation
**State(s):** Washington

**Goals and Objectives**: The overarching goal of this project is to improve the utility of Washington's Wildlife Action Plan for prioritizing conservation actions to address the needs of identified Species of Greatest Conservation Need (SGCN). Three major activities include: developing range and distribution maps for SGCN based on watersheds and ecological systems, leveraging data from conservation partners to supplement existing distribution data, and assessing the relative vulnerability of SGCN habitats in order to more effectively prioritize conservation actions.

**Federal Funds requested**: $60,000; **Non-Federal Match**: $20,000

**Region 2**

**Arizona Game and Fish Department**

**Title**: North American Bat Monitoring Pilot Expansion Project
**State(s):** Arizona, California, Colorado, Idaho, Montana, Texas, Utah, Washington

**Goals and Objectives:** Arizona Game and Fish Department will team up with the non-profit Bat Conservation International and a broad coalition of western States, building the capacity of the partners to implement the North American Bat Monitoring Program. Currently, no coordinated national efforts exist to monitor and track bat populations in North America, despite many threats facing them, from climate change to habitat loss, energy development to white-nose syndrome. Similar to SWG-supported efforts underway now in the eastern U.S., partners propose to implement standardized acoustic and roost surveys across multiple States. The information constitutes important baseline data that will inform continental trend analyses, allowing partners to determine the population status of targeted bat species. This work must be done before range-wide population models and landscape-scale conservation objectives can be established.

**Federal Funds requested**: $499,839; **Non-Federal Match**: $212,435

**Arizona Game and Fish Department**

**Title**: Developing Landscape Tools for Prairie Dog Management
**State(s):** Arizona, Colorado, Montana, New Mexico, Utah, Wyoming, North Dakota, South Dakota, Kansas, Nebraska, Oklahoma, Texas

**Goals and Objectives:** Four prairie dog species—the white-tailed, Gunnison's, Utah, and black-tailed prairie dog—are considered "keystone" species because they support the conservation needs of more than 12 other western grassland species. Management for these essential species exemplifies a cooperative and adaptive management approach through which the partners seek to

preclude future endangerment of targeted species. This multi-State landscape-level conservation project is coordinated by the Western Association of Fish and Wildlife Agencies, which refers to this on-going program as the Grassland Initiative. In this project, Arizona Game and Fish Department will survey select prairie dog populations range-wide to prioritize areas for future conservation actions. Genetic variation will be analyzed to help characterize the potential effects of prairie-dog plague and climate change on populations. Ultimately, the partners will field test an oral vaccine for the immunization of select species against sylvatic plague. As with other broad-scale conservation initiatives supported by competitive SWG, this project requires resources for coordination, joint planning, and data management.

**Federal Funds requested**: $400,750 (partial funding); **Non-Federal Match**: $172,569

**Region 3**

**Iowa Department of Natural Resources**

**Title**: Prioritizing Iowa Wildlife Habitats to Manage for Priority Species
**State(s):** Iowa

**Goals and Objectives**: This project will assist Iowa in prioritizing and goal-setting for species and habitats identified in the Iowa Wildlife Action Plan. Using occurrence records from the agency's and Iowa State University's Multiple Species Inventory and Monitoring Program, the partners will identify the most appropriate geographic locations to implement Iowa's Wildlife Action Plan. As a first step, the partners will use predictive mathematical models developed under a previous State Wildlife Grant Program award to create predictive occurrence maps similar to those developed through the USGS' national Gap Analysis Program.

**Federal Funds requested**: $38,120 (partial funding); **Non-Federal Match**: $12,792

**Michigan Department of Natural Resources**

**Title**: Eastern Massasauga Conservation Through Refined Modeling, Habitat Management and Snake Fungal Disease Detection
**State(s):** Michigan, Illinois

**Goals and Objectives:** The reclusive eastern massasauga rattlesnake is found in several upper Midwestern States and Ontario, Canada where it is critically imperiled in much of its range. Less than one-third of remaining populations are considered secure. Of great concern is a growing threat from a pathogen that causes snake fungal disease, which has been confirmed in at least two eastern massasauga specimens. The U.S. Fish and Wildlife Service (Service) classifies the species as a candidate for listing under the Endangered Species Act, and the Service's East Lansing Field Office is working with Michigan DNR to establish a Candidate Conservation Agreement With Assurances for State-owned land. Partners in the project include Illinois Natural History Survey at the University of Illinois, and the Michigan Natural Features Inventory along with the Illinois and Michigan Departments of Natural Resources. This cooperative conservation initiative focuses on better understanding the factors that affect detectability of this rare snake,

allowing partners to conduct better monitoring and surveys. An existing habitat suitability index model will be evaluated and refined, and 400 acres of habitat will be improved through vegetation management and other actions. Finally, the partners will utilize a standardized protocol to examine snake specimens for snake fungal disease, building upon the Service's initial efforts to characterize and understand this emerging threat.

**Federal Funds requested**: $500,000; **Non-Federal Match**: $243,253

**Minnesota Department of Natural Resources**

**Title**: Conservation Actions to Benefit Species of Greatest Conservation Need on Public and Private Land in the Driftless Area
**State(s):** Minnesota, Iowa, Wisconsin

**Goals and Objectives**: Three State fish and wildlife agencies will focus a variety of conservation actions on critical geographical areas identified in their Wildlife Action Plans, to benefit species such as the northern cricket frog, Henslow's sparrow, and the northern long-eared bat. Partnering regional and national conservation organizations such as the Upper Mississippi River and Great Lakes Region Joint Venture have also identified the mixed open woodlands, grasslands, and waterways of the Driftless Area as key lands for conservation. The goals of this multi-faceted project include more than 1000 acres of habitat restoration on public and private lands, development of 50 management plans for private landowners, crucial data collection on little-known butterfly and beetle species, and monitoring of the impacts of management actions on select species. This long-standing conservation initiative exemplifies the use of an adaptive management framework for protection of this unique landscape and the sensitive species that inhabit it.

**Federal Funds Requested**: $496,939; **Non-Fed Match**: $346,361

**Region 4**

**Kentucky Department of Fish and Wildlife Resources**

**Title**: Targeted Mussel Restoration: A Four-State Partnership
**State(s):** Kentucky, Tennessee, Ohio and West Virginia

**Goals and Objectives**: This project will support a multi-State partnership aimed at augmenting rare and imperiled mussel populations in high-priority locations through captive propagation and reintroduction. Goals include restoration of mussel populations across 180 miles of the Licking River in three States to within 90% of their historic levels. Notably, the partners seek to restore viable populations of Federally-endangered fanshell mussel (*Cyprogenia stegaria*). States and their partners will also help prevent the extinction of the Federally-endangered catspaw mussel (*Epioblasma obliquata obliquata*), which is currently one of the rarest mussels in North America with less than 25 remaining individuals. Once restored, the Licking River mussels will serve as a source for translocation of species in need of repatriation elsewhere in their range.

**Federal Funds Requested**: $397,420 **Non-Fed Match**: $167,698

**South Carolina Department of Natural Resources**

**Title**: Carolinas Regional Bat Acoustic Surveys
**State(s):** North Carolina, South Carolina

**Goals and Objectives:** North Carolina Wildlife Resources Commission and South Carolina Department of Natural Resources will cooperate with USDA Forest Service's Southern Research Station and the University of North Carolina-Greensboro to collect crucial data on bat distribution and relative abundance. Using standardized acoustic surveys across the two States, partners will contribute baseline data that will inform continental trend analyses and help determine targeted bat species population status. This is a priority for the partners due to white-nose syndrome, a fungal disease that has been shown to decimate bat populations across much of the eastern United States. A variety of imperiled bat species will benefit from modeling analyses allowing partners to establish regional population objectives for focused conservation actions. The team will utilize state-of-the-art acoustic detection technology to identify and map priority lands for conservation, following a standardized monitoring approach recommended by the North American Bat Conservation Partnership. These efforts will also help evaluate bat population impacts of wind energy development in the southeastern U.S., including three Federally-listed Endangered bat species (Virginia big-eared bat, gray bat, and Indiana bat).

**Federal Funds requested**: $265,480; **Non-Federal Match**: $116,596

**South Carolina Department of Natural Resources**

**Title**: Developing a DNA-Based Monitoring Tool for Blackbanded Sunfish
**State(s):** South Carolina, Georgia

**Goals and Objectives:** This project targets a species known to inhabit coastal plains habitats from New Jersey to Florida. The fish is believed to have declined in distribution and abundance primarily due to habitat loss and degradation. Within the project focal region, the rare Blackbanded Sunfish is currently documented in only three locations in south-central Georgia, while efforts to detect the diminutive fish in a previously-identified population center in Florida have failed for two decades. As a result, Georgia classifies the species as endangered. Due to the severe logistical challenges of traditional survey methods such as netting and electrofishing, the partners propose to utilize groundbreaking "environmental" DNA technology to verify the presence of the species in many locations across the two States. Data collected during the project will allow partners to determine if additional targeted conservation is necessary to protect this species.

**Federal Funds requested**: $465,418; **Non-Federal Match**: $207,906

**South Carolina Department of Natural Resources**

**Title**: Relative Abundance and Trophic Ecology of Scalloped and Carolina Hammerhead Shark

**State(s):** South Carolina, Georgia, Florida

**Goals and Objectives:** Although the scalloped hammerhead (*Sphyrna lewini*) is identified as endangered by the International Union for Conservation of Nature and is listed as a Species of Greatest Conservation Need (SGCN) in South Carolina's and Florida's Wildlife Action Plans (SWAPs), the Carolina hammerhead (*Sphyrna gilberti*) is not listed in either SWAP as it is a newly described species. Preliminary data suggest that Carolina hammerheads exist in low abundance and their range may be restricted to the western Atlantic. Given the threats already identified for scalloped hammerheads, it is critical that data on both species are acquired for management purposes. This project will investigate the species composition and ecology of these two hammerhead species within known and suspected nursery areas off of South Carolina, Georgia, and Florida. Establishing baseline genetic data, investigating habitat use, abundance, and reproductive ecology of each species, and investigating diet and feeding ecology will inform and enable future management actions to protect and conserve these shark species.

**Federal Funds requested**: $394,948; **Non-Federal Match**: $266,526

## Region 5

### Massachusetts Department of Fish and Game

**Title**: Conservation Planning and Implementation for the Wood Turtle and Associated Riparian Species
**State(s):** Massachusetts, Maine, New Hampshire, Connecticut, Pennsylvania, New Jersey, Maryland, Virginia

**Goals and Objectives:** This project originated as an identified Regional Conservation Need through the States' and the Northeast Association of Fish and Wildlife Agencies' collaborative conservation approach. Key to this regional, landscape-scale effort is the development of a spatially explicit regional conservation plan and implementation framework based on standardized, range-wide monitoring. By utilizing this unified approach across the wood turtle's range, partners expect to identify populations with high probability of persistence, prioritize and conserve these areas, and evaluate species response to conservation actions. Management of this long-term initiative will be assumed by the Wood Turtle Council, a decision-making entity with representation from participating States.

**Federal Funds requested**: $499,693; **Non-Federal Match**: $177,591

### Maine Department of Inland Fisheries and Wildlife

**Title**: Range-Wide New England Cottontail Initiative
**State(s):** Maine, Connecticut, Massachusetts, New Hampshire

**Goals and Objectives:** This project continues implementation of a regional, landscape-scale initiative begun in 2008 which is working to reverse the decline of the New England cottontail rabbit (*Sylvilagus transitionalis*) on a range-wide scale. This species is a high-priority candidate

for Federal protection under the Endangered Species Act, a potentially costly outcome that project partners seek to avoid through targeted conservation actions on Federal, State and private lands. The project approach uses sophisticated population modeling to identify critical parcels to target for conservation. The partners will create 12 new habitat patches across the species' range, with an expected long-term population increase of 180 animals through 300 total acres of habitat treatment on State lands and other high-priority parcels. This project also includes support for supplementary feeding and captive breeding, both of which have been shown to be effective in augmenting low population sizes in priority locations across this species' range.

**Federal Funds requested**: $500,000; **Non-Federal Match**: $269,340

**Region 6**

**Colorado Department of Natural Resources**

**Title**: Colorado Wildlife Action Plan Mapping Enhancements
**State(s):** Colorado

**Goals and Objectives**: Colorado's current Wildlife Action Plan, approved in 2006, does not include spatial distribution models for Species of Greatest Conservation Need. As part of the agency's preparations for the Plan update prior to October 1, 2015, it seeks to incorporate the most current species datasets available in order to develop spatially-explicit distribution models using USGS software for Assisted Habitat Modeling.

**Federal Funds requested**: $37,500; **Non-Federal Match**: $12,500

**Nebraska Game and Parks Commission**

**Title**: Improving and Protecting Key Habitats for At-Risk Bat Species
**State(s):** Nebraska, Wyoming

**Goals and Objectives:** In 2013, the Service issued a finding in response to a petition to list the northern long-eared bat (*Myotis septentrionalis*) as endangered throughout its range. The Service noted that, while listing is warranted due to the danger of extinction, the identification of critical habitat cannot be determined due to limited available information about the distribution and abundance of the bat. This project seeks to provide information that may be of use to the States, the Service, and other conservation partners in future decision-making to conserve the northern long-eared bat, while also collecting essential information about seven other eastern and western bat species. As elsewhere with other bat species, a primary threat to the northern long-eared bat is white-nose syndrome, which has been documented about 500 miles from the focal area of this project. This landscape-scale effort will enhance approximately 1100 acres of forest, savanna, grassland and riparian habitats and provide long-term protection for two important roosts for bats. The partnering States take an adaptive management approach, addressing information gaps through use of standardized monitoring methods to establish baseline occurrence and relative abundance. Such information is necessary in order to detect future

population changes and to allow Federal, State and private local managers to prioritize areas for conservation and protection.

**Federal Funds requested**: $500,000; **Non-Federal Match**: $299,696