

## *Summaries of Selected Projects*

Competitive State Wildlife Grant Program, Fiscal Year 2023

Total Amount Available: \$7,715,068.21

### Recommended for Funding:

#### **Competitive State Wildlife Grant Program**

##### **Region 1**

##### **Guam Department of Agriculture – Division of Aquatic and Wildlife Resources**

**Title:** Mariana eight-spot butterfly conservation and management

**State(s):** Guam

**Project Summary:** The federally endangered Mariana eight-spot butterfly is identified in the Guam Wildlife Action Plan as a Species of Greatest Conservation Need (SGCN). Guam Department of Agriculture's Division of Aquatic and Wildlife Resources, in partnership with the University of Guam Center for Island Sustainability, will propagate captive butterflies to augment wild populations, assess available habitats and risks, restore host plants to enrich habitats for releases, and collect and identify parasitoid wasps. These actions will pilot butterfly management approaches to meet recovery goals for the species.

**Federal Funds Requested:** \$487,120; **Non-Federal Match:** \$0 (*exempt*)

##### **Hawai'i Department of Land and Natural Resources**

**Title:** Determining the distribution of 'akikiki and akeke'e to inform and measure efficacy of landscape-level mosquito control on Kaua'i

**State(s):** Hawai'i

**Project Summary:** Two federally endangered Hawai'ian honeycreepers 'akikiki and akeke'e, are currently experiencing sharp population declines. A major threat to these species is the proliferation of avian malaria, as climate change facilitates the incursion of southern house mosquitoes (the vector for avian malaria) into forest bird habitat at higher elevations. Hawai'i Department of Land and Natural Resources will characterize the distribution and abundance of the two species, develop a labor-saving monitoring tool that expands monitoring capacity, and conduct outreach on the avian malaria threat and vector control strategies.

**Federal Funds Requested:** \$303,299; **Non-Federal Match:** \$101,723

##### **Hawai'i Department of Land and Natural Resources**

**Title:** Expanding conservation management for three listed seabird species on Kaua'i

**State(s):** Hawai'i

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**Project Summary:** Kaua'i hosts three federally listed native seabird species, the Newell's shearwater, the Hawai'ian petrel, and the band-rumped storm-petrel. This project aims to increase the conservation coverage for all three species by initiating a monitoring program in a new area, closing knowledge gaps on their distribution on land and at sea, and addressing major threats to seabird colonies.

**Federal Funds Requested:** \$499,922.50; **Non-Federal Match:** \$166,641.30

### **Hawai'i Department of Land and Natural Resources**

**Title:** Preventing extinction of the last known *Achatinellina* tree snail on Hawai'i Island

**State(s):** Hawai'i

**Project Summary:** With over 750 historically described species found nowhere else on Earth, land snails continue to make up a significant portion of the terrestrial biodiversity of the Hawai'ian Islands. The subject of this proposal is *Partulina physa*, a beautiful tree snail endemic to Hawai'i Island that is on the very brink of extinction. The agency will work with the Kohala Watershed Partnership and Parker Ranch to establish and manage a predator-proof fence on the ranch. Once free of predators, snails will be directly translocated from vulnerable 'ōhi'a trees into the protected area. The fence unit will also be planted with a diverse assemblage of snail host plants to safeguard the habitat.

**Federal Funds Requested:** \$500,000; **Non-Federal Match:** \$166,667

### **Hawai'i Department of Land and Natural Resources**

**Title:** Reversing anthropogenic hybridization in endangered koloa maoli (Hawai'ian duck, *Anas wyvilliana*)

**State(s):** Hawai'i

**Project Summary:** The koloa maoli was federally listed as endangered in 1967 and has the highest recovery priority among the four endangered waterbirds that occur on the main Hawai'ian Islands. To successfully recover the species, it is imperative to manage the feral mallard and koloa x feral mallard hybrid populations that now constitute all populations outside Kaua'i. The agency will artificially move the genetic ancestry of these populations back to koloa through model-guided supplementation and removal efforts.

**Federal Funds Requested:** \$499,787.71; **Non-Federal Match:** \$167,000

### **Washington Department of Fish and Wildlife**

**Title:** Advancing northern leopard frog recovery in Washington (Phase 3)

**State(s):** Washington

**Project Summary:** Washington Department of Fish and Wildlife will partner with Northwest Trek, Oregon Zoo, Washington State University, and the Columbia National Wildlife Refuge to help moderate the need for listing the northern leopard frog under the Endangered Species Act. This project will build on prior recovery work to improve conditions for the last population of this State

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endangered Species of Greatest Conservation Need in Washington. The partners will increase the chance of its persistence in the State by establishing additional populations through captive and *in situ* rearing, bullfrog management, and habitat restoration.

**Federal Funds Requested:** \$228,215; **Non-Federal Match:** \$76,072

**Region 2**

**Texas Parks and Wildlife Department**

**Title:** Prioritizing native bee species for conservation and developing tools to support habitat management

**State(s):** Texas, California, Vermont, Washington

**Project Summary:** A lack of information about conservation status, individual bee life histories, and habitat needs greatly hinders bee conservation by State wildlife agencies and their partners across the United States. This project will address knowledge gaps and facilitate the inclusion of native bees as conservation priorities within the partnering States’ Wildlife Action Plans. Project results will provide the collaborating agencies - plus Xerces Society, the Strategic Stewardship Initiative, the Vermont Center for Ecostudies, and the University of California-Riverside - with the information needed to protect populations of native bee Species of Greatest Conservation Need. The agencies and their partners will use this information to manage and restore native bee habitats.

**Federal Funds Requested:** \$1,000,000; **Non-Federal Match:** \$333,579

States Receiving Funds	Federal Funds Requested	Non-Federal Match	Grant or Subaward
Texas (Lead)	\$346,420	\$188,751	Grant
California	\$134,219	\$28,754	Subaward
Vermont	\$177,835	\$10,000	Subaward
Washington	\$341,526	\$106,074	Subaward

**Region 3**

**Iowa Department of Natural Resources**

**Title:** Conservation strategies and actions to support urban SGCN, 2024-2026

**State(s):** Iowa

**Project Summary:** This project will allow Iowa Department of Natural Resources to begin working in urban areas in order to slow or reverse the decline of Species of Greatest Conservation Need (SGCN) that are adaptable to living in cities. Project results will include a better understanding of actions needed to increase populations of selected SGCN in urban areas in Iowa. The agency will develop outreach materials for city officials and urban residents on how to enhance urban habitats for these species, from yards to parks. The agency will also implement projects on urban lands that will both provide habitat for SGCN and serve as educational examples for private landowners.

**Federal Funds Requested:** \$245,176; **Non-Federal Match:** \$82,395

**Wisconsin Department of Natural Resources**

**Title:** Improving open landscapes to benefit Species of Greatest Conservation Need in southeastern Wisconsin and northeastern Illinois (Phase 1)

**State(s):** Wisconsin, Illinois

**Project Summary:** Wisconsin Department of Natural Resources and McHenry County Conservation Foundation will partner to improve habitat connectivity in the Southeast Glacial Plain Ecological Landscape of Wisconsin and the Northeast Morainal Division Landscape in Illinois. The partners will improve, restore, and connect habitat areas for pollinators including the federally endangered Rusty-patched bumble bee, Monarch butterfly, and other Species of Greatest Conservation Need on at least 227 acres. Conservation actions include invasive plant management, seeding with native plant species, and prescribed fire. These actions will also improve habitat for vulnerable grassland birds and Blanding’s turtle, which is currently under review for Federal listing.

**Federal Funds Requested:** \$250,000; **Non-Federal Match:** \$84,950

States Receiving Funds	Federal Funds Requested	Non-Federal Match	Grant or Subaward
Wisconsin (Lead)	\$150,000	\$20,000	Grant
Illinois	\$100,000	\$64,950	Subaward

**Wisconsin Department of Natural Resources**

**Title:** Peatland rare insect surveys: targeting pollinators and other Species of Greatest Conservation Need insects across Minnesota, Wisconsin, and Michigan

**State(s):** Wisconsin, Michigan, Minnesota

**Project Summary:** Boreal peatlands are unique, high-priority landscapes containing imperiled and vulnerable natural communities. Eighteen imperiled species have been found in boreal peatlands in the three partnering States, including the federally endangered Hine’s emerald dragonfly. The agencies will conduct 150 invertebrate surveys across the highest priority peatlands, collecting species occurrences, plant and natural community associations, and environmental data. These surveys will help fill data gaps and directly inform future peatlands management for Species of Greatest Conservation Need within the three States.

**Federal Funds Requested:** \$722,610; **Non-Federal Match:** \$241,186

States Receiving Funds	Federal Funds Requested	Non-Federal Match	Grant or Subaward
Wisconsin (Lead)	\$247,077	\$82,361	Grant
Michigan	\$228,132	\$76,044	Grant
Minnesota	\$247,401	\$82,781	Grant

**Region 4**

**Georgia Department of Natural Resources**

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**Title:** Advancing conservation and management of the spotted turtle (*Clemmys guttata*) in the southeastern United States: addressing data gaps, refining approaches, and building capacity  
**State(s):** Georgia, South Carolina, Virginia, West Virginia

**Project Summary:** Spotted turtles have declined across their range, are identified as Species of Greatest Conservation Need in all 21 States in which they occur and are being considered for Federal listing under the Endangered Species Act. Building upon a recently completed status assessment and conservation plan, the collaborating States and other key partners will identify priority wetland and terrestrial habitats for spotted turtles in the southeastern U.S., improve their habitat quality and quantity, and increase protections from illegal collection. Additional objectives include continued inter-state research, population viability analysis, and technical assistance to landowners.

**Federal Funds Requested:** \$998,958; **Non-Federal Match:** \$332,986

States Receiving Funds	Federal Funds Requested	Non-Federal Match	Grant or Subaward
Georgia (Lead)	\$425,607	\$141,869	Grant
South Carolina	\$153,838	\$51,280	Grant
Virginia	\$184,500	\$61,500	Grant
West Virginia	\$235,013	\$78,337	Grant

**South Carolina Department of Natural Resources**

**Title:** Developing a proactive conservation planning tool for stream fishes of greatest conservation need in the Carolinas  
**State(s):** South Carolina, North Carolina

**Project Summary:** The Carolinas house one of the richest freshwater fish faunas in the United States, but nearly one-third of these species are in urgent need of conservation action to address ongoing threats. The cooperating agencies, along with Clemson University, Soil and Water Conservation Districts, and other key partners will focus on better prioritization and survey efforts for native fishes. The partners will also identify more effective species restoration and reintroduction methods and develop land-use guidance to minimize impacts to targeted species in this rapidly changing region. Among other objectives, the partners will develop an open-access, web-based Aquatic Planning Tool to help guide conservation and restoration efforts for fish Species of Greatest Conservation Need in the two States.

**Federal Funds Requested:** \$367,660; **Non-Federal Match:** \$125,624

States Receiving Funds	Federal Funds Requested	Non-Federal Match	Grant or Subaward
South Carolina (Lead)	\$320,710	\$109,972	Grant
North Carolina	\$46,950	\$15,652	Grant

**U.S. Virgin Islands Division of Fish and Wildlife**

**Title:** Distribution and habitat associations of Species of Greatest Conservation Need and assessment of aquatic organism barriers in the freshwaters of the U.S. Virgin Islands

**State(s):** U.S. Virgin Islands

**Project Summary:** The U.S. Virgin Islands (USVI) are home to a unique freshwater fauna that includes the American eel, a Species of Greatest Conservation Need (SGCN) identified in the USVI Wildlife Action Plan and in the Plans of many other States. However, freshwater systems in the USVI are grossly understudied, resulting in critical data gaps that limit effective management of many freshwater species. The USVI Division of Fish and Wildlife, in partnership with the Southeastern Association of Fish and Wildlife Agencies' Southeast Aquatic Resources Partnership (SARP) and Clemson University, will collect data on all known freshwater Species of Greatest Conservation Need and their habitats, assess in-stream barriers impacting the American eel and other species, and develop a freshwater connectivity plan that prioritizes barriers for removal.

**Federal Funds Requested:** \$ 229,130; **Non-Federal Match:** (*exempt*)

### **Region 5**

#### **Massachusetts Division of Fisheries and Wildlife (MassWildlife)**

**Title:** Implementation of regional conservation plans for at-risk turtles and co-occurring Species of Greatest Conservation Need in Massachusetts

**State(s):** Massachusetts

**Project Summary:** MassWildlife will target highly imperiled turtles including the federally threatened bog turtle as well as spotted, wood, and Blanding's turtles which are petitioned for Federal listing and identified as Regional Species of Greatest Conservation Need in the Northeast. To help stabilize populations of these species, the agency will implement a wide variety of actions documented in quantitative, spatially-explicit conservation plans that have been developed for all four species within the past decade. Some of the many objectives in this project include restoration of priority turtle nesting areas, wetland restoration and monitoring, and implementation of expanded protections for vernal pool habitats.

**Federal Funds Requested:** \$250,000; **Non-Federal Match:** \$88,333.33

### **Region 6**

#### **Nebraska Game and Parks Commission**

**Title:** Assessing and recovering native freshwater mussels to the Great Plains

**State(s):** Nebraska, South Dakota, Wyoming

**Project Summary:** Nebraska Game and Parks Commission, in collaboration with South Dakota Game, Fish, and Parks, Wyoming Game and Fish Department, and the University of Nebraska-Lincoln, seeks to expand upon prior successful mussel propagation efforts by rearing four additional mussel Species of Greatest Conservation Need for release in the wild. Two of 18 mussel species expected to benefit from this project are federally endangered and seven are identified as Regional Species of Greatest Conservation Need by the Midwest Landscape Initiative. The partners will also

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identify priority waterways across the three States for future surveying, monitoring, and reintroduction efforts.

**Federal Funds Requested:** \$730,124; **Non-Federal Match:** \$243,374

<b>States Receiving Funds</b>	<b>Federal Funds Requested</b>	<b>Non-Federal Match</b>	<b>Grant or Subaward</b>
Nebraska (Lead)	\$307,248	\$102,416	Grant
South Dakota	\$343,038	\$114,346	Grant
Wyoming	\$79,838	\$26,612	Grant

## **Wildlife Action Plan Enhancement Subprogram**

### **Region 1**

#### **Hawai'i Department of Land and Natural Resources**

**Title:** Modernizing the Hawai'i State Wildlife Action Plan with new visualizations and online dashboards

**State(s):** Hawai'i

**Project Summary:** Hawai'i Department of Land and Natural Resources will make much-needed improvements to the accessibility and adaptability of the Hawai'i State Wildlife Action Plan. Species of Greatest Conservation Need profiles will be adapted to a StoryMap and ESRI Dashboard interface that is easier to search and navigate, providing ecosystem-based information and encouraging site visitors to interact with the Plan. The agency will also develop a database of performance metrics for Plan objectives, strategies, and actions. This method of tracking progress and evaluating the Plan is essential to adapting resource management priorities shared by government agencies, other partners, and communities statewide.

**Federal Funds Requested:** \$71,866; **Non-Federal Match:** \$26,359

### **Region 3**

#### **Michigan Department of Natural Resources**

**Title:** Assessing climate vulnerability and adaptive capacity of 538 Midwest Species of Greatest Conservation Need

**State(s):** Michigan, Nebraska

**Project Summary:** A national team of agencies, academics, and non-profits recently developed an improved climate change vulnerability tool focused on linking species' attributes to adaptive capacity and State-identified conservation actions. Michigan Department of Natural Resources and Nebraska Game and Parks Commission will use this new tool to assess vulnerability for 538 Species of Greatest Conservation Need across Indiana, Michigan, Minnesota, Missouri, Nebraska, and South Dakota. Linking climate vulnerability to conservation actions will be a significant advancement in the quality and utility of these States' Wildlife Action Plans.

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**Federal Funds Requested:** \$181,200; **Non-Federal Match:** \$60,400

<b>States Receiving Funds</b>	<b>Federal Funds Requested</b>	<b>Non-Federal Match</b>	<b>Grant or Subaward</b>
Michigan (Lead)	\$151,200	\$50,400	Grant
Nebraska	\$30,000	\$10,000	Subaward

**Region 5**

**Delaware Division of Fish and Wildlife**

**Title:** Web-enabling the Delaware Wildlife Action Plan

**State(s):** Delaware

**Project Summary:** Delaware Division of Fish and Wildlife will enhance public delivery of the Delaware Wildlife Action Plan (DEWAP) by developing an online tool and accessible database. These enhancements will increase incorporation of DEWAP data into partner conservation efforts, allowing them to consider species and habitat impacts of proposed actions, and improve cross-boundary and landscape-scale conservation of Species of Greatest Conservation Need. The agency will offer training in use of the tool to a variety of State, Federal, and other conservation partners.

**Federal Funds Requested:** \$150,000; **Non-Federal Match:** \$50,000