# NATIONAL FISH AND WILDLIFE FOUNDATION

**2018 CONSERVATION INVESTMENTS** 

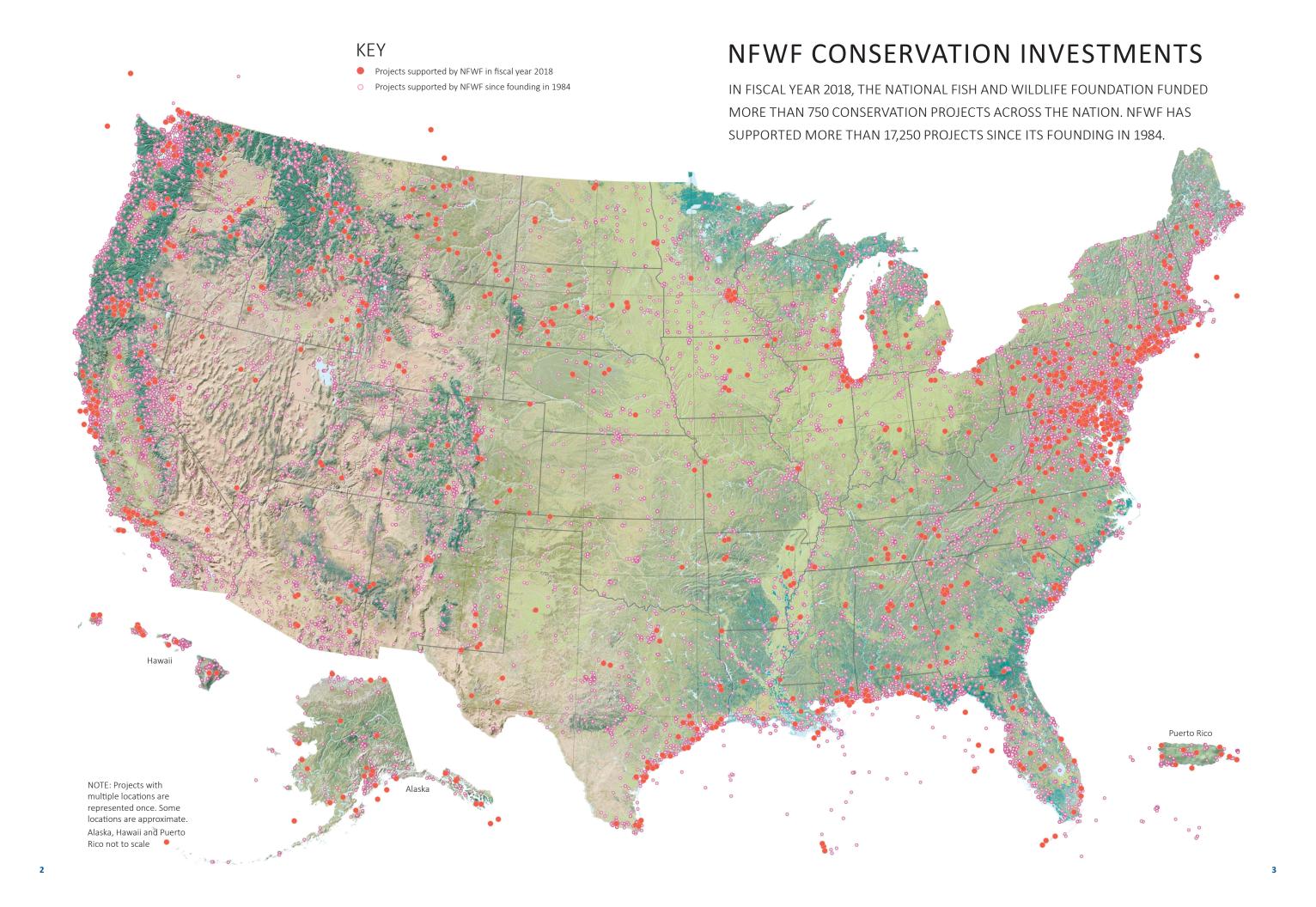




The National Fish and Wildlife
Foundation is dedicated to sustaining,
restoring and enhancing the nation's
fish, wildlife, plants and habitats for
current and future generations.

NFWF will advance its mission through innovative public and private partnerships, and by investing financial resources and intellectual capital into science-based programs designed to address conservation priorities and achieve measurable outcomes.

In Fiscal Year 2018, NFWF funded more than 750 conservation projects across the nation, generating an on-the-ground conservation impact of more than \$483 million.



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# UNITED STATES AND U.S. TERRITORIES

# FISCAL YEAR 2018 CONSERVATION INVESTMENTS

#### ALABAMA

#### **Alabama Forestry Commission Gopher Tortoise Soils Identification**

and Private Landowner Engagement (AL) Identify private landowners in areas containing high-priority gopher tortoise soils or those in the vicinity of public lands being managed for gopher tortoise in Alabama. Project will result in an educational workshop focused on providing information regarding cost-share initiatives, beneficial management activities and best management practices for the gopher tortoise.

#### \$14,000

#### **Alabama Forestry Foundation** Improving Habitat for At-Risk Species in

Southwest Alabama Longleaf Forests - II Engage family forest owners in southwest Alabama to restore and enhance longleaf forests and improve habitat for at-risk species. Project will engage 450 landowners and improve 1,300 acres of longleaf forests through planting, thinning, prescribed burning and invasive species control, benefiting gopher tortoises, eastern hognose snakes and other at-risk species. \$150,000

#### **Alabama Forestry Foundation** Improving Habitat for At-Risk Species in the Alabama Cumberlands - II

Engage family forest owners in an area of the Alabama Cumberlands designated as a high priority landscape under the American Forest Foundation's Southern Wood and Wildlife Initiative. Project will engage 250 landowners through assistance focused on habitat protection and enhancement for at-risk aquatic species, with the expectation that 14 family forests will improve 80 acres of riparian forests and 12 miles of streams. \$150,000

#### Alabama Wildlife Federation Catalyzing Private Landowner Contributions to Alabama Gulf Coast Conservation – II

Increase landowner engagement and stewardship on at least 5,000 acres in Alabama's Gulf Coast counties and lower Gulf coastal plain. Project will benefit habitat for migratory shorebirds, waterfowl and other wetland wildlife. as well as terrestrial birds and wildlife.

#### \$84,224

#### **Alabama Wildlife Federation** Longleaf Pine and Wildlife Habitat Restoration

on Alabama Private Lands – V

Restore and enhance 5,000 acres of longleaf pine on private lands within priority counties for longleaf pine and northern bobwhite restoration in Alabama. Project will engage at least 100 private landowners and will assist landowners with identifying eligible incentive programs for establishing and managing longleaf pine and associated wildlife habitat. \$115,000

#### **Bat Conservation International**

Glycol as a White-Nose Syndrome Management Strategy (AL, AK, Canada) Evaluate the efficacy of using two nontoxic agents – ultraviolet light and polyethylene glycol – to treat mine walls and reduce the prevalence of the fungus that causes white-nose syndrome (WNS) on roosting surfaces in bat hibernacula. Project will test the two environmental cleaning agents in three mines along the northern and southern edges of the WNS spread to test the potential of environmental cleaning as a WNS management strategy.

Testing Ultraviolet Light and Polyethylene

#### **Chicago Zoological Society**

\$111,760

Enhancing the Gulf of Mexico Dolphin Identification System (AL, FL, LA, MS, TX) Improve the functionality of the Gulf of Mexico Dolphin Identification System, a collaborative database of bottlenose dolphin photographic identification from researchers around the Gulf. Project will expand the existing tool for protection and restoration of bottlenose dolphins, allowing researchers to search online for individual dolphins within the catalogs of other collaborating researchers, to identify long-range movements and determine the origins of stranded dolphins. \$60,000

#### **Forest Landowners Association**

#### Engaging Working Forest Landowners, Building Stakeholder Collaboration & Developing Solutions – II (multiple states)

Engage large family forest landowners in longleaf restoration and at-risk species conservation throughout the historic range of the longleaf pine. Project will assist landowners with the establishment and enhancement of at least 2.000 acres of longleaf pine, develop regulatory predictability tools for at-risk species endemic to the longleaf ecosystem, reducing uncertainty for landowners wishing to manage for longleaf habitat conditions on their lands, and explore market-based solutions to address the economic constraints to large-scale longleaf restoration on private lands. \$145,000

#### **Gulf Seafood Institute**

#### Expanding the Gulf of Mexico Charter Boat Electronic Logbook (AL, FL, LA, MS, TX)

Expand the use of electronic logbooks in the Gulf of Mexico by improving software and providing training and outreach to captains. Project will increase the number of vessels with installed electronic logbook units in the Gulf of Mexico resulting in more accurate data to fishery managers. \$661,298

#### Murphy High School

\$20,145

#### Living Shoreline of Western Mobile Bay (AL) Stabilize 500 linear feet of shoreline along the western side of Mobile Bay to restore functionality as a nursery area for young estuarine organisms. Project will install oyster shell bags parallel to shore, establishing a natural breakwater from Mobile Bay ship channel wave action and plant emergent grasses between the ovster shell bags and the shoreline.

#### **New South Development and Training** Strategic Outreach to Expand Agricultural and Wetland Conservation (AL, FL, GA, TX)

Provide education and outreach services to private landowners to increase enrollment of agricultural and wetland properties in the Natural Resources Conservation Service Agricultural Conservation Easement Program. Project will identify and engage high priority landowners through informational workshops and technical assistance, with a priority of working with underserved landowners \$370,133

#### **North Carolina State University**

Prescribed Fire Initiative within the Southeastern United States (multiple states) Expand and accelerate the implementation of prescribed fire to restore and enhance longleaf pine habitat and other firedependent forest and grassland communities within the Southeast. Project will engage 1,000 landowners and fire practitioners through technical assistance, training and outreach, including "Learn and Burn" workshops, development of prescribed burn associations and Fire Festivals, to increase the use of prescribed fire. \$130,000

#### **Tall Timbers Research**

#### Strategic Prescribed Burn Assistance on Private Lands in the Longleaf Legacy Landscape (AL, FL, GA)

Build capacity to increase prescribed burning on private lands across the Longleaf Legacy Landscape, a key private-landdominated area in northwest Florida. southwest Georgia and south Alabama. Project will implement a variety of longleaf conservation assistance programs to burn 5,250 acres, prioritize future efforts based on the collection of key fire activity and conservation data and develop an innovative and integrated outreach program across organizations that will enhance future targeted longleaf restoration and prescribed fire application on private lands. \$99,984

# **TERRITORIES** U.S. AND

#### Texas A&M AgriLife Research

Applied Biodiversity Sciences Conservation Scholars Program (multiple states)

Integrate undergraduates and graduates using a two-tiered program that will focus on local issues related to Gulf of Mexico ecosystems and energy development. Project will appoint two graduate fellowships to serve as mentor assistants to guide a small cohort of undergraduate interns as they develop their projects and internship proposals.

#### \$200,000

#### **Texas State University**

Reddish Egret Conservation Plan for the U.S. Gulf Coast (AL, FL, LA, MS, TX)

Develop a detailed conservation plan with prioritized actions, clear conservation outcomes and well-defined funding needs to best support the reddish egret (REEG) in the Gulf of Mexico. Project will contract an expert on Open Standards for the Practice of Conservation and a research assistant to facilitate webinars, host two workshops with the REEG working group, write plans and aggregate existing focal foraging and nesting data into an online database. \$74,990

#### The Longleaf Alliance

Accelerating At-Risk Species Recovery in the Gulf Coastal Plain Ecosystem Partnership Landscape (AL, FL)

Accelerate recovery of declining and at-risk species, including northern bobwhite, gopher tortoise and reticulated flatwoods salamander within the western panhandle of Florida and southern Alabama. Project will support capacity to implement speciesspecific management and monitoring, such as captive rearing of salamanders and translocation of gopher tortoises, as well as development of a National Bobwhite Quail Initiative Focal Area to support northern bobwhite habitat restoration and recovery. \$620,000

#### The Longleaf Alliance

Longleaf Restoration in the Gulf Coastal Plain Ecosystem Partnership Landscape – IV (AL, FL) Restore and maintain 112,958 acres of longleaf pine habitat within the western panhandle of Florida and southern Alabama through plantings, prescribed fire and invasive species control. Project will prioritize recovery of red-cockaded woodpecker, gopher tortoise, eastern indigo snake and reticulated flatwoods

#### salamander \$300,000

#### The Nature Conservancy

Accelerating Longleaf Pine Ecosystem Restoration on the Fall Line – III (AL, GA)

Accelerate longleaf pine restoration and conservation on more than 19,000 acres of public and private land in west Georgia and east Alabama. Outcomes include planting longleaf on 137 acres and implementing prescribed fire on 19,000 acres of existing longleaf habitat, focusing on properties buffering Fort Benning, as well as high priority state and privately owned lands. \$275,000

#### The Nature Conservancy

Talladega Mountains Longleaf Pine Restoration - III (AL. GA)

Increase prescribed fire capacity through the addition of a seasonal burn crew in eastcentral Alabama and west Georgia. Project will support additional burning and montane longleaf pine habitat restoration on the Talladega National Forest and other priority public and private lands, benefiting redcockaded woodpecker, Bachman's sparrow and other longleaf-dependent species. \$179,989

#### The Red Mountain Park Fund

Riparian Restoration and Community Education at Red Mountain Park (AL)

Improve streams by removing invasive plants and rubbish and planting native vegetation while installing erosion control materials at Red Mountain Park in Birmingham. Project will fully restore 10 acres, and ensure the longevity of the restoration by educating or involving 1,825 community members. \$25,000

#### U.S. Department of Agriculture, U.S. Forest Service

Expanding the National Aquatic eDNAtlas and Data Exchange for Freshwater Species (multiple states)

Expand the aquatic environmental DNA Atlas database, website, digital tools and sample repository to a national scale. Project will expand the current coverage of the database of information important to the conservation and management of aquatic species to include waterways in the 37 remaining states to inform strategic conservation investments for suppressing invasives and increasing native populations. \$73,018

#### University of Florida

**Evaluating Recreational Fishing Management** Strategies for Red Snapper (AL, FL, LA, TX)

Assess the recreational management strategies of red snapper by using simulation and assessment modeling, stakeholder surveys and stakeholder workshops. Project will provide a framework for angling groups to explore management options to understand the impacts on available catch and anglers' access to the red snapper fishery \$275,121

#### **ALASKA**

Alaska Department of Fish and Game

Addressing Conservation-critical Needs of the Aleutian Tern in Western Alaska (AK) Address conservation-critical information needs related to the Aleutian tern through a collaborative study in three regions of Alaska, including Western Alaska, the Kodiak Archipelago and the Yakutat Forelands. Project will close data gaps in the breeding ecology and natural history of Aleutian terns by assessing the efficacy of various colony-monitoring methods and through the development of a monitoring framework. \$75,000

#### Alaska Department of Fish and Game

Anadromous Cataloging and Fish Inventory in Drainages of the Kobuk and Koyukuk Rivers (AK) Conduct a rapid, systematic inventory of anadromous and resident fish distribution and associated aquatic and riparian habitat in select drainages of the Kobuk and Koyukuk rivers. Project will select target streams to fill gaps in the coverage of the State of Alaska's Catalog of Waters Important for the Spawning, Rearing, or Migration of Anadromous Fishes in freshwater habitats expected to support anadromous fish populations likely to be impacted by human activities.

#### \$48.170

Alaska Department of Fish and Game Investigating Survey and Monitoring

Methodologies for Aleutian Terns (AK) Implement a collaborative study during with the U.S. Forest Service, University of Alaska, Oregon State University, U.S. Fish and Wildlife Service and others, to investigate methodologies recommended during a January 2018 Conservation Planning Meeting for estimating abundance of Aleutian terns at colony sites within Alaska. Project will advance methods and protocols for site-level population assessments to further advance Aleutian tern conservation and research using unmanned aerial vehicles for assessing Aleutian tern abundance at colony sites and experimental automated image analysis to continue work refining methods and developing a monitoring framework. \$54,600

#### Alaska Geographic Association Connecting Anchorage Residents to their Watersheds (AK)

Remove 20 acres of invasive European bird cherry to provide improved habitat and opportunities for urban youth and families to become better stewards of local natural resources through watershed education and hands-on restoration. Project will break down barriers for Anchorage's diverse urban neighborhoods to access natural resources by helping address priority habitat restoration issues within the city limits. \$52,959

#### Alaska Longline Fishermen's Association Increasing the Scale of the Alaskan Longline Electronic Monitoring Program

Improve Alaska's longline electronic monitoring program for vessels participating in sablefish, halibut and Pacific cod fixedgear fisheries by providing electronic monitoring (EM) hardware, field service support for vessels and support for stakeholder engagement. Project will result in electronic monitoring of up to 120 hookand line vessels that will reduce bycatch and improve the utility of EM data for fishermen and fishery managers. \$577,941

#### Alaska Longline Fishermen's Association Support Next Generation of Alaskan Fishermen through the Deckhand Apprentice Program

Coordinate and expand a statewide apprentice program to promote resource stewardship, community viability and opportunity in Alaska's commercial fisheries. Project will develop curriculum and resources to guide the program expansion, include additional vessels and fisheries, and promote entry-level job opportunities. \$69,996

#### College of William and Mary, Virginia Institute of Marine Science

Dungeness Crab Trap Biodegradable Hinge Escape Mechanism (AK, WA)

Reduce ecological and economic impacts associated with lost gear in Washington and Alaska. Project will incorporate an innovative bio-hinge mechanism into Dungeness crab traps, testing an effective, inexpensive mechanism to disarm derelict traps. \$140,568

#### Fairbanks Soil and Water **Conservation District**

#### Chinook Salmon Habitat Restoration along the Chena River (AK)

Restore and improve over 10 acres of riparian habitat along the Chena River in Fairbanks to protect chinook salmon habitat. Project will partner with four natural resource-based organizations and five volunteer groups to remove invasive species and utilize green infrastructure methods to stabilize a section of Chena River streambank

#### \$49.875

#### **Farallon Institute** Integrating Seabird Data into Fisheries Management in Alaska

Evaluate the use of seabird food habits data in Alaska fisheries management, specifically in fisheries stock assessments and models. Project will focus on seabird data on the relative abundance and size and condition of juvenile commercial fishes, information that is limited for many fisheries, and establish a working model for collaborative seabirds and fisheries research in Alaska that may be exported elsewhere in the world. \$99,999

#### Island Trails Network

Marine Mammal Entanglement Prevention and Habitat Restoration in Southwest Alaska Reduce entanglement and mortality of whales, Stellar sea lions and other marine mammals and increase awareness of the impact of entangling debris. Project will engage volunteers from the public and the commercial fishing industry in efforts to remove derelict fishing gear from prioritized locations in the Kodiak archipelago. \$203,627

#### Manomet

Determining Post-Breeding Sites for Arctic Coast Shorebirds of Conservation Concern (AK) Complete a large-scale effort using cutting edge tracking technologies to determine the most important staging sites on the Arctic Coast for arctic breeding shorebirds. Project will fill a major gap in understanding of the habitat needs at the sites they use after breeding on the Arctic Coast of Alaska to prepare for southbound migrations to South American wintering sites.

#### \$74,569 Saltwater

#### **Electronic Monitoring Pre-Implementation** in Alaskan Pot Cod Fishery

Expand electronic monitoring preimplementation in the Alaska pot cod fishery by installing electronic monitoring units on up to 15 additional vessels. Project will test an alternative service delivery model focused on building cost effective data collection infrastructure, data review and management processes to provide timely data to fisheries managers and facilitate electronic monitoring data integration. \$445,858

#### Sea Lion Corporation

#### Seabird Nest Protection at Kokechik Flats (AK)

Project nesting seabirds from human disturbance at Kokechik Flats, Alaska, a private in-holding within the Yukon Delta National Wildlife Refuge. Project will educate subsistence hunters and harvesters about sensitive resources, provide designated staging and camping areas, recommend transportation routes through sensitive nesting areas, develop written conservation and management guidelines and outreach materials, and provide on-site attendants to monitor activities and provide outreach. \$87,349

#### Southeast Alaska Watershed Coalition Cooperative Weed Management Area (AK)

Re-establish a cooperative weed management area in Juneau that will ensure long-term commitment for the inventory, assessment, prioritization and control of invasive plants. Project will support ongoing efforts to eradicate targeted infestations of invasive plant species in the most ecologically valuable and sensitive habitats in the area. \$29,100

#### Southeast Alaska Watershed Coalition Jordan Creek Greenbelt Restoration and Stewardship (AK)

Restore 5.5 acres by eradicating invasive plants, planting trees and shrubs, decommissioning an obsolete trail that damages riparian habitat, implementing snow storage BMPs, and improving forest structure and species diversity in Juneau's Jordan Creek Greenbelt Project will restore fish and wildlife habitat, foster public land stewardship, provide naturebased education opportunities for youth, connect under-served community members to nature and improve recreational opportunities. \$37.351

#### **Southeast Alaska Watershed Coalition** Klawock Lake Sockeye and Pacific Salmon Management and Habitat Restoration (AK)

Advance habitat restoration and informed fisheries management while building the capacity of tribal members and residents of rural communities to make salmon management decisions in the Klawock Watershed. Project will develop a Community Action Plan for the watershed that will address the decline of sockeye abundance, fill key information gaps on habitat restoration, identify land management opportunities, enhance community harvest management and result in improvements in fisheries management. \$61.010

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#### **Takshanuk Watershed Council** Water Quality Monitoring on the Chilkat and Chilkoot Rivers (AK)

Expand existing stream temperature and chemistry monitoring programs to gather baseline water chemistry data at three sites on the Klehini River, a major tributary of the Chilkat. Project will result in long-term monitoring of surface water quality that will allow for an assessment of the effects of both industrial development and changing environmental conditions on fish and freshwater aquatic habitats in the Chilkat and Chilkoot watersheds. \$16.723

#### The Conservation Fund

#### Eklutna River Fish Passage Barrier Removal (AK)

Restore the Lower Eklutna River near Anchorage, Alaska, through a stream habitat restoration project. Project will benefit five species of Pacific salmon (king, sockeye, silver, pink and chum), whose numbers are currently greatly reduced, and the Eklutna Dena'ina people, for whom the river is important culturally.

\$86.000

#### U.S. Department of the Interior. U.S. Fish and Wildlife Service - Region 7 Monitoring Sea Birds using Unmanned Aerial Vehicles on the North Slope (AK)

Aid in recovery efforts for Steller's and spectacled eiders in Alaska by using UAS (unmanned aircraft systems) and thermalimaging software to increase nest discovery and monitoring methods for sea birds on the North Slope of Alaska. Project will include an outreach program that promotes community involvement in conservation, increased knowledge of tundra-nesting sea bird ecology and provide summer employment opportunities for local youth. \$60,000

#### U.S. Department of the Interior. U.S. Fish and Wildlife Service - Region 7 Studying Chinook and Chum Salmon on the East Fork Andreafsky River (AK)

Collect data on Chinook and summer chum salmon escapement in the East Fork Andreafsky River. Project will collect daily migration counts, full season run timing, total seasonal escapement estimates, and annual age, sex and length composition of Chinook and summer chum salmon spawning populations, which will be used by in-season subsistence fishery managers and be analyzed post-season to contribute to Yukon River drainage-wide salmon run reconstructions and forecasts for the next season

\$37,200

#### U.S. Department of Agriculture, **U.S. Forest Service** Addressing Conservation-Critical Information

#### Needs of the Aleutian Tern in the Gulf of Alaska

Continue a collaborative study in the Gulf of Alaska during the 2018 field season partnering with Alaska Department of Fish and Game, University of Alaska, Oregon State University, U.S. Fish and Wildlife Service, and others, to address conservation-critical information needs of the Aleutian tern. Project will address information gaps including breeding season movements, colony distribution and abundance, productivity, and diet, to further advance Aleutian tern conservation and

\$75,000

#### University of California – Santa Cruz Developing Tools to Prevent Extinction and Recover Threatened and Endangered Seabirds (AK, CA, HI, Canada)

Utilize a new meta-population viability model approach in order to make improved seabird conservation decisions. Project will identify the most at-risk species and their breeding sites in order to improve the conservation status of seabirds and prevent the listing of seabird species in the future.

\$249,984

#### Wildlife Conservation Society

#### Mapping Common Eider Use of Beaufort Sea Barrier Islands (AK)

Evaluate the use of northern Alaska's barrier island ecosystem by nesting seabirds. Project will map which islands between Prudhoe Bay, Alaska, and the Canadian border are the most critical to the population in the event of an oil spill and will inform oil response planning.

#### **Yukon Delta Fisheries Development** Association

#### Researching Outmigration of Juvenile Chinook Salmon at the Yukon River Mouth (AK)

Fill gaps in knowledge of juvenile Yukon Chinook salmon necessary to understanding survival and recruitment dynamics. Project will quantify outmigration timing through the end of August, quantify juvenile Chinook salmon size, growth, diet, energetic condition and smolting stage and provide data on genetic composition of outmigrating Chinook salmon

\$82,105

#### **ARIZONA**

#### Arizona-Sonora Desert Museum Creating the Sonoran Desert Cooperative Weed Management Area (AZ)

Control buffelgrass, an invasive perennial grass that threatens the rich biological and cultural diversity of the Sonoran Desert. Project will benefit improved weed management across jurisdictions in Pima County by increasing the number of acres restored, increased numbers of volunteers and improving invasive species management.

#### **Arizona State University**

Develop Solar Net Illumination to Reduce Sea Turtle Bycatch in Coastal Gillnet Fisheries (AZ) Develop solar-powered illuminated fishing nets to reduce sea turtle bycatch in gillnet fisheries worldwide. Project will provide a more affordable gear option will increase the durability of the gear and reduce the need for batteries and additional handling, while maintaining target catch and bycatch reduction goals.

#### \$75.000

**CDP North America** 

#### Scaling Green Infrastructure Investments in Cities (multiple states)

Build capacity of communities in 18 cities across the United States to help them implement sustainable infrastructure for stormwater management, urban wildlife habitats and tree canopy improvement. Project will perform targeted outreach to cities to increase knowledge of sustainable infrastructure financing as well as develop cities' use of online tools to document green infrastructure and habitat benefits. \$200,000

#### **Grand Canvon Youth**

Native American Youth Restoring Ecological Balance in Colorado River Watershed (AZ. UT)

Perform invasive species management and stream buffer enhancements along the Colorado, Escalante, San Juan and Dirty Devil rivers. Project will engage Native American youth from the Southwest Conservation Corps Ancestral Lands Program to restore 15 acres of stream buffer zones, develop conservation and employment skills.

\$202.832

#### **National Audubon Society**

#### Audubon Arizona's Downtown Owls

Mobilize 150 volunteers to build artificial homes for displaced burrowing owls in Phoenix and assist with active translocation efforts. Project will facilitate monitoring the birds as they adjust to their new homes and educate local communities about urban wildlife habitats.

#### \$34,997

#### **Pheasants Forever**

#### Riparian Restoration Initiative to Benefit Southwestern Willow Flycatcher in Arizona

Increase participation in riparian habitat restoration and protection across the state of Arizona to benefit southwestern willow flycatcher. Project will work directly with private landowners, land management agencies and local communities to implement Farm Bill practices designed to improve riparian habitat for southwestern willow flycatcher. \$179,865

#### The Nature Conservancy

#### Greening Affordable Housing for Nature, Community Resilience and Human Well-being (AZ, CT, NM)

Create demonstration projects in three cities to address community resilience and improve green infrastructure by creating an urban forest and greenspace in Albuquerque, New Mexico; creating green stormwater infrastructure in Bridgeport, Connecticut; and depaying surfaces and planting trees in Phoenix, Arizona. Projects will plant 270 trees and reach out to 950 people to implement green infrastructure and develop supportive communities. \$250,000

#### U.S. Department of the Interior, U.S. Fish and Wildlife Service

#### Habitat Restoration and Reintroduction of Endangered Gila Topminnow in Bylas Springs (AZ)

Remove invasive plant species from 1,000 meters of spring habitat in the Bylas Springs Complex to restore endangered Gila topminnow habitat in spring-fed ponds. Project will improve instream habitat through hydraulic restoration and remove entrained sediment prior to fish reintroduction in ponds on the San Carlos Apache Reservation. \$39,778

#### Western Association

#### of Fish and Wildlife Agencies Monarch Butterfly Conservation in the Western United States (multiple states)

Develop a regional strategy and supporting plans to increase organizational capacity and coordination among monarch butterfly conservation partners west of the Rocky Mountains. Project will develop and track implementation efforts identified in the Western Monarch Population Conservation Strategy, establish the Western Monarch and Pollinator Initiative Council, and transition milkweed data into the Crucial Habitat Assessment Tool. \$120,000

#### **ARKANSAS**

#### American Bird Conservancy Priority Bird Habitat Conservation

#### in the West Gulf Coastal Plain/Ouachitas Region (AR, LA, OK, TX)

Facilitate the establishment, development, maintenance and success of Conservation Delivery Networks in the West Gulf Coastal Plain/Ouachitas geography. Project will focus on building connections and relationships among partner delivery staff across the fourstate region covering Arkansas, Louisiana, Oklahoma and Texas to restore 277 acres of bottomland hardwood forests and improve 92 acres of existing bottomland hardwoods. \$263,221

#### **Arkansas Forestry Commission**

#### Private Forest Conservation to Improve Northern Bobwhite Habitat in Arkansas Increase technical assistance and

conservation program delivery on private forest land to benefit northern bobwhite in Arkansas. Project will provide technical assistance in selected focal areas to create 44 miles of fire breaks, 13,000 acres of prescribed burns and 3,000 acres of forest stand improvement.

\$179.800

#### **Bat Conservation International**

#### Testing Ultraviolet Light and Polyethylene Glycol as a White-Nose Syndrome Management Strategy (AL, AK, Canada)

Evaluate the efficacy of using two nontoxic agents – ultraviolet light and polyethylene glycol – to treat mine walls and reduce the prevalence of the fungus that causes white-nose syndrome (WNS) on roosting surfaces in bat hibernacula. Project will test the two environmental cleaning agents in three mines along the northern and southern edges of the WNS spread to test the potential of environmental cleaning as a WNS management strategy. \$111,760

#### Ducks Unlimited

#### Arkansas Shallow Water Wetland Conservation Capacity

Increase staff capacity to implement habitat enhancement projects on existing Natural Resources Conservation Service Wetland Reserve Program (WRP/WRE) conservation easements in Arkansas. Project will identify existing WRP/WRE shallow water wetlands that need enhancement, implement restoration practices to improve hydrology and wetland functions and provide forest management recommendations to improve bottomland hardwood forest habitat that will benefit waterfowl and other wildlife species.

\$317,526

#### **KKAC Foundation**

#### Land Conservation Program for Underserved Landowners in Arkansas

### Provide educational opportunities and technical assistance to underserved

landowners in Arkansas to increase awareness and participation in the Natural Resources Conservation Service Agricultural Conservation Easement Program (ACEP). Project will work with underserved private landowners, with an emphasis on increasing enrollment in ACEP through educational workshops, and identifying and addressing barriers to landowner participation, including heirs' property title issues. \$331,153

#### **National Wild Turkey Federation Bottomland Hardwood Conservation** Partnership Initiative under the Agricultural Conservation Easement Program (AR)

Implement a three-year project to monitor, evaluate and plan conservation activities on existing Agricultural Conservation Easement-Wetland Reserve Easement (ACEP-WRE) program easements, specifically those where bottomland hardwood stands have reached or are approaching site conditions that warrant management. Project also will evaluate Kentucky warbler new properties for wetland and bottomland hardwood restoration opportunities and the potential for enrollment in the ACEP-WRE. \$188,175

#### North Carolina State University Prescribed Fire Initiative within the

Southeastern United States (multiple states) Expand and accelerate the implementation of prescribed fire to restore and enhance longleaf pine habitat and other fire-dependent forest and grassland communities within the Southeast. Project will engage 1.000 landowners and fire practitioners through technical assistance, training and outreach, including "Learn and Burn" workshops, development of prescribed burn associations and Fire Festivals, to increase the use of prescribed

\$130,000

#### Pheasants Forever

#### Delivery of Conservation Technical Assistance and Implementation of Early Successional Habitat Practices (AR, LA)

Work through Conservation Delivery Network (CDN) partner organizations to conduct program promotion and strategic marketing efforts on sustainable forest management to 600 landowners located in southeastern Arkansas and northeastern Louisiana. Of the 600 landowners reached in year one, the project expects that 550 will receive one-on-one technical assistance by resource conservation organization staff to produce landowner management plans on a minimum of 10.000 acres.

\$149,575

#### **Pheasants Forever**

#### Strategic Restoration of Northern Bobwhite Habitat on Working Lands (multiple states)

Deliver technical assistance across six states to improve land-management practices for northern bobwhite and other terrestrial wildlife. Project will include 11,940 landowner contacts, 27,800 acres under improved management practices, 720 plans with best management practices and 6,000 acres covered with federal program incentives.

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\$2,447,858

#### **Pollinator Partnership**

#### Project Wingspan: Enhancing Landscapes for At-risk Pollinators (multiple states)

Develop a regional seed collection and native plant materials development program in the Midwest to support monarch butterflies and rusty patched bumble bees. Project will improve 10,000 acres of pollinator habitat, collect 25 pounds of milkweed seed and propagate 10,000 seedlings. \$149,000

#### The Nature Conservancy

#### Restore Wetland Forest and Stabilize Agricultural Floodplains in the Upper Cache River (AR)

Restore 1,000 acres of wetland and

bottomland hardwood habitat under the Natural Resources Conservation Service's Agricultural Conservation Easement - Wetland Reserve Easement (ACEP-WRE) program, install best management practices along 10 miles of tributary ditch, re-engineer 3 miles of two-stage ditch and engage approximately 30 landowners through outreach and technical assistance. Together, these activities will reduce sediment and nutrients flowing into the riverine system and improve habitat for wildlife.

\$500,000

# U.S. Department of Agriculture, U.S. Forest Service

# Expanding the National Aquatic eDNAtlas and Data Exchange for Freshwater Species (multiple states)

Expand the aquatic environmental DNA Atlas database, website, digital tools and sample repository to a national scale. Project will expand the current coverage of the database of information important to the conservation and management of aquatic species to include waterways in the 37 remaining states to inform strategic conservation investments for suppressing invasives and increasing native populations. \$73,018

#### **CALIFORNIA**

**Amador Resource Conservation District** Developing Restoration Designs for Three Meadows on Eldorado National Forest (CA)

Develop restoration designs for three meadows and meadow boundaries totaling 50 acres within the Power Fire boundary on Eldorado National Forest in California. Project will generate designs for 13 acres of meadow, 37 acres of meadow boundary, thin and remove conifers on 23 acres of meadows and meadow boundaries and develop environmental compliance documents which are required for future restoration.

\$186,681

#### American Bird Conservancy Building Capacity for Riparian Habitat and Working Lands for Wildlife in Southern California

Increase participation of private landowners in California to restore riparian habitat for southwestern willow flycatcher by implementing on the ground riparian restoration projects using NRCS conservation practices. Project will engage 200 landowners and will improve management on 500 acres of riparian habitat to support the species recovery plan of the southwestern willow flycatcher. \$258,413

#### 258,413

# California Deer Association Warner Mountains Meadow Restoration near Modoc National Forest (CA)

Perform meadow restoration on Alaska Canyon, Dry Creek and Callie Spring totaling 878 acres within the Warner Mountains near Modoc National Forest in California. Project will restore meadows, remove conifers and juniper, improve water flow, and monitor the restored areas, which will benefit migratory corridors for mule deer, antelope and sage grouse.

\$100,000

#### **CDP North America**

### Scaling Green Infrastructure Investments in Cities (multiple states)

Build capacity of communities in 18 cities across the United States to help them implement sustainable infrastructure for stormwater management, urban wildlife habitats and tree canopy improvement. Project will perform targeted outreach to cities to increase knowledge of sustainable infrastructure financing as well as develop cities' use of online tools to document green infrastructure and habitat benefits. \$200,000

# **Central Coast Salmon Enhancement**Tracking Ecologically Significant Dry Season Instream Flows in South-Central California

Strengthen flow tracking and accounting methods in regions that have ecologically significant dry season instream flows that are less than 1 cubic foot per second. Project will include an experimental flume and field component, as well as an outreach and education component, to improve consistency among partners and increase probability of meeting regional ecological enhancement and recovery goals.

\$72,351

#### Channel Islands Cetacean Research Unit Sea Turtle Stranding Response along the West Coast of the United States (CA, OR, WA and Canada [BC])

Build capacity for the West Coast Marine Mammal Stranding Network to respond to five species of threatened and endangered sea turtles: Western Pacific leatherback turtle, Eastern Pacific green turtle, North Pacific loggerhead, Pacific olive ridley and Eastern Pacific hawksbill. Project will increase response efforts for live and dead stranded sea turtles through assessment of existing capacity, standardization of data and protocols, distribution of supplies and network-wide training sessions.

# Breeding Bird Habitat Restoration on the Potreros of the Sierra Madre Ridge (CA)

**Channel Islands Restoration** 

Work with local cattlemen to explore the feasibility to use modified cattle grazing practices to restore breeding bird habitat on the ridge of the Sierra Madre Mountains on the edge of the Zaca Fire scar. Project will investigate whether managed grazing regime will support native grassland, increase breeding bird populations and help recover the populations of several declining bird species.

\$59,117

#### **Channel Islands Restoration**

Tamarisk Treatment in the Sisquoc River Watershed and Piru Creek Watershed (CA)

Treat tamarisk trees with herbicide, pull out seedlings and monitor the success of past treatments in the Sisquoc River and Piru Creek watersheds within the Los Padres National Forest. Project will result in GIS data and a report that will include the numbers of adults treated, number of seedlings pulled out, miles of streams and river surveyed, number of acres treated, methods, maps, tables, a database, photographs of all treated areas, and a plan for any untreated areas. \$475,795

#### **Channel Islands Restoration**

#### Tamarisk Treatment in the Upper Santa Ynez River Watershed (CA)

Apply herbicide treatments to tamarisk adults and seedlings in the upper headwaters of the Santa Ynez River watershed within the Los Padres National Forest. Project will result in GIS data and a report that will include the numbers of adults treated, number of seedlings pulled out, miles of streams and river surveyed, number of acres treated, methods, maps, tables and a plan for any untreated areas.

#### County of Del Norte

#### Fuel Break Maintenance

#### in Six Rivers National Forest (CA)

Treat 300 acres of vegetation located within six strategically placed fuel breaks around the community of Gasquet. Project will provide additional defensible space and will improve the overall health of the forest and protect private and public improvements by reducing risk to wildfires. \$276.875

# Fire Safe Council of Nevada County Restoration of the Wildland-Urban Interface of the Tahoe National Forest (CA)

Restore the wildland-urban interface of the Tahoe National Forest to a healthy forest ecosystem by removing ladder fuels, tree competition and educating residents to become Fire Adapted Communities. Project will improve overall watershed resilience, landscape connectivity, improve wildlife habitat quality and forage, and reduce the risk of catastrophic fire in areas occupied by rare plants and endangered species. \$297,111

#### Friends of the Los Angeles River

LA River Wetland Habitat Restoration (CA)
Remove trash and debris and monitor water
quality on an 11-mile stretch of the highly
impaired Los Angeles River in Los Angeles.
Project will provide educational and volunteer
opportunities to 15,000 community members
and stage 10 large-scale community and
corporate clean-up events to restore habitat
and implement trash prevention programs.
\$49,930

#### **Golden Gate National Parks Conservancy** Restoring Endangered Coho Salmon Habitat in

the Coastal Redwood Creek Watershed (CA)
Restore the condition of the Redwood Creek
watershed by providing more habitat for
juvenile salmon by installing small wood
structures, beaver dam analogues and other
creek and flood plain areas at Muir Beach.
Project will remove kikuyu grass from five
key habitat hot spots at Muir Beach that
threaten the endangered Coho salmon in
Southern Marin County and sustain efforts
of communities along the watershed.

#### Hoopa Valley Tribe

\$42,000

#### Development of an Integrated Fisheries Restoration and Monitoring Plan for the Klamath Basin (CA, OR)

Assist the U.S. Fish and Wildlife Service and other Klamath Basin stakeholders in the completion of an accurate, comprehensive and prioritized Integrated Fisheries Restoration and Monitoring Plan, detailing needs throughout the Klamath River Watershed, including its major tributaries. Project will result in the publication of a final strategic plan for monitoring and restoration of Klamath River Basin native fishes. \$50,000

#### Humboldt State University Sponsored Programs Foundation

# Comparison of Standard and Environmental DNA Methods for Estimating Chinook Salmon Smolt Abundance in the Klamath River (CA) Compare standard and environmental

Compare standard and environmental DNA-based estimates of weekly and season totals of Chinook Salmon as a proxy for determination of relative abundance in aquatic environments at the Kinsman site on the Klamath River. The study, if successful, may serve as a foundation and justification for applying the eDNA methods in other areas within the Klamath-Trinity Basin and across the entire Pacific Northwest where similar approaches are applied for salmon. \$95,418

#### Humboldt State University Sponsored Programs Foundation

#### Scott River Beaver Dam Analogues: Implementation, Monitoring and Passage Assessment (CA)

Implement beaver dam analogues in the Scott River watershed and monitor their effectiveness with a particular focus on evaluating fish passage. Beaver dam analogues will expand the area of suitable rearing habitat for juvenile Coho salmon and other species, while the monitoring effort will clarify the potential benefit to fish populations and provide guidance for future efforts.

\$129,428

#### Island Conservation

### Maintaining Knowledge Management Products for Globally Threatened Seabirds (CA)

Maintain and make publicly available two key databases to support decision making and prioritization for globally threatened seabirds, the Threatened Island Biodiversity Database and the Database of Islands and Invasive Species Eradications. Project will produce database tools to support a range of island restoration activities, at scales of project planning, regional planning, and global assessment of the conservation benefits provided by invasive mammal eradications.

\$75,000

#### Karuk Tribe

#### Development of an Integrated Fisheries Restoration and Monitoring Plan for the Klamath Basin – Karuk Tribe (CA)

Assist the U.S. Fish and Wildlife Service and other Klamath Basin stakeholders in the completion of an accurate, comprehensive and prioritized Integrated Fisheries Restoration and Monitoring Plan, detailing needs throughout the Klamath River Watershed, including its major tributaries. Project will result in the publication of a final strategic plan for monitoring and restoration of Klamath River Basin native fishes.

\$50,000

# Karuk Tribe

# Restoration of Fire Adapted Landscapes within Six Rivers National Forest, California

Construct fire control features on 240 acres across four identified focal areas (Donahue, Patterson, Roger's Creek, Ti Bar) within the wildland-urban interface of the Six Rivers National Forest. Project will prepare areas to see a reintroduction of fire processes, create a more fire-safe environment for Karuk Tribe communities and establish improved fire control features for use during planned and unplanned fires.

\$380,126

#### Klamath Lake Land Trust

# Supplemental Water Storage Options (CA, OR) Conduct a feasibility study for potential water storage in the Upper Klamath basin and the Lower Klamath National Wildlife Refuge to help inform future water management decisions. Project will assess the physical and regulatory feasibility of above and below ground water-storage options to assist in the potential for instream flow augmentation with the primary purpose of potentially addressing instream needs for the federally listed aquatic

Klamath Basin Feasibility Study to Identify

species. *\$177,370* 

#### Klamath Watershed Partnership Upper Sycan Bull Trout Critical Habitat Protection (CA, OR)

Protect critical habitat for bull trout in the Upper Sycan Watershed through 3 miles of fencing and hardened water gaps for cattle. Project will limit cattle access to the streams in grazed meadows to benefit instream habitat conditions, especially with respect to spawning gravels, redds and refugia, and future streambank stabilization and shading promoting additional water quality and instream habitat improvements. \$54,000

#### Lava Beds-Butte Valley Resource Conservation District

### Clear Lake Sage Grouse Habitat Improvement in Modoc National Forest, California

Treat invasive western juniper trees in Clear Lake Sage Grouse Active Management Area. Project will reduce risk of catastrophic wildfire, reverse resource degradation and improve the sagebrush steppe habitat. \$132,500

#### LifeScape International

# Fire Impact on Mammal Communities in the Los Padres National Forest (CA)

Use camera-trap surveys and GPS-collar movement data to answer key questions regarding the impact of fire on the mammal community of Los Padres National Forest. Project will investigate the impact of fire on the distribution of the terrestrial mammalian community, relationships among key species, predation rates affecting nesting California condors and fire's potential to facilitate expansion of invasive feral pig populations. \$196,800

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# Los Padres Forest Association Jesusita Fire Trail Restoration, Development and Design (CA)

Evaluate and design a trail plan for the trails affected by the Jesusita Fire, provide advanced trail restoration training for the Santa Barbara Frontcountry (SBFC) trail community, and restore sections of those trails that are suffering from extreme erosion damage. Project will include a trail training that will teach stakeholders how to assess and address trail needs.

\$74,485

#### Los Padres ForestWatch

# Jesusita Fire Trail and Land Degradation Prevention (CA)

Install trail barriers and signage to prevent the degradation of trails and other land features by unauthorized motor vehicle use in the area affected by the 2009 Jesusita Fire. Project will assess unauthorized motor vehicle use sites in the project area and provide recommendations and guidance for the improvement or installation of barriers, signs and other solutions to restore habitat and reduce erosion and invasive species. \$43,143

#### Los Padres ForestWatch

Tamarisk Treatment along the Santa Ynez River in the Los Padres National Forest (CA) Apply herbicide treatments on invasive tamarisk from within the Santa Ynez River watershed from the Los Padres National Forest boundary to Gibraltar Dam – large areas within the Los Padres National Forest affected by the 2007 Zaca Fire. Project will assess and treat 35 miles of streams in the target watersheds and will improve ecosystem health and prevent

further spread of the species in and around

the Dick Smith Wilderness area.

\$49,156

#### **Mendocino County Resource Conservation District** Promoting Water Conservation BMPs for

Salmon in the Navarro Watershed (CA) Promote best management practices that increase summer base flows, and provide water security for agricultural producers during the critical seasons of spring, summer and early fall. Project will demonstrate, communicate and educate on the application of water conservation and riparian management BMPs for enhancing and optimizing stream flows, while ensuring onfarm water security to benefit Pacific salmon. \$149,595

#### Mid Klamath Watershed Council Creating and Restoring Off-Channel Habitat along Humbug and Seiad Creeks (CA)

Create 22,000 square feet of off-channel habitat and enhance a 700-foot-long Klamath River side channel in the Klamath Basin. Project will benefit Klamath River steelhead, Coho salmon and Chinook salmon by addressing key limiting factors affecting their survival, including lack of low-velocity overwintering habitat and lack of thermal refuge. \$334,368

#### Mid Klamath Watershed Council

Horse Creek Supplemental Design Project (CA) Develop a 100 percent fisheries design for 85 acres of the Horse Creek Valley with the intent of increasing the number of spawning adult Coho salmon in the Klamath Basin. Project will restore channel structure and complexity to a watershed that has suffered impacts of past land use practices, yet is situated to offer tremendous Coho salmon habitat potential.

\$131,541

#### **Monterey Bay Fisheries Trust**

Pilot a Sustainable Seafood Hub to Revitalize the Fishing Economy in Northern California Improve the value of landings for fishermen, expand public access to local, sustainable seafood, and revitalize the fishing industry in Monterey Bay ports. Project will emphasize local and regional markets for sustainable and traceable seafood, including West Coast groundfish.

\$101,826

#### **National Audubon Society**

Advancing the SageWest Communications Network across the Sagebrush Ecosystem (multiple states)

Elevate individual conservation efforts and create a larger dialogue about the value and need for sagebrush conservation. Project will engage in priority work groups, develop guidance documents, and organize partner meetings across the ecosystem.

#### NCASI, Paper Industry Council Pacific Marten Habitat Connectivity Model for Lassen National Forest (CA)

Develop a Pacific marten habitat connectivity model within the Storrie Fire boundary for Lassen National Forest in California. Project will develop a data-tested, flexible model that Lassen National Forest can use for future marten habitat restoration and management.

### **Northwest California Resource**

**Conservation & Development Council** Reducing Road-Sourced Sediment Loading for Scott River Tributaries on EcoTrust Lands (CA) Reduce potential road-sourced sediment load from entering tributaries of the Scott River to

benefit salmonid habitat and water quality through inventory and priority sediment treatment projects. Project will treat at least 10 major stream crossings impacted by fires in 2014 and 2017, including the improvement of culverts to convey 50-year flows, removal of culverts and installation of rock-filled fords with critical dips.

\$177,790

\$254,736

#### Oikonos – Ecosystem Knowledge

Ashy Storm-Petrel Nest Module Development on Southern California Islands

Produce 200 safe artificial nesting sites for ashy storm-petrels in order to protect breeding adults and chicks from predators on Southern California islands. Project will build on eight years of experience designing ceramic nesting modules for seabirds, create solutions for nesting storm-petrels in multiple habitats and test 3D printing methods to efficiently produce artificial nesting modules.

#### **Pacific States Marine Fisheries Commission** Integrated Fisheries Restoration and

Monitoring Plan for the Klamath Basin (CA, OR) Assist the U.S. Fish and Wildlife Service in supporting Klamath Basin stakeholders in the completion of an accurate, comprehensive and prioritized Integrated Fisheries Restoration and Monitoring Plan, which will detail needs throughout the Klamath River Watershed, including its major tributaries. Project will result in the publication of a final strategic plan for monitoring and restoration of Klamath River Basin native fishes. \$100.000

#### **Pheasants Forever**

**Expanding Conservation of Working Lands** in the Sagebrush Ecosystem (multiple states)

Maintain and expand technical assistance capacity in key greater sage grouse focal areas to strengthen working ranch lands management to improve greater sage grouse populations. Project will improve grazing practices on 250,000 acres to benefit greater sage grouse through technical assistance provided by 14 Strategic Watershed Action Teams members. \$1,688,795

#### **Pinnacles National Park Foundation**

Sustaining Resilient Landscapes through Collaborative Weed Management (CA)

Expand capacity of the San Benito County Weed Management Area by increasing outreach to the ranching community and carrying out projects on both public and private lands. Project will provide significant benefits to listed species and rare habitats. \$78,308

#### **Plumas Corporation**

Foster Meadow's Aquatic Organism Passage and Meadow Restoration on Eldorado National Forest (CA)

Restore meadow and aquatic organism passage at Foster Meadow on Eldorado National Forest in California. Project will enhance watershed hydrology by restoring 21 meadow acres, opening a mile of stream, planting native vegetation, and monitoring habitat and water flow benefits. \$215,450

#### **Plumas Corporation**

Upper Humbug Valley Meadow Restoration Designs for Lassen National Forest (CA)

Develop meadow restoration designs for Yellow Creek 1 and 2 within Upper Humbug Valley and the Storrie Fire boundary on Lassen National Forest in California. Project will create restoration designs for 47 acres of meadow, 90 acres of riparian and generate environmental compliance documents required for future restoration implementation

\$300,834

#### Point Reyes Bird Observatory, **Point Blue Conservation Science** Ashy Storm-petrel Working Group and California Monitoring Plan (CA)

Develop an international Ashy Storm-Petrel Conservation Working Group, write a monitoring plan containing standardized methods for use throughout the species' range, and write an implementation plan with estimated budget for long-term maintenance of the working group implementation of the monitoring plan. Project will invite 10-20 ashy storm-petrel experts to provide guidance on monitoring plan and implementation plan development during two workshops to be help over two years.

\$80,379

#### Point Reyes Bird Observatory

Developing High Priority Meadow Restoration Designs for Lassen National Forest (CA)

Identify and develop up to five high priority meadow restoration designs for meadows within the Storrie Fire boundary on Lassen National Forest in California. Project will assess 90 meadow data sets and group them by restoration need, develop restoration group recommendations, perform meadow site visits and develop up to five meadow restoration designs and associated environmental compliance documents.

\$431,290

#### **Rocky Mountain Elk Foundation**

Brushy Mountain Conservation Easement (CA) Protect 26,144 acres of private forestland and rangeland within California's wildlandurban interface through the acquisition of a conservation easement. Project will assist Mendocino County in wildfire preparedness by limiting residential housing and viticulture development between U.S. Route 101 and the Mendocino National Forest. \$275.000

#### Save The Bay

Martin Luther King Jr. Shoreline Community-Based Restoration and Education (CA)

Restore 2.9 acres of wetland habitat in Oakland, engage 2,000 local community volunteers, provide environmental stewardship and science education to 1,000 students (600 from high-need schools), coordinated with Save The Bay partners. Ensure a clean and healthy San Francisco Bay and San Lorenzo Creek watershed.

#### Save the Redwoods League

Conservation Easement on Mailliard Ranch for the Protection of Redwood Forests in Northern California

Place a conservation easement on the 14,898-acre Mailliard Ranch working forest, which includes the Garcia and Navarro River headwaters and upland habitat upon which numerous aquatic and terrestrial special status species depend. Project will conserve high quality redwood, oak woodland and riparian forests as well as support 28 miles of priority anadromous streams that provide habitat for migrating salmon and steelhead.

#### **Scott River Water Trust**

Water Dedication Development in the Scott River Basin (CA)

Advance negotiations of long-term and permanent water dedications and allow for the continuation of forbearance-based water dedications in the Scott River Watershed. within high-priority reaches for Coho salmon. Project will work with landowners to dedicate flow to return hundreds of acre-feet back to the system annually and provide for thousands of feet in instream benefit.

\$209,007

#### **Scott River Watershed Council** Floodplain Habitat Restoration

and Monitoring to Restore Coho Salmon in the Klamath Basin (CA)

Restore and monitor 0.6 acres of floodplain along an existing terrace adjacent to Sugar Creek and develop a design to connect an additional 2 acres of cold-water refugia to Sugar Creek or the Scott River. Project will enhance Coho salmon summer and winter rearing habitat by offering velocity refuge in the winter, productive feeding opportunities and cool water refugia for salmonids in the summer

\$255,875

#### Siskiyou Resource Conservation District Lower Mill Creek Habitat Enhancement for Coho Salmon (CA)

Perform a stream habitat assessment across a 20-acre section of the Shackleford-Mill stream system, which supports a significant population of native Scott River Coho salmon. Project will result in the development of a Conceptual Habitat Enhancement Plan aimed at increasing the volume of available rearing habitat for iuvenile Coho salmon.

#### Siskiyou Resource Conservation District Lower Scott Valley Stream Habitat Restoration (CA)

Complete a habitat assessment and hydraulic analysis of a 200-acre section of the mainstem Scott River and implement an off-channel pond as refuge for overwintering and over-summering juvenile Coho salmon. Project will plan for and prioritize stream restoration treatments within an important Coho salmon migratory corridor and provide an opportunity for partnership building between local landowners, private organizations, federal agencies and the Karuk Tribe. \$185,348

#### Siskiyou Resource Conservation District Lower Scott Valley Stream Habitat Restoration (CA)

Restore 2.75 river miles of critical habitat for Coho salmon. Chinook salmon and steelhead trout within the mainstem Scott River through instream habitat improvements. Project will develop conceptual design plans involving a series of instream habitat features and offchannel rearing ponds to increase pool frequency and volume, add complex woody shelter structures, improve floodplain connectivity, provide slow water rearing areas, promote mature riparian forests and sort spawning gravels.

# Siskiyou Resource Conservation District

Scott River Stream Restoration and Sediment Reduction Program (CA) Develop and implement streambank

stabilization techniques to reduce impacts to water quality for two critical streambank erosion sites on the Scott River mainstem. Project will stabilize approximately 1,400 feet of streambank and plant across 4 acres to minimize sediment contributions, protect adjacent agricultural land, promote riparian establishment, reduce solar loading affecting water temperatures and improve instream habitat complexity for anadromous species, including threatened Coho salmon. \$80,000

#### Siskiyou Resource Conservation District South Fork Scott River Floodplain Restoration and Increased Habitat Complexity for Coho Salmon (CA)

Restore floodplain function and instream habitat complexity within a 1-mile reach of the South Fork Scott River for the benefit of anadromous salmon species, including threatened Coho salmon. Project will include the excavation of inset floodplains. installation of large-wood structures/jams (spanning 600 feet of stream), and removal of historic mining tailings and planting of native riparian trees.

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\$111,591

#### Social and Environmental Entrepreneurs Watershed Tamarisk Treatment Assessment Monitoring and Follow Up Treatment on the Cuyama River (CA)

Conduct final assessment monitoring of tamarisk treatment, and retreat as necessary, on areas within the Cuyama River Watershed initially treated in 2017. The project team will monitor treated tamarisk on 10 miles of Deal Canyon and Rancho Nuevo creeks, monitor treated sections over approximately eight miles of Cuyama River, complete approximately 1,000 acres of tamarisk treatment monitoring and provide direction for further monitoring and treatment.

\$35,001

#### **Southern California Mountains** Foundation

#### Fuels Reduction Task Force for the San Bernardino National Forest in Southern California

Create a fuels reduction task force comprised of highly trained and seasoned sawyers to prepare fuel reduction units adjacent to and in sensitive meadow habitat on 87-plus acres of the Mountaintop District of the San Bernardino National Forest. Project will restore essential habitat to 87 acres of the Baldwin Lake Meadow unit and to 37 acres of the Bluff Mesa Meadow unit via fuel thinning and prescribed fire. \$101,042

# TERRITORIES U.S. AND STATES

#### **Student Conservation Association**

#### Performing Trail Maintenance for Soda Creek and Indian Springs on Lassen National Forest (CA)

Perform trail maintenance for Soda Creek and Indian Springs for nearly eight miles within the Storrie Fire boundary on Lassen National Forest in California. Project will provide critical trail maintenance that will reduce erosion and includes reduction of user-created trails, hazard tree and overgrown vegetation removal, sign installation and other trail improvements. \$130,509

#### **Tejon Ranch Conservancy**

#### Sacatara Canyon Springs Restoration (CA)

Restore 20 acres of wetland and desert riparian habitats that serve as important migratory and breeding habitat for a variety of avian species, native amphibian species and mammals in Kern County, California. Project will engage partners and volunteers to help remove 5 acres of invasive vegetation, assess wildlife communities and monitor growth of native riparian habitat. \$44,666

#### The Nature Conservancy

#### **Enhancing and Protecting Water** for Salmon through Voluntary Dedications in the Shasta River Basin (CA)

Engage with partners in the Shasta River Watershed to identify and implement voluntary solutions to enhancing flows to benefit habitat for Chinook and Coho salmon. Project will assist three to eight landowners who are currently pursuing Safe Harbor Agreements with the National Oceanic Atmospheric Administration in securing dedication of instream flows, which will ultimately result in up to 4,400 and 9,700 acre-feet of additional water being left instream when fish need it most.

#### \$99,566

#### The Nature Conservancy

#### French Meadows Forest Restoration and Fuels Reduction Project, Tahoe National Forest (CA)

Conduct restoration planning, monitoring and fuels reduction on 29 117 acres of forest land at the headwaters of the Middle Fork American River on the Tahoe National Forest in the northern Sierra Nevada. Project will significantly reduce the potential for severe wildfire that could damage owl and goshawk habitat and reservoir operations, as well as determine the potential forest health and water yield co-benefits of forest fuels reduction in this watershed

\$351,897

#### The Nature Conservancy

### San Miguel Island Rat Feasibility Study (CA) Evaluate rat-eradication strategies and

methodologies in relation to high priority nontarget natural resources and make site-specific recommendations for a rat eradication on San Miguel Island, California. Project will result in a comprehensive survey of existing rat eradication strategies and methodologies, and those on the near horizon, in relation to the high value nontarget resources that inhabit the

#### \$50,000

#### The Nature Conservancy

#### Water Transactions to Benefit Chinook Salmon and Support the Shasta River Water Transaction Program (CA)

Secure approximately 500 acre-feet of water with short-term forbearance agreements with willing water right holders in the Shasta River Watershed. Project will work with water rights holders to leave water instream when flows are at their lowest in late September just before the end of irrigation season.

#### \$58,210

#### **The Student Conservation Association** Los Padres Young Adult

Conservation Team (CA)

Evaluate and repair degraded trail, offhighway vehicle route and roads throughout areas impacted by the Jesusita and Zaca fires within the Los Padres National Forest. Project will utilize a highly qualified team of young adults to improve trail and habitat conditions, and provide valuable on-theground experience in conservation and land-management practices.

#### \$115,853

#### Trout Unlimited

#### Lahontan Cutthroat Trout (CA, NV, OR) Execute strategies identified in the

Lahontan Cutthroat Trout Business Plan by deploying a range-wide field crew to assist in recovery actions and applying a Population Viability Model to design effective and cost-efficient sampling protocols for agency partners.

#### \$242,463

#### **Trout Unlimited**

#### Optimizing Flow for Ecosystem Productivity and Irrigation in the Upper Shasta River (CA)

Refine and validate the effectiveness of environmental flow restoration on fish and food availability as estimated by invertebrate drift. Project will develop flow recommendations that improve ecosystem condition and facilitate environmentally responsible water use in the Shasta River. \$39,672

#### **Trout Unlimited**

#### Reduce Entrainment of Native Fishes

through Installation of Fish Screens (CA, OR) Address fish screening needs at five irrigation diversions on the Wood River in the Klamath River Basin to prevent entrainment of native fishes, including redband trout, bull trout and lamprey. Project will build upon ongoing partnerships and restoration efforts in the Wood River and will reduce entrainment threats to socially, culturally and ecologically important native fish species. \$139,863

#### **Trout Unlimited**

#### Russian River Coho Partnership (CA)

Refine and validate the effectiveness of environmental flow restoration on fish, and food availability as estimated by invertebrate drift. Project will develop flow recommendations that improve ecosystem condition and facilitate environmentally responsible water use

#### \$410,000

#### **Trout Unlimited**

#### Upper Sprague Riparian Protection and **Enhancement to Improve Water Quality** for Native Fish (CA, OR)

Complete riparian enhancement actions in the Upper Sprague Basin to improve water quality in the Klamath Basin through functioning riparian buffers to reduce external phosphorus loading and decrease stream temperatures. Project will include the installation of 5 miles of riparian fencing, 15 acres of riparian planting, five off-stream watering systems and riparian grazing management plans.

#### The Trust for Public Land Acquisition of Temescal Ranch

#### in Southern California

\$140,653

Acquire the 6,006-acre Temescal Ranch to help fill the largest gap in protected lands in Southern California. Project will conserve native habitats, wildlife corridors, streams and other natural resources that support sensitive species like the California condor and Southern California steelhead, while also supporting regional farms and expanding outdoor recreation opportunities.

#### The Trust for Public Land

#### South Los Angeles Green Alleys Initiative (CA)

Engage local residents in planning, implementation, monitoring and stewardship of the Central-Jefferson and Quincy Jones Green Alleys Networks in South Los Angeles, to absorb runoff that would otherwise impact the Los Angeles River and Pacific Ocean. Project will improve stormwater management, water quality monitoring, restoration of native habitat, increased local groundwater supplies and resilience to drought.

#### \$50,000

#### **U.S. Geological Survey**

#### Analyzing Trends and Variability in Southern California Ashy Storm-petrel Colonies (CA) Acquire, integrate, review and analyze

available catch-per-unit-effort data for ashy storm-petrel throughout the California Channel Islands to benefit understanding of its status and conservation. Project will establish robust guidelines to monitor trends in relative abundance, and outline a standardized, repeatable approach. \$49.966

#### U.S. Geological Survey,

#### **California Water Science Center** Sediment Mobilization and Geomorphic

Assessment of the Mainstem Klamath River Below Iron Gate Dam (CA)

Assess river corridor conditions and the geomorphic effectiveness of streamflow in the Klamath River below Iron Gate Dam, and relate flow history to bed mobility and conditions conducive to infectious diseases, particularly those effecting juvenile salmonids. Project will collect baseline datasets and create a foundational map for planning and implementing future monitoring and interpreting river response to hydrologic disturbance, including flow releases for fish disease mitigation. \$175,000

#### University of California – Davis Restoration and Resilience of Endemic Bigcone Douglas-fir after the Zaca Fire II (CA)

Map the distribution of bigcone Douglasfir in the Zaca Fire footprint, quantify stand mortality and collect seed from representative locations. Project will include a landscape-scale assessment of restoration viability, combined with an assessment of local-scale environmental conditions associated with regeneration, to maximize seedling survival in outplanting trials, and findings will support an adaptive management plan for long-term persistence of this important endemic species. \$68,665

#### University of California - Santa Barbara Evaluation and Restoration of Degraded Chaparral within the Piru Fire Perimeter II (CA)

Evaluate methods to restore chaparral species into degraded sites within the Piru Fire perimeter in Los Padres National Forest. Project will employ large-scale planting across a several acre area focusing on eight species planted across a heterogeneous landscape, and also plant out specific assemblages designed to either withstand drought or suppress invasive species or a combination that balances drought tolerance, re-sprouting ability and competitiveness while maximizing native species richness.

#### \$184,280

#### University of California - Santa Barbara Restoration and Resilience of Endemic Bigcone Douglas-fir after the 2007 Zaca Fire

Map the distribution of bigcone Douglasfir in the Zaca Fire footprint, quantify stand mortality and collect seed from representative locations. Project will conduct a landscape-scale assessment of restoration viability, combined with an assessment of local-scale environmental conditions associated with regeneration, to maximize seedling survival in outplanting trials. \$132,754

#### University of California - Santa Cruz Developing Tools to Prevent Extinction and Recover Threatened and Endangered Seabirds (AK, CA, HI, Canada)

Utilize a new meta-population viability model approach in order to make improved seabird conservation decisions. Project will identify the most at-risk species and their breeding sites in order to improve the conservation status of seabirds and prevent the listing of seabird species in the future. \$249.984

#### **Washington State University**

#### **Evaluating Meadow Restoration Techniques** for Sierra Nevada Amphibians (CA)

Evaluate multiple meadow restoration techniques and benefits for three endangered amphibians throughout Sierra Nevada in California. Project will study meadow restoration effects on the Yosemite toad, Sierra Nevada yellow-legged frog and mountain yellow-legged frog; create meadow restoration technique recommendations.

#### **Watershed Research and Training Center**

Thinning, Fuels Reduction and Resilience (CA) Conduct plantation thinning and fuels reduction to restore and enhance critical wildlife habitat attributes on 100 acres of forest plantations on the Shasta-Trinity National Forest. Project will use appropriate silvicultural techniques and prescriptions to help create late successional forest habitat attributes that support threatened and endangered wildlife, while mitigating risk from wildfire, competition and disease. \$112.022

#### Western Association

#### of Fish and Wildlife Agencies Monarch Butterfly Conservation in the

Western United States (multiple states) Develop a regional strategy to increase organizational capacity and coordination among monarch butterfly conservation partners west of the Rocky Mountains. Project will develop and track implementation efforts identified in the Western Monarch Population Conservation Strategy, establish the Western Monarch and Pollinator Initiative Council, and transition milkweed data into the Crucial Habitat Assessment Tool. \$120,000

#### Yurok Tribe

#### Development of an Integrated Fisheries Restoration and Monitoring Plan for the Klamath Basin – Yurok Tribe (CA)

Assist the U.S. Fish and Wildlife Service and other Klamath Basin stakeholders in the completion of an accurate, comprehensive and prioritized Integrated Fisheries Restoration and Monitoring Plan, detailing needs throughout the Klamath River Watershed, including its major tributaries. Project will result in the publication of a final strategic plan for monitoring and restoration of Klamath River Basin native fishes. \$50,000

#### Yurok Tribe

#### Lower Bear Creek Stream and Floodplain Habitat Enhancement to Benefit Native Salmonids (CA)

Install constructed wood jams and rehabilitate riparian habitats in lower Bear Creek to provide immediate and long-term benefits to Chinook and Coho salmon, and steelhead and coastal cutthroat trout. Project will facilitate the formation and maintenance of productive winter rearing habitats; improve connectivity between riverine, tributary and floodplain habitats; and increase riparian forest health and resilience. \$88,906

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#### Yurok Tribe

#### Water Quality and Habitat Restoration for Anadromous Fish in Blue Creek (CA)

Provide immediate and long-term benefits to wild runs of Chinook and Coho salmon; steelhead and coastal cutthroat trout; and Pacific lamprey by improving water quality, promoting base flow restoration, and increasing habitat complexity and resilience in the Blue Creek Watershed. Project will address sedimentation, water quality and hydrologic impairments associated with a legacy timber road; and increase habitat complexity and resilience by adding large wood to fluvial habitats and planting riparian

#### \$253,244

#### **COLORADO**

#### **Groundwork Denver**

#### Bear Creek Water Quality Outreach and Residential Activities (CO)

Improve the water quality and riparian habitat of Bear Creek in Denver County, Colorado, while providing a career pathway for 34 low-income youth employees and stewardship opportunities for local residents by offering education and resources to reduce watershed human impacts. Project will install green infrastructure to reduce runoff from residential properties, coordinate community volunteer days to remove invasives, clean up trash and replant native species in the riparian habitat.

\$46.911

#### National Audubon Society

Advancing the SageWest Communications Network across the Sagebrush Ecosystem (multiple states)

Elevate individual conservation efforts and create a larger dialogue about the value and need for sagebrush conservation. Project will engage in priority work groups, develop guidance documents, and organize partner meetings across the ecosystem. \$34,200

#### **Pheasants Forever**

Expanding Conservation of Working Lands in the Sagebrush Ecosystem (multiple states)

Maintain and expand technical assistance capacity in key greater sage grouse focal areas to strengthen working ranch lands management to improve greater sage grouse populations. Project will improve grazing practices on 250,000 acres to benefit greater sage grouse through technical assistance provided by 14 Strategic Watershed Action Teams members. \$1,688,795

# Rocky Mountain Bird Observatory Working Lands for Wildlife in the San Luis Valley. Colorado

Implement wetland and riparian habitat enhancement and restoration projects to benefit southwestern willow flycatcher. Project will provide targeted outreach to thousands of landowners through technical and educational workshops and landowner visits.

\$195,852

# Rocky Mountain Bird Observatory Habitat Restoration and Community Outreach along the South Platte River (CO)

Restore water control structures on permanent Wetland Reserve Program easements along the lower South Platte River, restoring at least 40 acres of open wetland and managing 200 acres of surrounding habitat to support waterfowl, waterbirds and shorebirds. Project will educate landowners and invite other landowners to implement wetland best management practices for wildlife habitat along the river corridor. \$22,159

### Rocky Mountain Bird Observatory Private Lands Conservation

for Grassland Birds in Southeast Colorado
Implement grassland habitat enhancement
and restoration on grassland habitats in
southeastern Colorado through enrolling
landowners in Farm Bill conservation
programs, which will be facilitated by a
private-lands wildlife biologist. Project also
will provide targeted outreach to thousands
of landowners through technical and
educational workshops and landowner visits.
\$151,237

#### Rocky Mountain Field Institute Environmental Stewardship (CO)

Engage and educate an average of 2,300 youth and adult community volunteers in Colorado Springs and throughout surrounding counties to restore 20 acres of habitat impacted by fire and invasive species. Project will work with conservation corps in addition to volunteers, supporting at least 75 corps member experiences who will learn conservation employment skills.

#### State of Colorado,

Department of Natural Resources Greenback Cutthroat Trout Restoration in the Canyon Lakes Ranger District (CO)

Support native greenback cutthroat trout recovery in Colorado by increasing suitable habitat in the George Creek watershed. Project will establish a metapopulation of greenback cutthroats within the Canyon Lakes Ranger District of the Arapaho Roosevelt National Forest. \$60,000

#### The Nature Conservancy

Prairie Canyonlands Big Horn Sheep and Grassland Birds Restoration (CO)

Restore habitat for Cassin's sparrow, chestnut collared longspur, lark bunting, McCown's longspur, Sprague's pipit and Rocky Mountain bighorn sheep through pinyon juniper clearing and rotational grazing. Project will focus on restoration strategies based on an analysis of habitat and connectivity needs of the Purgatoire Canyonlands.

#### \$110,045

# U.S. Department of Agriculture, U.S. Forest Service

Lesser Prairie Chicken Habitat Restoration (CO)
Replace 29 windmills with solar pumps to
benefit lesser prairie chicken nesting and
brood-rearing activities. Project will restore
habitat on more than 30,000 acres and
enhance the success of current translocation
efforts of lesser prairie chickens, with the
ultimate goal of restoring a viable population
to the Comanche National Grassland.
\$75,000

#### U.S. Geological Survey

National Wildlife Health Center Developing and Testing Delivery Methods for Vaccine Treatments to Reduce White-Nose Syndrome in Bats (CO, MN, TX, WI)

Design and test mass-delivery methods for vaccines and other treatment options as a strategy to reduce the occurrence of white-nose syndrome in bats. Project will develop and test an automatic spray technology device for delivering treatments to bats as they fly into maternity roosts or hibernacula for fall swarm and assess oral consumption of treatment and effectiveness of a topical delivery method through the use of biomarkers.

#### \$400,000

#### Upper Gunnison River Water Conservancy District

Riparian and Wet Meadow Restoration and Coordination in the Sagebrush Landscapes of Western Colorado

Enhance coordination, knowledge and technology transfer, and implementation of restoration structures that improve mesic habitats through landscape-scale restoration projects. Project will utilize the most appropriate restoration techniques to restore mesic habitats in the most costeffective manner, through site prioritization, development of methods and monitoring techniques, field assessments, design workshops with experts, outreach to private landowners and funding for on-the-ground restoration work.

#### \$149,639

Wetland Dynamics

Gunnison Sage Grouse Collaborative Action Plan Project and Plan Development (CO, UT) Help to identify and prioritize on-theground projects to benefit Gunnison sage grouse in each population so that when funding for projects is available, partners will have tools and guidance on where to focus project work. Project will work to sustain both the Gunnison Basin and satellite populations of sage grouse for future generations.

#### **World Wildlife Fund**

Expanding the Spatial and Temporal Scale of the Plowprint Analytical Tool (multiple states, Canada and Mexico)

Update and expand geospatial data analysis, called the Plowprint, to evaluate landscape change metrics for the Northern Great Plains ecoregion. Project analysis will expand the previous versions by including northern Mexico, extending the analysis backward in time to capture historical change and using the newest and best available data to track rates of agricultural conversion, monitor previously converted lands, identify risk factors for remaining intact habitat and target conservation work.

#### \$20,000

#### CONNECTICUT

#### City of Hartford

Bright Green Hartford – Residential Rainwater Management for a Greener, Cleaner and Healthier Hartford (CT)

Conduct a program to provide residents with green infrastructure in Hartford, Connecticut. Project will reduce 1.8 million gallons of stormwater pollution annually from flowing into the Connecticut River and Long Island Sound. \$177,310

#### City of New London

Developing a Natural Resource and Watershed Plan for New London (CT)

Conduct an assessment of the current condition of the city's natural resources and watershed health. Project will develop a plan that provides a concrete vision for a sustainable and resilient urban shoreline community into the future. \$35,000

#### **Connecticut Audubon Society**

Rain and Pollinator Gardens for Schools (CT)
Guide student-led planning and installation of rain and pollinator gardens at schools in the Connecticut River Estuary, including Essex, Deep River and Chester, Connecticut. Project will enhance existing schoolyard habitats, adding features that reduce 4,675 gallons of stormwater pollution while providing students and teachers with an example of sustainable conservation action for Long Island Sound.

#### Connecticut Audubon Society

\$15,443

Wildlife Preserve Restoration Project (CT)

Restore 33 acres of the H. Smith Richardson Wildlife Preserve to a coastal forest habitat in Westport, Connecticut. Project will improve conditions for birds and other wildlife at one of the largest open spaces in southwest Connecticut along the Long Island Sound. \$145,780

#### Connecticut Fund for the Environment

A Fishway for Pages Millpond Dam (CT)
Construct a fishway opening 5.35 river
miles and 4.25 lake acres of fish habitat for
alewife, blueback herring and American eel
in North Branford, Connecticut. Project will
complete the restoration of this riverine
migratory corridor to Long Island Sound.
\$249.947

# **Connecticut Fund for the Environment**Fish Passage Projects (CT)

Develop engineered designs for fishways at Whitford Pond Dam in Stonington and at Alewife Cove Dam in Waterford, Connecticut. Project will complete critical design work to address the next barriers to fish migration along two historically abundant diadromous fish migratory river corridors. \$99.987

#### Connecticut Fund for the Environment Unified Water Study: Long Island Sound Embayment Monitoring (CT, NY)

Implement the Unified Water Study (UWS), a water quality monitoring program in two embayments; and engage five water quality monitoring groups in nine embayments providing them with technical support as participants in the UWS in Connecticut and New York. Project will engage a coordinated effort to collect data on the health of bays and harbors to provide for synthesis about water quality issues affecting Long Island Sound. \$99,991

Earthplace – The Nature Discovery Center
Partnering for Pollution Prevention: Water
quality monitoring of Impaired Waterways (CT)

Monitor eight impaired waterways bi-weekly for water temperature, dissolved oxygen, conductivity, fecal coliform and bacteria in Fairfield County, Connecticut. Project will provide an update to a dataset of water quality conditions and work towards identifying sources of sewage pollution impacting Long Island Sound. \$65,363

#### Earthplace – The Nature Discovery Center The Unified Water Study Equipment Loan Program: Collaboration in Embayment Monitoring (CT, NY)

Manage an equipment, supplies and technical resources loan program for up to 20 embayment groups and 200 citizen science volunteers to support the Unified Water Study for Long Island Sound embayments in Connecticut and New York. Project will result in a greater number of embayments being monitored providing important information from the first areas affected by pollution sources that impact the health of Long Island Sound.

#### Earthplace – The Nature Discovery Center Water Quality Monitoring in Three Urban Watersheds (CT)

Conduct water quality monitoring in the Rippowam River, Norwalk River and Bruce Brook in Connecticut to identify sources of pollution. Project will collect data at each site, including dissolved oxygen, conductivity, water temperature, fecal coliform and E. coli, and identify sources of negative impacts to create a dataset of water quality conditions to reduce bacteria and nutrient inputs to Long Island Sound tributaries and reduce beach and shellfish bed closures.

#### \$27,056

#### Earthplace – The Nature Discovery Center Water Quality Monitoring to Improve Fairfield County Waterways and Long Island Sound (CT) Conduct water quality monitoring to

help improve 10 waterways affected by pollution in Fairfield County, Connecticut. Project will use the water quality data collected to inform local government actions to reduce sewage pollution into Long Island Sound.

#### \$74,493

# Eastern Connecticut Conservation District Shewville Dam Fishway Design Project (CT)

Prepare an engineered plan for a fishway on the Shewville Dam, Shewville Brook and Ledyard Reservior, Connecticut. Project will complete critical design work to address a barrier to upstream alewife migration along a migratory river corridor of Long Island Sound.

#### \$74,133

#### Eastern Connecticut Conservation District Rain Gardens and Rain Barrels

for Eastern Connecticut
Install an estimated 7,000-square-feet and
100 rain barrels in rain gardens in Eastern
Connecticut. Project will prevent up to
8,581 gallons of stormwater from flowing
into Long Island Sound.

#### \$84,996

#### Housatonic Valley Association Collaborative Watershed Planning for the Ten Mile River (CT, NY)

Develop a watershed management plan for the Ten Mile River in eastern Dutchess County, New York, and western Litchfield County, Connecticut. Project will inform restoration and water quality activities focused on reducing nitrogen loads from the Ten Mile River to the Housatonic River and Long Island Sound.

#### \$64,358

# IC Independent Consulting Implementing and Improving Electronic Monitoring in New England Fisheries (CT, MA, ME, NH, RI)

Review and synthesize electronic monitoring technologies, electronic reporting technologies and data requirements to better monitor catch, bycatch, discards and interactions with endangered, threatened and protected species within the New England groundfish fisheries. Project will develop a plan for implementing data modernization to address gaps that will satisfy scientific, enforcement and sustainable management needs. \$79,940

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#### Lynde Point Land Trust

Hepburn Living Shoreline Project (CT)

Construct a living shoreline on Long Island Sound in Fenwick, Connecticut. Project will provide protection for the nearby community and a 10-acre tidal marsh from storms and rising waters. \$250,000

#### Manomet

#### Coastal Habitat Restoration for American Oystercatcher along Atlantic Coast (multiple states)

Coordinate the planning and implementation of conservation action for American oystercatcher along the entire U.S. Atlantic seaboard. Project will continue the coastwide coordination of the American oystercatcher recovery initiative and compile lessons learned after a decade's worth of targeted investments and embark upon a new initiative to develop best management practices to restore wet and dry sand habitats for oystercatchers and other breeding shorebirds along the Atlantic Coast.

\$150,000

# Audubon WildLife Guards: A Coastal Youth Conservation Program (CT)

National Audubon Society

Employ high school students working with local partners to steward, monitor and restore habitat, and increase knowledge about protecting habitat and wildlife among visitors to Sandy Point Beach and Bird Sanctuary in West Haven. Project will complement ongoing efforts to restore and sustainably manage Sandy Point, to engage people in stewardship and to increase knowledge among visitors.

\$27,181

#### National Audubon Society

#### **Engaging Communities**

through Schoolyard Habitats – V (CT)

Create a network of schoolyard habitats at 25 schools in Fairfield and New Haven counties, Connecticut. Project will connect local residents to Long Island Sound and empower them to engage in its conservation. \$44,999

#### **National Audubon Society**

#### Urban Oases: Community-Based Education and Outreach to Enhance Habitats Around Long Island Sound (CT)

Engage teachers, students and community members in enhancing urban green spaces in the City of New Haven and Town of Hamden, Connecticut. Project will involve 12,000 people in local environmental education to increase the availability of habitat in urban parks and schoolyards for migrating birds and other wildlife. \$44,918

### National Audubon Society Urban Oases in New Haven Watershed (CT)

Engage local residents in restoring 20 acres of urban green space in parks and schoolyards to improve watershed health and provide quality habitat for migratory wildlife while also addressing critical community needs in underserved neighborhoods of greater New Haven. Project will enhance habitat at 31 school/park habitat sites, improve management of 545 acres of private land and engage 12,000 people through outreach and restoration activities.

\$49,994

### Neighborhood Housing Services of New Haven

Partners in the West River Watershed (CT)
Install Green Infrastructure improvements at residential sites in New Haven, Connecticut.
Project will prevent 108,000 gallons of stormwater pollution annually from flowing into the West River and Long Island Sound.
\$84,035

Disconnecting Downspouts and Connecting

# Neighborhood Housing Services of New Haven

Stormwater Management Education f(CT)
Provide education about Green Infrastructure
wastewater management systems in lowincome neighborhoods highly impacted by
water pollution in New Haven, Connecticut.
Project will seek to increase residents'
understanding of the impact of water
pollution and about the opportunities they
have to decrease pollution into Long Island
Sound through simple, low-cost solutions.

### Neighborhood Housing Services of New Haven

# Stormwater Management Programs to Improve Water Quality (CT)

Develop classroom-based programs and community-based, volunteer-driven environmental events in New Haven, Connecticut. Project will educate local residents about how to reduce stormwater from their homes into the West River and Long Island Sound.

\$14,398

\$10,000

#### **New Haven Land Trust**

# Schooner Coastal Exploration, Stewardship, and Environmental Education (CT)

Provide hands-on educational programming for underserved youth and families through summer camp, on-the-water programs, outreach, and school-based programs focusing on protection of Long Island Sound. Project will increase appreciation and awareness of and provide sustainable recreational activities to the Sound for more than 800 people.

#### New Haven Urban Resources Initiative Promoting Green Infrastructure through Monitoring & Evaluation of Bioswales (CT)

Monitor Green Infrastructure (GI) bioswales to evaluate their capacity to improve water quality and reduce stormwater runoff; and conduct a communications program for residents, the business community and the public. Project will aid in the design and installation of GI systems in three New Haven river watersheds and in urban areas of the Long Island Sound.

\$42,966

# Northeast Organic Farming Association of Connecticut

# Engaging New Landscaping Professionals in Nontoxic Landscaping Practices for Long Island Sound

Host two educational courses on nontoxic property management practices that reduce nonpoint source pollution entering Long Island Sound. Project will provide free training for about 70 local landscapers to help them transition to practices that decrease common fertilizer, phosphorous and pesticide use to reduce overall nitrogen pollution from entering Long Island Sound. \$44,937

# Northeast Organic Farming Association of Connecticut

#### Healthy Connecticut Towns

for a Healthy Long Island Sound (CT)

Offer training programs about organic land-care practices and principles to 100 landscapers in Connecticut. Project will have landscapers commit to transitioning properties in their care to an organic program to foster reductions of nitrogen and pesticide runoff into Long Island Sound. \$36.682

#### Sea Research Foundation

Connections to Long Island Sound (CT)

Use interactive exhibits, portable estuarine-based tools and curricula and interactive resources to engage and educate visitors and students about issues affecting Long Island Sound at the Mystic Aquarium, Connecticut. Project will reach approximately 750,000 individuals each year and promote environmental stewardship of Long Island Sound and its watersheds. \$44,966

#### Sea Research Foundation

#### Partnering for Marine Debris and Trash Prevention and Animal Rescue around Long Island Sound (CT, NY)

Offer education and stewardship opportunities focused on the impact of marine debris on marine species, and engage coastal and non-coastal community members in Connecticut and New York. Project will increase public awareness to reduce marine debris, trash and fishing gear from entering Long Island Sound. \$44,587

#### Sea Research Foundation

# Sound Discoveries – Education through Exploration (CT)

Host an environmental education program to immerse students and families in the habitats of Long Island Sound in Mystic, Connecticut. Project will increase knowledge about the natural resources of the Long Island Sound and actions people can take to improve it.

\$8,651

#### Sea Research Foundation

#### Sound Spirit Week (CT)

Conduct awareness and stewardship events designed to educate the public about the ecological and economical importance of Long Island Sound. Project will teach up to 40,000 individuals about actions they can take to reduce their impact on the Sound, engage 20 high school students in marine debris related activities and engage up to 300 people in conservation activities at four stewardship events.

\$9,978

#### Solar Youth

# Long Island Sound Summit and Video Project (CT)

Engage urban youth in a Long Island Sound Summit that will include curriculum and lessons, hands-on conservation activities and creation of a Youth Voice Video where the students will share what they learned about Long Island Sound with the public in New Haven, Connecticut. Project will increase urban youths' awareness, knowledge, skills and motivation to protect and restore the Sound.

\$10,000

#### **SoundWaters**

# SoundWaters Bioextraction Seaweed Farm for Stamford (CT)

Install a seaweed farm to bioextract pollution from Stamford Harbor, Stamford, Connecticut. Project will educate students, teachers and the public about the benefits of bioextraction through seaweed aquaculture in the waters of Long Island Sound. \$38,307

#### The Nature Conservancy

#### Community-driven Nitrogen Action Planning for Southeastern Connecticut Harbors and Bays (CT)

Develop a nitrogen action plan for harbors and bays in Southeastern Connecticut. Project will identify and prioritize activities to reduce nitrogen pollution entering Southeastern Connecticut waters and Long Island Sound. \$40,862

#### The Nature Conservancy

#### Greening Affordable Housing for Nature, Community Resilience and Human Well-being (AZ, CT, NM)

Create demonstration projects in three cities to address community resilience and improve green infrastructure by creating an urban forest and greenspace in Albuquerque, New Mexico; creating green stormwater infrastructure in Bridgeport, Connecticut; and depaving surfaces and planting trees in Phoenix, Arizona. Projects will plant 270 trees and reach out to 950 people to implement green infrastructure and develop supportive communities. \$250,000

#### The Nature Conservancy

# Identifying Ecologically Significant Areas for the Blue Plan – II (CT, NY)

Engage scientists, technical experts and the interested public to identify ecologically significant areas (ESAs) for the Long Island Sound Blue Plan in Connecticut and New York. Project will develop one of the foundational elements of a plan to protect important aquatic habitats of Long Island Sound.

\$45,000

#### The Nature Conservancy

# Planning for Fish Passage at the Starr Mill Pond Dam (CT)

Develop an engineered plan for fish passage at the Starr Mill Pond Dam and for restoration of the river corridor and upstream impoundment in Middleton, Connecticut. Project will improve connectivity, restore freshwater wetlands and riparian buffer, floodplain and aquatic habitat benefiting resident as well as migratory species. \$85,482

#### The Nature Conservancy

#### Producing and Implementing a Community-supported Long Island Sound Blue Plan (CT. NY)

Finalize the Long Island Sound Blue Plan in Connecticut and New York. Project will create a community-supported plan to protect marine life in Long Island Sound. \$44,986

#### Town of Berlin, Connecticut

# A Fishway for the Railroad Pond Dam (CT) Install a fishway at the Railroad Pond Dam in Berlin, Connecticut. Project will open pond and river for fish to pass, including: alewife, blueback herring, sea lamprey and American eel.

\$250,000

### U.S. Department of Agriculture,

#### U.S. Forest Service

#### Expanding the National Aquatic eDNAtlas and Data Exchange for Freshwater Species (multiple states)

Expand the aquatic environmental DNA Atlas database, website, digital tools, and sample repository to a national scale. Project will expand the current coverage of the database of information important to the conservation and management of aquatic species to include waterways in the 37 remaining states to inform strategic conservation investments for suppressing invasives and increasing native populations. *\$73,018* 

#### **University of Connecticut**

# Addressing the Problem of Microplastics in Long Island Sound Harbors (CT) Investigate microplastics and the impact

of this type of pollution in harbors of the western Long Island Sound in Connecticut. Project will develop a model monitoring program to assess the extent and impact of microplatic pollution on habitats and the food web of Long Island Sound, educate about the issue, and develop management recommendations to address the problem. \$99,999

#### **University of Connecticut**

#### Rapid Action Plans to Deliver Green Infrastructure in Coastal Connecticut

Plan, design and implement five Green Infrastructure projects in communities in the South Central Region Basin, Connecticut. Project will provide measurable annual reductions in stormwater pollution into Long Island Sound.

\$234,712

#### **University of Connecticut**

# Resilience Management and Restoration at Dodge Paddock/Beal Preserve (CT)

Develop a resilience management plan for and restore coastal grassland and upland at the Dodge Paddock/Beal Preserve in Stonington, Connecticut. Project will incorporate planning for rising tides and storms to protect tidal wetlands, coastal grassland, beach/dune habitat and rocky intertidal shoreline. \$55,449

#### **DELAWARE**

#### American Bird Conservancy

#### Optimizing Conservation Benefits to Black Ducks and Water Quality in the Chesapeake Bay Watershed (multiple states)

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Develop guidance to target wetland habitat restoration and enhancement across the entire Chesapeake Bay watershed. Project will be using the output of two separate models to target conservation actions that would benefit water quality and black ducks, in partnership with the U.S. Geological Survey and the Atlantic Coast and Black Duck joint ventures. \$25,634

#### Chesapeake Media Service

#### Increased Outreach to Local Governments in the Chesapeake Bay Watershed through the Bay Journal (multiple states)

Create a new local government edition of the Bay Journal to provide education for municipal staff in the vast majority of the 1,800 local government jurisdictions within the Chesapeake Bay Watershed. Project will provide information that will help them understand and achieve their commitments to Chesapeake Bay restoration efforts.

#### **Ducks Unlimited**

\$20,001

# Conservation of American Black Duck in Delaware, Maryland and Virginia

Implement the goals of the Working Lands for Wildlife Farm Bill Program by targeting conservation of American black duck priority habitat in Delaware, Maryland and Virginia. Project will work with producers and private landowners to implement voluntary Farm Bill conservation programs to protect, restore and enhance habitat to benefit American black ducks on private lands.

\$272,564

#### Manomet

#### Coastal Habitat Restoration for American Oystercatcher along Atlantic Coast (multiple states)

Coordinate the planning and implementation of conservation action for American oystercatcher along the entire U.S. Atlantic seaboard. Project will continue the coastwide coordination of the American ovstercatcher recovery initiative and compile lessons learned after a decade's worth of targeted investments and embark upon a new initiative to develop best management practices to restore wet and dry sand habitats for oystercatchers and other breeding shorebirds along the Atlantic Coast. \$150,000

#### Ridge to Reefs

#### Bioreactor Implementation Training and Promoting (DE, MD)

Increase the capacity of Nanticoke Watershed Alliance to site, design and build bioreactors within the Nanticoke watershed, and promote the practice with other farmers throughout the watershed. Project will conduct targeted outreach to farmers, hold a farmer workshop and provide bioreactor tours to increase knowledge about this practice.

\$49,994

#### The Nature Conservancy

Water Quality Project Prioritization and Capacity Continuity in Sussex County (DE)

Improve water quality in the Chesapeake Bay and local waters through the planning and design of wetland restoration and water control structure installation in Sussex County, Delaware. Project will result in a prioritized list of high-impact, costeffective wetland restoration and water control structure projects, three secured projects on willing agricultural landowner property, and two training workshops for conservation professionals.

\$48,712

#### U.S. Department of Agriculture, U.S. Forest Service

#### Expanding the National Aquatic eDNAtlas and Data Exchange for Freshwater Species (multiple states)

Expand the aquatic environmental DNA Atlas database, website, digital tools and sample repository to a national scale. Project will expand the current coverage of the database of information important to the conservation and management of aquatic species to include waterways in the 37 remaining states to inform strategic conservation investments for suppressing invasives and increasing native populations. \$73,018

#### University of Delaware

#### Mapping and Demonstrating Biochar Potential for Roadway Runoff Reduction in New Castle County (DE)

Examine roadway soils in New Castle County, Delaware, to ascertain soil and roadway locations most amenable to biochar amendment, a highly effective stormwater runoff reduction method Project will demonstrate the long-term benefit of biochar addition and create a map showing locations along county roadways where biochar amendment is expected to have high, medium or low benefit. \$49.723

#### **University of Maryland Center** for Environmental Science

#### **Incorporating Novel Watershed Indicators** into the Chesapeake Bay Report Card (multiple states)

Make key improvements to the Chesapeake Bay Report Card, which has served since 2006 as the definitive source for ecosystem health status in the Bay and tidal tributaries. Project will improve the Chesapeake Bay Report Card process and product by incorporating recent lessons learned, incorporating new design elements, developing indicators for nontidal watershed areas.

\$113.995

#### Water Words That Work

Training Chesapeake Bay Conservation Practitioners (DE, MD, PA, VA, WV)

Help conservation practitioners successfully recruit and negotiate landowners' participation in the Conservation Reserve Enhancement Program, conservation easements, agricultural best practices, manure and forest management plans and habitat restoration projects to improve water quality in the Chesapeake Bay watershed. Project will bring the expertise of the region's most successful conservation field staff into a course designed for entrylevel and mid-career field staff. \$24.978

#### **DISTRICT OF COLUMBIA**

#### Alliance for the Chesapeake Bay Developing a Chesapeake Tree Canopy Funding and Financing Guide (DC, MD, VA)

Develop a Chesapeake Urban Tree Canopy Funding and Financing document and hold a one-day workshop and provide one-on-one support for Metro Washington Council of Governments members. Project will serve as a general guidance for all Chesapeake communities on the funding and sustainable financing of the programs, bolstered with short and compelling how-to case studies from the Chesapeake region.

\$49,188

### Alliance for the Chesapeake Bay

#### Spring House Run Community Water Quality Monitoring (DC)

Implement a citizen water quality monitoring program on Spring House Run to collect data that will quantify the water-quality improvements of a recent stream bed restoration project. Project will provide a baseline for community engagement and education to mobilize the local community as stewards of the watershed in which they live. \$45.723

#### American Bird Conservancy

#### Optimizing Conservation Benefits to Black Ducks and Water Quality in the Chesapeake Bay Watershed (multiple states)

Develop guidance to target wetland habitat restoration and enhancement across the entire Chesapeake Bay watershed. Project will be using the output of two separate models to target conservation actions that would benefit water quality and black ducks, in partnership with the U.S. Geological Survey and the Atlantic Coast and Black Duck joint ventures. \$25,634

#### **Anacostia Watershed Society**

#### Freshwater Mussel Restoration (DC)

Restore populations of freshwater mussels by deploying more than 7,000 mussels to filter up to 26 million gallons of water annually in the Anacostia River in the District of Columbia, improving water quality conditions and aquatic biodiversity. Project will lay groundwork for future mussel restoration efforts by determining suitable habitats and feasibility while educating more than 500 people about the importance of freshwater mussels and engaging community members in mussel propagation. \$33,099

#### CDP North America

#### Scaling Green Infrastructure Investments in Cities (multiple states)

Build capacity of communities in 18 cities across the United States to help them implement sustainable infrastructure for stormwater management, urban wildlife habitats and tree canopy improvement. Project will perform targeted outreach to cities to increase knowledge of sustainable infrastructure financing. \$200,000

#### **Chesapeake Media Service**

#### Increased Outreach to Local Governments in the Chesapeake Bay Watershed through the Bay Journal (multiple states)

Create a new local government edition of the Bay Journal to provide education for municipal staff in the vast majority of the 1,800 local government jurisdictions within the Chesapeake Bay Watershed. Project will provide information that will help them understand and achieve their commitments to Chesapeake Bay restoration efforts. \$20,001

#### **National League of Cities Institute**

#### Leadership in Community Resilience

Conduct a series of demonstration projects by extending the Leadership in Community Resilience pilot program of 10 cities to a second cohort of seven cities. Project will support a resilience-focused community event and 12 months of technical support. \$248.111

#### **Nspiregreen**

#### RiverSmart Green Infrastructure (DC)

Develop a community-engagement plan and toolkit for the District Department of Energy and Environment's RiverSmart green infrastructure program. Project will significantly increase the number of homeowners participating in the program and installation of green infrastructure retrofits. \$40,078

#### **Skeo Solutions**

#### Anacostia Watershed Regional Messaging Initiative (DC, MD)

Develop a conservation-based regional initiative designed to educate effected communities and broaden knowledge of the Anacostia River and watershed throughout the District of Columbia, Montgomery County and Prince Georges County. Project will create a consistent and coordinated strategy to engage communities, neighborhoods, and citizens in conservation practices for the Anacostia that will reduce nutrients and sediment entering the Chesapeake Bay. \$44,911

#### U.S. Department of Agriculture, **U.S. Forest Service**

#### Expanding the National Aquatic eDNAtlas and Data Exchange for Freshwater Species (multiple states)

Expand the aquatic environmental DNA Atlas database, website, digital tools and sample repository to a national scale. Project will expand the current coverage of the database of information important to the conservation and management of aquatic species to include waterways in the 37 remaining states to inform strategic conservation investments for suppressing invasives and increasing native populations. \$73,018

#### **University of Maryland Center** for Environmental Science

Incorporating Novel Watershed Indicators into Chesapeake Bay Report Card (multiple states) Make key improvements to the Chesapeake Bay Report Card, which has served since 2006 as the definitive source for ecosystem health. status in the Bay and tidal tributaries. Project will improve the Chesapeake Bay Report Card process and product by incorporating recent lessons learned, incorporating new design elements, developing indicators for non-tidal watershed areas, and adding social, cultural and economically relevant values.

\$113,995

#### FLORIDA

#### **Alachua Conservation Trust**

Ocala Regional Implementation Team – V (FL) Restore and enhance more than 6,300 acres of longleaf pine habitat on public and private lands in north-central Florida. Project will expand foraging habitat for redcockaded woodpeckers in Ocala National Forest, establish longleaf pine on lands buffering Camp Blanding and increase prescribed fire capacity on private lands through development of a prescribed burn association.

\$240,000

#### **Chicago Zoological Society** Enhancing the Gulf of Mexico Dolphin

Identification System (AL, FL, LA, MS, TX) Improve the functionality of the Gulf of Mexico Dolphin Identification System, a collaborative database of bottlenose dolphin photographic identification from researchers around the Gulf. Project will expand the existing tool for protection and restoration of bottlenose dolphins, allowing researchers to search online for their individual dolphins within the catalogs of other collaborating researchers, to identify long-range movements and determine the origins of stranded dolphins.

#### \$60,000

#### **Conservation Foundation of the Gulf Coast** Restoration Modeling and Wetlands Reserve Program Implementation in the Myakka River Basin (FL)

Develop a unified hydrologic restoration model and strategic outreach program to reach landowners within the 2,500acre Tatum Sawgrass marsh, a degraded floodplain marsh within the Myakka River watershed. Project will provide a necessary tool for restoration planning and implementation of the Natural Resources Conservation Service Wetlands Reserve Easement (WRE) Program, with at least 150 eligible wetland and agricultural landowners contacted throughout the Myakka River watershed to increase enrollment in WRE. \$277,202

#### Florida Department

#### of Environmental Protection Longleaf Pine Restoration in Central Florida

Establish and enhance 1,100 acres of longleaf pine habitat on four state parks and build partnership capacity for landscape-scale longleaf restoration in west-central Florida. Project will plant 300 acres of longleaf pine and native ground cover species and remove invasive plants and implement prescribed burning on an additional 1,000 acres of existing longleaf stands, benefiting gopher tortoises and other at-risk species.

\$100,000

#### Florida Forest Service

Florida Longleaf Pine Restoration Incentives Provide technical and financial assistance to implement longleaf ecosystem restoration on 1,300 acres of private lands within priority areas in Florida. Project will market to landowners to build interest in longleaf restoration, prepare forest management plans to guide longleaf restoration efforts and provide financial assistance to landowners to offset planting and prescribed burning costs.

#### Florida State University

#### Review Management Options to Reduce Sea Turtle Vessel Strikes in Southern Florida

Explore opportunities to reduce vessel strikes to sea turtles in Southern Florida. Project will convene experts to identify strategies that can be implemented to reduce sea turtle vessel strike in Florida and assess challenges and opportunities.

\$79,553

\$150,000

#### **Forest Landowners Association**

#### Engaging Working Forest Landowners, Building Stakeholder Collaboration & Developing Solutions – II (multiple states)

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Engage large family forest landowners in longleaf restoration and at-risk species conservation throughout the historic range of the longleaf pine. Project will assist landowners with the establishment and enhancement of at least 2,000 acres of longleaf pine, develop regulatory predictability tools for at-risk species endemic to the longleaf ecosystem, reducing uncertainty for landowners wishing to manage for longleaf habitat conditions and explore market-based solutions to address the economic constraints to large-scale longleaf restoration on private lands. \$145,000

#### Florida Fish and Wildlife **Conservation Commission**

#### Replacement of Fisheries Management and Coral Rehab Equipment

Replace buoys and revive coral nurseries following Hurricane Irma's destruction in the Florida Keys. Project will improve management of many economically important fin fish species and enhance capacity to grow and propagate corals to restore reef ecosystems. \$180,000

#### Florida Fish and Wildlife Conservation Commission

#### SW Florida Coastal Wetlands Assessment

Assess ecosystem impact to coastal mangrove forests and marsh habitats from the Florida Keys to Tampa Bay. Damage assessments will build upon existing field sites to maximize before / after data. Project will focus on photographic recording of damage, plus some field work soil sampling.

\$74,783

25

#### Gulf of Mexico Reef Fish Shareholders' Alliance

Creating Tools to Reduce Bycatch (FL)

Develop an electronic bycatch hot spot avoidance program to reduce red snapper bycatch in the eastern Gulf of Mexico commercial grouper fishery to increase the impacts of the Gulf of Mexico Quota Bank. Project will develop a bycatch hot spot reporting tool, engage up to 30 qualifying commercial grouper fishermen and reduce up to 60,000 pounds of red snapper bycatch. \$59,107

#### **Gulf Seafood Institute**

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\$100,000

Expanding the Gulf of Mexico Charter Boat Electronic Logbook (AL, FL, LA, MS, TX)

Expand the use of electronic logbooks in the Gulf of Mexico by improving software and providing training and outreach to captains. Project will increase the number of vessels with installed electronic logbook units in the Gulf of Mexico resulting in more accurate data to fishery managers. \$661,298

# **Healthy Aquatics Marine Institute**Establishing a Seedbank and Spawning Stock

for 12 Native Floridian Coral Species (FL)
Develop a coral aquaculture system to
supply genetically diverse coral larva for
growth, experimentation and out planting
of resilient genetic stocks of corals to
Florida reefs. Project will construct nine
modules to house and protect 20 colonies
each of 12 species of native Florida corals
from extinction through seed banking with
genetic identification.

# **Hubbs-Sea World Research Institute**Advancing Dietary Estimation Tools for the Southern Resident Killer Whale Population (FL)

Develop new tools to assess the diet of wild killer whale populations during the under-studied winter months to inform prey management. Project will use existing blood samples from SeaWorld San Diego for amino acid compound specific stable isotope analysis to estimate diet and foraging habitats of Southern Resident killer whales during winter months when field work is most difficult. \$60,365

# Maine Coast Fishermen's Association Next Generation of Permit Banking and Fishery Allocation Trusts (multiple states)

Develop a new approach to fishery trusts that will be used as a model for multiple fisheries, including, but not limited to, the New England Groundfish and the Gulf of Mexico Reef fishery, by assessing current permit bank models, exploring small business growth, and exploring community buy-in and stewardship. Project will result in up to five new trust and permit bank business structures and up to five programmatic models that will respond to the changing needs of the fishing community. \$99.882

#### Manomet

Coastal Habitat Restoration for American Oystercatcher along Atlantic Coast (multiple states)

Coordinate the planning and implementation of conservation action for American oystercatcher along the entire U.S. Atlantic seaboard. Project will continue the coastwide coordination of the American oystercatcher recovery initiative and compile lessons learned after a decade's worth of targeted investments and embark upon a new initiative to develop best management practices to restore wet and dry sand habitats for oystercatchers and other breeding shorebirds along the Atlantic Coast. \$150,000

#### **Museum of Science**

Demonstrating Coastal Resilience in Greater Miami and the Beaches (FL)

Partner with a suite of local nonprofits, schools and municipalities to restore 17 acres of coastal wetland and dune habitats at three different public land sites in Miami-Dade County. Project will involve highly visible models, which will resonate across the region and progress toward a goal of 100 successful climate adaptation sites over 10 years throughout Greater Miami and the Beaches. \$287,748

#### National Audubon Society

Florida Grasshopper Sparrow Recovery

Oversee the project and ensure funds are distributed to the principle implementing organizations, Archbold Biological Station and the Rare Species Conservatory Foundation. This project will liaise with a recovery expert formally working with San Diego Zoo. Maintain close coordination with the Everglades Foundation and respective members of federal and state agencies. \$23,245

#### **National Wildlife Federation**

Longleaf Restoration on Private Lands (FL)

Provide technical assistance to private forest owners to restore longleaf pine in priority areas in Florida. Project will assist private landowners with developing comprehensive management plans, promote Farm Bill programs, teach longleaf pine management, and increase participation in certification programs leading to restoration and enhancement of 3,900 acres of longleaf pine habitat. \$150,000

#### National Wildlife Refuge Association Land Conservation in South Florida

Engage private landowners to increase enrollment in the Natural Resources Conservation Service Agricultural Conservation Easement Program, with a goal of protecting 8,000 acres of habitat. Project will identify high-priority lands and conduct outreach to underserved landowners in South Florida. \$338,901

#### **New South Development and Training** Strategic Outreach to Expand Agricultural and Wetland Conservation (AL, FL, GA, TX)

Provide education and outreach services to private landowners to increase enrollment of agricultural and wetland properties in the Natural Resources Conservation Service Agricultural Conservation Easement Program. Project will identify and engage high priority landowners through informational workshops and technical assistance, with a priority of working with underserved landowners. \$370,133

### North Carolina State University

Prescribed Fire Initiative within the

Southeastern United States (multiple states)
Expand and accelerate the implementation of prescribed fire to restore and enhance longleaf pine habitat and other fire-dependent forest and grassland communities within the southeast. Project will engage 1,000 landowners and fire practitioners through technical assistance, training and outreach, including "Learn and Burn" workshops, development of prescribed burn associations and fire festivals, to increase the use of prescribed

#### \$130.000

# Northwest Florida State College Foundation

Restoring Oyster Populations in Choctawhatchee Bay Through Community Stewardship (FL)

Restore 2 acres of oyster habitat in Choctawhatchee Bay, an estuary found in Okaloosa and Walton counties of Northwest Florida. Project will engage 150 oyster gardeners, 450 students and 400 additional community members and will enhance the declining oyster population by constructing three new oyster reefs and colonizing new reefs with community-grown oysters. \$40,000

#### Old Dominion University Research Foundation

Improving Coral Reef Restoration
Using Native Herbivorous Crabs (FL)

Enhance the density of native herbivorous crabs on coral reefs to reduce overabundance of algae to enhance survival of naturally reproducing and transplanted corals. Project will support local and Caribbean-wide efforts to restore coral reefs by developing and implementing new strategies to maximize natural coral recruitment and coral transplant success. \$96,839

### Southeastern Association of Fish and Wildlife

Water Conservation through Smart Irrigation Technologies for Agricultural Producers in the Apalachicola-Chattahoochee-Flint River Basin (FL, GA)

Deploy low-cost soil moisture sensors in the agricultural regions of southwest Georgia and northwest Florida to conserve 834 cubic-feet per second annually in the Apalachicola-Chattahoochee-Flint River Basin and educate growers on the effective methods of irrigation. Project will aid local economies dependent on these water sources and benefit freshwater species, including six federally listed mussels, the threatened Gulf sturgeon, Shoal bass and numerous other fish species. \$200,000

#### Tall Timbers Research

Strategic Prescribed Burn Assistance on Private Lands in the Longleaf Legacy Landscape (AL, FL, GA)

Build capacity to increase prescribed burning on private lands across the Longleaf Legacy Landscape, a key private-land-dominated area in northwest Florida, southwest Georgia and south Alabama. Project will implement a variety of longleaf conservation assistance programs to burn 5,250 acres, prioritize future efforts based on the collection of key fire activity and conservation data and develop an innovative and integrated outreach program across organizations that will enhance future targeted longleaf restoration and prescribed fire application on private lands. \$99.984

#### Texas A&M AgriLife Research

Applied Biodiversity Sciences Conservation Scholars Program (multiple states)

Integrate undergraduates and graduates using a two-tiered program that will focus on local issues related to Gulf of Mexico ecosystems and energy development.

Project will appoint two graduate fellowships to serve as mentor assistants to guide a small cohort of undergraduate interns as they develop their projects and internship proposals.

\$200.000

#### Texas State University

Reddish Egret Conservation Plan for the U.S. Gulf Coast (AL, FL, LA, MS, TX)

Develop a detailed conservation plan with prioritized actions, clear conservation outcomes and well-defined funding needs to best support the reddish egret (REEG) in the Gulf of Mexico. Project will contract an expert on Open Standards for the Practice of Conservation and a research assistant to facilitate webinars, host two workshops with the REEG working group, write plans and aggregate existing focal foraging and nesting data into an online database. \$74,990

#### The Nature Conservancy

Apalachicola Longleaf Restoration Initiative – VI (FL, GA)

Establish 740 acres of longleaf pine and enhance an additional 30,000 acres of existing longleaf habitat on the Apalachicola National Forest and other high-priority public and private lands within the eastern panhandle of Florida and southwest Georgia. Project will improve habitat for numerous at-risk species and will support the recovery of the federally threatened Eastern indigo snake through captive breeding and release on restored longleaf pine habitat.

#### \$280,000

#### The Nature Conservancy

Longleaf Pine Restoration and Management in the Okefenokee/Osceola Landscape – II (GA, FL)

Restore longleaf pine on family forest lands damaged by the West Mims wildfire in south Georgia and northeast Florida.

Project will establish 2,000 acres of longleaf pine on fire-impacted lands and reduce fuel loads on 50,000 acres of existing longleaf forests through thinnings and prescribed burns, reducing the likelihood of future catastrophic wildfires.

\$275,000

The Longleaf Alliance
Accelerating At-Risk Species Recovery in the
Gulf Coastal Plain Ecosystem Partnership
Landscape (AL, FL)

Accelerate recovery of declining and at-risk species, including northern bobwhite, gopher tortoise and reticulated flatwoods salamander within the western panhandle of Florida and southern Alabama. Project will support capacity to implement species-specific management and monitoring, such as captive rearing of salamanders and translocation of gopher tortoises, as well as development of a National Bobwhite Quail Initiative Focal Area to support northern bobwhite habitat restoration and recovery.

#### \$620,000

#### The Longleaf Alliance

Ecosystem Partnership Landscape – IV (AL, FL) Restore and maintain 112,958 acres of longleaf pine habitat within the western panhandle of Florida and southern Alabama through plantings, prescribed fire, removal of competing hardwoods, and invasive species control. Project will prioritize recovery of several rare species including the red-cockaded woodpecker, gopher tortoise, eastern indigo snake, and reticulated flatwoods salamander. \$300,000

Longleaf Restoration in the Gulf Coastal Plain

# U.S. Department of the Interior, U.S. Fish and Wildlife Service

Invasive Species Detection and Response (FL) Establish strike teams for early detection to identify, and rapidly respond to eradicate of any found terrestrial invasives before they can establish footholds. Project will focus on south Florida and the eastern Everglades, near national wildlife refuges. \$65,000

# U.S. Department of the Interior, U.S. Fish and Wildlife Service

Key Deer Habitat Assessment (FL)
Assess damage from Hurricane Irma to
habitat of Florida Key deer, an endangered
subspecies of the white-tailed deer endemic
to the Lower Florida Keys. Project will provide
managers with insights into Irma-related
damages, habitat utilization and forage
availability to set restoration priorities and
inform future funding requests.
\$140,000

#### U.S. Department of Agriculture, U.S. Forest Service

Expanding the National Aquatic eDNAtlas and Data Exchange for Freshwater Species (multiple states)

Expand the aquatic environmental DNA Atlas database, website, digital tools and sample repository to a national scale. Project will expand the current coverage of the database of information important to the conservation and management of aquatic species to include waterways in the 37 remaining states to inform strategic conservation investments for suppressing invasives and increasing native populations. \$73,018

#### **University of Florida**

Evaluating Recreational Fishing Management Strategies for Red Snapper (AL, FL, LA, TX)

Assess the recreational management strategies of red snapper by using simulation and assessment modeling, stakeholder surveys and stakeholder workshops. Project will provide a framework for angling groups to explore management options to understand the impacts on available catch and anglers' access to the red snapper fishery. \$275,121

# University of Maryland Center for Environmental Science

Coral Reef Ecosystem Status and Trends Report Cards and System-Wide Synthesis (FL, PR, VI) Develop a status and trends assessment framework and report card process to

synthesize biological, physical and socioeconomic data from Puerto Rico, the U.S.
Virgin Islands and the Florida Flower Garden
Banks. Project will expand on previous
investments to support a National Coral
Reef Monitoring Plan through the National
Oceanic and Atmospheric Administration's
Coral Reef Conservation Program.
\$107,964

#### **Volunteer Action Center** of Broward County

Project ROC: Reclaiming Our Coastline (FL)

Restore 21,512 square feet of coastal habitat, including beach dunes, mangrove wetlands and forests to improve water quality and habitats for sea turtles, migratory birds and coral reefs and develop community capacity to sustain these local natural areas in Palm Beach, Broward and Miami-Dade counties. Project will educate 1,000 students and 16 teachers and engage 500 volunteers to plant approximately 20,000 ecologically important coastal plants, including 75 mangroves and 100 other trees.

#### \$46,000

#### WearWare

Reducing Cetacean Bycatch by Expanding a Portable Electronic Monitoring System (FL)

Increase the effectiveness of bycatch mitigation activities using more inclusive data sets to rapidly and economically identify critical bycatch interactions with minimal disruption to industry in Florida. Project will result in reduced cetacean bycatch and expand the range of electronic monitoring platforms through a modular, portable piece of equipment to be used interchangeably among shore-based stations, small scale and medium-sized vessels.

\$106,312

#### **GEORGIA**

#### **American Rivers**

Water Efficiency for Streamflow Restoration in Georgia's Upper Flint River System

Implement a peak demand management program in the Fayette County Water System to conserve water and increase flows within the ecologically significant shoal habitat of the Flint River. Project will help reduce impacts to stream flows, especially during drought conditions, improving habitat for species of concern, which include the shoals spider-lily, bluestripe shiner, shoal bass and several species of federally endangered freshwater mussels.

\$75,000

#### **Athens Land Trust**

Establishing the Northeast Georgia Cooperative Weed Management Area

Establish the Northeast Georgia Cooperative Weed Management Area to address the negative effects of invasive species on natural habitats in Georgia's Piedmont in the Athens region. Project will increase local capacity for invasive species education through workshops and site visits, implement demonstration projects and result in 30 acres of improved habitat through effective management and invasive species removal.

\$84,072

#### **Blue Heron Nature Preserve** Restoring Urban Wetlands at the Blue Heron Nature Preserve (GA)

Engage 300 volunteers to restore 2.5 acres of wetlands in Atlanta, Georgia, by removing at least six invasive plant species and other vegetation not suited for wetlands and supplement the area with appropriate native plantings. Project also will develop educational curricula to facilitate research and education opportunities involved in this project to bring children and scientists to the wetlands safely.

#### **CDP North America**

\$30.778

Scaling Green Infrastructure Investments in Cities (multiple states)

Build capacity of communities in 18 cities across the United States to help them implement sustainable infrastructure for stormwater management, urban wildlife habitats and tree canopy improvement. Project will perform targeted outreach to cities to increase knowledge of sustainable infrastructure financing as well as develop cities' use of online tools to document green infrastructure and habitat benefits. \$200,000

#### **East Decatur Greenway** Habitat Restoration

and Environmental Education (GA)

Restore habitat at a former brownfield site in Atlanta, including removal of invasive plants and planting native trees. Project will engage nearby schools to create an environmental education plan for the site and incorporate signage and management plans for the site with community partners. \$30.000

#### **Forest Landowners Association**

Engaging Working Forest Landowners, Building Stakeholder Collaboration & Developing Solutions – II (multiple states) Engage large family forest landowners in

longleaf restoration and at-risk species conservation throughout the historic range of the longleaf pine. Project will assist landowners with the establishment and enhancement of at least 2,000 acres of longleaf pine, develop regulatory predictability tools for at-risk species endemic to the longleaf ecosystem, reducing uncertainty for landowners wishing to manage for longleaf habitat conditions on their lands and explore market-based solutions to address the economic constraints to large-scale longleaf restoration on private lands. \$145.000

#### **Georgia Department of Natural Resources** Shorebird Assessment along Coastal Georgia and South Carolina (GA, SC)

Study and assess body conditions and stress levels of five shorebird species at remote and disturbed sites along coastal Georgia and South Carolina. Project will fill knowledge gaps, mitigate disturbance and conduct nesting and roosting site restoration planning. An additional project will investigate migration patterns of red knots, which has important implications for forage quality and disturbance during their refueling at Delaware Bay. \$75,000

#### **Georgia Forestry Commission** Improving Longleaf Habitat

for At-Risk Species in Southwest Georgia

Engage family forest owners in southwest Georgia to implement forest restoration and management practices that improve habitat for at-risk wildlife, including gopher tortoises and eastern indigo snakes. Partners will educate landowners on sustainable forest management practices, and will provide technical and financial assistance to establish and enhance more than 2,500 acres of longleaf pine habitat on private lands. Project outcomes will encourage active forest management, which will benefit at-risk and game species, such as northern bobwhite.

\$150,000

#### **Limestone Valley Resource Conservation** and Development Council

Conserving Fish and Mussels

in the Conasauga River Watershed (GA, TN) Implement priority conservation actions to reduce nutrients, sediments and other pollutants in runoff. Project will improve Conasauga River water quality in support of published recovery plans for 10 of the listed fish and mussel species in the basin. \$268,113

#### Manomet

Coastal Habitat Restoration for American **Oystercatcher along Atlantic Coast** (multiple states)

Coordinate the planning and implementation of conservation action for American oystercatcher along the entire U.S. Atlantic seaboard. Project will continue the coastwide coordination of the American oystercatcher recovery initiative and compile lessons learned after a decade's worth of targeted investments and embark upon a new initiative to develop best management practices to restore wet and dry sand habitats for oystercatchers and other breeding shorebirds along the Atlantic Coast. \$150,000

#### **National Wildlife Federation**

Restoring Wildlife Habitat and Longleaf Pine on Private Lands in Georgia

Engage 40 private landowners to establish and enhance 2,700 acres of longleaf pine habitat in Georgia. Project will support a wildlife biologist position that will provide technical assistance to private landowners, develop forest management plans and connect landowners with Farm Bill programs and other sources of financial assistance to implement conservation practices benefiting northern bobwhite and other longleaf and grassland-associated wildlife.

\$140,000

**New South Development and Training** Strategic Outreach to Expand Agricultural and Wetland Conservation (AL, FL, GA, TX)

Provide education and outreach services to private landowners to increase enrollment of agricultural and wetland properties in the Natural Resources Conservation Service Agricultural Conservation Easement Program. Project will identify and engage high priority landowners through informational workshops and technical assistance, with a priority of working with underserved landowners. \$370,133

#### **North Carolina State University**

Prescribed Fire Initiative within the Southeastern United States (multiple states)

Expand and accelerate the implementation of prescribed fire to restore and enhance longleaf pine habitat and other fire-dependent forest and grassland communities within the southeast. Project will engage 1,000 landowners and fire practitioners through technical assistance, training and outreach, including "Learn and Burn" workshops, development of prescribed burn associations and fire festivals, to increase the use of prescribed

\$130,000

#### Park Pride

Briarlake Forest Park Restoration (GA)

Restore 15 acres of urban, mature forest habitat to improve local area green water infrastructure (via improved stormwater intake, outflow and drainage) in the Echo Lake corridor in Georgia and remove invasive vegetation threatening the forest tree canopy and the forest habitat. Project will engage five local resource management partners and 100 trained volunteers to manually remove 15 acres of invasive vegetation from intermittent streams beds, tree canopy and forest floor. \$25,000

#### Pheasants Forever

Strategic Restoration of Northern Bobwhite Habitat on Working Lands (multiple states)

Deliver technical assistance across six states to improve land-management practices for northern bobwhite and other terrestrial wildlife. Project will include 11,940 landowner contacts, 27,800 acres under improved management practices, 720 plans with best management practices and 6,000 acres covered with federal program incentives. \$2,447,858

#### **Southeastern Association** of Fish and Wildlife

Water Conservation through Smart Irrigation Technologies for Agricultural Producers in the Apalachicola-Chattahoochee-Flint River Basin (FL. GA)

Deploy low-cost soil moisture sensors in the agricultural regions of southwest Georgia and northwest Florida to conserve 834 cubic-feet per second annually in the Apalachicola-Chattahoochee-Flint River Basin and educate growers on the effective methods of irrigation. Project will aid local economies dependent on these water sources and benefit freshwater species, including six federally listed mussels, the threatened Gulf sturgeon, Shoal bass and numerous other fish species. \$200,000

#### **Tall Timbers Research**

Strategic Prescribed Burn Assistance on Private Lands in the Longleaf Legacy Landscape (AL, FL, GA)

Build capacity to increase prescribed burning on private lands across the Longleaf Legacy Landscape, a key privateland-dominated area in northwest Florida, southwest Georgia and south Alabama. Project will implement a variety of longleaf conservation assistance programs to burn 5,250 acres, prioritize future efforts based on the collection of key fire activity and conservation data and develop an innovative and integrated outreach program across organizations that will enhance future targeted longleaf restoration and prescribed fire application on private lands.

\$99.984

#### The Longleaf Alliance

Fort Stewart/Altamaha Longleaf Restoration Partnership - IV (GA)

Establish and enhance 11,000 acres of longleaf pine habitat in the Fort Stewart/ Altamaha Significant Geographic Area of Georgia. Project will restore longleaf habitat on public and private lands, including several properties recently acquired to restore populations of gopher tortoise. \$250,000

#### The Nature Conservancy

Accelerating Longleaf Pine Ecosystem Restoration on the Fall Line – III (AL, GA)

Accelerate longleaf pine restoration and conservation on more than 19,000 acres of public and private land in west Georgia and east Alabama. Outcomes include planting longleaf on 137 acres and implementing prescribed fire on 19,000 acres of existing longleaf habitat, focusing on properties buffering Fort Benning, as well as high priority state and privately owned lands. \$275,000

#### The Nature Conservancy

Apalachicola Longleaf Restoration Initiative – VI (FL. GA)

Establish 740 acres of longleaf pine and enhance an additional 30,000 acres of existing longleaf habitat on the Apalachicola National Forest and other high-priority public and private lands within the eastern panhandle of Florida and southwest Georgia. Project will improve habitat for numerous at-risk species and will support the recovery of the federally threatened Eastern indigo snake through captive breeding and release on restored longleaf pine habitat. \$280,000

#### The Nature Conservancy

Landscape Recovery after West Mims Fire (FL) West Mims wildfire impacted 150,000 acres in the Okefenokee/Osceola Significant Geographic Area, including more than 30,000 acres of private land. Funds are needed to assist public and private landowners with reforestation efforts, including the establishment of longleaf pine on impacted acres and management activities to reduce the UNITED

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#### The Nature Conservancy

\$275,000

Talladega Mountains Longleaf Pine Restoration – III (AL, GA)

likelihood of another catastrophic wildfire.

Increase prescribed fire capacity through the addition of a seasonal burn crew in eastcentral Alabama and west Georgia. Project will support additional burning and montane longleaf pine habitat restoration on the Talladega National Forest and other priority public and private lands, benefiting redcockaded woodpecker, Bachman's sparrow and other longleaf-dependent species. \$179,989

#### **Trees Atlanta**

**Browns Mill Community** Forest Restoration (GA)

Restore 6.1 acres at Browns Mill in Southeast Atlanta, the first forest of its kind in Atlanta to incorporate community-accessible fruit and nut trees as well as community gardens into a neighborhood park. Project will include restoration of the riparian buffer and creek while connecting area youths and adults to ecological and conservation opportunities. \$29,500

#### University of Hawaii

The Promise and Perils of Pampas Grass Control on Maui (HI)

Accelerate control of a pampas grass infestation in the West Maui watershed using helicopters to detect and control individual plants. Project will include analysis of geospatial data and parallel development of new technologies to help advance control of this population toward eventual eradication. \$95,480

#### University of Hawaii - Manoa Increasing Awareness of Fisheries Rules (HI)

Increase the opportunities for local communities to participate and provide informed input to a statewide initiative to effectively manage 30 percent of Hawaii's nearshore environments by 2030. Project will finalize key messages and implement outreach tactics to increase awareness of the 30x30 Initiative and encourage public participation in scoping meetings.

#### **Zoological Society of San Diego** Reintroduction of the 'Alala to Hawaii Island

Continue the successful captive propagation and reintroduction of the 'Alala, an iconic and charismatic Hawaiian bird species. Project will rear approximately 15 juveniles and release 11 to 13 juveniles into intensively restored and managed native forest habitat following a thoroughly vetted and peer-reviewed reintroduction plan. \$65,401

#### IDAHO

\$40,383

Stabilize and restore instream and riparian habitat in a priority stream reach on Teton Creek, a Yellowstone cutthroat trout spawning tributary to the upper Teton River. Project will restore habitat conditions and function to support native trout spawning and passage, create corridor connectivity, improve water quality and quantity, and promote integrated land and water conservation.

Improve tributary flows for the benefit of Chinook salmon, steelhead and native trout populations. Project will identify, assess, prioritize and implement new water transactions by working in a voluntary manner with water users in the Upper Salmon River Basin and the Teton River Basin. \$793,900

#### **Idaho Soil and Water Conservation Commission**

Creation of Idaho Sagebrush Landscape

Restoration Specialist Position (ID) Create and support a technical specialist in Idaho who will focus on restoring, enhancing and/or protecting sagebrush steppe across Idaho, maintaining and building strong partnerships, communicate with broad audiences, and ensure a welltrained workforce delivers landscape-scale conservation. Project will result in landscape scale improvements from implementation across jurisdictional boundaries and positive impacts to sage-steppe obligates and associated species across Idaho.

#### **Legacy Philanthropy Works**

\$200,000

Developing Incidental Groundwater Recharge Markets (ID, WY) Implement a pilot market for incidental

groundwater recharge in the Teton Basin to improve wetland health, base flows and stream flows in the Teton River. Project will result in an additional 5,000-10,000 acre feet of water in the Teton Basin aguifer annually. \$149,514

#### National Audubon Society

Advancing the SageWest Communications Network across the Sagebrush Ecosystem (multiple states)

Elevate individual conservation efforts and create a larger dialogue about the value and need for sagebrush conservation. Project will engage in priority work groups, develop guidance documents, and organize partner meetings across the ecosystem. \$34,200

#### **Pheasants Forever**

Expanding Conservation of Working Lands in the Sagebrush Ecosystem (multiple states) Maintain and expand technical assistance capacity in key greater sage grouse focal areas to strengthen working ranch lands management to improve greater sage grouse populations. Project will improve grazing practices on 250,000 acres to benefit greater sage grouse through technical assistance provided by 14 Strategic Watershed Action Teams members. \$1,688,795

#### The Henry's Fork Foundation

South Fork of the Snake River Initiative (ID) Restore 1 mile of Rainy Creek, improving 66 miles of instream habitat in the Snake River in Idaho with 50 local volunteers. Project will support riparian restoration and conservation easements to sustain habitats and engage the local community in recreational access and stewardship. \$45,013

#### **Trout Unlimited**

Trout Unlimited's Bridge to Bridge Restoration (ID)

Address 1,250 feet of highly impaired river reach of the Big Wood River in Idaho to enhance instream habitat for native redband trout and endemic Wood River sculpin, restore 25 acres of cottonwood forest and floodplain habitat and re-establish wetlands and riparian areas. Project will engage 70 volunteers and reach the entire community of the Wood River Valley because of its location and connection to project partners and educational elements. \$29,326

#### U.S. Department of the Interior, U.S. Fish and Wildlife Service Restoration of Mesic Habitats in the Owyhee

Sagebrush Landscape (ID)

Restore and improve mesic habitats for greater sage grouse, Columbia spotted frog and the interior redband trout by developing a conservation approach on a private ranch in Owyhee County, which contains a series of riparian areas and approximately 250 acres of flood irrigation dependent wet meadows used seasonally as pasture. Project will focus on water conveyance and water storage infrastructure in order to improve and maintain wetland and wet meadow habitats on the ranch. \$75,000

#### **Western Association**

of Fish and Wildlife Agencies Monarch Butterfly Conservation in the Western United States (multiple states)

Develop a regional strategy and supporting plans to increase organizational capacity and coordination among monarch butterfly conservation partners west of the Rocky Mountains. Project will develop and track implementation efforts identified in the Western Monarch Population Conservation Strategy, establish the Western Monarch and Pollinator Initiative Council, and transition milkweed data into the Crucial Habitat Assessment Tool. \$120,000

#### U.S. Department of Agriculture, U.S. Forest Service

Expanding the National Aquatic eDNAtlas and Data Exchange for Freshwater Species (multiple states)

Expand the aquatic environmental DNA Atlas database, website, digital tools and sample repository to a national scale. Project will expand the current coverage of the database of information important to the conservation and management of aquatic species to include waterways in the 37 remaining states to inform strategic conservation investments for suppressing invasives and increasing native populations \$73,018

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#### **American Bird Conservancy Establishing New Populations**

of Endangered Seabirds at Kilauea Point National Wildlife Refuge (HI)

Continue work to establish a new colony of endangered Hawaiian seabirds in the Nihoku Restoration Area within Kilauea Point National Wildlife Refuge (KPNWR), Kauai, Project will complete translocation of 20 endangered Hawaiian petrel and up to 20 threatened Newell's shearwater to the Nihoku site on KPNWR, a protected fenced area free of invasive predators and developed to support translocation efforts. \$214,998

#### American Bird Conservancy Saving Hawaii's At-risk Forest Birds – X

Build upon the conservation actions previously completed by a strong partnership to protect Hawaiian forest birds. Project will attempt to reintroduce up to 20 Maui parrotbills; conduct predator control on Maui and Kauai; restore habitat on Maui and the Big Island; maintain 47 miles of fence around palila critical habitat; conduct the palila population survey; conduct remote sensing and acoustic surveys on Kaua and guide management for these species; and develop a comprehensive community engagement strategy.

\$344,586

#### Bishop Museum

Applied Marine Research to Support Management of Papahanaumokuakea Marine National Monument (HI)

Perform multidisciplinary research to determine how predicted environmental stressors will affect key species and habitats at French Frigate Shoals in the Papahanaumokuakea Marine National Monument. Project will explore the trophic connections between shallow and deepsea ecosystems for prey and refugia, and determine how sea level rise will impact low-lying sand and coral reef habitats and associated species such as sea turtles, seabirds and monk seals.

\$899,829

#### Hawaii Division of Forestry and Wildlife Reclaiming Kure Atoll's Runway for Seabird Habitat (HI)

Convert 1 acre of runway substrate on Kure Atoll to quality nesting habitat in a pilot project designed to protect and increase nesting habitat for black-footed albatross, Laysan albatross and other seabirds. Project will identify priority restoration sites and develop safe and efficient techniques for converting hard crushed coral runway substrate to nesting habitat protected from periodic flooding.

#### Oahu Economic Development Board Community-led Stream Restoration in the Ala Wai Watershed (HI)

Gather stream bed data to monitor and assess stream sites, remove trash and debris and invasive species, and plant native vegetation to protect 6.5 miles of stream banks and prevent erosion on the island of Oahu. Project will present findings at neighborhood meetings and aggregate and visualize data on online platforms to demonstrate effectiveness and support each of the seven neighborhoods that will submit designs for neighborhood-wide stream bed restoration plans in a Community Design Challenge.

\$50,000

#### Pacific Rim Conservation

**Creating Resilient Seabird Colonies** through Predator-Proof Fencing in Hawaii

Identify, visit and assess the conservation fencing potential adjacent to three nesting locations of Newell's shearwaters and Hawaiian petrels on Kaua'i and provide implementation plans for these fences to serve both as social attraction sites, and hopefully capture active burrows within. Project will identify preferred fencing alignment, and assess the feasibility, cost and benefits of various fencing strategies for the preferred fencing alignment and the initiation of necessary compliance in anticipation of building the fence. \$34,888

#### **Pacific Rim Conservation**

\$299,365

Creating Resilient Seabird Colonies through Translocation (HI)

Utilize translocation to create new breeding colonies of black-footed albatrosses, Bonin petrels and Tristrams storm-petrels on James Campbell National Wildlife Refuge on Oahu. Project will protect seabirds from the impacts of predators, changing ocean conditions and storm events through predator-proof fencing, translocation of missing seabird fauna to the main islands of Hawaii and restoring the coastal ecosystems to which birds are moved.

#### Pacific Rim Conservation

Locating Breeding Colonies of Newell's Shearwater and Hawaiian Petrels on Oahu (HI)

Conduct focused, intensive ground searches at locations identified as calling hot spots for Newell's shearwater and Hawaiian petrel on Oahu to determine if birds are breeding on the island, or simply prospecting. Project will identify the presence of the birds throughout the breeding season, previously thought to be extinct on the island, and protect any remnant populations. \$30,051

#### The Trust for Public Land

Acquisition of the Waimea Native Forest on the Shores of Oahu, Hawaii

Acquire in fee the rugged 3,716-acre Waimea Native Forest on the North Shore of Oahu, Hawaii, to complete the protection of the entire Waimea watershed from mountaintop to the ocean. Project will secure suitable habitat for the Newell's shearwater. Hawaiian hoarv bat. Oahu elepaio and numerous other threatened and endangered species; as well as protect the headwaters of two major streams that flow undiverted to Waimea Bay and the Humpback Whale National Marine Sanctuary \$600,000

#### U.S. Department of Agriculture, U.S. Forest Service

Expanding the National Aquatic eDNAtlas and Data Exchange for Freshwater Species (multiple states)

Expand the aquatic environmental DNA \$73,018

#### University of California - Santa Cruz Developing Tools to Prevent Extinction and Recover Threatened and Endangered Seabirds (AK, CA, HI, Canada)

Utilize a new meta-population viability model approach in order to make improved seabird conservation decisions. Project will identify the most at-risk species and their breeding sites in order to improve the conservation status of seabirds and prevent the listing of seabird species in the future. \$249,984

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#### ILLINOIS

#### **Audubon International**

Monarchs in the Rough: Pollinator Habitat on Golf Courses (multiple states)

Establish pollinator habitat at 500 golf courses in a 10-state area to support pollinators such as the monarch butterfly. Project will provide technical assistance and native, regionally appropriate seed while raising awareness about pollinators through educational signage and demonstrating how to manage commercial properties sustainably.

#### \$150,000

TERRITORIES

U.S.

AND

STATES

UNITED

### Champaign County Soil and Water Conservation District

Headwaters Invasive Plant Partnership (IL)

Establish a Cooperative Weed Management Area and increase awareness and action by volunteers and professionals to better assist land managers and others in preventing, detecting and responding to invasive plants in east central Illinois. Project will decrease introductions of invasive plants in the area and improve reporting and managing of new and long-existing plant infestations. \$75,469

#### Friends of the Chicago River Improving Fish Passage in Mill Creek and the Cal-Sag Channel (IL)

Reconnect Mill Creek to the Cal-Sag Channel by removing two shelf-structures, which block fish passage from the Cal-Sag Channel. Project will open up 2.5 miles of high-quality stream habitat, benefiting more than 17 species of fish. \$248.327

### Friends of the Forest Preserves

Centennial Volunteers Network Restoration along the Chicago River (IL)

Implement Phase III of the Centennial Volunteers Network project to expand and mature self-sustaining communities of habitat restoration volunteers at Cook County forest preserves. Project will increase efforts to recruit, train and mentor volunteers at new and established forest preserve sites, empowering volunteers effectively manage and implement habitat restoration activities, such as invasive species control establishing native vegetation.

\$110,398

#### Illinois Conservation Foundation Wolf Lake Native Prairie Restoration and Public Use Enhancement (IL)

Create native prairie habitat for pollinators and improve public access to Wolf Lake at the William W. Powers State Recreation Area. Project will implement community-prioritized improvements to the site, enhancing habitat quality and public access to this important natural resource and recreation area.

\$165,599

#### Jo Daviess Conservation Foundation Increasing the Capacity of the Newly Created Northwest Illinois CWMA

and Land Stewardship Co-op (IL)

Advance the newly established Northwest Illinois Cooperative Weed Management Area and Land Stewardship Co-op with the addition of new organizational partners to the effort. Project will control invasive species, increase the rate of prescribed fire, increase the rate of volunteer participation and training, and educate private landowners about invasive species control within a four-county area of northwest Illinois. \$99,994

#### Openlands

Space to Grow:

Greening Chicago Schoolyards (IL)

Construct six schoolyard habitats that have a total design retention capacity of 900,000 gallons, remove 250,000 square feet of impermeable surface and restore 6.1 acres into public green space and plant 140 trees at six Chicago public schools. Project will provide training and workshops to 150 Chicago Public School teachers and engage 300 volunteers.

#### \$50,000

#### Pollinator Partnership

Project Wingspan: Enhancing Landscapes for At-Risk Pollinators (multiple states)

Develop a regional seed collection and native plant materials development program in the Midwest to support monarch butterflies and rusty patched bumble bees. Project will improve 10,000 acres of pollinator habitat, collect 25 pounds of milkweed seed and propagate 10,000 seedlings.

#### \$149,000

#### **Shedd Aquarium Society**

**Engaging Communities** 

in Stewardship of Local Waterways (IL)

Engage community members in volunteer days to restore 5 acres of habitats, including wetlands, ephemeral ponds, oak savanna, woodland and prairie in Cook County, Illinois. Project will engage 700 volunteers and benefit a range of species, including blue-spotted salamanders, chorus frogs and spring peepers.

#### \$34,574

\$574,508

#### The Nature Conservancy

Restoring Calumet Coastal Wetlands through Collaborative Restoration and Management (IL, IN)

Control invasive species and enhance coastal wetland habitat at five sites in the bistate Calumet region. Project represents the third phase of a successful regional restoration partnership and will restore 123 acres of hemi-marsh, dune swale, wet prairie and emergent marsh habitats to benefit target migratory bird species, such as least bittern, king rail and pied-billed grebe.

#### Trout Unlimited

Driftless Partnership: Engaging Landowners in Water Quality and Wildlife Habitat Farm Bill Programs (IL, IA, MN, WI)

Engage agricultural producers in developing conservation practices and science-based tools that restore cold-water streams and promote grass-based grazing systems.

Project will restore 20 miles of stream, reduce/eliminate bank erosion, reconnect streams to their floodplains and install a suite of critical habitat practices for fish, shorebirds, amphibians, reptiles and other aquatic biota.

#### \$149,247

# U.S. Department of Agriculture, U.S. Forest Service

Expanding the National Aquatic eDNAtlas and Data Exchange for Freshwater Species (multiple states)

Expand the aquatic environmental DNA Atlas database, website, digital tools and sample repository to a national scale. Project will expand the current coverage of the database of information important to the conservation and management of aquatic species to include waterways in the 37 remaining states to inform strategic conservation investments for suppressing invasives and increasing native populations.

#### \$73,018

#### Village of Park Forest

Park Forest Green Infrastructure for Stormwater Management (IL)

Convert 2.5 acres of existing turf into demonstration rain gardens in three local parks. Project will engage 1,500 community members to create rain gardens out of depressional areas immediately upstream of storm sewer inlets to positively impact water quality by retaining water and allowing it to infiltrate and recharge groundwater before discharging to Thorn Creek in Park Forest, Illinois.

#### \$30,000

#### INDIANA

#### **Audubon International**

Monarchs in the Rough: Pollinator Habitat on Golf Courses (multiple states)

Establish pollinator habitat at 500 golf courses in a 10-state area to support pollinators such as the monarch butterfly. Project will provide technical assistance and native, regionally appropriate seed while raising awareness about pollinators through educational signage and demonstrating how to manage commercial properties sustainably. \$150,000

### Groundwork Cincinnati/Mill Creek

Community-Driven Restoration in Cincinnati's Mill Creek (IN, OH)

Restore 28 acres of wetland, riparian and prairie habitat to benefit wildlife, including the state-threatened black-crowned night heron, and people in Cincinnati's Mill Creek watershed and Muscatatuck National Wildlife Refuge. This project will engage 921 participants, including 800 middle and high school students, 40 teachers, 21 youth employees and 60 adult volunteers from local neighborhoods and diverse partner organizations.

\$37,964

#### Pollinator Partnership

Project Wingspan: Enhancing Landscapes for At-risk Pollinators (multiple states)

Develop a regional seed collection and native plant materials development program in the Midwest to support monarch butterflies and rusty patched bumble bees. Project will improve 10,000 acres of pollinator habitat, collect 25 pounds of milkweed seed and propagate 10,000 seedlings. \$149,000

#### Save the Dunes Conservation Fund

Enhancing Habitat and Public Access on the
East Branch of the Little Calumet River (IN)
Restore habitat and enhance public use
along the East Branch of the Little Calumet
River (EBLC). Project will restore more than
200 acres and enhance restoration efforts by

incorporating 262 acres into landscape-level

conservation planning to guide restoration

projects along the EBLC. \$274,000

#### The Nature Conservancy

Restoring Calumet Coastal Wetlands through Collaborative Restoration and Management (IL, IN)

Control invasive species and enhance coastal wetland habitat at five sites in the bistate Calumet region. Project represents the third phase of a successful regional restoration partnership and will restore 123 acres of hemi-marsh, dune swale, wet prairie and emergent marsh habitats to benefit target migratory bird species, such as least bittern, king rail and pied-billed grebe.

#### \$574.508

# The Student Conservation Association Calumet Tree Conservation Corps (IN)

Reduce stormwater and sediment runoff and restore degraded habitat in the Grand Calumet and Little Calumet Rivers. Project will add 72,275 gallons of stormwater storage capacity by strategically planting 1,000 native trees in riparian zones and offer training in basic arboriculture to residents across the region to build capacity and sustain project impact through long-term maintenance.

\$161,466

# U.S. Department of Agriculture, U.S. Forest Service

Expanding the National Aquatic eDNAtlas and Data Exchange for Freshwater Species (multiple states)

Expand the aquatic environmental DNA Atlas database, website, digital tools and sample repository to a national scale. Project will expand the current coverage of the database of information important to the conservation and management of aquatic species to include waterways in the 37 remaining states to inform strategic conservation investments for suppressing invasives and increasing native populations. \$73,018

#### **IOWA**

#### Audubon International

Monarchs in the Rough: Pollinator Habitat on Golf Courses (multiple states)

Establish pollinator habitat at 500 golf courses in a 10-state area to support pollinators such as the monarch butterfly. Project will provide technical assistance and native, regionally appropriate seed while raising awareness about pollinators through educational signage and demonstrating how to manage commercial properties sustainably.

#### \$150,000

#### **CDP North America**

Scaling Green Infrastructure Investments in Cities (multiple states)

Build capacity of communities in 18 cities across the United States to help them implement sustainable infrastructure for stormwater management, urban wildlife habitats and tree canopy improvement. Project will perform targeted outreach to cities to increase knowledge of sustainable infrastructure financing as well as develop cities' use of online tools to document green infrastructure and habitat benefits. \$200,000

#### **Ducks Unlimited**

Restoring lowa's Wetlands to Improve Water Quality, Flood Resilience and Wildlife Habitat Restore 152 acres of wetlands to reduce

nutrient runoff, improve water quality, mitigate local and downstream flooding, and provide waterfowl and wildlife habitat in 37 north-central lowa counties. Project will improve wetlands and restore shallow lakes with turbid or algal conditions that are overrun with invasive fish and vegetation. \$250,000

# Polk Soil and Water Conservation District A Targeted Community Approach to Improving Water Quality in the Mississippi River Basin (IA)

Apply the Agricultural Conservation Planning Framework (ACPF) Tool within the Fourmile Creek, Walnut Creek, and Mud/Camp/Spring Creek Watersheds in Central lowa to target the installation of conservation practices. Project will use outputs from the ACPF tool to assist outreach to landowners and implementation of conservation practices outlined in Natural Resource Conservation Service programs, including wetlands, bioreactors and saturated buffers. \$231,280

#### **Trout Unlimited**

Driftless Partnership: Engaging Landowners in Water Quality and Wildlife Habitat Farm Bill Programs (IL, IA, MN, WI)

Engage agricultural producers in developing conservation practices and science-based tools that restore cold-water streams and promote grass-based grazing systems.

Project will restore 20 miles of stream, reduce/eliminate bank erosion, reconnect streams to their floodplains and install a suite of critical habitat practices for fish, shorebirds, amphibians, reptiles and other aquatic biota.

#### \$149,247

#### U.S. Department of Agriculture, U.S. Forest Service

Expanding the National Aquatic eDNAtlas and Data Exchange for Freshwater Species (multiple states)

Expand the aquatic environmental DNA Atlas database, website, digital tools and sample repository to a national scale. Project will expand the current coverage of the database of information important to the conservation and management of aquatic species to include waterways in the 37 remaining states to inform strategic conservation investments for suppressing invasives and increasing native populations. \$73,018

#### World Wildlife Fund

Expanding the Spatial and Temporal Scale of the Plowprint Analytical Tool (multiple states, Canada and Mexico)

Update and expand geospatial data analysis, called the Plowprint, to evaluate landscape change metrics for the Northern Great Plains ecoregion. Project analysis will expand the previous versions by including northern Mexico, extending the analysis backward in time to capture historical change and using the newest and best available data to track rates of agricultural conversion, monitor previously converted lands, identify risk factors for remaining intact habitat and target conservation work.

\$20,000

#### **KANSAS**

#### Miami County Conservation District Bull Creek Park Native Habitat Establishment on Former Cropland (KS)

Convert 80 acres of degraded farmland to diverse prairie habitat to improve water quality in the Bull Creek stream system in Johnson County, Kansas. Project will provide critical habitat for declining populations of grassland birds, native bees and other pollinators.

\$30,554

#### World Wildlife Fund

#### Expanding the Spatial and Temporal Scale of the Plowprint Analytical Tool (multiple states, Canada and Mexico)

Update and expand geospatial data analysis, called the Plowprint, to evaluate landscape change metrics for the Northern Great Plains ecoregion. Project analysis will expand the previous versions by including northern Mexico, extending the analysis backward in time to capture historical change and using the newest and best available data to track rates of agricultural conversion, monitor previously converted lands, identify risk factors for remaining intact habitat and target conservation work. \$20,000

#### KENTUCKY

**TERRITORIES** 

U.S.

AND

STATES

#### **CDP North America**

# Scaling Green Infrastructure Investments in Cities (multiple states)

Build capacity of communities in 18 cities across the United States to help them implement sustainable infrastructure for stormwater management, urban wildlife habitats and tree canopy improvement. Project will perform targeted outreach to cities to increase knowledge of sustainable infrastructure financing as well as develop cities' use of online tools to document green infrastructure and habitat benefits. \$200,000

#### Kentucky Department of Fish and Wildlife Resources Wildlife Biologist in Eastern Kentucky – III

Engage farmers and tobacco growers in eastern Kentucky to implement best management practices on at least 800 acres of cropland to reduce erosion and improve soil health and water quality. Project will focus on transitioning tobacco growers to conservation tillage practices and promote conservation practice implementation on the total farming operation while leading to improved water quality within the region as well as positive effects on wildlife, such as the Blackside Dace and the Little Wing Pearly Mussel. \$190,000

#### **North Carolina State University**

Prescribed Fire Initiative within the Southeastern United States (multiple states)

Expand and accelerate the implementation of prescribed fire to restore and enhance longleaf pine habitat and other fire-dependent forest and grassland communities within the southeast. Project will engage 1,000 landowners and fire practitioners through technical assistance, training and outreach, including "Learn and Burn" workshops, development of prescribed burn associations and fire festivals, to increase the use of prescribed

\$130,000

#### **Pheasants Forever**

### Strategic Restoration of Northern Bobwhite Habitat on Working Lands (multiple states)

Deliver technical assistance across six states to improve land-management practices for northern bobwhite and other terrestrial wildlife. Project will include 11,940 landowner contacts, 27,800 acres under improved management practices, 720 plans with best management practices and 6,000 acres covered with federal program incentives.

\$2,447,858

# Office of Kentucky Nature Preserves Restoring Shortleaf Pine in Kentucky

Establish 165 acres of shortleaf pine and enhance an additional 432 acres of existing shortleaf pine habitat by thinning hardwood species and introducing prescribed fire on three nature preserves in eastern Kentucky. Project will reduce the threat of southern pine beetle infestations and improve habitat for numerous wildlife species, including bats, wild turkey, northern bobwhite and several rare plants.

\$120,000

# U.S. Department of Agriculture, U.S. Forest Service

# Expanding the National Aquatic eDNAtlas and Data Exchange for Freshwater Species (multiple states)

Expand the aquatic environmental DNA Atlas database, website, digital tools, and sample repository to a national scale. Project will expand the current coverage of the database of information important to the conservation and management of aquatic species to include waterways in the 37 remaining states to inform strategic conservation investments for suppressing invasives and increasing native populations. \$73,018

#### LOUISIANA

#### American Bird Conservancy

Priority Bird Habitat Conservation in the West Gulf Coastal Plain/Ouachitas Region (AR, LA, OK, TX)

Facilitate the establishment, development, maintenance and success of Conservation Delivery Networks in the West Gulf Coastal Plain/Ouachitas geography. Project will focus on building connections and relationships among partner delivery staff across the fourstate region covering Arkansas, Louisiana, Oklahoma and Texas to restore 277 acres of bottomland hardwood forests and improve 92 acres of existing bottomland hardwoods. \$263,221

#### CDP North America

# Scaling Green Infrastructure Investments in Cities (multiple states)

Build capacity of communities in 18 cities across the United States to help them implement sustainable infrastructure for stormwater management, urban wildlife habitats and tree canopy improvement. Project will perform targeted outreach to cities to increase knowledge of sustainable infrastructure financing as well as develop cities' use of online tools to document green infrastructure and habitat benefits. \$200,000

#### Chicago Zoological Society

#### Enhancing the Gulf of Mexico Dolphin Identification System (AL, FL, LA, MS, TX)

Improve the functionality of the Gulf of Mexico Dolphin Identification System, a collaborative database of bottlenose dolphin photographic identification from researchers around the Gulf. Project will expand the existing tool for protection and restoration of bottlenose dolphins, allowing researchers to search online for their individual dolphins within the catalogs of other collaborating researchers, to identify long-range movements and determine the origins of stranded dolphins.

\$60,000

#### **Ducks Unlimited**

### Enhancing Wetland Easement Habitat in Louisiana

Increase staff capacity to implement habitat enhancement projects on existing Natural Resources Conservation Service Wetland Reserve Program (WRP/WRE) conservation easements in Louisiana. Project will identify existing WRP/WRE shallow water wetlands that are in need of enhancement, implement restoration practices to improve hydrology and wetland functions, and provide forest management recommendations to improve bottomland hardwood forest habitat that will benefit waterfowl and other wildlife species. \$317,526

#### Forest Landowners Association

#### Engaging Working Forest Landowners, Building Stakeholder Collaboration & Developing Solutions – II (multiple states)

Engage large family forest landowners in longleaf restoration and at-risk species conservation throughout the historic range of the longleaf pine. Project will assist landowners with the establishment and enhancement of at least 2,000 acres of longleaf pine, develop regulatory predictability tools for at-risk species endemic to the longleaf ecosystem, reducing uncertainty for landowners wishing to manage for longleaf habitat conditions on their lands, and explore market-based solutions to address the economic constraints to large-scale longleaf restoration on private lands. \$145,000

# **Gulf Seafood Institute**Expanding the Gulf of Mexico Charter Boat

Electronic Logbook (AL, FL, LA, MS, TX)
Expand the use of electronic logbooks in the
Gulf of Mexico by improving software and
providing training and outreach to captains.
Project will increase the number of vessels
with installed electronic logbook units in the
Gulf of Mexico resulting in more accurate
data to fishery managers.
\$661,298

# **Expanding Resources into Action**Land Conservation Program for Farmers and Ranchers (LA, MS)

Provide technical assistance to limited resource farmers and ranchers in Louisiana and Mississippi to increase awareness and participation in the Natural Resources Conservation Service Agricultural Conservation Easement Program (ACEP). Project will develop educational materials and host workshops to inform landowners of best land conservation practices and opportunities to enroll their lands in ACEP. \$299,700

#### Friends of City Park

# New Orleans City Park Lagoon System Restoration and Invasive Species Removal (LA)

Remove invasive water hyacinth growth, plant native tree species and shoreline grasses, and engage and enhance community stewardship through education about the importance of the lagoon system and habitats in New Orleans. Project will plant 560 trees, remove invasive plants on 6.5 acres and engage 1,150 volunteers from local communities to support the restoration outcomes.

\$25,000

# Lake Pontchartrain Basin Foundation Swamp Restoration in the Pontchartrain Basin, Southeast Louisiana

Restore 31 acres of swamp through planting new trees and monitoring 5,090 trees that are already in the ground.

Project will increase storm surge protection for the largest urban areas and benefit 18 species of concern, including bald eagle, prothonotary warbler, mottled duck, swallow-tailed kite, Louisiana black bear and alligator snapping turtle.

\$114,000

#### **Land Trust for Louisiana**

#### Expanding Partnerships to Advance the Agricultural Land Easements Program in Louisiana

Expand private and public partnerships and provide technical assistance through easement procurement on the first Agricultural Land Easements (ALE) project in Louisiana on a rice farm in Vermilion Parish. Project will demonstrate the efficacy of the ALE program through the Vermilion Parish prototype, develop a constituency for the program, and determine viable pathways for securing dedicated non-federal matching funds to further implementation of the ALE program on rice farms, which provide critical overwintering habitat for numerous migratory birds.

\$40,106

# Maine Coast Fishermen's Association Next Generation of Permit Banking and Fishery Allocation Trusts (multiple states)

Develop a new approach to fishery trusts that will be used as a model for multiple fisheries, including, but not limited to, the New England Groundfish and the Gulf of Mexico Reef fishery, by assessing current permit bank models, exploring small business growth, and exploring community buy-in and stewardship. Project will result in up to five new trust and permit bank business structures and up to five programmatic models that will respond to the changing needs of the fishing community.

\$99,882

# MQVN Community Development Corporation

#### New Orleans East Lagoon Maxent Community Stewardship (LA)

Improve management of at least 4 acres of habitat by planting native species on riparian buffers to increase stormwater management and runoff mitigation in New Orleans. Project will monitor water quality at six sites to evaluate efficacy while installing community trash and debris collection equipment at strategic sites and conducting extensive community education and outreach by training 10 teachers in watershed stewardship curriculum to engage students and families on best practices.

\$47,184

#### **National Wild Turkey Federation**

Pineywoods Longleaf Restoration – VI (LA)
Establish and enhance 7,150 acres
of longleaf pine in a six-parish WestCentral Louisiana Ecosystem Partnership
Conservation Area anchored by the Fort
Polk/Kisatchie National Forest Significant
Geographic Area. Project will provide
financial assistance to plant longleaf and
enhance existing habitat with prescribed
fire, as well support landowner outreach
and technical assistance through field days
and development of forest management

\$298,953

### North Carolina State University Prescribed Fire Initiative within the

Southeastern United States (multiple states)
Expand and accelerate the implementation of prescribed fire to restore and enhance longleaf pine habitat and other fire-dependent forest and grassland communities within the Southeast. Project will engage 1,000 landowners and fire practitioners through technical assistance, training and outreach, including "Learn and Burn" workshops, development of prescribed burn associations and Fire Festivals, to increase the use of prescribed fire.

\$130,000

#### **Pheasants Forever**

#### Delivery of Conservation Technical Assistance and Implementation of Early Successional Habitat Practices (AR, LA,)

Work through Conservation Delivery
Network partner organizations to conduct
program promotion and strategic marketing
efforts on sustainable forest management
to 600 landowners located in southeastern
Arkansas and northeastern Louisiana. Of
the 600 landowners reached in year one,
the project expects that 550 will receive
one-on-one technical assistance by resource
conservation organization staff to produce
landowner management plans on a
minimum of 10,000 acres.

\$149,575

#### Tierra International Foundation , Tierra Foundation

# Mangrove Air Seeding: An Innovative Approach to Habitat Conservation (LA)

Utilize an innovative mangrove air-seeding technique to establish mangrove habitat in Louisiana. Project will establish wetland habitat for a variety of Species of Greatest Conservation Need and several species listed as conservation priority in the 2015 Louisiana Wildlife Action Plan.

\$166,148

# TERRITORIES U.S. AND STATES

#### Texas A&M AgriLife Research

**Applied Biodiversity Sciences Conservation** Scholars Program (multiple states)

Integrate undergraduates and graduates using a two-tiered program that will focus on local issues related to Gulf of Mexico ecosystems and energy development. Project will appoint two graduate fellowships to serve as "mentor assistants" to guide a small cohort of undergraduate interns as they develop projects and internship proposals. \$200,000

#### **Texas State University**

Reddish Egret Conservation Plan for the U.S. Gulf Coast (AL, FL, LA, MS, TX)

Develop a detailed conservation plan with prioritized actions, clear conservation outcomes and well-defined funding needs to best support the reddish egret (REEG) in the Gulf of Mexico. Project will contract an expert on Open Standards for the Practice of Conservation and a research assistant to facilitate webinars, host two workshops with the REEG working group, write plans and aggregate existing focal foraging and nesting data into an online database.

\$74,990

#### U.S. Department of Agriculture, U.S. Forest Service

Expanding the National Aquatic eDNAtlas and Data Exchange for Freshwater Species (multiple states)

Expand the aquatic environmental DNA Atlas database, website, digital tools, and sample repository to a national scale. Project will expand the current coverage of the database of information important to the conservation and management of aquatic species to include waterways in the 37 remaining states to inform strategic conservation investments for suppressing invasives and increasing native populations. \$73,018

#### **University of Florida**

**Evaluating Recreational Fishing Management** Strategies for Red Snapper (AL, FL, LA, TX)

Assess the recreational management strategies of red snapper by using simulation and assessment modeling, stakeholder surveys and stakeholder workshops. Project will provide a framework for angling groups to explore management options to understand the impacts on available catch and anglers' access to the red snapper fishery. \$275,121

#### MAINE

Atlantic Salmon Federation (U.S.) Reconnecting Eastern Brook Trout and Atlantic Salmon Habitat on the Kennebec and Piscataquis Rivers (ME)

Replace three undersized culverts on tributaries to the Upper Kennebec and Piscataquis rivers to restore access to historic habitat for eastern brook trout and Atlantic salmon in Maine, Project will restore 21.74 miles of high quality cold-water habitat and restore natural ecological processes to the streams, including sediment movement, nutrient processing and movement of wood. \$194,025

**Cape Cod Commercial Fishermen's Alliance** Expanding Electronic Monitoring in the New England Groundfish Fisheries (ME, MA, NH, RI)

Expand participation in electronic monitoring from 20 to 30 vessels in the New England groundfish fishery to improve accountability through video monitoring and reduce bycatch. Project will update technology, plan for industry cost sharing and strengthen partnerships with fishermen, the National Marine Fisheries Service and scientists resulting in improved long-term fisheries management. \$541,109

#### **Gulf of Maine Research Institute**

Develop Machine Learning Software to Reduce Electronic Monitoring Costs in New England (ME, MA, RI)

Develop activity recognition algorithms to identify fishing activity to decrease video review time, and data storage requirements on vessels using a maximized retention bycatch monitoring approach in the New England groundfish fishery. Project will install software on vessels, document the process for incorporating automation into an electronic monitoring program, and present results in a best practices report. \$450,266

#### **IC Independent Consulting** Implementing and Improving Electronic

Monitoring in New England Fisheries (CT. MF. MA. NH. RI)

Review and synthesize electronic monitoring technologies, electronic reporting technologies, and data requirements to better monitor catch, bycatch, discards and interactions with endangered, threatened and protected species within the New England groundfish fisheries. Project will develop a plan for implementing data modernization to address gaps that will satisfy scientific, enforcement, and sustainable management needs. \$79,940

#### Maine Audubon Society

Restoring Aquatic Connectivity for Critical Eastern Brook Trout and Diadromous Fish Populations (ME)

Increase abundance and distribution of eastern brook trout and diadromous fish, including Atlantic salmon, in blocks of high elevation forest in the Saco, Presumpscot, Penobscot and Kennebec river basins of Maine. Project will result in replacement of 34 high priority stream crossing barriers and access to 66 miles of historic high quality stream habitat, using the U.S. Forest Service Stream Simulation Design methodology, an ecosystem-based approach for constructing road-stream crossings.

\$156,913

Maine Coast Fishermen's Association Next Generation of Permit Banking and Fishery Allocation Trusts (multiple states)

Develop a new approach to fishery trusts that will be used as a model for multiple fisheries, including, but not limited to, the New England Groundfish and the Gulf of Mexico Reef fishery, by assessing current permit bank models, exploring small business growth, and exploring community buy-in and stewardship. Project will result in up to five new trust and permit bank business structures and up to five programmatic models that will respond to the changing needs of the fishing community.

\$99,882

#### Midcoast Conservancy

Improving Fish Passage and Habitat for Multiple Diadromous Fish Species on the Sheepscot River (ME)

Modify a fish passage barrier on the Sheepscot River in Alna, Maine, to reconnect multiple anadromous fish species, including river herring, Atlantic salmon and sea-run brook trout, to historic stream habitat. Project will restore access to 167 miles of stream habitat and 847 acres of pond habitat to enhance long-term population sustainability and provide access to refugia for cold-water aquatic species.

\$73,700

#### **Nobleboro Historical Society** Damariscotta Mills Fish Ladder Post-

Restoration Efficiency Study (ME) Conduct study to evaluate river herring

passage efficiency over the Damariscotta Mills Fish Ladder, which was restored in 2016 to allow access to high quality spawning habitat in Damariscotta Lake in Maine. Project will compare fish ladder efficiency before and after restoration by first determining the rate of fish passage over the ladder during the 2018 river herring spawning run, and then comparing results to a similar study completed prior to the restoration of the fish ladder. \$10,000

Passamaquoddy Tribe - Pleasant Point Pennamaguan River Watershed Alewife Restoration and Community Outreach (ME)

Repair two fish ladders in the Pennamaguan River currently inhibiting river herring passage into the Pennamaquan River Watershed in Maine. Project will engage 15 tribal community members to help construct and install the improved fish ladders and restore migratory connections to the river, tripling the current river herring population. \$23,232

#### U.S. Department of Agriculture, **U.S. Forest Service**

Expanding the National Aquatic eDNAtlas and Data Exchange for Freshwater Species (multiple states)

Expand the aquatic environmental DNA Atlas database, website, digital tools and sample repository to a national scale. Project will expand the current coverage of the database of information important to the conservation and management of aquatic species to include waterways in the 37 remaining states to inform strategic conservation investments for suppressing invasives and increasing native populations. \$73,018

#### **MARYLAND**

Alliance for the Chesapeake Bay Developing a Chesapeake Tree Canopy

Funding and Financing Guide (DC, MD, VA) Develop a Chesapeake Urban Tree Canopy Funding and Financing document and hold a one-day workshop and provide oneon-one support for Metro Washington Council of Governments members. Project will serve as a general guidance for all Chesapeake communities on the funding and sustainable financing of the programs, bolstered with short and compelling how-to case studies from the Chesapeake region. \$49,188

#### American Bird Conservancy

Optimizing Conservation Benefits to Black Ducks and Water Quality in the Chesapeake Bay Watershed (multiple states)

Develop guidance to target wetland habitat restoration and enhancement across the entire Chesapeake Bay watershed. Project will be using the output of two separate models to target conservation actions that would benefit water quality and black ducks, in partnership with the U.S. Geological Survey and the Atlantic Coast and Black Duck joint ventures.

\$25,634

#### **Center for Watershed Protection** Stream Stabilization Design (MD)

Build capacity of the Audubon Naturalist Society to implement a high-priority watershed restoration project by designing a plan for stabilization of the Clean Drinking Stream at the Woodend Nature Sanctuary inside the Washington, D.C., beltway. Project will deliver a design for all four segments of the stream that are "shovel-ready," and can be implemented in sequential phases as funding becomes available.

\$49,954

\$48,190

#### **Center for Watershed Protection** Stormwater Retrofit Plan and Design (MD)

Identify opportunities to install stormwater retrofits in the town of New Market and develop designs for a water quality retrofit of the town's fire pond. Project will develop a plan for better managing stormwater runoff to both improve water quality and address localized drainage issues as well as address the safety concern of the fire pond while enhancing water quality treatment.

#### Chesapeake Media Service

Increased Outreach to Local Governments in the Chesapeake Bay Watershed through the Bay Journal (multiple states)

Create a new local government edition of the Bay Journal to provide education for municipal staff in the vast majority of the 1,800 local government jurisdictions within the Chesapeake Bay Watershed. Project will provide information that will help them understand and achieve their commitments to Chesapeake Bay restoration efforts. \$20,001

#### **Dewberry Engineers**

Cecil County Stormwater Outreach (MD)

Build Cecil County's capacity for outreach and education to municipal employees and county residents by enhancing and building on their existing efforts with a focus on improved water quality and overall Chesapeake Bay Watershed health. Project will develop an employee-training program, and create stormwater best management practice operation and maintenance guidelines \$35,048

#### **Ducks Unlimited**

Conservation of American Black Duck in Delaware, Maryland and Virginia

Implement the goals of the Working Lands for Wildlife Farm Bill Program by targeting conservation of American black duck priority habitat in Delaware, Maryland and Virginia. Project will work with producers and private landowners to implement NRCS Farm Bill conservation programs to protect, restore and enhance habitat to benefit American black ducks on private lands.

\$272,564

#### Indiana University of Pennsylvania Research Institute

Improving Forest Health on Private Lands to Benefit Golden-Winged Warblers (MD, PA, VA) Continue the efforts on private land to meet the goals of the Natural Resource Conservation Service's Working Lands for Wildlife program and increase populations of golden-winged warblers and associated forest bird species in Pennsylvania, Maryland and Virginia. Project will engage at 2.000 private landowners and enroll at least 3,000 acres in Working Lands for Wildlife by utilizing conservation planners and field foresters to implement best practices in strategic locations.

\$1,169,163

#### Manomet

Coastal Habitat Restoration for American Oystercatcher along Atlantic Coast (multiple states)

Coordinate the planning and implementation of conservation action for American ovstercatcher along the entire U.S. Atlantic seaboard. Project will continue the coastwide coordination of the American oystercatcher recovery initiative and compile lessons learned after a decade's worth of targeted investments and embark upon a new initiative to develop best management practices to restore wet and dry sand habitats for oystercatchers and other breeding shorebirds along the Atlantic Coast.

UNITED

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\$150,000

#### **National Wildlife Federation**

Maryland Stormwater Success Stories

Create a resource that packages the most compelling information and stories of stormwater best management practices and use them to educate communities regarding stormwater financing and create an educational network that helps put more projects into the ground. Project will target municipalities, local agency staff and local government officials; however, the resources created will be available to the public and adaptable to various user needs. \$50,000

#### Ridge to Reefs

**Bioreactor Implementation Training** and Promoting (DE, MD)

Increase the capacity of Nanticoke Watershed Alliance to site, design and build bioreactors within the Nanticoke watershed, and promote the practice with other farmers throughout the watershed. Project will conduct targeted outreach to farmers, hold a farmer workshop and provide bioreactor tours to increase knowledge about this

\$49,994

#### **Shorerivers**

#### Williston Lake Watershed Assessment and Management Plan (MD)

Complete a watershed plan for the Williston Lake watershed in Caroline County, Maryland, to identify sources and quantities of nutrients and sediment loads impacting Williston Lake and ultimately the Choptank River. Project will create a management plan with a prioritized list of actions that the Girl Scouts, farmers and other watershed partners can use as a blueprint to help reduce inputs and improve the water quality of the Lake.

\$48,971

#### Skeo Solutions

#### Anacostia Watershed

Regional Messaging Initiative (DC, MD) Develop a conservation-based regional

initiative designed to educate effected communities and broaden knowledge of the Anacostia River and watershed throughout the District of Columbia, Montgomery County and Prince Georges County. Project will create a consistent and coordinated, conservation stewardship strategy to engage communities, neighborhoods, and citizens in conservation practices for the Anacostia that will ultimately reduce nutrients and sediment entering the Chesapeake Bay. \$44,911

#### The Nature Conservancy

Improving Management of Family Forestland Using a Landowner Service Model to Optimize Outcomes (MD)

Enhance management of private family woodlands in western Maryland by utilizing a landowner service model that coordinates the full spectrum of available private and public service providers to meet the needs of landowners implementing best management practices. Project will implement forest stewardship and habitat improvements that maintain and enhance age and structural diversity for early successional, mature and late successional habitat on a total of 400 acres owned by 20 different landowners. \$199,960

#### U.S. Department of Agriculture, **U.S. Forest Service**

Expanding the National Aquatic eDNAtlas and Data Exchange for Freshwater Species (multiple states)

Expand the aquatic environmental DNA Atlas database, website, digital tools and sample repository to a national scale. Project will expand the current coverage of the database of information important to the conservation and management of aquatic species to include waterways in the 37 remaining states to inform strategic conservation investments for suppressing invasives and increasing native populations. \$73,018

#### **University of Maryland Center** for Environmental Science

**Incorporating Novel Watershed Indicators** into the Chesapeake Bay Report Card (multiple states)

Make key improvements to the Chesapeake Bay Report Card, which has served since 2006 as the definitive source for ecosystem health status in the Bay and tidal tributaries. Project will improve the Chesapeake Bay Report Card process and product by incorporating recent lessons learned, incorporating new design elements, developing indicators for non-tidal watershed areas.

\$113,995

#### **Water Words That Work**

Training Chesapeake Bay Watershed **Conservation Practitioners** (DE. MD. PA. VA. WV)

Help conservation practitioners successfully recruit and negotiate landowners' participation in the Conservation Reserve Enhancement Program, conservation easements, agricultural best practices, manure and forest management plans and habitat restoration projects to improve water quality in the Chesapeake Bay watershed. Project will bring the expertise of the region's most successful conservation field staff into a course designed for entry level and mid-career field staff. \$24.978

#### **Waterfront Partnership of Baltimore** Green Stoop Challenge (MD)

Engage communities in Baltimore's Harris Creek watershed to plant and maintain 450 tree pits. The planting of the tree pit will be as important as the tree itself and will be used to engage residents in sustainable block building exercises. Project will train 300 local residents as tree pit gardeners who will learn about the benefits of green infrastructure and native plants, reconnect to their historic waterways and compete with neighboring blocks to have the greenest stoops. \$29,998

#### **MASSACHUSETTS**

#### Cape Cod Commercial Fishermen's Alliance Developing the Massachusetts Shellfish Initiative

Develop the Massachusetts Shellfish Initiative plan to build capacity for shellfish stakeholders and maximize the economic and environmental benefits of shellfish resources, including oysters, quahogs, surf clams, mussels, razor clams, steamers and bay scallops. Project will include more than 500 stakeholders who will develop goals and guidance for balancing the growing and competing demands for shellfish resources.

#### **Cape Cod Commercial Fishermen's Alliance**

Expanding Electronic Monitoring in the New England Groundfish Fisheries (ME, MA, NH, RI) Expand participation in electronic monitoring from 20 to 30 vessels in the New England groundfish fishery to improve accountability through video monitoring and reduce bycatch. Project will update technology, plan for industry cost sharing and strengthen partnerships with fishermen, the National Marine Fisheries Service and scientists. \$541.109

#### **Connecticut River Watershed Council** A Watershed Monitoring Strategy to Support

the Long Island Sound Nitrogen Strategy (MA. NH. VT) Create a watershed-scale monitoring strategy

to add nutrient and other water quality data in the Connecticut and Housatonic River watersheds of Massachusetts, New Hampshire and Vermont. Project will add to the current effort to implement the Long Island Sound Nitrogen Reduction Strategy for the large river systems that drain into Long Island Sound. \$39,361

#### **Connecticut River Watershed Council** Restoring Riparian and Instream Habitat for Trout (MA, NH, VT)

Provide targeted outreach and technical assistance to landowners to implement riparian, instream habitat and water quality projects in priority eastern brook trout sub-watersheds of the Middle and Upper Connecticut River. Project will plant riparian buffers on 6 acres and increase wildlife habitat as well as create 3 miles of restored instream habitat through large wood and log jam additions that increase structural complexity. \$199.672

#### **Cornell Cooperative Extension Association** of Suffolk County

Bycatch Avoidance Network Expansion for Georges Bank Haddock and Northern Red Hake (MA, NJ, NY, RI)

Expand the Bycatch Avoidance Network to identify and report real-time bycatch of butterfish, river herring, windowpane, yellowtail flounder, haddock and northern red hake. Project will reduce bycatch in Southern New England fisheries by providing active vessels with real-time spatial and temporal bycatch data. \$60,939

#### **CVision Consulting**

Electronic Monitoring Video Review (MA)

Develop open source video review tools for the fisheries management community to accelerate the delivery of accurate electronic monitoring data. Project will result in a semiautomated video review and expanded use of computer vision in the New England groundfish fisheries, which reduces the cost of fisheries data collection and review. \$128,085

#### **Gulf of Maine Research Institute**

Develop Machine Learning Software to Reduce Electronic Monitoring Costs in New England (MA, ME, RI)

Develop activity recognition algorithms to identify fishing activity to decrease video review time and data storage requirements on vessels using a maximized retention bycatch monitoring approach in the New England groundfish fishery. Project will install software on vessels, document the process for incorporating automation into an electronic monitoring program and present results in a best practices report. \$450,266

#### **Housatonic Valley Association**

Creating Road-Stream Crossing Management Plans to Pass Eastern Brook Trout and Reduce Flood Risk (MA)

Create road-stream crossing management plans for municipalities in the Berkshire Hills of Massachusetts that prioritize culvert replacements, improve fish habitat and reduce flood risk. Project will develop management plans for five towns that will serve as a tool to secure financing for implementation of culvert replacements that improve aquatic connectivity for eastern brook trout. \$85,399

#### **IC Independent Consulting**

Implementing and Improving Electronic Monitoring in New England Fisheries (CT, ME, MA, NH, RI)

Review and synthesize electronic monitoring technologies, electronic reporting technologies, and data requirements to better monitor catch, bycatch, discards and interactions with endangered, threatened and protected species within the New England groundfish fisheries. Project will develop a plan for implementing data modernization to address gaps that will satisfy scientific, enforcement and sustainable management needs. \$79,940

#### **Lowell Parks and Conservation Trust** Engaging Community in Monitoring, Stewardship and Education (MA)

Restore 3 acres and 1.000 linear feet of riverbank abutting the Concord River Greenway in Massachusetts to improve habitat and restore anadromous fish to the Sudbury-Assabet-Concord River Watershed while engaging local youth and adults through educational programs and a volunteer stewardship and monitoring program. Project will include five resource management partners, 75 local volunteers and 12 schools, engaging more than 2,000 community members to provide over 250 monitoring observations.

\$27,232

#### Maine Coast Fishermen's Association Next Generation of Permit Banking and Fishery Allocation Trusts (multiple states)

Develop a new approach to fishery trusts that will be used as a model for multiple fisheries, including, but not limited to, the New England Groundfish and the Gulf of Mexico Reef fishery, by assessing current permit bank models, exploring small business growth, and exploring community buy-in and stewardship. Project will result in up to five new trust and permit bank business structures and up to five programmatic models that will respond to the changing needs of the fishing community.

\$99,882

#### Manomet

Coastal Habitat Restoration for American **Oystercatcher along Atlantic Coast** (multiple states)

Coordinate the planning and implementation of conservation action for American oystercatcher along the entire U.S. Atlantic seaboard. Project will continue the coastwide coordination of the American oystercatcher recovery initiative and compile lessons learned after a decade's worth of targeted investments and embark upon a new initiative to develop best management practices to restore wet and dry sand habitats for oystercatchers and other breeding shorebirds along the Atlantic Coast. \$150.000

#### Massachusetts Department of Fish and Game's Division of Ecological Restoration

Planning for Restored Aquatic Connectivity for Eastern Brook Trout on the Manhan River (MA) Complete final engineering designs and submit permit applications to remove a fish passage barrier that is a significant public hazard in Southhampton, Massachusetts, on the Manhan River, a tributary of the Connecticut River. Project will lead to reconnection of 27 miles of eastern brook trout habitat in a state-designated cold-water fishery and the elimination of a public safety risk that would impact the availability of drinking water to a portion of the town.

\$51,000

#### **Springfield Water and Sewer Commission** Enhancing Nitrogen Removal at the Springfield Regional Wastewater Treatment Facility (MA)

Install nitrogen sensors and use information from those sensors to improve operations during the biological treatment process at the Springfield Regional Wastewater Treatment Facility. Project will eliminate nitrogen discharges by 1.000 pounds annually into the Connecticut River, which drains into Long Island Sound.

\$51,146

#### Town of Amherst

Remove Nitrogen at Wastewater Plant (MA) Amherst will install flow monitoring systems on effluent and return activated sludge at the Amherst Wastewater Treatment Plant. Project will improve process control for nitrification and denitrification, resulting in a reduction of nitrogen loading to the Connecticut River, which drains into Long Island Sound. \$17.650

#### **Town of South Hadley**

Enhancing Nitrogen Removal at the South Hadley Wastewater Treatment Plant (MA) Replace one mechanical aerator at the South Hadley Wastewater Treatment Plant, Chicopee, Massachusetts. Project will result in increased nitrogen removal, improving water quality in the Connecticut River, which drains into Long Island Sound.

\$145,000

#### **Trout Unlimited**

Targeting Municipalities and Landowners to Improve Stream Health (MA, VT)

Assist municipalities, private landowners and contractors to prioritize stream connectivity and cold-water habitat restoration projects using available data on road-stream crossings. Project will use the new Forests for Fish program to recruit six municipalities and 75 landowners to increase land under easement by 200 acres and develop restoration plans based on culvert replacement prioritization. \$66,433

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#### U.S. Department of Agriculture, U.S. Forest Service

Expanding the National Aquatic eDNAtlas and Data Exchange for Freshwater Species (multiple states)

Expand the aquatic environmental DNA Atlas database, website, digital tools and sample repository to a national scale. Project will expand the current coverage of the database of information important to the conservation and management of aquatic species to include waterways in the 37 remaining states to inform strategic conservation investments for suppressing invasives and increasing native populations. \$73,018

#### **MICHIGAN**

#### **Audubon International**

Monarchs in the Rough: Pollinator Habitat on Golf Courses (multiple states)

Establish pollinator habitat at 500 golf courses in a 10-state area to support pollinators such as the monarch butterfly. Project will provide technical assistance and native, regionally appropriate seed while raising awareness about pollinators through educational signage and demonstrating how to manage commercial properties sustainably.

\$150,000

#### Assistance for Maple River Watershed (MI)

Clinton Conservation District

Increase the availability of technical assistance to landowners in the Clinton County area of the Maple River watershed. Project will engage landowners through

outreach programs, assist in the development of conservation plans and implement conservation practices aimed at improving soil health and water quality. \$189.600

#### **Conservation Resource Alliance**

Restoring Total Aquatic Connectivity (MI) Rectify and restore the three remaining aquatic species passage barriers within the entire Carp Lake River. Project will restore aquatic organism passage for brook trout and other cold-water species, improve degraded riparian habitat benefiting species such as the federally endangered Hungerford's crawling water beetle, and reduce sediment loading up to 15 tons per

\$300,000

#### **County of Ottawa**

#### Restoring Bayou Connectivity and Grand River Shoreline Stability at Riverside Park (MI)

Restore the hydrologic connection between the 26-acre Kirby Bayou and the Grand River, and stabilize 500 feet of riverbank to reduce sediment and improve water quality. Project will reconnect access to rare bayou habitat for species of greatest concern such as lake sturgeon, northern pike and snuffbox.

\$184,113

#### **Huron Conservation District** Landowner Technical Assistance in Saginaw Bay

Provide planning and technical support to improve soil heath and water quality in the high-risk and high-need Saginaw Bay watershed. Project will provide planning and technical support to landowners to facilitate the timely installation of soil health and water quality best management practices.

\$184,844

#### **Huron Pines Resource Conservation** and Development Council

#### **Enhancing Brook Trout Habitat** in the Pigeon River (MI)

Restore natural river function, reduce aquatic organism passage-impeding flow velocities and enhance the recreational capacity of the Pigeon River. Project will reconnect 55 upstream miles of aquatic habitat and decrease sediment loading by 0.5 tons annually.

\$225,000

#### **Kent Conservation District**

#### Protecting Our Mid and West Michigan Soil and Water Resources

#### through Engineering Support

Protect thousands of acres of water quality and habitat on agricultural land by designing and installing backlogged engineered conservation practices in mid and west Michigan. Grow conservation partnerships between National Fish and Wildlife Federation, Natural Resources Conservation Services, a local conservation district and private landowners who account for the majority of Michigan's natural areas. \$198,000

#### **Keweenaw County Road Commission** Improving Fish Passage

#### at Central Creek Crossing (MI)

Replace a perched culvert impeding aquatic connectivity for priority native brook trout. Project will improve the road stream crossing by installing a concrete structure, widening and naturalizing the streambed resulting in the reconnection of more than 1.57 miles of high-quality habitat, including potential spawning areas. \$110,000

#### **Macomb County Public Works Office** Sterling Relief Drain Daylighting

and Green Infrastructure Retrofit (MI) Redesign and retrofit 1 mile of the Sterling Relief Drain corridor in Macomb County as green infrastructure to daylight, store and infiltrate stormwater from the 1,870-acre urban drainage district. Project will create more than 50 acres of diverse native habitat, plant 5,000 trees and intercept 28 lateral storm drains to add more than 10 million gallons of urban stormwater storage capacity. \$602,183

#### **Marquette County Conservation District** Landowner Technical Assistance

# in Michigan's Central Upper Peninsula

Support a soil conservationist for a threeyear term to increase private, nonindustrial landowner participation in forest management planning and implementation of recommended conservation practices within the central Upper Peninsula. \$236,457

### **Mason-Lake Conservation District**

#### Farmer-led Approach to Reduce Sediment and Nutrient Loading in the Lincoln and Sable Watersheds (MI)

Improve the health of the Sable and Lincoln River watersheds by reducing sediment and nutrients input through the implementation of Farm Bill conservation practices. Project will expand landowner technical assistance capacity to implement priority conservation practices, such as cover crops, field borders, filter strips and improve nutrient management practices on 10,000 acres of farmland. \$188,424

#### **National Audubon Society**

#### Sustaining Birds of the Great Lakes – II (MI, NY)

Restore critical habitat for migratory shorebirds and waterfowl across 449 acres of some of the highest priority coastal wetland complexes in the Great Lakes region. Project will leverage the resources of 10 partner organizations to implement landscape scale restoration activities, including invasive species control native plantings and improvement of water-control capacity. \$593,476

#### The Nature Conservancy

#### Conserving Michigan's North Point Peninsula Acquire in fee 1,384 acres of Michigan's North Point Peninsula, which includes 4 miles of Great Lakes shoreline. Project will safeguard this pristine area, which includes habitat for migratory birds and coastal wetlands that are important habitat for fish, wildlife and rare

#### \$500,000

#### Pollinator Partnership

#### Project Wingspan: Enhancing Landscapes for At-risk Pollinators (multiple states)

Develop a regional seed collection and native plant materials development program in the Midwest to support monarch butterflies and rusty patched bumble bees. Project will improve 10,000 acres of pollinator habitat, collect 25 pounds of milkweed seed, and propagate 10,000 seedlings.

#### U.S. Department of Agriculture, U.S. Forest Service

#### Expanding the National Aquatic eDNAtlas and Data Exchange for Freshwater Species (multiple states)

Expand the aquatic environmental DNA Atlas database, website, digital tools, and sample repository to a national scale. Project will expand the current coverage of the database of information important to the conservation and management of aquatic species to include waterways in the 37 remaining states to inform strategic conservation investments for suppressing invasives and increasing native populations. \$73,018

#### **MINNESOTA**

#### **Audubon International**

#### Monarchs in the Rough: Pollinator Habitat on Golf Courses (multiple states)

Establish pollinator habitat at 500 golf courses in a 10-state area to support pollinators such as the monarch butterfly. Project will provide technical assistance and native, regionally appropriate seed while raising awareness about pollinators through educational signage and demonstrating how to manage commercial properties sustainably. \$150,000

#### **Conservation Corps**

#### Twin Cities Adopt-a-River Restoration (MN) Improve 6 miles of riparian wetland, remove 1.5 acres of invasive vegetation and improve 1,489 acres of habitat along the Mississippi and Minnesota rivers near Minneapolis and St. Paul. Project will engage 1,000 community volunteers, with 15 teachers receiving training to implement an environmental curriculum within their youth programs.

#### **Cook County Soil and Water Conservation District**

\$43,940

#### Restoring Aquatic Connectivity (MN)

Reconstruct a road stream crossing and railroad crossing on Fredenberg Creek, a tributary to the Two Island River 1.5 miles from Lake Superior. Project will restore access to nearly 2 miles of high-quality cold-water habitat for brook trout as well as reduce sediment and phosphorus inputs into the waterway and improve the health of the Sable and Lincoln River watersheds. \$100,000

#### **Dakota County**

#### Restoring Habitat for Pollinators (MN)

Restore and enhance nearly 900 acres of prairie and woodland in Minnesota to support monarch butterflies, rusty patched bumble bees, and other pollinators. Project will also develop a native plant materials program and engage 100 volunteers to harvest milkweed seed and propagate milkweed seedlings. \$150,000

#### Minnesota Land Trust

#### St. Louis River Estuary Coastal Wetland Revegetation (MN)

Restore and enhance native riparian and emergent coastal wetland vegetation communities on up to 200 acres in the St. Louis River Estuary. Project will integrate revegetation practices with grading and excavation of aquatic habitat to accelerate comprehensive habitat restoration outcomes and improve stopover and breeding habitat for Canada warbler, blue winged teal and common tern. \$95,192

#### Stearns County Soil and Water **Conservation District**

#### Technical Assistance to Farmers Participating in Agricultural Water Quality Certification

Accelerate implementation of voluntary conservation practices as part of a comprehensive natural resource conservation plan for the Upper Mississippi River Basin Project will provide additional technical assistance for 24 animal waste management systems and 40 erosion control projects required for producers and landowners to become certified, leveraging state Clean Water funds, Farm Bill programs and NRCS conservation practices.

\$199,447

#### The Conservation Fund

#### Boundary Water Canoe Area (MN)

Acquire 10,000 acres of land within and around the Boundary Water Canoe Area Wilderness, a 1 million-acre wilderness area within the Superior National Forest of northeastern Minnesota. Project will protect habitat of 69 species of greatest conservation need, including the Canada lynx, spruce grouse, Connecticut warbler, shortjaw cisco, boreal owl. boreal chickadee, spoonhead sculpin and black-backed woodpecker. \$500,000

#### The Nature Conservancy

#### Restoring Riparian Forest Resilience (MN)

Restore forest cover, diversity and resilience along 55 miles of priority riparian forests adjacent to Lake Superior and its priority North Shore tributaries. Project will help maintain and restore habitat strongholds for brook trout and other priority cold-water fish. \$249,419

**Trout Unlimited** 

#### Driftless Partnership: Engaging Landowners in Water Quality and Wildlife Habitat Farm Bill Programs (IL, IA, MN, WI)

Engage agricultural producers in developing conservation practices and science-based tools that restore cold-water streams and promote grass-based grazing systems. Project will restore 20 miles of stream, reduce bank erosion, reconnect streams to their floodplains and install a suite of critical habitat practices for fish, shorebirds, amphibians, reptiles and other aquatic biota. \$149,247

#### **Urban Roots MN**

#### Engaging Local Youth (MN)

Restore 10.4 acres of lowland hardwood forest and mixed emergent marsh to improve water quality and enhance habitat for great blue herons, egrets, bald eagles and other waterfowl around Little Pig's Eye Lake in St. Paul, Minnesota. Project will employ 30 teen interns who, along with 400 volunteers and hired restoration crews, will restore the woodland and wetlands.

#### \$49,998

#### U.S. Department of Agriculture, U.S. Forest Service

#### Expanding the National Aquatic eDNAtlas and Data Exchange for Freshwater Species (multiple states)

Expand the aquatic environmental DNA Atlas database, website, digital tools and sample repository to a national scale. Project will expand the current coverage of the database of information important to the conservation and management of aquatic species to include waterways in the 37 remaining states to inform strategic conservation investments for suppressing invasives and increasing native populations. \$73,018

#### U.S. Geological Survey

#### National Wildlife Health Center

Developing and Testing Delivery Methods for

Vaccine Treatments to Reduce White-Nose Syndrome in Bats (CO, MN, TX, WI) Design and test mass-delivery methods for vaccines and other treatment options as a strategy to reduce the occurrence of whitenose syndrome in bats. Project will develop and test an automatic spray technology device for delivering treatments to bats as they fly into maternity roosts or hibernacula for fall swarm and assess oral consumption of treatment

and effectiveness of a topical delivery method

#### \$400,000

#### Expanding the Spatial and Temporal Scale of the Plowprint Analytical Tool

through the use of biomarkers.

World Wildlife Fund

# (multiple states, Canada and Mexico)

Update and expand geospatial data analysis, called the Plowprint, to evaluate landscape change metrics for the Northern Great Plains ecoregion. Project analysis will expand the previous versions by including northern Mexico, extending the analysis backward in time to capture historical change and using the newest and best available data to track rates of agricultural conversion, monitor previously converted lands, identify risk factors for remaining intact habitat and target conservation work. \$20,000

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#### MISSISSIPPI

#### **Chicago Zoological Society**

Enhancing the Gulf of Mexico Dolphin Identification System (AL, FL, LA, MS, TX) Improve the functionality of the Gulf of Mexico Dolphin Identification System, a collaborative database of bottlenose dolphin photographic identification from researchers around the Gulf. Project will expand the existing tool for protection and restoration of bottlenose dolphins, allowing researchers to search online for their individual dolphins within the catalogs of other collaborating researchers, to identify long-range movements and determine the origins of stranded dolphins.

#### **Expanding Resources into Action**

#### Land Conservation Program for Limited Resource Farmers and Ranchers (LA, MS) Provide technical assistance to limited

resource farmers and ranchers in Mississippi and Louisiana to increase awareness and participation in the Natural Resources Conservation Service Agricultural Conservation Easement Program (ACEP). Project will develop educational materials and host workshops to inform landowners of best land conservation practices and opportunities to enroll their lands in ACEP.

\$299,700

\$60,000

#### Forest Landowners Association

Engaging Working Forest Landowners, Building Stakeholder Collaboration & Developing Solutions – II (multiple states)

Engage large family forest landowners in longleaf restoration and at-risk species conservation throughout the historic range of the longleaf pine. Project will assist landowners with the establishment and enhancement of at least 2,000 acres of longleaf pine, develop regulatory predictability tools for at-risk species endemic to the longleaf ecosystem, reducing uncertainty for landowners wishing to manage for longleaf habitat conditions on their lands, and explore market-based solutions to address the economic constraints to large-scale longleaf restoration on private lands. \$145,000

#### **Gulf Seafood Institute**

Expanding the Gulf of Mexico Charter Boat

Electronic Logbook (AL, FL, LA, MS, TX)
Expand the use of electronic logbooks in the
Gulf of Mexico by improving software and
providing training and outreach to captains.
Project will increase the number of vessels
with installed electronic logbook units in the
Gulf of Mexico resulting in more accurate
data to fishery managers.

\$661,298

#### Land Trust for the Mississippi Coastal Plain Educational Awareness and Trail Construction at Bayou Auguste (MS)

Restore Bayou Auguste through trash and invasive removal from more than 10 acres, and the installation of a trail providing opportunities for the community, especially the neighborhood children and surrounding schools, to develop a stronger understanding and stewardship of the bayou. Project will utilize strategic partnerships to design and implement the trail plan while engaging more than 100 community volunteers in Biloxi, Mississippi. \$30,000

# Maine Coast Fishermen's Association Next Generation of Permit Banking and Fishery Allocation Trusts (multiple states)

Develop a new approach to fishery trusts that will be used as a model for multiple fisheries, including, but not limited to, the New England Groundfish and the Gulf of Mexico Reef fishery, by assessing current permit bank models, exploring small business growth, and exploring community buy-in and stewardship.

Project will result in up to five new trust and permit bank business structures and up to five programmatic models that will respond to the changing needs of the fishing community.

\$99,882

#### Mississippi Land Trust

Mississippi Landowner Outreach and

Conservation Technical Assistance Program Expand upon past outreach efforts and implement a three-year technical assistance capacity-building project in partnership with the USDA's Natural Resources Conservation Service (NRCS) to improve landowners' understanding and participation in NRCS conservation programs in Mississippi. Project will improve water quality, enhance wildlife populations and meet landscape-level conservation priorities.

\$300,000

#### Mississippi Land Trust

# Mississippi Longleaf Pine Ecosystem Restoration

Establish 325 acres of longleaf pine and enhance an additional 4,760 acres of existing longleaf habitat with prescribed fire in the Piney Woods landscape of south Mississippi. Project will support long-term capacity for prescribed burning by stimulating private prescribed fire contractors, training and assisting private landowners with burns on their own lands, and engaging the forest industry in prescribed fire efforts.

\$116,857

#### **National Audubon Society**

Bridging Data Gaps in the Northern Gulf through Comprehensive Monitoring (MS)

through Comprehensive Monitoring (MS)
Bridge key data gaps concerning the status, distribution and conservation needs of priority shorebird species in the northern Gulf of Mexico. This project will re-establish and expand standardized migratory and breeding bird surveys on the barrier islands of Mississippi, which will augment ongoing work on the mainland of Mississippi. This project also will extend and expand a snowy plover banding program.

\$113,000

# North Carolina State University Prescribed Fire Initiative within the Southeastern United States (multiple states)

Expand and accelerate the implementation of prescribed fire to restore and enhance longleaf pine habitat and other fire-dependent forest and grassland communities within the Southeast. Project will engage 1,000 landowners and fire practitioners through technical assistance, training and outreach, including "Learn and Burn" workshops, development of prescribed burn associations and Fire Festivals, to increase the use of prescribed

130,000

#### Texas A&M AgriLife Research

Applied Biodiversity Sciences Conservation Scholars Program (multiple states)

Integrate undergraduates and graduates using a two-tiered program that will focus on local issues related to Gulf of Mexico ecosystems and energy development and broader questions on energy development. Project will appoint two graduate fellowships to serve as mentor assistants to guide a small cohort of undergraduate interns as they develop their projects and internship proposals.

\$200,000

#### Texas State University

Reddish Egret Conservation Plan for the U.S. Gulf Coast (AL, FL, LA, MS, TX)

Develop a detailed conservation plan with prioritized actions, clear conservation outcomes and well-defined funding needs to best support the reddish egret in the Gulf of Mexico. Project will contract an expert and a research assistant, host two workshops with the working group, write plans and aggregate existing foraging and nesting data into an online database.

\$74,990

#### The Nature Conservancy

Floodplain Reconnection and Hydrological Restoration at Loch Leven (MS)

Install water-control structures to flood the interior of Loch Leven, a batture island in Mississippi, anticipated to reconnect the tract to the Mississippi River. Project will help restore hydrology to 6,000 acres of bottomland hardwood forested wetlands and improve water quality through sediment and nutrient reduction. \$500,000

#### The Nature Conservancy

Oyster Restoration in the Lower Wolf River Watershed (MS)

Restore 5 acres of subtidal oyster reef habitat in the lower Wolf River Watershed within the Bay of St. Louis to benefit oysters and associated species. Project will utilize cultch-deployment and then monitor impacts on local water quality, oyster reef development and associated finfish utilization of historically lost oyster reef. \$29,958

#### The Trust for Tomorrow

Wetland Restoration Assistance Program (MS)

Increase capacity in Mississippi to provide targeted landowner outreach and education for increasing new enrollment in NRCS's Agricultural Conservation Easement – Wetland Reserve Easement (ACEP-WRE) program. Project will provide assessment and implementation planning for the enhancement and management of bottomland forests on existing easements. \$296,170

#### U.S. Department of Agriculture, U.S. Forest Service

#### Expanding the National Aquatic eDNAtlas and Data Exchange for Freshwater Species (multiple states)

Expand the aquatic environmental DNA Atlas database, website, digital tools and sample repository to a national scale. Project will expand the current coverage of the database of information important to the conservation and management of aquatic species to include waterways in the 37 remaining states to inform strategic conservation investments for suppressing invasives and increasing native populations. \$73,018

#### MISSOURI

#### **Audubon International**

Monarchs in the Rough: Pollinator Habitat on Golf Courses (multiple states)

Establish pollinator habitat at 500 golf courses in a 10-state area to support pollinators such as the monarch butterfly. Project will provide technical assistance and native, regionally appropriate seed while raising awareness about pollinators through educational signage and demonstrating how to manage commercial properties sustainably.

#### **CDP North America**

\$150,000

# Scaling Green Infrastructure Investments in Cities (multiple states)

Build capacity of communities in 18 cities across the United States to help them implement sustainable infrastructure for stormwater management, urban wildlife habitats and tree canopy improvement. Project will perform targeted outreach to cities to increase knowledge of sustainable infrastructure financing as well as develop cities' use of online tools to document green infrastructure and habitat benefits. \$200,000

#### Heartland Conservation Alliance Municipal Farm Habitat Restoration through Community Engagement (MO)

Restore 35 acres of habitat and engage more than 500 individuals from urban communities in Kansas City, Missouri. Project will support fish and wildlife habitat, urban forestry, water quality education and monitoring, and outdoor recreational activities while improving community understanding of how fish and wildlife conservation and clean water contribute to community well-being.

\$49,935

#### **Pheasants Forever**

Strategic Restoration of Northern Bobwhite Habitat on Working Lands (multiple states)

Deliver technical assistance across six states to improve land-management practices for northern bobwhite and other terrestrial wildlife. Project will include 11,940 landowner contacts, 27,800 acres under improved management practices, 720 plans with best management practices and 6,000 acres covered with federal program incentives. \$2,447,858

#### **Pollinator Partnership**

Project Wingspan: Enhancing Landscapes for At-risk Pollinators (multiple states)

Develop a regional seed collection and native plant materials development program in the Midwest to support monarch butterflies and rusty patched bumble bees. Project will improve 10,000 acres of pollinator habitat, collect 25 pounds of milkweed seed, and propagate 10,000 seedlings. \$149,000

### U.S. Department of Agriculture, U.S. Forest Service

#### Expanding the National Aquatic eDNAtlas and Data Exchange for Freshwater Species (multiple states)

Expand the aquatic environmental DNA Atlas database, website, digital tools and sample repository to a national scale. Project will expand the current coverage of the database of information important to the conservation and management of aquatic species to include waterways in the 37 remaining states to inform strategic conservation investments for suppressing invasives and increasing native populations. *\$73,018* 

#### MONTANA

#### Clark Fork Coalition

Granite Creek Bull Trout Restoration (MT)

Restore and enhance native populations of bull trout in the Granite Creek and greater Upper Lolo watershed. Project will open up currently inaccessible high-quality habitat for spawning and cold-water refugia while reducing negative impacts from road sediment entering the system. \$66,368

#### **Clark Fork Coalition**

# Reconnecting Upper Clark Fork Basin Aquatic and Riparian Corridors (MT)

Enhance aquatic and riparian habitats of the Upper Clark Fork River basin to provide movement corridors for bull and westslope cutthroat trout and other wildlife. Project will reconnect six tributary streams to the river, remove 13 fish passage barriers, re-water up to 18 miles of aquatic habitat and improve 11 miles of riparian habitat.

\$110,808

# Clark Fork Coalition Water Transaction Development

in the Upper Clark Fork, Blackfoot, and Bitterroot Rivers (MT)

Identify, implement and monitor water transactions in the Upper Clark Fork, Bitterroot and Blackfoot River sub basins of Montana. Project will improve streamflows and aquatic habitat conditions for native trout.

\$689,408

#### **Ducks Unlimited**

Restoring Connectivity on Montana Grasslands

Protect privately owned parcels in key grassland landscapes in north-central Montana through the USDA Agricultural Land Easement Program. Project will identify and contact willing landowners to conserve properties left unprotected by wetlandspecific programs; provide nonfederal cost-share on the easements; and cover a portion of the staff costs associated with the identification, development and establishment of the Agricultural Land Easements.

30,000

#### Montana Conservation Corps Musselshell River Cooperative Weed Management Area (MT)

Establish a Cooperative Weed Management Area set along the Musselshell River Watershed in central Montana. Project will create an Integrated Weed Management Plan and implement an invasive species treatment and mapping project utilizing Montana Conservation Corps AmeriCorps members and local volunteers. \$45,011

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### Montana Department of Natural Resources and Conservation

Support for Water Transfers to Instream Flows FY18 (MT)

Assist organizations developing water transactions with review and coordination of project proposals. Project will efficiently process instream flow applications to legally protect water from transactions for instream purposes.

\$40,652

#### **Montana Land Reliance**

Conservation of Ringling Ranch (MT)

Acquire the Ringling Ranch conservation easement, an Agricultural Lands Easement through the Natural Resources and Conservation Service in Carter County, southeastern Montana. Project will protect more than 21,000 acres of rangeland, native grasslands and greater sage grouse habitat. \$300,000

lands into working rangeland and improving management of non-native grass plantings, including the conversion of existing marginal cropland to perennial cover of native grasses and forbs through reseeding.

expiring Conservation Reserve Program

Montana Land Reliance

\$150,000

(multiple states)

\$34,200

\$143,421

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Conservation of Cattle Company Ranch (MT)

conservation easement, located in Chouteau

grouse. Project will protect the 9,985-acre

on the property into native grassland for

sage grouse and other grassland species.

Advancing the SageWest Communications

Network across the Sagebrush Ecosystem

Elevate individual conservation efforts and

need for sagebrush conservation. Project

create a larger dialogue about the value and

will engage in priority work groups, develop

guidance documents, and organize partner

Support of MALT/NRCS Agricultural Land

Support the Montana Association of Land

Trusts and Natural Resources Conservation

Land Easement (ALE) Program Coordinator

additional capacity to process more than

140,000 acres of Montana ALE projects that

Service's (NRCS) Montana Agricultural

position. Project will provide critical

NRCS has obligated to fund.

**Ranchers Stewardship Alliance** 

Utilize a community-led partnership to

implement restoration and enhanced

management in Montana's Milk River

Grasslands. Project will focus on transitioning

Restoration of Milk River (MT)

meetings across the ecosystem.

**Prickly Pear Land Trust** 

Easement Program (MT)

**National Audubon Society** 

property and reseed 1,500 acres of cropland

Acquire the Weaver Cattle Company

and Blaine counties in north-central

Montana, a preferred habitat for sage

\$300,000

#### **Rocky Mountain Bird Observatory**

Effectiveness Monitoring for Declining Grassland Bird Species within the Northern Great Plains (MT, ND, SD, WY)

Collect data on bird abundance and occupancy of priority grassland bird species to evaluate and quantify impacts of conservation investments. Project will focus on three strategies for conservation projects: conservation easements, grassland restoration and grazing management projects within the Northern Great Plains region with comparisons providing an assessment of which programs are benefiting priority grassland bird species and help guide future investments

\$235,155

#### The Blackfoot Challenge

Connectivity and Conflict Management for Large Carnivores in the Rocky Mountains (MT) Expand the proven practice of carcass removal, bear-resistant containers, electric fencing and range riders to much of western Montana in partnership with 10 landowner-led watershed collaboratives. Project will serve to reduce livestock loss while building trust for long-term conflict resolution and result in fewer large carnivores being removed from the population due to conflicts with humans. \$150,001

#### The Nature Conservancy Conservation of Cornwell Ranch (MT)

Acquire a conservation easement on approximately 4,000 acres of native grassland and restore approximately 800 acres of native grassland in northern Valley County, Montana, directly adjacent to the Bitter Creek Wilderness Study Area. Project will protect and improve habitat for numerous species, including at-risk grassland songbirds, greater sage grouse and pronghorn.

\$150,000

#### The Nature Conservancy

Restoring High-elevation Mesic Seeps and Streams in Southwest Montana

Develop an integrated suite of projects to restore sage grouse brood-rearing habitats in stands of mountain big sagebrush near mesic seeps and streams. Project will further collaboration between ranching, agency and conservation communities, and quantify outcomes to understand how rock and brush structures and conifer removaltechniques increase soil moisture, expand the extent of mesic vegetation, increase the abundance of forbs and insects for sage grouse broods, and influence songbird populations

\$115,000

#### The Trust for Public Land Conservation of the Swift Creek-Stillwater Forest Linkage of Montana

Acquire 13.398 acres of critical watershed and forestland in the Swift Creek-Stillwater Forest Linkage Area of Montana. Project will prevent subdivision and development from neighboring resort town, enhance landscape-scale connectivity, ensure public recreational access as well as conserve 91 percent of the Lazy Creek watershed, 13 miles of streams and critical habitat for grizzly bear, Canada lynx, bull trout, and a variety of other plant and animal species.

#### **Trout Unlimited**

Instream Flow in the Upper Clark Fork and Blackfoot River Basins of Southwest Montana

Develop water right leases and water management agreements that work to augment stream flow and critical habitat for native trout species throughout the Upper Clark Fork River basin and Blackfoot River sub-basin. Project will reconnect key tributaries to their main stems and restore chronically de-watered stream reaches. \$113,523

#### **Trout Unlimited**

Rock Creek Fish Passage (MT)

Reconnect bull trout and westslope cutthroat trout habitat in the Rock Creek watershed by replacing irrigation infrastructure, installing fish screens, protecting riparian habitat, and improving road crossings on private and federal agency lands. Project will protect and restore migratory native trout populations, and improve resilience by reconnecting tributary habitats, improving stream flow and providing thermal refugia. \$98,500

#### U.S. Department of Agriculture, U.S. Forest Service

Westslope Cutthroat Trout Recovery (MT)

Construct a fish passage barrier to remove non-native brook trout and re-establish native westslope cutthroat trout along 33 miles of connected habitat in the Selway Watershed on the Beaverhead-Deerlodge National Forest. Project will improve stream and riparian habitat, decrease sediment delivery from roads, restore vegetation and improve irrigation infrastructure. \$79,999

#### U.S. Department of the Interior, **Bureau of Land Management**

Modification of Woven Wire Fences (MT) Modify existing woven wire fences that harm, block or hinder daily wildlife movements, seasonal migrations and access to forage and water throughout the Northern Great Plains. Project will replace woven wire fence in crucial pronghorn winter range and high-use areas to wildlife-friendly specifications. \$50,000

#### World Wildlife Fund

Advancing Black-footed Ferret Recovery through Innovative Delivery of Sylvatic Plague Vaccine Baits to Prairie Dogs (MT, SD)

Improve the accuracy and speed of existing unmanned aircraft system (UAS) and allterrain vehicle (ATV) bait delivery prototypes and build additional models that can be used to protect prairie dogs from sylvatic plague at black-footed ferret reintroduction sites in the Northern Great Plains. Project will advance recovery of the black-footed ferret through efficient, operational UAS and ATV delivery of sylvatic plague vaccine baits to prairie dogs.

\$75,000

#### World Wildlife Fund

Expanding the Spatial and Temporal Scale of the Plowprint Analytical Tool (multiple states. Canada and Mexico)

Update and expand geospatial data analysis, called the Plowprint, to evaluate landscape change metrics for the Northern Great Plains ecoregion. Project analysis will expand the previous versions by including northern Mexico, extending the analysis backward in time to capture historical change and using the newest and best available data to track rates of agricultural conversion, monitor previously converted lands, identify risk factors for remaining intact habitat and target conservation work. \$20,000

#### **NEBRASKA**

#### **National Audubon Society** Support of Conservation Ranching Program

(NE, SD) Support the market-based Conservation Ranching Program, which focuses on implementing bird-friendly land management practices through technical assistance and market-based connection to

landowners. Project will grow the program's impact by expanding into the state of Nebraska and strengthen impact in western South Dakota by providing professional technical assistance to enrolled ranchers. \$198,928

#### Nebraska Community Foundation, **Rainwater Basin Joint Venture** Addressing Eastern Red Cedar in the Nebraska Sandhills

Improve management on 27,625 acres of grasslands in Nebraska's Sandhills. Project will include 17,250 acres of mechanical removal of invasive cedar, construction of grazing infrastructure to manage against re-infestation, and the hiring of a burn boss to provide training, plan and implement prescribed fire as well as a geospatial eastern red cedar inventory for the Sandhills documenting distribution and density across the landscape. \$300,000

#### Nebraska Community Foundation. **Rainwater Basin Joint Venture** Grassland and Wetland Enhancement in Nebraska's Mixed Grass Prairie Region

Engage landowners in management practices to improve habitat for grassland bird and waterfowl in the Rainwater Basin. Project will improve management on 1,500 acres of grazing lands, develop grazing plans as well as incorporate grazing as a management practice to promote desired habitat for waterfowl and grassland nesting birds on 750 acres of protected ranch lands.

\$300,000

#### Pheasants Forever

#### Grassland Conservation in the Sandhills of Nebraska

Accelerate working lands programs that assist ranchers and landowners in managing their land for livestock and wildlife. Project will work with private landowners to control invasive eastern red cedar and provide technical assistance to seed cropland back to grass to restore and enhance 80.000 acres of Sandhills grasslands.

\$211,153

#### **Pheasants Forever**

#### Support for Nebraska Sandhills Conservation

Build capacity in the Nebraska Sandhills to address the spread of invasive cedar and grassland conversion to cropland in an area critical to numerous species in decline. Project will improve 30,000 acres by working one-on-one with private landowners to restore intact grasslands by mechanically removing invasive tree species, promoting and demonstrating prescribed fire, writing prescribed grazing plans and reseeding converted areas back to native grasslands.

#### World Wildlife Fund

#### Expanding the Spatial and Temporal Scale of the Plowprint Analytical Tool (multiple states, Canada and Mexico)

Update and expand geospatial data analysis, called the Plowprint, to evaluate landscape change metrics for the Northern Great Plains ecoregion. Project analysis will expand the previous versions by including northern Mexico, extending the analysis backward in time to capture historical change and using the newest and best available data to track rates of agricultural conversion, identify risk factors for remaining intact habitat and target conservation work.

\$20,000

#### **NEVADA**

#### **CDP North America**

#### Scaling Green Infrastructure Investments in Cities (multiple states)

Build capacity of communities in 18 cities across the United States to help them implement sustainable infrastructure for stormwater management, urban wildlife habitats and tree canopy improvement. Project will perform targeted outreach to cities to increase knowledge of sustainable infrastructure financing as well as develop cities' use of online tools to document green infrastructure and habitat benefits. \$200,000

#### **Great Basin Land and Water**

#### Acquisition and Conservation Activities to Benefit Pyramid Lake and Summit Lake (NV)

Facilitate land and water acquisition and conservation activities to benefit two natural desert terminal lakes in Nevada: Pyramid Lake in Washoe County and Summit Lake in Humboldt County. Project will facilitate the acquisition of water rights and related property interests from willing sellers within, contiguous to and/or upstream of the Pyramid Lake Paiute Indian Reservation. which surrounds Pyramid Lake; and advance conservation activities and the acquisition of real property, including fractionated interests in Indian allotments and water rights, in cooperation with willing sellers and willing participants located within, contiguous to, or nearby the Summit Lake Paiute Indian Reservation and the Summit Lake watershed.

\$20,000,000

#### **Humboldt Watershed Cooperative Weed Management Area Humboldt Watershed Invasive Plant** Management Project (NV)

Work in partnership with several agencies within the Humboldt River Watershed to treat weeds and restore treated areas to functioning vegetative communities by creating more suitable wildlife habitat. Project will prevent or hinder the spread of noxious weeds through early detection and removal.

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\$90,000

#### **National Audubon Society**

#### Advancing the SageWest Communications Network across the Sagebrush Ecosystem (multiple states)

Elevate individual conservation efforts and create a larger dialogue about the value and need for sagebrush conservation. Project will engage in priority work groups, develop guidance documents, and organize partner meetings across the ecosystem. \$34,200

#### **Pheasants Forever**

#### Expanding Conservation of Working Lands in the Sagebrush Ecosystem (multiple states)

Maintain and expand technical assistance capacity in key greater sage grouse focal areas to strengthen working ranch lands management to improve greater sage grouse populations. Project will improve grazing practices on 250,000 acres to benefit greater sage grouse through technical assistance provided by 14 Strategic Watershed Action Teams members

\$1,688,795

# TERRITORIES U.S. AND STATES

#### Trout Unlimited

Lahontan Cutthroat Trout (CA, NV, OR)

Execute strategies identified in the Lahontan Cutthroat Trout Business Plan by deploying a range-wide field crew to assist in recovery actions and applying a population viability model to design effective and cost-efficient sampling protocols for partners. \$242,463

#### Walker Basin Conservancy

Water Acquisitions Grant No. 1:

Walker Basin Restoration Program (NV)

Purchase approximately 6,600 acre-feet of surface water located in the Walker River Basin, Nevada, for the primary purpose of restoring Walker Lake. These acquisitions would achieve approximately 9.8 percent of the overall goal to restore the lake to a 12,000 total dissolved solids level. \$19,800,000

#### Western Association of Fish and Wildlife Agencies

Monarch Butterfly Conservation in the

Western United States (multiple states) Develop a regional strategy and supporting plans to increase capacity and coordination among monarch butterfly conservation partners west of the Rocky Mountains. Project will develop and track implementation efforts identified in the Western Monarch Population Conservation Strategy, establish the Western Monarch and Pollinator Initiative Council, and transition milkweed data into the Crucial

\$120,000

#### **NEW HAMPSHIRE**

Habitat Assessment Tool

#### **American Rivers**

Final Designs for Fish Barrier Modifications

on the Upper Connecticut River (NH, VT) Complete final engineering designs and permitting for three fish barrier modifications on cold-water tributaries of the Upper Connecticut River in New Hampshire and Vermont. Project will set the stage for implementation that restores natural river processes, reconnects more than 45 miles of historic habitat for eastern brook trout \$114,990

#### Cape Cod Commercial Fishermen's Alliance Expanding Electronic Monitoring in the New England Groundfish Fisheries (ME, MA, NH, RI)

Expand participation in electronic monitoring from 20 to 30 vessels in the New England groundfish fishery to improve accountability through video monitoring and reduce bycatch. Project will update technology, plan for industry cost sharing and strengthen partnerships with fishermen, the National Marine Fisheries Service and scientists resulting in improved long-term fisheries management.

\$541,109

#### **Connecticut River Watershed Council**

A Watershed Monitoring Strategy to Support the Long Island Sound Nitrogen Strategy (MA, NH, VT)

Create a watershed-scale monitoring strategy to add nutrient and other water quality data in the Connecticut and Housatonic River watersheds of Massachusetts. New Hampshire and Vermont. Project will add to the current effort to implement the Long Island Sound Nitrogen Reduction Strategy for the large river systems.

\$39,361

#### **Connecticut River Watershed Council** Restoring Riparian and Instream Habitat for Trout in the Connecticut River Watershed (MA, NH, VT)

Provide targeted outreach and technical assistance to landowners to implement riparian, instream habitat and water quality projects in priority eastern brook trout sub-watersheds of the Middle and Upper Connecticut River. Project will plant riparian buffers on 6 acres to reduce stream temperatures and increase wildlife habitat as well as create 3 miles of restored instream habitat through large wood and log jam additions that increase structural complexity. \$199,672

#### **IC Independent Consulting**

Implementing and Improving Electronic Monitoring in New England Fisheries (CT, ME, MA, NH, RI)

Review and synthesize electronic monitoring and electronic reporting technologies, and data requirements to better monitor catch, bycatch, discards and interactions with endangered, threatened and protected species within the New England groundfish fisheries. Project will develop a plan for implementing data modernization that will satisfy scientific, enforcement and sustainable management needs. \$79,940

#### **New Hampshire Fish and Game Department** Conservation of Turtle Habitat (NH)

Protect, enhance and increase habitat for Blanding's, spotted and wood turtles in New Hampshire by providing expert technical assistance to private landowners within high-priority turtle areas. Project will provide continued and enhanced technical assistance that will help complete strategic conservation and recovery projects for these species. \$150,100

#### **Southeast Land Trust of New Hampshire** Partnership for Blanding's, Wood and Spotted Turtle Habitat Conservation (NH)

Conserve 875 acres of habitat and restore 10 acres of habitat for Blanding's, spotted and wood turtle in New Hampshire. Project will reach out to 55 landowners to provide training or technical assistance on land conservation and restoration options for their land. \$141.737

#### The Conservation Fund

Eastern Brook Trout Habitat Restoration (NH) Restore habitat for eastern brook trout on 5,435 acres of Beebe River headwaters in central New Hampshire by removing obstructions to fish passage and mitigating impacts of sedimentation and erosion from roads. Project will install bridges on five tributaries as well as relocate and reconstruct more than 3.5 miles of road. reconnecting 6 miles of spawning habitat.

#### U.S. Department of Agriculture, U.S. Forest Service

Expanding the National Aquatic eDNAtlas and Data Exchange for Freshwater Species (multiple states)

Expand the aquatic environmental DNA Atlas database, website, digital tools and sample repository to a national scale. Project will expand the current coverage of the database of information important to the conservation and management of aquatic species to include waterways in the 37 remaining states to inform strategic conservation investments for suppressing invasives and increasing native populations. \$73,018

#### **NEW JERSEY**

American Littoral Society Expanding Beach Restoration Efforts in Delaware Bay for Red Knots (NJ)

Continue beach and intertidal oyster reef restoration efforts in Delaware Bay, adding up to 5,000 cubic yards of coarse-grained sand to Cooks Beach, New Jersey, a feeder beach that supplies sand to other beaches vital to red knots and horseshoe crabs. Project will raise the elevation of the existing berms to reduce the risk of overwash from storms and create an intertidal oyster reef adjacent to the beach. \$250,000

#### Associação para Conservação das Aves do Brasil - SAVE Brasil

Building Community Support for Critical Red Knot Habitat at Lagoa do Peixe National Park, Brazil (NJ)

Build local community support for Lagoa do Peixe National Park in Brazil, a critical wintering and staging habitat for red knot and other shorebirds. Project will identify and map ecosystem services through a participatory process, sharing these values with a broader audience using a social marketing-based approach led by local students. Project will involve students in the International Shorebird Survey and build local pride in the protected area through an exchange with Delaware Bay schools.

#### **Association of New Jersey Environmental Commissioners**

Installation of Green Infrastructure in the Upper Salem Watershed (NJ)

Improve water quality in the Upper Salem Watershed focus area by improving stormwater management. Project will focus on treating stormwater by applying green infrastructure practices where stormwater has never been treated to make measurable improvements in water quality. \$130.000

#### **Burlington County Soil Conservation District** Soil Health Initiative

for the Kirkwood-Cohansey (NJ)

Increase local knowledge and participation in federal Farm Bill programs by partnering with conservation agencies and operators in the Kirkwood-Cohansey subwatershed. Project will employ outreach and education programs, demonstration projects, as well as mini grants to improve the number of working farms applying soil and water conservation practices to agricultural land in order to improve farm practice efficiency and farm infiltration for healthier soils. \$50,200

#### **Conserve Wildlife Foundation** of New Jersey

Monitoring the Delaware Bay Shorebird Stopover (NJ)

Continue work on the New Jersey Shorebird Project, a program of integrated monitoring and management projects focused in the stopover period in May, has been the center of conservation of the Delaware Bay Stopover for more than 20 years. Project will involve the trapping and tagging of shorebirds in coastal New Jersey, resulting in an increased understanding of the flyway network used by red knot and the importance of the Bay to their survival. \$150,000

#### **Cornell Cooperative Extension Association** of Suffolk County

Bycatch Avoidance Network Expansion for Georges Bank Haddock and Northern Red Hake (MA, NJ, NY, RI)

Expand the Bycatch Avoidance Network to identify and report real-time bycatch of butterfish, river herring, windowpane, yellowtail flounder, haddock and northern red hake. Project will reduce bycatch in Southern New England fisheries by providing active vessels with real-time spatial and temporal bycatch data. \$60,939

#### **Groundwork Elizabeth**

Great Swamp Community Partnership (NJ)

Engage 12 youth from the Green Team and another 350 from community programs, such as the City Summer program, YMCA, Boys and Girls Club, and Kean University to restore 1.5 acres of the Great Swamp Refuge in New Jersey. Project will share skills with staff and the Friends of the Great Swamp, creating a new generation of environmental leaders and engaging a host of Refuge staff and volunteers at two sites in Elizabeth River Trotters Creek site and near the Peterstown Community Center.

\$30,788

#### Manomet

#### Coastal Habitat Restoration for American Oystercatcher along Atlantic Coast (multiple states)

Coordinate the planning and implementation of conservation action for American oystercatcher along the entire U.S. Atlantic seaboard. Project will continue the coastwide coordination of the American ovstercatcher recovery initiative and compile lessons learned after a decade's worth of targeted investments and embark upon a new initiative to develop best management practices to restore wet and dry sand habitats for oystercatchers and other breeding shorebirds along the Atlantic Coast.

#### \$150,000

#### **New Jersey Audubon Society**

Creating and Enhancing Golden-Winged Warbler, Northern Bobwhite and Black Duck Habitat in New Jersey

Engage private landowners to improve habitat for golden-winged warbler, northern bobwhite and American black duck in focal areas across New Jersey. Project will improve habitat for focal species on more than 430 acres, restore 155 acres of habitat, monitor population response on 500 acres, and help sustain 100 local community jobs.

\$269,116

#### North Jersey RC&D Area

Fostering Farmer Engagement for Implementation of Agricultural Best Management Practices (NJ)

Increase implementation of agricultural best management practices in the Lower-Middle Musconetcong and Lopatcong watersheds in the New Jersey Highlands. Project will engage farmers in the region through a free soil/manure testing initiative that includes farm assessment and farmer education, a free cover crop and nutrient management consulting service, as well as providing funding to leverage conservation practice implementation.

\$171,000

#### Pheasants Forever

Strategic Restoration of Northern Bobwhite Habitat on Working Lands (multiple states) Deliver technical assistance across six states to improve land-management practices for northern bobwhite and other terrestrial wildlife. Project will include 11,940 landowner contacts, 27,800 acres under improved management practices, 720 plans with best management practices and 6.000 acres covered with federal incentives.

\$2,447,858

#### **Pinelands Preservation Alliance** Improving Shoreline Community Resilience and Beach Habitat Management (NJ)

Promote natural revegetation, sediment accretion and dune formation to protect 66 miles of back beach area from beach raking and off-road vehicles Project will allow a portion of the beach to function as habitat and begin the process of dune formation to protect communities during storms. \$199,998

#### The Nature Conservancy

Fish Passage and Habitat Restoration for Diadromous Fish in the Paulins Kill River (NJ) Restore access to 20 miles of the lower Paulins Kill River and its tributaries for American eel, sea lamprey, American shad UNITED

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and other diadromous fish. Project will improve water quality, restore floodplain and riparian habitat, and restore natural channel hydraulics and sediment transport as well as increase recreational use of the

\$100,000

#### The Nature Conservancy

Restoring Paulins Kill Floodplain Forests and Functions - III (NJ)

Restore degraded riparian buffers and stabilize eroding stream banks in the Upper Paulins Kill headwaters and Restoration Alley. Project will improve floodplain function, reconnect riparian habitat and improve water quality through new reforestation efforts in 10 acres floodplain and management of an existing 4-mile restoration corridor. \$144,606

#### **Trout Unlimited**

Expand Native Eastern Brook Trout Patches in the Upper Delaware River Basin (NJ)

Protect and restore native upper Delaware River brook trout habitat. Project will expand the number of brook trout patches from 57 to 61 and reconnect 7.5 miles of habitat throughout the watershed. \$89,815

#### U.S. Department of Agriculture, **U.S. Forest Service**

#### Expanding the National Aquatic eDNAtlas and Data Exchange for Freshwater Species (multiple states)

Expand the aquatic environmental DNA Atlas database, website, digital tools, and sample repository to a national scale. Project will expand the current coverage of the database of information important to the conservation and management of aquatic species to include waterways in the 37 remaining states to inform strategic conservation investments for suppressing invasives and increasing native populations. \$73,018

#### **NEW MEXICO**

#### **New Mexico Association** of Conservation Districts

Grazing Management Enhancements (NM) Implement brush control, installation of alternate water sources, water pipelines and fence lines in upland areas adjacent to the Pecos. Black and Delaware rivers and Red Bluff, Brushy and Salt Grass draws within Eddy County, New Mexico. Project will focus on restoration of grassland ecosystems, enhanced distribution of livestock and enhancement of water quality, quantity and rare aquatic species within these rivers.

#### New Mexico Department of Game and Fish Improving Habitat for At-Risk Mussel within the Pecos River (NM)

Construct a bypass for hypersaline waters that enter the Black River in Eddy County, New Mexico, to benefit Texas hornshell mussel and its associated host fishes. Project will increase the total available habitat to Texas hornshell by 6.7 miles, a 77 percent increase in available habitat. \$118,843

\$247,500

#### **New Mexico Department of Game and Fish** Managing Pecos Pupfish Habitat in the Pecos Watershed (NM)

Improve habitat for the remaining stronghold of the state-threatened Pecos pupfish through the creation of fish barriers that will protect the species from sheepshead minnow invasion. Project will result in improvement to more than 90 acres of Pecos pupfish habitat benefiting at least 30 percent of the core population, development of a long-term maintenance plan for the barriers, and increased coordination among managers, leading to more successful and efficient actions to protect the species.

\$63,828

#### New Mexico Department of Game and Fish William S. Huey Wildlife Management Area Habitat Enhancement (NM)

Enhance backwater stream habitat on the William S. Huey Wildlife Management Area through bank sculpting, restoration with native vegetation, improvement of water input and removal of tamarisk along the Pecos River. Project will improve habitat for Pecos pupfish, Rio Grande cooter, southwestern willow flycatcher and multiple other aquatic and riparian

\$250,000

#### **Playa Lakes Joint Venture**

#### Sustainable Water Supply for Clovis Through Community-based Playa Restoration (NM)

Partner with residents, farmers and ranchers to proactively address a declining municipal water supply by restoring part of the Ogallala Aquifer through: playa restoration and protection, reduced use of irrigation-based agriculture and better surface water management. Project will work with 120 members of the community to develop workshops to assist producers in learning how they can restore playas resulting in an estimated 700 wetland and thousands of upland acres.

#### **Rocky Mountain Youth Corps**

### South Valley Ecosystem Restoration (NM)

Recruit and hire 21 local Corps members to transform 4 acres of a vacant lot and an adjacent stormwater retention facility into a southwest riparian habitat and education facility outside Albuquerque in New Mexico. Project will engage 50 additional volunteers to construct recreation facilities, restore ecological functions, improve water quality and provide environmental education programs to the community. \$50,000

#### The Nature Conservancy

#### Greening Affordable Housing for Nature, Community Resilience and Human Well-being (AZ, CT, NM)

Create demonstration projects in three cities to address community resilience and improve green infrastructure by creating an urban forest and greenspace in Albuquerque, New Mexico; creating green stormwater infrastructure in Bridgeport, Connecticut; and depaying surfaces and planting trees in Phoenix, Arizona. Projects will plant 270 trees and reach out to 950 people to implement green infrastructure and develop supportive communities. \$250,000

#### The Nature Conservancy

#### Integrating Watershed and Urban Tree **Canopy Restoration Practices** with Workforce Development (NM)

Perform instream restoration activities along 2 acres of Tijeras Arroyo River tributaries to enhance watershed health, plant native trees in neighborhoods in Albuquerque's South Valley to alleviate heat vulnerability and drought while partnering with a local tree nursery and greenhouse to benefit the local workforce. Project will train and employ approximately 33 local youth to plant more than 200 trees in two neighborhoods.

\$200,008

#### World Wildlife Fund

#### Expanding the Spatial and Temporal Scale of the Plowprint Analytical Tool (multiple states, Canada and Mexico)

Update and expand geospatial data analysis, called the Plowprint, to evaluate landscape change metrics for the Northern Great Plains ecoregion. Project analysis will expand the previous versions by including northern Mexico, extending the analysis backward in time to capture historical change and using the newest and best available data to track rates of agricultural conversion, monitor previously converted lands, identify risk factors for remaining intact habitat and target conservation work. \$20,000

#### **NEW YORK**

#### **American Littoral Society**

#### Long Island Sound Beach Cleanup - VI (NY) Deliver beach cleanups along 191 miles of shoreline at 58 sites in the Long Island Sound watershed of New York. Project will educate volunteers about how they can prevent marine pollution in Long Island Sound.

\$10,000

#### **Bronx River Alliance**

#### Waterway and Street Trash Elimination (NY)

Bronx River Alliance will collect and analyze the sources of floatable trash on the Bronx River sharing those results with the public and public officials as well as educate and engage students in development and delivery of outreach projects to local businesses to help reduce trash. Project will reduce 2,000 pounds of trash entering Long Island Sound and reach 140 students about the impact of litter on waterways and the Sound.

\$34,712

#### Citizens Campaign Fund for the Environment

#### **Educating to Protect Marine Life and Eliminate** Single-use Plastics (NY)

Conduct comprehensive public education to reduce the impact of plastic polluting Long Island Sound beaches, bays and harbors, in Nassau and Suffolk counties, New York. Project will gather 500 pledges to reduce common throw-away plastic use and engage 200 volunteers in coastal clean-ups. \$45.000

#### Citizens Campaign Fund for the Environment

#### Septic Change-Out Education Program (NY)

Deliver a comprehensive education project to educate homeowners about the importance of upgrading their on-site septic system and to provide tools and information to allow them to more easily apply for assistance grants to fund these upgrades in the Towns of Huntington, Smithtown and Riverhead New York. Project will help homeowners switch to new innovative alternative septic systems that reduce nitrogen into Long Island Sound. \$45,000

#### Citizens Campaign Fund for the Environment

#### Sound Gardening: Why Your Grass Choice Matters (NY)

Launch an educational campaign aimed at homeowners to provide guidance about the types and correct grass seed to use on lawns in Nassau and Suffolk counties, New York. Project will provide homeowners with tools to reduce their impact on the Long Island Sound and to encourage practices to reduce nitrogen (from fertilizers) and pesticides from entering the Sound's river, streams, tributaries and embayments. \$9,996

#### **City Parks Foundation**

\$99,999

#### Planning and Coordination for Coastal Forest Habitat Management in Bronx Park (NY)

Develop a management plan for 170 acres of coastal maritime forest in the Bronx Park, Bronx, New York. Project will contribute to targeted restoration and management of coastal maritime forest in an important urban Long Island Sound watershed. \$99.810

#### **Connecticut Fund for the Environment** Phillips Mill Fish Passage Project (NY)

Connecticut Fund for the Environment will develop an engineered plan for fish passage at Phillips Mill Pond Dam on the Nissequogue River in Smithtown, New York. Project will plan for fish passage to restore native migratory fish runs from Long Island Sound to upstream spawning habitat for the first time in 300 years.

#### **Connecticut Fund for the Environment** Unified Water Study: Long Island Sound Embayment Monitoring (CT, NY)

Implement the Unified Water Study (UWS) a water quality monitoring program in two embayments; and engage five water quality monitoring groups in nine embayments providing them with technical support as participants in the UWS in Connecticut and New York. Project will engage a coordinated effort to collect data on the health of bays and harbors to provide for synthesis about water quality issues affecting Long Island Sound

\$99,991

#### **Cornell Cooperative Extension Association** Bycatch Avoidance Network Expansion for Georges Bank Haddock and Northern Red Hake (MA, NJ, NY, RI)

Expand the Bycatch Avoidance Network to identify and report real-time bycatch of butterfish, river herring, windowpane, yellowtail flounder, haddock and northern red hake. Project will reduce bycatch in Southern New England fisheries by providing active vessels with real-time spatial and temporal bycatch data.

\$60,939

#### **Cornell Cooperative Extension Association** Implementing Electronic Vessel Trip Reporting

Develop and implement a voluntary costshared electronic monitoring and reporting program to support fisheries conservation and management. Project will increase data accuracy and timeliness for New York fisherydependent data by advancing education and training for electronic vessel trip reporting using an eTrips mobile application. \$84.558

#### **Earthplace, The Nature Discovery Center** Collaboration in Embayment Monitoring (CT, NY)

Manage an equipment, supplies and technical resources loan program for up to 20 embayment groups and 200 citizen science volunteers to support the Unified Water Study for Long Island Sound embayments in Connecticut and New York. Project will result in a greater number of embayments being monitored providing important information from the first areas affected by pollution sources that impact the health of Long Island Sound. \$99,971

#### **Groundwork Hudson Valley**

#### Restoring a Critical Wetland (NY)

Restore 2.5 acres of wetland by engaging 250 volunteers Groundwork Youth Corps the U.S. Fish and Wildlife Service and partners associated with the Saw Mill River Coalition in Yonkers, New York. Project will focus on an important 6-acre wetland area along Saw Mill River, a critical spot for a wide range of fish and wildlife and other aquatic species with great potential for capturing stormwater. \$50,000

#### Group for the East End

#### Habitat Restoration Stewardship at Hallock State Park Preserve (NY)

Conduct public and partner outreach and education programs, environmental stewardship activities, remove invasive plants, and develop a habitat restoration plan to inform management of the 225-acre Hallock State Park Preserve, Riverhead, New York. \$67.542

#### **Housatonic Valley Association**

#### Collaborative Watershed Planning for the Ten Mile River (CT, NY)

Develop a watershed management plan for the Ten Mile River in eastern Dutchess County, New York, and western Litchfield County, Connecticut. Project will inform restoration and water quality activities focused on reducing nitrogen loads from the Ten Mile River to the Housatonic River and Long Island Sound.

#### Incorporated Village of Sea Cliff, New York Hempstead Harbor 2018 Water Quality Monitoring Program – X (NY)

Conduct water quality monitoring of physical, chemical and biological indicators of pollution in outer and inner Hempstead Harbor and Glen Cove Creek, Nassau County, New York. Project will inform management of Hempstead Harbor, an embayment of Long Island Sound. \$89,900

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#### Incorporated Village of Sea Cliff, New York Hempstead Harbor 2019 Water Quality Monitoring Program - XI (NY)

Conduct water quality monitoring in Hempstead Harbor, Nassau County, New York. Project will inform management of Hempstead Harbor, an embayment of Long Island Sound

\$75,000

\$64,358

#### Maritime Explorium at Port Jeff Harbor Rain Gardens at Port Jefferson Harbor: Linking Water, Wildlife and Waterways (NY)

Install native plant rain gardens in high visibility areas and provide natural landscaping guidance to community members in Port Jefferson, New York. Project will demonstrate to 800,000 visitors how rain gardens improve the water quality and biodiversity of Long Island Sound. \$43,626

#### Matinecock Court HDFC

#### Demonstrating Sewage Treatment and Water Conservation Strategies (NY)

Install a wastewater harvesting system in the town of Huntington, New York. Project will result in the annual recapture of treated sewage effluent for reuse as on-site drip irrigation, and prevent nitrogen and total suspended solids from being discharged into the Long Island Sound watershed. \$250,000

# Nassau County Soil and Water Conservation District Planting for Clean Water Communities (NY)

Assess priority areas, develop three green infrastructure sites and conduct educational workshops for residents about water quality in Long Island Sound. Project will bring visible projects to community centers, local parks, schools and businesses.

567,479

#### National Audubon Society Be a Good Egg III:

Share the Shore with Shorebirds (NY)

Provide an environmental education program "Be a Good Egg" encouraging people to share the shore with shorebirds at shorelines on Long Island, New York.

Project will engage people to reduce threats to coastal habitats and shorebirds, including piping plover, least tern and common tern.

\$36,037

#### **National Audubon Society**

Collaboration with Family Forest Owners to Improve Habitat for Target Forest Birds (NY) Improve habitat for wood thrush and cerulean warbler in the northeastern region of the Upper Delaware Watershed. Project will provide technical assistance to family forest owners and loggers to develop bird-friendly management strategies to be integrated during timber harvests as well as provide loggers financial assistance to offset any monetary losses.

### National Audubon Society

Engaging Stakeholders to Improve Priority Bird Habitats (NY, VT)

Provide technical assistance to landowners, foresters and industry to improve the mosaic of forest habitats to benefit multiple bird species, including golden-winged warbler, American woodcock, black-throated blue warbler and wood thrush. Project will restore 265 acres of young forest habitat, improve 900 acres of late successional habitat and develop a pilot program with International Paper that prioritizes procurement of wood fiber from forests being managed with bird-friendly techniques.

\$187,841

\$86,471

#### National Audubon Society Improving Forest Management in the Allegheny Highlands (NY, PA)

Improve management of private family forests in the Upper Allegheny and Sinnemahoning watersheds of New York and Pennsylvania to increase young and mature forest habitat structure to benefit cerulean warbler and golden-winged warbler populations. Project will create at least 200 acres of young forest habitat and at least 550 acres of mature forest habitat and assess 5,000 acres to prioritize future management. \$149,437

#### National Audubon Society

Sustaining Birds of the Great Lakes – II (MI, NY)

Restore critical habitat for migratory shorebirds and waterfowl across 449 acres of some of the highest priority coastal wetland complexes in the Great Lakes region. Project will leverage the resources of 10 partner organizations to implement landscape scale restoration activities, including invasive species control, native plantings and improvement of water-control capacity. \$593,476

#### **Natural Areas Conservancy**

Coastal Wetland and Forest Restoration Planning Project (NY)

Produce three restoration plans for up to 10 acres of tidal wetland and coastal forest in Hammond Cove and Harding Park, Bronx, New York. Project will develop designs, cost estimates, custom specifications and/or regulatory guidance using a community-driven model to inform habitat restoration and management of local parkland and engage the local community for feedback that will be incorporated in the final design plans in preparation for implementation. \$99,976

# New York City Department of Parks and Recreation

Expanding Environmental Stewardship in the Alley Creek Watershed (NY)

Expand the Shorekeepers program in the Alley Creek watershed to support long-term volunteer participation in tidal wetland and coastal forest restoration. Project will increase local stakeholder engagement through greater public participation in clean-up and restoration efforts, as well as train volunteers as Shorekeepers to work in wetlands.

# New York State Office of Parks, Recreation and Historic Preservation

Strategic Hemlock Preservation to Sustain Ecological Function and Protect Species of Special Concern (NY)

Protect eastern hemlocks in New York State
Parks from the invasive hemlock woolly adelgid
to preserve this unique riparian habitat and
preserve stream quality. Project will expand on
remediation actions being employed across
the East Coast and protect more than 40 acres
of riparian hemlock forests.
\$130,000

# Research Foundation for State University of New York, SUNY Maritime College

Celebration of the Long Island Sound (NY)
Host a "Celebration of the Long Island
Sound" event to educate 500 students and
residents about the Sound. Project will
include provide an array of educational
stewardship activities to the community
including water quality monitoring, shoreline
clean-up and oyster restoration.
\$7.665

# Salonga Wetland Advocates Network Long Island Sound Fresh Pond Festival (NY)

Conduct a shoreline cleanup in Fort Salonga, New York. Project will increase public awareness of and commitment to restoration and protection of the environment of Long Island Sound.

#### Sea Research Foundation

Partnering for Marine Debris and Trash Prevention, and Animal Rescue around Long Island Sound (CT, NY)

Offer education and stewardship opportunities focused on the impact of marine debris on marine species, and engage coastal and non-coastal community members in Connecticut and New York. Project will increase public awareness to reduce marine debris, trash and fishing gear from entering Long Island Sound. \$44,587

#### The Nature Conservancy

Identifying Ecologically Significant Areas for the Blue Plan – II (CT, NY)

Engage scientists, technical experts and the interested public to identify ecologically significant areas (ESAs) for the Long Island Sound Blue Plan in Connecticut and New York. Project will develop one of the foundational elements of a plan to protect important aquatic habitats of Long Island Sound. \$45,000

#### The Nature Conservancy

Producing and Implementing a Communitysupported Long Island Sound Blue Plan (CT, NY)

Finalize the Long Island Sound Blue Plan in Connecticut and New York. Project will create a community-supported plan to protect marine life in Long Island Sound. \$44,986

# **The Whaling Museum Society**Sound Effects: A Public Conservation Education Series (NY)

Deliver a year-long public education series with hands-on learning and conservation-based activities to inform people about the effects of pollution on Long Island Sound. Project will teach 350 adult and elementary school audiences about actions they can take to improve the health of the Sound. \$9,998

#### The Whaling Museum Society

SOUNDoff Event! Creating Long Island Sound Stewards–III (NY)

Host one-day public event, SOUNDoff! to educate local communities about conservation of Long Island Sound in a hands-on accessible way. Project will reach 300 visitors who will leave the event with a stronger understanding of their relationship to the Sound and with practical ways to contribute to a cleaner Sound. \$7,408

#### Town of Harrison

Bringing Environmental Stewardship to the 2019 Play2Learn Festival (NY)

Expand the annual Play2Learn Festival to to introduce children to the principles of conserving Long Island Sound. Project will offer a series of creative educational stations and provide information about local stormwater pollution issues. \$6,750

#### Town of Harrison

Sustainability Planning (NY)

Develop a drainage manual in Harrison, New York. Project will improve the current stormwater management and set the stage for implementation of low-impact development green infrastructure projects to address stormwater pollution into Long Island Sound. \$45,000

#### **NORTH CAROLINA**

# Cape Fear Resource Conservation and Development

Assessing Aquatic Connectivity in the Black River Watershed (NC)

Assess, rank and prioritize 200 culverts and barriers for removal and/or restoration in the lower Black River Basin. Project will select up to five barriers to evaluate for feasibility, and develop preliminary engineering design and construction estimates for future removal. \$130,000

#### **CDP North America**

# Scaling Green Infrastructure Investments in Cities (multiple states)

Build capacity of communities in 18 cities across the United States to help them implement sustainable infrastructure for stormwater management, urban wildlife habitats and tree canopy improvement. Project will perform targeted outreach to cities to increase knowledge of sustainable infrastructure financing as well as develop cities' use of online tools to document green infrastructure and habitat benefits. \$200,000

#### Clemson University

Identifying Habitat Requirements of the Carolina Heelsplitter to Inform Habitat Restoration and Species Recovery (NC, SC)

Identify and prioritize on-the-ground management actions to benefit the federally endangered Carolina heelsplitter freshwater mussel and its host fish, the bluehead chub, in the Lynches River watershed of the greater Pee Dee River Basin. Project will develop a novel protocol to detect the mussel and host fish from stream water via environmental DNA, apply the protocol to understand habitat requirements of each species and synthesize the information gathered to prioritize actions to improve aquatic habitat. \$175.000

#### Forest Landowners Association

Engaging Working Forest Landowners, Building Stakeholder Collaboration & Developing Solutions – II (multiple states)

Engage large family forest landowners in longleaf restoration and at-risk species conservation throughout the historic range of the longleaf pine. Project will assist landowners with the establishment and enhancement of at least 2,000 acres of longleaf pine, develop regulatory predictability tools for at-risk species endemic to the longleaf ecosystem, reducing uncertainty for landowners wishing to manage for longleaf habitat conditions on their lands, and explore market-based solutions to address the economic constraints to large-scale longleaf restoration. \$145,000

#### Manomet

#### Coastal Habitat Restoration for American Oystercatcher along Atlantic Coast (multiple states)

Coordinate the planning and implementation of conservation action for American oystercatcher along the entire U.S. Atlantic seaboard. Project will continue the coastwide coordination of the American oystercatcher recovery initiative and compile lessons learned after a decade's worth of targeted investments and embark upon a new initiative to develop best management practices to restore wet and dry sand habitats for oystercatchers and other breeding shorebirds along the Atlantic Coast.

#### \$150,000

Mecklenburg County Storm Water Services
Stevens Creek Stream Restoration Project (NC)
Restore approximately 1.9 miles of severely
degraded stream in the Goose Creek
Watershed, which has been identified
as habitat for the federally endangered
Carolina heelsplitter freshwater mussel.
Project will supplement the stream
restoration project with stabilization
structures, which also will be used to
re-establish laboratory-propagated or

#### \$120,000

# North Carolina Coastal Land Trust Blackwater Rivers Land Protection

transplanted freshwater mussels.

Purchase 3,000 acres of longleaf pine and bottomland hardwood forest habitat along the Black and Waccamaw rivers in eastern North Carolina. Project will safeguard 7.5 miles of river, provide habitat for dozens of at-risk wildlife species, create public access for hiking, hunting and boating, and secure the protection of a stand of 1,600-year-old bald cypress, the oldest known trees east of the Rocky Mountains. \$350,000

#### North Carolina Department of Agriculture and Consumer Services Improving Forest Habitat (NC)

Increase capacity for private landowner outreach to restore and enhance longleaf pine and bottomland hardwood habitats on family forest lands in southeastern North Carolina. Project will engage 300 private landowners to restore and enhance 8,250 acres of longleaf pine and bottomland hardwood habitats benefiting numerous declining and at-risk forest-dependent species, including northern bobwhite, Swainson's warbler and gopher frog. \$639,053

### North Carolina State University Prescribed Fire Initiative within the

Southeastern United States (multiple states)
Expand and accelerate the implementation
of prescribed fire to restore and

of prescribed fire to restore and enhance longleaf pine habitat and other fire-dependent forest and grassland communities within the Southeast. Project will engage 1,000 landowners and fire practitioners through technical assistance, training and outreach, including "Learn and Burn" workshops, development of prescribed burn associations and Fire Festivals.

**UNITED STATES** 

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\$130,000

#### The Nature Conservancy

Blackwater Rivers Land Protection

Purchase 2,200 acres of longleaf pine and bottomland hardwood forest habitat along the Black and Waccamaw Rivers in eastern North Carolina. Project will safeguard more than 11 miles of river, provide habitat for dozens of at-risk wildlife species, create public access for hiking, hunting and boating, and protect a stand of the oldest known trees in eastern North America. \$200,000

#### The Nature Conservancy

#### North Carolina Sandhills Longleaf Restoration Task Force – IV

Establish longleaf pine habitat and increase the capacity of land managers to enhance existing longleaf habitat quality through a seasonal burn crew and burn contractors within the Sandhills region of North Carolina, which is anchored by Fort Bragg and the Sandhills Game Lands. Project will establish 410 acres of longleaf pine and enhance an additional 30,000 acres of existing longleaf habitat with prescribed fire, benefiting the federally endangered red-cockaded woodpecker and other at-risk species.

\$259,500

# U.S. AND STATES

#### The Nature Conservancy

#### Onslow Bight Longleaf Ecosystem Restoration Project - IV (NC)

Restore and enhance at least 28,773 acres of longleaf pine habitat on priority conservation lands within the Onslow Bight landscape in eastern North Carolina. Project will establish 249 acres of longleaf pine and support a seasonal burn crew to implement prescribed fire on at least 28,000 acres of existing longleaf around Marine Corps Base Camp Leieune and other public and private lands, improving habitat for Bachman's sparrow, redcockaded woodpecker and the Carolina gopher frog. \$266,000

#### U.S. Department of Agriculture, **U.S. Forest Service**

#### Expanding the National Aquatic eDNAtlas and Data Exchange for Freshwater Species (multiple states)

Expand the aquatic environmental DNA Atlas database, website, digital tools and sample repository to a national scale. Project will expand the current coverage of the database of information important to the conservation and management of aquatic species to include waterways in the 37 remaining states to inform strategic conservation investments for suppressing invasives and increasing native populations. \$73,018

#### University of North Carolina - Wilmington Fisheries Bycatch Assessment at Sea Turtle Foraging Grounds in Colombia and Panama

Implement onboard fisheries observer programs to document the nature and frequency of sea turtle interactions with gillnet and longline fisheries off the coasts of Columbia and Panama. Project will compile information on distribution and bycatch risk for critically endangered Eastern Pacific hawksbill and leatherback turtles, engage fishermen in best practices for turtle release, and contribute to broader regional efforts to mitigate mortality from fishery interaction

\$54,957

#### Virginia Polytechnic Institute and State University

#### Improving Eastern Hellbender Habitat on Private Lands (NC, TN, VA)

Promote eastern hellbender habitat restoration and conservation on private lands in North Carolina, Tennessee and Virginia by building relationships with landowners and communities in the target watersheds identified Project will improve riparian area condition and overall water quality within the project waterways through conservation actions focused on reducing nonpoint source pollution and sedimentation.

\$647,995

#### **NORTH DAKOTA**

#### **Ducks Unlimited**

Protection of Habitat for Grassland Birds (ND) Deliver working lands options that conserve grassland and wetland habitats through incentivized leases, native grass planting, grazing infrastructure enhancements, prescribed fire and wetland restoration. Project will provide flexible and voluntary programs that benefit grassland species while diversifying a producers' operation, and better engaging the agricultural sector in implementing best management practices that promote sustainability. \$214,966

#### **National Audubon Society**

#### Advancing the SageWest Communications Network across the Sagebrush Ecosystem (multiple states)

Elevate individual conservation efforts and create a larger dialogue about the value and need for sagebrush conservation. Project will engage in priority work groups, develop guidance documents, and organize partner meetings across the ecosystem. \$34,200

#### **Rocky Mountain Bird Observatory Effectiveness Monitoring for Declining** Grassland Bird Species within the Northern

Great Plains (MT, ND, SD, WY)

Collect data on bird abundance and occupancy of priority grassland bird species to evaluate and quantify impacts of conservation investments. Project will focus on three strategies for conservation projects: conservation easements, grassland restoration and grazing management projects within the NFWF Northern Great Plains region with comparisons providing an assessment of which programs are benefiting priority grassland bird species and help guide future investments. \$235,155

#### World Wildlife Fund

#### Expanding the Spatial and Temporal Scale of the Plowprint Analytical Tool (multiple states, Canada and Mexico)

Update and expand geospatial data analysis, called the Plowprint, to evaluate landscape change metrics for the Northern Great Plains ecoregion. Project analysis will expand the previous versions by including northern Mexico, extending the analysis backward in time to capture historical change and using the newest and best available data to track rates of agricultural conversion, monitor previously converted lands, identify risk factors for remaining intact habitat and target conservation work.

\$20,000

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#### American Farmland Trust

#### Partnering with Non-Operating Landowners and Farmers to Improve Water Quality (OH) Utilize an agricultural stewardship professional to directly engage nonoperating landowners and farmers who rent land in watersheds in Ohio to build the demand for conservation improvements on rented lands. Project will develop conservation plans, utilize tools to help landowners and farmers communicate about conservation practices, and participate in professional meetings and trainings with USDA Natural Resources Conservation Sources, conservation districts

#### \$183,213

#### **CDP North America**

and other professionals.

#### Scaling Green Infrastructure Investments in Cities (multiple states)

Build capacity of communities in 18 cities across the United States to help them implement sustainable infrastructure for stormwater management, urban wildlife habitats and tree canopy improvement. Project will perform targeted outreach to cities to increase knowledge of sustainable infrastructure financing as well as develop cities' use of online tools to document green infrastructure and habitat benefits. \$200,000

#### **Cleveland Museum of Natural History** Restoring Wetland Habitat in the West Basin of Mentor Marsh (OH)

Improve habitat complexity and resilience through native plant reseeding, invasive control and habitat creation in Mentor Marsh. Project will restore 42 acres of wetland habitat for priority shorebirds and waterfowl, improve hydrology to 50 acres of shallow emergent marsh, restore 10 shallow pools and install a fish shelf to improve fish spawning habitat.

#### **Conservancy for Cuyahoga Valley National Park**

\$120,779

#### Reducing Stormwater Runoff and Improving Riparian Habitat in the Cuyahoga River Watershed (OH)

Install a green stormwater management system to reduce erosion and stormwater runoff and improve habitat with invasive species management. Project will reduce stormwater runoff by 121,000 gallons annually and restore 29 acres of habitat. \$266,272

### **Groundwork Cincinnati/Mill Creek**

#### Community-Driven Restoration in Cincinnati's Mill Creek (IN. OH)

Restore 28 acres of wetland, riparian and prairie habitat to benefit wildlife, including the state-threatened black-crowned night heron, and people in Cincinnati's Mill Creek watershed and Muscatatuck National Wildlife Refuge. This project will engage 921 participants, including 800 middle and high school students, 40 teachers, 21 youth employees and 60 adult volunteers from local neighborhoods and diverse partner organizations.

#### \$37,964

#### **Ohio Department of Natural Resources** Enhancing Forest Habitat through Oak-Hickory Restoration in Appalachian Ohio

Enhance habitat for a diversity of forest wildlife in Appalachia Ohio by restoring oak-hickory forests. Project will complement and expand the impact of an ongoing collaborative oak management project by focusing technical assistance at the landscape scale, using a new inter-agency business model with key state and federal partners. \$50,000

#### **Pheasants Forever**

#### Strategic Restoration of Northern Bobwhite Habitat on Working Lands (multiple states)

Deliver technical assistance across six states to improve land-management practices for northern bobwhite and other terrestrial wildlife. Project will include 11,940 landowner contacts, 27,800 acres under improved management practices, 720 plans with best management practices and 6,000 acres covered with federal program incentives. \$2,447,858

#### **Pollinator Partnership**

#### Project Wingspan: Enhancing Landscapes for At-risk Pollinators (multiple states)

Develop a regional seed collection and native plant materials development program in the Midwest to support monarch butterflies and rusty patched bumble bees. Project will improve 10,000 acres of pollinator habitat, collect 25 pounds of milkweed seed, and propagate 10,000 seedlings. \$149.000

#### Wildlife Management Institute

#### Developing a Landowner Outreach and Communications Strategy in the Greenbrier Watershed (OH, PA, WV)

Develop a detailed outreach strategy that targets landowners in the Greenbrier watershed of eastern West Virginia to create a mixed mosaic of forest habitat that supports species of greatest conservation need. Project will encourage landowners to improve forest management practices in this key watershed identified by both the American Forest Foundation and the Appalachian Mountain Joint Venture. \$99,941

#### U.S. Department of Agriculture, U.S. Forest Service

#### Expanding the National Aquatic eDNAtlas and Data Exchange for Freshwater Species (multiple states)

Expand the aquatic environmental DNA Atlas database, website, digital tools and sample repository to a national scale. Project will expand the current coverage of the database of information important to the conservation and management of aguatic species to include waterways in the 37 remaining states to inform strategic conservation investments for suppressing invasives and increasing native populations. \$73,018

#### OKLAHOMA

#### **American Bird Conservancy** Priority Bird Habitat Conservation in the West Gulf Coastal Plain/Ouachitas Region (AR, LA, OK, TX)

Facilitate the establishment, development, maintenance and success of Conservation Delivery Networks in the West Gulf Coastal Plain/Ouachitas geography. Project will focus on building connections and relationships among partner delivery staff across the fourstate region covering Arkansas, Louisiana, Oklahoma and Texas to restore 277 acres of bottomland hardwood forests and improve 92 acres of existing bottomland hardwoods. \$263,221

#### **Audubon International**

#### Monarchs in the Rough: Pollinator Habitat on Golf Courses (multiple states)

Establish pollinator habitat at 500 golf courses in a 10-state area to support pollinators such as the monarch butterfly. Project will provide technical assistance and native, regionally appropriate seed while raising awareness about pollinators through educational signage and demonstrating how to manage commercial properties \$150,000

#### North Carolina State University Prescribed Fire Initiative within the

Southeastern United States (multiple states) Expand and accelerate the implementation of prescribed fire to restore and enhance longleaf pine habitat AND other fire-dependent forest and grassland communities within the southeast. Project will engage 1,000 landowners and fire practitioners through technical assistance, training and outreach, including "Learn and Burn" workshops, development of prescribed burn associations and fire festivals, to increase the use of prescribed

\$130,000

#### **Pheasants Forever**

#### Improve Private Land Grasslands (TX)

Provide technical assistance to private landowners in Texas to improve grassland habitat for priority species by engaging landowners in voluntary practices known to improve habitat for grassland birds. Project will develop detailed conservation plans guiding on the ground implementation practices on 49,500 acres. \$210,000

#### Team Up to Clean Up

#### Eufaula Lake Wetlands Restoration (OK)

Create 4 acres of wetland habitat to mitigate pollution from stormwater runoff and flooding from the city of Eufaula, Oklahoma. Project will improve water quality in Lake Eufaula and create habitat for plovers, avocets, sandpipers, herons, rails and waterfowl and engage 56 volunteers to build an interpretive area. \$50,000

#### The Learning Center, Euchee Butterfly Farm Tribal Alliance for Pollinators (OK)

Build capacity for Native American tribes in Oklahoma to support pollinator habitat restoration. Project will coordinate between tribal nations and other partners, provide technical support, host training workshops, harvest seeds from milkweed and nectar plants, and manage a website and seed bank. \$93.080

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#### World Wildlife Fund

#### Expanding the Spatial and Temporal Scale of the Plowprint Analytical Tool (multiple states, Canada and Mexico)

Update and expand geospatial data analysis, called the Plowprint, to evaluate landscape change metrics for the Northern Great Plains ecoregion. Project analysis will expand the previous versions by including northern Mexico, extending the analysis backward in time to capture historical change and using the best available data to track rates of agricultural conversion and target conservation work. \$20,000

#### **OREGON**

#### **Channel Islands Cetacean Research Unit** Sea Turtle Stranding Response along the West Coast of the United States (CA, OR, WA and Canada)

Build capacity for the West Coast Marine Mammal Stranding Network to respond to five species of threatened and endangered sea turtles: Western Pacific leatherback turtle, Eastern Pacific green turtle, North Pacific loggerhead, Pacific olive ridley and Eastern Pacific hawksbill. Project will increase response efforts for live and dead stranded sea turtles through assessment of existing capacity, standardization of data and protocols, distribution of supplies and network-wide training sessions. \$50,000

Elevate individual conservation efforts and

**Oregon Water Resources Department** 

the Endangered Species Act. \$210,565

\$126,760

#### **Confluence Environmental Center** Lower Willamette Stewardship (OR)

restoration to support salmonids.

Deploy nine AmeriCorps members at seven local resource management organizations to restore 14.5 acres of riparian habitat to improve water quality and watershed health throughout the Lower Willamette basin in Oregon. Project will engage 1,135 volunteers to plant 16,400 native trees and shrubs and remove 14.5 acres of invasive vegetation. \$29,702

#### **Deschutes River Conservancy** Stream Flow Restoration in the Deschutes

Restore streamflow in Oregon's Deschutes Basin through water transactions. Project will improve habitat and water quality for native fish, including salmon and federally listed steelhead trout.

\$441,937

TERRITORIES

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Basin (OR)

#### **Friends of Trees** Youth Restoration and Urban Forestry

# Leadership Training (OR)

Engage 30 youth in tree planting, tree care, managing volunteers and event-planning activities using critical natural areas and street tree projects as a basis for learning in Portland, Oregon. Project will restore 5 acres and work with 1,000 volunteers to teach concepts of proper tree planting and care, managing stormwater, identifying invasive and native plants, restoring habitat, managing natural resources, enhancing tree canopy, water quality monitoring and community outreach. \$50,000

\$100,000

#### **General Klamath Tribal Administration** Upper Klamath Stream Restoration and Enhancement (OR)

Conduct stream restoration and enhancement projects on private and public lands within the Klamath Tribes historic reservation, which includes installing stream structures, fish screen and gravel placement, fence installation, planting and caging within the riparian habitat, and monitoring to assess stream condition. Project will improve habitat and water quality for the Klamath Tribes' historic salmonid fisheries, including Chinook, Coho and steelhead trout that have been extirpated.

#### **Hoopa Valley Tribe**

#### Integrated Fisheries Restoration and

Monitoring Plan for Klamath Basin (CA, OR) Assist the U.S. Fish and Wildlife Service and other Klamath Basin stakeholders in the completion of a comprehensive and prioritized Integrated Fisheries Restoration and Monitoring Plan, detailing needs throughout the Klamath River Watershed, including its major tributaries. Project will result in the publication of a final strategic plan for monitoring and restoration of Klamath River Basin native fishes. \$50,000

#### Klamath Lake Land Trust

Klamath Basin Feasibility Study to Identify Supplemental Water Storage Options (CA, OR) Conduct a feasibility study for potential water storage in the Upper Klamath basin

and the Lower Klamath National Wildlife Refuge to help inform future water management decisions. Project will assess the physical and regulatory feasibility of water-storage options to assist in the potential for instream flow augmentation with the primary purpose of potentially addressing instream needs for the federally listed aquatic species.

\$177,370

#### **Klamath Watershed Partnership** Upper Sycan Bull Trout Critical Habitat Protection (CA, OR)

Protect critical habitat for bull trout in the Upper Sycan Watershed through 3 miles of fencing and hardened water gaps for cattle. Project will limit cattle access to the streams in grazed meadows to benefit instream habitat conditions, especially with respect to spawning gravels, redds and refugia, and future streambank stabilization and shading promoting additional water quality and instream habitat improvements.

#### **National Audubon Society**

#### Advancing the SageWest Communications Network across the Sagebrush Ecosystem (multiple states)

create a larger dialogue about the value and need for sagebrush conservation. Project will engage in priority work groups, develop guidance documents, and organize partner meetings across the ecosystem. \$34,200

### Flow Restoration Program Support (OR)

Provide support for water transactions. including allocations of conserved water, instream leases, instream transfers to protect water instream, and/or projects to mitigate impacts of groundwater pumping on surface water in Northeast Oregon. Project will process applications, track water rights data and coordinate with flow restoration staff. \$15.241

### **Oregon Water Resources Department**

#### Support and Data Collection for Water Transactions (OR)

Assist other Oregon grantees on water transactions in Oregon watersheds that are tributary to the Columbia River, by processing applications for allocations of conserved water, instream leases and instream transfers, and providing for continued monitoring of water transactions on the Lostine River. Project will protect water instream, and/or support projects to mitigate impacts of groundwater pumping on surface water. \$71.213

#### **Pacific States Marine Fisheries Commission** Support for the Integrated Fisheries

Restoration and Monitoring Plan for the Klamath Basin (CA, OR)

Assist the U.S. Fish and Wildlife Service in supporting Klamath Basin stakeholders in the completion of an accurate, comprehensive and prioritized Integrated Fisheries Restoration and Monitoring Plan, which will detail needs throughout the Klamath River Watershed, including its major tributaries. Project will result in the publication of a final strategic plan for monitoring and restoration of Klamath River Basin native fishes.

#### The Freshwater Trust

\$100,000

Innovative Transactions to Restore Flow (OR) Implement voluntary, cooperative, marketbased instream flow transactions through the Columbia River basin in Oregon. Project will implement existing instream flow agreements and work collaboratively with landowners to develop new instream flow transactions in critically de-watered streams with high habitat potential to meet instream flow targets and to benefit salmonid species listed under the Endangered Species Act.

#### The Freshwater Trust

\$895,895

Innovative Transactions to Restore Flow in the Umatilla, Walla Walla and Upper Grande Ronde (OR)

Implement voluntary, cooperative and market-based instream flow transactions in targeted streams in the Umatilla, Walla Walla and Upper Grande Ronde areas within the Columbia River Basin in Oregon. Project will work collaboratively with landowners to develop new instream flow transactions to meet in stream flow targets in critically de-watered streams with high habitat potential for salmonid species listed under

#### **Trout Unlimited**

#### Channel Reconnection and Water Transfer to Restore Critical Habitat (OR)

Restore habitat, improve water quality and ensure reliable connectivity to unoccupied critical habitat for the benefit of threatened bull trout, Oregon spotted frog, endangered suckers and anadromous fish. Project will remove Threemile and Crane creeks from a series of irrigation ditches, return them to their historic channels, and reconnect them to adjacent critical bull trout habitat, as well as complete funding of an instream water transfer to ensure reliable flows in the restored channels. \$300,000

#### **Trout Unlimited**

Increase Habitat Complexity in the Wood River and Sprague River to Benefit Native Fish (OR) Increase habitat complexity for native fishes through the addition of large woody debris along approximately 10 miles of the Wood River and Sprague River in the Klamath Basin. Project will benefit native fish species, including redband trout, Lost River sucker, bull trout and lamprey, build upon ongoing restoration in the respective watersheds, and prepare the watersheds for recolonization and reintroduction of anadromous salmonids.

\$91,000

#### **Trout Unlimited**

Lahontan Cutthroat Trout (CA, NV, OR) Execute strategies identified in the Lahontan Cutthroat Trout Business Plan by deploying a range-wide field crew to assist in recovery actions and applying a Population Viability Model to design effective sampling protocols for agency partners.

\$242,463

#### **Trout Unlimited**

#### Reduce Entrainment of Native Fishes through Installation of Fish Screens (CA, OR)

Address fish screening needs at five irrigation diversions on the Wood River in the Klamath River Basin to prevent entrainment of native fishes, including redband trout, bull trout and lamprey. Project will build upon ongoing partnerships and restoration efforts in the Wood River and will reduce entrainment threats to socially, culturally and ecologically important native fish species. \$139,863

#### **Trout Unlimited**

Umatilla and Walla Walla Basin Water Transactions Development (OR, WA)

Implement water transactions, primarily in the Umatilla Basin. Project will include working closely with the Confederated Tribes of the Umatilla Indian Reservation to prioritize reaches for project implementation to ensure best benefits for instream flow, as well as analyzing data and pre- and postmonitoring.

\$56,924

#### **Trout Unlimited**

#### Upper Sprague Riparian Protection and **Enhancement to Improve Water Quality** for Native Fish (CA, OR)

Complete riparian protection and enhancement actions in the Upper Sprague Basin to improve water quality in the Klamath Basin through functioning riparian buffers to reduce external phosphorus loading and decrease stream temperatures. Project will include the installation of 5 miles of riparian fencing, 15 acres of riparian planting, five off-stream watering systems and riparian grazing management plans. \$140,653

#### **Western Association** of Fish and Wildlife Agencies

Monarch Butterfly Conservation in the Western United States (multiple states) Develop a regional strategy and supporting plans to increase organizational capacity and coordination among monarch butterfly conservation partners west of the Rocky Mountains. Project will develop and track implementation efforts identified in the western monarch population conservation strategy, establish the western monarch and pollinator initiative council, and transition milkweed data into the crucial habitat assessment tool.

\$120,000

#### Yurok Tribe

#### Development of an Integrated Fisheries Restoration and Monitoring Plan for the Klamath Basin - Yurok Tribe (OR)

Assist the U.S. Fish and Wildlife Service and other Klamath Basin stakeholders in the completion of an accurate, comprehensive and prioritized Integrated Fisheries Restoration and Monitoring Plan, detailing needs throughout the Klamath River Watershed, including its major tributaries. Project will result in the publication of a final strategic plan for monitoring and restoration of Klamath River Basin native fishes. \$50,000

#### PENNSYLVANIA

#### **Allegheny County Conservation District** North Park Riparian Buffer Installation (PA)

Engage 20 volunteers to restore approximately 2.6 acres of multifunctional forest buffer by planting 500 native riparian trees and shrubs along the North Fork of Pine Creek within North Park in Allegheny County, Pennsylvania. Project will support planting native species of riparian trees and shrubs to promote soil stability, filter nonpoint source pollutants, and reduce stormwater runoff and flooding. \$21,153

#### Alliance for the Chesapeake Bay Benefits of Forest Stewardship Networks

among Family Woodland Owners (PA) Demonstrate the utility of forest landowner stewardship networks for improving management practices and forest habitat structure on 1,000 acres of family-owned woodlands through development of forest management plans. Project will build two to four networks of neighboring forest properties that all have stewardship plans and actively manage for diverse stand ages and habitats, increasing populations of species of concern, including cerulean warbler, goldenwinged warbler and American woodcock.

#### American Bird Conservancy

#### **Optimizing Conservation Benefits to Black** Ducks and Water Quality in the Chesapeake Bay Watershed (multiple states)

Develop guidance to target wetland habitat restoration and enhancement across the entire Chesapeake Bay watershed. Project will be using the output of two separate models to target conservation actions that would benefit water quality and black ducks, in partnership with the U.S. Geological Survey and the Atlantic Coast and Black Duck joint ventures.

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53

\$25,634

\$74.907

#### American Bird Conservancy

Restoring Dynamic Forest Structure (PA) Develop and implement a comprehensive forest management strategy in the Poconos Cooperative Forest Management Area in northeastern Pennsylvania. Project will target long-term availability of diverse forest age classes to benefit the entire reproductive cycle of golden-winged warbler, cerulean warbler and wood thrush. \$205,492

#### **American Bird Conservancy**

#### Restoring Multiple Forest Stages to Provide Habitat for Priority Birds in Pennsylvania

Improve forest management practices on 3,200 acres of state-owned lands in the Pennsylvania Wilds of north central Pennsylvania. Project will create at least 500 acres of young forest habitat, 140 acres of middle-aged forests and 500 acres of mature forest, utilizing prescribed fire and other methods to benefit species of greatest conservation need, including golden-winged warbler, cerulean warbler and wood thrush. \$199,999

#### **American Rivers**

#### Aquatic Habitat Connectivity in Laurel Highlands and Upper Allegheny (PA)

Rectify four fish passage barriers in the Laurel Highlands and Upper Allegheny areas of Pennsylvania to benefit wild brook trout and freshwater mussels. Project will provide a total of 47.5 miles of reconnected habitat and 1 mile of reconnected river side channel. \$100,000

# TERRITORIES U.S. AND STATES

#### Audubon International

#### Monarchs in the Rough: Pollinator Habitat on Golf Courses (multiple states)

Establish pollinator habitat at 500 golf courses in a 10-state area to support pollinators such as the monarch butterfly. Project will provide technical assistance and native, regionally appropriate seed while raising awareness about pollinators through educational signage and demonstrating how to manage commercial properties sustainably.

#### \$150,000

#### **Audubon Society of Western Pennsylvania** Enhancing Critical Bird Habitat at Beechwood Farms Nature Reserve (PA)

Restore 5 acres of forest through invasive species management and planting native tree, shrub and perennials to improve breeding and migratory habitat for scarlet tanagers and wood thrushes and associated species at Beechwood Farms Nature Reserve in Fox Chapel, Pennsylvania. Project will plant 190 trees, 195 shrubs and 390 perennials while removing invasive species across 5 acres with the support of 205 volunteers through workshops and monitoring at nine locations in the reserve. \$27,144

#### **Berks Nature**

#### Installing Whole Farm Agricultural Practices in the Middle Schuylkill (PA)

Install whole-farm agricultural best management practices utilizing Natural Resources Conservation Service prioritized farmer contracts and engineered designs, as well as partner investment within the focus areas of the Middle Schuylkill Cluster. Project will follow Conservation and Nutrient Management Plans for crop production and soil health to recycle farm nutrients, resulting in the reduction of farm nutrient impacts and in improved surface, ground and drinking water quality. \$200,000

#### Brandywine Conservancy & Museum of Art Implementing a Whole-Farm Approach in the West Branch Brandywine Creek Watershed (PA)

Conduct landowner education and outreach while implementing agricultural best management practices using a whole-farm approach in the headwater reaches of the West Branch Brandywine Creek subwatershed. Project will achieve attained water quality status for currently impaired streams by reducing the impacts of agricultural run-off and supporting long-term water quality improvements to benefit habitat and drinking water supplies. \$250,000

#### **CDP North America**

#### Scaling Green Infrastructure Investments in Cities (multiple states)

Build capacity of communities in 18 cities across the United States to help them implement sustainable infrastructure for stormwater management, urban wildlife habitats and tree canopy improvement. Project will perform targeted outreach to cities to increase knowledge of sustainable infrastructure financing as well as develop cities' use of online tools to document green infrastructure and habitat benefits. \$200.000

### **Center for Watershed Protection**

#### Stream and Floodplain Restoration Crediting and Prioritization (PA)

Build the capacity of three municipal entities and the Paxton Creek Watershed and Education Association through pollutant reduction calculations to the development of criteria to prioritize 13 potential sites for stream restoration. Project will reduce credit calculation risks, analyze upland retrofits to enhance stream restoration performance and work with watershed partners to prioritize the projects. \$49,978

#### **Chesapeake Media Service**

#### Increased Outreach to Local Governments in the Chesapeake Bay Watershed through the Bay Journal (multiple states)

Create a new local government edition of the Bay Journal to provide education for municipal staff in the vast majority of the 1,800 local government jurisdictions within the Chesapeake Bay Watershed. Project will provide information that will help them understand and achieve their commitments to Chesapeake Bay restoration efforts. \$20.001

#### **Clauser Environmental**

#### Green Infrastructure Planning (PA)

Identify green infrastructure and city greening opportunities in Wilkes-Barre, create concept plans, and develop conceptual details for the various practices proposed. Project will develop conceptual designs for greening nine public spaces, a project report highlighting the green infrastructure opportunities and proposed practices, and a workshop with local elected officials, volunteers and staff. \$49,500

#### **Delaware River City Corporation**

North Delaware Riverfront Greenway (PA) Restore 45 acres of habitat, including riparian coastal plain forest, intertidal marsh and upland meadows along the Delaware River in the northeast neighborhoods of Philadelphia. Project will facilitate handson restoration, environmental education and community service opportunities for 175 volunteers and provide job-training opportunities to young adults.

\$26,824

#### **Ducks Unlimited**

#### Presque Isle Priority Wetland Restoration (PA)

Restore 800 acres of coastal wetland habitat at Presque Isle State Park through comprehensive invasive species remediation and revegetation of native plant communities. Project will build upon the success of previous habitat restoration and invasive species control efforts to restore critical habitat for numerous shorebirds, wading birds and waterfowl species. \$907,696

#### Foundation for California University of PA Creating Young Forest Habitat (PA)

Create and restore young forest habitat for early successional species such as American woodcock, Appalachian cottontail and golden-winged warbler in western Pennsylvania forestland. Project will result in restoration of more than 270 acres of high quality habitat and demonstrate techniques that will be transferable other areas \$159,500

#### **Green Valleys Association**

#### Providing Technical Assistance for Small Agricultural Operations (PA)

Provide planning, technical and financial assistance for three small community agricultural livestock operations in three Schuylkill Highlands focus area subwatersheds of the French Creek. Project will protect and improve the water quality in these streams by implementing best management practices to reduce sediment, nutrient and bacterial loading while working to preserve and maintain strong agricultural operations within the cluster. \$134,935

#### Herbert, Rowland and Grubic

#### Conewago Creek Stream Restoration (PA)

Assess a 2-mile reach of the Conewago Creek and prioritize those areas at which stream restoration projects will be most beneficial to the watershed. Project will outline project costs, anticipated pollutant load reductions and long-term responsibilities associated with each potential stream restoration project. \$49,996

#### Indiana University of Pennsylvania Research Institute

#### Improving Forest Health on Private Lands to Benefit Golden-Winged Warblers (MD, PA, VA)

Continue the efforts on private land to meet the goals of the Natural Resource Conservation Service's Working Lands for Wildlife program and increase populations of golden-winged warblers and associated forest bird species in Pennsylvania, Maryland and Virginia. Project will engage at 2,000 private landowners and enroll at least 3,000 acres in Working Lands for Wildlife by utilizing conservation planners and field foresters to implement best practices in strategic locations.

#### \$1,169,163

#### Indiana University of Pennsylvania Research Institute

#### Monitoring Population Responses of Golden-Winged Warbler and Other Focal Bird Species in Pennsylvania

Monitor population responses of goldenwinged warblers, cerulean warblers, American woodcock and associated forest bird species to habitat management actions on private and public land in selected focal geographies of western Pennsylvania. Project will quantify species occurrence and densities at sites targeted for habitat improvement and compare vegetation attributes to bird data to guide adaptive management strategies and planning for the region.

#### \$293,001

#### **Lancaster Farmland Trust** Establishing an Effective Public-Private Partnership for Water Quality (PA)

Develop a robust public-private partnership to engage a variety of community stakeholders in advancing farmland protection and stewardship to improve water quality in local waterways and in the Chesapeake Bay. Project will assess the feasibility of implementing a private land protection and stewardship program and create a plan, framework and timeline for implementation if expansion is feasible. \$49,919

#### **McKean County Conservation District Building Capacity and Awareness** for the Allegheny Plateau Invasive Plant Management Area (PA)

Establish the Allegheny Plateau Invasive Plant Management Area to build capacity among contributing partner organizations, educate the community, and develop a volunteer network to identify, monitor and map invasive plants that threaten high quality watersheds and species of concern such as brook trout. Project will result in an inventory from which to prioritize future invasive plant treatment activities across public and private lands of the Allegheny Plateau watersheds and forests. \$37,074

#### **National Audubon Society** Improving Forest Management in the Allegheny Highlands to Benefit

Key Bird Species (NY, PA)

Improve management of private family forests in the Upper Allegheny and Sinnemahoning watersheds of New York and Pennsylvania to increase young and mature forest habitat structure to benefit cerulean warbler and golden-winged warbler populations. Project will create at least 200 acres of young forest habitat and at least 550 acres of mature forest habitat, certify at least six consulting foresters to provide assistance to family forest owners and assess 5,000 acres to prioritize future management.

\$149,437

#### **National Audubon Society** Philly Wild (PA)

Implement 10 acres of habitat restoration projects and engage 3,500 community members throughout west and southwest Philadelphia, creating a corridor of green space from the John Heinz National Wildlife Refuge to East Park Reservoir in Fairmount Park in Philadelphia. Project will engage youth and young adults in two new programs to plant 3,000 native plants, remove invasive plants on 15 acres and enhance 1.5 miles of riparian buffer. \$49,275

#### **National Wildlife Federation** NWF Choose Clean Water Coalition (PA)

Bring together regional stakeholders and community members for a twoday educational experience. The 2018 conference will focus on enhancing and facilitating more cross-sector relationships across the Chesapeake Bay watershed in order to encourage more collaboration in

#### \$45,000

the restoration effort.

#### **Penns Valley Conservation Association** American Woodcock and Eastern Brook Trout

Habitat Management in Penns Creek (PA) Integrate woodcock habitat establishment with brook trout habitat improvement by establishing native riparian flora that maintain cold water temperatures and stabilize river banks and planting seedlings at woodcock singing grounds. Project will create 19 acres of woodcock habitat and enhance 1,450 feet of stream banks.

#### Pennsylvania Environmental Council Expansion of the Smart Stormwater House Call Program (PA)

Engage watershed organizations, private contractors and vendors to promote and install residential best management practices, such as rain barrels, rain gardens and stream side plantings through the Upstream Suburban Philadelphia Stream Smart Stormwater House Call Program. Project will implement various large- and small-scale restoration programs to reduce stormwater runoff and related pollutants, as well as improve habitat. \$280,000

#### Pennsylvania Environmental Council Restoring Young Forest Habitat (PA)

Restore young forest habitat with a mix of white pine and quaking aspen on legacy mine lands in Moshannon State Forest. Project will improve habitat conditions on 55 acres for early successional bird species, including golden-winged warbler and American woodcock, improve water quality, and educate the public and industry on the benefits of this technique across Appalachia. \$61.895

#### Pollinator Partnership

#### Project Wingspan: Enhancing Landscapes for At-risk Pollinators (multiple states)

Develop a regional seed collection and native plant materials development program in the Midwest to support monarch butterflies and rusty patched bumble bees. Project will improve 10,000 acres of pollinator habitat, collect 25 pounds of milkweed seed, and propagate 10,000 seedlings. \$149,000

#### **Stroud Water Research Center**

#### Improving Soil Health and Stream Health in the Red Clay and White Clay Creeks (PA)

Work with farmers currently operating the most agriculture acres at the headwaters of the Red Clay and White Clay creeks to implement best management practices for improved water quality. Project will restore approximately 20 acres of forested buffers and address gaps in coverage throughout the area, as well as evaluate various innovative soil health methods for these farmers and others in region. \$249,984

#### **Stroud Water Research Center** Installation of Agricultural Best Management Practices in the Middle Schuylkill (PA)

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Provide outreach and technical assistance to develop whole farm plans and implement best management practices. Project will implement whole farm conservation on a minimum of eight farms, provide technical assistance on all buffers installed, and promote the adoption of soil health and stream health measures through farmer-to-farmer trainings. Project will additionally engage the new poultry facilities in the area, providing an opportunity to implement conservation on existing operations.

#### \$249,619

#### The ClearWater Conservancy of Central Pennsylvania

#### A Strategic Conservation Action Plan for the Scotia Barrens Wildlife Corridor (PA)

Support early successional forest habitats for golden-winged warbler and American woodcock on privately owned forest lands in Pennsylvania. Project will partner with conservation professionals and volunteers to prioritize locations for habitat restoration activities as well as implement an outreach and education campaign to involve landowners and municipalities in a shared commitment to restore, enhance and connect important young forest habitats in the Scotia Barrens region.

\$87,053

# TERRITORIES U.S. AND STATES UNITED

#### The Pennsylvania State University Understanding the Role of a Virus in the Virulence of the Fungus that Causes White-nose Syndrome (PA)

Use Pseudogymnoascus destructans partitivirus (PdPV) and virus-free strains of Pseudogymnoascus destructans (Pd), the fungus causing white-nose syndrome (WNS), to assess the role of the virus in virulence of Pd genes and spread of WNS. Project will develop a virus-induced gene-silencing system using infectious clones of PdPV to test the role of potential virulence genes of Pd, and develop virus-free or altered virus strains as a WNS treatment strategy. \$263,168

#### Tookany/Tacony-Frankford **Watershed Partnership**

Restoration of Jenkintown Creek at Conklin Recreation Center (PA)

Remove 225 feet of concrete lining from a channelized section of Jenkintown Creek and direct flows through a constructed wetland feature to extend flow path. Project will convert 7,500 square feet of upland area from turf to meadow, and will create a walking trail to expand recreational use of the entire Conklin Recreation Center property.

\$50,000

#### U.S. Department of Agriculture, U.S. Forest Service

Expanding the National Aquatic eDNAtlas and Data Exchange for Freshwater Species (multiple states)

Expand the aquatic environmental DNA Atlas database, website, digital tools and sample repository to a national scale. Project will expand the current coverage of the database of information important to the conservation and management of aguatic species to include waterways in the 37 remaining states to inform strategic conservation investments for suppressing invasives and increasing native populations. \$73,018

#### **University of Maryland Center for Environmental Science** Incorporating Novel Watershed Indicators into the Chesapeake Bay Report Card (multiple states)

Make key improvements to the Chesapeake Bay Report Card, which has served since 2006 as the definitive source for ecosystem health status in the Bay and tidal tributaries. Project will improve the Chesapeake Bay Report Card process and product by incorporating recent lessons learned, incorporating new design elements, developing indicators for non-tidal watershed areas.

\$113,995

#### **Water Words That Work**

Closing the Deal With Rural Landowners: Training Chesapeake Bay Watershed **Conservation Practitioners** (DE, MD, PA, VA, WV)

Help conservation practitioners successfully recruit and negotiate landowners' participation in the Conservation Reserve Enhancement Program, conservation easements, agricultural best practices, manure and forest management plans and habitat restoration projects to improve water quality in the Chesapeake Bay watershed. Project will bring the expertise of the region's most successful conservation field staff into a course designed for entrylevel and mid-career field staff.

#### Western Pennsylvania Conservancy Culvert Assessment and Prioritization for Aquatic Organism Passage (PA)

\$24.978

Complete culvert assessments on at least 400 stream-road crossings at priority locations in Elk, Potter, and Blair counties, developing baseline crossing data that can be used for planning physical projects and restoring connectivity in the area. Project will provide a final report to the local conservation districts and host a workshop reviewing the importance of aquatic organism passage, explaining the process of the assessment and highlighting the results of the work. \$30.947

#### Western Pennsylvania Conservancy Restoring Aquatic and Forest Habitat on Youghiogheny River Tributaries to Benefit Multiple Species (PA)

Restore aquatic and forest habitat on the Youghiogheny River in the Laurel Highlands of Pennsylvania to benefit eastern brook trout, American woodcock, golden-winged warbler, cerulean warbler and other priority species that inhabit streams and young and mature forest habitat. Project will result in 30 acres of young forest and riparian tree plantings, removal of two barriers to fish passage, installation of 50 fish habitat structures and reduction of sediment runoff by 35 tons annually. \$199,998

#### Wildlife Management Institute Developing a Landowner Outreach and Communications Strategy in the Greenbrier

Watershed (OH, PA, WV) Develop a detailed outreach strategy that targets landowners in the Greenbrier watershed of eastern West Virginia to create a mixed mosaic of forest habitat that supports species of greatest conservation need. Project will encourage landowners to improve forest management practices in this key watershed identified by both the American Forest Foundation and the Appalachian Mountain Joint Venture. \$99.941

#### **RHODE ISLAND**

Cape Cod Commercial Fishermen's Alliance Expanding Electronic Monitoring in the New England Groundfish Fisheries (ME, MA, NH, RI) Expand participation in electronic monitoring from 20 to 30 vessels in the New England groundfish fishery to improve accountability through video monitoring and reduce bycatch. Project will update technology, plan for industry cost sharing and strengthen partnerships with fishermen. the National Marine Fisheries Service and scientists resulting in improved long-term fisheries management.

#### **Cornell Cooperative Extension** Association of Suffolk County

\$541,109

**Bycatch Avoidance Network Expansion** for Georges Bank Haddock and Northern Red Hake (MA, NJ, NY, RI)

Expand the Bycatch Avoidance Network to identify and report real-time bycatch of butterfish, river herring, windowpane, yellowtail flounder, haddock and northern red hake. Project will reduce bycatch in Southern New England fisheries by providing active vessels with real-time spatial and temporal bycatch data. \$60.939

#### **Gulf of Maine Research Institute**

Develop Machine Learning Software to Reduce Electronic Monitoring Costs in New England (MA, ME, RI)

Develop activity recognition algorithms to identify fishing activity to decrease video review time, and data storage requirements on vessels using a maximized retention bycatch monitoring approach in the New England groundfish fishery. Project will install software on vessels, document the process for incorporating automation into an electronic monitoring program, and present results in a best practices report. \$450,266

#### **IC Independent Consulting**

Implementing and Improving Electronic Monitoring in New England Fisheries (CT, ME, MA, NH, RI)

Review and synthesize electronic monitoring technologies, electronic reporting technologies, and data requirements to better monitor catch, bycatch, discards and interactions with endangered, threatened and protected species within the New England groundfish fisheries. Project will develop a plan for implementing data modernization to address gaps that will satisfy scientific, enforcement, and sustainable management needs. \$79,940

#### Manomet

#### Coastal Habitat Restoration for American **Oystercatcher along Atlantic Coast** (multiple states)

Coordinate the planning and implementation of conservation action for American oystercatcher along the entire U.S. Atlantic seaboard. Project will continue the coastwide coordination of the American oystercatcher recovery initiative and compile lessons learned after a decade's worth of targeted investments and embark upon a new initiative to develop best management practices to restore wet and dry sand habitats for oystercatchers and other breeding shorebirds along the Atlantic Coast. \$150,000

#### U.S. Department of Agriculture, U.S. Forest Service

Expanding the National Aquatic eDNAtlas and Data Exchange for Freshwater Species (multiple states)

Expand the aquatic environmental DNA Atlas database, website, digital tools, and sample repository to a national scale. Project will expand the current coverage of the database of information important to the conservation and management of aquatic species to include waterways in the 37 remaining states to inform strategic conservation investments for suppressing invasives and increasing native populations. \$73,018

#### **SOUTH CAROLINA**

#### **Chesterfield County Soil and Water Conservation District**

Sandhills Longleaf Pine Conservation – VI (SC) Restore and enhance 1,638 acres of longleaf pine on private and public lands through longleaf plantings, mid-story hardwood removal and prescribed fire. Project will expand a geospatial land-use inventory to help prioritize future restoration efforts and a native understory seed collection effort, establishing 25 acres of native understory plants that will benefit species such as northern bobwhite and Bachman's sparrow. \$299,975

#### Clemson University

Identifying Habitat Requirements of the Carolina Heelsplitter (NC, SC)

Identify and prioritize on-the-ground management actions to benefit the federally endangered Carolina heelsplitter freshwater mussel and its host fish, the bluehead chub, in the Lynches River watershed of the greater Pee Dee River Basin, Project will develop a novel protocol to detect the mussel and host fish from stream water via environmental DNA, apply the protocol to understand habitat requirements of each species and synthesize the information gathered to improve aquatic habitat.

\$175,000

#### Forest Landowners Association

Engaging Working Forest Landowners, Building Stakeholder Collaboration – II (multiple states) Engage large family forest landowners in longleaf restoration and at-risk species conservation throughout the historic range of the longleaf pine. Project will assist landowners with the establishment and enhancement of at least 2,000 acres of longleaf pine, develop regulatory predictability tools for at-risk species endemic to the longleaf ecosystem. and explore market-based solutions to address the economic constraints to large-scale longleaf restoration on private lands.

#### \$145,000

#### **Georgia Department of Natural Resources** Shorebird Assessment along Coastal Georgia and South Carolina (GA, SC)

Study and assess body conditions and stress levels of five shorebird species at remote and disturbed sites along coastal Georgia and South Carolina. Project will fill knowledge gaps, mitigate disturbance, and conduct nesting and roosting site restoration planning. An additional project will investigate migration patterns of red knots, which has important implications for forage quality and disturbance during their refueling at Delaware Bay.

#### \$75,000

Manomet

Coastal Habitat Restoration for American Oystercatcher along Atlantic Coast (multiple states)

Coordinate the planning and implementation of conservation action for American oystercatcher along the entire U.S. Atlantic seaboard. Project will continue the coastwide coordination of the American oystercatcher recovery initiative and compile lessons learned after a decade's worth of targeted investments and embark upon a new initiative to develop best management practices to restore wet and dry sand habitats for oystercatchers and other breeding shorebirds along the Atlantic Coast.

#### \$150,000

#### **National Audubon Society** Pee Dee River-Winvah Bay

Forest Restoration Partnership (SC)

Engage at least 900 family forest landowners in sustainable management of longleaf pine and bottomland hardwood habitats to benefit at-risk species in the Pee Dee River-Winyah Bay landscape. Project will develop management plans, assist with Tree Farm certification and connect landowners with resource management professionals to establish and enhance 6,000 acres of longleaf pine and bottomland hardwood forest habitat.

\$149,998

#### **North Carolina State University** Prescribed Fire Initiative within the

Southeastern United States (multiple states) Expand and accelerate the implementation of prescribed fire to restore and enhance longleaf pine habitat and other firedependent forest and grassland communities within the Southeast. Project will engage 1,000 landowners and fire practitioners through technical assistance, training and outreach, including "Learn and Burn" workshops, development of prescribed burn associations and Fire Festivals, to increase the use of prescribed fire.

#### **Pheasants Forever**

\$130,000

Habitat on Working Lands (multiple states) Deliver technical assistance across six states to improve land-management practices for northern bobwhite and other terrestrial wildlife. Project will include 11,940 landowner contacts, 27,800 acres under improved management practices, 720 plans with best management practices and 6,000 acres

Strategic Restoration of Northern Bobwhite

#### covered with federal program incentives. \$2,447,858

#### The Longleaf Alliance Longleaf Restoration in the Sewee Longleaf Conservation Cooperative Landscape (SC)

**UNITED STATES** 

AND

U.S.

TERRITORIES

Provide public and private landowner outreach and assistance for longleaf establishment, enhancement and management in cooperation with the Sewee Longleaf Conservation Cooperative in South Carolina. Project will engage landowners through two workshops and provide technical and assistance to restore and enhance 2,200 acres of longleaf habitat, prioritizing efforts on lands that will benefit at-risk and listed species, such as the redcockaded woodpecker. \$150,000

#### The Longleaf Alliance

#### Lowcountry-ACE Basin Longleaf Ecosystem Restoration Partnership – V (SC)

Establish and enhance 3,000 acres of longleaf pine habitat on public and private lands and accelerate the recovery of federally listed and at-risk species within the Lowcountry and ACE Basin in South Carolina. Project will establish longleaf pine on private lands, as well as Army Corps of Engineers property; existing longleaf habitat will be enhanced through midstory hardwood removal and prescribed burning; speciesspecific management for gopher tortoises will include hatching and fostering up to 250 eggs for release on restored habitat; and red-cockaded woodpecker recovery efforts will be bolstered by installing at least 25 artificial nest boxes.

\$300,000

# **TERRITORIES** U.S. AND STATES

#### The Longleaf Alliance

#### Red-cockaded Woodpecker Conservation Project on State and Private Lands (SC)

Translocate 20 red-cockaded woodpeckers (RCW) from the Francis Marion National Forest to state lands and private properties enrolled in the South Carolina Department of Natural Resources safe harbor program in the South Carolina coastal plain. Project will improve the demographic and genetic health of this endangered species, supporting the objectives of the U.S. Fish and Wildlife Service's RCW Recovery Plan. \$117,476

#### U.S. Department of Agriculture, U.S. Forest Service

#### Expanding the National Aquatic eDNAtlas and Data Exchange for Freshwater Species (multiple states)

Expand the aquatic environmental DNA Atlas database, website, digital tools and sample repository to a national scale. Project will expand the current coverage of the database of information important to the conservation and management of aquatic species to include waterways in the 37 remaining states to inform strategic conservation investments for suppressing invasives and increasing native populations. \$73,018

#### **SOUTH DAKOTA**

#### **Ducks Unlimited**

#### Improving Soil Health on Agricultural Lands to Benefit Grassland Bird Habitat in the Prairie Pothole Region (SD)

Help landowners implement and monitor soil health improvement practices on agricultural land using cover crops and other best management practices to enhance waterfowl and grassland bird habitat in the Prairie Pothole Region of South Dakota. Project will engage approximately 25 producers to permanently adopt soil health farming practices benefiting approximately 25,000 acres of agricultural lands in high priority landscapes for waterfowl and grassland birds.

\$133,970

#### **Ducks Unlimited**

#### Promoting Soil Health on Working Farms in Eastern South Dakota

Promote soil health practices through a variety of educational opportunities and soil health monitoring on working farms in the Prairie Pothole Region of eastern South Dakota, Project will work directly with 50 producers to design and implement soil health monitoring systems to improve soil health on 5,140 acres of cropland and 1,920 acres of rangeland.

\$268,609

#### **Lower Brule Sioux Tribe**

#### Tribal Youth Conservation Work Crew (SD)

Create a Tribal Youth Conservation Work Crew that will perform tasks on tribal and public lands that benefit focal wildlife species. Project will improve pronghorn movement and reduce wildlife hazards, monitor specific species of grassland birds, improve grassland bird habitat and mitigate impacts of sylvatic plague.

\$36.787

#### **National Audubon Society**

#### Advancing the SageWest Communications Network across the Sagebrush Ecosystem (multiple states)

Elevate individual conservation efforts and create a larger dialogue about the value and need for sagebrush conservation. Project will engage in priority work groups, develop guidance documents, and organize partner meetings across the ecosystem. \$34,200

#### **National Audubon Society**

#### Support of Conservation Ranching Program (NE. SD)

Support the market-based Conservation Ranching Program, which focuses on implementing bird-friendly land management practices through technical assistance and market-based connection to landowners. Project will grow the program's impact by expanding into the state of Nebraska and strengthen impact in western South Dakota by providing professional technical assistance to enrolled ranchers. \$198,928

#### **Pheasants Forever**

#### Expanding Conservation of Working Lands in the Sagebrush Ecosystem (multiple states)

Maintain and expand technical assistance capacity in key greater sage grouse focal areas to strengthen working ranch lands management to improve greater sage grouse populations. Project will improve grazing practices on 250,000 acres to benefit greater sage grouse through technical assistance provided by 14 Strategic Watershed Action Teams members.

\$1.688.795

#### **Pheasants Forever**

#### Restoration of Habitat and Productivity on Saline Impacted Soils in South Dakota

Address loss of agricultural production due to saline and sodic soils that is exacerbated by two-crop rotations in South Dakota. Project will engage with 150 landowners to enlist 40 participants and enroll 750 acres for highintensity treatments on select targeted areas. These areas will be used for demonstration field days to develop broader producer interest in how this practice improves soil health, productivity and wildlife habitat. \$223,197

#### **Pheasants Forever**

#### Using Decision-Support Tools to Strategically Support Grassland Bird Conservation (SD)

Deploy a new generation of decisionsupport tools for grassland bird conservation to strategically implement grazing management systems on 10,000 acres of priority grassland throughout western South Dakota. Project will identify grasslands with the highest risk of conversion, including tracts enrolled in the Conservation Reserve Program that are nearing contract expiration and encourage stewardship and enhancement. \$399,809

#### Prairie Wildlife Research

#### Evaluation of Sylvatic Plague Mitigation Effectiveness on Black-footed Ferret Populations (SD)

Evaluate the effectiveness of two Sylvatic Plague mitigation tools on black-footed ferret survival and recruitment in three South Dakota populations. Project will build upon current black-footed ferret recovery efforts by monitoring treated ferret colonies to determine if the treatments are providing adequate protection, and the project team will provide direct vaccinations as needed.

\$124,895

#### **Rocky Mountain Bird Observatory**

#### Effectiveness Monitoring for Declining Grassland Bird Species within the Northern Great Plains (MT, ND, SD, WY)

Collect data on bird abundance and occupancy of priority grassland bird species to evaluate and quantify impacts of conservation investments. Project will focus on three strategies for conservation projects: conservation easements, grassland restoration and grazing management projects within the NFWF Northern Great Plains region with comparisons providing an assessment of which programs are benefiting priority grassland bird species and help guide future investments.

\$235,155

#### South Dakota Soil Health Coalition

#### Improving Soil Health in Eastern South Dakota

Improve soil health, water quality and wildlife habitat, and improve the economic and environmental performance of working lands in eastern South Dakota. Project will provide follow-up to producers regarding continued conservation practices and will develop a website tool to assist producers in locating available grazing lands and improving management on 5,000 acres. \$155,560

#### **World Wildlife Fund**

#### Advancing Black-Footed Ferret Recovery through Innovative Aerial and Ground-Based Delivery of Sylvatic Plague Vaccine Baits to Prairie Dogs (MT, SD)

Improve the accuracy and speed of existing unmanned aircraft system (UAS) and allterrain vehicle (ATV) bait delivery prototypes and build additional models that can be used to protect prairie dogs from sylvatic plague at black-footed ferret reintroduction sites in the Northern Great Plains. Project will advance recovery of the black-footed ferret through efficient, operational UAS and ATV delivery of sylvatic plague vaccine baits to prairie dogs. \$75,000

#### World Wildlife Fund

#### **Building Capacity in Northwest South Dakota** to Increase Grassland Bird Conservation with Ranchers

Engage ranchers in northwestern South Dakota to enhance nesting grasslanddependent bird habitat. Project will increase enrollment on ranch lands to better maintain habitats for grassland bird species to help sustain ranching and to provide outreach on opportunities related to voluntary monitoring and management practices for different species. \$60,000

#### World Wildlife Fund

#### Expanding the Spatial and Temporal Scale of the Plowprint Analytical Tool (multiple states, Canada and Mexico)

Update and expand geospatial data analysis, called the Plowprint, to evaluate landscape change metrics for the Northern Great Plains ecoregion. Project analysis will expand the previous versions by including northern Mexico, extending the analysis backward in time to capture historical change and using the newest and best available data to track rates of agricultural conversion, monitor previously converted lands, identify risk factors for remaining intact habitat and target conservation work. \$20,000

#### **TENNESSEE**

#### **CDP North America**

#### Scaling Green Infrastructure Investments in Cities (multiple states)

Build capacity of communities in 18 cities across the United States to help them implement sustainable infrastructure for stormwater management, urban wildlife habitats and tree canopy improvement. Project will perform targeted outreach to cities to increase knowledge of sustainable infrastructure financing as well as develop cities' use of online tools to document green infrastructure and habitat benefits.

\$200.000

### and Development Council Conserving Fish and Mussels

in the Conasauga River Watershed (GA, TN) Implement priority conservation actions to reduce nutrients, sediments, and other pollutants in runoff. Project will improve Conasauga River water quality in support of published recovery plans for 10 of the listed fish and mussel species in the basin. \$268.113

**Limestone Valley Resource Conservation** 

#### **Lincoln County Soil Conservation District** Elk and Duck River Watershed Forest Initiative (TN)

Establish 300 acres of shortleaf pine, develop forest management plans for 6,000 acres of family forestland and restore 450 acres of forested riparian buffers on degraded streams within priority subwatersheds of Tennessee's Elk and Duck River watersheds. Project will develop transferable tools to identify priority conservation sites, increase landowner awareness on the benefits of sustainable forest management and riparian buffers, and improve water quality and habitat for northern bobwhite, prairie warbler, amphibians and aquatic species.

#### North Carolina State University Prescribed Fire Initiative within the

Southeastern United States (multiple states) Expand and accelerate the implementation of prescribed fire to restore and enhance longleaf pine habitat and other fire-dependent forest and grassland communities within the southeast. Project will engage 1,000 landowners and fire practitioners through technical assistance, training and outreach, including "Learn and Burn" workshops, development of prescribed burn associations and fire festivals, to increase the use of prescribed

\$130,000

\$215,000

#### The Conservation Fund

#### Skinner Mountain Forest Shortleaf Pine Restoration and Conservation (TN) Restore and enhance shortleaf pine

ecosystems on the Skinner Mountain Forest Property located in Fentress and Overton counties, Tennessee. Project will establish 123 acres of shortleaf pine, enhance an additional 159 acres of existing shortleaf-hardwood forest through thinning and prescribed burning, and permanently protect 11,734 acres with a working forest conservation easement \$100,000

#### The Nature Conservancy

#### Accelerating Restoration of Fire-Adapted Habitats on the Cumberland Plateau (TN)

Map fire adapted ecological systems, conduct a consensus-based stakeholder process to prioritize sites for prescribed burns and implement prescribed burning in three high priority locations within the Cumberland Plateau and Mountains in Tennessee. Project will improve forest habitat on 2,000 acres with prescribed fire, drive habitat restoration management to the highest priority locations and maximize the future investments of all land managers in the region. \$149,996

#### The Nature Conservancy

#### Old Shoal Creek Derelict Dam Removal (TN)

Restore fish passage and water quality in Shoal Creek by removing Old Shoal Creek Dam. Project will re-connect almost 108 miles of Shoal Creek and its tributaries and expand habitat for fish species of greatest conservation need.

\$70,768

#### U.S. Department of Agriculture, **U.S. Forest Service**

#### Expanding the National Aquatic eDNAtlas and Data Exchange for Freshwater Species (multiple states)

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Expand the aquatic environmental DNA Atlas database, website, digital tools, and sample repository to a national scale. Project will expand the current coverage of the database of information important to the conservation and management of aquatic species to include waterways in the 37 remaining states to inform strategic conservation investments for suppressing invasives and increasing native populations. \$73,018

#### Virginia Polytechnic Institute and State University

#### Improving Eastern Hellbender Habitat on Private Lands (NC, TN, VA)

Promote eastern hellbender habitat restoration and conservation on private lands in North Carolina, Tennessee and Virginia by building relationships with landowners and communities in the target watersheds identified Project will improve riparian area condition and overall water quality within the project waterways through conservation actions focused on reducing nonpoint source pollution and sedimentation. \$647,995

#### **Wolf River Conservancy**

#### Wolf River Greenway Restoration (TN)

Remove 50 acres of invasives, plant 1.500 trees and clean up trash and debris from key properties along the Wolf River in Memphis, Tennessee. Project will engage 800 volunteers to protect and restore watershed features and hydrological functions along the urban sections of the Wolf River.

\$38,924

#### **TEXAS**

#### American Bird Conservancy

Priority Bird Habitat Conservation in the West Gulf Coastal Plain/Ouachitas Region (AR, LA, OK, TX)

Facilitate the establishment, development, maintenance and success of Conservation Delivery Networks in the West Gulf Coastal Plain/Ouachitas geography. Project will focus on building connections and relationships among partner delivery staff across the fourstate region covering Arkansas, Louisiana, Oklahoma and Texas to restore 277 acres of bottomland hardwood forests and improve 92 acres of existing bottomland hardwoods. *\$263,221* 

#### Audubon International

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Monarchs in the Rough: Pollinator Habitat on Golf Courses (multiple states)

Establish pollinator habitat at 500 golf courses in a 10-state area to support pollinators such as the monarch butterfly. Project will provide technical assistance and native, regionally appropriate seed while raising awareness about pollinators through educational signage and demonstrating how to manage commercial properties sustainably. \$150,000

#### Borderlands Research Institute, Sul Ross State University Marfa and Marathon Grassland Enhancement (TX)

Conduct necessary brush management activities in the Marfa and Marathon grasslands utilizing herbicide treatments to improve grassland health as well as pronghorn and grassland bird habitat. Project will treat 6,000 acres of grassland using a landowner cost-share program, monitoring pronghorn and grassland bird responses to the treatment and resulting in the creation of region-specific science-driven management recommendations. \$250,000

#### **Chicago Zoological Society**

\$60,000

Enhancing the Gulf of Mexico Dolphin Identification System (AL, FL, LA, MS, TX) Improve the functionality of the Gulf of Mexico Dolphin Identification System, a collaborative database of bottlenose dolphin photographic identification from researchers around the Gulf. Project will expand the existing tool for protection and restoration of bottlenose dolphins, allowing researchers to search online for their individual dolphins within the catalogs of other collaborating researchers, to identify long-range movements and determine the origins of stranded dolphins.

#### Forest Landowners Association

Engaging Working Forest Landowners, Building Stakeholder Collaboration & Developing Solutions – II (multiple states)

Engage large family forest landowners in longleaf restoration and at-risk species conservation throughout the historic range of the longleaf pine. Project will assist landowners with the establishment and enhancement of at least 2,000 acres of longleaf pine, develop regulatory predictability tools for at-risk species endemic to the longleaf ecosystem, reducing uncertainty for landowners wishing to manage for longleaf habitat conditions on their lands, and explore market-based solutions to address the economic constraints to large-scale longleaf restoration. \$145,000

#### Galveston Bay Foundation

Living Shoreline Habitat Protection (TX)

Build a living shoreline on the western shore of Galveston Bay. Project will restore intertidal marsh while protecting coastal upland habitats of a property owned by the Galveston Bay Foundation. Outcomes include approximately 800 feet of shoreline and more than 3 acres of intertidal marsh restored.

#### **Gulf Coast Bird Observatory**

Texas Coastal Motus Network Tower Repair Repair four Motus Wildlife Tracking System towers, a coordinated hemispheric tracking system for all migratory bird species whose purpose is to facilitate landscape-scale research and education on the ecology and conservation of migratory animals. Project will replace or repair broken masts and antennas and the coaxial cable that runs between the antennas and the sensorgnome box.

#### **Gulf Seafood Institute**

Expanding the Gulf of Mexico Charter Boat Electronic Logbook (AL, FL, LA, MS, TX)

Expand the use of electronic logbooks in the Gulf of Mexico by improving software and providing training and outreach to captains. Project will increase the number of vessels with installed electronic logbook units in the Gulf of Mexico resulting in more accurate data to fishery managers. \$661,298

#### **Houston Wilderness**

Galveston Bay Oyster Reefs and Migratory Bird Habitat Restoration (TX)

Establish three to four living shorelines that include new oyster reef areas to stabilize bottom sediments, reduce wave energy, improve hydrology in Galveston Bay and prevent erosion. Project will fortify wetlands to serve as natural levee systems that can provide storm protection to the Gulf Coast, provide cleaner water and habitats. \$52,853

#### **Houston Wilderness**

Port of Houston Tree Planting (TX)

Monitor the effectiveness of Port of Houston restoration efforts by placing air and water quality and sediment monitoring devices along the waterway, navigating the waterway to identity and record trees and plants throughout the corridor and create a baseline of ecosystem services. Project will work with adjacent land owners and 250 volunteers to restore riparian buffers and analyze data collected at all stages. \$50,000

# Maine Coast Fishermen's Association Next Generation of Permit Banking and Fishery Allocation Trusts (multiple states)

Develop a new approach to fishery trusts that will be used as a model for multiple fisheries, including, but not limited to, the New England Groundfish and the Gulf of Mexico Reef fishery, by assessing current permit bank models, exploring small business growth, and exploring community buy-in and stewardship. Project will result in up to five new trust and permit bank business structures and up to five programmatic models that will respond to the changing needs of the fishing community.

\$99,882

#### **New South Development and Training** Strategic Outreach to Expand Agricultural and Wetland Conservation (AL, FL, GA, TX)

Provide education and outreach services to private landowners to increase enrollment of agricultural and wetland properties in the Natural Resources Conservation Service Agricultural Conservation Easement Program. Project will identify and engage high priority landowners through informational workshops and technical assistance, with a priority of working with underserved landowners.

#### \$370,133

#### North Carolina State University

Prescribed Fire Initiative within the Southeastern United States (multiple states)

Expand and accelerate the implementation of prescribed fire to restore and enhance longleaf pine habitat and other fire-dependent forest and grassland communities within the southeast. Project will engage 1,000 landowners and fire practitioners through technical assistance, training and outreach, including "Learn and Burn" workshops, development of prescribed burn associations and fire festivals, to increase the use of prescribed fire.

#### \$130,000

# Parks and Wildlife Foundation of Texas Restoration of Private Grasslands within the Pecos River Watershed (TX)

Work with private landowners to restore or enhance 5,000-8,000 acres of grassland habitat using a range of practices on private lands in the Pecos River Watershed in Texas. Project will directly benefit a number of native species, including Baird's sparrow, Pecos pupfish, Rio Grande chub, Rio Grande cooter and Sprague's pipit, many of which have experienced significant declines that can be attributed to habitat loss, degradation and fragmentation at the landscape level.

\$250,000

#### Pheasants Forever

Accelerating Technical Capacity to Improve Private Land Grasslands for Wildlife (TX) Provide technical assistance to private landowners in Texas to improve grassland

Provide technical assistance to private landowners in Texas to improve grassland habitat for priority species identified in State Wildlife Action Plans by engaging landowners in voluntary practices known to improve habitat for grassland birds. Project will add two range/wildlife conservationists who will develop detailed conservation plans guiding on the ground implementation practices on 49,500 acres. \$210,000

#### **San Antonio Bay Partnership** Restoration of Freshwater Wetlands

and Ponds at Aransas NWR (TX)
Repair freshwater well infrastructure on
Aransas National Wildlife Refuge and
Welder Flats Conservation Area damaged
by Hurricane Harvey. Project will improve a
large number of freshwater wetlands that
were overwashed with the storm surge,
raising salinities and making them unusable
for a number of wildlife species.

# **Texan by Nature**Restoring Pollinator Habitat in Rights-of-Way in Texas

\$90,000

\$110,000

Convene key stakeholders in Texas to develop strategies focused on pollinator habitat in rights-of-way. Project will develop a case study by restoring 350 acres of habitat in rights-of-way to support monarch butterflies and other pollinators.

# Texas A&M AgriLife Research Applied Biodiversity Sciences Conservation

Scholars Program (multiple states)

Integrate undergraduates and graduates using a two-tiered program that will focus on local issues related to Gulf of Mexico ecosystems and energy development. Project will appoint two graduate fellowships to serve as "mentor assistants" to guide a small cohort of undergraduate interns. \$200,000

#### Texas A&M Forest Service

Conservation of Texas' Longleaf Ridge
Restore and protect a portion of Longleaf
Ridge connecting the Angelina and
Sabine National Forests. Project will use
a conservation easement to permanently
protect 5,439 acres of managed timberland
containing longleaf pine woodlands,
beech slope forests, spring-fed creeks with

waterfalls, pitcher plant bogs and rare plant

species. \$270,000

#### **Texas A&M Forest Service**

Facilitating Longleaf Conservation in East Texas Coordinate education, technical and financial assistance to restore, enhance and conserve the longleaf pine and bottomland hardwood ecosystems in East Texas. Project will continue to build on the momentum and interest generated from previous projects. \$300,000

### Texas Parks and Wildlife Department Assessment of Wildlife Habitat (TX)

Provide helicopter flight time for project leaders, biologists, managers, and other personnel to identify and document possible damage from Hurricane Harvey along the Texas Coast. Project is the first phase in moving forward with identifying and estimating potential restoration costs on these important wildlife habitats.

\$10,860

# **Texas Parks and Wildlife Department**Conservation of Wild and Native Fishes of the Chihuahuan Desert Ecoregion (TX)

Restore and preserve wild and native fishes of the Chihuahuan Desert ecoregion, a strongholds for 29 species of native fishes, including Pecos pupfish, Pecos gambusia, Rio Grande darter, Rio Grande chub, Rio Grande silvery minnow and Chihuahua catfish. Project will restore 25 acres of riparian habitats and deliver conservation best management practices on 50,000 acres in focal watersheds. \$250,000

#### **Texas Parks and Wildlife Department** Integrated Disease Management System to Reduce White-Nose Syndrome Mortality (TX)

The Texas Parks and Wildlife Department will establish an integrated disease management system approach aimed at minimizing whitenose syndrome (WNS) mortality amongst tricolored bats in Texas. This project will use multiple mitigation approaches, including high-pressure steam cleaning, application of polyethylene glycol, and volatile organic compound treatments, to reduce WNS-related mortality, and slow the spread of Pseudogymnoascus destructans, the causal agent of WNS.

#### \$315,072

# Texas Rice Industry Coalition for the Environment

Texas Coastal Plain Land Conservation
Engage private landowners through

Engage private landowners through strategic outreach and technical assistance to increase enrollment in the Natural Resources Conservation Service Agricultural Conservation Easement Program. Project will focus on private lands adjacent to National Wildlife Refuges, Texas Parks and Wildlife Department wildlife management areas, and other public lands to buffer these lands and create corridors for wildlife, including shorebirds, waterbirds and songbirds. \$130,000

#### Texas State University

Reddish Egret Conservation Plan for the U.S. Gulf Coast (AL, FL, LA, MS, TX)

Develop a detailed conservation plan with prioritized actions, clear conservation outcomes and well-defined funding needs to best support the reddish egret in the Gulf of Mexico. Project will contract an expert and research assistant, facilitate webinars, host two workshops with the working group, and aggregate existing foraging and nesting data into an online database.

#### \$74,990

#### **Texas Trees Foundation** ReTree Rowlett Creek (TX)

Restore the urban forest Bob Woodruff Park in Plano, Texas, by designing and planting groves of approximately 125 native trees and an additional 500 seedlings to provide nesting, shelter, shade and water quality benefits. Project will engage 350 community members in tree planting and invasive species removal and will support the city's stormwater management plan and tailor educational opportunities for the community associated with project development. \$50,000

#### The Conservation Fund

Laguna Atascosa Conservation Easement (TX)

Protect 400 acres of native Tamaulipan thorn scrub and coastal prairie on the Hardie tract, which helps connect the Laguna Atascosa and the Lower Rio Grande Valley national wildlife refuges into a parcel containing more than 49,500 acres. Project represents an additional 400 acres of protection toward a 7,000-acre goal within the Bahia Grande Coastal Corridor. \$170,000

#### The Peregrine Fund

Aplomado Falcon Restoration (TX)

Assess and replace highest priority original wooden nest structures with longer-lasting aluminum units in areas impacted by Hurricane Harvey. Project will focus on grasslands and marshes of the barrier islands along the Gulf of Mexico that serve as primary habitat for the endangered northern Aplomado falcon.

\$49,888

#### U.S. Department of the Interior. U.S. Fish and Wildlife Service

Aransas National Wildlife Refuge Hurricane Recovery Clean Up and Assessments (TX) Repair infrastructure on Matagorda Island to gain access to the refuge and state wildlife management facilities damaged by Hurricane Harvey. Project will allow the U.S. Fish and Wildlife Service to ultimately begin recovery efforts on Matagorda Island. \$61,000

#### U.S. Department of the Interior, U.S. Fish and Wildlife Service

Aransas NWR Debris Field Assessment (TX) Map debris fields, placement of orphaned containers and potential HAZMAT related items, white goods, electronic goods, and other items following landfall by Hurricane Harvey. Project data will be used to implement a pre-recovery planning process where ground crew assessments may be ordered and prioritization of debris removal can be made. \$10,343

#### U.S. Geological Survey **National Wildlife Health Center**

Developing and Testing Delivery Methods for Vaccine Treatments to Reduce White-Nose Syndrome in Bats (CO, MN, TX, WI)

Design and test mass-delivery methods for vaccines and other treatment options to reduce the occurrence of white-nose syndrome in bats. Project will develop and test an automatic spray technology device for delivering treatments to bats as they fly into maternity roosts or hibernacula for fall swarm and assess oral consumption of treatment and effectiveness of a topical delivery method through the use of biomarkers. \$400,000

#### **University of Florida**

**Evaluating Recreational Fishing Management** Strategies for Red Snapper (AL, FL, LA, TX) Assess the recreational management strategies of red snapper by using simulation

and assessment modeling, stakeholder surveys and stakeholder workshops. Project will provide a framework for angling groups to explore management options to understand the impacts on available catch and anglers' access to the red snapper fishery.

#### \$275,121

World Wildlife Fund

#### Expanding the Spatial and Temporal Scale of the Plowprint Analytical Tool

(multiple states, Canada and Mexico)

Update and expand geospatial data analysis, called the Plowprint to evaluate landscape change metrics for the Northern Great Plains ecoregion. Project analysis will expand the previous versions by including northern Mexico, extending the analysis to capture historical change and using the newest and best available data to track rates of agricultural conversion and target conservation work. \$20,000

#### UTAH

#### **Grand Canyon Youth**

Native American Youth Restoring Ecological Balance in Colorado River Watershed (AZ, UT) Perform invasive species management and stream buffer enhancements along the Colorado, Escalante, San Juan and Dirty Devil rivers. Project will engage Native American youth from the Southwest Conservation Corps Ancestral Lands Program to restore 15 acres of stream buffer zones, develop conservation and employment skills. \$202,832

#### **National Audubon Society**

Advancing the SageWest Communications Network across the Sagebrush Ecosystem (multiple states)

Elevate individual conservation efforts and create a larger dialogue about the value and need for sagebrush conservation. Project will engage in priority work groups, develop guidance documents, and organize partner meetings across the ecosystem. \$34,200

#### **Pheasants Forever**

Expanding Conservation of Working Lands in the Sagebrush Ecosystem (multiple states) Maintain and expand technical assistance capacity in key greater sage grouse focal areas to strengthen working ranch lands management to improve greater sage grouse populations. Project will improve grazing practices on 250,000 acres to benefit greater sage grouse through technical assistance provided by 14 Strategic Watershed Action Teams members. \$1,688,795

#### U.S. Department of Agriculture, U.S. Forest Service

Restoration of Fish Passage in Hall Creek (UT) Improve fish passage and resilience of remnant Colorado River cutthroat trout populations in historic habitat. Project will replace an undersized, perched road culvert with a timber bridge to complete a series of barrier removals that will reconnect more than 10 miles of habitat. \$20,000

#### Western Association of Fish and Wildlife Agencies

\$120,000

Monarch Butterfly Conservation in the Western United States (multiple states)

Develop a regional strategy and supporting plans to increase organizational capacity and coordination among monarch butterfly conservation partners west of the Rocky Mountains Project will develop and track implementation efforts identified in the Western Monarch Population Conservation Strategy, establish the Western Monarch and Pollinator Initiative Council, and transition milkweed data into the Crucial Habitat Assessment Tool.

#### **Wetland Dynamics**

Plan Project and Plan Development (CO, UT) Help to identify and prioritize on-theground projects to benefit Gunnison sage grouse in each population so that when funding for projects is available, partners will have tools and guidance on where to focus project work. Project will work to sustain both the Gunnison Basin and satellite populations of sage grouse for future generations.

Gunnison Sage Grouse Collaborative Action

\$63,500

#### **VERMONT**

#### American Rivers

Completing Final Designs for Fish Barrier Modifications on the Upper Connecticut River (NH, VT)

Complete final engineering designs and permitting for three fish barrier modifications on cold-water tributaries of the Upper Connecticut River in New Hampshire and Vermont. Project will set the stage for implementation that restores natural river processes, reconnects more than 45 miles of historic habitat for eastern brook trout and increases the availability of cold-water refuges.

### \$114,990

**Connecticut River Watershed Council** A Watershed Monitoring Strategy to Support the Long Island Sound Nitrogen Strategy (MA, NH, VT)

Create a watershed-scale monitoring strategy to add nutrient and other water quality data in the Connecticut and Housatonic River watersheds of Massachusetts, New Hampshire and Vermont. Project will add to the current effort to implement the Long Island Sound Nitrogen Reduction Strategy for the large river systems that drain into Long Island \$39,361

#### **Connecticut River Watershed Council**

Restoring Riparian and Instream Habitat for Trout in the Connecticut River Watershed (MA. NH. VT)

Provide targeted outreach and technical assistance to landowners to implement riparian, instream habitat and water quality projects in priority eastern brook trout sub-watersheds of the Middle and Upper Connecticut River. Project will plant riparian buffers on 6 acres to reduce stream temperatures and increase wildlife habitat as well as create 3 miles of restored habitat

\$199,672

#### **National Audubon Society**

Engaging Stakeholders to Improve Priority Bird Habitats in the Upper Hudson and Lake Champlain (NY, VT)

Provide technical assistance to landowners, foresters and industry to improve the mosaic of forest habitats to benefit multiple bird species, including golden-winged warbler, American woodcock, black-throated blue warbler and wood thrush. Project will restore 265 acres of young forest habitat, improve 900 acres of late successional habitat and develop a pilot program with International Paper that prioritizes procurement of wood fiber from forests being managed with birdfriendly techniques.

\$187,841

#### **Rich Earth Institute**

Effluent Diversion Installations (VT)

Identify new sites to install innovative effluent diversion technology in Windham County, Vermont. Project will secure sites to install a technology designed to reduce nitrogen from urine entering the Connecticut River and, ultimately, Long Island Sound. \$29,767

#### **Rich Earth Institute**

Innovative Urine Diversion Technology to Reduce Nitrogen in Long Island Sound (VT) Install innovative technology to divert urine, a source of nitrogen, at five sites in Windham County, Vermont. Project will prevent 350 pounds of nitrogen from urine entering the Connecticut River and, ultimately, Long Island Sound. \$115,720

#### **Trout Unlimited**

Targeting Municipalities and Landowners to Improve Stream Health (MA, VT)

Assist municipalities, private landowners and contractors to prioritize stream connectivity and cold-water habitat restoration projects using available data on road-stream crossings. Project will use the new Forests for Fish program to recruit six municipalities and 75 landowners to increase acres under easement by 200 acres and develop restoration plans based on culvert replacement prioritization. \$66,433

#### **VIRGINIA**

Alliance for the Chesapeake Bay Developing a Chesapeake Tree Canopy

one-on-one support for Metro Washington Council of Governments members. Project will serve as a general guidance for all Chesapeake communities on the funding and sustainable financing of the UTC programs. \$49,188

#### **American Bird Conservancy**

Optimizing Conservation Benefits to Black Ducks and Water Quality in the Chesapeake Bay Watershed (multiple states)

Develop guidance to target wetland habitat restoration and enhancement across the entire Chesapeake Bay watershed. Project will be using the output of two separate models to target conservation actions that would benefit water quality and black ducks, in partnership with the U.S. Geological Survey and the Atlantic Coast and Black Duck joint ventures.

\$25,634

#### **Blossom Consulting and Engineering** Watershed Assessment for Stormwater Retrofit and Stream Restoration (VA)

Complete watershed and site assessments for stormwater retrofit and stream restoration projects on two sites in Shenandoah County. Project will develop conceptual planning strategies, project identification, designs and quantification for future implementation.

#### \$39.107

#### **Canaan Valley Institute** Aquatic Connectivity in the Upper

Clinch River Watershed (VA) Restore instream habitat, implement agricultural best management practices and

assess the presence of eastern hellbenders in the Upper Clinch River watershed. Project will benefit 12 species of endangered mussels, three threatened fish species and the eastern hellbender by providing access to 30.2 acres of upstream habitat and 3 acres of instream habitat. \$65,000

#### **Chesapeake Environmental Communications**

Subwatershed Analysis

and Landowner Outreach (VA, WV)

Conduct spatial analysis of six subwatersheds of the Potomac River to identify priority areas to implement conservation and restoration activities. Project will design and develop a fourpage brochure that details the process of conservation easements used for outreach and engagement with landowners in the target watersheds

\$47,035

#### **Chesapeake Environmental Communications** Watershed Assessment and Community

Engagement in Urbanna Creek Watershed (VA) Assess the drainage of the Urbanna Creek Watershed, identify potential areas for stormwater solutions and present a suite of options for stormwater solutions. Project will engage the community by hosting two town hall-style meetings with local citizens, business owners and students.

\$45,754

#### **Chesapeake Media Service** Increased Outreach to Local Governments in the Chesapeake Bay Watershed (multiple states)

Create a new local government edition of the Bay Journal to provide education for municipal staff in the vast majority of the 1,800 local government jurisdictions within the Chesapeake Bay Watershed. Project will provide information that will help them understand and achieve their commitments to Chesapeake Bay restoration efforts. \$20,001

#### **Conservation Concepts**

Creating a Fredericksburg Regional Response to the Chesapeake Bay Program (VA)

Develop a Fredericksburg area regional response for the Chesapeake Bay Phase III Watershed Implementation Plan being developed by the Virginia Department of Environmental Quality.

\$50,000

#### **Ducks Unlimited**

#### Conservation of American Black Duck in Delaware, Maryland and Virginia

Implement the goals of the Working Lands for Wildlife Farm Bill Program by targeting conservation of American black duck priority habitat in Delaware, Maryland and Virginia. Project will work with producers and private landowners to implement NRCS Farm Bill conservation programs to protect, restore and enhance habitat to benefit American black ducks on private lands. \$272,564

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#### **Forest Landowners Association**

Engaging Working Forest Landowners, Building Stakeholder Collaboration and Developing Solutions – II (multiple states)

Engage family forest landowners in longleaf restoration and at-risk species conservation throughout the historic range of the longleaf pine. Project will assist landowners with the establishment and enhancement of at least 2,000 acres of longleaf pine, develop regulatory predictability tools for at-risk species endemic to the longleaf ecosystem, and explore market-based solutions to address the economic constraints to largescale longleaf restoration on private lands. \$145,000

#### **GKY & Associates**

Increase Stormwater Management on Private Properties (VA)

Identify potential stormwater retrofit opportunities on privately owned properties, concentrating on nonprofitowned properties, and define potential actions for the city of Falls Church to incorporate into future planning documents. Project will develop public outreach tools while also identifying potential incentive to those private property owners considering participation.

\$32,346

Funding and Financing Guide (DC, MD, VA) Develop a Chesapeake Urban Tree Canopy (UTC) Funding and Financing document and hold a one-day workshop and provide

#### Indiana University of Pennsylvania Research Institute

Improving Forest Health on Private Lands to Benefit Golden-Winged Warblers (MD, PA, VA) Continue the efforts on private land to meet the goals of the Natural Resource Conservation Service's Working Lands for Wildlife program and increase populations of golden-winged warblers and associated forest bird species in Pennsylvania, Maryland and Virginia. Project will engage at 2,000 private landowners and enroll at least 3,000 acres in Working Lands for Wildlife by utilizing conservation planners and field foresters to implement best practices in strategic locations.

\$1,169,163

# James River Association Building Adaptive Shorelines in Tidewater, Virginia

Develop a pilot living shoreline program in the Tidewater region of Virginia's James River watershed resulting in visible demonstration projects and readily available training and technical resources. Project will hold three workshops, perform targeted outreach and engage 100 volunteers while implementing shoreline stabilization techniques such as installing sills and oyster shell bags and planting marsh grasses. \$400,113

#### Manomet

#### Coastal Habitat Restoration for American Oystercatcher along Atlantic Coast (multiple states)

Coordinate the planning and implementation of conservation action for American oystercatcher along the entire U.S. Atlantic seaboard. Project will continue the coastwide coordination of the American oystercatcher recovery initiative and compile lessons learned after a decade's worth of targeted investments and embark upon a new initiative to develop best management practices to restore wet and dry sand habitats for oystercatchers and other breeding shorebirds along the Atlantic Coast.

\$150,000

#### **North Carolina State University**

Prescribed Fire Initiative within the Southeastern United States (multiple states)

Expand and accelerate the implementation of prescribed fire to restore and enhance longleaf pine habitat and other fire-dependent forest and grassland communities within the southeast. Project will engage 1,000 landowners and fire practitioners through technical assistance, training and outreach, including "Learn and Burn" workshops, development of prescribed burn associations and fire festivals, to increase the use of prescribed fire

\$130,000

#### **Timmons Group**

# Identifying Green Infrastructure Projects in Petersburg (VA)

Identify at least four specific sustainable and feasible green infrastructure projects in the city of Petersburg, Virginia, to minimize pollutant-laden stormwater runoff and address localized flooding. Project will identify project extents, alignment, constraints, quantifiable benefits (pollutant reduction and/or hydraulic level of service) and construction cost estimates, providing a list of defined and prioritized projects ready to proceed with funding and implementation. \$49,969

# Virginia Polytechnic Institute and State University

#### Hellbender Nest Boxes as an Innovative Restoration Strategy and Tool for Engaging Landowners (VA)

Restore critical shelter, nesting habitat and population connectivity in Copper Creek, Virginia, to enhance the long-term population resilience of hellbenders.

Project will remove a fish passage barrier to create 247 acres of habitat and integrate hellbender nest boxes as well as engaging landowners to promote interest in further riparian conservation activities.

\$64,999

# Virginia Polytechnic Institute and State University

# Improving Eastern Hellbender Habitat on Private Lands (NC, TN, VA)

Promote eastern hellbender habitat restoration and conservation on private lands in North Carolina, Tennessee and Virginia by building relationships with landowners and communities in the target watersheds identified. Project will improve riparian area condition and overall water quality within the project waterways through conservation actions focused on reducing nonpoint source pollution and sedimentation.

\$647,995

# U.S. Department of Agriculture, U.S. Forest Service

# Expanding the National Aquatic eDNAtlas and Data Exchange for Freshwater Species (multiple states)

Expand the aquatic environmental DNA Atlas database, website, digital tools and sample repository to a national scale. Project will expand the current coverage of the database of information important to the conservation and management of aquatic species to include waterways in the 37 remaining states to inform strategic conservation investments for suppressing invasives and increasing native populations. \$73,018

#### University of Maryland Center for Environmental Science

# Incorporating Novel Watershed Indicators into the Chesapeake Bay Report Card (multiple states)

Make key improvements to the Chesapeake Bay Report Card, which has served since 2006 as the definitive source for ecosystem health status in the Bay and tidal tributaries. Project will improve the Chesapeake Bay Report Card process and product by incorporating recent lessons learned, incorporating new design elements, developing indicators for non-tidal watershed areas. \$113,995

#### Water Words That Work

#### Closing the Deal With Rural Landowners: Training Chesapeake Bay Watershed Conservation Practitioners (DE, MD, PA, VA, WV)

Help conservation practitioners successfully recruit and negotiate landowners' participation in the Conservation Reserve Enhancement Program, conservation easements, agricultural best practices, manure and forest management plans and habitat restoration projects to improve water quality in the Chesapeake Bay watershed. Project will bring the expertise of the region's most successful conservation field staff into a course designed for entrylevel and mid-career field staff. \$24,978

#### WASHINGTON

#### **Cascade Forest Conservancy**

#### Gifford Pinchot Aquatic Resilience (WA)

Improve the health and long-term resilience of aquatic and riparian systems along 8.5 miles of stream and 89 acres of wetland habitat in the southern Washington Cascades. Project will reintroduce beavers, install native riparian plants, including 8,500 native trees planted by 200 volunteers, and develop a partnership for instream wood placement for fish habitat. \$26,601

### Channel Islands Cetacean Research Unit

#### Sea Turtle Stranding Response along the West Coast of the United States (CA, OR, WA and Canada)

Build capacity for the West Coast Marine Mammal Stranding Network to respond to five species of threatened and endangered sea turtles: Western Pacific leatherback turtle, Eastern Pacific green turtle, North Pacific loggerhead, Pacific olive ridley and Eastern Pacific hawksbill. Project will increase response efforts for live and dead stranded sea turtles through assessment of existing capacity, standardization of data and protocols, distribution of supplies and network-wide training sessions. \$50,000

# College of William and Mary, Virginia Institute of Marine Science

# Dungeness Crab Trap Biodegradable Hinge Escape Mechanism (AK, WA)

Reduce ecological and economic impacts associated with lost gear in coastal Washington and Alaska. Project will incorporate an innovative bio-hinge mechanism into Dungeness crab traps, testing an effective, inexpensive mechanism to disarm derelict traps. \$140,568

# Confederated Tribes of the Umatilla Indian Reservation

# Flow Restoration in the Walla Walla, Umatilla and Upper Grande Ronde (OR, WA)

Work with The Freshwater Trust, Trout Unlimited, and Washington Water Trust to support and develop innovative voluntary water transactions for instream flow restoration to support salmonids. \$126,760

#### Conservation Northwest

# Habitat Connectivity for Mule Deer, Lynx and Other Wildlife in the Okanagon Valley (WA)

Coordinate partners seeking to secure and improve landscape connectivity for mule deer, Canada lynx and other wildlife in the Okanagon Valley of Washington. Specific activities include road closure and restoration on tribal lands, preparation of a site for installation of a wildlife highway underpass, and conservation program delivery through the local conservation district. \$235,000

#### **Farallon Institute**

#### Integrating Seabird Data into Fisheries Management in Alaska (AK, WA)

Evaluate the use of seabird food habits data in Alaska fisheries management, specifically in fisheries stock assessments and models. Project will focus on seabird data from various seabird monitoring programs that provide information on the relative abundance and size and condition of juvenile commercial fishes. \$99,999

#### **Fieldwork Communications**

#### Enhancing the Online Resource Network for the Electronic Monitoring and Reporting Community

Provide greater access to information about electronic monitoring, electronic reporting and fish tech programs across the United States through an expanding online network. Project will advance conservation efforts by promoting the adoption of data management initiatives and modernization of fishery management practices in the United States.

\$40,005

#### Forterra NW

#### Green-Duwamish River

Restore more than 1 acre of native plant communities along the Green-Duwamish River in King County, Washington. Project will engage 90 community members, plant 600 native trees and support 13 additional acres protected from future habitat degradation in areas critical to salmon migration and recovery in Puget Sound. \$49,977

Cooperative Riparian Improvement (WA)

#### Foster Creek Conservation District Establishment of a Douglas County

# Cooperative Weed Management Area (WA) Establish a cooperative weed management area in Douglas County, Washington, to collaboratively address invasive weed issues that degrade shrub steppe, wetland and riparian habitat. Project will bring together a diverse group of stakeholders, including private landowners, local, state and federal government, and nongovernmental organizations to create and begin to implement the plan.

\$100,000

### Kwiaht: Center for the Historical Ecology of the Salish Sea

#### Winter Prey Use and Growth of Blackmouth Chinook Salmon in the San Juan Islands (WA) Collect data from hatchery-marked

resident Blackmouth Chinook salmon to study annual variations in prey availability and survival in the Salish Sea. Project will engage recreational anglers to improve understanding of this salmon population, which has experienced significant decline and which historically may have been an important component of the Southern Resident killer whale diet.

\$35,700

#### Mid-Columbia Fisheries Enhancement Group Prioritize Fish Passage Barriers in the Cle Elum Ranger District for Salmonid Recovery (WA)

Support native fish recovery by assessing and prioritizing fish passage barriers in priority watersheds on the Cle Elum Ranger District. Project will identify problem fish passage features and will inform restoration efforts.

\$31,791

#### **National Audubon Society**

#### Advancing the SageWest Communications Network across the Sagebrush Ecosystem (multiple states)

Elevate individual conservation efforts and create a larger dialogue about the value and need for sagebrush conservation. Project will engage in priority work groups, develop guidance documents, and organize partner meetings across the ecosystem. \$34,200

#### Nooksack Salmon Enhancement Association

#### Whatcom County Stream Stewards Program; Engaging Community in Restoration, Education and Stewardship (WA)

Restore 15 acres of riparian habitat to improve water quality and habitat for Chinook salmon, bull trout and steelhead salmon in Puget Sound and Whatcom County, Washington. Project will engage six local resource management partners and 2,500 volunteers to plant 5,000 trees and remove 6 acres of invasive vegetation. \$29,835

#### **Northwest Fisheries Science Center**

# Evaluating Exposure of Southern Resident Killer Whales to Microbial Pathogens (WA)

Assess Southern Resident killer whale vulnerability to infection using molecular screening of microbial pathogens. Project will inform stormwater management of microbial pathogens in terrestrial runoff and sewage effluent that are showing up in killer whales to help prioritize mitigation. \$135,120

### NMFS: Northwest Fisheries Science Center Use Passive Acoustics to Monitor Southern

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#### Use Passive Acoustics to Monitor Southern Resident Killer Whale Distribution and Habitat Use (WA)

Determine distribution and habitat use of Southern Resident killer whales along coastal Washington. Project will conduct passive acoustical monitoring of whale populations and evaluate distribution changes over time and in relation to prey availability.

\$132,248

#### **Northwest Straits**

#### Marine Conservation Foundation Chinook Salmon Habitat Protection and Restoration in the Northwest Straits of Puget Sound (WA)

Increase prey availability of Chinook salmon for Southern Resident killer whales in the Northwest Straits of the Puget Sound. Project will restore and protect nearshore habitat for juvenile Chinook salmon and implement priority actions of the Puget Sound Partnership Action Agenda. \$138,030

#### **Oceans Initiative**

# Assessing the Impacts of Noise Exposure on Southern Resident Killer Whale Foraging Efficiency (WA)

Quantify the relationship between noise exposure and foraging efficiency of Southern Resident killer whales to improve the quality of hunting habitat. Project will combine two existing datasets to explore how mitigating noise could the increase frequency and efficiency of killer whale foraging behavior and the possible impacts of sound to the size of prey available to the population. \$124,555

#### Okanogan Conservation District

Upper Columbia Steelhead

Habitat Restoration in Johnson Creek (WA) Design an implementation plan for restoring spawning and rearing habitat for threatened Upper Columbia steelhead in Johnson Creek, a priority tributary to the Okanogan River. Project will assess current function and develop a plan to restore floodplain and channel habitat structure on a former hay field.

\$32,500

#### **Pheasants Forever**

Expanding Conservation of Working Lands in the Sagebrush Ecosystem (multiple states)

Maintain and expand technical assistance capacity in key greater sage grouse focal areas to strengthen working ranch lands management to improve greater sage grouse populations. Project will improve grazing practices on 250,000 acres to benefit greater sage grouse through technical assistance provided by 14 Strategic Watershed Action Teams members. \$1,688,795

#### **Skagit Fisheries Enhancement Group**

Restore Chinook Salmon Rearing Habitat in the Skagit Forks Britt Slough (WA) Reconnect 7.9 acres in the Skagit River floodplain to restore high quality Chinook salmon rearing habitat. Project will restore the outlet of Britt Slough to its historic path by clearing invasive weeds and replanting native vegetation.

#### **Spokane Tribe**

\$97,058

**Building Fire Resistance** and Healthy Wildlife Habitat (WA)

Improve fire resilience by thinning overstocked trees on the Spokane Reservation for a healthier, fire resistant habitat as well as create and promote growth of fire-resistant aspen stands and other native vegetation while creating browse and essential cover for deer, elk, moose and numerous bird species. Project will reduce fuel loads and enhance wildlife habitat on approximately 550 acres of land. \$225,000

#### SR3 SeaLife Response,

Rehabilitation and Research Health Monitoring of Southern Resident Killer

Whales Using Aerial Photogrammetry (WA)

Use aerial photogrammetry to monitor the health and nutritional status of individual Southern Resident killer whales across key habitats and foraging seasons. Project will help prioritize prey species management and restoration efforts to meet nutritional requirements and bolster recovery. \$139,997

#### **Trout Unlimited**

Beaver Relocation in North Central Washington to Naturally Restore Salmonid Habitat

Relocate 30 beavers and install 40 beaver dam analogs in the Wenatchee River and Entiat River basins to restore degraded ecosystems for the benefit of Chinook salmon steelhead bull trout cutthroat trout, rainbow trout and other native salmonids. Project will capture nuisance beaver from irrigation ditches, agricultural lands and utility infrastructure, and release them to suitable locations on Forest Service lands as well as install beaver dam analogs on public and private lands. \$58,205

#### **Trout Unlimited**

Columbia Cascade Water Transaction Development and Implementation (WA)

Identify, prioritize and develop water transactions with willing landowners in the Methow, Entiat, Yakima and Wenatchee sub-basins of Washington, with a focus on completing significant instream flow enhancements to priority streams and tributaries. Project will improve tributary instream habitat to benefit listed salmon and other fish species. \$246,519

**Trout Unlimited** 

Okanogan Basin Water Transactions Development in Partnership with the Colville Tribe (WA)

Identify, prioritize and develop water transactions in the Methow and Okanogan sub-basins of Washington working in collaboration with the Colville Tribe. Funding will increase habitat and instream flow in priority tributaries. \$60,874

#### **Trout Unlimited**

Umatilla and Walla Walla Basin Water Transactions Development (OR, WA)

Implement water transactions, primarily in the Umatilla Basin. Project will include working closely with the Confederated Tribes of the Umatilla Indian Reservation to prioritize reaches for project implementation to ensure best benefits for instream flow, as well as analyzing data and pre- and postmonitoring

#### \$56,924

**University of Washington** 

Conservation Internships and Fellowship (WA) Support training of a diverse group of undergraduate and early career conservation

scholars. Project will support 36 Conservation Scholars in summer internships held in Washington State in 2018 and 2019, while the second branch will support the development and launch of a pilot, year-long fellowship for alumni of the Conservation Scholars program to work with federal agencies.

\$170,000

#### Washington Department of Ecology

Support for Development and Monitoring for Washington State Water Right Acquisitions Assist in the selection, assessment, coordination and management of water right acquisitions in Washington State and manage monitoring of flow restoration transactions. Project will benefit flow restoration, fish and instream habitats.

#### Washington Department of Fish and Wildlife

Electronic Harvest Reporting System (WA) Deploy an electronic reporting and monitoring software system for nontribal commercial fishers and tribal fishers in Puget Sound and Washington coastal waters. Project will build on pilot projects to develop a complete mobile and web catch-reporting solution to serve up to 4,500 commercial and tribal fishers. \$304,296

#### **Washington Water Trust**

Stream Flow Restoration for Steelhead and Other Fish Species in Walla Walla Basin (WA)

Identify, develop and implement strategic water transactions focused on salmon and habitat recovery in the Walla Walla, Touchet and Tucannon Basins of Washington State. Project will work with the Confederated Tribes of the Umatilla Reservation, landowners, irrigation districts, conservation districts, municipalities and community groups to facilitate water management solutions, stream and habitat restoration to directly leverage optimal conditions for stream flows and fish in targeted watersheds. \$68,834

#### **Washington Water Trust**

Stream Flow Restoration to benefit Salmon and Trout in the Columbia Basin (WA)

Identify, develop and implement strategic water transactions focused on salmon and habitat recovery in the Wenatchee, Methow, Walla Walla, Yakima and White Salmon Basins of Washington State. Project will work collaboratively with landowners, irrigation districts, tribes, conservation districts, municipalities, counties and community groups to facilitate water management solutions, stream and habitat restoration for stream flows and fish in targeted watersheds. \$555,914

#### **Washington Water Trust**

to Benefit Fish in the Okanogan Basin (WA) water transactions focused on salmon and habitat recovery in the Okanogan Basin of Washington state. Project will work with the Confederated Tribes of the Colville Reservation, landowners. irrigation districts, conservation districts. municipalities, counties and community groups to facilitate water management solutions and stream and habitat restoration to directly leverage optimal conditions for stream flows and fish. \$84,493

#### Western Association

Monarch Butterfly Conservation in the

of Fish and Wildlife Agencies

Western United States (multiple states)

Develop a regional strategy and supporting plans to increase organizational capacity and coordination among monarch butterfly conservation partners west of the Rocky Mountains. Project will develop and track implementation efforts identified in the Western Monarch Population Conservation Strategy, establish the Western Monarch and Pollinator Initiative Council, and transition milkweed data into the Crucial Habitat Assessment Tool. \$120,000

#### Whatcom Land Trust

Harrison Reserve: Kendall Community Outdoor Education Program (WA)

Provide a safe, hands-on, equitable outdoor learning environment in rural Whatcom County, Washington and complete wetland/riparian restoration and site improvements, including the installation of an accessible boardwalk. Project will restore a portion of Kendall Creek, a salmon-inhabited stream and used by various bird species. \$30,000

#### **WEST VIRGINIA**

American Bird Conservancy

entire Chesapeake Bay watershed. Project models to target conservation actions that would benefit water quality and black ducks,

Water Acquisition for Stream Flow Restoration Identify, develop and implement strategic

Create a new local government edition of the Bay Journal to provide education for municipal staff in the vast majority of the 1,800 local government jurisdictions within the Chesapeake Bay Watershed. Project will provide information that will help them understand and achieve their commitments to Chesapeake Bay restoration efforts. \$20.001

Develop a Green Infrastructure Implementation Plan for Martinsburg, West Virginia, to guide implementation of new stormwater management practices in an area with limited or no stormwater infrastructure. Project will create detailed designs and cost estimates for the highestpriority sites to support the city's efforts to meet West Virginia's Chesapeake Bay pollution reduction goals and build public awareness and understanding of green infrastructure opportunities. \$49,965

Optimizing Conservation Benefits to Black Ducks and Water Quality in the Chesapeake Bay Watershed (multiple states)

Develop guidance to target wetland habitat restoration and enhancement across the will be using the output of two separate in partnership with the U.S. Geological Survey and the Atlantic Coast and Black Duck joint ventures.

\$25,634

#### **Chesapeake Environmental** Communications

Subwatershed Analysis and Landowner Outreach for Potomac Land Conservation and Restoration (VA, WV)

Conduct spatial analysis of six subwatersheds of the Potomac River to identify priority areas to implement conservation and restoration activities, providing a summary and interactive mapping application that detail the analyses. Project will design and develop a fourpage brochure that details the process of conservation easements used for outreach and engagement with landowners in the target watersheds. \$47,035

#### **Chesapeake Media Service**

Increased Outreach to Local Governments in the Chesapeake Bay Watershed through the Bay Journal (multiple states)

#### **Downstream Strategies**

Martinsburg Green Infrastructure Plan and Demonstration Sites (WV)

#### **National Wild Turkey Federation**

Improving Outreach and Communications to Private and Public Landowners in the Greenbrier Watershed (WV)

Create a communications and outreach strategy to engage landowners in the Greenbrier watershed of eastern West Virginia in creating diverse forest habitat that supports species of greatest conservation need. Project will partner with the Wildlife Management Institute and a consultant to develop effective language that encourages landowners to improve forest management practices in this key watershed identified by both the American Forest Foundation and the Appalachian Mountain Joint Venture.

\$100,000

#### U.S. Department of Agriculture, U.S. Forest Service

Expanding the National Aquatic eDNAtlas and Data Exchange for Freshwater Species (multiple states)

Expand the aquatic environmental DNA Atlas database, website, digital tools, and sample repository to a national scale. Project will expand the current coverage of the database of information important to the conservation and management of aguatic species to include waterways in the 37 remaining states to inform strategic conservation investments for suppressing invasives and increasing native populations. \$73,018

#### **University of Maryland Center for Environmental Science**

Incorporating Novel Watershed Indicators into the Chesapeake Bay Report Card (multiple states)

Make key improvements to the Chesapeake Bay Report Card, which has served since 2006 as the definitive source for ecosystem health status in the Bay and tidal tributaries. Project will improve the Chesapeake Bay Report Card process and product by incorporating recent lessons learned, incorporating new design elements, developing indicators for nontidal watershed areas.

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\$113,995

#### **Water Words That Work**

Closing the Deal With Rural Landowners: Chesapeake Bay Watershed Conservation Practitioners (DE, MD, PA, VA, WV)

Help conservation practitioners successfully recruit and negotiate landowners' participation in the Conservation Reserve Enhancement Program, conservation easements, agricultural best practices, manure and forest management plans and habitat restoration projects to improve water quality in the Chesapeake Bay watershed. Project will bring the expertise of the region's most successful conservation field staff into a course designed for entry-level and midcareer field staff.

\$24,978

Wildlife Management Institute

Developing a Landowner Outreach and Communications Strategy in the Greenbrier Watershed (OH, PA, WV)

Develop a detailed outreach strategy that targets landowners in the Greenbrier watershed of eastern West Virginia to create a mixed mosaic of forest habitat that supports species of greatest conservation need. Project will encourage landowners to improve forest management practices in this key watershed identified by both the American Forest Foundation and the Appalachian Mountain Joint Venture.

\$99,941

#### **WISCONSIN**

#### Audubon International

Monarchs in the Rough: Pollinator Habitat on Golf Courses (multiple states)

Establish pollinator habitat at 500 golf courses in a 10-state area to support pollinators such as the monarch butterfly. Project will provide technical assistance and native, regionally appropriate seed while raising awareness about pollinators through educational signage and demonstrating how to manage commercial properties sustainably.

#### \$150,000

**Ducks Unlimited** 

#### Enhancing Wetland Habitat (WI)

Enhance a 234-acre impoundment and restore 25 acres of adjacent wetland habitat while creating a northern pike spawning marsh. Project will improve critical wetland habitat through water control management to benefit blue-winged teal, black tern and

#### \$210,839

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#### Friends of Schlitz Audubon Nature Center Creating Stormwater Wetlands and Improving Flood Resilience (WI)

priority fisheries in the Green Bay area.

Create new and improve existing wetlands to add 463,383 gallons of annual stormwater storage capacity and restore forested ravine habitat to improve flood resilience and reduce sediment runoff. Project will combine green stormwater infrastructure best practices and habitat restoration to improve the resilience, function and quality of these habitats for species of concern, including Blanding's turtle and rusty patched bumble bee.

\$116,632

#### Milwaukee Metropolitan Sewerage District Implementation of the Milwaukee River Watershed Project (WI)

Implement adaptive approaches to managing soil health, water quality and achievement of total maximum daily loads for permit holders and agricultural producers in the Milwaukee River watershed. Project will facilitate two producer-led watershed protection councils and promote, plan and design conservation practices to address soil and water quality. \$120,000

#### Milwaukee Public Schools

#### Creating Greener, Healthier Schoolyards (WI)

Renovate four Milwaukee schoolyards

by creating unique outdoor play spaces designed to provide up to 4.7 million gallons of stormwater storage annually. Project will install green stormwater infrastructure best practices to create green recreational facilities that provide improved environmental, social and economic health benefits to students and communities. \$440,000

#### Ozaukee County, Wisconsin

Enhancing the Milwaukee River Mequon-Thiensville Dam Fishway for Lake Sturgeon Passage (WI)

Enhance the operation and function of the nature-like fishway which provides aquatic organism passage around the Mequon – Thiensville Dam on the Milwaukee River. Project will build upon existing lake sturgeon reintroduction efforts by improving passability for lake sturgeon and other larger fish as well as increasing overall performance of the fishway. \$200,000

#### **Pollinator Partnership**

Project Wingspan: Enhancing Landscapes for At-risk Pollinators (multiple states)

Develop a regional seed collection and native plant materials development program in the Midwest to support monarch butterflies and rusty patched bumble bees. Project will improve 10,000 acres of pollinator habitat, collect 25 pounds of milkweed seed, and propagate 10,000 seedlings. \$149,000

#### Riveredge Nature Center

Reintroduction of Lake Sturgeon in the Milwaukee River and Lake Michigan Basin (WI)

Reintroduce lake sturgeon breeding population to the Milwaukee River and the Lake Michigan Basin. Project will repair hatchery infrastructure to continue annual stocking of 1,000 fingerlings and engage technical experts to conduct a preliminary spawning habitat assessment.

#### **Sixteenth Street Community Health Centers** Kinnickinnic River Trail Habitat Restoration (WI)

Restore 7 acres of riparian area, creating habitat for migrating and resident bird species and pollinators, increasing native tree canopy and ecosystem resilience, reducing runoff into the river and ensuring a safe space for people to enjoy nature in Milwaukee. Project will engage 515 local volunteers and youth in experiential learning with planting days and activities integrated into school lessons and planned river cleanups drawing on neighborhood and school connections to the area. \$49,518

#### **Trout Unlimited**

#### Driftless Partnership: Engaging Landowners in Water Quality and Wildlife Habitat Farm Bill Programs (IL, IA, MN, WI)

Engage agricultural producers in developing conservation practices and science-based tools that restore cold-water streams and promote grass-based grazing systems. Project will restore 20 miles of stream, reduce/ eliminate bank erosion, reconnect streams to their floodplains and install a suite of critical habitat practices for fish, shorebirds, amphibians, reptiles and other aquatic biota. \$149,247

#### **US Fish and Wildlife Service**

Wisconsin Driftless Area Monarch Butterfly Initiative

Conduct field surveys for pollinators and restore and enhance 750 acres of habitat in Wisconsin's Driftless Area to support monarch butterflies, rusty patched bumble bees and other pollinators. Project will provide baseline data about pollinators, improve pollinator habitat on public and private lands, and enhance technical support for landowners. \$149,999

#### U.S. Department of Agriculture, U.S. Forest Service

Expanding the National Aquatic eDNAtlas and Data Exchange for Freshwater Species (multiple states)

Expand the aquatic environmental DNA Atlas database, website, digital tools and sample repository to a national scale. Project will expand the current coverage of the database of information important to the conservation and management of aquatic species to include waterways in the 37 remaining states to inform strategic conservation investments for suppressing invasives and increasing native populations.

#### **U.S. Geological Survey**

**National Wildlife Health Center** 

**Developing and Testing Delivery Methods** for Vaccine Treatments to Reduce White-Nose Syndrome in Bats (CO, MN, TX, WI)

Design and test mass-delivery methods for vaccines and other treatment options as a strategy to reduce the occurrence of white-nose syndrome in bats. Project will develop and test an automatic spray technology device for delivering treatments to bats as they fly into maternity roosts or hibernacula for fall swarm and assess oral consumption of treatment and effectiveness of a topical delivery method through the use of biomarkers. \$400,000

#### WYOMING

#### **Legacy Philanthropy Works**

**Developing Incidental** Groundwater Recharge Markets (ID, WY)

Implement a pilot market for incidental groundwater recharge in the Teton Basin to improve wetland health, base flows and streamflows in the Teton River. Project will result in an additional 5,000-10,000 acre feet of water in the Teton Basin aguifer, annually.

#### \$149,514

#### **Little Snake River Conservation District** Southwestern Wyoming Sagebrush Habitat Restoration Collaborative

Conserve sagebrush habitat across a 20-million-acre landscape in the Upper Green River watershed through the Southwestern Wyoming Sagebrush Habitat Restoration Collaborative. Project will maintain, restore and enhance sagebrush habitat with particular emphasis on intertwined mesic habitat to benefit sagebrush and wet meadow dependent species; design and implement conservation strategies for working wet meadows; and highlight the value of crossjurisdictional capacity and coordination. \$150,000

#### **National Audubon Society**

Advancing the SageWest Communications Network across the Sagebrush Ecosystem (multiple states)

Elevate individual conservation efforts and create a larger dialogue about the value and need for sagebrush conservation. Project will engage in priority work groups, develop guidance documents, and organize partner meetings across the ecosystem. \$34,200

#### **Pheasants Forever**

**Expanding Conservation of Working Lands** in the Sagebrush Ecosystem (multiple states) Maintain and expand technical assistance capacity in key greater sage grouse focal areas to strengthen working ranch lands management to improve greater sage grouse populations. Project will improve grazing practices on 250,000 acres to benefit greater sage grouse through technical assistance provided by 14 Strategic Watershed Action Teams members.

\$1,688,795

#### **Rocky Mountain Bird Observatory** Effectiveness Monitoring for Declining Grassland Bird Species within the Northern Great Plains (MT, ND, SD, WY)

Collect data on bird abundance and occupancy of priority grassland bird species to evaluate and quantify impacts of conservation investments Project will focus on three strategies for conservation projects: conservation easements, grassland restoration and grazing management projects within the NFWF Northern Great Plains region with comparisons providing an assessment of which programs are benefiting priority grassland bird species and help guide future investments. \$235,155

#### The Nature Conservancy

Upper Green River Basin

Migration Corridor Fencing Initiative (WY) Partner with private ranch owners and a local conservation district to modify, replace or remove up to 20 miles of problematic fences in the Hoback to Red Desert mule deer migration corridor. Project will collect wildlife collar data and local partner knowledge to identify the highest priority segments to increase landscape permeability for wildlife and reduce ungulate mortality. \$125,000

#### World Wildlife Fund

Expanding the Spatial and Temporal Scale of the Plowprint Analytical Tool (multiple states, Canada and Mexico)

Update and expand geospatial data analysis, called the Plowprint, to evaluate landscape change metrics for the Northern Great Plains ecoregion. Project analysis will expand the previous versions by including northern Mexico, extending the analysis backward in time to capture historical change and using the newest and best available data to track rates of agricultural conversion, monitor previously converted lands, identify risk factors for remaining intact habitat and target conservation work. \$20,000

#### **Wyoming Game and Fish Department** Rangeland Improvements on the Spring Creek Watershed (WY)

Assist the Spring Creek Grazing Association with planning for range improvement structures and practices for a variety of sagebrush/prairie dependent wildlife species. Project will improve wildlife habitat and connectivity in the Spring Creek portion of the Thunder Basin National Grassland, including water development, fence conversion, cross fencing, cheatgrass spraying and rangeland aeration. \$150,000

#### **U.S. TERRITORIES**

#### **PUERTO RICO**

#### **Enterprise Community Partners** Enterprise Resilience Learning Collaborative

Create and lead the CARES Learning Collaborative of Community Development Corporations from Puerto Rico and the U.S. Virgin Islands. Project will deepen up to eight local organizations' understanding of resilience through developing business continuity, engage 5,000 residents in readiness planning for local communities and rebuild with resilience in mind to reduce the impact of future disasters and events. \$250,000

#### **North Carolina State University**

Prescribed Fire Initiative within the Southeastern United States (multiple states)

Expand and accelerate the implementation of prescribed fire to restore and enhance longleaf pine habitat and other fire-dependent forest and grassland communities within the southeast. Project will engage 1,000 landowners and fire practitioners through technical assistance, training and outreach, including "Learn and Burn" workshops, development of prescribed burn associations and fire festivals, to increase the use of prescribed

\$130,000

#### Para la Naturaleza

Assess and mitigate threats to Coral Reefs from the Quebrada Ceiba Watershed (PR) Implement a volunteer-based water quality and coral reef health monitoring assessment and reforestation initiative in the municipality of Ceiba. Project will achieve measurable ecological and educational outcomes and inform implementation of better management practices for coral reefs in Puerto Rico. \$77,884

#### **Protectores de Cuencas**

Evaluation of Best Management Practices for Erosion Control in Guánica Bay Watershed (PR) Implement 10-15 high priority restoration projects within the Guánica Bay subwatershed, building upon efforts to address recommended actions of the Guánica Bay/Río Loco Watershed Management Plan. Project will evaluate erosion control measure effectiveness, develop user-friendly erosion assessment and best practices design tools and train interested groups in how to execute erosion mitigation plans based on proven cost-effective techniques. \$148,990

#### The Nature Conservancy

Improve and Expand the Puerto Rico Commercial Fishery Electronic Reporting System

Develop, improve and expand the adaptive electronic reporting system for up to 100 vessels in Puerto Rico fisheries. Project will result in a fully functional electronic reporting system in Puerto Rico's commercial fisheries, which will improve catch accountability, monitor annual catch limits, promote productive and sustainable fisheries, and improve Puerto Rico's fisheries statistics collection and management.

\$98,054

#### The Peregrine Fund

Puerto Rican Sharp-shinned Hawk Emergency Response to 2017-Hurricanes Irma and Maria Provides immediate emergency actions to save the endemic Puerto Rican sharpshinned hawk from extinction following the devastating impact of hurricanes Irma and

Maria on their habitat in Puerto Rico. Project will establish the Phase-1 basis of a recovery project that is likely to span five phases over a period of 20 years

\$25,000

#### The Ocean Foundation

#### Derelict Fishing Trap Removal and Effective Management Planning in Puerto Rico

Conduct a comprehensive removal effort of abandoned fishing traps in Puerto Rico and document the scale of unauthorized trap fishing in the territory. Project will couple a large-scale derelict gear-removal effort with an assessment of illegal trap fishing in collaboration with local and federal agencies and the fishing sector to improve compliance with trap fishing regulations and help transition to legal gear.

\$221,861

#### The Ocean Foundation

### Expanding the Electronic Fisheries Reporting Platform to U.S. Virgin Islands Commercial Fisheries (PR, VI)

Expand the electronic fisheries reporting platform established in Puerto Rico to the U.S. Virgin Islands to improve fisheries data. Project will apply mobile technology to collect fisheries data and combine data capture and visualization capabilities which will support improved fisheries management \$159,753

### U.S. Department of the Interior, U.S. Fish and Wildlife Service

Rescuing the Endangered Puerto Rican Parrot
Provide emergency funding to identify, ship
and store adequate food and other medical/
care supplies for endangered Puerto Rican
parrots following Hurricane Maria. Project
also will support temporary improvements
to the facilities to ensure the overall care/
health of the population and provide
additional resources.

\$100,000

### University of Maryland Center for Environmental Science

Coral Reef Ecosystem Status and Trends Report
Cards and System-Wide Synthesis (FL, PR, VI)
Develop a status and trends assessment
framework and report card process to
synthesize biological, physical and socioeconomic data from Puerto Rico, the U.S.
Virgin Islands and the Florida Flower Garden
Banks. Project will expand on previous
investments to support a National Coral
Reef Monitoring Plan through the National
Oceanic and Atmospheric Administration's
Coral Reef Conservation Program.

\$107,964

#### **U.S. VIRGIN ISLANDS**

#### **Enterprise Community Partners**

### Enterprise Resilience Learning Collaborative (PR. VI)

Create and lead the CARES Learning
Collaborative of Community Development
Corporations from Puerto Rico and the
U.S. Virgin Islands. Project will deepen up
to eight local organizations' understanding
of resilience through developing business
continuity, engage 5,000 residents in
readiness planning for local communities
and rebuild with resilience in mind to reduce
the impact of future disasters and events.
\$250,000

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\$130,000

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Coral Reef Ecosystem Status and Trends Report Cards and System-Wide Synthesis (FL, PR, VI)
Develop a status and trends assessment framework and report card process to synthesize biological, physical, and socio-economic data from Puerto Rico, the U.S.
Virgin Islands, and the Florida Flower Garden Banks. Project will expand on previous investments to support a National Coral Reef Monitoring Plan through the National Oceanic and Atmospheric Administration's Coral Reef Conservation Program.
\$107,964

### UNITED STATES AND INTERNATIONAL

FISCAL YEAR 2018 CONSERVATION INVESTMENTS

#### ASIA, INDIA AND THE PACIFIC

#### Island Conservation

#### Seabird Restoration on Midway Atoll

Protect breeding albatross and other at-risk seabirds on Midway Atoll National Wildlife Refuge through the eradication of the invasive house mouse. Project will result in the absence of mice from the entire 452 hectares (1,117 acres) of Sand Island and end mouse predation that result in albatross mortality and nest abandonment, increasing both adult survivorship and reproductive success.

#### \$1,000,000

#### **Island Conservation**

### Understanding Behavior and Diets of Rats on Tropical Islands in French Polynesia

Study two rat populations on Tetiaroa Atoll in French Polynesia to determine how breeding behavior and diet affect bait interaction used in rodent eradication, a powerful conservation tool employed globally. Project will address knowledge gaps around invasive rodent biology and diet on tropical islands that will inform how best to treat the highest risk segments in order to protect seabirds. \$60,260

#### **Marine Environment**

### **and Resources Foundation**Implementing a Networked Approach

### to Protected Area and Ecosystem Management in the Philippines

Explore best management practices of the Oriental Mindoro Marine Protected Area and Fishery Network in the Philippines, a network of local government units undertaking coastal resource management. Project will provide technical assistance and capacity building for the network including governance and planning, and monitoring and evaluation. \$60,000

#### MPA Enforcement International Increasing Enforcement Capacity for Coral Reef Management in American Samoa

Conduct a preliminary assessment of enforcement capacity and implementation in American Samoa. Project will transfer the successful capacity-building model and enforcement training techniques used in the Caribbean region to the Pacific. \$70,000

#### PATH Foundation Philippines Enhancing Community Management Capacity for Coral Reef Ecosystem Health

Increase local government and community management capacity to conserve biodiversity of coral reef ecosystems in six marine protected areas along the Verde Island Passage in the Philippines. Project will enhance marine protected area planning, reduce conflicts of use of ocean spaces, and provide economic incentives to reduce unsustainable fishing practices.

#### \$59,717

#### CANADA

\$111,760

#### **Bat Conservation International**

Testing Ultraviolet Light and Polyethylene

Glycol as a White-Nose Syndrome
Management Strategy (AL, AK, Canada)
Bat Conservation International will
evaluate the efficacy of using two nontoxic
agents — ultraviolet light and polyethylene
glycol — to treat mine walls and reduce
the prevalence of the fungus that causes
white-nose syndrome (WNS) on roosting
surfaces in bat hibernacula. Project will
test the two environmental cleaning
agents in three mines along the northern
and southern edges of the WNS spread
to test the potential of environmental
cleaning as a WNS management strategy.

#### Channel Islands Cetacean Research Unit Sea Turtle Stranding Response along the West Coast of the United States (CA, OR, WA and Canada)

Build capacity for the West Coast Marine Mammal Stranding Network to respond to five species of threatened and endangered sea turtles: Western Pacific leatherback turtle, Eastern Pacific green turtle, North Pacific loggerhead, Pacific olive ridley and Eastern Pacific hawksbill. Project will increase response efforts for live and dead stranded sea turtles through assessment of existing capacity, standardization of data and protocols, distribution of supplies and network-wide training sessions.

#### Hamilton-Wentworth Green Venture Reducing Flooding and Improving Water Quality through Green Infrastructure in Hamilton, Ontario (Canada)

Install a series of nine green stormwater infrastructure projects throughout Hamilton's Dundas neighborhood to increase stormwater storage by more than 130,000 gallons annually. Project will remove pervious surface, install rain gardens and engage the community to reduce significant flooding and the input of contaminants via stormwater runoff into Spencer Creek and Hamilton Harbor. \$122,201

#### Nature Conservancy of Canada Improving Brook Trout Habitat and Water Quality on Twelve Mile Creek (Canada)

Improve water quality, stream flow and temperature on Twelve Mile Creek near Hamilton, Ontario, by removing impoundments from natural springs, restoring riparian habitat and reinforcing a passage structure. Project will improve and protect critical stream and riparian habitat for brook trout on the headwaters of the last remaining cold-water stream in the Niagara Peninsula.

#### \$85,000

## University of California – Santa Cruz Developing Tools to Prevent Extinction and Recover Threatened and Endangered Seabirds (AK, CA, HI, Canada)

Utilize a new meta-population viability model approach in order to make improved seabird conservation decisions. Project will identify the most at-risk species and their breeding sites in order to improve the conservation status of seabirds and prevent the listing of seabird species in the future.

#### \$249,984

#### **World Wildlife Fund**

### Expanding the Spatial and Temporal Scale of the Plowprint Analytical Tool (multiple states, Canada, Mexico)

Update and expand geospatial data analysis, called the Plowprint, to evaluate landscape change metrics for the Northern Great Plains ecoregion. Project analysis will expand the previous versions by including northern Mexico, extending the analysis backward in time to capture historical change and using the newest and best available data to track rates of agricultural conversion, monitor previously converted lands, identify risk factors for remaining intact habitat and target conservation work. \$20,000

### LATIN AMERICA

### AND THE CARIBBEAN Bahamas National Trust

### Improving Capacity for Effective Management of Moriah Harbour Cay National Park in the Bahamas

Advance community awareness of Moriah Harbour Cay National Park to increase support for approved management systems. Project will engage community members, install park signs and boundary markers, and establish a regional branch in Exuma to support effective conservation and management of the park. \$30,206

#### BirdLife International

### Reducing Bycatch of the Pink-footed Shearwater in Chile

Reduce the bycatch of pink-footed shearwaters in the Chilean artisanal purse seine fishery that operates around the main breeding colony on Mocha Island. Project will construct 15 modified purse seine nets for the fishery, monitor the effect of the improved net design on seabird bycatch and increase awareness of the mitigation measure throughout the fishery stakeholder community. \$295,793

#### Centre for Resource Management and Environmental Studies (CERMES), The University of the West Indies

Coordination of a Global Monitoring Initiative for Coastal Management

Facilitate the coordination and enhancement of six regional programs for coastal management. Project will facilitate monitoring activities at established or new sites, and disseminate information on global status, trends, and prospects for six regional monitoring programs in the Caribbean, Central America, Brazil, South Asia, Southeast Asia and Pacific Islands. \$54,000

#### Fauna & Flora International Reduce Sea Turtle Bycatch from Gillnets and Blast Fishing in Priority Hawksbill Habitat (Nicaragua)

Characterize, map and evaluate the impact of artisanal fisheries in northern Nicaragua on local hawksbill sea turtle populations. Project will build a consensus among fishers and local and national authorities on feasible management measures to reduce hawksbill mortality due to bycatch caused by artisanal fisheries such as blast fishing and gill netting.

#### New Jersey Audubon Society

\$78,897

\$49,996

Aerial Surveys for Shorebirds Wintering along Brazil's North and Northeastern Coasts

Conduct aerial surveys for shorebirds wintering along Brazil's north and northeastern coasts, regions known to be critically important wintering areas for red knot and semipalmated sandpipers that stage in Delaware Bay during migration. Project will collect data that will help evaluate efficacy of conservation actions implemented in the Delaware Bay directed at the two species.

### Oikonos – Ecosystem Knowledge

Conservation of Pink-footed Shearwater in Chile

Advance conservation efforts for the pink-footed shearwater in all three of the known Chilean breeding islands, Isla Mocha and the Juan Fernández Islands, and in continental Chile. Project will address colony and at-sea threats through direct actions to protect colonies from human harvest, and predation and habitat degradation by non-native mammals, and aim to better understand fishery-related mortality, especially in the Chilean purseseine fishery.

\$325,000

#### Parc National de la Guadeloupe

Coral Reef and Human Dimensions Monitoring in the Mesoamerican Reef Caribbean

Increase integration of coral and human communities' data in management of prioritized marine protected areas along the Mesoamerican Reef. Project will implement bio-physical and socio-economic coral reef monitoring training workshops in Belize and Honduras as well as perform site assessments in four prospective sites in Belize, Honduras, Guatemala and Mexico. \$59,367

#### **Roatan Marine Park**

Reduce Threats to Coral Reefs by Addressing Priority Capacity Needs in Roatán Marine Park, Honduras

Fill three priority capacity needs within the Special Marine Protection Zone Sandy Bay — West End through initiatives that address sustainable tourism, fisheries management and financing. Project will reduce threats to coral reefs within the Bay Islands National Marine Park and inform management across Honduras.

#### The Ocean Foundation

\$47,734

Determine Vital Rates in Eastern Pacific Leatherback Sea Turtles (Mexico)

Expand a census of males in the Eastern Pacific leatherback sea turtle population through genetic fingerprinting at four primary nesting beaches in Mexico to build a deeper understanding of genetic stock structure. Project will provide information on likely sex ratios and parentage of the current leatherback population to help managers adapt conservation strategies to help stabilize the declining trajectory of this population.

\$45,536

#### World Wildlife Fund

Expanding the Spatial and Temporal Scale of the Plowprint Analytical Tool (multiple states, Canada and Mexico)

Update and expand geospatial data analysis, called the Plowprint, to evaluate landscape change metrics for the Northern Great Plains ecoregion. Project analysis will expand the previous versions by including northern Mexico, extending the analysis backward in time to capture historical change and using the newest and best available data to track rates of agricultural conversion, monitor previously converted lands, identify risk factors for remaining intact habitat and target conservation work.

\$20.000

# **GULF ENVIRONMENTAL BENEFIT FUND**FISCAL YEAR 2018 PROJECT COMMITMENTS

In the wake of the 2010 Deepwater Horizon explosion and oil spill in the Gulf of Mexico, BP Exploration and Production, Inc. and Transocean Deepwater, Inc. each pleaded guilty to criminal violations of federal law. The plea agreements in those cases require BP and Transocean, among other things, to make certain monetary payments to NFWF that are designated to fund projects benefiting Gulf Coast natural resources injured as a result of the spill. NFWF has established the Gulf Environmental Benefit Fund to receive and administer these funds. Funding was committed to the following projects under the Gulf Environmental Benefit Fund during Fiscal Year 2018 in accordance with the terms of the plea agreements. Since its inception in 2013, NFWF has awarded more than \$1 billion to projects in the Gulf States.

#### **ALABAMA**

### **Dauphin Island Park and Beach Board**Dauphin Island Bird Habitat Enhancement

Program

Enhance coastal bird habitat along 1 mile of recently restored beach and within an adjacent 200 acre bird sanctuary on Dauphin Island, Alabama's only barrier island and a Global Important Bird Area.

\$1,631,900

#### Dauphin Island Sea Lab / Marine Environmental Sciences Consortium Alabama Marine Mammal Conservation and Recovery Program (Amendment)

Amendment to address higher than anticipated stranding response and additional sampling and data collection requirements. \$621,100

#### Mobile Bay National Estuary Program, Marine Environmental Sciences Consortium

Coastal Habitat Restoration Planning Initiative (Amendment)

Undertake a bay-wide cultural resource survey and hydrologic model to inform engineering and design and facilitate permitting of future coastal habitat restoration projects. \$1,345,300

#### **Mobile County Commission**

Salt Aire Shoreline Restoration

Protect and restore a degraded shoreline and 30 acres of associated coastal marsh on the western shore of Mobile Bay. The 230 acre Salt Aire property was acquired by the County through a 2015 GEBF award. \$12,700,000

#### National Oceanic and Atmospheric Administration, National Marine Fisheries Service

Gulf of Mexico Marine Mammal Stranding Database (Amendment)

Amendment to a 2015 GEBF project to extend and expand application of the new marine mammal stranding database across the Gulf States and increase data collection and analysis to inform management.

\$29,778

#### The Conservation Fund

Bon Secour National Wildlife Refuge Acquisition – Phase I

Acquire a 251-acre parcel on Fort Morgan Peninsula for inclusion within the Bon Secour National Wildlife Refuge. The property has been identified by the U.S. Fish and Wildlife Service as among the highest priority for acquisition and includes diverse coastal habitat types.

\$5,866,177

#### FLORIDA

### Florida Department of Environmental Protection

Restoration of Florida's Coastal Dune Lakes (Amendment)

Amendment to complete removal of invasive plant material and use fire management to restore wetland habitat and increase freshwater flows into Deer Lake, a unique coastal dune lake in the Florida Panhandle. \$2.760.214

#### Florida Fish and Wildlife Conservation Commission, Fish and Wildlife Research Institute Enhanced Assessment of Gulf of Mexico

Fisheries: Fisheries Dependent Monitoring

– Phase V

Improve marine fisheries data collection for enhancement of stock assessments and fisheries management of important species along Florida's Gulf Coast. Project will collect harvest data for red snapper and other reef fish from recreational and commercial fishermen. \$3,292,615

# Florida Fish and Wildlife Conservation Commission, Fish and Wildlife Research Institute Enhanced Assessment of Gulf of Mexico Fisheries: Fisheries Independent Monitoring — Phase V

Implement a significant and meaningful expansion of the collection of fishery-independent data in the northern and eastern Gulf of Mexico. These data will be used to assess the recovery of offshore assemblages in association with restoration efforts implemented in response to the Deepwater Horizon oil spill; improve and expand single-species stock assessments for managed species; and foster improved ecosystem-based assessment and management capabilities. \$3,945,485

### National Audubon Society Comprehensive Panhandle Coastal Bird

Conservation (Amendment)

Amendment to complete restoration of a priority nesting island in Apalachicola Bay to benefit coastal birds.

\$600,000

#### National Oceanic and Atmospheric Administration, National Marine Fisheries Service Gulf of Mexico Marine Mammal Stranding Database (Amendment)

Amendment to a 2015 GEBF project to extend and expand application of the new marine mammal stranding database across the Gulf States and increase data collection and analysis to inform management.

\$414,716

#### Sea Turtle Conservancy

Eliminating Light Pollution on Sea Turtle
Nesting Beaches – Phase II (Amendment)

Amendment to address remaining priority light pollution retrofits to Panhandle properties and continue ongoing improvements to data collection and monitoring. \$957,000

#### The Atlanta Botanical Garden

Restoration of Florida's Coastal Dune Lakes (Amendment)

Amendment to complete removal of invasive plant material and use fire management to restore wetland habitat and increase freshwater flows into Deer Lake, a unique coastal dune lake in the Florida Panhandle. \$110.386

#### **LOUISIANA**

### Louisiana Coastal Protection and Restoration Authority

Adaptive Management: Louisiana River Diversions & Barrier Islands – Phase II

Conduct adaptive management activities related to river diversions and barrier islands in Louisiana. Project will provide data, modeling and analyses to support the development, design and operation of river diversions and barrier island restoration projects.

\$19,632,100

### Louisiana Coastal Protection and Restoration Authority

East Timbalier Island: Engineering and Design (Amendment)

Amendment for additional data collection and surveys needed to complete engineering and design.

\$2,228,700

### Louisiana Coastal Protection and Restoration Authority

Increase Atchafalaya Flow to Terrebonne: Engineering and Design – Phase I

Advance design and critical environmental regulatory review needed to construct a river diversion to build, sustain and maintain wetlands within the Terrebonne Basin. Once constructed and operated, this diversion project will restore freshwater influence in the basin and reduce wetland loss by approximately 13,000 acres over 50 years. \$16,367,400

10,307,400

#### MISSISSIPPI

### Mississippi Department of Environmental Quality

Coastal Headwaters Protection Due Diligence Undertake a technical assessment to determine the water quality and quantity benefits to coastal bays for a potential acquisition of approximately 48,000 acres that would protect significant coastal headwaters.

\$1.310.200

### Mississippi Department of Environmental Quality

Marine Mammal and Sea Turtle Conservation, Recovery, and Monitoring Program – Phase I Engage state and federal agencies, academic institutions and conservation organizations to bolster the capacity of Mississippi's marine mammal and sea turtle stranding network. Project will improve response to injured or dead animals and develop a consistent scientific understanding of the causes of mortality to inform management actions in the state.

\$9,933,900

FUND

BENEFIT

**ENVIRONMENTAL** 

### Mississippi Department of Environmental Quality

Pascagoula River Corridor Acquisitions

Acquire more than 3,400 acres in the Lower Pascagoula floodplain, including significant bottomland hardwoods. Protection of these properties will benefit various bird and fish species and will sustain water quality and quantity benefits downstream. \$11,849,800

### Mississippi Department of Environmental Quality

Reef Fish Assessment for Mississippi Coastal and Nearshore Waters – Phase II

Perform an assessment of reef fish in coastal Mississippi and nearshore Gulf waters through biological, environmental and fishery-dependent components that will provide necessary data resolution for reducing scientific uncertainty of factors influencing red snapper and reef fish population structures.

\$2,346,900

#### National Oceanic and Atmospheric Administration, National Marine Fisheries Service Gulf of Mexico Marine Mammal Stranding Database (Amendment)

Amendment to a 2015 GEBF project to extend and expand application of the new marine mammal stranding database across the Gulf States and increase data collection and analysis to inform management. \$43,012

#### National Park Service, Gulf Islands National Seashore

Habitat Restoration:

Federal Lands Program - Phase I
Enhance and restore habitat on the mainland
and barrier island units of Gulf Islands National
Seashore in Mississippi.
\$1,734,815

#### U.S. Fish and Wildlife Service, Grand Bay National Wildlife Refuge

Habitat Restoration: Federal Lands Program - Phase I

Enhance and restore habitat within the Grand Bay National Wildlife Refuge in Mississippi. \$1,769,000

#### **TEXAS**

#### American Bird Conservancy

Beach-Nesting and Wintering Bird Protection and Habitat Stewardship

Increase the number of breeding pairs and nesting success of beach nesting species and protect wintering shorebirds through habitat protection, monitoring and stewardship. \$275,000

### Coastal Bend Bays and Estuaries Program Nueces Bay Rookery Islands Restoration (Amendment)

Amendment to complete the design and restoration of four important rookery islands in Nueces Bay. \$1,145,000

#### **Coastal Bend Bays and Estuaries Program** Restoring Colonial Waterbirds

on the Texas Coast

Enhance and manage 35 colonial waterbird rookery islands on the Texas coast from San Antonio Bay to the Laguna Madre. \$363,400

#### **Ducks Unlimited**

Cow Trap Lake Bird Nesting Island Improvements (Amendment)

Amendment to restore nesting habitat and signage following damage from Hurricane Harvey.

\$186,400

#### **Ducks Unlimited**

Hydrological Restoration of Brazoria National Wildlife Refuge Wetlands – Phase I

Conduct engineering and design for future restoration of 9,500 acres of freshwater wetlands on Brazoria National Wildlife Refuge that have been previously ditched and drained. Project will enhance habitat for a suite of water bird species.

\$200,000

#### **Ducks Unlimited**

Restoration of J.D. Murphree WMA Water

Management Infrastructure

Remove marsh and other debris that settled in interior compartment ditches in the J.D. Murphree Wildlife Management Area due to extreme flooding from Hurricane Harvey. Project will directly benefit habitat critical for waterbirds within the WMA. \$82,500

#### National Audubon Society

Matagorda Bay Rookery Island, Feasibility Study and Alternative Analysis (Amendment) Amendment for additional assessments following Hurricane Harvey. \$73,300

#### National Oceanic and Atmospheric Administration, National Marine Fisheries Service Gulf of Mexico Marine Mammal Stranding Database (Amendment)

Amendment to a 2015 GEBF project to extend and expand application of the new marine mammal stranding database across the Gulf States and increase data collection and analysis to inform management. \$72,790

#### **Texas General Land Office**

Carancahua Bay Habitat Preservation and Enhancement – Phase I

Develop engineering and design plans for an approximately 2-mile living shoreline along the western side of the mouth of Carancahua Bay to reduce further erosion and restore the bay's hydrology.

#### **Texas General Land Office**

Galveston Island State Park Marsh Restoration and Protection – Phase III

Restore, enhance and protect intertidal marsh and other estuarine habitats at Galveston Island State Park through construction of an additional 7,600 linear-foot segments of rock breakwater within the Carancahua Cove area of West Bay.

\$5,000,000

\$392,000

#### **Texas General Land Office**

Salt Bayou (McFaddin NWR) Beach and Ridge Restoration

Restore the beach ridge system along the Gulf Coast within the McFaddin National Wildlife Refuge, between High Island and Sea Rim State Park on the Texas Upper Coast. This 17-mile beach ridge restoration project will complete restoration of 20 miles of coastline, protecting the largest estuarine marsh system in Texas.

\$26,500,000

#### Texas Parks and Wildlife Department

Dagger Island Restoration Project

Construct a half-mile, nearshore breakwater and beneficially use dredge material to restore an island in order to protect approximately 5,236 acres of coastal habitat, including 2,630 acres of seagrass in Redfish Bay, an area adjacent to Corpus Christi Bay. Project also will restore approximately 28 acres of coastal wetland habitat and create oyster, invertebrate and fisheries habitat. \$3,824,000

#### The Conservation Fund

Bahia Grande Coastal Corridor Acquisitions – Phase II

Acquire a 1,540-acre property to protect more than 4 miles of tidal frontage on Laguna Madre, and includes extensive coastal habitats such as emergent tidal wetlands, seagrass beds, mud flats and transitional habitats.

Property will be added to the Laguna Atascosa National Wildlife Refuge.

\$2,000,000

#### **The Conservation Fund**

Sabine Ranch Acquisition

Acquire 8,169 acres of the Sabine Ranch, a tract rich in Chenier Plain habitats, including extensive fresh and intermediate tidal marsh, coastal prairie, pond shore and salty prairie. As a part of a larger 12,376 acres tract, which will be ultimately conveyed to the McFaddin National Wildlife Refuge, this acquisition will secure the entire major watershed feeding Willow Sough Marsh, the largest remaining coastal freshwater marsh in Texas. \$10,199,101

#### The Nature Conservancy

South Padre Island Land Acquisitions – Phase I Acquire a 1,680-acre property on South Padre Island, which straddles the barrier island and includes healthy, intact habitats including beach, dunes, intertidal marsh and mudflats Property will be added to the Laguna Atascosa National Wildlife Refuge.

#### The University of Texas Marine Science Institute

\$2,575,000

Rebuild Flight Cage and Enclosure Complex for Rehabilitated Birds

Repair and rebuild a flight cage, bird enclosures and sea turtle rehabilitation pools at the Amos Rehabilitation Keep (ARK) facility which were damaged by Hurricane Harvey. \$194,600

# IMPACT-DIRECTED ENVIRONMENTAL ACCOUNTS (IDEA) FISCAL YEAR 2018 PROJECT COMMITMENTS

NFWF's IDEA department serves as a manager and trustee for funds arising from legal and regulatory actions involving natural resources and the environment. These funds originate primarily from court orders, settlements of legal cases, regulatory permits, licenses, and conservation and mitigation plans.

#### **ALASKA**

#### **Copper River Watershed Project**

Enhancing Fish Passage and Implementing Snow Melt Filtration to Benefit Salmon and Migrating Shorebird Habitat on Alaska's Copper River Delta (AK)

Restore connectivity to 1.5 kilometers of upland stream channels by replacing a culvert at mile 17 of the Copper River Highway with a stream simulation culvert. Project will improve passage for coho salmon on the Copper River Delta

\$150,000, Federal Criminal Case U.S. v. Polar Tankers, Inc.

#### Manomet

#### Determining Avian Population Trends in the 1002 Area of the Arctic National Wildlife Refuge (AK)

Conduct a shorebird population survey of the 1002 Area in the Arctic National Wildlife Refuge that will support range-wide population trend-estimation goals, provide critical information and important baseline data about the distribution and habitat use of breeding shorebirds in the area, and help target conservation actions locally and range-

\$79,714, Federal Criminal Case U.S. v. BP Exploration (Alaska), Inc.

#### Wildlife Conservation Society

Protecting Coastal Lagoons in the Southern Chukchi Sea: Project Chariot Revisited (AK)

Repeat historical surveys of four coastal lagoons at Cape Thompson using standardized protocols. Project will provide essential data for state and national response planning that prioritizes coastal lagoons across the entire southern Chukchi coast for deployment of limited human and material resources in the event of an oil spill.

\$119,860, Federal Criminal Case U.S. v. BP Exploration (Alaska), Inc.

#### ARIZONA

### **Ecosystems Research Institute**San Juan River Habitat Assessment (AZ, CO, NM, UT, WY)

Assess and monitor habitats in the San Juan River to help meet the goals and objectives of the San Juan River Basin Recovery Implementation Program.

\$75,810, Mitigation

#### Geomni

San Juan River Digital Aerial Photography (AZ) Conduct digital aerial videography of the San Juan River to track changes in river habitats. \$53,300, Mitigation

#### **CALIFORNIA**

#### **Audubon California**

Lake Isabella Willow Flycatcher Restoration (CA)
Continue to restore 1,150 acres of
southwestern willow flycatcher habitat
to compensate for impacts of long-term
operations of Lake Isabella reservoir, in
cooperation with the U.S. Army Corps of
Engineers and the U.S. Fish and Wildlife

\$178.952. Mitigation

#### **Bajada Ecology**

Service.

### 2018 Raven Studies in Joshua Tree National Park and Pinto Mountains Critical Habitat Unit (CA)

Conduct research on the interaction between desert tortoises and common ravens in Joshua Tree National Park and Pinto Mountains Critical Habitat Unit.

\$69,206, Mitigation

#### **Bajada Ecology**

### 2018 Raven Studies in Ord-Rodman Critical Habitat Unit (CA)

Conduct research on the interaction between desert tortoises and common ravens in the Ord-Rodman Critical Habitat Unit.

\$78,982, Mitigation

### California Department of Fish and Wildlife

California Department of Fish and Wildlife
Endowment – Topaz Solar Farm (CA)
Perform long-term management of mitigation
land in San Luis Obispo County, California.
\$258,569, Mitigation

### California Department of Fish and Wildlife

California Department of Fish and Wildlife Endowment - Wister Pond Water Source (CA) Purchase water from Imperial Irrigation District to benefit Wister Pond in San Diego

\$21,552, Mitigation

### **California Department of Fish and Wildlife**California Department of Fish and Wildlife

California Department of Fish and Wildlife Endowment – Wister Pond Operation and Maintenance (CA)

Conduct long-term operation and maintenance of Wister Pond in San Diego County, California. *\$17,102, Mitigation* 

#### **California Invasive Plant Council**

Controlling Invasive Sea Lavender in San Francisco Bay Tidal Marshes (CA)

Eradicate invasive sea lavender in order to maintain healthy wildlife habitat for the endangered Ridgway's rail and salt marsh harvest mouse in San Francisco Bay tidal marshes.

\$198,995, Federal Criminal Cases (multiple prosecutions)

#### California State University, Stanislaus Surveys for San Joaquin Kit Foxes.

Surveys for San Joaquin Kit Foxes, Tipton Kangaroo Rats, and Blunt-Nosed Leopard Lizards – II (CA)

Determine the presence of listed species, including the San Joaquin kit fox, Tipton kangaroo rat, and blunt-nosed leopard lizard, on Unit 15 of the Kern National Wildlife Refuge. \$4,834, Mitigation

#### California State University, Stanislaus Surveys for Tipton Kangaroo Rats

and Blunt-Nosed Leopard Lizards (CA)

Determine the presence of listed species, including Tipton kangaroo rat and blunt-nosed leopard lizard, on Unit 15 of the Kern National Wildlife Refuse

\$5,310, Mitigation

#### **California Trout**

#### Upper Shasta Coho Habitat Restoration (CA)

Improve coho salmon habitat and access to cold-water refugia in the Upper Shasta River. Project will add large woody debris structures, augment gravel and improve a spring water alcove on Hidden Valley Ranch.

\$175,247, Mitigation

#### **Central Coast State Parks Association**

Oceano Dunes District Oso Flaco Boardwalk Update/Expansion Project (CA)

Enhance visitors' experiences at Oso Flaco Lake in San Luis Obispo County, California, through education, expansion of the boardwalk picnic table area to meet Americans with Disabilities Act requirements, and the installation of bilingual interpretive paneling.

\$117,200, State Civil Case

People of the State of California v. Union Oil Company of California dba Unocal

#### City of Pacifica

#### Pacifica Pier Restoration Project (CA)

Repair the Pacifica Pier so that it may remain open to the public for recreational use.

Project will provide contractual services for design and project management for repair work, remove and replace lights, repair the deck access lid and wooden hand rails, and develop design documents to solicit bids for a set of additional deck hatch covers that are close to failing.

\$29,090, State Civil Case U.S. v. M/V Cosco Busan, et al.

#### **Corvus Ecological Consulting**

2018 Raven Studies in Fremont-Kramer Critical Habitat Unit (CA)

Conduct research on the interaction between desert tortoises and common ravens in Fremont-Kramer Critical Habitat Unit.

\$129,612, Mitigation

#### **Corvus Ecological Consulting**

2018 Raven Studies in Mojave National Preserve, Ivanpah Critical Habitat Unit, and Piute-Fenner Critical Habitat Unit (CA)

Conduct research on the interaction between desert tortoises and common ravens in the Mojave National Preserve, Ivanpah Critical Habitat Unit, and Piute-Fenner Critical Habitat Unit.

\$142,704, Mitigation

### Desert Tortoise Preserve Committee Renewable Energy Action Team Initial and Capital, Manzana Wind (CA)

Perform short-term management of mitigation land in Kern County, California.

\$11,373, Mitigation

#### East Bay Regional Park District

Casey Property Acquisition, Contra Costa County (CA)

Fund acquisition of approximately 320 acres by East Bay Regional Parks District, in partnership with the East Contra Costa County Habitat Conservancy, for the benefit of raptors and raptor habitat.

\$215,000 State Civil Cases and State Criminal Cases

#### **East Bay Regional Park District**

(multiple prosecutions)

Casey Property Habitat Restoration Project (CA)

Conduct initial habitat improvements as part of the long-term habitat management plan for the Casey property at Byron Vernal Pools Regional Preserve in Contra Costa County, California. Project will install signs to prevent trespassing, remove and replace 7,920 linear feet of fence, remove accumulated debris and hazardous materials, restore a water well, and preform weed abatement measures.

\$190,700, State Civil Cases and State Criminal Cases (multiple prosecutions)

#### East Bay Regional Park District Dotson Family (Breuner) Marsh Wetland-Upland Transitional Planting (CA)

Restore 30 acres of wetlands and 25 acres of coastal prairie through the removal of bay fill and contaminated soil and the creation of habitat to withstand sea level rise. Project will protect the endangered Ridgway's rail, California black rail and salt marsh harvest

\$115,000, Federal Criminal Cases (multiple prosecutions)

#### **Full Frame Productions**

California Endangered Species and Habitats Educational Video Projects (CA) Produce a series of educational videos and

public service announcements that focus on northern California threatened and endangered species and habitats, specifically the California tiger salamander, western snowy plover, San Joaquin kit fox, and coho salmon. \$139,925, Federal Criminal Case U.S. v. Wildlife Management, LLC.

#### Great Basin Institute

Great Basin Institute Wildlife Research
Associate at Kern National Wildlife Refuge (CA)
Provide continued support to research
associate program that engages aspiring
wildlife biologists in various activities, including
the management of protected species at Kern
National Wildlife Refuge and the monitoring,

\$9.780. Mitigation

species

\$160,000

#### **Guadalupe-Nipomo Dunes Center**

mapping and removal of target invasive

Guadalupe-Nipomo Dunes Center Educational and Public Programs Coordinator Position (CA) Fund a full-time educational and public programs coordinator at the Guadalupe-Nipomo Dunes Center, a natural history museum in Guadalupe, California. Project will coordinate school programs, field trips, afterschool programs, and public conservation and cultural events at the Dunes Center during the Dunes Center's capital campaign to renovate the new museum space.

State Civil Case, People of the State of California v. Union Oil Company of California dba Unocal

#### **Habitat Restoration Sciences**

California Department of Fish and Wildlife Endowment – JAL Preserve (CA) Perform long-term management of mitigation

Perform long-term management of mitigation land in San Diego County, California. \$12,186, Mitigation

#### **Habitat Restoration Sciences**

San Diego County Endowment

– Greenhills Ranch (CA)

Perform long-term management of mitigation land in San Diego County, California. \$19,798, Mitigation

#### **Habitat Restoration Sciences**

San Diego County Endowment – Jacumba Solar Open Space Preserve (CA)

Perform long-term management of mitigation land in San Diego County, California. \$7,376, Mitigation

#### HPR II

California Department of Fish and Wildlife Initial and Capital and Endowment – California Valley Solar Ranch (CA)

Perform short-term and long-term management of mitigation land in San Luis Obispo County, California. \$601,668, Mitigation

#### Institute for Wildlife Studies

Non-lead Ammunition

Outreach and Education (CA)

Implement a program to provide non-lead outreach and education to hunters within the southern California region, focusing on the Tehachapi and Transverse ranges. Project will help reduce the amount of lead fragments exposed to California condors.

\$84,000, Mitigation

#### Koopmann Family Trust

California Department of Fish and Wildlife
Initial and Capital – Koopmann Preserve (CA)
Perform short-term management of mitigation
land in Alameda County, California.
\$24,670, Mitigation

#### Mendocino County

Resource Conservation District

California Department of Fish and Wildlife Endowment – Willits Bypass (CA)

Perform long-term management of mitigation land in Mendocino County, California. \$344,762, Mitigation

#### Mid Klamath Watershed Council

Middle Creek Channel Rehabilitation Design Project (CA)

Create a creek rehabilitation design plan for 3,300 feet of private property along Middle Creek, a vital tributary for coho salmon. Project will increase and enhance salmonid rearing habitat.

\$92,187, Mitigation

#### Mid Klamath Watershed Council

Mid Klamath Coho Rearing Habitat Enhancement Project – II (CA)

Enhance cover complexity through placement of small woody debris and willow plantings within pools of the lower reaches of Klamath River tributaries.

#### **Mojave Desert Land Trust**

\$50,188, Mitigation

California Department of Fish and Wildlife – Renewable Energy Action Team Endowment – Hidden Valley and Chuckwalla Desert Wildlife Management Area (CA)

Perform long-term management of mitigation lands in San Bernardino and Imperial Counties, California.

\$74,677, Mitigation

#### **Mojave Environmental Holdings**

California Department of Fish and Wildlife Initial and Capital – Cuddeback-Kramer Preserve (CA)

Perform short-term management of mitigation land in San Bernardino County, California. \$88,488, Mitigation

#### Myers Irrevocable Flying M Ranch Trust

Flying M Ranch Project Conservation Easement Acquisition (CA)

Under NFWF's Sacramento District California Wetlands Mitigation In-Lieu Fee Program, obtain an exclusive and irrevocable option to purchase a conservation easement as a component of a compensatory wetland mitigation project entitled, "Flying M Ranch, Vernal Pool Preservation and Enhancement Project, Southern Sierra Foothills Vernal Pool Service Area" in Merced County, California. \$25,000, Mitigation

#### **National Park Service**

California Department of Fish and Wildlife – Renewable Energy Action Team Endowment – Mojave Milkweed (CA)

Perform long-term management of mitigation land in San Bernardino County, California. \$2,620, Mitigation

### Pacific Gas and Electric Company Acquisition of Sierra Health Foundation Property (CA)

Fund acquisition of 542 acres of vernal pool property to fulfill certain mitigation requirements under the Pacific Gas and Electric Company's multiregion Habitat Conservation Plan in Placer County, California. \$2,400,000, Mitigation

#### Pacific Gas and Electric Company

Payment into Escrow to Fund Mitigation Actions under Bay Area Habitat Conservation Plan (CA)

Fund pending actions under the Pacific Gas and Electric Company's Bay Area Habitat Conservation Plan in San Mateo, Alameda, Solano, and Fresno counties, California, including specified acquisitions of mitigation lands, restoration of mitigation lands, and enhancement of mitigation lands. \$7,530,000, Mitigation

#### **Point Millerton Ranch**

California Department of Fish and Wildlife Endowment – Point Millerton (CA) Perform long-term management of mitigation

land in Madera County, California. \$10,694, Mitigation

#### **Point Reyes National Seashore Association**

Dune Restoration Expansion Project:
Protecting Key Species from Extinction (CA)
Improve the quality and ecosystem function in
the area through restoration of coastal dune
habitat immediately adjacent to California
marine waters. Project will link two large-scale
dune restoration projects.
\$99,622, Federal Criminal Cases

(multiple prosecutions)

#### Prunuske Chatham, Inc.

Herndon and Reedley College Tree Replanting
– San Joaquin Valley Habitat Conservation
Plan (CA)

Plant more than 3,000 trees for the fulfillment of certain requirements under Pacific Gas and Electric Company's Master Streambed Alteration Agreement and San Joaquin Valley Habitat Conservation Plan. \$720,147, Mitigation

### Resource Conservation District of the Santa Monica Mountains

Riparian Oak Maintenance

in Lower Topanga Creek State Park (CA)
Continue maintenance, monitoring and planting
of native riparian species with associated
invasive species removal in the floodplain
and adjacent transitional habitat of lower
Topanga State Park located in the Santa Monica

Mountains, Los Angeles County, California.

\$44,857, State Civil Cases (multiple prosecutions)

#### **River Partners**

Panorama Vista Preserve and Dos Rios Ranch Tree Planting (CA)

Plant, monitor and maintain approximately 4,000 trees intended to offset tree removals in advance of projects covered by Pacific Gas and Electric Company's Master Streambed Alteration Agreement at two developed wildlife habitat restoration sites within the San Joaquin Valley: Dos Rios Ranch in Stanislaus County and Panorama Vista Preserve in Kern County, California.

\$861,165, Mitigation

#### Salmon River Restoration Council Salmon River Coho Rearing Habitat Enhancement Project (CA)

Restore and maintain habitat connectivity within all tributaries of the Salmon River during the summer low-flow period and remove and manipulate blockages to coho salmon migration. Project will improve critical coho salmon rearing habitat by increasing cover, pool depth and habitat complexity, with manual modifications and the addition of small and large wood and brush bundles. \$2,440, Mitigation

#### Santa Barbara County Parks Division, Community Services Department

Rancho Guadalupe Dunes Preserve Public Access Revitalization Project (CA)

Maintain and improve American with
Disabilities Act compliant visitor services at
Rancho Guadalupe Dunes Preserve through
public access improvements. Project will install
a new, prefabricated waterless restroom facility,
a new informational kiosk at the parking area,
and new interpretive panels and benches along
the concrete walkway.

\$230,000, State Civil Case People of the State of California v. Union Oil Company of California dba Unocal

#### Save The Bay

San Francisco Bay Transition Zone Restoration Project (CA)

Restore, maintain and monitor tidal marsh transition zone habitat in San Francisco Bay. Project will benefit wildlife including the endangered Ridgway's rail and salt marsh harvest mouse.

\$86,000, Federal Criminal Case various federal criminal prosecutions

#### **Scott River Water Trust**

Water Dedication Development in the Scott River Basin (CA)

Develop long-term and permanent water dedications in the Scott River watershed for the benefit of rearing coho salmon. *\$12,237, Mitigation* 

#### Southwest Wetlands Interpretive Association

Assessment of Ecosystem Health at Tijuana River National Estuarine Research Reserve (CA) Assess the effects of pollution at the Tijuana River National Estuarine Research Reserve. Project will monitor bioindicators with a primary emphasis on fauna, including mollusks, crustaceans, and fish.

\$224,999 , Federal Criminal Case
U.S. v. W. Bockstiegel Reederei GmBH &
CO. KG and W. Bockstiegel GmBH & CO.
Reederei KG MS "NILS B"

#### **Sundance Biology**

Raven Reproductive Control: Engineering an Egg-Oiling Drone (CA)

Develop and field test an unmanned aerial system capable of oiling raven eggs in nests built on electrical transmission towers. Project will contribute to long-term goals to manage raven populations and allow for desert tortoise recovery.

IMPACT-DIRECTED

**ENVIRONMENTAL ACCOUNTS** 

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\$36,264, Mitigation

#### Sundance Biology

2018 Raven Egg Oiling Implementation in Chemehuevi Critical Habitat Unit (CA)

Conduct raven management actions and effectiveness monitoring in the Chemehuevi Critical Habitat Unit in an effort to reduce raven fecundity, decrease recruitment, and over time, decrease raven abundances.

\$64,067, Mitigation

#### Sundance Biology

2018 Raven Egg Oiling Implementation in Superior-Cronese Critical Habitat Unit and Fort Irwin's Southeast Conservation Area (CA)

Conduct raven management actions and effectiveness monitoring in Superior-Cronese Critical Habitat Unit and Fort Irwin's Southeast Conservation Area in an effort to reduce raven fecundity, decrease recruitment, and over time, decrease raven abundances.

\$60,244, Mitigation

#### The Bay Foundation

Community Iceplant Removal at the Ballona Wetlands (CA) Manually remove iceplant monoculture patches

from approximately 1.5 acres of degraded wetland habitat while broadening community and public involvement at the Ballona Wetlands Ecological Reserve located in Los Angeles County, California. Project will bring together a diverse range of community members and students to participate in hands-on wetland restoration activities through organized events. \$43,850, State Civil Cases (multiple prosecutions)

#### The Land Conservancy of San Luis Obispo County

Evaluating Effectiveness of Nipomo Lupine Recovery Management (CA)

Evaluate the current management strategy for the Nipomo lupine to better calculate future management needs in San Luis Obispo County, California. Project will evaluate the effectiveness of restoration efforts to provide appropriate habitat for Nipomo lupine within two of the identified Dune Protected Areas as referenced in the Guadalupe Nipomo Dunes Complex Conservation Plan.

\$11,421, State Civil Case People of the State of California v. Union Oil Company of California dba Unocal

#### The Land Conservancy of San Luis Obispo County Kathleen's Canyon Overlook Interpretive Opportunities and Visitor Service Amenities (CA)

Construct a conservation park at Kathleen's Canyon Overlook in the Lower Black Lake Canyon Wetland Preserve, San Luis Obispo County, California. Project will provide free public access to the underserved communities of the Santa Maria River Valley for educational, social and health purposes while showcasing the special natural resources unique to the conservation property and Central Coast

\$28,000, State Civil Case People of the State of California v. Union Oil Company of California dba Unocal

#### The Living Desert

Desert Tortoise Information and Education Program (CA)

Print and distribute materials for "Cover Your Trash" outreach and education campaign. Project will increase awareness in local communities about the importance of protecting desert ecosystems and desert tortoises.

\$9,999, Mitigation

#### The Restoration Trust

The Restoration Trust Endowment

Bordoni Ranch (CA)

Perform long-term management of the Bordoni Ranch Mitigation Area in Solano County, California.

\$9,441, Mitigation

#### **Thomas K. Moss**

California Department of Fish and Wildlife Endowment - Pletz Residence (CA) Perform long-term management of mitigation land in Monterey County, California. \$3,046, Mitigation

#### **Transition Habitat Conservancy**

California Department of Fish and Wildlife – Renewable Energy Action Team Endowment - Fremont-Kramer (CA)

Perform long-term management of mitigation land in San Bernardino County, California. \$104,839, Mitigation

#### Truckee Donner Land Trust

Long-Term Land Management Fund for the Truckee Meadows Restoration Project (CA) Establish a long-term land management

fund to be held by the Truckee Donner Land Trust in trust for the perpetual management and protection of the Truckee Meadows Restoration Project site. Project will generate up to 2.33 Aquatic Resource Released Credits under NEWE's Sacramento District California In-Lieu Fee Program by restoring 6.56 acres of montane wet meadow habitat in Truckee, California, in the In-Lieu Fee Program's Tahoe Service Area.

\$31,415, Mitigation

#### **Truckee River Watershed Council**

Truckee Meadows Restoration Project (CA)

Generate up to 2.33 Aquatic Resource Released Credits under NFWF's Sacramento District California In-Lieu Fee Program by restoring 6.56 acres of montane wet meadow habitat in Truckee, California in the In-Lieu Fee Program's Tahoe Service Area. Project will fulfill a NFWF compensatory mitigation obligation resulting from the In-Lieu Fee Program's authorized sale of Aquatic Resource Advance Credits in the Tahoe Service Area.

\$193,500, Mitigation

Recovery Program (CA)

#### University of California, Santa Cruz Updating the Database Management System for Effective Use by the California Condor

Continue updating a comprehensive database of critical information on the central and southern California condor flocks for use by the U.S. Fish and Wildlife Service. Project will update database to include information from

\$2,000, Federal Criminal Case U.S. v. Wal-Mart, Inc.

calendar year 2017.

#### U.S. Department of Agriculture, Animal and Plant Health Inspection Service, Wildlife Services, National Wildlife Research Center

Raven Management

for Desert Tortoise Protection (CA)

Conduct wildlife damage management activities to control ravens for the protection of the federally listed desert tortoise in the Moiave and Colorado deserts located within California.

\$91,400, Mitigation

#### **Ventana Wildlife Society**

Releasing California Condors in San Luis Obispo County (CA)

Continue ongoing recovery effort for the California condor in San Luis Obispo County. California. The project includes conducting releases of captive-raised condors and monitoring condor populations.

\$50,000, Federal Criminal Case U.S. v. Wal-Mart, Inc.

#### **Vollmar Natural Lands Consulting**

Flying M Ranch Vernal Pool Preservation and Enhancement Project Development Plan (CA) Under NFWF's Sacramento District California Wetlands Mitigation In-Lieu Fee Program, develop a project development plan for a compensatory wetland mitigation project entitled, "Flying M Ranch, Vernal Pool Preservation and Enhancement Project, Southern Sierra Foothills Vernal Pool Service

Area." Project will preserve and enhance vernal pool wetland resources and ensure long-term protection of the wetland resource functions and values of the project site. \$169,080, Mitigation

#### **Westervelt Ecological Services**

Cosumnes Floodplain Mitigation Bank Credit Purchase (CA)

Purchase by NFWF's Sacramento District California Wetlands Mitigation In-Lieu Fee Program of 0.17 Floodplain Mosaic Wetland Credit from the Cosumnes Floodplain Mitigation Bank. The credit purchase fulfills a NFWF compensatory mitigation obligation resulting from the In-Lieu Fee Program's authorized sale of Aquatic Resource Credits in the Cosumnes/Mokelumne Rivers Aquatic Resource Service Area.

\$24,000, Mitigation

#### **Westervelt Ecological Services** Bullock Bend Mitigation Bank

Credit Purchase (CA)

Purchase by NFWF's Sacramento District California Wetlands Mitigation In-Lieu Fee Program of 0.59 Salmonid/Riverine Riparian Credit from the Bullock Bend Mitigation Bank. The credit purchase fulfills a NFWF compensatory mitigation obligation resulting from the In-Lieu Fee Program's authorized sale of Aquatic Resource Credits in the Cache/Putah Rivers Aquatic Resource Service Area \$82,600, Mitigation

#### **Westervelt Ecological Services**

California Department of Fish and Wildlife Endowment - Maxwell Planned Unit Development (CA)

Perform long-term management of mitigation land in Colusa County, California. \$9,121, Mitigation

#### **Westervelt Ecological Services Grasslands Mitigation Bank** Credit Purchase (CA)

Purchase by NFWF's Sacramento District California In-Lieu Fee Program of 2.88 Seasonal Wetland Credits from the Grasslands Mitigation Bank. The credit purchase fulfills a NFWF compensatory mitigation obligation resulting from the In-Lieu Fee Program's authorized sale of Aquatic Resource Credits in the San Joaquin River Aquatic Resource Service Area. \$403,948, Mitigation

#### **Westervelt Ecological Services**

U.S. Fish and Wildlife Service Endowment – Ferrari Ranch (CA)

Perform long-term management of mitigation land in Solano County, California. \$16,752, Mitigation

#### COLORADO

#### A. Lawrence Kolz

Standardization of Recovery Program Electrofishing Fleet (CO, UT)

Provide members of the San Juan River Recovery Implementation Program electrofishing fleet with guidelines for standardizing their electrode arrays to facilitate standardization of the power output for electrofishing.

\$3,375, Species Recovery

#### **Denver Botanic Gardens**

Propagation of Uinta Basin Hookless Cactus (CO)

Grow at least 33 Uinta Basin hookless cactus to a size that is adequate for outplanting into their wild habitat. Project will help mitigate cacti loss CONNECTICUT on Bureau of Land Management lands.

\$3,500, Mitigation

#### **Ecosystems Research Institute**

San Juan River Habitat Assessment (AZ, CO, NM, UT, WY)

Assess and monitor habitats in the San Juan River to help meet the goals and objectives of the San Juan River Basin Recovery Implementation Program. \$75,810, Mitigation

#### **Global Conservation Network**

Colorado Pikeminnow

Population Viability Analysis (CO, UT, WY) Use a population viability analysis to assess

Colorado pikeminnow extinction risk and help the U.S. Fish and Wildlife Service, program managers and species experts reach a downlisting decision.

\$28,950, Species Recovery

#### Miller Ecological Consultants

Colorado Pikeminnow Population Viability Analysis (CO, UT, WY)

Use a population viability analysis to assess Colorado pikeminnow extinction risk and help the U.S. Fish and Wildlife Service, program managers and species experts reach a

\$4,832, Species Recovery

downlisting decision.

#### Pat Martinez

Standardization of Recovery Program Electrofishing Fleet (CO. UT)

Provide members of the San Juan River Recovery Implementation Program electrofishing fleet with guidelines for standardizing their electrode arrays to facilitate standardization of the power output for electrofishing.

\$1,275, Species Recovery

#### **SWCA Environmental Consulting** Technical Assistance to the Upper Colorado

River Fish Recovery Program (CO)

Assist U.S. Fish and Wildlife Service, in coordination with the Recovery Program, with completing revision of four endangered fish species recovery plans. Revised recovery goals will be assimilated with past and new information, and consistent with the Endangered Species Act, implementing regulations, and the U.S. Fish and Wildlife Service handbook for recovery plan development.

\$21,120, Species Recovery

#### U.S. Department of the Interior, U.S. Fish and Wildlife Service, Region 2 Non-native Fish Management

on the San Juan River (CO, NM, UT) Implement non-native fish management on the San Juan River in accordance with the San Juan River Basin Recovery Implementation

\$50,361, Mitigation

#### **Connecticut Fund for the Environment** Long Island Sound Ecosystem Health Report Card (CT, NY)

Coordinate, distribute and the publicize the regional Long Island Sound Report Card over a three-year budget cycle.

\$5,500, Federal Criminal Case U.S. v. ODFJELL ASIA II

#### **Northeast States**

#### for Coordinated Air Use Management VOC and Other Air Quality Aircraft

Measurements over Connecticut and Long Island Sound (CT)

Conduct aircraft flights over Long Island Sound and coastal Connecticut to collect atmospheric measurements of volatile organic compounds (VOCs), including formaldehyde and other air toxics, affecting Connecticut. Project will gather improved information on VOCs entering Connecticut and will aid state air quality planners in designing effective programs to reduce the environmental and public health harms associated with VOC pollution, including ground-level ozone formation, organic particulate matter and air toxics. \$179,838, Federal Criminal Case US v. SCP Management, LLC

**FLORIDA** 

#### **Conservation Fisheries**

Okaloosa Darter Collection, Propagation, and Reintroduction (FL)

Fund the collection, propagation and reintroduction of the federally threatened Okaloosa darter.

\$31,175, Mitigation

#### **Coral Restoration Foundation** Rapid Coral Reef Assessment and Emergency Restoration (FL)

Conduct rapid assessment of "high value" sites along the entire affected reef tract, from Palm Beach County through the Dry Tortugas. Project will respond to sites identified by a survey team for coral triage and stabilization.

\$109,723, Federal Criminal Case, Various federal criminal prosecutions

#### **Escambia County**

Bayou Grande Living Shoreline Project (FL)

Construct offshore oyster reefs and install appropriate emergent marsh vegetation between the oyster reefs and mean high water line at three locations in the Navy Point area of Bayou Grande, Pensacola Bay. Project will improve priority fish and wildlife habitat, improve water quality, reduce shoreline erosion, strengthen coastal resilience, and restore oyster reef and emergent marsh habitat in the Pensacola Bay system.

\$180,000, Federal Criminal Case U.S. v. Briese Schiffahrts GmBh & Co. KG

#### Fish and Wildlife Foundation of Florida Invasive Lionfish Control and Management in the Coral Reef Systems

MPACT-DIRECTED

**ENVIRONMENTAL ACCOUNTS** 

of Southeast Florida (FL)

Coordinate an education, research, and management initiative to reduce the population growth and spread of the invasive lionfish species across southeast Florida. Project will coordinate removal derbies to remove thousands of non-native lionfish in one-day events, research attractants to increase their capture and conduct collection, handling and culinary workshops. \$69,500, Federal Criminal Case

#### Florida Fish and Wildlife Conservation Commission

Hurricane Irma Displaced Trap Retrieval in the Florida Keys (FL)

U.S. v. Princess Cruise Lines, LTD.

Address the impacts of spiny lobster and stone crab traps lost during Hurricane Irma in coastal and inland areas of the Florida Keys. Project will restore sensitive habitats, including mangroves, coral reefs, and seagrass beds where derelict traps may become entanglement hazards to endangered and threatened species

\$150.000. Federal Criminal Case U.S. v. Princess Cruise Lines, LTD.

#### Florida Fish and Wildlife **Conservation Commission**

Post-Hurricane Irma Derelict Trap Retrieval and Debris Removal in the Florida Keys (FL)

Address the impacts of traps lost during Hurricane Irma by removing derelict traps and trap debris from coastal and inland areas of the Florida Keys. Project will recover 3,395 derelict traps to assist with urgent wildlife and habitat restoration efforts.

\$132,892, Federal Criminal Case U.S. v. Princess Cruise Lines, LTD.

#### **Mote Marine Laboratory**

Upgrade sea water system at the Mote Marine Lab Facility (FL)

Upgrade the sea water supply and filtration system for the purpose of improving the operation of educational, research, and conservation facility. Project will provide the necessary equipment to provide better water quality and reliability for the live coral tanks. \$46,800, Federal Criminal Case U.S. v. Idaho Aquarium, Inc.

#### St. Andrew Bay

#### **Resource Management Association** Community-Based Habitat Restoration in St. Andrew Bay (FL)

Implement community-based living shoreline habitat restoration programs in the St. Andrew Bay watershed. Project will restore and enhance a total of 0.4 acres of coastal wetlands and perform education and outreach activities, resulting in habitat restoration that will increase community resilience and enhance environmental stewardship.

\$40,000, Federal Criminal Case U.S. v. Lagoon Landing, LLC

#### HAWAII

#### **Conservation Metrics**

2017 Automated Acoustic Surveys for Hawaiian Seabirds on Lanai (HI)

Deploy a total of 23 automated acoustic sensors to survey for Hawaiian seabird species on the island of Lanai, Hawaii. \$8,494, Mitigation

#### **Conservation Metrics**

2018 Automated Acoustic Surveys for Hawaiian Seabirds on Lanai (HI) Fund the 2018 analysis of remote acoustic

monitoring for the threatened Newell's shearwater, endangered Hawaiian petrel, and endangered band-rumped storm petrel on the island of Lanai.

\$10,728, Mitigation

#### Ho'ilina Ranch

#### Fence Maintenance and Ungulate Control at Kona Forest Unit (HI)

Fence conservation lands and remove feral ungulates from the Kona Forest Unit of Hakalau Forest National Wildlife Refuge. \$444, Other

#### Malama Maunalua

#### Restoring nearshore habitat in Maunalua Bay through the use of the Supersucker (HI)

Operate a supersucker to remove invasive alien algae threatening the coral reefs in Maunalua Bay. The project engages volunteers, Malama Maunalua staff. community members and students in facilitating the return of native species and creating a healthy nearshore

\$122,380, Federal Criminal Case U.S. v. Keoje Marine Co. Ltd.

#### Pulama Lanai

#### Kaheawa Wind Power Mitigation Lanai Hawaiian Petrel Protection Project (HI)

Expansion of ecosystem-level Hawaiian petrel colony management on the island of Lanai. Project will improve reproductive success in areas that are currently under-protected from mammalian predators.

\$100,616, Mitigation

#### Pulama Lanai

Song Meter Purchase for Lanaihale Colony (HI) Purchase song meters and associated equipment to monitor the Hawaiian petrel colony on Lanaihale.

\$7,726, Mitigation

#### **Roth Ecological Design International**

Improving Coral Reef Resilience

in West Maui through Floating Wetlands (HI) Design, fabricate and install an anchored floating wetland structure planted with native wetland plants at a point of concentrated nutrient and urban pollutant loading in a resort lagoon tidally connected to the ocean. Project will help improve water quality in the lagoon and increase the long-term resilience of nearby coral reefs. \$99,966, Federal Criminal Case U.S. v. Princess Cruise Lines, LTD.

#### University of Hawaii

#### 2018 Monitoring of Endangered Seabirds on Lanai (HI)

Monitor and manage work on the Seabird Recovery Project, which will support the Lanai Hawaiian petrel colony in coordination with landowner efforts to do landscape level predator control

\$47,200, Mitigation

#### West Maui Soil and Water **Conservation District**

Sustained Sediment Reduction to Nearshore Reefs in West Maui (HI)

Coordinate the de-watering and removal of sediment accumulated over decades from Kahana Nui Basin to restore capacity for sediment storage. Project will restore storage capacity for the top sediment-exporting watershed in West Maui, help reduce the chronic contributions to high turbidity levels in the nearshore waters and hydrologically connected coral reefs will have enhanced resilience as this stressor is reduced.

\$199,760, Federal Criminal Case U.S. v. Princess Cruise Lines, LTD.

#### **LOUISIANA**

#### **Coalition to Restore Coastal Louisiana** Pointe-au-Chien Cultural

Heritage Protection Reef (LA)

Install a 394-foot ovster reef in Bayou Pointe-au-Chien. Project will aid in slowing the erosion of the mounds and surround channels, support the ecosystem by providing cultch for new oyster growth and enhance the area's cultural value. \$2,500, Federal Criminal Case U.S. v. Marine Managers, Ltd.

#### **MASSACHUSETTS**

#### Massachusetts Division of Marine Fisheries

Reducing Right Whale Entanglement through Derelict Fixed Gear Removal in Cape Cod Bay (MA)

Remove fixed gear from the Massachusetts Bay Restricted Area during closed season to reduce the entanglement risk to North Atlantic right whales. Project will partner with Massachusetts Environmental Police, the Center for Coastal Studies, and local lobstermen to identify. remove, and dispose of fixed-fishing gear. \$93,839, Federal Criminal Case U.S. v. Princess Cruise Lines, LTD.

#### **Massachusetts Maritime Academy** MARPOL Courses

for Marine Pollution Training (MA)

Provide a MARPOL course to students enrolled in the Marine Safety and Environmental Protection program at the Massachusetts Maritime Academy. Project will educate students on the annexes within MARPOL International Convention for the Prevention of Pollution from Ships through a six-week course. \$26,307, Federal Criminal Case U.S. v. MSC Ship Management (Hong Kong) Limited

#### The Research Foundation for the State University of New York

MARINE DEFENDERS: A Mariner

Environmental Education Program (MA) Educate seafarers visiting or sailing from ports in Massachusetts about MARPOL and key U.S. environmental laws, the extent and impact of oil pollution on the marine environment, and how to report violations to the U.S. Coast Guard. Project will create a mariner educational campaign focusing on seafarers visiting or sailing from ports in Massachusetts by creating a documentary about intentional oil pollution from ships, a how-to guide for whistleblowers and create educational content to be shared online and via posters and brochures. \$135,000, Federal Criminal Case U.S. v. MSC Ship Management (Hong Kong)

#### MONTANA

#### Forestoration

Lost Trail Stream Restoration (MT)

Conduct stream restoration in the Lost Trail National Wildlife Refuge. \$15,890, Mitigation

#### **Montana Conservation Corps**

Lost Trail National Wildlife Refuge Riparian Restoration and Revegetation (MT)

Conduct riparian restoration and revegetation work in the Lost Trail National Wildlife Refuge. \$15,000, Mitigation

#### **Rehbein Enterprises**

Lost Trail Stream Restoration (MT)

Conduct stream restoration in the Lost Trail National Wildlife Refuge. \$5,908, Mitigation

#### **River Design Group**

Lost Trail National Wildlife Refuge Restoration (MT)

Provide project management and coordination for the Lost Trail National Wildlife Refuge Stream and Wetland Final Design project. \$25,345, Mitigation

#### **River Design Group**

McGregor Meadows Waterfowl Protection Area Post-Construction Monitoring and Wetland Delineation (MT)

Conduct post-construction monitoring and wetland delineation in McGregor Meadows Waterfowl Production Area, as part of Kerr Mitigation Project.

\$6,441, Mitigation

#### **River Design Group**

Swan River National Wildlife Refuge Wetland Restoration (MT)

Conduct wetland restoration assessment of Swan River National Wildlife Refuge. \$26,083, Mitigation

#### **NEVADA**

#### Board of Regents, NSHE, obo University of Nevada, Reno

Spatial Analysis of Raven Management Data for Desert Tortoise Critical Habitat (NV) Create a database to store all collected data from

common raven surveys conducted between 2013 and 2017 in desert tortoise critical habitat units. Project will perform data analyses to answer key management questions and create an interactive map for all surveyed areas. \$90,864, Mitigation

#### **Mountain View Business Group** Desert Tortoise Spatial Decision Support

System Porting to New Host (NV)

Port the Desert Tortoise Spatial Decision Support System to a stable production environment and ensure that the system is updated. Project will support the Desert Renewable Energy Conservation Plan by identifying mitigation strategies and key areas for Mojave desert tortoise recovery. \$24,000, Mitigation

#### American Southwest Ichthvological Researchers

San Juan River Channel Restoration Site

monitoring, in collaboration with New Mexico Department of Game and Fish, in restored channels of the San Juan River

#### **Chem-Impex International**

Chem-Impex Calcein (NM)

Purchase calcein powder to be used to mark age-0 Colorado pikeminnow before they are stocked into the San Juan River. \$7,466, Mitigation

#### **Ecosystems Research Institute**

San Juan River Habitat Assessment (AZ, CO, NM, UT, WY)

Assess and monitor habitats in the San Juan River to help meet the goals and objectives of the San Juan River Basin Recovery Implementation Program.

\$75,810, Mitigation

#### Geomni

San Juan River Digital Aerial Photography (NM) Conduct digital aerial videography of the San Juan River to track changes in river habitats.

\$53,300, Mitigation

#### Jolie Products / DBA 123Ponds.com

The Razorback Sucker Swimming Project (NM) Conduct work to improve survival of stocked fish in the San Juan River by conditioning fish before stocking.

\$1,363, Mitigation

#### Syndel USA Syndel Calcein (NM)

\$2,227, Mitigation

Purchase calcein powder to be used to mark age-0 Colorado pikeminnow before they are stocked into the San Juan River.

U.S. Department of the Interior,

U.S. Fish and Wildlife Service Staff Biologist for San Juan River

Recovery Actions (NM) Contribute towards a San Juan River Recovery Implementation Program staff biologist to conduct Recovery Actions. \$133,384, Mitigation

#### U.S. Department of the Interior, U.S. Fish and Wildlife Service, Region 2

Non-Native Fish Management on the San Juan River (CO, NM, UT)

Implement non-native fish management on the San Juan River in accordance with the San Juan River Basin Recovery Implementation Program. \$50,361, Mitigation

#### **NEW YORK**

#### **Brooklyn Public Library**

Greenpoint Library Environmental Education Center (NY)

Retrofit the Greenpoint Library to LEED Silver standards by adding a floor to house a community environmental education center. Project will provide over 50 hours of access each week and 300 programs yearly promoting environmental awareness, install 8,500 square feet of intensive green roof, and replace 10,700 square feet of impervious surfaces with permeable pavers and rain gardens. \$49,428, Other

#### **Brooklyn Public Library**

Greenpoint Library Environmental Education Center – Youth Environmental Education (NY) Enhance the programs and services available at the Greenpoint Library and Environmental Education Center with the development of a series of 12 environmental education workshops for youth, and acquisition of over 200 born-digital environmental remediation reports for public use. Project will increase access to free information and handson activities that support environmental education, awareness and stewardship in the Greenpoint community, while library staff gains the skills, confidence and tools needed to offer robust services that complement the environmentally friendly features of the new

\$25,286, Other

#### **Carleton University**

St. Lawrence River Fish Habitat Conservation Strategy – II (NY)

Develop the St. Lawrence Fish Habitat Conservation Strategy, which involves site prioritization and development of a site list with recommendations for enhancement activities. Project also includes the implementation of team meetings, support for advancing proposed implementation projects, creation of preliminary designs for projects, along with GIS database maintenance, and the collection, processing, and reporting of biological and physical monitoring data needed to assess impacts on the fisheries of existing and proposed implementation projects. \$24,750, Mitigation

**IMPACT-DIRECTED** 

**ENVIRONMENTAL ACCOUNTS** 

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#### **City Parks Foundation**

Greening Greenpoint: An Urban Forestry Plan (NY)

Implement a full inventory of trees and associated canopy cover, develop a comprehensive urban forestry plan on the neighborhood scale, and implement the plan. Project will plant 500 new trees that will capture 787,500 gallons of stormwater annually, sequester 13,000 pounds of carbon dioxide, install 325 tree guards around existing trees, remove up to 25,000 square feet of impervious concrete and reduce local air pollution.

\$603.513. Other

#### **City Parks Foundation**

Greening the Industrial Shoreline of Newtown Creek in Greenpoint (NY)

Educate the community and raise awareness of the environmental conditions of Newtown Creek. Project will train volunteers to identify local species of trees and plants and invite volunteers to participate in a canoe-based and land-based survey of the creek's shoreline, recording their observations in iNaturalist. \$53,826, Other

#### **NEW MEXICO**

Monitoring – II (NM)

Conduct larval and small-bodied fish \$7,851, Mitigation

#### Connecticut Fund for the Environment Long Island Sound Ecosystem

Health Report Card (CT, NY)
Coordinate, distribute and the publicize the regional Long Island Sound Report Card over a

\$5,500, Federal Criminal Case
U.S. v. ODFJELL ASIA II

three-year budget cycle.

### Council on the Environment, GrowNYC Lentol Garden Renovation (NY)

Renovate Lentol Garden, a community garden in Greenpoint, to restore a declining garden to a vibrant neighborhood gathering spot, spur neighborhood involvement, participation from community-based organizations, and the growth of a wide variety of plants. Project will reactivate several dark and shady areas of the garden, replace mature plants inadvertently destroyed by pest control efforts several years ago, and install additional seating areas as well as educational signage throughout the garden. \$99,241, Other

### Council on the Environment, GrowNYC McCarren Park Urban Farm

and Green Infrastructure Corridor (NY)
Design and implement a large garden/farm
in McCarren Park to educate Greenpoint
residents and increase incidences of safe

backyard gardening. \$38,192, Other

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ACCOUNTS

**ENVIRONMENTAL** 

IMPACT-DIRECTED

#### **Gowanus Canal Conservancy**

Improving Gowanus Canal Water Quality
Through Volunteer Stewardship (NY)

Conduct stewardship of tree pits and other public green spaces such as gardens and small parks. Project will steward 300 street trees, which will increase soil permeability and the volume of stormwater captured; remove 3,000 pounds of trash from public space; install 470 native plant species; and engage 900 volunteers and 900 students to participate in programs.

\$69,993, Federal Criminal Case U.S. v. A&L Cesspool Service Corporation

#### Horticultural Society of New York McGolrick Park Environmental Education Stewardship Project (NY)

Enhance and maintain two native plant areas of McGolrick Park, the Urban Oasis Garden and the Native Pollinator Sanctuary in the primary garden area.

\$75,000, Other

### Horticultural Society of New York McGolrick Park Restoration (NY)

Increase the environmental and community benefits provided by McGolrick Park. Project will remediate environmental concerns, increase the sustainability of the park's natural areas, and increase opportunities for community-focused education.

\$128,455, Other

### National Audubon Society Audubon New York's For the Birds! Environmental Education Program (NY)

Deliver hands-on environmental education programming to students at PS 110 The Monitor School, St. Stanislaus Kostka Catholic Academy, PS 31 Samuel F. Dupont School, and PS 34 Oliver H. Perry School. Project will cultivate new audiences and promote a culture of stewardship by delivering adult and family-focused environmental education workshops that will create opportunities for Greenpoint residents to learn about and engage with local ecosystems.

\$100,089, Other

#### National Wildlife Federation

Greenpoint Eco-Schools:

Creating a Legacy of Sustainability (NY)

Reduce water use, energy use and solid waste at four public schools using the Eco-Schools USA model to build environmental awareness, leadership, and stewardship among more than 1,800 students, 125 staff, and thousands of community residents. Project will reduce solid waste by 25 percent, water use by at least 5 percent, and energy use by at least 10 percent, providing measurable environmental benefits to the community.

\$728,290, Other

#### Neighbors Allied for Good Growth Strengthening Our Common Ground: Lead in Soils in Greenpoint (NY)

Provide Greenpoint residents with education on lead in soil. Project will promote and facilitate practices for avoiding lead exposure, thus expanding the network of environmental stewards and improving public health. \$50,000, Other

#### **New York Botanical Garden**

### Conservatory Permeable Paver Stormwater Detention Lot Project (NY)

Install 11,136 square feet of permeable pavers in an existing impervious parking area. Project will improve the water quality of the Bronx River that in turn discharges into Long Island Sound by reducing the volume of runoff and the quantity of pollution.

\$10,589, State Criminal Case State of New York v. City of Yonkers

### New York City Audubon Society The Newtown Creek Wildflower Roof and Community Space (NY)

Install and maintain a large-scale, bird-friendly green roof planted with native species with the goals of minimizing direct wet-weather flows to Newtown Creek, creating natural habitat for birds and other species, and establishing a community space

\$162,901, Other

#### New York City Audubon Society

The Newtown Creek Wildflower Roof and Community Space – II (NY)

Create a teaching lab at the Newtown Creek Wildflower Roof and Community Space by installing scientific equipment, writing a green-roof curriculum for pre-K to grade 5, and incorporating the lab into the space's current educational programming. Project will install and maintain a second bird-friendly green roof of 2,014 square feet plus a 100-square-foot green wall with the goals of increasing natural habitat access and species diversity in Greenpoint, further reducing direct wet-weather flows to Newtown Creek and local air pollution, and adding public green space for the community. \$99,557, Other

#### **Newtown Creek Alliance**

Gateway to Greenpoint (NY)

Create a community-driven plan for the development of a 13,000 square-foot, city-owned parcel at the corner of Greenpoint and Kingsland avenues in Greenpoint, Brooklyn. Project will result in a site plan that generates public space and environmental benefit will allow New York City Department of Environmental Protection to move forward in developing the parcel.

\$31,811, Other

#### **Newtown Creek Alliance**

#### Newtown Creek SAMPLES Project – II (NY)

Collect a season's worth of water quality sampling to provide vital information about the conditions of surface waters in Greenpoint's Newtown Creek. Project will share and distill information with the Greenpoint community through social media and a series of educational canoe trips on Newtown Creek and create a project booklet to summarize key findings and outline ways in which Greenpoint residents can help improve local water quality conditions. \$29,233, Other

#### North Brooklyn Chamber of Commerce

Curb Your Litter: Greenpoint – II (NY)

Implement a three-step process to reduce the volume of litter and other waste in the entire neighborhood through an assessment of current conditions, a coordinated education and outreach campaign and the implementation of infrastructure upgrades to replace and/or complement current containers. Project will recruit 50 local businesses to sign the Clean Greenpoint Pledge, convene four neighborhood cleanup days, develop a curriculum guide for 8-12th grade educators and neighborhood leaders, and install 50 new, high-end litter baskets at priority intersections. \$15,000, Other

#### North Brooklyn Community Boathouse Environmental Education Shed – II (NY)

Expand the Environmental Education Shed, a sustainable wetland laboratory with multifaceted programming that demonstrates green infrastructure systems and communityled environmental stewardship in Greenpoint. \$88,784, Other

#### Open Space Alliance For North Brooklyn Greenpoint Parks

Community Stewardship Program (NY)
Fund the hiring of a program manager to
oversee an outreach program designed
to create a culture of stewardship around
Greenpoint Parks, including McGolrick Park,
WNYC Transmitter Park, and Newtown Barge
Parks, as well as the Greenpoint and American
playgrounds.

\$99,000, Other

#### PS 110K PTA

PS110 Garden Renovation (NY)

Renovate the playground on Monitor Street next to PS110 by adding several planters containing native trees and vines, raised beds for agricultural development, and special seating for students. Project will improve the quality of life and education for the students and teachers of PS110, create a public garden for the Greenpoint community, and create natural habitat for pollinators.

\$83,724, Other

### The Research Foundation for the State University of New York

St. Lawrence River Fish Habitat Conservation Strategy (NY)

Continue to advance progress associated with the Fish Habitat Conservation Strategy partnership. The Fish Habitat Conservation Strategy has led to a significant partnership among resource management agencies, conservation organizations, and academia in the proactive management of fish habitat to improve natural reproduction of native fishes. \$592,300, Mitigation

#### **Town Square**

Go Green Activity Hub – II (NY)

Sustain and grow Go Green BK Hub, an online digital resource launched in April 2016. Project will increase participation in environmental issues and projects, and result in a larger and more engaged community for environmental stewardship across Greenpoint by organizing, centralizing and presenting local environmental issues, events and opportunities for the Greenpoint community.

\$50,000, Other

#### U.S. Army Corps of Engineers

Marsh Island Restoration Planning in Jamaica Bay (NY)

Support the planning portion of a saltwater marsh feasibility study in the interior of Jamaica Bay.

\$300,000, Other

#### U.S. Department of the Interior, U.S. Fish and Wildlife Service, New York Field Office Lake Sturgeon Restoration Project, Hatchery Assistance (NY)

Provide support for Lake Sturgeon restoration projects.

\$25,000, Mitigation

### U.S. Department of the Interior, U.S. Fish and Wildlife Service, New York Field Office

St. Lawrence Fish Enhancement, Mitigation and Research Fund Expenses (NY)
Support fish enhancement, mitigation and

Support fish enhancement, mitigation and research projects in the St. Lawrence River. \$204,164, Mitigation

#### U.S. Department of the Interior, U.S. Geological Survey, Great Lakes Science Center Assessment of Lake Sturgeon Habitat Enhancement after 10 Years (NY)

Assess the status and effectiveness of a habitat improvement project in the St. Lawrence River created 10 years ago to support lake sturgeon reproduction.

\$162,604, Mitigation

#### Various Recipients

Goose Bay Wetland Enhancement Project (NY) Support the creation of a spawning pool to enhance northern pike spawning habitat. \$154,674, Mitigation

#### **Various Recipients**

Little Sucker Brook Walleye Spawning Enhancement (NY)

Support shoreline stabilization to reduce sediment input as part of a project to improve walleye spawning.

\$12,665, Mitigation

#### Various Recipients

Otter Creek Wetland Enhancement Project (NY)
Creation of channeling/spawning pool to
enhance northern pike habitat.
\$54,890, Mitigation

#### Vemco

American Eel Telemetry Study (NY)

Purchase of acoustic receiver and flotation collar for an American eel tracking study. *\$40,675, Mitigation* 

#### Wildlife Conservation Society

Enhance Propagation of Asian One-Horned Rhinoceroses at the Bronx Zoo (NY)

Enhance the Bronx Zoo's breeding program for Asian one-horned rhinoceros with a custombuilt restraint chute that will be designed to fit in one of the indoor rhino stalls at the Bronx Zoo's Wild Asia facility. Project will enable staff to collect blood, urine and/or fresh fecal samples to monitor estrous periods, allow staff to conduct ultrasound examinations to follow fetal development during pregnancies, and reduce the number of times rhinos would need to be chemically immobilized for veterinary purposes. \$3,500, Federal Criminal Case

\$3,500, Federal Criminal Cas U.S. v. Robert W. Newman

#### NORTH CAROLINA

#### **Carolina Marine Structures**

Great Dismal Swamp National Wildlife Refuge Water Control Structures (NC, VA)

Install water-control structures on the Great Dismal Swamp National Wildlife Refuge. \$71,500, Other

#### **Conservation Fisheries**

Preventing Extinction

the intent to breed them

of the Carolina Madtom in North Carolina (NC) Enable captive breeding of Carolina madtom from the Neuse River basin and areas of the Tar River basin. Project will capture and hold live

individuals from the Neuse River basin, with

\$50,000, Federal Criminal Case
U.S. v. Duke Energy Carolinas; U.S. v. Duke
Energy Progress

#### **Conserving Carolina**

Mud Creek Floodplain Connectivity and Aquatic Habitat Restoration (NC)

Conduct a large-scale, holistic restoration of degraded floodplain located at the confluence of the French Broad River and Mud Creek in Henderson County. Project will restore natural hydrology; enhance habitat for breeding muskellunge, amphibians, reptiles and birds; restore wetland habitat; restore native vegetation adapted to site conditions; improve water quality; and reconnect rivers to floodplains. \$490,000, Federal Criminal Case
U.S. v. Duke Energy Carolinas; U.S. v. Duke Energy Progress

MPACT-DIRECTED

**ENVIRONMENTAL** 

**ACCOUNTS** 

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#### **Key-Log Economics**

Ecosystem Services in the Roanoke River Basin (NC, VA)

Develop an ecosystem services framework and analytical tools for the Roanoke River basin so that stakeholders have robust information available for developing conservation, restoration, management and development plans. \$89,560, Federal Criminal Case U.S. v. Duke Energy Carolinas; U.S. v. Duke Energy Progress

#### **New River Conservancy**

North Carolina Aquatic Data Hub (NC)

Establishment of a statewide standard set of water quality parameters and protocols for collection by citizen scientists. Project will develop a robust statewide citizen water-quality monitoring framework that empowers interested residents to participate in the protection of North Carolina water and ecosystem quality while contributing to the data required to responsibly monitor and protect our water resources statewide. \$70,000, Federal Criminal Case

U.S. v. Duke Energy Carolinas; U.S. v. Duke Energy Progress

### North American Marine Environment Protection Association

OPERATION: COMPLIANCE (NC)

Educate the seafarer and shoreside personnel on the need for MARPOL compliance and to provide educational tools to support MARPOL compliance and reporting of noncompliance. Project will provide education about environmental impacts of shipping on the marine environment; requirements for compliance; programs for complying; risks of noncompliance; and methods and opportunities for reporting violations. \$53,600, Federal Criminal Cases (multiple prosecutions)

### **Division of Parks and Recreation** Lake Waccamaw Hydrilla Control (NC)

North Carolina

Eradicate the invasive aquatic plant Hydrilla verticillata in Lake Waccamaw through use of aquatic herbicides. Project will suppress hydrilla growth in the lake preventing its spread and protecting the federally threatened Waccamaw silverside and numerous endemic fish and mussels

\$200,000, Federal Criminal Case U.S. v. Duke Energy Carolinas; U.S. v. Duke **Energy Progress** 

#### **North Carolina** Wildlife Resources Commission

Aquatic Species Propagation (NC)

Acquisition of equipment and supplies to outfit the upgraded Conservation Aquaculture Center operated by the North Carolina Wildlife Resources Commission. Project will allow the North Carolina Wildlife Resources Commission to increase capacity to produce numerous atrisk species via hatchery propagation. \$275,000, Federal Criminal Case

U.S. v. Duke Energy Carolinas; U.S. v. Duke

#### **North Carolina** Wildlife Resources Commission

**Energy Progress** 

Magnificent Ramshorn Propagation and Restoration (NC) Establish at least one population of the

magnificent ramshorn in the wild in eastern North Carolina. Project will support a biologist to propagate magnificent ramshorn, identify potential ponds for stocking, conduct habitat improvements in identified ponds, implement stocking, and conduct evaluations of stocking

\$100,000, Federal Criminal Case U.S. v. Duke Energy Carolinas; U.S. v. Duke **Energy Progress** 

#### **Piedmont Conservation Council** Densons Creek Vented Wet Ford Improvement Project (NC)

Improve the existing vented ford crossing over Densons Creek to facilitate aquatic fish habitat passage for state-endangered freshwater mussels, brook floater, and Savannah lilliput. Project will transform the structure into a wet ford crossing through the use of a series of boulder cascades.

\$32,000, Federal Criminal Case U.S. v. Duke Energy Carolinas; U.S. v. Duke **Energy Progress** 

#### The Conservation Fund

Rocky and Deep Rivers Conservation Corridor Initiative (NC)

Protection of 317 acres along the Deep River. which will be added to the Deep River State Natural Area and Deep River State Trail. The protection of these lands will preserve habitat for the federally endangered Cape Fear shiner. \$1,300,000, Federal Criminal Case U.S. v. Duke Energy Carolinas; U.S. v. Duke **Energy Progress** 

#### **Unique Places**

High Falls Dam Removal (NC)

Acquisition and removal of High Falls Dam in support of improving critical habitat for the Cape Fear shiner, a federally endangered aquatic species.

\$1,000,000, Federal Criminal Case U.S. v. Duke Energy Carolinas; U.S. v. Duke Energy Progress

#### University of North Carolina-Wilmington **Bioaccumulation of Contaminants** in the Lower Cape Fear River (NC)

Investigate concentrations of three toxic metals in key indicator species throughout the food web in the Lower Cape Fear River ecosystem to help assess threats to native wildlife. Project will document interannual variations in metal exposure at multiple trophic levels resulting from increased discharge from watersheds following hurricanes or other storms over the two-year period of the study.

\$138,581, Federal Criminal Case U.S. v. Duke Energy Carolinas; U.S. v. Duke **Energy Progress** 

#### **U.S. Army Corps of Engineers** Wildlife Camera Relocation (NC)

Move the Jordan Lake wildlife camera to a new location across the Haw River. \$2,800, Federal Criminal Case U.S. v. Dale Myers

#### U.S. Department of the Interior, U.S. Fish and Wildlife Service, Region 5 Dan River Watershed Mussel Restoration and Recovery (NC, VA)

Develop a propagation technology and culture techniques for the James spinymussel, Atlantic pigtoe, green floater, and triangle floater; and produce yellow lampmussel juveniles. Project will fund genetic analysis to evaluate broodstock collection sites and establish viable mussel release and monitoring sites in the Roanoke River basin.

\$180,000, Federal Criminal Case U.S. v. Duke Energy Carolinas; U.S. v. Duke Energy Progress

#### Virginia Polytechnic Institute and State University

Assessment of the Dynamics and Biotic Impacts of Fine Sediment in the Dan and Roanoke River Basins (NC, VA)

Conduct assessments of sediment transport and deposition, instream benthic habitat, and site-specific occupancy of silt-sensitive fish species in 30 stream reaches distributed across representative watersheds in the Piedmont portion of the Dan-Roanoke river basin. Project analyses will be synthesized into a decision-support framework to help U.S. Fish and Wildlife Service and partners prioritize the riparian and floodplain management actions needed to protect and enhance recovery of silt-sensitive fishes.

\$189,998, Federal Criminal Case U.S. v. Duke Energy Carolinas; U.S. v. Duke **Energy Progress** 

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#### Monroe Soil and Water **Conservation District**

**Erosion Control** 

in Captina Creek Watershed (OH)

Plant native plants on a portion of the Cranenest Creek. Project will prevent erosion, reduce sediment, and improve water quality in Cranenest Creek, which lies in the Captina Creek Watershed.

\$4.800. Federal Criminal Case U.S. v. Donald E. Hercher

#### The Wilds

Columbia Multiple Species Habitat Conservation Plan American Burying Beetle Mitigation (OH)

Raise 200 pairs of American burying beetles to be released as part of the Ohio Conservation

\$15,000, Mitigation

#### **OREGON**

#### Columbia Soil and Water **Conservation District**

Calhoun Large Wood and Riparian Enhancement Project (OR)

Design a project that will improve freshwater and riparian habitat for coho salmon and other native salmonids. Project will add off-channel habitat and large wood structures on a tributary of the Nehalem River in Oregon. \$53,626, Federal Criminal Case various federal criminal prosecutions

#### **Lower Nehalem Watershed Council**

Lower Nehalem Rapid Bioassessment and Limiting Factors Analysis-Light (OR) Collect essential data regarding salmonid distributions and abundance, and associated watershed characteristics that may serve as limiting factors for salmonids Project will determine seasonal habitat limitations for coho salmon and develop a systematic approach to identify and implement restoration actions that address those limiting factors.

\$15,000, Federal Criminal Case various federal criminal prosecutions

#### Lower Nehalem Watershed Council North Fork Road Fish Passage Project (OR)

Develop designs for replacing three fish passage barriers along North Fork Road in Nehalem, Oregon. Project will improve floodplain connectivity and access to a combined 4.12 miles of habitat for coho salmon, winter steelhead, chum, and fall

\$35,508, Federal Criminal Case various federal criminal prosecutions

chinook

#### **Siuslaw Watershed Council**

Lower North Fork Siuslaw

Helicopter Wood Placement Project (OR)

Treat 10 miles of stream with large wood. Project will increase the quantity and quality of winter-rearing habitat for coho salmon and other anadromous fish within the Lower North Fork Siuslaw River in Oregon.

\$204,930, Federal Criminal Case various federal criminal prosecutions

#### Siuslaw Watershed Council North Fork Siuslaw Tidal Restoration

Technical Assistance (OR) Investigate baseline site conditions and restoration options for a 250-acre property on the lower North Fork of the Siuslaw River in Oregon. Project will improve the health of the watershed and its ability to support healthy populations of species, including coho salmon. \$15,000, Federal Criminal Case various federal criminal prosecutions

#### **Upper Nehalem Watershed Council**

**Anchor Habitat Restoration** at Hyla Woods (OR)

Restore habitat for native coho salmon through the placement of large woody debris within Lousignont Creek in Oregon.

\$10,428, Federal Criminal Case various federal criminal prosecutions

#### **Upper Nehalem Watershed Council**

Beaver Dam Analogues of the Nehalem Watershed (OR)

Install a beaver dam analogue structure to improve dammed rearing habitat for three listed salmon species, including coho salmon, within the upper Nehalem watershed in Oregon. Project will treat a total of 5.1 miles in four different stream reaches to address the loss of legacy beaver habitat.

\$166,815, Federal Criminal Case various federal criminal prosecutions

#### **Upper Nehalem Watershed Council** Salmon Anchor Habitat Improvement of Lousignont Creek (OR)

Rebuild and enhance native coho salmon habitat through the construction of log jams in Lousignont Creek in Oregon. \$52,030, Federal Criminal Case various federal criminal prosecutions

#### **SOUTH DAKOTA**

#### **Ducks Unlimited**

Restore eight wetlands totaling 39.5 acres on the Denholm property, a tract of land owned by Wetlands America Trust, a sister organization to Ducks Unlimited. Project will protect grassland and all of the wetlands in perpetuity, with conservation easements held by the U.S. Fish and Wildlife Service.

\$16,408, Federal Criminal Case Various federal criminal prosecutions

#### Lake Area Zoological Society

Waterfowl Kiosk Renovation (SD)

Renovate the educational waterfowl kiosk at the Bramble Park Zoo.

\$4,500, Federal Criminal Case U.S. v. Silbernagel

#### **TEXAS**

#### **Tarver Abstract Company**

Acquisition of Land

in Trinity River National Wildlife Refuge (TX) Acquire nearly 1 acre of land located within the acquisition boundary of the Trinity River National Wildlife Refuge.

\$1,200, Mitigation

#### Texas A&M Forest Service

Facilitating Longleaf Conservation in the Longleaf Ridge

Significant Geographic Area – III (TX)

Provide education, outreach, and technical and financial assistance within the Longleaf Ridge Significant Geographic Area in east Texas. Project will restore 950 acres of longleaf pine, enhance an additional 4,400 acres of existing longleaf, and educate 200 private landowners.

\$2,500, Federal Criminal Case U.S. v. Overseas Shipholding Group, Inc.

#### **Texas Rice Industry Coalition** for the Environment

Anahuac National Wildlife Refuge Entrance Road Wetlands – II (TX)

Construct 360 acres of wetland units on the Anahuac National Wildlife Refuge entrance road. Project will provide a sustainable source of food and habitat for coastal shorebirds and other wildlife.

\$122,500, Federal Criminal Case U.S. v. Thome Ship Management PTE, LTD and Egyptian Tanker Company

#### **Texas Rice Industry Coalition** for the Environment

Anahuac National Wildlife Refuge Entrance Road Wetlands – II (TX)

Construct 360 acres of wetland units on the Anahuac National Wildlife Refuge entrance road. Project will provide year round habitat to waterfowl, wading birds and shorebirds. \$35,000. Federal Criminal Case

U.S. v. Thome Ship Management PTE, LTD and Egyptian Tanker Company

#### Thomas E. Smith

Land Acquisition Support for Columbia Bottomlands (TX)

Provide support in developing land acquisition opportunities for bottomland hardwood habitat in the Texas Mid-Coast Refuge Complex.

\$81,226, Mitigation

#### **Various Recipients**

McFaddin National Wildlife Refuge

and Egyptian Tanker Company

#### Berm Repair (TX)

Restore the berm at McFaddin National Wildlife Refuge to control the flow of water from the Gulf of Mexico into these marshes. Project will ultimately reduce salinities in the Star Lake and Clam Lake units of McFaddin. \$54,843, Federal Criminal Case U.S. v. Thome Ship Management PTE, LTD

#### UTAH

#### A. Lawrence Kolz

Standardization of Recovery Program Electrofishing Fleet (CO, UT)

Provide members of the San Juan River Recovery Implementation Program electrofishing fleet with guidelines for standardizing their electrode arrays to facilitate standardization of the power output for electrofishing.

**IMPACT-DIRECTED** 

**ENVIRONMENTAL ACCOUNTS** 

(IDEA

\$3,375, Species Recovery

#### **Ecosystems Research Institute** San Juan River Habitat Assessment

(AZ, CO, NM, UT, WY)

Assess and monitor habitats in the San Juan River to help meet the goals and objectives of the San Juan River Basin Recovery Implementation Program. \$75,810, Mitigation

#### **Global Conservation Network**

Colorado Pikeminnow

Population Viability Analysis (CO, UT, WY) Use a population viability analysis to assess

Colorado pikeminnow extinction risk and help the U.S. Fish and Wildlife Service, program managers and species experts reach a downlisting decision.

\$28,950, Species Recovery

#### Miller Ecological Consultants

Colorado Pikeminnow

Population Viability Analysis (CO, UT, WY) Use a population viability analysis to assess Colorado pikeminnow extinction risk and help the U.S. Fish and Wildlife Service, program managers and species experts reach a

\$4,832, Species Recovery

downlisting decision.

#### **Montgomery Archaeological Consultants**

**Cultural Resource Services** for the Green River Canal Fish Screen (UT)

Conduct a Class III inventory of the Green River Canal Company's proposed fish screen project area in Emery County. Utah.

\$34,999, Species Recovery

#### Denholm Wetland Restoration (SD)

#### **Pat Martinez**

### Standardization of Recovery Program Electrofishing Fleet (CO, UT)

Provide members of the San Juan River Recovery Implementation Program electrofishing fleet with guidelines for standardizing their electrode arrays to facilitate standardization of the power output for electrofishing.

\$1,275, Species Recovery

#### State of Utah, Department of Natural Resources, Division of Wildlife Resources Miller Creek Watershed Restoration (UT)

Restore instream, riparian, and upland habitats in Miller Creek, a tributary to the Price River in Carbon County, Utah. Project will encompass activities ranging from beaver dam analogs to pinyon-juniper removal to target restoring and protecting sage habitat in the Miller Creek Watershed.

\$110,707, Mitigation

### U.S. Department of the Interior, U.S. Fish and Wildlife Service, Region 2

Non-Native Fish Management on the San Juan River (CO. NM. UT)

Implement non-native fish management on the San Juan River in accordance with the San Juan River Basin Recovery Implementation Program. \$50,361, Mitigation

#### **Utah Division of Wildlife Resources**

Utah Prairie Dog Habitat Improvement (UT)
Purchase seed to complete a habitat
improvement project for Utah prairie dogs
at The Nature Conservancy's Johnson Bench
property in Garfield County, Utah.
\$20,372, Mitigation

#### **Ute Indian Tribe**

Tribal Sclerocactus Management Plan (UT)
Implement the Ute Indian Tribe's Sclerocactus
Management Plan.

\$41,072, Mitigation

#### VIRGINIA

### Canaan Valley Institute Stream Habitat Restoration, Aquatic Connectivity and Riparian Corridor

Connectivity and Ripa Enhancement (VA)

Implement aquatic connectivity and stream corridor enhancement projects along the North Fork Roanoke River to improve habitat for the Roanoke logperch. Project will remove one fish passage barrier to restore 2.3 miles of aquatic connectivity and improve ½ mile instream habitat; enhance another ½ mile instream habitat through stream restoration and streambank stabilization; establish 12 acres of riparian corridor habitat; and install 6,700 feet of livestock exclusion fence to protect riparian buffer areas.

\$299,999, Federal Criminal Case U.S. v. Duke Energy Carolinas; U.S. v. Duke Energy Progress

#### Carolina Marine Structures

Great Dismal Swamp National Wildlife Refuge Water Control Structures (NC, VA)

Installation of water control structures on the Great Dismal Swamp National Wildlife Refuge.

\$71,500, Other

#### **Key-Log Economics**

Ecosystem Services in the Roanoke Rive Basin (NC, VA)

Develop an ecosystem services framework and analytical tools for the Roanoke River basin so that stakeholders have robust information available for developing conservation, restoration, management and development plans.

\$89,560, Federal Criminal Case
U.S. v. Duke Energy Carolinas; U.S. v. Duke
Energy Progress

### U.S. Department of the Interior, U.S. Fish and Wildlife Service, Region 5

Dan River Watershed Mussel Restoration and Recovery (NC, VA)

Develop a propagation technology and culture techniques for the James spinymussel, Atlantic pigtoe, green floater, and triangle floater; and produce yellow lampmussel juveniles. Project will fund genetic analysis to evaluate broodstock collection sites and establish viable mussel release and monitoring sites in the Roanoke River basin with an emphasis on the Dan River watershed.

\$180,000, Federal Criminal Case
U.S. v. Duke Energy Carolinas; U.S. v. Duke
Energy Progress

### Virginia Department of Environmental Quality

Fish Tissue Sampling Program in the Roanoke, Dan, and Yadkin River Basins (VA)

Continue and expand Virginia's annual fish tissue sampling, which currently collects fish tissue at eight sites in the Dan River Basin, and tests for aluminum, antimony, arsenic, barium, beryllium, cadmium, chromium, copper, lead, manganese, mercury, nickel, selenium, silver, thallium, vanadium and zinc. Project will test for PCBs, as a consumption advisory already exists in the Dan River and five additional sampling sites will be added in the Roanoke and Yadkin river basins.

\$357,685, Federal Criminal Case U.S. v. Duke Energy Carolinas; U.S. v. Duke Energy Progress

### Virginia Polytechnic Institute and State University

Assessment of the Dynamics and Biotic Impacts of Fine Sediment to Assist Conservation of Stream Fishes in the Dan and Roanoke River Basins (NC, VA)

Conduct spatially explicit assessments of sediment transport and deposition, instream benthic habitat, and site-specific occupancy of silt-sensitive fish species in 30 stream reaches distributed across representative watersheds in the Piedmont portion of the Dan-Roanoke river basin. Project analyses will be synthesized into a decision-support framework to help U.S. Fish and Wildlife Service and partners prioritize the riparian and floodplain management actions needed to protect and enhance recovery of silt-sensitive fishes in U.S. Fish and Wildlife Service Regions 4 and 5.

\$189,998, Federal Criminal Case U.S. v. Duke Energy Carolinas; U.S. v. Duke Energy Progress

### Virginia Polytechnic Institute and State University

Framework to Guide Translocation of At-risk Aquatic Species in the Roanoke and Dan River Basins (VA)

Develop a structured decision-making framework to guide translocations of four at-risk species: Roanoke logperch, orangefin madtom, James spinymussel, and green floater. Project will focus on at-risk fishes and mussels in the Roanoke and Dan river basins. \$94,000, Federal Criminal Case U.S. v. Duke Energy Carolinas; U.S. v. Duke Energy Progress

### Virginia Polytechnic Institute and State University

Landscape Model to Predict Reach-Level
Sources of Roanoke Logperch Larvae (VA)
Develop a spatially explicit model designed to
predict which reaches are likely sources for
larvae of the endangered Roanoke logperch.
Project will provide crucial new knowledge
about early life history of Roanoke logperch
and which habitats are crucial for the species'
persistence.

\$124,999, Federal Criminal Case U.S. v. Duke Energy Carolinas; U.S. v. Duke Energy Progress

#### WASHINGTON

#### Islands' Oil Spill Association

Oil Spill Response Trainings, Drills and Preparedness in the San Juan Islands (WA)

Maintain and increase oil spill-response preparedness in the San Juan Islands and surrounding straits. Project will help protect orcas and other endangered and threatened species such as the marbled murrelet, western grebe, tufted puffin, and the common murre. \$74,100, Federal Criminal Case U.S. v. Angelakos (Hellas) S.A.

#### **Natural Resources Consultants**

Lost Gillnet Removal in Puget Sound to Protect and Restore Critical Marine Habitat (WA)

Remove up to 30 derelict gillnets from marine waters in Puget Sound, Washington. Project will clear areas of historically high concentrations of derelict nets to protect critical habitats for listed species including chinook salmon, bocaccio rockfish, yellow-eye rockfish and marbled murrelet.

\$164,912, Federal Criminal Case U.S. v. Princess Cruise Lines. LTD.

#### **WEST VIRGINIA**

#### Allstar Ecology

Development of Mitigation Plan for TransCanada (WV)

Develop Columbia Spruce Mountain conservation plan. *\$43,921, Mitigation* 

### West Virginia Division of Natural Resources Equipment Purchase for West Virginia

Division of Natural Resources
Reptile Conservation Program (WV)

Purchase equipment needed to support the West Virginia Division of Natural Resources Reptile Conservation Program. Project will provide the necessary pieces of equipment to monitor and conserve reptiles in West Virginia. \$10,988, Federal Criminal Case U.S. v. Michael P. Ellard

#### **WYOMING**

### **Buffalo Bill Memorial Association**Golden Eagle in Greater Yellowstone and the American West (WY)

Install a permanent exhibition at the Draper Natural History Museum designed to expand public engagement with the scientific exploration and research into wildlife ecology and human-wildlife connections to create a community of critical thinkers who understand the ties that bind people and nature and act as responsible stewards of the future of Greater Yellowstone and the American West. Project will highlight findings of multiyear research projects on golden eagles and educate the community on the significance of eagles to Plains Indian cultures

\$12,000, Federal Criminal Case U.S. v. PacifiCorp Energy

#### Buffalo Bill Memorial Association Golden Eagle Reproduction and Diet in Wyoming's Bighorn Basin (WY)

Extend and expand the Draper Natural History Museum's long-term Golden Eagle monitoring and research project to monitor reproduction in as many as 60 nesting territories in the Bighorn Basin. Project will utilize new camera traps to compare nest deliveries with prey remains collected at selected nests. \$7,000, Federal Criminal Case

\$7,000, Federal Criminal Co U.S. v. PacifiCorp Energy

### Conservation Science Global Assessing Risk to Golden Fagles

Assessing Risk to Golden Eagles
From Turbine Development (WY)

Conduct modeling risk of wind energy development to golden eagles to develop site-specific models that can predict risk to golden eagles and other raptors from turbines. Project will utilize telemetry data from golden eagles trapped in Wyoming as input to spatially explicit risk models built on resource selection functions.

\$222,499, Federal Criminal Case U.S. v. PacifiCorp Energy

#### Ecosystems Research Institute

San Juan River Habitat Assessment (AZ, CO, NM, UT, WY)

Assess and monitor habitats in the San Juan River to help meet the goals and objectives of the San Juan River Basin Recovery Implementation Program. \$75,810, Mitigation

#### **Global Conservation Network**

Colorado Pikeminnow Population Viability Analysis (CO, UT, WY)

Use a population viability analysis to assess Colorado pikeminnow extinction risk and help the U.S. Fish and Wildlife Service, program managers and species experts reach a downlisting decision.

\$28,950, Species Recovery

#### Miller Ecological Consultants

Colorado Pikeminnow

Population Viability Analysis (CO, UT, WY)
Use a population viability analysis to assess
Colorado pikeminnow extinction risk and help
the U.S. Fish and Wildlife Service, program
managers and species experts reach a
downlisting decision.

\$4,832, Species Recovery

#### **Wyoming Stock Growers Land Trust**

Purple Sage Ranch

Conservation Easement (WY)

Secure a perpetual conservation easement on approximately 2,285 acres of the Purple Sage Ranch. Project will ensure that the ranch retains its current open-space nature and protects a variety of important wildlife habitats, including golden eagle breeding and migration habitat

\$69,036, Federal Criminal Case
U.S. v. PacifiCorp Energy

#### NATIONWIDE

#### **Retail Industry Leaders Association**

Retail Compliance Assistance Center Create and operate a retail compliance center. \$954,870, Federal Criminal Case U.S. v. Wal-Mart, Inc.

### Southern Environmental

Advanced Environmental Crimes

Training Program, Southern Environmental Enforcement Network

Develop and administer Advanced Environmental Crimes Training Program courses that provide classroom and practical instruction for advanced investigation techniques applicable to the investigation of environmental crimes.

\$62,978, Federal Criminal Case U.S. v Wal-Mart, Inc.

#### The Midwest Environmental Enforcement Association

Advanced Environmental Crimes

Training Program, Midwest Environmental Enforcement Association

Develop and administer Advanced Environmental Crimes Training Program courses that provide classroom and practical instruction for advanced investigation techniques applicable to the investigation of environmental crimes.

\$130,364, Federal Criminal Case U.S. v. Wal-Mart, Inc.

#### **Western States Hazardous Waste Project**

MPACT-DIRECTED

**ENVIRONMENTAL ACCOUNTS** 

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Advanced Environmental Crimes Training Program, Western States Hazardous Waste Project

Develop and administer Advanced Environmental Crimes Training Program courses that provide classroom and practical instruction for advanced investigation techniques applicable to the investigation of environmental crimes.

\$94,264, Federal Criminal Case U.S. v. Wal-Mart, Inc.

#### **U.S. TERRITORIES**

#### **Force Blue**

Puerto Rico and the U.S. Virgin Islands Coral Reef Emergency Response Post-Hurricanes Irma and Maria

Deploy a team of four divers to conduct initial monitoring of corals damaged from Hurricanes Irma and Maria. Project will conduct rapid triage and stabilization of as many corals as possible

\$24,842, Federal Criminal Case U.S. v. Princess Cruise Lines, LTD.

#### **HJR Reefscaping**

Puerto Rico Coral Reef Emergency Response Post-Hurricanes Irma and Maria

Conduct damage assessments, triage and colony restoration of corals impacted by Hurricanes Irma and Maria at priority coral reefs around Puerto Rico as suggested by the National Oceanic and Atmospheric Administration Restoration Center. Project will rescue colonies of threatened and endangered species to have a greater chance of recovery and survival at the locations impacted by this project.

\$100,342, Federal Criminal Case U.S. v. Princess Cruise Lines. LTD.

#### Red Caribena de Varamientos

#### Puerto Rico Manatee Conservation Center Hurricane Maria Reconstruction

Rebuild and make functional the enhanced manatee veterinary clinic and labs destroyed by Hurricane Maria. Project will construct new quarantine pools and aquaculture tanks for maintaining and cultivating natural vegetation for manatees

\$200,000, Federal Criminal Case U.S. v. Princess Cruise Lines, LTD.

#### **Ridge to Reefs**

Seagrass Restoration

#### on the South Coast of Puerto Rico

Conduct seagrass planting, marine debris removal, education and outreach, and water quality improvements to benefit seagrass on the south coast of Puerto Rico. Project will address several factors impacting sea grasses, including boating and recreational impacts, marine debris and sewage and septic impacts.

\$25,000, Federal Criminal Case U.S. v. Authority for the Port of Americas

#### The Ocean Foundation

#### Emergency Location and Removal of Lost Fishing Gear in Puerto Rico

and 5 trips each in Culebra and Viegues to locate, conservation or for managed, nondestructive remove and destroy or recycle abandoned or lost leaf harvest. fishing gear. Project will conduct a total of 70 trips \$115,000, Federal Criminal Case during the five-month project period and will cover all of Puerto Rico, including marine critical habitats, and areas important to commercial and recreational fishing.

\$107,721, Federal Criminal Case U.S. v. Princess Cruise Lines, LTD.

#### U.S. Department of Agriculture, **Animal and Plant Health Inspection** Service, Wildlife Services

Dog and Mongoose Control to Protect Nesting Sea Turtles

#### at Sandy Point National Wildlife Refuge

Remove feral dogs and mongooses to protect endangered sea turtles at Sandy Point National Wildlife Refuge in the U.S. Virgin Islands. The project outcome anticipates a reduction of sea turtle nest depredation from 50 percent to less than 15 percent while reducing direct sea turtle attacks to zero.

\$48.983. Federal Criminal Case U.S. v. Princess Cruise Lines, LTD.

#### **WIDECAST: Wider Caribbean Sea Turtle Conservation Network**

Rapid Assessment and Management Actions After Hurricane Impacts on Sea Turtle Nesting Beaches in Puerto Rico

Assess nesting habitat condition across the most important nesting beaches post Hurricanes Irma and Maria. Project will construct a spatially explicit inventory of areas with problematic beach erosion and debris accumulation to rapidly prioritize restoration actions.

\$30,038, Federal Criminal Case U.S. v. Princess Cruise Lines, LTD.

#### INTERNATIONAL

#### **Blue Marine Foundation**

Reviving Ecosystem Health

Through Oyster Restoration

Reseeding of two of the largest native oyster beds in Europe, which have declined drastically as a result of historic overfishing, disease and invasive species. Project will enhance biodiversity, improve water quality and restore the health of an entire ecosystem.

\$952.559. Federal Criminal Case U.S. v. Princess Cruise Lines, LTD.

#### **Amazon Conservation Association**

#### Protecting and Restoring Rosewood

#### in Amazonian Peru

Plant 5,000 seedlings of Rosewood trees at the Los Amigos Conservation Concession and Biological Station in Amazonian Peru, and maintain them for two years to the point of self-sufficiency. Project will be implemented by two local agroforestry technicians with experience planting and managing tree crops under the growing conditions in Amazonian Peru, and these trees will eventually serve as a seed bank for others who may wish to reforest and conduct ecological restoration Conduct 15 trips in each of Puerto Rico's coasts, that includes Rosewood, either for strict

U.S. v. Young Living Essential Oils

Photography: Gary Kramer (cover, blue-winged teal), National Geographic (p. 3-4, terrain)



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