United States Department of the Interior

FISH AND WILDLIFE SERVICE
Washington, D.C. 20240

OCT 14 2019

In Reply Refer To
FWS/AWSR/POP/071095

Memorandum

To: Principal Deputy Director

From: Assistant Director – Wildlife and Sport Fish Restoration Program

Subject: Competitive State Wildlife Grant Program – Fiscal Year 2019

This memorandum seeks your review and approval of awards for the Fiscal Year (FY) 2019 Competitive State Wildlife Grant (SWG) Program.

The purpose of the SWG Program is to provide wildlife conservation grants to States for the development and implementation of programs that benefit wildlife and their habitats, including species that are not hunted or fished. The SWG Program has been funded annually since 2001 through appropriations of Congress.

The Wildlife and Sport Fish Restoration Program (WSFR) recommends funding 14 projects (see Attachment 1).

WSFR received 27 eligible applications from 14 States and one regional association of fish and wildlife agencies in response to the published funding opportunity (see Attachment 2). A national panel consisting of Service Regional SWG Program managers scored and ranked the applications.

The total FY 2019 funds available for the Competitive SWG Program are $6,460,950. The awarded Federal funds for these proposals will be matched by over $2.1 million in non-Federal funds. This will result in approximately $8.6 million to be expended for projects that conserve and protect species of greatest conservation need and their habitats, as described in these States' Wildlife Action Plans.

If you have questions, please contact Christy Vigfusson, Acting Chief, Division of Policy and Programs, Wildlife and Sport Fish Restoration Program, at (703) 358-1748.

Approved: _____ Date: 10-14-19

Attachment

Attachment 1 FY 2019 Competitive State Wildlife Grant Program Recommended Projects

Region	Lead State	Project Title	SWG Federal Share	Non-Federal Match	Total Project Costs
1	CNMI	Alamagan Ecosystem Restoration to Benefit Mariana Skink and SGCN	$272,964	$81,459	$354,423
1	CNMI	Determining Distribution and Ecological Associations of the Rota Blue Damself	$466,660	$0	$466,660
1	Hawaii	Enhancing Protection of a Key Wetland for Endangered Hawaiian Waterbirds	$206,683	$84,772	$291,455
1	Hawaii	Improving Efficacy of Rodent Control to Benefit the Endangered Puaiohi	$492,339	$179,789	$672,128
1	Hawaii	Oahu Snail Predator-Proof Fence for Reintroduction of *Achatinella livida*	$250,000	$83,335	$333,335
1	Hawaii	Restoring Alala to the Wild on Hawaii Island	$461,853	$153,951	$615,804
3	Minnesota	Improving and Expanding Fire-Dependent Communities to Benefit SGCN	$500,000	$216,490	$716,490
3	Wisconsin	Pollinator Conservation Through Barrens Restoration	$249,947	$83,386	$333,333
4	Florida	Repatriating Eastern Indigo Snakes in Florida Through Captive Breeding	$249,974	$83,325	$333,299
4	Georgia	Multistate Habitat and Population Restoration of Gopher Frogs	$604,933	$240,274	$845,207
4	South Carolina	Basin-Wide Planning for Bartram's Redeye Bass in South Carolina and Georgia	$483,052	$166,421	$649,473
4	South Carolina	Disomic Microsatellite Panel for Population Genetics of Shortnose Sturgeon	$234,943	$92,219	$327,162
5	New Hampshire	Using Nanotag Technology to Identify SGCN Habitat Use	$998,038	$357,007	$1,355,045
5	Pennsylvania	Implementation of the Northern Population Bog Turtle Conservation Plan	$989,564	$336,923	$1,326,487
		Totals	**$6,460,950**	**$2,159,351**	**$8,620,301**

Summaries of Proposed Projects

Competitive State Wildlife Grant (SWG) Program, Fiscal Year 2019
Total Amount Available: $6,460,950

Recommended for Funding (14 projects):

Region 1

Commonwealth of the Northern Mariana Islands Department of Fish and Wildlife

Title: Alamagan Ecosystem Restoration to Benefit Mariana Skink and Multiple Species of Greatest Conservation Need
State(s): Commonwealth of the Northern Mariana Islands (CNMI)

Project Summary: The CNMI Department of Fish and Wildlife, in partnership with the U.S. Department of Agriculture, the U.S. Geological Survey, and CNMI's Northern Islands Mayor's Office, proposes to conduct logistical planning and environmental compliance required to implement ecosystem restoration of Alamagan Island to benefit the rare, native Mariana Skink (*Emoia slevini*) and several other rare and endangered birds and invertebrates. The Mariana Skink is a federally endangered species endemic to the Mariana Archipelago and populations have recently been declining rapidly. The project is a first and necessary phase that will allow the immediate implementation of ecosystem restoration. The next phase of the project, to be funded separately, consists of removing the invasive ungulates that degrade the native forest habitats of the skink and other endemic species.

Federal Funds Requested: $272,964; **Non-Federal Match:** $81,459

Commonwealth of the Northern Mariana Islands Department of Fish and Wildlife

Title: Determining the Distribution and Ecological Associations of the Rota Blue Damselfly
State(s): Commonwealth of the Northern Mariana Islands (CNMI)

Project Summary: The CNMI Department of Fish and Wildlife, in partnership with Texas A&M University, proposes to conduct field research and genetic analysis to determine the distribution and habitats of the Rota Blue Damselfly (*Ischnura luta*) on Rota Island, CNMI. The Rota Blue Damselfly is a federally listed species endemic to CNMI. It is found only on Rota Island and is at additional risk from planned water development projects within its breeding habitat. The project will use field surveys and cutting-edge environmental DNA analysis to detect damselfly presence in freshwater habitats, map distributions, and identify potential competitors, predators, and prey. Results will be used to create an adaptive management and restoration plan and to help guide implementation of local water development planning to minimize effects on damselflies.

Federal Funds Requested: $466,660; **Non-Federal Match:** $0

Hawaii Department of Land and Natural Resources

Title: Enhancing Protection of a Key Wetland for Endangered Hawaiian Waterbirds
State(s): Hawaii

Project Summary: The Hawaii Department of Land and Natural Resources proposes to improve management and survival of federally endangered waterbirds by identifying causes of waterbird mortality at one of the State's largest wetland refuges. The study will benefit three federally listed waterbird species, all of which are endemic to Hawaii: Hawaiian Coots (*Fulica alai*), Hawaiian Gallinules (*Gallinula galeata sandvicensis*) and Hawaiian Stilts (*Himantopus mexicanus knudseni*). Researchers will observe active nests and radio-tag chicks to identify predators responsible for chick mortality at the Kawainui-Hamakua wetland complex on Oahu, an area identified in the Hawaii Waterbird Recovery Plan as a core wetland necessary for species recovery. This information will allow State wetland managers to adapt their management and predator control strategies to increase chick survival and accelerate species recovery.

Federal Funds Requested: $206,683; **Non-Federal Match:** $84,772

Hawaii Department of Land and Natural Resources

Title: Improving Efficacy of Rodent Control to Benefit the Endangered Puaiohi and Other Species of Greatest Conservation Need in Hawaii
State(s): Hawaii

Project Summary: The Hawaii Department of Land and Natural Resources, in partnership with University of Hawaii, Colorado State University, Auburn University and Northern Arizona University, proposes to increase survival of Puaiohi (*Myadestes palmeri*), a rare species of forest bird, by increasing efficacy of predator control. Puaiohi are federally listed as an endangered species, are endemic to Hawaii, and are only found in montane areas of Kauai Island. The project proposes to quantify and improve the efficacy of current methods of controlling rats, which are the primary predator of this species and a major reason for its decline. Project results will improve survival of Puaiohi and will also benefit other endemic Hawaii forest birds subject to rat predation.

Federal Funds requested: $492,339; **Non-Federal Match:** $179,789

Hawaii Department of Land and Natural Resources

Title: Oahu Snail Predator-Proof Fence for Reintroduction of *Achatinella livida*
State(s): Hawaii

Project Summary: The Hawaii Department of Land and Natural Resources proposes to reintroduce the endemic Hawaii Snail *(Achatinella livida)* to the wild in the northern Koolau Mountains on Oahu Island. This species is federally listed as endangered and is no longer present in the wild, after the last snails were brought into a captive propagation facility in 2019. Predation by introduced snails and other species have been the major factors in the decline. The agency will construct a fenced, predator-proof enclosure within the historic range of the species and will re-introduce

captive snails after predators have been removed from inside the fence. This project will help prevent the imminent extinction of this species and will also serve to protect two additional rare, endemic snail species.

Federal Funds requested: $250,000; **Non-Federal Match:** $83,335

Hawaii Department of Land and Natural Resources

Title: Restoring Alala to the Wild on Hawaii Island
State(s): Hawaii

Project Summary: The Hawaii Department of Land and Natural Resources, in partnership with the University of Hawaii, the San Diego Zoo and other partners, proposes to facilitate population restoration of Alala *(Corvus hawaiiensis)*, an endemic Hawaiian crow, to the wild in its native habitat on Hawaii Island. The Alala is a federally listed endangered species that became extinct in the wild in 2002 and is slowly being re-established in the wild from captive populations, with a total current wild population of 25 individuals. In anticipation of additional crow releases, this project will restore native forest habitat, control introduced predators, and install infrastructure necessary for the crow releases. The project is necessary to ensure survival and reproduction of the released crows and will benefit several additional endemic species that are also dependent on native forest habitats and predator control.

Federal Funds requested: $461,853; **Non-Federal Match:** $153,951

Region 3

Minnesota Department of Natural Resources

Title: Improving and Expanding Fire-Dependent Communities to Benefit Species of Greatest Conservation Need
State(s): Minnesota, Wisconsin

Project Summary: Minnesota and Wisconsin Departments of Natural Resources will partner to improve habitat in rare fire-dependent ecosystems, some of the most highly threatened lands in the world. The agencies will restore or enhance at least 1,250 acres of public lands, provide technical assistance to private landowners, and monitor species for responses to management activities. Although restoration activities will benefit many species, this cooperative effort is specifically designed to benefit Rusty-Patched Bumble Bee *(Bombus affinis)*, Monarch Butterfly (*Danaus plexippus*), Blanding's Turtle *(Emydoidea blandingii)*, and Ornate Box Turtle *(Terrapene ornate)*. Rusty-Patched Bumble Bee is federally listed as endangered, Blanding's Turtle and Monarch are under review for Federal listing, and Ornate Box Turtle is State-listed as endangered in Wisconsin.

Federal Funds Requested: $500,000; **Non-Federal Match:** $216,490

Wisconsin Department of Natural Resources

Title: Pollinator Conservation through Barrens Restoration
State(s): Wisconsin

Project Summary: Wisconsin Department of Natural Resources will restore 400 acres of pine and oak barrens to benefit Karner Blue Butterfly *(Lycaeides Melissa samuelis)* and Monarch Butterfly *(Danaus plexippus)*, Frosted Elfin *(Callophrys irus irus)*, Rusty-Patched Bumble Bee *(Bombus affinis)*, and Yellow-Banded Bumble Bee *(Bombus terricola)*. The agency will conduct site assessments and species surveys, facilitate implementation of the Wisconsin Monarch Conservation Strategy, and use data to identify future management needs to create or improve suitable habitat for these and other species. The data will improve the effectiveness of the Wisconsin Natural Heritage Inventory database in informing future management actions for pollinators and other species identified in Wisconsin's Wildlife Action Plan.

Federal Funds requested: $249,947; **Non-Federal Match:** $83,386

Region 4

Florida Fish and Wildlife Conservation Commission

Title: Repatriating Eastern Indigo Snakes in Florida through Habitat Management, Monitoring, and Captive Breeding
State(s): Florida

Project Summary: The Florida Fish and Wildlife Conservation Commission, in partnership with the Orianne Center for Indigo Conservation, seeks to propagate and reintroduce the Eastern Indigo Snake *(Drymarchon corais couperi)*, an apex predator once extirpated from the Florida panhandle. The Eastern Indigo Snake was listed under the Endangered Species Act as threatened in 1978 due to habitat modification, collections for the pet trade, and gassing while in Gopher Tortoise burrows. Primary objectives of this project include breeding and husbandry for reintroduction at The Nature Conservancy's Apalachicola Bluffs and Ravines Preserve, habitat management essential for the snake's survival, and monitoring of reintroduced snakes. This species was successfully released at the Preserve in 2017. This project is designed to build upon the momentum of the reintroduction and continue effective habitat management and monitoring.

Federal Funds Requested: $249,974; **Non-Federal Match:** $83,325

Georgia Department of Natural Resources

Title: Multistate Habitat and Population Restoration of Gopher Frogs
State(s): Georgia, Alabama, North Carolina, and South Carolina

Project Summary: The Georgia Department of Natural Resources, in partnership with the Alabama Department of Conservation and Natural Resources, North Carolina Wildlife Resources Commission, and South Carolina Department of Natural Resources, proposes to restore or construct

breeding habitat for targeted imperiled amphibians. The Gopher Frog *(Lithobates capito)* is ranked among the highest priority species of greatest conservation need in all States within its range and is currently being considered for Federal listing under the Endangered Species Act. This project will focus on investigating the capacity for propagation and feasibility of augmentation of natural populations, as well as creation and restoration of breeding habitats in the four participating States. Project activities will also indirectly benefit a significant number of other native species. The actions in this proposal will directly increase suitable habitat for Gopher Frogs, toward the goal of decreasing the need for Federal listing of the species.

Federal Funds Requested: $604,933; **Non-Federal Match:** $240,274

South Carolina Department of Natural Resources

Title: Basin-Wide Planning for "Bartram's" Redeye Bass in the Savannah River
State(s): South Carolina, Georgia

Project Summary: The South Carolina and Georgia Departments of Natural Resources, along with university partners, propose research regarding two geographically isolated species native to South Carolina and Georgia's Atlantic Slope river systems. The provisionally recognized Bartram's and Altamaha Bass are each listed as species of conservation need in the two States' Wildlife Action Plans. Both States' Plans describe the imminent threats of extirpation posed by habitat alteration and an invasive species, the Alabama Bass. To address key knowledge gaps needed for conservation of Bartram's and Altamaha Bass, this project will complete the taxonomic description of these two species, identify the spatial distribution of genetically pure endemic bass, quantify spread and dispersal of bass species, and develop a conservation planning map for prioritizing restoration efforts to benefit all aquatic species. This project is expected to lead to a greater understanding of the population dynamics of these species and to habitat recommendations to benefit a suite of native aquatic fauna.

Federal Funds Requested: $483,052; **Non-Federal Match:** $166,421

South Carolina Department of Natural Resources

Title: Identification and Optimization of a Disomic Microsatellite Panel for Use in Population Genetics of Shortnose Sturgeon
State(s): South Carolina

Project Summary: The South Carolina Department of Natural Resources, in collaboration with West Virginia University, seeks to identify genetic markers to inform conservation of the Shortnose Sturgeon *(Acipenser brevirostrum)*. This federally endangered species was an initial listing under the Endangered Species Act in 1973 due to overharvest for caviar, habitat degradation, and limited access to historic gravel bed spawning grounds due to the construction of dams. New genetic tools can be used to interpret patterns of population structure and gene flow and can vastly improve management for population-specific threats, helping to guide recovery efforts for this species. The development of functionally disomic microsatellite markers for this species will lead to genetic characterization of the Santee-Cooper River System and Winyah Bay populations of Shortnose

Sturgeon in South Carolina. Additionally, the tool will be made available to other researchers to genotype Shortnose Sturgeon populations throughout its range.

Federal Funds Requested: $234,943; **Non-Federal Match:** $92,219

Region 5

New Hampshire Fish and Game Department

Title: Using Nanotag Technology to Identify Species Habitat Use
State(s): New Hampshire, Maine, Massachusetts, Pennsylvania

Project Summary: The Motus Wildlife Tracking System, a network of automated radio telemetry receiving stations that detects digitally coded transmitters, now enables researchers to track small-bodied, highly mobile animals regionally or continentally for up to 90 days. New Hampshire Fish and Game Department, along with the Maine Department of Inland Fisheries and Wildlife, Massachusetts Division of Fisheries and Wildlife, and the Pennsylvania Game Commission will work with partners in establishing automated radio telemetry stations to document the regional movements of species of greatest conservation need. Receiver stations will be sited to provide maximum coverage of recognized and potential flyways within the region. The project will gather geographic and temporal data on migration routes, timing, and post-breeding movements of American Kestrel *(Falco sparverius)* and Monarch Butterfly *(Danaus plexippus)*. This effort will greatly expand the telemetry monitoring network along an important inland migration corridor, enabling the collection of full life-cycle data to inform habitat management and other conservation decisions.

Federal Funds requested: $998,038; **Non-Federal Match:** $357,007

Pennsylvania Fish and Boat Commission

Title: Implementation of the Bog Turtle Conservation Plan for the Northern Population with Benefits to Associated Headwater Wetland Species of Greatest Conservation Need
State(s): Pennsylvania, Connecticut, Delaware, Maryland, Massachusetts, New Jersey, New York

Project Summary: The northern population of Bog Turtle *(Glyptemys muhlenbergii)* was federally listed in 1997 and is a high priority species of greatest conservation need in the Northeast. One of the primary threats to Bog Turtle populations throughout the region is natural vegetative succession of important resource areas including nesting, thermoregulation, and foraging sites. This project, led by the Pennsylvania Fish and Boat Commission, along with resource agencies of the States of Maryland, Delaware, New Jersey, New York, Connecticut, and Massachusetts, will improve core habitat on private and public lands, conduct survey and genetics activities, and create best management practices for development projects and roadside mowing. All work is guided by the Bog Turtle State and Federal Partners Working Group which will implement the conservation plan developed in an earlier Competitive SWG Program-funded project to advance the recovery of the species.

Federal Funds requested: $989,564; **Non-Federal Match:** $336,923