

# NATIONAL FISH AND WILDLIFE FOUNDATION

2021 CONSERVATION INVESTMENTS



NFWF

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 2021, NFWF invested \$314.3 million to support 701 projects across the nation. These investments leveraged \$301.3 million in matching support from grantees to generate a total conservation impact of \$615.6 million.





A young manatee enjoying  
the warmth of a freshwater  
spring in Florida





A wild turkey  
strutting in Nebraska



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# UNITED STATES AND U.S. TERRITORIES

## FISCAL YEAR 2021 CONSERVATION INVESTMENTS



## ALABAMA

### Alabama Coastal Foundation

#### Dauphin Island Sea Turtle Stranding Surveys (AL)

Complete 30 sea turtle surveys on Dauphin Island, Alabama. Project will conduct two stranding surveys per week through October 2021 and April 2022, providing survey logs and completed documentation to the State of Alabama, and include coordination with the Sea Turtle Stranding and Salvage Network State Coordinator on the transport of live turtles off-island.  
\$5,732

### Alabama Forestry Foundation

#### Engaging Landowners to Improve Habitat for Listed and At-Risk Aquatic Species in South Alabama

Increase outreach and technical assistance to private landowners in a 10-county area of south Alabama to protect and improve aquatic habitat for threatened, endangered and at-risk species. Project will work closely with local NRCS offices and engage 120 landowners to develop a management plan that includes best management practices, implement conservation practices, or sign-up for an NRCS program, resulting in 7,500 acres under improved management and 20 stream miles opened.  
\$350,000

### Alabama Forestry Foundation

#### Engaging Private Landowners to Restore Shortleaf Pine and Improve Aquatic Habitat (AL)

Engage family forest owners in the Cumberland Plateau region of Alabama to restore and improve shortleaf pine forests and protect and improve stream and riparian habitat for at-risk aquatic species. Project will restore and enhance more than 5,000 acres of shortleaf pine habitat, improve 5 miles of riparian habitat through invasive species control or streambank restoration, and open 15 miles of stream by retrofitting culverts, benefiting grassland birds and aquatic species.  
\$270,000

### Alabama Forestry Foundation

#### Improving Habitat for At-Risk Species in South Alabama's Longleaf Forests

Engage family forest owners in south Alabama to restore and enhance longleaf pine forests to improve habitat for at-risk species, such as gopher tortoise, eastern indigo snake and eastern hognose snake. Project will reach and educate landowners through direct mail and social media marketing, workshops and field days, restore 13,000 acres of longleaf through plantings, prescribed burning and invasive species control, and collect gopher tortoise population data on private lands.  
\$259,600

### Alabama Wildlife Federation

#### Restoring Native Grasslands on Private Lands in Alabama

Engage private landowners through outreach and technical assistance to improve habitat for northern bobwhite and other grassland dependent species in priority areas across Alabama. Project will develop best management practice recommendations for at least 80 landowners and assist with the implementation of 1,500 acres of native grassland habitat restoration and management.  
\$118,000

### American Forest Foundation

#### Enhancing Water Quality through Forested Watershed Conservation (AL, FL, MS)

Enhance and maintain water quality by protecting and restoring forested watershed conditions in key watersheds across the Gulf Coast. Project will be implemented through a public-private partnership and will support capacity building and expand resources to protect and restore forested watersheds in the Gulf States.  
\$10,000

### Cawaco Resource Conservation and Development Council

#### Improving Passage and Monitoring Populations of Trispot Darters in Big Canoe Creek Watershed (AL)

Enhance fish passage accessibility and improve population estimates within known spawning areas for the Trispot Darter in the Big Canoe Creek watershed. Project will remove two large culverts from an identified priority restoration site and replace with a bridge structure to improve the hydrologic regime, monitor fish before and after restoration, conduct an assessment to estimate spawning site populations, and conduct surveys in non-spawning habitats.  
\$235,367

### Forest Landowners Association

#### Restoring Longleaf Pine and Species Habitat on Large-Acreage Private Lands (AL, GA, LA)

Establish 1,400 acres of longleaf pine and improve 2,900 acres of existing longleaf forest with prescribed fire on large-acreage private lands in Alabama, Georgia and Louisiana. Project will address barriers to restoring longleaf pine on large-acreage private lands by building trust among stakeholders and developing innovative tools to mitigate risks associated with at-risk and listed species regulations and providing technical and financial assistance to support planting and management of longleaf pine.  
\$150,000

### Gentner Consulting Group

#### Deepwater Horizon Oceanic Fish Restoration Project Project Monitoring and Evaluation (multiple states)

Conduct requisite statistical analyses to evaluate key performance indicators for the project in accordance with the Oceanic Fish Restoration Project Monitoring Plan. Project will estimate bycatch reduction and alternative gear performance during the remaining repose years and will support evaluation of the overall performance of the project following the final repose year.  
\$430,600

### Gulf Fisheries Research Foundation

#### Remote Electronic Monitoring for the Gulf of Mexico For-Hire Reef Fish Fishery (AL, FL, TX)

Develop remote electronic monitoring for the Gulf of Mexico for-hire reef fish fishery using wireless video and data transfer, onboard artificial intelligence, cloud data storage and remote video review. Project will explore incentives specific to the for-hire industry, develop an image library for regulated species, explore artificial intelligence to minimize video review costs, and contribute information for science and management, including post-release mortality estimates.  
\$396,343

### North Carolina State University

#### Expanding Prescribed Fire Delivery to Restore Southeast Forests (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 landowners, including underserved landowners, and fire practitioners through technical assistance, training and outreach to increase the use of prescribed fire.  
\$180,000

### One World Adventure Company

#### Little River Watershed Restoration (AL, GA)

Implement best management practices for storm water using green infrastructure on 20 acres and restore 20 miles of riverbanks and major streambanks in the Little River Watershed. Project will engage 40 volunteers to mitigate sediment and stormwater runoff with native plants and grasses.  
\$37,288

### South Alabama Land Trust

#### Alta Fish River Preserve Habitat Restoration and Outreach (AL)

Restore 60 acres for public access and outdoor recreation in Baldwin County, Alabama. Project will improve a property for public access and volunteer opportunities, including invasive plant removal, native plantings, prescribed burning, trail maintenance/construction, as well as nature hikes and environmental ecosystem educational field trips to engage 200 community members.  
\$25,500



**Stantec Consulting Services****Gulf-wide In-water Sea Turtle Monitoring Plan (multiple states)**

Develop a statistically sound plan for the establishment of a coordinated Gulf-wide network for collection and compilation of critical abundance, demographic, and biological information on sea turtles in the Gulf of Mexico. Project will provide important context for project-level monitoring at individual sites where restoration is implemented and will assist with comparisons across multiple projects.

**\$224,267**

**Tall Timbers Research****Increasing the Pace and Scale of Fire in the Central Longleaf Pine Belt of Alabama**

Provide education, outreach and prescribed fire assistance to address impediments to prescribed burning in Central Alabama. Project will develop demonstration sites on public lands, work with local universities to integrate fire ecology into their curriculum and provide technical support to private landowners, including historically underserved landowners, to complete 2,100 acres of prescribed burning on private lands, benefiting northern bobwhite and Bachman's sparrow.

**\$276,000**

**Tennessee Aquarium****Monitoring Status of Bridled Darters and Assessing Threats to Blue Shiners (AL, GA, TN)**

Monitor abundance and genetic health of the bridled darter and assess threats to federally threatened blue shiners in the Coosa River drainage. Project will utilize snorkeling, eDNA surveys and DNA analysis from tissues to monitor bridled darters and will utilize geographic information systems, fish passage assessments, eDNA surveys and habitat comparisons to other watersheds to assess threats to blue shiners.

**\$113,097**

**The Longleaf Alliance****Habitat and Species Recovery in the Gulf Coastal Plain Ecosystem Partnership Landscape (FL, AL)**

Restore and maintain 149,000 acres of longleaf pine habitat in south Alabama and the western panhandle region of Florida to benefit rare and declining species such as the Bachman's sparrow, red-cockaded woodpecker, gopher tortoise and northern bobwhite. Project will provide technical assistance to private landowners and deploy an ecosystem support team to implement prescribed burning, plant longleaf pine, remove invasive species and support rare species recovery on public and private lands.

**\$300,000**

**The Longleaf Alliance****Coordinating Local Implementation Team Capacity and Landowner Technical Assistance and Outreach (multiple states) – Phase V**

Improve and sustain coordination and exchange of information among 18 multi-partner local implementation teams that organize, plan and deliver conservation actions to restore and enhance the longleaf pine ecosystem. Project will support strategic on-the-ground restoration through conservation planning, as well as tracking and communication of longleaf pine restoration accomplishments.

**\$250,000**

**The Nature Conservancy****Restoring and Managing Longleaf in Northwest Georgia and Northeast Alabama**

Plant, maintain and improve montane longleaf pine stands on both public and private lands in northwest Georgia and northeast Alabama. Project will establish 1,000 acres of new longleaf pine through plantings and improve and maintain an additional 48,000 acres of existing longleaf pine habitat with prescribed fire, benefiting northern pine snake, fox squirrel and Bachman's sparrow.

**\$225,000**

**The Nature Conservancy****Partnering to Restore Longleaf Pine Across the Chattahoochee Fall Line (AL, GA)**

Accelerate longleaf pine habitat restoration and enhancement on more than 20,900 acres of public and private land in west Georgia and east Alabama, benefiting red-cockaded woodpecker, gopher tortoise and other at-risk species. Project will enhance and maintain existing longleaf pine habitat with prescribed fire and forest thinning, establish longleaf pine through plantings, and engage landowners through outreach and technical assistance, focusing on lands around Fort Benning.

**\$224,618**

**ALASKA****Alaska Longline Fishermen's Association****Improving Image Quality and Cost Effectiveness in Alaska's Fixed Gear Electronic Monitoring Program**

Develop lower cost electronic monitoring hardware, test automated real-time feedback to vessels on image quality and support stakeholder engagement in fisheries management forums relevant to electronic monitoring in the Alaska fixed gear fishery. Project will explore methods to improve image quality and cost effectiveness of electronic monitoring through the development of new electronic monitoring systems and deployment methods.

**\$185,104**

**Alaska Native Tribal Health Consortium****Building Capacity and Conducting Coastal Risk Assessments in Remote Alaska Native Communities**

Provide adaptation planning and development of hazard mitigation and restoration solution support for 44 Alaskan Resilience Hub communities with capacity building on coastal flooding and erosion for the development of informed mitigation solutions and future design of restoration. Project will take an innovative, comprehensive, efficient, culturally sensitive and forward-looking approach to building capacity and conducting urgently needed coastal risk assessments in remote Alaska Native communities.

**\$1,360,801**

**Arctic National Wildlife Refuge – U.S. Fish and Wildlife Service****Assessing and Developing Monitoring Tools for Lemmings on the North Slope (AK)**

Develop a novel remote monitoring tool for lemmings, an important species in arctic food webs. Project will create an improved monitoring method for small mammals by increasing the spatial and temporal coverage of small mammal monitoring, as well as gather lemming abundance data to help inform future management decisions.

**\$39,341**

**Chugach Regional Resources Commission****Developing a Strategic Sockeye Salmon Plan for the English Bay Lakes on the Kenai Peninsula (AK)**

Develop a strategic sockeye salmon monitoring plan to prioritize and conduct Indigenous-led research initiatives for the English Bay Lakes on the Kenai Peninsula, Alaska. Project will create a 5-year fisheries strategic plan and operate a community-based weir monitoring program that will enhance long-term viability of escapement models and data collection and incorporate Nanwalek community knowledge and engagement in fisheries management.

**\$86,384**

**Manomet****Assessing Shorebirds in Teshekpuk Lake Special Area of the National Petroleum Reserve Alaska**

Conduct shorebird surveys in the Teshekpuk Lake Special Area of the National Petroleum Reserve in Alaska (NPPRA) following the protocols developed by the Program for Regional and International Shorebird Monitoring. Project will provide a comparison of changes in shorebird populations and provide critical information on the distribution of shorebirds breeding in the NPPRA.

**\$95,765**

**Municipality of Anchorage****Campbell Creek Streambank and Wildlife Habitat Restoration Project (AK)**

Rehabilitate streambank habitat along Campbell Creek in Anchorage, Alaska to benefit salmon habitat, migratory birds and other wildlife. Project will install 150 linear feet of root wads, revegetate 2.5 acres of streambank at three sites and plant over 550 native trees, shrubs and herbaceous plants to replace trees lost along the creek corridor to spruce beetle infestation.  
\$49,979

**Northern Research Technical Assistance Center****Assessment of Seabird Gillnet Bycatch (AK)**

Synthesize and analyze data on incidental take of seabirds in Alaska gillnet fisheries. Project will provide baseline data on seabird gillnet bycatch in Alaska, identify high risk locations and seabird species at risk and characterize environmental and biological factors that will assist in development of seabird bycatch reduction methods important for future conservation measures.  
\$70,000

**Southeast Alaska Watershed Coalition****Engaging Tribal and Community Partners to Restore Salmon Habitat in Margaret Creek Watershed (AK)**

Restore habitat for four Pacific salmon species, trout and char in Margaret Creek, Tongass National Forest, Alaska. Project will construct log jams in stream channels and thin floodplain forest to accelerate recovery of old-growth conditions, as well as build tribal and community capacity to foster watershed stewardship.  
\$74,793

**Takshanuk Watershed Council****Assessing and Monitoring Water Quality in the Chilkat and Chilkoot River Watersheds (AK)**

Continue to collect hydrologic and benthic macroinvertebrate baseline data at 16 study sites in the Chilkat and Chilkoot River Watersheds, Alaska to improve understanding of climate change impacts on local aquatic habitats essential to wild Pacific salmon populations. Project will map the thermal landscape and identify areas of thermal refugia important for Pacific salmon conservation to inform future management and development decisions.  
\$49,055

**The Conservation Fund****Protecting Migratory Bird Habitat on the Kasilof River Through a Conservation Project (AK)**

Protect a property along the Kasilof River on the western Kenai Peninsula in Alaska through a conservation project to secure migratory, breeding and overwintering habitat for more than 160 bird species. Project will secure 309 acres of migratory bird habitat.  
\$100,000

**U.S. Department of the Interior,****U.S. Fish and Wildlife Service****- Division of Migratory Birds**

**Surveying Aleutian Tern Populations in Alaska**  
Develop a survey framework to assess Aleutian tern colonies in Alaska. Project will create a tern colony survey framework and refine regionally tiered colony monitoring methods to determine abundance and population trends, which will fill information gaps on tern distribution and provide baseline population estimates for long-term monitoring in Alaska.  
\$100,000

**U.S. Department of the Interior,****U.S. Fish and Wildlife Service,****Fairbanks Conservation Office****Monitoring and Assessing Steller's and Spectacled Eider to Support Conservation and Recovery (AK)**

Continue Steller's and spectacled eider conservation through research, monitoring and management at Utqiagvik on the North Slope, Alaska. Project will provide community outreach and education, collect demographic data of nesting populations and fill key information gaps for Steller's and spectacled eiders that will inform recovery efforts.  
\$86,600

**University of Alaska Anchorage****Supporting Alaska Native Science and Engineering Program Students in Advancing Conservation**

Support the Alaska Native Science and Engineering Program to advance conservation efforts on the Chugach National Forest, Yukon River Delta and North Slope of Alaska. Project will provide hands-on experiences for five students as they work alongside conservation professionals on projects that support data collection, habitat restoration and community outreach efforts for the benefit of Pacific salmon, polar bears and migratory birds.  
\$65,488

**University of California - Santa Cruz****Improving a Meta-Population Viability Analysis Tool for Threatened and Endangered Seabirds (multiple states)**

Improve a meta-population viability analysis tool to help prevent seabird extinctions. Project will incorporate sea-level rise and financial return on investment data to enhance the existing seabird conservation planning and decision support tool.  
\$125,000

**Yukon Delta Fisheries Development Association****Assessing Juvenile Chinook Salmon Outmigration on the Yukon River Delta – II (AK)**

Assess out-migrating juvenile Chinook salmon conditions on the Yukon River Delta in Alaska. Project will gather data on juvenile Chinook salmon size, diet and energetic condition to fill information gaps on growth, outmigration timing and health.  
\$91,119

**ARIZONA****Arizona Game and Fish Department****Restoring Big Game Winter Range by****Removing Invasive Woody Vegetation (AZ)**

Restore critical winter range and stopover habitat for mule deer and pronghorn in northern Arizona by mechanically masticating invasive woody vegetation from historic browse communities and grasslands. Project will reduce tree densities and restore 800 acres of grassland habitat.  
\$100,000

**Arizona Game and Fish Department****Restoring Pronghorn Habitat by Removing****Invasive Juniper (AZ)**

Remove encroaching juniper and pinyon pine trees from historic grassland areas to restore habitat for mule deer, pronghorn and elk through mastication utilizing a drum grinder mounted on a rubber-tired tractor. Project will restore more than 2,300 acres of habitat that serve as a critical migration link from winter to summer grounds for ungulates.  
\$220,000

**Arizona Land and Water Trust****Conserving Vera Earl Ranch Within the Sky Islands Region of Southern Arizona**

Place a conservation easement on the Vera Earl Ranch to permanently protect 5,000 acres of important grasslands connecting the Santa Rita Mountains and the Las Cienegas National Conservation Area. Project will offer crucial habitat for the Western burrowing owl, golden eagle, black-tailed prairie dog, Chiricahua leopard frog, desert box turtle, desert mud turtle and jaguar.  
\$250,000

**Arizona Sustainability Alliance****Engaging Youth to Restore Desert and Riparian Habitat in the Robbins Butte Wildlife Area (AZ)**

Restore 1,110 acres of riparian and floodplain habitat in the Robbins Butte Wildlife Area in Maricopa County, Arizona to benefit the desert pupfish and Gila topminnow and to provide habitat for the southwestern willow flycatcher, ridgway rail and western yellow-billed cuckoo. Project will engage high school youth from low-income communities in conservation-focused internships to restore critical areas at the Robbins Butte Wildlife Area in the Rio Reimagined corridor of the Gila River.  
\$40,986

**NatureServe****Research Support for Management of Pollinator Species (multiple states)**

Conduct research to identify priority areas for on-the-ground monarch management actions such as habitat restoration and enrichment as well as to inform regulatory review. Project will map these areas most used by monarchs, recognizing that monarchs tend to migrate along riparian and wetland corridors.  
\$199,878



## ARKANSAS

### American Bird Conservancy

**Priority Bird Habitat Conservation in the West Gulf Coastal Plain/Ouachitas – II (AR, LA, OK, TX)**  
Coordinate conservation delivery networks to restore forest and grassland habitats and monitor species' response within the West Gulf Coastal Plain/Ouachitas geography of Arkansas, Louisiana, Oklahoma and Texas. Project will provide technical and financial assistance to private landowners to implement conservation practices on 3,000 acres benefiting Bachman's sparrow, prairie warbler and other forest and grassland-dependent bird species.  
**\$213,995**

### Ducks Unlimited

**Monitoring Waterfowl Response to Wetland Restoration in the Mississippi Alluvial Valley (AR, LA, MS)**  
Monitor waterfowl response to forest and shallow water wetland restoration on Wetland Reserve Easement sites within the Mississippi Alluvial Valley region of Arkansas, Louisiana and Mississippi. Project will deploy unmanned aerial vehicles to investigate their utility to monitor waterfowl use of restored wetlands and use imagery analysis and machine learning to establish efficient and effective protocols to derive duck counts and general use behaviors at a project level scale.  
**\$195,000**

### Ducks Unlimited

**Enhancing Hydrology and Restoring Forests in the Lower Mississippi Alluvial Valley – II (AR, MS)**  
Restore and enhance bottomland hardwood forests and wetlands on public and private lands within the Delta of Arkansas and Mississippi. Project will restore hydrology, enhance existing forests and reforest areas to impact a total of 8,075 acres, including 7,095 acres of conservation easements, benefiting migratory waterfowl, Louisiana black bear and other forested wetland-dependent species.  
**\$343,000**

### KKAC Foundation

**Engaging Underserved Landowners in Conservation and Woodland Management (AR, MS)**  
Develop forest management plans and implement forest conservation practices to improve forest health and wildlife habitat on private lands in the Mississippi Alluvial Valley region of Arkansas and Mississippi. Project will engage historically underserved and minority landowners through workshops and field days to provide forestry technical assistance, address heirs' property issues and connect landowners with financial assistance resources to restore and manage 350 acres of forest habitat.  
**\$375,000**

### Mississippi River Trust

**Forested Wetland Restoration in the Lower Mississippi River Floodplain – II (multiple states)**  
Reforest and protect frequently flooded, marginal cropland on private lands through the adoption of USDA Wetland Reserve Easements in the active floodplain of the Lower Mississippi River. Project will establish 10,285 acres of bottomland hardwood forest to expand and enhance habitat and improve water quality, benefiting the Louisiana black bear, swamp rabbit, forest birds, waterfowl and freshwater fish.  
**\$780,000**

### Mississippi State University

**Demonstration of Restoration and Monitoring Techniques for Bottomland Hardwood Habitats (AR, MS)**  
Restore bottomland hardwood forest habitats, monitor habitat condition and wildlife response to restoration treatments and provide information, training and technical assistance to land-owners and resource managers to inform forest and wildlife management decisions. Project will restore 884 acres of bottom-land hardwood forest within the Tallahatchie, Boeuf and Tensas watersheds in Arkansas and Mississippi, benefiting waterfowl, swamp rabbits and other forested wetland-dependent species.  
**\$355,000**

### North Carolina State University

**Expanding Prescribed Fire Delivery to Restore Southeast Forests (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 landowners, including underserved landowners and fire practitioners through technical assistance, training and outreach to increase the use of prescribed fire.  
**\$180,000**

### Pheasants Forever

**Increasing Technical Assistance to Benefit Northern Bobwhite on Private Working Lands (AR, MO)**  
Support five technical assistants with expertise in northern bobwhite conservation in Arkansas and Missouri who will assist private landowners in managing their lands to benefit bobwhite and many wildlife species while also improving working land productivity. Project will improve management on 10,000 acres of private working lands through the development of 400 conservation management plans and associated best management practices.  
**\$249,939**

### The Nature Conservancy

**Enhancing Monarch Butterfly Habitat on Rights-of-Way and Public Lands (AR)**  
Restore and enhance pollinator habitat on rights-of-way, lands owned by The Nature Conservancy and Logan Cave National Wildlife Refuge in western Arkansas through prescribed burning, invasive species control and planting native species with an emphasis on milkweeds and nectar producing forbs to support monarch butterflies. Project will restore 50 acres and improve 2,200 acres.  
**\$99,999**

### The Nature Conservancy

**Restoring Forested Wetlands within Mississippi Alluvial Valley Priority Focal Areas (AR, LA, MS)**  
Project will restore and protect forested wetlands within high priority areas in the Mississippi Alluvial Valley region of Arkansas, Mississippi and Louisiana. Project will reforest 4,800 acres of marginal cropland, restore 1,200 acres of hydrologic wetland function and protect 6,000 acres with conservation easements, benefiting Louisiana black bear, swamp rabbits, waterfowl and neotropical migratory songbirds.  
**\$690,356**

## CALIFORNIA

### American Forests

**Restoring Conifer Plantations in the Powerhouse Fire Scar (CA)**  
Aid restoration of conifer forests impacted by the Powerhouse Fire within the Angeles National Forest. Project will conduct surveys of local seedbanks, collect seeds from critical species such as big cone Douglas fir and gray pine and fill seedbank gaps for the Southern California seed zone by developing a reforestation infrastructure strategy using climate-smart principles and new forestation tools.  
**\$101,760**

### American Songbird Management and Recovery

**Least Bell's Vireo Range Expansion Surveys in the Mohave Desert and Central Valley (CA)**  
Survey for the least Bell's vireo in Bureau of Land Management (BLM) riparian habitat in the Central Valley and the Mohave Desert in order to assess whether they may have recently re-expanded their range north into historical breeding ranges on BLM lands in the Central Valley and to determine the range and occupancy of them on BLM lands in the Mohave. Project will enable the BLM and the U.S. Fish and Wildlife Service to complete a more accurate assessment of the size and distribution of the vireo's range-wide population.  
**\$77,000**

**California Deer Association****Restoring Mule Deer Habitat in the Slink Fire Scar (CA, NV)**

Restore migratory corridor and winter and spring range habitat for California-Nevada interstate mule deer impacted by the Slink Fire in Mono County and Alpine County, California. Project will plant mule deer forage, install wildlife-friendly fencing, perform erosion control and restoration, deter invasive weed conversion, acquire a conservation easement in a migratory corridor, and analyze data on mule deer migration and plant seeding restoration preference.

**\$262,178**

**California Deer Association****Fuels Management Treatments in Van Bremmer and Round Valley within the Klamath National Forest (CA)**

Implement fuels management practices and improve wildfire resilience in the Van Bremmer and Round Valley areas within the Goosenest Ranger District of the Klamath National Forest. Project will reduce 396 acres of high fuel loads by treating canopy understory, removing invasive juniper and conifer, and reducing ladder fuels to reduce the risk of severe wildfire within the forest and neighboring communities.

**\$165,995**

**California Rangeland Trust****Silacci Ranch Conservation Easement (CA)**

Place a conservation easement on 9,418 acres of rangeland in the Gabilan Mountain Range to eliminate the potential for subdivision, development and cropland intensification. Project will provide important linkages for numerous special-status plant and animal species, maintain water quality in the watershed, support agricultural productivity, and continue tule elk distribution and public hunting opportunities.

**\$376,000**

**California State Coastal Conservancy****Enhancing the Tidal Wetland Complex and Creating Habitat for Salmonids in the Elk River Estuary (CA)**

Restore a 114 acre tidal wetland complex within Humboldt Bay to be self-sustaining over the long term in the face of projected sea level rise. Project will provide critical habitat for threatened salmonids and other listed species, act as a living shoreline to protect Highway 101 and an electrical power line from sea-level rise and tidal flooding, and expand passive recreational opportunities and coastal access for the public.

**\$979,000**

**California Trout****Assessing Fuels Reduction Impact on Biomass Removal, Water and Greenhouse Gases (CA)**

Conduct feasibility studies to inform short-term and long-term planning for biomass removal and processing critical to large scale fuels management. Project will include model-based estimates of hydrologic and greenhouse gas benefits derived from fuels reduction efforts using June Mountain and Mammoth Lakes Basin projects on the Inyo National Forest as pilots and extrapolating the results of these projects to the broader Owens watershed.

**\$206,000**

**City of Oceanside****Finalizing Design of a Loma Alta Slough Wetlands Enhancement Plan (CA)**

Prepare a construction-ready coastal wetland restoration project in Southern California building off completed preliminary designs, stakeholder outreach and permitting communications. Project will restore the hydrologic function of Loma Alta Slough, protecting surrounding critical coastal infrastructure from sea-level rise and increased storm intensity, and will enhance species habitat while promoting education and conservation value to the community.

**\$175,000**

**Conservation Corps of Long Beach****Addressing Invasive Vegetation and Off-Highway Vehicle Barriers in the Angeles National Forest (CA)**

Remove invasive vegetation and litter and install off-highway vehicle barriers within the Copper and Powerhouse fire scars in the Angeles National Forest. Project will work alongside conservation corps groups to manage invasive plants across 30 acres, restore 5 acres through native plantings, remove 400 pounds of trash from the project area and construct or replace 170 off-highway vehicle barriers to restore critical habitats and improve land degradation.

**\$367,774**

**Conservation Science Partners**

Mojave Desert Tortoise Monitoring Plan (CA) Develop a monitoring plan that will be used to track progress towards objectives integral to implementing the Recovery and Sustainment Partnership initiative to recover the Mojave desert tortoise. Project will conduct a requisite review of existing data sources, describe methods to generate new data for species objective monitoring and suggest guidance for data management.

**\$34,928**

**County of Santa Clara****Building a County Collaborative and Capacity through Development of a Resilience Strategy (CA)**

Build capacity and identify local vulnerabilities and priorities through convening practitioners and leaders of 20-30 local government agencies and civil society stakeholders in Silicon Valley to ultimately incorporate policy and project solutions in the Santa Clara County Resiliency Strategy. Project will increase knowledge and develop a pipeline of prioritized policy and projects to implement and increase community, economic, riparian and bay ecological resiliency.

**\$150,000**

**Earth Team****Restoring San Leandro and San Lorenzo Watersheds and Associated Shorelines (CA)**

Restore up to 100 acres of watershed and shoreline habitats in two major watersheds in the San Francisco East Bay: San Leandro and San Lorenzo and their connected shorelines, Martin Luther King Shoreline and Hayward Regional Shoreline. Project will: 1) engage students to monitor water quality; 2) map, classify and remove land-based litter from creekside locations; 3) restore riparian habitats; and 4) engage 2,000 peer and community members to reduce litter, pet waste and garden pesticides pollution.

**\$35,708**

**Gold Ridge Resource Conservation District Restoring Streamflow for Coho and Steelhead by Increasing Landscape-Scale Resiliency (CA)**

Provide technical assistance and engineering to landowners along salmonid-bearing streams to measurably improve instream flows, promote groundwater recharge and enhance instream habitat, with special emphasis on watersheds devastated by recent catastrophic wildfires. Project will complete a minimum of 12 comprehensive water conservation plans or engineered designs for streamflow enhancement and connect willing landowners with Natural Resources Conservation Service programs.

**\$150,000**

**Humboldt State University Sponsored Programs Foundation****Quantification of the Variability of C. shasta DNA Concentrations in Klamath River Water Samples (CA)**

Examine the effect of water depth and distance from shore on estimates of C. shasta, a parasite that negatively impacts Chinook and coho salmon populations in the Klamath River. Project will identify reaches in the Klamath River that are hot spots for C. shasta production by comparing C. shasta DNA levels just upstream and downstream of the suspected hot spot.

**\$129,973**



**Island Conservation****Completing Initial Planning for Mouse Removal on Farallon Island (CA)**

Create a framework and develop supplemental documents to support environmental compliance and permitting requirements for rodent removal on Southeast Farallon Island, home to the largest breeding colony of ashy storm-petrels. Project will provide preliminary plans necessary to complete environmental compliance requirements and support a well-implemented rodent eradication plan that will improve the ashy storm-petrel population.

**\$36,119**

**Karuk Tribe****Fuels Management and Somes Bar Community Protection on Six Rivers National Forest – II (CA)**

Complete manual fuels reduction treatments along strategic fuel breaks in the Ti Bar and Donahue areas of the Six Rivers National Forest. Project will treat 250 acres to reduce the severity of future fires, increase fire safety around the local Somes Bar community and prepare for future large scale prescribed fire implementation.

**\$277,579**

**LifeScope International****Baseline Data Collection on Fire-Mammal Relationships in Los Padres National Forest Fire Scars (CA)**

Provide baseline information on local wildlife populations by examining the impact of recurring fire intensity, expanse and post-fire recovery intervals on mammal communities in the Los Padres National Forest. Project will deploy camera traps across differential landscape gradients of fire impact to develop an occupancy model and understand fire impact on the ecology and certain wildlife of the region.

**\$198,800**

**Los Padres Forest Association****Signage and Off-Highway Vehicle Barriers within the Jesusita Fire Scar (CA)**

Develop and install educational signage and improve barriers blocking access to user-created off-highway vehicle trails located around the Jesusita Fire scar. Project will obtain the necessary environmental compliance to install 26 barriers and create and install signage at six locations.

**\$251,411**

**Los Padres Forest Association****Design, Decommissioning and Construction of the Santa Barbara Canyon Trail (CA)**

Realign a mile section of eroded trail along the Santa Barbara Canyon Trail within the Mount Pinos Ranger District in the Los Padres National Forest. Project will decommission 3.5 acres and build and realign 1 mile of trail to create a sustainable trail and reduce erosion and sedimentation resulting from the existing trail alignment.

**\$86,737**

**Los Padres Forest Association****Design and Restoration of the Pothole Trail within the Ojai Ranger District (CA)**

Realign the southern 1.8 miles of the Pothole Trail within the Ojai Ranger District in the Los Padres National Forest. Project will design a new trail layout and complete necessary environmental approvals to build a sustainable section of the trail.

**\$114,888**

**Midwater Trawlers Cooperative****Setting Course for Success: Improving Catch Handling and Electronic Monitoring Data Use (CA, OR, WA)**

Improve electronic monitoring catch handling requirements to be more operationally efficient while still supporting catch accountability, and expand data use for science in the West Coast groundfish fishery. Project will result in electronic monitoring data being used to benefit stock assessment and management and retain existing electronic monitoring users while addressing the concerns of prospective users.

**\$256,000**

**National Forest Foundation****Gold Spotted Oak Borer Response and Oak Recovery in Green Valley Area, Angeles National Forest (CA)**

Identify and remove gold spotted oak borer, a high priority pest, from the Green Valley area within the Angeles National Forest. Project will treat 175 acres to stop and slow the spread of gold spotted oak borer and improve forest health.

**\$290,267**

**National Wildlife Refuge Association****Los Angeles Pocket Wildlife Refuges (CA)**

Develop and implement five small native habitat areas, known as pocket wildlife refuges, within existing parks and recreational areas in the Los Angeles River and Ballona Creek watersheds. Project will connect communities back to national wildlife refuges and create engaging biodiversity hot spots, as well as restore habitat for native flora and fauna.

**\$50,000**

**NatureServe****Research Support for Management of Pollinator Species (multiple states)**

Conduct research to identify priority areas for on-the-ground monarch management actions such as habitat restoration and enrichment as well as to inform regulatory review. Project will map these areas and highlight those that are most used by monarchs, recognizing that monarchs tend to migrate along riparian and wetland corridors.

**\$199,878**

**Nevada Department of Wildlife****Improving Habitat for Mule Deer and Pronghorn by Treating Invasives and Removing Fences (CA, NV)**

Treat invasive grasses and remove invasive conifers and fences to improve connectivity and address an immediate barrier to migration for wintering-resident deer, resulting in reduced metabolic demands on mule deer and pronghorn, ultimately decreasing mortality. Project will restore 3,000 acres of habitat and remove or improve 40 miles of fences.

**\$75,000**

**Outdoor Outreach****YES San Diego: Youth Environmental Stewardship (CA)**

Create access points to the San Diego Bay and Tijuana River Watersheds for youth from low-income communities and communities of color, engaging youth in hands-on, outdoor conservation programs with impacts both for wetland and coastal habitat restoration and for youth awareness and ownership of those natural resources. Project will engage 140 individuals in environmental education and restoration programs resulting in the restoration of 120 acres of sensitive wetland and coastal habitats.

**\$29,420**

**Point Reyes Bird Observatory,****Point Blue Conservation Science****Initiating the First Coordinated Range-Wide Survey of Ashy Storm-Petrel Breeding Habitat (CA)**

Initiate a five-year monitoring cycle for ashy storm-petrel breeding sites along the coast of California and develop a framework for compiling, managing and sharing data. Project will survey 18 locations to provide a data set that will inform the monitoring plan and data management and sharing framework, which will support management activities through the ashy storm-petrel breeding range.

**\$224,999**

**Rancho Santa Ana Botanic Garden****Restoring Plant Diversity in Fire-Affected Watersheds on the Angeles National Forest – III (CA)**

Improve capacity for wildfire restoration in the Copper and Sayre fire scars within the Angeles National Forest. Project will collect 50 high-priority seed collections, seed bulk high priority grasses, propagate over 5,000 chaparral plant species, monitor and maintain existing restoration sites, and develop a comprehensive report for chaparral restoration.

**\$273,089**

**Santa Ynez Band of Chumash Indians****Installing Cultural and Educational Signage within the Zaca Fire Scar (CA)**

Develop and install educational signage in recreational areas of the Los Padres National Forest that were affected by the Zaca Fire. Project will develop and install signage at nine sites to educate visitors on the Native American Chumash history of the forest, traditional use of land and resources, and the importance of wildlife, including Southern California Steelhead.  
\$101,696

**Shasta Valley Resource Conservation District**

**Enhancing Elk Flat Late-Successional Reserve on Shasta-Trinity National Forest (CA)**  
Enhance and ensure long-term sustainability of late-successional habitat in the Elk Flat Late-Successional Reserve on the Shasta-Trinity National Forest. Project will complete fuels reduction treatments across 254 acres to improve forest health and habitat for species such as the Northern spotted owl and Pacific fisher, as well as restore 676 acres of meadow habitat to enhance early seral species habitat.  
\$256,731

**Southern Sierra Research Station****Lake Isabella Willow Flycatcher Restoration Grant (CA)**

Conduct southwestern willow flycatcher and least Bell's vireo surveys, as well as brown-headed cowbird point count surveys and control in the USDA Forest Service's South Fork Wildlife Area. Project will also evaluate habitat suitability for the flycatcher and vireo as well as conduct nest monitoring for any flycatcher or vireo nests found.  
\$54,555

**The Mule Deer Foundation****Fuels Management within the Prather-Medusa Project Area on the Stanislaus National Forest (CA)**

Complete fuels reduction treatments within the Prather-Medusa project area on the Stanislaus National Forest to improve forest health and wildlife habitat for critical species including the California spotted owl. Project will treat and reduce fuels across 185 acres to increase stand resilience, reduce future fire intensity and severity and improve important wildlife habitat.  
\$346,815

**The Student Conservation Association  
Fuels Reduction in Bishop Creek and Pine Creek on the Inyo National Forest (CA)**

Conduct fuels management within the Bishop Creek and Pine Creek watersheds within the Inyo National Forest. Project will support a five-person crew to implement fuels reduction treatments across 75 acres in order to improve forest health and recreational areas.  
\$42,025

**The Student Conservation Association****OHV Barrier Installation and Resource Restoration in Drinkwater Flat, Angeles National Forest (CA)**

Install barriers within the Drinkwater Flat Off-Highway Vehicle (OHV) area within the Angeles National Forest. Project will support a five-person crew to build and install 100 no-dig barriers to improve management of OHV use and protect and support landscape restoration across 500 acres.  
\$72,407

**The Student Conservation Association  
Trail Development and Interpretive Signage for the St. Francis Dam Monument and Memorial (CA)**

Construct a portion of new trail and install interpretive signage at the Saint Francis Dam Monument and Memorial on the Angeles National Forest. Project will design a new quarter-mile long trail, design up to eight interpretive signs and field a crew to construct the new trail at the Saint Francis Dam.  
\$283,309

**The Trust for Public Land****Building an Urban Orchard Community Park in the City of South Gate (CA)**

Create a 7-acre park for recreation and community engagement within a post-industrial lot located along the Los Angeles River in Southeastern Los Angeles. Project will implement a design developed through community engagement to include a large constructed wetland to extract and clean runoff, an education garden, fruit orchard, nature-based playground, community buildings and artwork, as well as other amenities.  
\$50,000

**The Urban Association of Forestry and Fire Professionals****Fuel Break and Cistern Management within the Copper Fire Scar (CA)**

Manage fuel break vegetation and provide GIS mapping and assessment services for cisterns along priority fuel breaks and areas within the Copper Fire burn scar. Project will support two crews to improve 300 acres of fuel breaks and assess 20 cisterns within the project area.  
\$304,000

**TreePeople****Forest Aid within the Copper Fire Scar of the Angeles National Forest – III (CA)**

Complete on-the-ground restoration activities in woodland, riparian and chaparral areas of the San Francisquito Canyon in the Angeles National Forest. Project will maintain 20 acres of existing restoration sites, restore 10 additional acres and propagate 1,500 native plants to establish healthy native vegetation.  
\$894,269

**TreePeople****Restoring the Shake Plantation within the Sierra Pelona Mountains (CA)**

Restore the Shake plantation, a conifer plantation in direct vicinity of the Powerhouse and Lake Fire scars within the Angeles National Forest. Project will remove invasive non-native vegetation, propagate and maintain 11,000 seedlings across 26 acres and engage 750 volunteers to assist with restoration activities.  
\$198,443

**TreePeople****Bigcone Douglas-fir Regeneration in the Powerhouse Fire Scar (CA)**

Conduct a wide-ranging study of the different methods and approaches to improve outcomes and success in the establishment and regeneration of Bigcone Douglas-fir in areas of the Sierra Pelona Mountains impacted by fires. Project will complete surveys, collect and propagate seedlings and ensure maintenance and monitoring of seedlings for conifer regeneration.  
\$222,092

**Truckee River Watershed Council****Sardine Meadow Restoration Project (CA)**

Restore riparian and watershed resources in the Truckee River Watershed. Project will restore 350 acres of Sierra Nevada meadow and 5 miles of historic stream channel and improve habitat for willow flycatcher and Lahontan cutthroat trout.  
\$249,259

**U.S. Department of the Interior,****U.S. Fish and Wildlife Service****Line Distance Sampling for Mojave Desert Tortoises in Ord-Rodman Critical Habitat Unit (CA)**

Complete line distance sampling and related activities for seasonal collection of data to describe population trends in Mojave desert tortoises in the Ord-Rodman critical habitat unit in southeastern California. Project will contribute to wider efforts coordinated by the U.S. Fish and Wildlife Service's Desert Tortoise Recovery Office to monitor study areas across the range of Mojave desert tortoises.  
\$70,000

**University of California - Santa Cruz****Improving a Meta-Population Viability Analysis Tool for Threatened and Endangered Seabirds (multiple states)**

Improve a meta-population viability analysis (mPVA) tool to help prevent seabird extinctions. Project will incorporate sea-level rise and financial return on investment data to enhance the existing seabird mPVA conservation planning and decision support tool.  
\$125,000



### **University of California Agriculture and Natural Resources**

#### **Education and Outreach for Goldspotted Oak Borer in the Angeles National Forest (CA)**

Develop and implement education, outreach and public information campaigns relevant to forest wildlife recovery and management of post-fire invasive pests in the Angeles National Forest. Project will increase public awareness of major forest pests, including goldspotted oak borer and inform the community on management and prevention of future infestation to ultimately enhance forest health and wildfire resilience by countering the spread and impact of invasive forest pests.

**\$196,011**

### **University of Wisconsin - Madison**

#### **Assessing Fuels Reduction Impact on California Spotted Owls in the Sierra Nevada (CA)**

Assess data to characterize the effects of fuels treatments on California spotted owls in the Sierra Nevada. Project will provide support for continued demographic monitoring efforts and will assess the effects of fuels reduction treatments on California spotted owls using GPS tagging data and demographic studies, which will help inform future management efforts.

**\$255,513**

#### **Watershed Research and Training Center Prescribed Fire Treatment in the Weaverville Community Forest (CA)**

Implement fuels reduction, utilizing prescribed fire treatments in the Weaverville Community Forest, on the Shasta-Trinity National Forest. Project will collaboratively implement fuels reduction targeting 157 acres to reduce the risk of future wildfires to surrounding communities, protect natural resources and forest health and improve wildlife habitat for species including the Northern spotted owl.

**\$99,775**

### **Wildcoast**

#### **Developing Logistics for Fishing Net Collection and Recycling in California**

Set up collection efforts to aggregate fishing net waste across California. Project will establish derelict fishing gear collection at five ports, recycling 60 tons of unused fishing nets.

**\$146,218**

### **Yurok Tribe**

#### **Habitat Restoration and Heliwood Loading in the South Fork Trinity River (CA)**

Improve the habitat quality and ecological conditions for wild spring-run Chinook salmon and steelhead in a 9-mile reach of the South Fork Trinity River. Project will place approximately 300 whole trees as large wood to enhance habitat complexity by restoring and enhancing geomorphic processes and water quality.

**\$78,061**

## **COLORADO**

### **Central Colorado Conservancy**

#### **Restoring Riparian and Wetland Habitat to Benefit Trout Spawning in Badger Creek (CO)**

Design and implement riparian and wetland restoration and improved grazing management projects within the Badger Creek Headwaters watershed. Project will deliver 142 acres of reconnected floodplain and reestablished native riparian vegetation, 6.7 miles of restored stream geomorphology, 85 acres of restored wetlands, 1.6 miles of livestock fencing and improve 8,909 acres of rangeland habitat on public and private land.

**\$390,101**

### **Colorado Department of Agriculture**

#### **Advancing Soil Health Technical Assistance in the Republican River Watershed (CO)**

Launch a Colorado Soil Health Program in Eastern Colorado that includes technical assistance, producer incentives, soil health testing and participation in the STAR program with the goal of increasing participation in the Natural Resources Conservation Service's Environmental Quality Incentives Program. Project will implement Best Management Practices across 960 acres, prevent 5,760 pounds in nutrient runoff annually and sustain water supplies for the Ogallala Aquifer.

**\$265,813**

### **Colorado Open Lands**

#### **Restoring Riparian and Wetland Hydrology and Species Habitat in the South Platte Headwaters (CO)**

Restore natural function and habitat in the headwaters of the South Platte Watershed, using low-tech treatments to restore stream geomorphology to increase aquatic species habitat, reconnect floodplain and reestablish native riparian vegetation and restore wetland. Project will restore 164 acres of riparian habitat, 111 acres of wetland habitat and 4.3 miles of stream habitat to benefit boreal toad, northern leopard frog, bald eagle, Lewis's woodpecker, short-eared owls and river otter.

**\$131,795**

### **Conservation Legacy**

#### **Removing Invasive Tamarisk to Restore Riparian Habitat and Instream flow (CO)**

Treat invasive tamarisk along the Dolores River below McPhee Dam, restoring the river to a resilient self-sustaining state. Project will restore 500 acres of stream bank and 35 miles of riparian habitat by treating tamarisk and revegetate native plants.

**\$260,008**

### **Groundwork Denver**

#### **Lower Bear Creek Water Quality Education, Outreach and Neighborhood Improvement Activities (CO)**

Lead water quality education, activities and monitoring in the Lower Bear Creek Watershed, focusing efforts on the last 8 miles of Bear Creek before it feeds the South Platte River. Project will monitor 15 sites along the 8-mile section of Lower Bear Creek, restore 50 acres of the watershed and 4 miles of riparian area, capture 36,360 gallons of stormwater through stormwater improvements, and reduce runoff by 14,625 gallons through sprinkler improvements.

**\$49,650**

### **Gunnison Conservation District**

#### **Increasing Technical Assistance to Benefit Gunnison Sage-Grouse on Private Working Lands (CO)**

Increase capacity to implement Gunnison sage-grouse habitat improvement projects and develop conservation plans on private working lands in southwestern Colorado. Project will improve management on 21,000 acres and restore 225 acres through noxious weed treatment and reseeding.

**\$90,091**

### **Mesa County Land Conservancy**

#### **Restoring Riparian and Upland Habitat in the Little Dolores River Watershed (CO)**

Restore riparian and upland habitat in the Little Dolores River Watershed by installing beaver dam analogue and Zeedyk structures to improve hydrology, removing invasive Russian olive and tamarisk, restoring declining Aspen groves, removing fencing and reducing grazing intensity. Project will restore more than 300 acres of habitat benefiting a variety of species include Gunnison sage-grouse, mule deer and elk.

**\$381,036**

### **Montezuma Land Conservancy**

#### **Restoring Sagebrush Shrubland for Sage-Grouse and Big Game Habitat in Dolores and San Miguel (CO)**

Increase capacity for planning and implementation of landscape-scale restoration efforts in sagebrush shrublands in southwest Colorado to enhance big game habitat and working lands resilience. Project will implement mesic restoration through the installation of approximately 100 Zeedyk structures, as well as invasive species removal and retreatment of tamarisk on approximately 158 acres of Dry Creek Basin in San Miguel County.

**\$277,676**

**National Audubon Society**

**Increasing Strategic Ranch Enrollment in the Audubon Conservation Ranching Program (CO)**  
Strategically restore and improve management on private ranches in critical grassland habitat and identify and develop specific ranch habitat management plans and monitoring to benefit focal bird species such as lesser prairie chicken, eastern black rail, lark bunting and thick-billed longspur. Project will restore hydrology on more than 6,000 acres of mesic habitat and improve management on more than 30,000 acres of grassland habitat.

**\$317,686**

**National Forest Foundation**

**Improving Habitat and Reducing Wildfire Risk by Treating Railroad Bridge Forestland (CO)**  
Improve wildlife habitat and reduce the risk of severe wildfire by 50% through targeted, cross-jurisdictional treatments in Chaffee County on the Arkansas River headwaters. Project will restore 380 acres of forestland through mechanical mastication and hand thinning treatments, benefiting mule deer, bighorn sheep, elk and wild turkey populations and reducing the risk of severe wildfire to the Town of Buena Vista.

**\$454,024**

**NatureServe**

**Research Support for Management of Pollinator Species (multiple states)**  
Conduct research to identify priority areas for on-the-ground monarch management actions such as habitat restoration and enrichment as well as to inform regulatory review. Project will map these areas and highlight those that are most used by monarchs, recognizing that monarchs tend to migrate along riparian and wetland corridors.

**\$199,878**

**Rocky Mountain Bird Observatory**

**Evaluating Impact of Conservation Activities on Sagebrush Obligate Songbirds (CO, ID, UT, WY)**  
Evaluate the impacts of conifer removal and control of annual grasses on sagebrush obligate songbirds in the Rocky Mountain Rangelands Region. Project will provide a long-term assessment of which projects benefit sagebrush obligate songbirds and help guide future conservation investments.

**\$231,169**

**Rocky Mountain Elk Foundation**

**Conserving Big Game Connectivity via Easement on Buffalo Horn Ranch (CO)**  
Prevent development and conserve vital sagebrush, riparian and forestland habitat, as well as a migration corridor and pathway for two of Colorado's largest migratory ungulate herds by placing a conservation easement on Buffalo Horn Ranch north of Meeker, Colorado. Project will permanently protect approximately 14,000 acres, protecting critical winter and transition range for elk and mule deer.

**\$150,000**

**Rocky Mountain Field Institute**

**Addressing Public Land Stewardship Needs in the Pikes Peak Region of Southern Colorado**  
Engage community members, youth conservation corps members and professional trail crews in the completion of critical stewardship projects on public lands involving trail construction, trail maintenance, riparian restoration, forest mitigation and environmental education. Project will engage at least 1,000 community volunteers and will support 100 acres of forest mitigation and restoration, 1 mile of riparian restoration and monitoring of 22 project locations.

**\$30,000**

**State of Colorado****Department of Natural Resources**

**Habitat Enhancement for Rio Grande Sucker and Rio Grande Chub at McIntire Spring (CO)**  
Enhance habitat and exclude nonnative fish to benefit Rio Grande sucker and Rio Grande chub in historically occupied habitat. Project will secure resilient populations of both species, providing a significant contribution to their rangewide conservation.

**\$165,000**

**Summit County Government**

**Restoring Riparian and Upland Habitat on Swan River to Improve Connectivity for Cutthroat Trout (CO)**  
Restore riparian floodplain, wetlands and upland habitat to increase habitat quality and connectivity for native cutthroat, brown and brook trout species in the Swan River Valley. Project will restore 0.8 miles of the main stem stream to a natural condition and 30 adjacent acres of riparian and upland habitat.

**\$300,000**

**Telluride Foundation**

**Restoration of Cutthroat Trout in Fall Creek (CO)**  
Secure a Colorado River cutthroat trout population from the threat of nonnative trout and restore 5 miles of stream habitat in Fall Creek. Project will construct a fish passage barrier, eradicate nonnative trout above the barrier and reintroduce cutthroat trout from the upstream conservation population in Woods Lake.

**\$79,000**

**The Mule Deer Foundation**

**Increasing Cross-Jurisdictional Coordination in Sagebrush Habitat (multiple states)**  
Increase cross-jurisdictional coordination with state agencies and other partners to implement projects on big game migration corridors and in sage-grouse core habitats. Project will improve habitat through treating invasive species, conservation easements, mesic and wet meadow habitat restoration, removing or improving fencing and restoring 3,000 acres of shrubland habitat.

**\$395,012**

**Trout Unlimited**

**Restoring Riparian and Upland Habitat in the Tomichi Creek Watershed (CO)**  
Coordinate restoration work on federal, state and private land to accomplish riparian, forest and range-land habitat improvements throughout the Tomichi Creek watershed near Gunnison, Colorado. Project will restore 8.5 miles of stream and 10 acres of mesic habitat to benefit big game, aquatic species and two priority native species: the Gunnison sage-grouse and green lineage Colorado cutthroat trout.

**\$299,661**

**Trout Unlimited**

**Restore Riparian Habitat and Connectivity on the Colorado River at Windy Gap Reservoir (CO)**  
Restore the hydrology and connectivity of the Colorado River by building a natural channel and floodplain around Windy Gap Reservoir, an on-channel reservoir that blocks the movement of fish and other aquatic organisms. Project will link cross-jurisdictional restoration efforts to restore habitat for lost and declining aquatic species and provide economic benefits to the small Grand County communities that rely on these stream reaches for recreation.

**\$255,695**

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

**Clear Fork Cutthroat Trout Restoration (CO)**  
Restore 13 miles of habitat for native green lineage Colorado River cutthroat trout on the Clear Fork East Muddy Creek through the establishment of a fish barrier and the removal of nonnative brook trout that are out-competing native fish. Project will create a meta-population of native cutthroat trout which will help ensure the long-term persistence of the species by increasing the population's resiliency.

**\$68,000**

**CONNECTICUT****Canaan Valley Institute**

**Coordinating Eastern Brook Trout Joint Venture Strategies and Goals (multiple states)**  
Continue the activities of the Eastern Brook Trout Joint Venture in the historic range of the species. Project will refine the strategic objectives and key conservation priorities of the Eastern Brook Trout Joint Venture using the results of the recently completed status assessment of wild brook trout at the catchment scale.

**\$74,999**



**Long Island Community Foundation**

**Delivery of the Long Island Sound Community Stewardship Fund Program – III (CT, NY)**  
 Deliver the Long Island Sound Stewardship Fund of the Long Island Sound Funders Collaborative (LISFC) in the Long Island Sound Study boundaries of Connecticut and New York. Project will enhance the partnership between LISFC and the U.S. Environmental Protection Agency around the common mission of restoring and protecting the health and living resources of the Sound based upon the Long Island Sound Comprehensive Conservation and Management Plan.  
**\$100,000**

**Manomet**

**Managing American Oystercatchers and Minimizing Coastal Engineering Impacts Along the Atlantic Coast (multiple States)**  
 Coordinate the American oystercatcher recovery initiative, implement best management practices for disturbance and predation management along the U.S. Atlantic Coast and Gulf Coast of Florida and develop long-term improvements in coastal engineering protocols to restore habitats critical to focal shorebird species. Project will support the goals of the Atlantic Flyway Business Plan by creating a framework for long-term protection, restoration and creation of shorebird habitat at key sites.  
**\$189,999**

**The Maritime Aquarium at Norwalk**

**Derelict Fishing Gear Collection in Clinton, Connecticut**  
 Install a publicly accessible derelict fishing gear collection bin in Clinton, Connecticut to gather abandoned lobster traps posing ecological and navigational hazards in Long Island Sound. Project will gather an estimated 219 lobster traps in the collection bin to be recycled, increasing the resilience of fisheries in Long Island Sound and reducing hazards for commercial and recreational vessels.  
**\$3,106**

**Virginia Polytechnic Institute and State University**

**Preventing Human Disturbance of Atlantic Flyway Shorebirds – III (multiple states)**  
 Address the threat of disturbance to red knot, American oystercatcher and whimbrel by implementing Community Based Social Marketing strategies for human disturbance reduction, developing a shorebird disturbance reduction toolkit for land managers and disseminating the results throughout the Atlantic Flyway shorebird network. Project will develop scalable conservation strategies that can be applied to change human behavior and improve shorebird survival and reproductive success.  
**\$189,965**

**DELAWARE****Academy of Natural Sciences of Drexel University**

**Delaware River Restoration Fund Project Impact Assessments for Phase 2 – ANS Modeling (DE, NJ, NY, PA)**  
 Deploy novel, high-resolution modeling techniques to quantify the positive impact of DRWI-associated restoration projects. Project will collaborate with the FieldDoc development team to develop and implement a series of Application Program Interfaces that enable DRWI grantees to run geospatial queries on project areas and model annual pollutant load reductions of nitrogen, phosphorus and sediment reduced as a result of project implementation.  
**\$212,751**

**Brandywine Shad 2020**

**Restoration of American Shad and Fish Passage on the Brandywine River (DE)**  
 Restore American shad and improve ecological function to the Brandywine River through the removal of two fish passage barriers, restoration of 10 acres of impounded habitat and development of fish passage designs at two other dams. Project will build on previous success to reduce water levels that lead to flooding and help reduce risk to public safety while increasing aquatic habitat diversity and water quality.  
**\$445,000**

**Canaan Valley Institute**

**Coordinating Eastern Brook Trout Joint Venture Strategies and Goals (multiple states)**  
 Continue the activities of the Eastern Brook Trout Joint Venture in the historic range of the species. Project will refine the strategic objectives and key conservation priorities of the Eastern Brook Trout Joint Venture using the results of the recently completed status assessment of wild brook trout at the catchment scale.  
**\$74,999**

**Delaware River Basin Commission**

**Water Management Studies to Inform Basin-wide Resource Planning (DE, NJ, NY, PA)**  
 Advance research in water management through completion of three studies focusing on water quality, contaminants of emerging concern and future water availability. Project will be used for planning efforts including consideration of future water supply projects, wastewater assimilative capacity, evaluation of pass-by flows, conservation releases, consumptive use mitigation triggers, freshwater flow needs to address sea-level rise and potential flow targets.  
**\$499,126**

**National Wildlife Federation**

**Sacred Grounds Program: Installing Pollinator Gardens and Engaging Communities of Faith (DE)**  
 Implement National Wildlife Federation's Sacred Grounds program in Wilmington, Delaware. Project will not only increase pollinator habitat and stormwater best management practices, but also engage the untapped faith community to connect with in nature, building an environmental stewardship ethic that is beneficial to fish, wildlife and people.  
**\$237,426**

**New Castle Conservation District**

**Dam Removal in the White Clay Creek (DE)**  
 Remove an obsolete stone dam on the White Clay Creek in New Castle County, Delaware, restoring the indigenous ecosystem and habitat for aquatic animals and wildlife. Project will restore 1 mile of river hydrology and stream habitat and reconnect 9.2 miles of streambed, enabling shad and herring to spawn in the future while restoring riparian habitat essential to benthic organisms and neotropical warblers.  
**\$179,520**

**Partnership for the Delaware Estuary Producing Natural Resource Evaluation and a Management Plan for Mispillion and Cedar Creek (DE)**

Work with partners to produce a natural resource economic valuation and management plan for Mispillion and Cedar Creek watersheds in Delaware. Project will provide the region with an ecotourism and nature-based investment strategy for conservation, climate adaptation and community resilience in the watersheds and will culminate in a comprehensive management plan that promotes resilience to flooding, sea-level rise and land use development.  
**\$110,042**

**Partnership for the Delaware Estuary Evaluating Outcomes of Coastal Salt Marsh Intervention Efforts (DE, NJ, PA)**

Develop the Marsh Futures Ecological Mapper system to provide landscape-level evaluation of changes to key salt marsh ecosystem services of proposed habitat-specific restoration efforts. Project will fill a vital evaluation gap in protecting coastal marshes by providing a mechanism to understand how specific intervention efforts can either support or diminish landscape-level ecosystem services of salt marshes with applicability across the Atlantic Coast.  
**\$300,000**

**Partnership for the Delaware Estuary**

Developing Propagation and Rearing Methods for Freshwater Mussels in the Lower Delaware River Basin (DE, PA)

Develop propagation and rearing methods for three rare species of freshwater mussels that inhabit the tidal freshwater zone of the Delaware River Basin. Project will address a key bottleneck in the restoration and damage mitigation for these species and will also contribute to immediate and future water quality goals as progeny produced by the study will be planted into pilot living shoreline projects where they can deliver ecosystem services.

**\$164,002**

**Woods Hole Group**

Advancing a Resilience Prioritization Decision Support System for Zone of Influence Prediction (DE)

Conceptualize and begin development of a resilience prioritization decision-support system (DSS) in the Delaware Bay to help understand the impacts of storm surge and sea level rise under current and future conditions. Project will utilize the DSS to help set goals to build resilience to flooding within a given community and prioritize investments for maximum impact.

**\$310,000**

**DISTRICT OF COLUMBIA****Alliance for the Chesapeake Bay**

Maintaining Best Management Practices in the Anacostia Watershed (MD, DC)

Promote successful, long-term best management practice maintenance and water quality improvement through a virtual maintenance resource center, inspections, cost-share maintenance services and a neighborhood volunteer program. Project will increase the functionality of at least 300 installed best management practices and document improvement in the abilities of 200 property owners to maintain their practices over time.

**\$500,000**

**American Forests**

Leveraging Urban Forests for Climate, Health and Tree Equity Scores (MD, VA, DC)

Build a deep-dive Tree Equity Score Analyzer tool for use across the greater Washington metropolitan region. Project will provide a way to set urban forestry narratives, plan strategies and focus resources on communities of highest need to improve tree canopy where its benefits are most needed.

**\$49,111**

**Canaan Valley Institute**

Coordinating Eastern Brook Trout Joint

Venture Strategies and Goals (multiple states) Continue the activities of the Eastern Brook Trout Joint Venture in the historic range of the species. Project will refine the strategic objectives and key conservation priorities of the Eastern Brook Trout Joint Venture using the results of the recently completed status assessment of wild brook trout at the catchment scale.

**\$74,999**

**Earth Conservation Corps**

Riparian Restoration of Barnaby Run/Oxon Cove Through Community Engagement (DC, MD)

Engage community youth and local organizations in the removal of a half mile of invasive species and restoration of riparian habitat through trash removal in Barnaby Run, a tributary to Oxon Cove and the Potomac River. Project will plant fifty native bald cypress trees and 1 acre of wild rice plants in Oxon Cove, a vital urban wildlife habitat to a myriad of migratory bird species.

**\$38,097**

**Thurgood Marshall College Fund**

Thurgood Marshall College Fund Conservation Fellows Program (DC)

Work with NFWF and other conservation organizations to place 40 graduate and undergraduate students from Historically Black Colleges and Universities (HBCU) in internships in an effort to enhance recruitment of diverse professionals within the conservation community. Project will leverage outreach systems and campus relationships to communicate internship opportunities to the broad HBCU markets and provide NFWF with the best candidates for open internship positions.

**\$811,443**

**Wildlife Management Institute**  
Conservation Without Conflict (DC)

Work with NFWF and other conservation partners to expand voluntary and collaborative on-the-ground approaches to wildlife conservation on working lands across the United States.

**\$300,000**

**Winrock Solutions at Winrock International**  
Upgrading NFWF's Carbon Calculator

Conceptualize and develop an upgraded Carbon Calculator for the National Fish and Wildlife Foundation. Project will update tool activities, research additional carbon databases, update current databases to allow refined estimates, test the completed tool, and develop tool training and manuals for NFWF staff.

**\$36,100**

**FLORIDA****Alachua Conservation Trust**

Restoring and Maintaining Longleaf Pine in the Ocala Local Implementation Team Geography – II (FL)

Enhance 16,000 acres of existing longleaf pine habitat and establish an additional 1,000 acres of longleaf pine seedlings to benefit red cockaded woodpecker, Bachman's sparrow and gopher tortoise in north-central Florida. Project will engage private landowners in longleaf pine restoration through a prescribed burn association and will restore and enhance longleaf pine habitat on the Ocala National Forest and public and private lands surrounding Camp Blanding Joint Training Center.

**\$272,000**

**Alachua Conservation Trust**

Increasing Landowner Engagement to Improve Water Quality and Quantity in the Suwannee Watershed (FL)

Provide additional technical assistance to landowners within Florida's Suwannee Basin to accelerate the conveyance of Farm Bill programs benefiting water quality and quantity. Project will engage landowners in cost-share programs resulting in permanent acres protected and the implementation of best management practices for the reduced impact on regional water and aquatic species.

**\$200,000**

**American Forest Foundation**

Enhancing Water Quality through Forested Watershed Conservation (AL, FL, MS)

Enhance and maintain water quality by protecting and restoring forested watershed conditions in key watersheds across the Gulf Coast. Project will be implemented through a public-private partnership and will support capacity building and expand resources to protect and restore forested watersheds in the Gulf States.

**\$10,000**

**City of Jacksonville**

Restoring Stream, Wetlands and Floodplains of McCoys Creek (FL)

Restore McCoys Creek in Jacksonville, Florida, including 1 mile of stream and up to 35 acres of floodplain and wetlands using natural, nature-based features and materials, benefiting rock sea bass, summer flounder, crevalle jack, gray snapper, red drum, pink shrimp, brown shrimp and white shrimp. Project will complete restoration using a mixture of cypress and hardwood forests, freshwater ponds and salt marsh vegetation, as appropriate, along the salinity gradient.

**\$4,300,000**

**City of Miami****Developing a Resilient Waterfront and Shoreline Enhancement Plan (FL)**

Develop a 20-year capital plan for city of Miami shoreline enhancement projects, including updated design and permitting guidelines and financing recommendations. Project will lead to reduced increasing flood risks over the next 40 years and will protect and enhance the currently compromised ecosystems of Biscayne Bay, Miami River and Little River through a combination of nature-based and structural means.

**\$225,000**

**Coral Restoration Foundation****Improving Coral Restoration Monitoring Through Implementation of an Automated Photomosaic Tool (FL)**

Design and implement an automated web-based application to stitch, store and analyze reef-scale photomosaic images for the purpose of coral restoration monitoring. Project will increase monitoring scalability and efficiency using large-scale photomosaics and machine learning recognition of coral species.

**\$148,430**

**Escambia County****Creating a Pensacola Bay Living Shoreline (FL)**

Construct approximately 5,300 linear feet of emergent and submerged offshore reef breakwaters, 9 acres of sandy beach habitat and create conditions to support natural recruitment and colonization of up to 22 acres of submerged aquatic vegetation habitat at Sherman Inlet located in southwestern Pensacola Bay. Project will complete restoration at Sherman Inlet and will benefit numerous finfish and shellfish species while enhancing coastal resilience of Naval Air Station Pensacola.

**\$2,502,059**

**Florida Conservation Group****Implementing Gopher Tortoise Habitat Management on Private Ranchlands (FL)**

Provide technical assistance to ranch operators to accelerate the implementation of prescribed fire and other practices that benefit upland habitats that are vital for supporting gopher tortoise populations in southcentral and southwest Florida. Project will design and implement 15 best management practices to improve 6,000 acres of private working ranchland for gopher tortoise.

**\$258,540**

**Gentner Consulting Group****Deepwater Horizon Oceanic Fish Restoration Project Project Monitoring and Evaluation (multiple states)**

Conduct requisite statistical analyses to evaluate key performance indicators for the project in accordance with the Oceanic Fish Restoration Project Monitoring Plan. Project will estimate bycatch reduction and alternative gear performance during the remaining repose years and will support evaluation of the overall performance of the project following the final repose year.

**\$430,600**

**Groundwork Jacksonville****Developing a Hogans Creek Restoration Plan (FL)**

Develop a preliminary design for the ecological restoration of Hogans Creek to reduce flooding, improve water quality, create habitat for fish and wildlife and provide nature-based recreation using concepts in natural channel design to fit its watershed and receiving waters. Project will engage the neighborhoods within the creek's watershed as well as other key stakeholders as design partners.

**\$294,000**

**Gulf Fisheries Research Foundation****Remote Electronic Monitoring for the Gulf of Mexico For-Hire Reef Fish Fishery (AL, FL, TX)**

Develop remote electronic monitoring for the Gulf of Mexico for-hire reef fish fishery using wireless video and data transfer, onboard artificial intelligence, cloud data storage and remote video review. Project will explore incentives specific to the for-hire industry, develop an image library for regulated species, explore artificial intelligence to minimize video review costs and contribute information for science and management, including post-release mortality estimates.

**\$396,343**

**Manomet****Managing American Oystercatchers and Minimizing Coastal Engineering Impacts Along the Atlantic Coast (multiple states)**

Coordinate the American oystercatcher recovery initiative, implement best management practices for disturbance and predation management along the U.S. Atlantic Coast and Gulf Coast of Florida and develop long-term improvements in coastal engineering protocols to restore habitats critical to focal shorebird species. Project will support the goals of the Atlantic Flyway Business Plan by creating a framework for long-term protection, restoration and creation of shorebird habitat at key sites.

**\$189,999**

**Mote Marine Laboratory****Post-Restoration Monitoring for Robinson Preserve Wetlands Restoration Project (FL)**

Conduct fisheries monitoring after restoration is completed at Robinson Preserve in Florida to measure nekton abundance, composition, and density for a period of up to three years post-restoration.

**\$81,682**

**Museum of Science****Restoring, Enhancing and Maintaining Coastal Habitats in South Florida's Coastal Watershed**

Restore, enhance and maintain three separate coastal habitats in South Florida's coastal watershed: 1) The City of Miami's Virginia Key North Point Beach Park Coastal Hammock; 2) Crandon Park Beach Dune; and 3) Haulover Beach Park Dunes. Project will engage 1,400 volunteers directly during 28 workday events and plant a total of 10,000 dune plants and coastal hammock trees.

**\$34,196**

**National Marine Sanctuary Foundation****Developing Capacity to Recycle Fishing Debris in The Florida Keys**

Identify recycling solutions for gear approaching "end-of-life." Project will use targeted engagement with local stakeholders to develop capacity and logistics for recycling of end-of-life and derelict fishing gear throughout the Florida Keys, a pervasive issue that affects the health and well-being of delicate ecosystems and habitats including coral reefs.

**\$70,591**

**National Marine Sanctuary Foundation****Building Resilience through Community Stewardship of Coral Reefs (FL)**

Restore coral reefs at Eastern Dry Rocks, one of seven focus sites of the Mission: Iconic Reefs initiative. Project will complete site preparation and maintenance for coral out-plantings through community engagement in site-based activities, involve restoration practitioners from propagation to planting of elkhorn and staghorn corals, and complete monitoring during and after the project work period to inform impacts.

**\$4,958,494**

**North Carolina State University****Expanding Prescribed Fire Delivery to Restore Southeast Forests (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 landowners, including underserved landowners and fire practitioners through technical assistance, training and outreach to increase the use of prescribed fire.

**\$180,000**



**Nova Southeastern University****Saving the Corals of Florida's Iconic Reefs Using Proven Disease Mitigation Techniques**

Utilize proven disease mitigation techniques to stop stony coral tissue loss disease on large coral colonies at Florida's Iconic Reef sites. Project will provide treatment along the disease line to maintain existing coral cover with prioritization for species diversity and large colony size classes.

**\$233,238**

**Pinellas County****Enhancing Shoreline Protection at the Tampa Bay Philippe Park (FL)**

Assess and design seawall enhancement options in Tampa Bay, at Philippe Park in Safety Harbor, Florida, with a goal of demonstrating and comparing resiliency, creating salt marsh and oyster reef habitat and assessing cost-effectiveness. Project will result in 60% design of several different living shoreline treatments, both traditional and innovative, along a concrete seawall and baseline monitoring.

**\$130,000**

**Santa Rosa County****Developing a Living Shoreline Suitability Model for Pensacola Bay (FL)**

Develop a living shoreline habitat suitability model and master plan for the Pensacola Bay System and assess approximately 175 miles of shoreline and include parameters such as land use, bathymetry, habitat type, wave dynamics and sediment transport. Project will create a model to characterize and prioritize living shoreline opportunities across local government jurisdictions as a comprehensive coastal resilience strategy.

**\$73,891**

**Stantec Consulting Services****Gulf-wide In-water Sea Turtle Monitoring Plan (multiple states)**

Develop a statistically sound plan for the establishment of a coordinated Gulf-wide network for collection and compilation of critical abundance, demographic, and biological information on sea turtles in the Gulf of Mexico. Project will provide important context for project-level monitoring at individual sites where restoration is implemented and will assist with comparisons across multiple projects.

**\$224,267**

**The Longleaf Alliance****Coordinating Local Implementation Team Capacity and Landowner Technical Assistance and Outreach (multiple states) - V**

Improve and sustain coordination among 18 multi-partner local implementation teams that organize, plan and deliver conservation actions to restore and enhance the longleaf pine ecosystem. Project will support conservation planning, as well as tracking and communication of longleaf pine restoration accomplishments.

**\$250,000**

**The Longleaf Alliance****Habitat and Species Recovery in the Gulf Coastal Plain Ecosystem Partnership Landscape (FL, AL)**

Restore and maintain 149,000 acres of longleaf pine habitat in south Alabama and the western panhandle region of Florida to benefit rare and declining species such as the Bachman's sparrow, red-cockaded woodpecker, gopher tortoise and northern bobwhite. Project will provide technical assistance to private landowners and deploy an ecosystem support team to implement prescribed burning, plant longleaf pine, remove invasive species and support rare species recovery on public and private lands.

**\$300,000**

**The Longleaf Alliance****Conserving Longleaf Forests, Wildlife Habitat and Water Resources through Innovative Partnerships (FL, GA, LA, SC, TX)**

Restore and enhance 5,000 acres of longleaf pine habitat within priority drinking water supply watersheds in the Southeast. Project will build partnerships between forestry and conservation organizations, landowners and drinking water supply utilities and provide private landowners with technical and financial assistance to restore and enhance longleaf pine habitat, protecting drinking water supplies and benefiting the gopher frog and other at-risk forested-wetland dependent species.

**\$411,000**

**The Nature Conservancy****Restoring and Enhancing Longleaf Pine Habitat in the Florida Panhandle (FL)**

Restore and enhance more than 30,000 acres of longleaf pine habitat within the Apalachicola Regional Stewardship Alliance area of the Florida Panhandle located between the Aucilla and Choctawhatchee rivers. Project will plant longleaf pine, implement prescribed fire, thinning and invasive species treatments in existing longleaf habitat, and provide financial assistance to priority private landowners for longleaf pine restoration, improving habitat for the eastern indigo snake and Bachman's sparrow.

**\$300,000**

**The Nature Conservancy****Building Capacity and Partnerships to Plan and Implement Coastal Resilience in the Florida Panhandle**

Create a portfolio of nature-based solution projects for coastal resilience in Franklin, Gulf and Bay counties in Florida through work with regional and local partners and analysis of the effectiveness of natural features in reducing storm damage from Hurricane Michael. Project will establish a regional resilience planning framework, including a process for using existing decision support tools and resources, and guide investments in restoring, strengthening and creating natural features.

**\$206,753**

**University of Florida****Designing Innovative Saltmarsh Restoration and Protecting Coastal Community Infrastructure (FL)**

Collect baseline data, develop a guidance manual and provide preliminary design plans that facilitate salt marsh lateral expansion, enable dredged sediments to be applied to adjacent salt marshes and augment salt marsh accretion. Project will engage multiple stakeholders in the design of an innovative approach focused on using thin-layer placement of dredged sediments from the Intracoastal Waterway to enhance the resilience of adjacent salt marshes and community infrastructure.

**\$157,834**

**GEORGIA****2021 Guy Bradley Award****State Winner (GA)**

\$2,500 was awarded to the family of 2021 Guy Bradley Award state level recipient, deceased Game Warden Captain, Stanley Curtis Elrod of the Georgia Department of Natural Resources Law Enforcement Division.

**\$2,500**

**Atlanta Audubon Society****Maritime Grassland Dune Restoration on Jekyll Island (GA)**

Restore and stabilize 3.5 acres of coastal dunes through the establishment of maritime grassland habitat to protect Georgia's valuable salt marshes and interior terrestrial habitats. Project will engage seven local partners and at least 50 volunteers to install 24,000 plants and 10 pounds of seed and remove 3.5 acres of invasive vegetation, as well as engage at least 900 youth and community members in conservation experiences.

**\$44,418**

**Canaan Valley Institute****Coordinating Eastern Brook Trout Joint Venture Strategies and Goals (multiple states)**

Continue the activities of the Eastern Brook Trout Joint Venture in the historic range of the species. Project will refine the strategic objectives and key conservation priorities of the Eastern Brook Trout Joint Venture using the results of the recently completed status assessment of wild brook trout at the catchment scale.

**\$74,999**

**Forest Landowners Association****Restoring Longleaf Pine and Species Habitat on Large-Acreage Private Lands (AL, GA, LA)**

Establish 1,400 acres of longleaf pine and improve 2,900 acres of existing longleaf forest with prescribed fire on large-acreage private lands in Alabama, Georgia and Louisiana. Project will address barriers to restoring longleaf pine on large-acreage private lands by building trust among stakeholders and developing innovative tools to mitigate risks associated with at-risk and listed species regulations and providing technical and financial assistance to support planting and management of longleaf pine. **\$150,000**

**Georgia Department of Natural Resources****Shell Rake Habitat Restoration and Boater Disturbance Reduction for Atlantic Flyway Shorebirds (GA)**

Restore shell rake nesting habitat for American oystercatcher, reduce human disturbance in offshore bar habitats and identify key red knot and whimbrel sites along the coast of Georgia with aerial surveys and pinpoint tags. Project will improve nesting success for American oystercatchers and identify and enhance conditions at important migration stopovers for whimbrel and red knot. **\$75,000**

**Kennesaw State University****Testing the Efficacy of Aerosolized Treatments in Reducing Prevalence of White-Nose Syndrome (GA)**

Create artificial cave environments to mimic bat hibernation conditions and evaluate the effectiveness of aerosolized compounds in reducing the growth of the fungus that causes white-nose syndrome. Project will test aerosolized versions of existing experimental treatments like polyethylene glycol and volatile organic compounds and evaluate their use in future management. **\$87,164**

**Limestone Valley Resource Conservation and Development Council****Water Quality Conservation for Fish and Mussels in the Conasauga River Watershed (GA, TN)**

Build on previous project efforts to work with local agricultural and business landowners to improve water quality in the Conasauga River watershed. Project will create partnerships and conduct outreach in order to implement water quality best management practices and bolster conservation efforts in support of published recovery plans for 10 of the listed fish and mussel species in the basin. **\$256,304**

**Manomet****Managing American Oystercatchers and Minimizing Coastal Engineering Impacts Along the Atlantic Coast (multiple states)**

Coordinate the American oystercatcher recovery initiative, implement best management practices for disturbance and predation management along the U.S. Atlantic Coast and Gulf Coast of Florida and develop long-term improvements in coastal engineering protocols to restore habitats critical to focal shorebird species. Project will support the goals of the Atlantic Flyway Business Plan by creating a framework for long-term protection, restoration and creation of shorebird habitat at key sites. **\$189,999**

**North Carolina State University****Expanding Prescribed Fire Delivery to Restore Southeast Forests (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 landowners, including underserved landowners and fire practitioners through technical assistance, training and outreach to increase the use of prescribed fire. **\$180,000**

**Ogeechee Riverkeeper****Urban Ecological Restoration in the Vernon River (GA)**

Perform targeted sampling on 16 stream sites with 85 volunteers to analyze, plan restoration and engage a diverse, multigenerational community to implement data-driven management practices that reduce pathogen loading and litter in an impaired water body in Savannah and Chatham County, Georgia. Project will improve ecological health and specific habitat for endangered sturgeon, diamondback terrapin and sea turtles in the Vernon River. **\$46,000**

**One World Adventure Company****Little River Watershed Restoration (AL, GA)**

Implement best management practices for storm water using green infrastructure on 20 acres and restore 20 miles of riverbanks and major streambanks in the Little River Watershed. Project will engage 40 volunteers to mitigate sediment and stormwater runoff with native plants and grasses. **\$37,288**

**Southeastern Association of Fish and Wildlife Agencies****Planning for Coastal Resilience through an Innovative Design Approach to Capacity Building (GA, NC, SC)**

Identify, assess and build regional teams to address hydrologic connectivity threats resulting from inadequate culvert structures in tidal systems. Project will focus on surveying, assessing and prioritizing sites with key regional partners from diverse backgrounds and aims to build a community of practice in each region to further aquatic conservation and community resiliency. **\$200,000**

**Southeastern Association of Fish and Wildlife Agencies****Restoring Radium Springs Through Agriculture (GA)**

Provide outreach and assistance to implement innovative irrigation best management practices in the Radium springshed, the largest spring in Georgia. Project will work with local farmers to reduce their water usage and implement best management practices across approximately 1,400 acres to provide flow resiliency in critical spring habitat areas, benefiting a variety of species, including gulf sturgeon, gulf striped bass, Dougherty plain cave crayfish and the Georgia blind salamander. **\$205,000**

**Tennessee Aquarium****Monitoring Status of Bridled Darters and Assessing Threats to Blue Shiners (AL, GA, TN)**

Monitor abundance and genetic health of the bridled darter and assess threats to federally threatened blue shiners in the Coosa River drainage. Project will utilize snorkeling, eDNA surveys and DNA analysis from tissues to monitor bridled darters and will utilize geographic information systems, fish passage assessments, eDNA surveys and habitat comparisons to other watersheds to assess threats to blue shiners. **\$113,097**

**The Longleaf Alliance****Coordinating Local Implementation Team Capacity and Landowner Technical Assistance and Outreach (multiple states) - V**

Improve and sustain coordination and exchange of information among 18 multi-partner local implementation teams that organize, plan and deliver conservation actions to restore and enhance the longleaf pine ecosystem. Project will support strategic on-the-ground restoration through conservation planning, as well as tracking and communication of longleaf pine restoration accomplishments. **\$250,000**

### **The Longleaf Alliance**

#### **Longleaf Pine Restoration on Public and Private Lands in the Fort Stewart/Altamaha Area – II (GA)**

Advance longleaf pine ecosystem restoration on public and private lands in southeast Georgia through prescribed burning, forest thinning, longleaf planting, a longleaf awareness social media campaign and restoration of native groundcover. Project will restore and enhance more than 12,000 acres of longleaf pine habitat on high-priority lands around Fort Stewart, benefiting gopher tortoise, northern bobwhite and other open-pine and grassland-dependent species.

**\$275,000**

### **The Longleaf Alliance**

#### **Conserving Longleaf Forests, Wildlife Habitat and Water Resources through Innovative Partnerships (FL, GA, LA, SC, TX)**

Restore and enhance 5,000 acres of longleaf pine habitat within priority drinking water supply watersheds in the Southeast. Project will build partnerships between forestry and conservation organizations, landowners and drinking water supply utilities and provide private landowners with technical and financial assistance to restore and enhance longleaf pine habitat, protecting drinking water supplies and benefiting the gopher frog and other at-risk forested-wetland dependent species.

**\$411,000**

### **The Nature Conservancy**

#### **Restoring and Managing Longleaf in Northwest Georgia and Northeast Alabama**

Plant, maintain and improve montane longleaf pine stands on both public and private lands in northwest Georgia and northeast Alabama. Project will establish 1,000 acres of new longleaf pine through plantings and improve and maintain an additional 48,000 acres of existing longleaf pine habitat with prescribed fire, benefiting northern pine snake, fox squirrel and Bachman's sparrow.

**\$225,000**

### **The Nature Conservancy**

#### **Developing a Resiliency Implementation Workplan for Camden County (GA)**

Create a resiliency implementation workplan for Camden County, Georgia, via a stakeholder-driven planning process that results in actionable steps to assist local, county and Navy decision-makers in improving local resilience. Project will prioritize nature-based solutions by identifying and developing opportunities for nature-based, green-grey infrastructure projects to mitigate flooding, storm surge, sea-level rise risks and other threats to local infrastructure and facilities.

**\$75,000**

### **The Nature Conservancy**

#### **Partnering to Restore Longleaf Pine Across the Chattahoochee Fall Line (AL, GA)**

Accelerate longleaf pine habitat restoration and enhancement on more than 20,900 acres of public and private land in west Georgia and east Alabama, benefiting red-cockaded woodpecker, gopher tortoise and other at-risk species. Project will enhance and maintain existing longleaf pine habitat with prescribed fire and forest thinning, establish longleaf pine through plantings and engage landowners through outreach and technical assistance, focusing on lands around Fort Benning.

**\$224,618**

### **The Nature Conservancy**

#### **Reducing Sediment in Chattahoochee National Forest to Benefit the Blue Shiner and Bridled Darter (GA)**

Reduce sediment loading to Holly Creek by replacing six undersized and perched culverts and improve drainage and filtration along 1 mile of road. Project will significantly improve water quality for the federally threatened blue shiner, endemic to the Mobile River drainage, as well as the Georgia state endangered bridled darter.

**\$75,000**

### **Trees Atlanta**

#### **Frazer Forest Restoration (GA)**

Restore Frazer Forest, located on the east-northeast edge of the City of Atlanta in DeKalb County and containing old-growth trees and native plant species that indicate it is a remnant of the original forest in Atlanta. Project will improve 9.7 acres of forest through invasive removal, plant 100 trees and install protective fencing and signage while conducting onsite education and engagement for over 500 people.

**\$34,514**

### **Virginia Polytechnic Institute and State University**

#### **Preventing Human Disturbance of Atlantic Flyway Shorebirds – III (multiple states)**

Address the threat of disturbance to red knot, American oystercatcher and whimbrel by implementing Community Based Social Marketing strategies for human disturbance reduction, developing a shorebird disturbance reduction toolkit for land managers and disseminating the results throughout the Atlantic Flyway shorebird network. Project will develop scalable conservation strategies that can be applied to change human behavior and improve shorebird survival and reproductive success.

**\$189,965**

## **HAWAII**

### **American Bird Conservancy**

#### **Saving Hawai'i's Imperiled Forest Birds – XIII**

Continue conservation activities to protect forest birds in Hawai'i. Project will: 1) support rat control in critical forest habitat on Kaua'i, 2) perform kiwiku rapid assessment surveys in support of establishing a captive population, 3) conduct predator control, restore habitat and maintain ungulate fencing for palila, 4) perform mosquito distribution and abundance surveys on Kaua'i and Maui, and 5) support coordination of the steering committee developing landscape-scale mosquito control.

**\$302,775**

### **Arizona State University**

#### **Quantifying Herbivory Thresholds for Coral Reef Resilience (HI)**

Identify herbivory thresholds for reef resilience in Hawai'i that relate to coral reef condition and changes before and after the 2014 to 2015 bleaching event through statewide and priority site-based analyses. Project will help reef managers with place-based planning, management to define monitoring targets and identifying sites best suited for coral restoration.

**\$196,372**

### **Hanalei Watershed Hui**

#### **Enhancing Community Resilience through Site Flood Assessment and a Flood Mitigation Design (HI)**

Conduct a hydrologic assessment to evaluate potential mitigation designs to attenuate riverine flood water impacts in Hanalei Basin and create a elevation model using survey data of existing topography and bathymetry of the floodway and inland waterways. Project will evaluate mitigation designs, rank flood attenuation, create a wetland habitat matrix, define cost-benefit to attenuate flood impacts and enhance wetland habitat, and complete 60% preliminary designs.

**\$250,000**

### **Hawai'i Division of Forestry and Wildlife**

#### **Building Community Resiliency through Ecological Restoration on the Hawaiian Island of Moloka'i**

Complete key components of a landscape-level restoration effort that the Moloka'i community has prioritized and progressively developed over the past 20 years in response to historical and ongoing pressure from increasing runoff and erosion rates in barren or non-native, fire-adapted grasses-covered forests. Project will address major threats to essential community assets through the protection and restoration of native ecosystems and the construction of strategic firebreaks.

**\$1,861,422**



**Hawai'i Division of Forestry and Wildlife****Restoring Habitat in Kawaiui Marsh for Endangered Waterbirds (HI)**

Clear 10.4 acres of invasive vegetation and install 3,000 native plants in Kawaiui Marsh, involving 1,600 volunteers and 2,300 K-12 students. Project will restore 1.3 wetland acres and 2.5 upland acres to create habitat for three species of endangered waterbirds and begin the transition to a community-based management model.

**\$43,278**

**Hawai'i Division of Forestry and Wildlife****Restoring Seabird Breeding Habitat (HI) - V**

Remove invasive plants to improve seabird nesting populations and reproductive success on Kure Atoll. Project will treat invasive plant species utilizing chemical and mechanical method, will restore seabird habitat by planting native vegetation and will monitor seabird populations and reproductive success, including Laysan albatross and black-footed albatross.

**\$500,000**

**Kekulamamo****Na Maka Nou: Engaging Community and Island Stewardship Through Documentaries (HI)**

Capture and present stories of Lāna'i's people, their historical interactions with the land and lessons learned to communicate the current conservation needs on the island and encourage community stewardship. Project will support student interns to develop various videos documenting the progress of the Kuahiwi a Kai program, as well as the history, human impact and environmental threats to the watershed and native species.

**\$64,171**

**Lāna'i Culture and Heritage Center****Lāna'i Resident Deer and Sheep Management and Community Stewardship Program (HI)**

Develop and implement a community-based hunting program for residents to reduce the number of invasive ungulates within the Kuahiwi a Kai Program Area on Lāna'i, Hawai'i. Project will engage the community in restoring and preserving natural and cultural resources through active participation and education of Lāna'i's natural history, cultural heritage and ecosystems functions.

**\$95,720**

**Pacific Rim Conservation****Developing a Predator-Free Nesting Area for Hawaiian Petrel on Hawai'i Island (HI)**

Initiate the planning phases necessary to construct a predator proof fence adjacent to a breeding area for Hawaiian petrel and initiate social attraction for Newell's shearwater and Hawaiian petrel in the Kohala Mountains, Hawai'i. Project will conduct biological monitoring and inventory and complete pre-construction compliance and will develop the eradication plan necessary to construct a predator-proof fence.

**\$12,499**

**Pacific Rim Conservation****Creating Resilient Tropical Seabird Colonies through Translocation (HI, MEX)**

Continue seabird translocations to James Campbell National Wildlife Refuge on the north shore of O'ahu, Hawai'i and begin translocations of black-footed albatrosses to Guadalupe Island, Mexico. Project will translocate up to 225 chicks and 42 eggs to two sea-level rise resilient and predator free locations in an effort to create long-term resilient seabird colonies.

**\$390,000**

**Pacific Rim Conservation****Using Thermal Imaging Drones to Locate Newell's Shearwaters and Hawaiian Petrels on O'ahu – II (HI)**

Develop thermal imaging drone technology to search for breeding colonies of Newell's shearwater and Hawaiian petrel on O'ahu and evaluate success of translocation as a management action on Kaua'i. Project will test and develop thermal imaging drones to detect burrow nesting seabirds, deploy song meters at strategic locations, locate possible burrows and conduct monitoring at a translocation site to determine whether listed seabirds are breeding and evaluate the success of past translocations.

**\$79,000**

**Pacific Rim Conservation****Improving Elepaio Predator Control (HI)**

Increase the effectiveness and scale of rat control in the Honolulu Watershed Forest Reserve to improve the O'ahu elepaio population. Project will increase O'ahu elepaio reproductive success and population growth by expanding and improving rat removal methods for a minimum of 35 O'ahu elepaio territories.

**\$29,769**

**Pono Pacific Land Management****Installation of Landscape-scale Ungulate Fencing on Lāna'i (HI)**

Install ungulate control fencing mauka to makai (mountain to ocean) to enclose the core of the Kuahiwi a Kai Program Area on Lāna'i for the management of invasive axis deer and mouflon sheep populations. Project will begin installation of invasive ungulate-proof fencing in preparation for future successful ungulate control to improve watershed conditions and protect native habitats.

**\$249,347**

**Safina Center****Design and Develop a Pelagic Longline Hook/Weight to Reduce Seabird Bycatch (HI)**

Design and produce a weighted hook for use in pelagic longline fisheries to reduce seabird bycatch in Hawai'i. Project will assess the practicality, safety and economic viability of a new longline hook design in order to increase the baited hook sink rate and reduce catch risk of black-footed and Laysan albatrosses.

**\$150,000**

**State of Hawai'i, Department of Land and Natural Resources****Seabird Habitat Restoration, Monitoring and Social Attraction on Lehua Island (HI)**

Continue long-term seabird restoration efforts on Lehua Island off the West coast of Kaua'i. Project will use social attraction techniques to attract endangered Hawaiian petrel, control avian predators, monitor seabird nesting, restore over 15 acres of high value seabird habitat by controlling invasive plants, and improve facilities for long-term monitoring and maintenance of the island and the 18 species of resident seabirds.

**\$150,000**

**State of Hawai'i, Department of Land and Natural Resources****Building Ungulate Excluding Fencing to Reduce Sediment Loading to Coral Reefs in West Maui (HI)**

Protect 7,000 acres of forests from non-native hooved animals, maintain firebreaks and replant eroding areas upland of West Maui's coral reefs near Olowalu. Project will reduce land-based sources of pollution by improving native vegetation cover, ultimately improving water quality for coral reef habitat.

**\$222,570**

**The Nature Conservancy****Informing Southeast Moloka'i Watershed Restoration and Fisheries Management (HI)**

Collect benthic, fish, sediment and water quality data to assess the condition of the marine resources around Kawela in Southeast Moloka'i, Hawai'i. Project will build upon baseline data previously collected by project partners to assess how the reef has changed after years of watershed restoration activities, informing management for future restoration activities.

**\$110,884**

**The Nature Conservancy****Assessment of Kiwikiu and Mosquito Populations in Waikamoi Preserve, East Maui – II (HI)**

Continue assessing the current status of the windward populations of kiwikiu (Maui parrotbill) and 'akohekohe (crested honeycreeper), as well as analyzing the threat of avian disease in the Waikamoi Preserve on Maui. Project will document the presence, distribution and abundance of western subpopulations of kiwikiu and 'akohekohe and assess the presence and distribution of avian malaria-carrying mosquitoes.

**\$37,903**

**The Trust for Public Land****Acquisition of Hawai'i Koa Forest for Inclusion in the Hilo Forest Reserve**

Acquire the 13,129-acre Hawai'i Koa Forest for addition into the Hilo Forest Reserve. Project will permanently protect forested watershed, allow proper management and public access on contiguous property over a larger landscape, encourage sustainable forestry, aid the recovery of 28 listed endangered or threatened species and increase public recreational opportunities. **\$500,000**

**U.S. Department of the Interior, U.S. Fish and Wildlife Service****Eradicating Verbesina to Enhance Ecosystem Resilience and North Pacific Albatross Populations (HI)**

Remove invasive non-native plant species, such as Verbesina, from Sand, Eastern and Spit Islands of Midway Atoll National Wildlife Refuge. Project will remove invasive plant species from 1,549 acres to increase suitable seabird nesting habitat and improve reproductive success of albatrosses, including the black-footed and the Laysan albatross. **\$500,000**

**University of California - Santa Cruz****Improving a Meta-Population Viability Analysis Tool for Threatened and Endangered Seabirds (multiple states)**

Improve a meta-population viability analysis (mPVA) tool to help prevent seabird extinctions. Project will incorporate sea-level rise and financial return on investment data to enhance the existing seabird mPVA conservation planning and decision support tool. **\$125,000**

**University of Hawai'i****Critical Facility Repairs and Upgrades at the Marine Corps Base Hawai'i Cetacean Stranding Center**

Conduct facility repairs and upgrades to prevent closure of the Marine Corps Base Hawai'i marine mammal facility that houses the University of Hawai'i stranding program. Project will conduct electrical upgrades in wet laboratories, mold remediation and prevention, internal temperature management, rodent control, repainting of the facility exterior and repair of a walk-in freezer unit. **\$98,717**

**University of Miami****Coral Reef 3D Remote Sensing Imagery Using NASA's FluidCam and MiDAR on Lāna'i (HI)**

Conduct an airborne field campaign using NASA's FluidCam and MiDAR tools to provide 3D remote sensing imagery of focal coral reef systems on Lāna'i. Project will provide state of the art high-resolution imaging of the reef ecosystem and utilize NASA's NeMO-Net, a new online machine learning application, to engage Lāna'i's community in the mapping effort establishing a baseline to measure nearshore conservation management impacts. **\$61,723**

**Zoological Society of San Diego****Assessing Hawaiian Hawk Movement and Behavior in Support of Resuming 'Alalā Releases (HI)**

Fill key information gaps with new data on Hawaiian hawk, a key predator of the endangered Hawaiian crow ('alalā). Project will provide amplified spatial and temporal data for understanding the ecology, behavior and movements that will be critical for meeting the enabling conditions that will allow for resumption of 'alalā reintroductions. **\$64,999**

**Zoological Society of San Diego****Reintroduction of the 'Alalā to Hawai'i Island – IV (HI)**

Continue implementing an intensive captive breeding program at the Keauhou and Maui Bird Conservation Centers for the reintroduction of 'alalā (Hawaiian crow) on Hawai'i Island. Project will focus on advancing 'alalā releases through improved chick production from parent reared pairs in the captive rearing program and enhanced pre-release training and continuation of post-release monitoring following release. **\$63,134**

**IDAHO****Friends of the Teton River****Advancing Adoption of Agricultural Best Management Practices Through Landowner Education (ID, WY)**

Provide targeted educational opportunities for agricultural producers that accelerate the adoption of farming and ranching best management practices in the Teton Watershed to benefit water quality, quantity and yellowstone cutthroat trout. Project will employ workshops and peer-to-peer education, engage 20 producers in a pilot program, improve management on 1,650 acres, reduce nitrogen and sediment runoff and increase long-term adoption of sustainable land and water management practices. **\$197,280**

**Idaho Fish and Wildlife Foundation****Managing Invasive Annual Grasses to Reduce Fire Size, Frequency and Intensity (ID)**

Work collaboratively across jurisdictions in southern Idaho to implement ecologically based rangeland improvement projects to reduce the threat of annual grass invasion. Project will combat the invasion through adaptive herbicides, aerial and ground seeding and livestock management in an effort to reduce fire size, frequency and intensity. **\$169,950**

**NatureServe****Research Support for Management of Pollinator Species (multiple states)**

Conduct research to identify priority areas for on-the-ground monarch management actions such as habitat restoration and enrichment as well as to inform regulatory review. Project will map these areas and highlight those that are most used by monarchs, recognizing that monarchs tend to migrate along riparian and wetland corridors. **\$199,878**

**Rocky Mountain Bird Observatory****Evaluating Impact of Conservation Activities on Sagebrush Obligate Songbirds (CO, ID, UT, WY)**

Evaluate the impacts of conifer removal and control of annual grasses conservation projects on sagebrush obligate songbirds in the Rocky Mountain Rangelands Region. Project will provide a long-term assessment of which projects benefit sagebrush obligate songbirds and help guide future conservation investments. **\$231,169**

**The Mule Deer Foundation****Increasing Cross-Jurisdictional Coordination in Sagebrush Habitat (multiple states)**

Increase cross-jurisdictional coordination with state agencies and other partners to implement projects on big game migration corridors and in sage-grouse core habitats. Project will improve habitat through treating invasive species, conservation easements, mesic and wet meadow habitat restoration, removing or improving fencing and restoring 3,000 acres of shrubland habitat. **\$395,012**

**The Mule Deer Foundation****Improving Wildlife Crossings over Highway 28 to Increase Habitat Connectivity and Driver Safety (ID)**

Enhance migration corridors in the Lemhi Valley Priority Area in Idaho, improving existing conditions for a road crossing and 4 miles of fencing to reduce animal vehicle collisions with big-game and increase permeability of the crossing. Project will result in increased passage success rates and animal survivor-ship of big-game within the Lemhi Valley Complex Priority Area and surrounding habitats. **\$176,132**

**U.S. Department of the Interior,  
U.S. Bureau of Land Management**  
Employing Virtual Fencing Techniques to  
Preserve Wildlife Connectivity on Grazing  
Allotments (ID)

Establish targeted grazing using new technology through the Vence System that manages cattle remotely using collars with GPS sensors, virtual fencing and a mobile tracking application on the Davis Grazing Allotment in Bliss, Idaho. Project will preserve migratory corridors, big game winter range habitat and conserve sage-grouse habitat by leaving these grazing allotments unfenced.  
\$89,500

## ILLINOIS

**American Farmland Trust**  
Increasing Technical Support for Priority  
Conservation Practices in the Vermilion  
Watershed (IL)

Increase capacity for a full-time Conservation Technician position in the Vermilion Watershed, Illinois to promote priority conservation practices, develop conservation plans, assist Farm Bill contracting and support farmers to implement practices to reduce sediment and nitrogen losses. Project will prevent 15,000 pounds of nitrogen, phosphorus and sediment runoff pollution annually by implementing 30 Best Management Practices and improving management on 6,000 acres of private working lands.  
\$192,604

**Bat Conservation International**  
Creating Native Prairie in Right-of-Ways to  
Increase Insects for Declining Bat Populations  
(IL, WV)

Improve foraging conditions for bats as a long-term and scalable strategy to improve survival and aid recovery of bat populations impacted by White-nose Syndrome. Project will determine if restoring native plant communities on rights-of-way in Illinois and West Virginia can increase available insect prey for bats, particularly during fall and spring.  
\$224,999

**Chicago Public Schools, District 299**  
Installing Green Stormwater Infrastructure  
in Chicago's Historically Underserved Public  
Schools (IL)

Install green stormwater infrastructure on public schools in Chicago to address water quality and flooding issues for Chicago's combined sewer system and waterways. Project will restore approximately 70,000 square feet using stormwater best management practices with a designed retention capacity of 600,000 gallons and annual infiltration of 2 million gallons.  
\$440,000

**Ducks Unlimited**  
Expanding Agricultural Conservation and  
Adoption of Farm Bill Conservation Programs  
(IA, IL, IN, MO)

Promote and implement Farm Bill conservation programs within the agriculturally based communities of central/northcentral Iowa, northern Illinois/Indiana and central/northwest Missouri. Project will work directly with 390 producers to design and implement wetland friendly conservation practices to reduce nitrogen and phosphorous runoff and improve water quality and wildlife habitats on 4,050 acres of cropland.  
\$240,000

**Friends of the Forest Preserves**  
Restoring Wetlands and Building Community  
at Possum Hollow Woods (IL)

Engage volunteers, Conservation Corps members and high school students to restore 38 acres of habitat for birds, amphibians and native plants at Possum Hollow Woods forest preserve. Project will improve regional water quality, plant native seeds, increase habitat for rare species through invasive species management, and engage urban stewardship communities to benefit the riparian corridor of Salt Creek in Cook County, Illinois.  
\$40,000

**Lake County Forest Preserve District**  
Restoring Hydrology in Prairie Wolf Forest  
Preserve to Benefit Marsh-Dependent  
Species (IL)

Improve hydrologic function and habitat diversity along the North Branch of the Chicago River by removing or disabling more than 5,000 linear feet of drain tile and clearing invasive species across 146 acres of Prairie Wolf Forest Preserve. Project will restore diverse habitat for multiple species of conservation concern, create or enhance 23 acres of wetland and store an estimated 2 million gallons of stormwater annually.  
\$177,260

**Lake County Forest Preserve District**  
Expanding Invasive Species Control in the  
Greenbelt Forest Preserve (IL)

Improve the ecological health of Greenbelt Forest Preserve by increasing the abundance and diversity of the preserve's native plants and animals, reducing stormwater runoff and reducing sediment and pollutants entering Lake Michigan. Project will re-treat invasive plants across 187 acres of previously restored habitat and address untreated buckthorn thickets on 43 adjacent acres that threaten the previously restored areas.  
\$100,000

**National Audubon Society**  
Restoring Wetland Habitat and Improving  
Public Access to Deadstick Pond (IL)

Restore and develop public access to Deadstick Pond and adjoining riverfront trail, greatly expanding marsh bird habitat, greenspace connectivity and recreational access in the Calumet Region. Project will restore 24 acres of high quality hemi-marsh and 25 acres of wet prairie habitat by designing and installing a new water control structure, regrading the channel to maximize water control and treating invasive species.  
\$262,178

**NeighborSpace**  
Improving Stormwater Management by  
Installing Green Stormwater Infrastructure in  
South Chicago (IL)

Install green stormwater infrastructure at the Calumet River Gateway Garden in South Chicago. Project will install bioswales, rain gardens and an artificial river to retain 810,560 gallons of stormwater annually, improve water quality in the Calumet watershed and educate local residents about the purpose and importance of stormwater management and resiliency.  
\$300,000

**Pollinator Partnership**  
Project Wingspan: Enhancing Agricultural  
Lands for Pollinators (IL, IN, MI, OH)

Enhance and increase connectivity of pollinator habitat on Midwestern private agricultural lands and public conservation lands by providing technical assistance to landowners, collecting and distributing seeds and propagating seedlings. Project will collect 55 pounds of milkweed seeds, propagate 3,000 milkweed seedlings, host 14 events to engage 2,000 people and prescribe management actions to improve 2,000 acres of habitat.  
\$99,570

**The Nature Conservancy**  
Leveraging Green Stormwater Infrastructure  
(GSI) to Finance Construction and  
Maintenance of Future GSI through  
StormStore (IL)

Install green stormwater infrastructure (GSI) along portions of the Little Calumet and/or the southernmost Lower Des Plaines watershed with a minimum design retention capacity of 100,000 gallons volume of runoff captured. Project will demonstrate how stormwater credit trading programs can be used to provide a sustaining source of construction capital to support future construction and maintenance of GSI projects.  
\$247,000



**The Nature Conservancy**

**Controlling Invasive Species in the Calumet Region through Strategic Retreatment (IL, IN)**  
Enhance and intensify prior restoration efforts on 540 acres of wetland communities at six sites in the bi-state Calumet region of southern Lake Michigan, including marsh and hemi-marsh, dune, and swale and wet prairie habitat through invasive species control. Project will employ herbicide and prescribed fire practices to sharply reduce remaining invasive patches, halting expansion, removing seed sources that cause re-invasion and improving overall habitat conditions.  
**\$543,449**

**INDIANA****American Farmland Trust**

**Advancing Adoption of Regenerative Agriculture and Soil Health Practices (IN, OH)**  
Build models of one-on-one farmer engagement, benchmarking of farm practices, development of continuous improvement plans and implementation of improved soil health management practices in Ohio and Indiana. Project will develop 50 Best Management Practices recommendations to improve 15,000 acres of private working lands.  
**\$202,323**

**Ducks Unlimited**

**Expanding Agricultural Conservation and Adoption of Farm Bill Conservation Programs (IA, IL, IN, MO)**  
Promote and implement Farm Bill conservation programs within the agriculturally based communities of central/northcentral Iowa, northern Illinois/Indiana and central/northwest Missouri. Project will work directly with 390 producers to design and implement wetland friendly conservation practices to reduce nitrogen and phosphorous runoff and improve water quality and wildlife habitats on 4,050 acres of cropland.  
**\$240,000**

**Keep Indianapolis Beautiful**

**Community-Based Habitat Restoration along the White River (IN)**  
Collaborate with Reconnecting to Our Waterways, the City of Indianapolis and community partners to restore 4 acres of native habitat in Riverside and Ravenswood Overlook Parks along the White River in Indianapolis, Indiana. Project will restore native habitat for local flora and fauna, train and employ 10 college students and young adults through the Urban Naturalist program and enlist 100 volunteers in habitat restoration work.  
**\$20,401**

**National Audubon Society**

**Avian Monitoring and Evaluation for the Sustain our Great Lakes Program (multiple states)**  
Assist in monitoring NFWF's impact on migratory shorebirds, waterfowl and marsh-nesting birds for NFWF's Sustain our Great Lakes Program.  
**\$484,097**

**Pheasants Forever**

**Providing Technical Assistance to Farmers to Increase Sustainability and Profitability (IN)**  
Work in partnership with an agricultural retailer to provide landowners with sustainable conservation technical assistance that provides habitat and natural resource outcomes while improving the farm's bottom line. Project will provide training to producers by running workshops, demonstrations and other engagement opportunities that will connect farmers with the broader vision of working lands agriculture and address how profitability can lead to conservation outcomes.  
**\$308,109**

**Pollinator Partnership**

**Project Wingspan: Enhancing Agricultural Lands for Pollinators (IL, IN, MI, OH)**  
Enhance and increase connectivity of pollinator habitat on Midwestern private agricultural lands and public conservation lands by providing technical assistance to landowners, collecting and distributing seeds and propagating seedlings. Project will collect 55 pounds of milkweed seeds, propagate 3,000 milkweed seedlings, host 14 events to engage 2,000 people and prescribe management actions to improve 2,000 acres of habitat.  
**\$99,570**

**Sand County Foundation**

**Midpoint Evaluation of NFWF's Great Lakes Business Plan (multiple states)**  
Evaluate the success to date of the Great Lakes Business Plan in achieving its dedicated conservation objectives in the areas of streams, coastal wetlands, and water quality. Project will include a review of the ten sub-objectives within these three priority areas, as well as of the sixteen focus areas expected to achieve multiple overlapping outcomes.  
**\$195,526**

**Save the Dunes Conservation Fund**

**Controlling Invasive Species to Enhance and Maintain Habitat in the Tolleston Dunes (IN)**  
Conduct invasive species re-treatment work within a ecologically significant unit of Northwest Indiana- Tolleston Dunes to protect and enhance remnant black oak savanna and wetland habitat. Project will treat 310 acres to control invasive species to augment simultaneous and collaborative work, leading to greater impact and sustainability across the landscape.  
**\$328,501**

**The Nature Conservancy**

**Controlling Invasive Species in the Calumet Region through Strategic Retreatment (IL, IN)**  
Enhance and intensify prior restoration efforts on 540 acres of wetland communities at six sites in the bi-state Calumet region of southern Lake Michigan, including marsh and hemi-marsh, dune, and swale and wet prairie habitat through invasive species control. Project will employ herbicide and prescribed fire practices to sharply reduce remaining invasive patches, halting expansion, removing seed sources that cause re-invasion and improving overall habitat conditions.  
**\$543,449**

**The Wetlands Initiative**

**Collaborative Restoration and Community Engagement in Calumet Marsh Bird Conservation Area (IN)**  
Restore a floodplain corridor along the West Branch of the Little Calumet River in northwest Indiana to benefit rare wetland-dependent birds and the surrounding underserved communities. Project will manage invasive species on 142 acres, restore hydrologic wetland function and collaborate with local community groups on connected community beautification efforts that will amplify the conservation impact of the project.  
**\$299,393**

**IOWA****Ducks Unlimited**

**Expanding Agricultural Conservation and Adoption of Farm Bill Conservation Programs (IA, IL, IN, MO)**  
Promote and implement Farm Bill conservation programs within the agriculturally based communities of central/northcentral Iowa, northern Illinois/Indiana and central/northwest Missouri. Project will work directly with 390 producers to design and implement wetland friendly conservation practices to reduce nitrogen and phosphorous runoff and improve water quality and wildlife habitats on 4,050 acres of cropland.  
**\$240,000**

**Iowa Agriculture Water Alliance**

**Leveraging a Conservation Agronomist to Increase On-Farm Sustainability and Profitability (IA)**  
Coordinate between the Iowa Agriculture Water Alliance, the Cooperative Farmers Elevator and the Iowa Soybean Association to drive adoption of conservation practices among farmers in northwest Iowa. Project will communicate the economic, agronomic and environmental benefits of conservation practices to producers, enroll willing participants in public conservation programs and improve management on 102,500 acres.  
**\$289,973**

**Iowa Natural Heritage Foundation****Iowa Butterfly Flyways: Restoring and Enhancing Pollinator Habitat**

Restore and improve pollinator habitat on public and private lands throughout Iowa by planting diverse seed mixes to support monarch butterflies, rusty patched bumble bees and other pollinators. Project will restore 1,000 acres on public lands, improve 2,000 acres on numerous public and private sites, collect 50 pounds of seed and propagate 5,000 seedlings.

**\$100,000**

**Monarch Joint Venture****Midwest Technical Assistance to Improve Pollinator Habitat on Working Lands (IA, MN)**

Provide technical assistance to private landowners by hiring one pollinator habitat specialist to increase agricultural stakeholder engagement and habitat implementation in Minnesota and Iowa. Project will restore 400 acres and improve 200 acres, develop 40 plans, host 10 events, reach 250 people and develop the Farmers for Monarchs website.

**\$185,023**

**KANSAS****Cheney Lake Watershed****Increasing Technical Assistance for Regenerative Agriculture to Protect Water and Soil Health (KS)**

Promote the implementation of regenerative agricultural principles on a watershed scale in south-central Kansas as a primary tool to protect and restore water quality, build soil health, enhance fish and wildlife habitat and build resilient farms and communities. Project will implement 150 Best Management Practices plans to improve management on 2,250 acres, protecting water quality, improving soil health and enhancing wildlife habitat.

**\$219,910**

**Friends of the Kaw****Protecting Downstream Water Intake on the Kansas River Through Ecosystem Restoration (KS)**

Restore 21.6 acres of riparian woodland and tallgrass prairie, install bioswales and conduct outreach to the local community. Project will improve water quality in the Kansas River and outreach will directly impact at least 1,050 people, resulting in expanded relationships between partners and the community, which will support the development of future projects.

**\$49,867**

**Groundwork Northeast****Revitalization Group****Engaging Residents to Promote Green Infrastructure in the Jersey Creek Watershed (KS)**

Promote green infrastructure in the Jersey Creek watershed of northeast Kansas through engagement with local residents. Project will: 1) conduct workshops focusing on the benefits of establishing native plants and trees; 2) collaborate with local residents on the installation and maintenance of green infrastructure; 3) document stories with local residents and research related to Oak Grove and Turtle Hill; and 4) conduct a second year water quality testing at Jersey Creek.

**\$38,727**

**Heartland Conservation Alliance****Training Youths in Environmental Stewardship in the Blue River Watershed (KS, MO)**

Train 18 youth and employ a crew of five to seven youth who will steward 220 acres of land in the Blue River Watershed. Project will address needs for improved watershed health, improved community health and lack of natural resource management workforce.

**\$49,609**

**Kansas Department of Health and Environment****Increasing Technical Assistance for Regenerative Agriculture Peer Mentoring Programs (KS)**

Work directly with new and emerging farmers participating in regenerative agriculture in Kansas. Project will expand on an existing Farmer-to-Farmer peer mentorship program to bring 30,000 acres under improved management by implementing 150 Best Management Practices plans aimed at significantly improving soil health, water quality and carbon sequestration.

**\$450,000**

**Pheasants Forever****Expanding the Audubon Conservation Ranching Program on Private Working Grasslands (KS, OK)**

Build upon the success of the Audubon Conservation Ranching Program (ACR) partnership in Oklahoma and expanding ACR technical assistance efforts and resources into Kansas. Project will result in the direct enhancement and protection of 90,000 acres of grassland, soil and water resources in Oklahoma and Kansas, keep viable working lands productive and demonstrate the benefits of wildlife habitat conservation and regenerative grazing practices with participating producers.

**\$200,000**

**The Nature Conservancy****Pollinator Habitat Restoration and Management at Smoky Valley Ranch (KS)**

Restore 760 acres of cropland to prairie at Smoky Valley Ranch in Kansas using a diverse seed mix that will benefit monarch butterflies and other native pollinators. Project will improve 5,200 acres through prescribed fire, conservation grazing and enhanced seed dispersal to increase the abundance of native wildflower species.

**\$99,997**

**The Nature Conservancy****Increasing Technical Assistance for Grassland Conservation in the Red Hills (KS, OK)**

Increase capacity for The Nature Conservancy's Red Hills Initiative, a 10-year community-based conservation effort for the Red Hills landscape of Kansas and Oklahoma that provides a full suite of technical private lands assistance, such as prescribed burn and regenerative grazing plans, as well as assistance with management of invasive species. Project will improve management on 100,000 acres and restore 50,000 acres of private working lands.

**\$250,017**

**KENTUCKY****Cumberland River Compact****Implementing Low-Cost Stream and Riparian Buffer Restoration Techniques on Private Lands (KY, TN)**

Engage landowners and interested individuals in hands-on stream bank repair of small headwater streams and restoration of the associated riparian buffers within priority watersheds in the Cumberland Plateau region of Kentucky and Tennessee. Project will train landowners and students from historically black colleges and universities on stream restoration techniques and plant 14,000 trees along 4 miles of stream, benefiting fish, freshwater mussels and other aquatic species.

**\$149,999**

**Mississippi River Trust****Forested Wetland Restoration in the Lower Mississippi River Floodplain – II (multiple states)**

Reforest and protect frequently flooded, marginal cropland on private lands through the adoption of USDA Wetland Reserve Easements in the active floodplain of the Lower Mississippi River. Project will establish 10,285 acres of bottomland hardwood forest to expand and enhance habitat and improve water quality, benefiting the Louisiana black bear, swamp rabbit, forest birds, waterfowl and freshwater fish.

**\$780,000**

**North Carolina State University****Expanding Prescribed Fire Delivery to Restore Southeast Forests (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 landowners, including underserved landowners and fire practitioners through technical assistance, training and outreach to increase the use of prescribed fire.

**\$180,000**

**Ruffed Grouse Society****Restoring Forest Habitat for Wildlife in the Cumberland Plateau (KY, TN)**

Improve forest health through forest restoration and management to benefit at-risk wildlife species on private and public lands in the Cumberland Plateau region of Kentucky and Tennessee. Project will work with public land managers and private landowners to restore and enhance more than 12,000 acres of shortleaf pine and oak forest habitat to improve populations of golden-winged warbler, ruffed grouse and other woodland and savanna-dependent species.

**\$199,807**

**LOUISIANA****American Bird Conservancy****Priority Bird Habitat Conservation in the West Gulf Coastal Plain/Ouachitas – II (AR, LA, OK, TX)**

Coordinate conservation delivery networks to restore forest and grassland habitats and monitor species response within the West Gulf Coastal Plain/Ouachitas geography of Arkansas, Louisiana, Oklahoma and Texas. Project will provide technical and financial assistance to private landowners to implement conservation practices on 3,000 acres benefiting Bachman's sparrow, prairie warbler and other forest and grassland-dependent bird species.

**\$213,995**

**Audubon Nature Institute****Marine Mammal Stranding Response Support (LA)**

Enhance capacity to respond to and investigate live and dead stranded, injured, entangled and out of habitat cetaceans in the State of Louisiana. Project will provide equipment and resources to allow Audubon to respond to and necropsy dead, stranded cetaceans and triage live stranded, injured, entangled and out-of-habitat cetaceans.

**\$140,000**

**City of New Orleans****Creating a Living Shoreline and Establishing Marshlands in East Landbridge (LA)**

Conduct preliminary planning and design for living shoreline and marsh creation on the New Orleans East Landbridge, the only remaining natural feature in the Louisiana Coastal Master Plan that protects the City of New Orleans from storm surge in the Gulf. Project will create a design that will include 1,563 acres of wetlands created using hydraulically dredged sediment from Lake Borgne and 21,597 linear feet of living shoreline protection features to be installed in Lake Borgne.

**\$500,000**

**Ducks Unlimited****Monitoring Waterfowl Response to Wetland Restoration in the Mississippi Alluvial Valley (AR, LA, MS)**

Monitor waterfowl response to forest and shallow water wetland restoration on Wetland Reserve Easement sites within the Mississippi Alluvial Valley region of Arkansas, Louisiana and Mississippi. Project will deploy unmanned aerial vehicles to investigate their utility to monitor waterfowl use of restored wetlands and use imagery analysis and machine learning to establish efficient and effective protocols to derive duck counts and general use behaviors at a project level scale.

**\$195,000**

**Ducks Unlimited****Conservation of Ricelands in South and Central Louisiana through Technical Assistance and Outreach**

Further technical assistance and outreach within the rice growing regions of Louisiana through NRCS's Environmental Quality Incentives Program. Project will protect and enhance approximately 20,000 acres through technical assistance to producers, as well as strengthen, increase and encourage the voluntary participation of private landowners in Farm Bill Programs.

**\$200,000**

**East Coast Observers**

Sea Turtle Stranding and Salvage Network Enhancement for Southwest Louisiana Station two stranding response personnel at Holly Beach in Cameron, Louisiana through May 2021. Project will ensure that each stranded animal gets reported accurately and reliably and confirm nesting rumors on the beach.

**\$55,800**

**Forest Landowners Association****Restoring Longleaf Pine and Species Habitat on Large-Acreage Private Lands (AL, GA, LA)**

Establish 1,400 acres of longleaf pine and improve 2,900 acres of existing longleaf forest with prescribed fire on large-acreage private lands in Alabama, Georgia and Louisiana. Project will address barriers to restoring longleaf pine on large-acreage private lands by building trust among stakeholders and developing innovative tools to mitigate risks associated with at-risk and listed species regulations and providing technical and financial assistance to support planting and management of longleaf pine.

**\$150,000**

**Gentner Consulting Group****Deepwater Horizon Oceanic Fish Restoration Project Project Monitoring and Evaluation (multiple states)**

Conduct requisite statistical analyses to evaluate key performance indicators for the project in accordance with the Oceanic Fish Restoration Project Monitoring Plan. Project will estimate bycatch reduction and alternative gear performance during the remaining repose years and will support evaluation of the overall performance of the project following the final repose year.

**\$430,600**

**Lake Pontchartrain Basin Foundation****Youth and Community-Driven Environmental Stewardship in New Orleans East (LA)**

Train students and teachers in New Orleans East to design, implement and monitor small-scale restoration projects in underserved communities with a focus on sustainability, accessibility and community input. Project will engage community partners, students, teachers and community members in restoration projects, educating over 10,000 community members via outreach efforts and creating 2 acres of highly accessible public open space with restored habitat and enhanced tree canopy.

**\$50,000**

**Louisiana Tech University****Restoring Longleaf Using Grazing and Prescribed Fire (LA, TX)**

Enhance 1,000 acres of longleaf pine forests in southwestern Louisiana and southeastern Texas by integrating cattle grazing with prescribed burning. Project will monitor ecological benefits of prescribed burning with cattle grazing on multiple private forestlands on which it is being conducted, and landowners and natural resource professionals will be trained on these benefits as well as the logistics of cattle grazing in longleaf pine through a multi-media outreach program.

**\$224,500**



### **Louisiana Wildlife and Fisheries Foundation**

#### **Connecting Forest Landowners with Markets to Improve Forest Health and Wildlife Habitat (LA)**

Pilot market-oriented approaches to manage bottomland hardwood forests and improve wildlife habitat in Louisiana. Project will develop partnerships between local wood suppliers, forest products companies, landowners and resource professionals to thin 700 acres of bottomland hardwood forest, improving forest habitat structure, understory condition, wildlife habitat and water quality.

**\$245,000**

### **Lowlander Center**

#### **Protecting Sacred Sites and Building Community Resilience through Strengthening Marshes (LA)**

Identify the many dredged and abandoned canals threatening tribal sacred sites, discern places that can be restored or conserved and recognize those that have passed their survival tipping points. Project will result in reduced land loss, preserve sacred places and safe-havens, and restore overland flow and some below-ground flows in coastal marshes by placing plugs in abandoned canals and removing spoil banks.

**\$112,006**

### **Mississippi River Trust**

#### **Forested Wetland Restoration in the Lower Mississippi River Floodplain – II (multiple states)**

Reforest and protect frequently flooded, marginal cropland on private lands through the adoption of USDA Wetland Reserve Easements in the active floodplain of the Lower Mississippi River. Project will establish 10,285 acres of bottomland hardwood forest to expand and enhance habitat and improve water quality, benefiting the Louisiana black bear, swamp rabbit, forest birds, waterfowl and freshwater fish.

**\$780,000**

### **North Carolina State University**

#### **Expanding Prescribed Fire Delivery to Restore Southeast Forests (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 landowners, including underserved landowners and fire practitioners through technical assistance, training and outreach to increase the use of prescribed fire.

**\$180,000**

### **St. Bernard Parish Government**

#### **Creating Ridge Restoration and Reforestation along the Bayou Terre aux Boeufs (LA)**

Install shoreline protection and Cypress and Tupelo forest along the Bayou Terre aux Boeufs ridge and other intersecting bayous near Delacroix, Louisiana. Project will protect the remaining ridge through strategic armoring and reforestation.

**\$2,599,028**

### **Stantec Consulting Services**

#### **Gulf-wide In-water Sea Turtle Monitoring Plan (multiple states)**

Develop a statistically sound plan for the establishment of a coordinated Gulf-wide network for collection and compilation of critical abundance, demographic, and biological information on sea turtles in the Gulf of Mexico. Project will provide important context for project-level monitoring at individual sites where restoration is implemented and will assist with comparisons across multiple projects.

**\$224,267**

### **Sustaining Our Urban Landscape**

#### **Riparian Tree Planting in the Lake Pontchartrain Watershed (LA)**

Engage 600 community volunteers to plant 700 large, native trees in order to restore 457 acres of urban forest. Project will mitigate stormwater runoff into Lake Pontchartrain, enhance habitat for urban bird species and increase the Pontchartrain Park community's access to nature.

**\$50,000**

### **The Longleaf Alliance**

#### **Coordinating Local Implementation Team Capacity and Landowner Technical Assistance and Outreach (multiple states) - V**

Improve and sustain coordination among 18 multi-partner local implementation teams that organize, plan and deliver conservation actions to restore and enhance the longleaf pine ecosystem. Project will support strategic on-the-ground restoration through conservation planning, as well as tracking and communication of longleaf pine restoration accomplishments.

**\$250,000**

### **The Longleaf Alliance**

#### **Conserving Longleaf Forests, Wildlife Habitat and Water Resources through Innovative Partnerships (FL, GA, LA, SC, TX)**

Restore and enhance 5,000 acres of longleaf pine habitat within priority drinking water supply watersheds in the Southeast. Project will build partnerships between forestry and conservation organizations, landowners and drinking water supply utilities, and provide private landowners with technical and financial assistance to restore and enhance longleaf pine habitat, protecting drinking water supplies and benefiting the gopher frog and other at-risk species.

**\$411,000**

### **The Nature Conservancy**

#### **Restoring Forested Wetlands within Mississippi Alluvial Valley Priority Focal Areas (AR, LA, MS)**

Project will restore and protect forested wetlands within high priority areas in the Mississippi Alluvial Valley region of Arkansas, Mississippi and Louisiana. Project will reforest 4,800 acres of marginal cropland, restore 1,200 acres of hydrologic wetland function and protect 6,000 acres with conservation easements, benefiting Louisiana black bear, swamp rabbits, waterfowl and neotropical migratory songbirds.

**\$690,356**

### **University of New Orleans**

#### **Urban Bird Habitat and Environmental Education at The University of New Orleans (LA)**

Enhance bird habitat along a key migration corridor, expand community tree canopy, improve public open spaces, avert waste from local waterways and engage the community in environmental stewardship. Project will: 1) establish an urban birding trail at the University of New Orleans (UNO); 2) initiate regular campus bird counts; 3) plant 120 native trees and shrubs along the trail route; 4) launch UNO participation in trash cleanup events; and 5) provide 375 educational experiences to UNO students.

**\$33,937**

## **MAINE**

### **Appalachian Mountain Club**

#### **Conserving the Pleasant River Headwaters Forest in Maine's 100-Mile Wilderness**

Purchase and permanently conserve a 26,740-acre parcel of working forestland known as the Pleasant River Headwaters Forest. Project will expand existing fish habitat restoration efforts to benefit threatened species like native brook trout and Atlantic salmon; conduct sustainable forestry operations; offer the public access to outdoor recreation opportunities; and advance the overall ecological and economic health of the region.

**\$500,000**

### **Atlantic Salmon Federation**

#### **Install a Fishway to Restore Passage for River Herring at Baskahegan Lake and Crooked Brook (ME)**

Construct a fishway at the Crooked Brook Dam in the town of Danforth, Maine that will connect the Crooked Brook and Baskahegan Lake in the upper Penobscot River. Project will reconnect 8,960 pond and lake acres and 137 stream miles to the Penobscot with the potential to add 2 million adult river herring to the system and benefit other species including Atlantic salmon, American eel and sea lamprey.

**\$198,000**

**Canaan Valley Institute****Coordinating Eastern Brook Trout Joint Venture Strategies and Goals (multiple states)**

Continue the activities of the Eastern Brook Trout Joint Venture in the historic range of the species. Project will refine the strategic objectives and key conservation priorities of the Eastern Brook Trout Joint Venture using the results of the recently completed status assessment of wild brook trout at the catchment scale.

**\$74,999**

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

Support the implementation and advancement of electronic monitoring in the New England Groundfish fishery at an operational scale serving as a national example of the third party audit model. Project will reduce the cost of video review, increase fishermen compliance and reduce barriers to entry for interested fishermen through on-deck innovations and advances in artificial intelligence.

**\$275,437**

**Downeast Salmon Federation****Restoring Tidal Flows to Schoppee Marsh and Increasing Coastal Resilience of Machias (ME)**

Restore more than 50 acres of salt marsh at the Machias Bay estuary in eastern Washington County, Maine. Project will produce a feasibility study and adaptive management strategies in preparation for the production of a full engineering design to restore the salt marsh, provide sea-level rise and storm surge protection, protect habitat for salt marsh fish, wildlife and plant species, and provide education and outreach opportunities.

**\$107,780**

**Gulf of Maine Lobster Foundation****Fishing Net Collection in Portland, Maine**

Develop logistics for the collection of fishing nets from local New England fishermen who are looking for ways to properly dispose of their end of life nets. Project will develop locations and proper disposal options to recycle or convert to energy 280 tons of fishing gear, reducing unwanted bycatch of many marine species.

**\$136,610**

**Gulf of Maine Research Institute****Maximized Retention Electronic Monitoring the New England Groundfish Fishery (MA, ME, NH, RI)**

Prepare the maximized retention electronic monitoring program for implementation in the New England groundfish fishery. Project will continue collecting data for fishing year 2021 with a focus on testing catch handling methods for high-volume fishing vessels and collaboratively identify and overcome steps necessary to implement this program through outreach and stakeholder workshops.

**\$500,000**

**Maine Coast Fishermen's Association****Piloting Electronic Monitoring in the Northern Gulf of Maine Scallop Fleet- Year Three (MA, ME, NH)**

Continue developing and piloting an electronic monitoring program for the northern Gulf of Maine scallop fleet to test feasibility on small scallop vessels and demonstrate the data it provides. Project will engage three new vessels, bringing the total to six, refine protocols and processes for electronic monitoring in scallop fisheries and work closely with federal agencies to develop a viable monitoring option that works under new regulations which are expected to be implemented.

**\$120,960**

**Maine Department of Marine Resources**  
**Increasing Access to Fish Habitat and Aquatic Connectivity through Stream Restoration (ME)**

Complete removal of one barrier and the partial removal and installation of a technical fishway within the Sabattus River, Maine. Project will reduce flooding risk attributed to catastrophic failure of derelict dams, reduce the barriers to fish passage in the Sabattus River and increase access to high quality fish habitat, increase overall aquatic connectivity in the Androscoggin River drainage, restore several river miles of impoundments to free-flowing river and improve water quality.

**\$1,548,528**

**Manomet****Managing American Oystercatchers and Minimizing Coastal Engineering Impacts Along the Atlantic Coast (multiple states)**

Coordinate the American oystercatcher recovery initiative, implement best management practices for disturbance and predation management along the U.S. Atlantic Coast and Gulf Coast of Florida and develop long-term improvements in coastal engineering protocols to restore habitats critical to focal shorebird species. Project will support the goals of the Atlantic Flyway Business Plan by creating a framework for long-term protection, restoration and creation of shorebird habitat at key sites.

**\$189,999**

**Massachusetts Division of Marine Fisheries**  
**Developing a Framework for Ropeless Fishing in New England (MA, ME, NH, RI)**

Characterize the issues and challenges associated with the integration of on-call or ropeless fishing gear technology into New England fisheries. Project will evaluate the issues using semi-structured interviews and workshops with experts in the field, synthesize perspectives and analyze the technical, legal and socioeconomic challenges and opportunities to develop a set of recommendations for further work, including in situ testing and policy development.

**\$170,861**

**New England Marine Monitoring****Kept Catch Data from Electronic Monitoring in the New England Groundfish Fishery (MA, ME, NH, RI)**

Develop machine learning tools that use existing electronic monitoring data to collect information on kept catch in the New England groundfish fishery through testing three catch monitoring approaches across a variety of vessels. Project will derive kept catch data useful for science and management from video already being collected in the New England audit and maximum retention electronic monitoring programs and explore how this impacts program costs.

**\$225,962**

**Rangeley Lakes Heritage Trust****Restore Critical Habitat in the Cupsuptic River for Eastern Brook Trout by Installing Bridges (ME)**

Reconnect over 4 miles of headwater streams critical to spawning and cold water refugia for native eastern brook trout within the Cupsuptic River watershed of western Maine. Project will remove two undersized culverts at road stream crossings and install bridges that allow for natural stream processes and upstream and downstream passage of aquatic organisms.

**\$60,000**

**Southern Maine Planning and Development Commission****Developing a Regional Coastal Resilience Plan for Southern Maine**

Develop a regional coastal resilience plan for a 10-municipality region in southern Maine through collaborative engagement of municipalities, local land trusts, regional conservation organizations and state natural resource agencies. Project will assist communities, the region and the state to better prepare for impacts of coastal hazards and will identify land use strategies, adaptation measures and nature-based solutions for making the region more resilient to coastal flooding.

**\$130,000**

**Spatial Informatics Group Natural Assets Laboratory****Surveying Changes in Forest Bird Populations after 30 Years of Commercial Forest Management (ME)**

Evaluate how the 10 million acre commercial forestland of north-central Maine is supporting national-scale bird conservation today and recommend landscape-level changes in management that would better support declining species. Project will revisit a comprehensive survey of birds in this managed forest landscape from 30 years ago, recreate the study in present time and demonstrate how commercial forestry can advance national-scale bird conservation goals.

**\$125,000**

**Wells National Estuarine Research Reserve**  
**Building Capacity for Sustainable Young Forest**  
**Habitat Management in Maine – II**  
 Implement on-the-ground habitat restoration to increase New England cottontail populations in southern Maine, where populations have responded to habitat improvements, but where an urgent need remains to expand and connect habitats. Project will conserve and manage an additional 300 acres of habitat using a new Tool for Engaging Landowners Effectively program approach to develop robust partnerships with landowners in the region.  
**\$81,089**

## MARYLAND

**Alliance for the Chesapeake Bay**  
**Maintaining Best Management Practices in the**  
**Anacostia Watershed (MD, DC)**  
 Promote successful, long-term best management practice maintenance and water quality improvement through a virtual maintenance resource center, inspections, cost-share maintenance services and a neighborhood volunteer program. Project will increase the functionality of at least 300 installed best management practices and document improvement in the abilities of 200 property owners to maintain their practices over time.  
**\$500,000**

**American Forests**  
**Leveraging Urban Forests for Climate, Health**  
**and Tree Equity Scores (MD, VA, DC)**  
 Build a deep-dive Tree Equity Score Analyzer tool for use across the greater Washington metropolitan region. Project will provide a way to set urban forestry narratives, plan strategies and focus resources on communities of highest need to improve tree canopy where its benefits are most needed.  
**\$49,911**

**Audubon Naturalist Society of the Central**  
**Atlantic States**  
**Designing a Training Program to Expand**  
**the Community of Green Infrastructure**  
**Professionals (MD)**  
 Design a conservation landscape and rain garden for Audubon Naturalist Society's Woodend Nature Sanctuary in Chevy Chase, Maryland and create a program to train the owners and employees of small and underrepresented landscape contracting companies in the construction of conservation landscapes and rain gardens. Project will provide a path forward for promoting increased use of green infrastructure to manage stormwater and improve water quality within the Anacostia and Rock Creek watersheds.  
**\$25,011**

**Baltimore Municipal Golf Corp**  
**Developing an Environmental Master Plan for**  
**the Forest Park Golf Course (MD)**  
 Develop an environmental master plan for the Forest Park Golf Course in Baltimore City, Maryland. Project will identify the highest priority stormwater management project to proceed to final design, permitting and plans review in order to produce a shovel-ready set of construction documents for implementation.  
**\$49,935**

**Blue Water Baltimore**  
**Restoring Model Watersheds to Improve**  
**Urban Water Quality in Baltimore County (MD)**  
 Continue watershed restoration implementation that improves urban water quality in Baltimore County on private property. Project will install priority restoration projects that can be used as model projects, reduce watershed pollution to help Baltimore County meet its watershed improvement plan goals, motivate homeowners to change behavior and plant a tree in their yard and engage residents in pollution detection and stream learning opportunities.  
**\$268,871**

**Canaan Valley Institute**  
**Coordinating Eastern Brook Trout Joint Venture**  
**Strategies and Goals (multiple states)**  
 Continue the activities of the Eastern Brook Trout Joint Venture in the historic range of the species. Project will refine the strategic objectives and key conservation priorities of the Eastern Brook Trout Joint Venture using the results of the recently completed status assessment of wild brook trout at the catchment scale.  
**\$74,999**

**Carroll County Government**  
**- Bureau of Resource Management**  
**Assessing and Prioritizing Restoration**  
**Opportunities in Little Pipe Creek (MD)**  
 Develop a comprehensive watershed assessment and prioritization process evaluating the needs and opportunities for restoration projects to improve the water quality in the Little Pipe Creek sub-watershed in Carroll County. Project will identify and rank high priority areas to be targeted for potential restoration opportunities.  
**\$49,998**

**Chesapeake Bay Foundation**  
**Farm Stewardship and Regenerative**  
**Agriculture Education in the Upper Potomac**  
**Watershed (MD)**  
 Implement agricultural conservation practices in the Upper Potomac Watershed. Project will provide "whole farm" technical assistance and financial incentives to farmers, engage volunteers in tree plantings and buffer maintenance and educate consumers about local regenerative agriculture to inform their purchasing decisions.  
**\$379,430**

**College of William and Mary, Virginia**  
**Institute of Marine Science**  
**RecFish: Engaging Recreational Anglers as**  
**Community Scientists Using a Mobile App**  
**(MD, VA)**  
 Develop a smartphone application, called RecFish, that allows recreational anglers in Maryland and Virginia to automatically identify, measure and log their catch to enhance their fishing experience while contributing data to the RecFish database as community scientists. Project will engage 10 vessels in testing the application along with relevant government entities and supplement existing data collected through fisheries surveys allowing for enhanced analysis.  
**\$323,163**

**Defensores de la Cuenca**  
**Promoting Watershed Stewardship Through**  
**Spanish-Language Stormwater Education (MD)**  
 Create "La Academia de Defensores de la Cuenca" based on existing Watershed Stewards Academy models. Project will pair workshops with hands-on experiences to train primarily Spanish-speaking participants on watershed issues, culminating in the completion of a stormwater project by each participant.  
**\$167,807**

**Future Harvest**  
**Improving Soil Health and Water Quality**  
**through Purposeful Cover Crop Planning and**  
**Management (MD)**  
 Demonstrate the agronomic and environmental benefits of purposeful, site specific cover crop planning at the farm scale on 12 collaborating grain farms on Maryland's Eastern Shore with the goal of catalyzing and accelerating adoption of innovative cover cropping strategies across the region. Project will support 12 row crop farmers in implementing site-specific plans for cover crop planting and measuring agronomic and environmental benefits of the practices over time.  
**\$302,750**

**Greater Grace World Outreach**  
**Implementing a Green Infrastructure Master**  
**Plan for Greater Grace (MD)**  
 Install components of Greater Grace World Outreach's green infrastructure master plan and plant 100 community trees. Project will install two micro-bioretenion areas and one bioretention system as well as remove 7,014 square feet of impervious surface, which will result in the annual treatment of 1.3 acres of impervious surface.  
**\$200,785**



**Gunpowder Valley Conservancy****Cultivating Stronger Partnerships for Clean Water in the Gunpowder Watershed (MD)**

Expand restoration project implementation by working with old and new partners and by engaging businesses in implementing rain gardens or micro-bioretenion practices. Project will implement stormwater best management practices, plant native trees and increase community engagement in stormwater restoration in the Gunpowder Watershed.

**\$364,586**

**Interfaith Partners for the Chesapeake****One Water Partnership: Innovative Network for Scaled Conservation (MD)**

Extend engagement of private land-owner congregations to address fragmented non-source pollution issues through implementation and stormwater management, diversify communities and partners engaged and adaptively manage practices and partnerships through a uniquely developed hub benchmarking system. Project will accelerate water quality outcomes across targeted geographies in the Chesapeake Bay through an integrated conservation value chain across private landowners, implementers and funders.

**\$882,750**

**Manomet****Managing American Oystercatchers and Minimizing Coastal Engineering Impacts Along the Atlantic Coast (multiple states)**

Coordinate the American oystercatcher recovery initiative, implement best management practices for disturbance and predation management along the U.S. Atlantic Coast and Gulf Coast of Florida and develop long-term improvements in coastal engineering protocols to restore habitats critical to focal shorebird species. Project will support the goals of the Atlantic Flyway Business Plan by creating a framework for long-term protection, restoration and creation of shorebird habitat at key sites.

**\$189,999**

**National Wildlife Federation****Building Living Islands to Enhance Shoreline Protection (MD)**

Use a combination of natural and nature-based features including beach nourishment, dune restoration, cobble headland breakwaters and the creation of five offshore living islands to mitigate impacts at several high-priority sites identified through the Town of Oxford's Stormwater Management and Shoreline Protection Master Plans. Project will employ an innovative and holistic design approach to address flooding and erosion impacting the Town of Oxford.

**\$1,436,701**

**Oyster Recovery Partnership****Integrating Shellfish Industry Reporting into a Comprehensive Electronic Reporting (MD)**

Integrate shellfish industry harvest reporting into an existing electronic harvest reporting and monitoring system using established methods and protocols for Maryland already serving more than 900 fishermen in other fisheries. Project will enhance data timeliness, quality and usability of harvest data and will bring the shellfish fleet into the 21st century with a comprehensive business tool.

**\$226,888**

**Ridge to Reefs****Implementing a Spring Bioreactor and Creating and Enhancing Wetlands (MD, VA)**

Construct a denitrifying bioreactor on a spring in Lacey Springs, Virginia, design a second spring bioreactor on a springhead draining into a tributary of Smith Creek and construct wetlands on a farm in Worton, Maryland. Project will reduce nitrogen and benefit in-stream conditions for brook trout and provide habitat for American black duck.

**\$246,142**

**Shorerivers****Engaging the Community to Increase Urban Tree Canopy Coverage in Maryland Watersheds**

Implement volunteer-identified and initiated tree-planting projects in the communities of the Sassafras, Chester, Miles-Wye and Choptank River watersheds. Project will partner with an existing Tree Stewards program to plant trees, train volunteers from partnering organizations and committees, conduct outreach, make gains in nutrient pollution mitigation and increase shade on impervious streets and public walkways.

**\$53,609**

**Shorerivers****Activating Restoration in Three Underrepresented Communities in the Choptank Watershed (MD)**

Engage three underrepresented communities from across Maryland's Choptank watershed in implementing restoration projects prioritized by each community that will improve water quality, address resource concerns such as stormwater flooding and enhance private lands and shared spaces. Project will build on existing engagement to activate a diverse community of stewards through a power- and resource-sharing implementation model.

**\$79,886**

**St. Mary's River Watershed Association****Engaging the Community in Oyster Habitat Restoration in St. Mary's River (MD)**

Restore vibrant oyster habitat in prioritized shellfish sanctuary areas of St. Mary's River. Project will engage partners and volunteers to make habitat structures, improve bottom substrate, grow spat, plant seed and conduct monitoring within targeted areas of the St. Mary's River Shellfish Sanctuary.

**\$125,173**

**The Sixth Branch****Creating a Tree Nursery to Increase Urban Canopy Coverage in the Broadway East Neighborhood (MD)**

Build "One Green Acre," a tree nursery and community hub in the Broadway East neighborhood, which will be the capstone to the Montford Avenue Green Corridor project. Project will create a unique tree farm, nursery, community hub and center for workforce development that will return native-tree production to Baltimore City.

**\$59,374**

**Trout Unlimited****Protecting and Restoring Brook Trout Habitat in the Savage River Watershed (MD)**

Permanently protect a high-quality riparian corridor and restore riparian buffers, in-stream habitat and aquatic organism passage within the Savage River Watershed eastern brook trout stronghold. Project will increase habitat integrity and reduce sediment and nutrient runoff destined for the Chesapeake Bay while improving productivity for local agricultural producers, enhancing a native fishery and engaging community members and students in a shared vision for watershed health.

**\$360,124**

**Washington College****Establishing Native Grass Buffers and Restoring Wetlands in the Lower Shore (MD)**

Extend the successful Natural Lands Project to the lower Eastern Shore of Maryland. Project will work with landowners to establish native grass buffers and restore wetlands primarily targeting riparian zones of marginal agricultural land on Maryland's lower Eastern Shore.

**\$400,000**

**MASSACHUSETTS****American Saltwater Guides Association****Incentives for Electronic Reporting in the Massachusetts Recreational Atlantic Bluefin Tuna Fishery**

Survey Massachusetts recreational bluefin tuna anglers to identify barriers to and incentives for complying with the requirement to self-report bluefin tuna landings and dead discards. Project will provide information to National Oceanic and Atmospheric Administration Fisheries to increase reporting compliance and improve quota monitoring in this fishery and other recreational fisheries relying on self-reporting.

**\$45,210**

**Canaan Valley Institute****Coordinating Eastern Brook Trout Joint Venture Strategies and Goals (multiple states)**

Continue the activities of the Eastern Brook Trout Joint Venture in the historic range of the species. Project will refine the strategic objectives and key conservation priorities of the Eastern Brook Trout Joint Venture using the results of the recently completed status assessment of wild brook trout at the catchment scale.

**\$74,999**

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

Support the implementation and advancement of electronic monitoring in the New England Groundfish fishery at an operational scale serving as a national example of the third-party audit model. Project will reduce the cost of video review, increase fishermen compliance and reduce barriers to entry for interested fishermen through on-deck innovations and advances in artificial intelligence.

**\$275,437**

**City Of Gloucester Harbormaster****Collection of Fishing Gear in Gloucester, Massachusetts**

Collect and dispose of derelict fishing gear from the City of Gloucester, Massachusetts. Project will recycle or convert to energy 50 tons of fishing gear, including lobster pots, ropes and buoys.

**\$10,000**

**Connecticut River Watershed Council****Increasing Technical Assistance to Benefit Northeast Turtles on Private Working Lands (MA, NH, VT)**

Provide private landowners with technical assistance to accelerate on-the-ground delivery and implementation of Farm Bill conservation programs designed to specifically benefit two Working Lands for Wildlife priority species: wood turtle and spotted turtles in the Connecticut River watershed. Project will develop 15 best management practices to improve water quality through reductions in sediment and nutrients runoff, plus riparian buffer plantings to improve habitat for rare freshwater turtles.

**\$100,000**

**Conserve Wildlife Foundation of New Jersey**  
**Assessing Southbound Migration of Red Knots Along the Atlantic Coast (MA)**

Study the southbound migration of red knots moving from Arctic breeding areas to both long and short-distance wintering areas by attaching satellite transmitters to shorebirds at Monomoy National Wildlife Refuge, Massachusetts. Project will document fine-scale movements and migratory pathways to improve management at key sites, increasing red knot protection and survival.

**\$45,000**

**Groundwork Somerville****Community Forestry for Green Jobs and Resilience in Somerville and Cambridge (MA)**

Create and run a program to engage residents of Cambridge and Somerville, Massachusetts in collective urban forestry management. Project will train young people in the science and skills of urban forestry, providing an introduction to green jobs while also reducing both cities' vulnerability to heat and flooding.

**\$49,428**

**Gulf of Maine Lobster Foundation****Developing Logistics for Fishing Net Collection in Portland, Maine**

Develop logistics for the collection of fishing nets from local New England fishermen who are looking for ways to properly dispose of their end of life nets. Project will develop locations and proper disposal options to recycle or convert to energy 280 tons of fishing gear, reducing unwanted bycatch of many marine species.

**\$136,610**

**Gulf of Maine Research Institute****Maximized Retention Electronic Monitoring the New England Groundfish Fishery (MA, ME, NH, RI)**

Prepare the maximized retention electronic monitoring program for implementation in the New England groundfish fishery. Project will continue collecting data for fishing year 2021 with a focus on testing catch handling methods for high-volume fishing vessels and collaboratively identify and overcome steps necessary to implement this program through outreach and stakeholder workshops.

**\$500,000**

**Industrial Economics****Onboarding, Development, Maintenance, and Upgrading of the NFWF Resilience Data Hub**

Assist in the onboarding, development, maintenance, and upgrading of the Resilience Data Hub, two systems that support data collection for NFWF resilience programs. Project will contract tasks include onboarding backlog of grantees, ongoing onboarding and technical assistance for grantees, training for NFWF Staff, development of user dashboard, maintenance of database, and upgrades.

**\$149,959**

**Maine Coast Fishermen's Association****Piloting Electronic Monitoring in the Northern Gulf of Maine Scallop Fleet- Year Three (MA, ME, NH)**

Continue developing an electronic monitoring program for the northern Gulf of Maine scallop fleet to test feasibility on small scallop vessels and demonstrate the data it provides. Project will engage three new vessels, refine protocols and processes for electronic monitoring in scallop fisheries and work closely with federal agencies to develop a viable monitoring option that works under new regulations which are expected to be implemented.

**\$120,960**

**Manomet****Managing American Oystercatchers and Minimizing Coastal Engineering Impacts Along the Atlantic Coast (multiple states)**

Coordinate the American oystercatcher recovery initiative, implement best management practices for disturbance and predation management along the U.S. Atlantic Coast and Gulf Coast of Florida and develop long-term improvements in coastal engineering protocols to restore habitats critical to focal shorebird species. Project will support the goals of the Atlantic Flyway Business Plan by creating a framework for long-term protection, restoration and creation of shorebird habitat at key sites.

**\$189,999**

**Massachusetts Audubon Society****Restore Aquatic Connectivity for Eastern Brook Trout on 27 Miles of the Mahan River (MA)**

Restore critical ecological functions and protect community water infrastructure vulnerable to flooding through the removal of the Lyman Pond Dam on the Manhan River, a tributary to the Connecticut River in south central Massachusetts. Project will eliminate a total barrier to upstream movement of native brook trout and anadromous fish species, protect a public source of drinking water and restore fish passage to 27 miles of previously inaccessible high quality habitat.

**\$80,627**

**Massachusetts Division of Marine Fisheries****Developing a Framework for Ropeless Fishing in New England (MA, ME, NH, RI)**

Characterize the issues and challenges associated with the integration of on-call or ropeless fishing gear technology into New England fisheries. Project will evaluate the issues using semi-structured interviews and workshops with experts in the field, synthesize perspectives and analyze the technical, legal and socioeconomic challenges and opportunities to develop a set of recommendations for further work, including in situ testing and policy development.

**\$170,861**

**Merrimack River Watershed Council****Riparian Restoration and Water Quality Monitoring Along the Merrimack River (MA)**

Restore and open public access to eleven acres of riparian and wetland habitat on a neglected riverine island and monitor and improve nearby water quality. Project will train community members to design and implement the project alongside trained local youth "Green Team" restoration crews and benefit shortnose sturgeon, Atlantic sturgeon, blueback Herring and American eel.

**\$39,850**

**New England Marine Monitoring**

**Kept Catch Data from Electronic Monitoring in the New England Groundfish Fishery (MA, ME, NH, RI)**

Develop machine learning tools that use existing electronic monitoring data to collect information on kept catch in the New England groundfish fishery through testing three catch monitoring approaches across a variety of vessels. Project will derive kept catch data useful for science and management from video already being collected in the New England audit and maximum retention electronic monitoring programs and explore how this impacts program costs.

**\$225,962**

**MICHIGAN****Chandler Park Conservancy**

**Improving Chandler Park and Reducing Flooding by Installing Green Stormwater Infrastructure (MI)**

Install green stormwater infrastructure in Chandler Park, Detroit to reduce combined sewer overflows and flooding to adjacent community property owners. Project will add 46,000 gallons of stormwater storage capacity annually through the installation of a bioretention cell and a rain garden.

**\$161,000**

**City of Detroit**

**Installing Green Infrastructure in Patton Park to Improve Stormwater Storage Capacity (MI)**

Install a bioretention project at Patton Park, a 93-acre city-owned park located on the border of Detroit and Dearborn, Michigan to capture the runoff from the 2.5-acre parking lot adjacent to the Patton Recreation Center. Project will reduce the amount of stormwater entering the sewer system and increase the park's storm water storage capacity by approximately 140,000 gallons.

**\$300,000**

**City of Hamtramck**

**Planting Trees to Reduce Flooding and Benefit Underserved Communities in the City of Hamtramck (MI)**

Plant at least 300 trees throughout the city of Hamtramck and strengthen partnerships built with the local community. Project will prevent 6,000 gallons of runoff annually, reduce the risk of flooding during heavy rain storms and benefit a historically underserved community.

**\$130,000**

**Conservation Resource Alliance**

**Capturing Stormwater and Restoring Habitat by Planting Trees on Public Recreation Sites (MI)**

Restore historic farmland converted to wetlands, local parks and riparian habitat by planting trees to capture stormwater runoff and reduce flooding, property damage and sediment and nutrient loading while educating, engaging and serving the surrounding communities. Project will plant 8,000 trees and shrubs in riparian and wetland corridors to capture more than 140,000 gallons of stormwater runoff annually.

**\$125,000**

**Conservation Resource Alliance**

**Restoring Brook Trout Passage through Jordan River and Deer Creek (MI)**

Restore three culvert road-stream crossings on the Jordan River and its tributary, Deer Creek, by constructing spanning structures that accommodate aquatic passage and return natural stream morphology. Project will restore floodplain connectivity, reduce stream velocities and temperatures, improve the natural movement of substrate and instream wood, restore and improve connectivity through more than 20 miles of stream and halt excess sedimentation.

**\$270,000**

**Detroit Future City**

**Restoring Native Habitat and Creating Public Green Space in Elmwood Forest (MI)**

Restore habitat and create public green space along 1.3 acres of vacant, once-residential land in East Poletown, Detroit by removing invasive species, adding biodiversity through the planting of native trees and shrubs and enhancing educational public space. Project will plant 185 trees and create publicly accessible forest and meadow habitat, with several pathways winding through the site with an emphasis on habitat for pollinators and migratory birds.

**\$259,446**

**Eastside Community Network**

**Creating a Community Flooding and Resilience Plan for Southeast Detroit (MI)**

Undertake a planning effort in southeast Detroit to evaluate the flooding issues facing the community and develop a set of recommended solutions. Project will survey households experiencing flooding issues, a selected portion will receive home assessments to address the cause of their flooding with an emphasis on the use of nature-based, green stormwater infrastructure and restoration solutions that could mitigate flooding risk while contributing to ecosystem recovery.

**\$185,609**

**Friends of the Rouge**

**Building Resilience through Green Infrastructure for Underserved Communities (MI)**

Build more than 7,000 square feet of green stormwater infrastructure by planting trees, installing rain gardens and removing impervious surfaces. Project will capture over 1,300,000 gallons of stormwater per year, while providing substantial co-benefits to underserved communities with among the highest levels of social vulnerability in Detroit, South Dearborn, Redford and Highland Park.

**\$299,875**

**Grand Traverse Regional Land Conservancy Expanding Invasive Species Control in Coastal Dune Habitats (MI)**

Expand invasive species treatment on Great Lakes dunes and coastal forest ecosystems in northwestern lower Michigan. Project will treat at least 250 acres of high-priority species across public and private land to protect rare and threatened species, improve habitat and increase the resiliency of imperiled natural communities.

**\$121,802**

**Huron Pines Resource Conservation and Development Council**

**Implementing an Invasive Species Management Plan in Coastal Wetland Habitats (MI)**

Implement a regionally cohesive invasive species management plan across five coastal counties in Michigan from the Saginaw Bay to the Mackinac Bridge. Project will maintain 550 acres and restore an additional 200 acres of imperiled dune and swale wetland complex, bedrock glade, coastal fen, marsh and rich conifer swamp habitat.

**\$198,737**

**Huron Pines Resource Conservation and Development Council**

**Restoring Stream Passage in the Upper Black River Watershed by Replacing a Degraded Culvert (MI)**

Promote sustainable populations of native brook trout and other desirable species in the Upper Black River Watershed while improving road safety and alleviating erosion at two road crossings by replacing aging culverts with appropriately sized road crossing structures. Project will rectify two aquatic organism passage barriers and open 9 miles of stream.

**\$175,000**

**Huron-Clinton Metropolitan Authority**

**Increasing Resiliency of Huron River Floodplain in Willow Metropark (MI)**

Improve habitat along the Huron River in Wayne County, Michigan by restoring eroded river bank, in-stream, floodplain and native prairie habitat. Project will increase habitat complexity and biodiversity, create a wildlife corridor along the river, benefit native pollinators, capture and infiltrate stormwater runoff, relocate and improve a river launch site and decrease flood potential.

**\$250,000**



**Marquette Charter Township****Restoring Habitat Connectivity and Cold Water Refugia for Brook Trout in Compeau Creek (MI)**

Restore and enhance stream and riparian habitat to secure aquatic connectivity for brook trout and naturalizing stream channels by replacing two severely undersized road stream crossing culverts with bridges spanning the bankfull channel in the Compeau Creek. Project will open 7 miles of brook trout passage, restore stream flows to 0.2 miles of stream and ensure water temperatures stay cold enough to support brook trout.

**\$146,000**

**Mason-Lake Conservation District****Accelerating a Holistic Approach to Conservation on Working Lands in Mason and Lake County (MI)**

Accelerate the implementation of conservation practices and provide local producers in western lower Michigan with a holistic regenerative agriculture approach to working lands. Project will improve soil health and reduce sediment and nutrient runoff into the Lincoln and Sable watersheds while also educating landowners on regenerative agriculture.

**\$137,550**

**National Audubon Society****Restoring Coastal Wetlands for Birds and People in the Grand River Coastal Corridor (MI)**

Restore coastal wetland habitat in the Grand River Coastal Corridor located in Ottawa and Muskegon counties of Michigan. Project will build on a successful partnership to restore 42 acres of high priority marsh while advancing structured systems of monitoring, engagement and stewardship that sustain these improvements for local communities of people, focal fish and bird species.

**\$499,376**

**Oakland County Parks and Recreation****Restoring Riparian Habitat and Connectivity to the Shiawassee River by Removing Mill Pond Dam (MI)**

Remove the failing Davisburg Mill Pond Dam to restore the natural stream channel and adjacent wetlands. Project will improve river connectivity, reduce sedimentation and provide critical habitat for species including the Eastern Massasauga rattlesnake and Blanding's turtle.

**\$207,472**

**National Audubon Society****Avian Monitoring and Evaluation for the Sustain our Great Lakes Program (multiple states)**

Assist in monitoring NFWF's impact on migratory shorebirds, waterfowl and marsh-nesting birds for NFWF's Sustain our Great Lakes Program.

**\$484,097**

**Pheasants Forever****Increasing Technical Assistance to Farmers Implementing Regenerative Agriculture Practices (MI)**

Create new technical assistance capacity in Southern Michigan through the hiring, training and work of a regenerative agriculture specialist and increase awareness of the benefits of integrating regenerative agriculture into an array of agricultural operations. Project will work directly with at least 30 farmers to identify opportunities to simultaneously provide environmental benefits and positive economic return through implementation of regenerative agriculture practices on 6,000 acres of farmland.

**\$274,739**

**Pollinator Partnership****Project Wingspan: Enhancing Agricultural Lands for Pollinators (IL, IN, MI, OH)**

Enhance and increase connectivity of pollinator habitat on Midwestern private agricultural lands and public conservation lands by providing technical assistance to landowners, collecting and distributing seeds and propagating seedlings. Project will collect 55 pounds of milkweed seeds, propagate 3,000 milkweed seedlings, host 14 events to engage 2,000 people and prescribe management actions to improve 2,000 acres of habitat.

**\$99,570**

**Rutgers, The State University of New Jersey Using Whole-Room Ultraviolet Light in Mines to Reduce the Impact of White-Nose Syndrome (MI, NJ, NY)**

Test the efficacy of using whole-room ultraviolet (UV) light treatment on the fungus that causes white-nose syndrome in 10 mines that host hibernating populations of little brown bats in Michigan, New Jersey and New York. Project will test the ability of commercially available technology to benefit bats by killing or slowing growth of the fungus in summer, when bats are not present.

**\$268,661**

**Sand County Foundation****Midpoint Evaluation of NFWF's Great Lakes Business Plan (multiple states)**

Evaluate the success to date of the Great Lakes Business Plan in achieving its dedicated conservation objectives in the areas of streams, coastal wetlands, and water quality. Project will include a review of the ten sub-objectives within these three priority areas, as well as of the sixteen focus areas expected to achieve multiple overlapping outcomes.

**\$195,526**

**Springfield Township****Controlling Invasive Species to Enhance and Maintain Habitat in Springfield Township (MI)**

Enhance and maintain critical habitat to benefit the federally endangered Poweshiek skipperling and federally threatened eastern massasauga rattlesnake by implementing invasive species control, prescribed fire and native plant augmentation. Project will enhance and maintain 200 acres of habitat, install 3,000 native plants and monitor changes in structure and composition of fen vegetation.

**\$100,000**

**The Nature Conservancy****Restoring Coastal Wetland Habitat for Migratory Birds in Erie Marsh Preserve (MI)**

Construct a dike, improve water control and treat invasive plants to enhance degraded coastal wetland in Monroe County, Michigan, thereby expanding on past large-scale restoration and invasive species control at Erie Marsh Preserve. Project will improve hydrology for and treat or retreat invasive plants to improve habitat quality, structure and diversity of the wetland and benefit species of conservation concern, including migratory waterfowl.

**\$490,817**

**The Nature Conservancy****Controlling Invasive Species in Prairie and Oak Savanna Habitat at the Grand River Fen Preserve (MI)**

Control populations of invasive species at Grand River Fen Preserve to help restore and maintain prairie fen and oak savannas ecosystems, directly benefiting endangered Mitchell's satyr butterfly and the federally threatened eastern massasauga rattlesnake. Project will enhance more than 200 acres of habitat through invasive species control with the use of cut-stump treatments and select spraying throughout specific parcels.

**\$100,000**

**Tip of the Mitt Watershed Council****Improving Aquatic Connectivity within the Crooked River Watershed (MI)**

Rectify two road-stream crossings in the Crooked River Watershed by replacing undersized, perched culverts with channel-spanning culverts. Project will reduce sediment inputs at these crossing sites and eliminate existing fish passage barriers, thereby improving connectivity of these cold-water streams, particularly benefiting brook trout.

**\$101,374**

**Trout Unlimited****Reconnecting Cold-water Habitat in Brook Trout Streams (MI)**

Improve aquatic organism passage and habitat in Northern Michigan cold-water streams through the implementation of three road-stream culvert upgrades, one culvert removal and three stream habitat restoration and enhancements. Project will reconnect and restore more than 15 miles of high quality cold water stream habitat to benefit brook trout and other native communities and restore natural stream ecosystem processes.

**\$156,912**

**MINNESOTA****Great River Greening****Improving Pollinator Habitat for Rusty Patched Bumble Bee and Other Pollinators (MN)**

Improve habitat for monarch butterflies, rusty patched bumble bees and other pollinators along the Mississippi River Corridor near the Twin Cities metropolitan area in Minnesota by collecting and planting native seeds, controlling invasive species and conducting prescribed burns. Project will improve 700 acres, collect 8 pounds of milkweed seed and engage 200 people.

**\$85,000**

**Lake County Soil and Water Conservation District****Restoring Stream Passage for Brook Trout in Hockamin Creek by Removing Culverts (MN)**

Restore connectivity to 8 miles of native brook trout spawning and wintering habitat and thermal refugia in Hockamin Creek, a tributary to the Baptism River which flows to Lake Superior in Minnesota. Project will remove two culverts acting as fish passage barriers and replace them with a crossing designed for aquatic organism passage.

**\$120,000**

**Monarch Joint Venture****Midwest Technical Assistance to Improve Pollinator Habitat on Working Lands (IA, MN)**

Provide technical assistance to private landowners by hiring one pollinator habitat specialist to increase agricultural stakeholder engagement and habitat implementation in Minnesota and Iowa. Project will restore 400 acres and improve 200 acres, develop 40 plans, host 10 events, reach 250 people and develop the Farmers for Monarchs website.

**\$185,023**

**National Audubon Society****Avian Monitoring and Evaluation for the Sustain our Great Lakes Program (multiple states)**

Assist in monitoring NFWF's impact on migratory shorebirds, waterfowl and marsh-nesting birds for NFWF's Sustain our Great Lakes Program.

**\$484,097**

**MISSISSIPPI****American Forest Foundation****Enhancing Water Quality through Forested Watershed Conservation (AI, FL, MS)**

Enhance and maintain water quality by protecting and restoring forested watershed conditions in key watersheds across the Gulf Coast. Project will be implemented through a public-private partnership and will support capacity building and expand resources to protect and restore forested watersheds in the Gulf States.

**\$10,000**

**Ducks Unlimited****Monitoring Waterfowl Response to Wetland Restoration in the Mississippi Alluvial Valley (AR, LA, MS)**

Monitor waterfowl response to forest and shallow water wetland restoration on Wetland Reserve Easement sites within the Mississippi Alluvial Valley region of Arkansas, Louisiana and Mississippi. Project will deploy unmanned aerial vehicles to investigate their utility to monitor waterfowl use of restored wetlands and use imagery analysis and machine learning to establish efficient and effective protocols to derive duck counts and general use behaviors at a project level scale.

**\$195,000**

**Ducks Unlimited****Enhancing Hydrology and Restoring Forests in the Lower Mississippi Alluvial Valley – II (AR, MS)**

Restore and enhance bottomland hardwood forests and wetlands on public and private lands within the Delta of Arkansas and Mississippi. Project will restore hydrology, enhance existing forests and reforest areas to impact a total of 8,075 acres, including 7,095 acres of conservation easements, benefiting migratory waterfowl, Louisiana black bear and other forested wetland-dependent species.

**\$343,000**

**Gentner Consulting Group****Deepwater Horizon Oceanic Fish Restoration Project Project Monitoring and Evaluation (multiple states)**

Conduct requisite statistical analyses to evaluate key performance indicators for the project in accordance with the Oceanic Fish Restoration Project Monitoring Plan. Project will estimate bycatch reduction and alternative gear performance during the remaining repose years and will support evaluation of the overall performance of the project following the final repose year.

**\$430,600**

**KKAC Foundation****Engaging Underserved Landowners in Conservation and Woodland Management (AR, MS)**

Develop forest management plans and implement forest conservation practices to improve forest health and wildlife habitat on private lands in the Mississippi Alluvial Valley region of Arkansas and Mississippi. Project will engage historically underserved and minority landowners through workshops and field days to provide forestry technical assistance, address heirs property issues and connect landowners with financial assistance resources to restore and manage 350 acres of forest habitat.

**\$375,000**

**Mississippi Commercial Fisheries United Collection of Derelict Fishing Gear Along the Mississippi Gulf Coast**

Maintain a derelict gear collection utility trailer to support the continued collection, hauling and recycling of derelict blue crab traps for Mississippi's inshore shrimpers. Project will divert and recycle three tons of fishing gear from the Mississippi sound.

**\$15,137**

**Mississippi Forestry Association****Expanding Longleaf Pine Restoration in South Mississippi**

Plant 575 acres of longleaf pine, certify 65 family forest tracts into the American Tree Farm Certification Program and improve 450 acres of existing longleaf pine habitat. Project will provide technical guidance in sustainable management of natural resources on private lands and educate landowners about opportunities to enhance/improve longleaf pine forest habitats through technical guidance and cost-share practices.

**\$295,996**

**Mississippi River Trust****Forested Wetland Restoration in the Lower Mississippi River Floodplain – II (multiple states)**

Reforest and protect frequently flooded, marginal cropland on private lands through the adoption of USDA Wetland Reserve Easements in the active floodplain of the Lower Mississippi River. Project will establish 10,285 acres of bottomland hardwood forest to expand and enhance habitat and improve water quality, benefiting the Louisiana black bear, swamp rabbit, forest birds, waterfowl and freshwater fish.

**\$780,000**

**Mississippi State University****Demonstration of Restoration and Monitoring Techniques for Bottomland Hardwood Habitats (AR, MS)**

Restore bottomland hardwood forest habitats, monitor habitat condition and wildlife response to restoration treatments and provide information, training and technical assistance to land-owners and resource managers to inform forest and wildlife management decisions. Project will restore 884 acres of bottom-land hardwood forest within the Tallahatchie, Boeuf and Tensas watersheds in Arkansas and Mississippi, benefiting waterfowl, swamp rabbits and other forested wetland-dependent species.

**\$355,000**

**North Carolina State University****Expanding Prescribed Fire Delivery to Restore Southeast Forests (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 landowners, including underserved landowners and fire practitioners through technical assistance, training and outreach to increase the use of prescribed fire.

**\$180,000**

**Stantec Consulting Services****Gulf-wide In-water Sea Turtle Monitoring Plan (multiple states)**

Develop a statistically sound plan for the establishment of a coordinated Gulf-wide network for collection and compilation of critical abundance, demographic, and biological information on sea turtles in the Gulf of Mexico. Project will provide important context for project-level monitoring at individual sites where restoration is implemented and will assist with comparisons across multiple projects.

**\$224,267**

**The Longleaf Alliance****Coordinating Local Implementation Team Capacity and Landowner Technical Assistance and Outreach (multiple states) - V**

Improve and sustain coordination and exchange of information among 18 multi-partner local implementation teams that organize, plan and deliver conservation actions to restore and enhance the longleaf pine ecosystem. Project will support strategic on-the-ground restoration through conservation planning, as well as tracking and communication of longleaf pine restoration accomplishments.

**\$250,000**

**The Mississippi State Port Authority at Gulfport****Creating a Resiliency and Sustainability Master Plan for Port of Gulfport (MS)**

Create a Resiliency and Sustainability Master Plan for the Port of Gulfport that will support the Port's current environmental program and comprehensive emergency management plan and will also weave elements of sustainability throughout the Port's operations and procedures. Project will determine goal and objective formation, complete a resiliency assessment, sustainability assessment and prepare a resiliency and sustainability master plan.

**\$124,493**

**The Nature Conservancy****Restoring Forested Wetlands within Mississippi Alluvial Valley Priority Focal Areas (AR, LA, MS)**

Project will restore and protect forested wetlands within high priority areas in the Mississippi Alluvial Valley region of Arkansas, Mississippi and Louisiana. Project will reforest 4,800 acres of marginal cropland, restore 1,200 acres of hydrologic wetland function and protect 6,000 acres with conservation easements, benefiting Louisiana black bear, swamp rabbits, waterfowl and neotropical migratory songbirds.

**\$690,356**

**Wildlife Mississippi****Aquatic Habitat Conservation within the Pascagoula and Pearl River Watersheds (MS)**

Conserve aquatic systems by conducting landowner outreach and technical assistance within the Pascagoula and Pearl River watersheds. Project will provide outreach, workshops and presentations and one-on-one technical assistance to landowners to improve management of 1,000 acres and potentially protecting 200 acres, positively impacting the aquatic or wetland-associated protected species in these drainages.

**\$199,991**

**MISSOURI****Ducks Unlimited****Expanding Agricultural Conservation and Adoption of Farm Bill Conservation Programs (IA, IL, IN, MO)**

Promote and implement Farm Bill conservation programs within the agriculturally based communities of central/northcentral Iowa, northern Illinois/Indiana and central/northwest Missouri. Project will work directly with 390 producers to design and implement wetland friendly conservation practices to reduce nitrogen and phosphorous runoff and improve water quality and wildlife habitats on 4,050 acres of cropland.

**\$240,000**

**Heartland Conservation Alliance****Training Youths in Environmental Stewardship in the Blue River Watershed (KS, MO)**

Train 18 youth and employ a crew of five to seven youth who will steward 220 acres of land in the Blue River Watershed. Project will address needs for improved watershed health, improved community health and lack of natural resource management workforce.

**\$49,609**

**Kansas City Community Gardens****Community Orchards and Environmental Education in the Blue River Watershed (MO)**

Plant community orchards, engage volunteers and provide environmental education at locations along the Blue River watershed in urban Kansas City, Missouri. Project will: 1) plant a 35-tree orchard on Kansas City's historic Municipal Farms site; 2) plant a 32-tree expansion to the Kauffman Legacy Park Orchard; and 3) engage students in the Kansas City Community Garden Demonstration Orchard through STEM-based lessons on environment and nutrition.

**\$26,161**

**Mississippi River Trust****Forested Wetland Restoration in the Lower Mississippi River Floodplain – II (multiple states)**

Reforest and protect frequently flooded, marginal cropland on private lands through the adoption of USDA Wetland Reserve Easements in the active floodplain of the Lower Mississippi River. Project will establish 10,285 acres of bottomland hardwood forest to expand and enhance habitat and improve water quality, benefiting the Louisiana black bear, swamp rabbit, forest birds, waterfowl and freshwater fish.

**\$780,000**

**Missouri Stream Team Watershed****Coalition, Stream Teams United Engaging Local Community Members in Restoring and Conserving Hickory and Shoal Creek Confluence (MO)**

Plan, plant and monitor the success of a streambank and wetland aquatic habitat restoration project at the confluence of Hickory Creek and Shoal Creek at Neosho, Newton County, Missouri. Project will train students and volunteers in habitat conservation practices and monitoring protocols for water quality and species diversity, plant over 2,200 native trees at the site and monitor success through tree survival assessment, water quality sampling and species diversity indexing.

**\$49,962**



**Pheasants Forever****Increasing Technical Assistance to Benefit Northern Bobwhite on Private Working Lands (AR, MO)**

Support five technical assistants with expertise in northern bobwhite conservation in Arkansas and Missouri who will assist private landowners in managing their lands to benefit bobwhite and many wildlife species while also improving working land productivity. Project will improve management on 10,000 acres of private working lands through the development of 400 conservation management plans and associated best management practices.  
**\$249,939**

**Pheasants Forever****Expanding Technical Assistance for Prescribed Burning to Improve Pollinator Habitat (MO)**

Provide technical assistance for private landowners in Missouri by hiring a prescribed fire coordinator to provide guidance about pollinator conservation, develop prescribed burn plans and coordinate outreach and education about prescribed burning, including hosting a prescribed fire summit. Project will improve 4,000 acres, develop 75 plans, host 10 events and engage 500 people.  
**\$200,000**

**MONTANA****Alberta Conservation Association****Enhancing Habitat and Connectivity for Pronghorn and Sage-Grouse by Improving Fences (AB, MT)**

Enhance sage-grouse critical habitat by assessing range condition and signing habitat conservation strategy letters with private landowners. Project will improve 40,000 acres of habitat by removing 5 miles of page wire fencing and converting it to a wildlife friendly fencing to enhance sage-grouse habitat and retrofitting 50 miles of existing fencing to facilitate easier pronghorn movement.  
**\$150,000**

**American Bird Conservancy****Providing Technical Assistance for Conservation Management on Private Working Lands (MT, ND, SD, WY)**

Provide technical assistance to promote healthy grassland conservation to benefit grassland birds while meeting the economic bottom line for private landowners. Project will result in improved management on 6,500 acres through improved grazing rotations and fencing and water infrastructure, and restore 350 acres by re-seeding annual cropland with native perennial grasses and forbs and 1,920 acres by removing windmills.  
**\$345,588**

**Ducks Unlimited****Restoring Habitat through the Northern Grasslands Restoration Incentives Program (MT, ND, SD, WY)**

Provide technical assistance through the Northern Grasslands Restoration Incentives Program to provide an additional set of conservation options for producers throughout the Northern Great Plains who provide habitat for declining grassland birds. Project will restore 2,000 acres of grassland habitat and place 16,000 acres under improved management.  
**\$128,533**

**Montana Conservation Corps****Restoring and Enhancing Mesic and Wet Meadow Habitat in the Lower Missouri Watershed (MT)**

Restore and enhance wet meadows and mesic areas throughout the Lower Missouri Watershed in Montana and improve habitat for sage-grouse and pronghorn. Project will restore and enhance 300 acres of habitat and build local capacity to promote a more sustainable model for improving mesic and wet meadow areas throughout the region.  
**\$330,036**

**Montana Land Reliance****Conserving Greater Sage-Grouse Habitat on Fauth Ranch through a Perpetual Conservation Easement (MT)**

Conserve a multi-generation ranching operation, Fauth Ranch, located in Golden Valley and Musselshell counties, Montana to benefit the greater sage-grouse and to ensure the ranch remains intact and passed on to the next generation. Project will place 8,086 acres under a perpetual conservation easement.  
**\$300,000**

**Montana Trout Unlimited****Improving Arctic Grayling Overwintering Habitat in Centennial Valley (MT)**

Improve overwintering habitat for adfluvial Arctic grayling in Red Rock Lakes National Wildlife Refuge through the construction of an underground pipeline which will transfer and oxygenate water. Project will restore Arctic grayling populations to historic levels.  
**\$199,500**

**National Wildlife Federation****Improving Big Game Connectivity by Removing Fences in Horse Prairie and Big Hole Valley (MT)**

Provide capacity for a Southwest Montana fence coordinator position to identify and implement fence modification projects and build collaborative partnerships to benefit wildlife and landowners. Project will update 16 miles of fence to wildlife friendly standards and improve connectivity through 100 miles of ungulate migration corridors.  
**\$165,981**

**NatureServe****Research Support for Management of Pollinator Species (multiple states)**

Conduct research to identify priority areas for on-the-ground monarch management actions such as habitat restoration and enrichment as well as to inform regulatory review. Project will map these areas and highlight those that are most used by monarchs, recognizing that monarchs tend to migrate along riparian and wetland corridors.  
**\$199,878**

**Pheasants Forever****Using Decision-Support Tools to Strategically Deliver Grassland Bird Conservation (MT, SD, WY)**

Collaboratively implement a tract-prioritization protocol based on grassland habitat decision-support tools to identify tracts on private land in western South Dakota, eastern Montana and eastern Wyoming with the highest value to grassland nesting passerines. Project will enroll 10,000 acres in grazing systems, integrate 50 ranchers with local stewardship resources, restore 5,000 acres of grassland habitat, improve 13 miles of fencing and restore 15 acres of riparian and wetland habitat.  
**\$421,561**

**Ranchers Stewardship Alliance****Improving Big Game Migration Connectivity while Maintaining Agricultural Land Stewardship (MT)**

Remove or improve 68 miles of fence on public and private lands in north-central Montana to increase landscape permeability and access to critical habitat for migratory big game species including elk, mule deer and pronghorn. Project will coordinate with various state, federal and private landowner partners to enhance permeability, increase habitat availability, restore connectivity and reduce fragmentation for big game species.  
**\$472,000**

**Ranchers Stewardship Alliance****Restoring Former Grazing and Cropland to Ecologically Functional Grassland (MT)**

Enhance core grazing lands and restore former cropland to working, ecologically functional grassland in northeast Montana through innovative practices that restore ecological integrity, soil health, productivity and function to our grazing landscape, rural communities and family ranches. Project will restore 1,000 acres and improve management on 9,000 acres of grassland habitat.  
**\$296,970**

### **Rocky Mountain Bird Observatory** Community-Led Conservation of Grassland Habitat on Private Working Lands (MT, NE, SD, WY)

Maintain grassland connectivity through community-led conservation efforts, supported by sound science from diverse knowledge sources and facilitated through habitat enhancement and restoration by qualified Private Lands Wildlife Biologists. Project will provide and deliver technical support for fish and wildlife habitat conservation, restoration and improved management on 5,000 acres of private lands.  
**\$214,192**

### **Smithsonian Institution**

**Improving MOTUS Infrastructure and Capacity to Benefit Migratory Grassland Birds (MT)**  
Build MOTUS infrastructure in the Northern Great Plains to increase the quality and quantity of grassland bird migratory and demographic data that can be leveraged for conservation action. Project will fill key data gaps concerning migratory bird ecology by growing the infrastructure and capacity of the MOTUS network.  
**\$146,163**

### **The Mule Deer Foundation**

**Increasing Cross-Jurisdictional Coordination in Sagebrush Habitat (multiple states)**  
Increase cross-jurisdictional coordination with state agencies and other partners to implement projects on big game migration corridors and in sage-grouse core habitats. Project will improve habitat through treating invasive species, conservation easements, mesic and wet meadow habitat restoration, removing or improving fencing and restoring 3,000 acres of shrubland habitat.  
**\$395,012**

### **The Nature Conservancy**

**Restoring Mesic and Wet Meadow Habitat in Sagebrush Landscapes (MT)**  
Restore or preserve mesic and wet meadow habitats within arid sagebrush rangelands in the High Divide of Southwest Montana. Project will improve mesic habitat either through the installation of beaver dam analogues and water-slowing structures, or through the removal of conifers threatening the resilience of mesic habitats.  
**\$181,069**

### **The Trust for Public Land**

**Permanently Conserving Big Game Migration Corridors and Improving Public Access (MT)**  
Link migration corridors for mule deer and elk, creating landscape continuity and stitching together landscape-scale conservation efforts protecting wildlife habitat, prime fisheries and highly productive timberland on private lands nestled within the Kootenai National Forest in Montana. Project will protect 38,000 acres of habitat under permanent conservation easement.  
**\$400,000**

### **Trout Unlimited**

**Bitterroot Native Trout Passage and Habitat Restoration (MT)**  
Remove passage barriers and restore habitat quality for bull trout and Western cutthroat trout in the Bitterroot Watershed of Western Montana. Project will reconnect up to 53 miles of habitat, restore 2 miles of instream habitat and improve 155 acres of riparian habitat.  
**\$99,495**

### **Winnett ACES**

**Restoring and Enhancing Grassland and Wet Meadow Habitat in the Musselshell Plains (MT)**  
Facilitate grassland management for the benefit of grassland wildlife and agricultural operations within the Musselshell Plains of central Montana. Project will result in 10,000 acres under improved management, 20 acres of wet meadow restoration, 10 miles of fence modifications for pronghorn and further development of the grassbank strategy.  
**\$220,788**

### **Winnett ACES**

**Improving Habitat Connectivity for Grassland and Sagebrush-Dependent Bird Species (MT)**  
Work with a diverse partnership of farmers and ranchers, non-governmental conservation organizations, state and federal agencies and local conservation districts to achieve bird habitat improvements and connectivity for greater sage-grouse, Baird's sparrow, chestnut-collared longspur and thick-billed longspur. Project will restore 800 acres and improve management on 25,000 acres.  
**\$214,611**

### **World Wildlife Fund**

**Improving Grazing Management with Improved Infrastructure, Management Tools and Education (MT, SD)**  
Improve grassland habitat on working lands by utilizing management agreements, prescribed grazing and changes in infrastructure to facilitate management in the Missouri-Milk River and Dakota Grasslands. Project will improve management on 90,000 acres to conserve grassland habitat and improve population trends for priority grassland songbirds, greater sage-grouse and pronghorn.  
**\$451,155**

## **NEBRASKA**

### **Nebraska Community Foundation, Rainwater Basin Joint Venture**

**Restoring Sandhills Grassland Habitat by Treating Invasive Eastern Red Cedar (NE)**  
Restore and enhance grassland habitat in the Nebraska Sandhills through the mechanical removal of Eastern red cedar and using two mobile burn units to support prescribed fire on private lands. Project will promote healthy, resilient grasslands that support profitable private working ranches, bringing 9,500 acres under improved management.  
**\$215,250**

### **Pheasants Forever**

**Increasing Technical Assistance for Regenerative Agriculture and Cover Crops (NE)**  
Increase capacity to implement Best Management Practices (BMPs) for cover crops and standing crops, finding scenarios that work within a farming operation with a wildlife benefit in southeastern Nebraska. Project will implement 35 BMPs and avoid 26,400 pounds of nitrogen and prevent 8,830 pounds of phosphorus runoff annually.  
**\$204,963**

### **Pheasants Forever**

**Providing Capacity to Implement Community-Based Grassland Conservation on Private Lands (NE)**  
Continue support for two positions that provide capacity for Eastern red cedar control, prescribed fire and grazing management through the Working Lands For Wildlife program and other opportunities in the Nebraska Sandhills. Project will implement innovative community-based grassland management to restore and enhance 90,000 acres on private lands.  
**\$237,814**

### **Rocky Mountain Bird Observatory**

**Community-Led Conservation of Grassland Habitat on Private Working Lands (MT, NE, SD, WY)**  
Maintain grassland connectivity through community-led conservation efforts, supported by sound science from diverse knowledge sources and facilitated through habitat enhancement and restoration by qualified Private Lands Wildlife Biologists. Project will provide and deliver technical support for fish and wildlife habitat conservation, restoration and improved management on 5,000 acres of private lands.  
**\$214,192**

## **NEVADA**

### **Desert Research Institute**

**Summit Lake Integrated Watershed-Lake Model and Water Isotope Analysis (NV)**  
Combine remote sensing, stream gauge data, weather station data, measurements from existing water wells, hydrologic modeling, investigation of historic water use and water isotope analysis to create a detailed water budget for Summit Lake. Project will be used by the Summit Lake Tribe and other land managers for making decisions that will affect the water availability for Lahontan cutthroat trout.  
**\$69,522**

**Mason Valley Conservation District****Walker River Floodplain Noxious Weed Control (NV)**

Inventory, map, treat and control Nevada State listed noxious weeds on 70 miles of the Walker River Corridor and associated floodplains. Project will increase the freshwater river flow in order to enhance water delivery to Walker Lake.

**\$249,992**

**National Audubon Society****Conserving Carson River Basin Wetland Habitats and Shorebirds in the Lahontan Valley (NV)**

Develop operational species-habitat profiles for shorebirds, assess baseline habitat conditions and establish a coordinated monitoring program for habitat management to benefit priority shorebird species at Carson Lake and Pasture and Stillwater National Wildlife Refuge in the Lahontan Valley. Project will provide site-based habitat management guidance and tools to assess shorebird response and provide applicable models to other Great Basin locations.

**\$187,207**

**NatureServe****Research Support for Management of Pollinator Species (multiple states)**

Conduct research to identify priority areas for on-the-ground monarch management actions such as habitat restoration and enrichment as well as to inform regulatory review. Project will map these areas and highlight those that are most used by monarchs, recognizing that monarchs tend to migrate along riparian and wetland corridors.

**\$199,878**

**Nevada Department of Wildlife****Placing a Conservation Easement on Big Game Migratory Corridor Habitat in Pole Canyon (NV)**

Conserve habitat along a critical migratory corridor for the largest population of mule deer in Nevada, as well as bighorn sheep, mountain goat and several species of conservation priority, including the greater sage-grouse. Project will permanently protect more than 12,000 acres of private rangeland along the base of the East Humboldt mountains in northern Nevada through a conservation easement.

**\$150,000**

**Nevada Department of Wildlife****Improving Habitat for Mule Deer and Pronghorn by Treating Invasives and Removing Fences (CA, NV)**

Treat invasive grasses and remove invasive conifers and fences to improve connectivity and address an immediate barrier to migration for wintering-resident deer, resulting in reduced metabolic demands on mule deer and pronghorn, ultimately decreasing mortality. Project will restore 3,000 acres of habitat and remove or improve 40 miles of fences.

**\$75,000**

**Summit Lake Paiute Tribe****Summit Lake Paleoclimatology Study to Inform Restoration and Management Actions (NV)**

Quantify the historical impacts of natural events on lake conditions, hydrologic input and fire history in the Summit Lake watershed to assist in future lake and watershed management. Project will use lake sediments and tree-ring records to identify historical conditions and how they affected changes in lake level and hydrologic inputs, as well as effects on lake productivity and water quality.

**\$153,293**

**The Mule Deer Foundation****Increasing Cross-Jurisdictional Coordination in Sagebrush Habitat (multiple states)**

Increase cross-jurisdictional coordination with state agencies and other partners to implement projects on big game migration corridors and in sage-grouse core habitats. Project will improve habitat through treating invasive species, conservation easements, mesic and wet meadow habitat restoration, removing or improving fencing and restoring 3,000 acres of shrubland habitat.

**\$395,012**

**Walker Basin Conservancy****Water Acquisitions Grant No. 3 (NV)**

Purchase 2.651 cubic feet per second of decree water and 545.89 acre-feet of apportioned storage water to aid in the goal of restoring Walker Lake to a 12,000 total dissolved solids level.

**\$2,000,000**

**Walker Basin Conservancy****Lahontan Cutthroat Trout Habitat Recovery Monitoring at Walker Lake (NV)**

Expand and enhance water quality monitoring activities in Walker Lake to better track improvement of Lahontan cutthroat trout habitat conditions and guide successful species reintroduction. Project will observe, record and publish water quality data to demonstrate the improvements of Walker Lake conditions resulting from increased program water inflows into Walker Lake.

**\$300,000**

**NEW HAMPSHIRE****Belknap County Conservation District****Restore Eastern Brook Trout Stream Habitat through Strategic Wood Additions (NH)**

Restore native eastern brook trout streams and develop forest stewardship plans in Alton, Belmont and Gilmanton, New Hampshire. Project will install large in-stream wood in seven streams to improve stream function and habitat quality and develop three Town Forest Stewardship Plans that focus on sustainable forest management, and protection of aquatic and forest habitat for target bird species dependent on mature forest.

**\$159,690**

**Canaan Valley Institute****Coordinating Eastern Brook Trout Joint Venture Strategies and Goals (multiple states)**

Continue the activities of the Eastern Brook Trout Joint Venture in the historic range of the species. Project will refine the strategic objectives and key conservation priorities of the Eastern Brook Trout Joint Venture using the results of the recently completed status assessment of wild brook trout at the catchment scale.

**\$74,999**

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

Support the implementation and advancement of electronic monitoring in the New England Groundfish fishery at an operational scale serving as a national example of the third party audit model. Project will reduce the cost of video review, increase fishermen compliance and reduce barriers to entry for interested fishermen through on-deck innovations and advances in artificial intelligence.

**\$275,437**

**Connecticut River Watershed Council****Increasing Technical Assistance to Benefit Northeast Turtles on Private Working Lands (MA, NH, VT)**

Provide private landowners with technical assistance to accelerate on-the-ground delivery and implementation of Farm Bill conservation programs designed to specifically benefit two Working Lands for Wildlife priority species: wood turtle and spotted turtles in the Connecticut River watershed. Project will develop 15 best management practices to improve water quality through reductions in sediment and nutrients runoff, plus riparian buffer plantings to improve habitat for rare freshwater turtles.

**\$100,000**

**Gulf of Maine Research Institute****Maximized Retention Electronic Monitoring the New England Groundfish Fishery (MA, ME, NH, RI)**

Prepare the maximized retention electronic monitoring program for implementation in the New England groundfish fishery. Project will continue collecting data for fishing year 2021 with a focus on testing catch handling methods for high-volume fishing vessels and collaboratively identify and overcome steps necessary to implement this program through extensive outreach and stakeholder workshops.

**\$500,000**



### **Maine Coast Fishermen's Association** Piloting Electronic Monitoring in the Northern Gulf of Maine Scallop Fleet- Year Three (MA, ME, NH)

Continue developing and piloting an electronic monitoring program for the northern Gulf of Maine scallop fleet to test feasibility on small scallop vessels and demonstrate the data it provides. Project will engage three new vessels, bringing the total to six, refine protocols and processes for electronic monitoring in scallop fisheries and work closely with federal agencies to develop a viable monitoring option that works under new regulations which are expected to be implemented.

**\$120,960**

### **Manomet** Managing American Oystercatchers and Minimizing Coastal Engineering Impacts Along the Atlantic Coast (multiple states)

Coordinate the American oystercatcher recovery initiative, implement best management practices for disturbance and predation management along the U.S. Atlantic Coast and Gulf Coast of Florida and develop long-term improvements in coastal engineering protocols to restore habitats critical to focal shorebird species. Project will support the goals of the Atlantic Flyway Business Plan by creating a framework for long-term protection, restoration and creation of shorebird habitat at key sites.

**\$189,999**

### **Massachusetts Division of Marine Fisheries** Developing a Framework for Ropeless Fishing in New England (MA, ME, NH, RI)

Characterize the issues and challenges associated with the integration of on-call or ropeless fishing gear technology into New England fisheries. Project will evaluate the issues using semi-structured interviews and workshops with experts in the field, synthesize perspectives and analyze the technical, legal and socioeconomic challenges and opportunities to develop a set of recommendations for further work, including in situ testing and policy development.

**\$170,861**

### **Merrimack River Watershed Council** Restore Fish Passage for Native Brook Trout and Improve Stream Habitat in the Warner River (NH)

Replace five undersized culverts, restore riparian forest buffers and improve instream conditions in the Warner River Watershed in southern New Hampshire. Project will develop a cost-effective and replicable model of Resilient Riparian Forest Management by engaging landowners and foresters in climate-adaptive riparian buffer restoration at precision-targeted sites, while holistically improving habitat for wild brook trout and dramatically reducing flood risk at high priority flood hazard sites.

**\$191,198**

### **New England Marine Monitoring** Kept Catch Data from Electronic Monitoring in the New England Groundfish Fishery (MA, ME, NH, RI)

Develop machine learning tools that use existing electronic monitoring data to collect information on kept catch in the New England groundfish fishery through testing three catch monitoring approaches across a variety of vessels. Project will derive kept catch data useful for science and management from video already being collected in the New England audit and maximum retention electronic monitoring programs and explore how this impacts program costs.

**\$225,962**

### **New Hampshire Department of Environmental Services** Living Shoreline Stabilization for Communities and Tidal Wetlands in Great Bay Estuary (NH)

Create a pipeline for living shoreline projects that protect salt marsh habitat and coastal communities in the Great Bay Estuary municipalities of Dover, Durham and Newmarket. Project will prioritize sites based on criteria, including habitat value and community asset protection, from which three to four sites will be selected for 50% engineering designs that will be developed by working with an innovative living shoreline professional training program.

**\$257,000**

## **NEW JERSEY**

### **Academy of Natural Sciences of Drexel University** Assessment of Northern Snakehead Feeding in the Delaware River Estuary (NJ, PA)

Assess the feeding impacts of Northern Snakehead on alosines and species of management concern in the Delaware River Estuary through site surveys by boat electrofishing. Project will guide future management and predict potential impacts for species of management concern such as striped bass, American eel, American shad and herring species.

**\$75,046**

### **Academy of Natural Sciences of Drexel University** Delaware River Restoration Fund Project Impact Assessments for Phase 2 – ANS Modeling (DE, NJ, NY, PA)

Deploy novel, high-resolution modeling techniques to quantify the positive impact of DRWI-associated restoration projects. Project will collaborate with the FieldDoc development team to develop and implement a series of application program interfaces that enable DRWI grantees to run geospatial queries on project areas and model annual pollutant load reductions of nitrogen, phosphorus and sediment reduced as a result of project implementation.

**\$212,751**

### **Academy of Natural Sciences of Drexel University**

#### **Delaware River Restoration Fund Project Impact Assessments for Phase 2 (NJ, PA)**

Conduct preliminary selection and design of monitoring plans for a subset of restoration projects funded under the Delaware River Restoration Fund. Project assessments will include monitoring water chemistry, habitat, macroinvertebrates, fish and algae at these sites as they inform its success in improving stream ecosystems.

**\$280,956**

### **American Littoral Society** Kimble Beach Restoration and Shoreline Stabilization (NJ)

Continue restoration of Kimble Beach shorebird and horseshoe crab habitat in Cape May County, New Jersey. Project will advance the comprehensive conservation and restoration of highly vulnerable and valuable Bayshore beach habitat critical for horseshoe crabs and shorebirds by using strategies that will further reduce erosion and increase resilience to storms and climate change.

**\$560,800**

### **American Littoral Society** Restoring Ecologically Beneficial and Resilient Infrastructure at Maurice River (NJ)

Create hybrid living shoreline, hybrid rock revetment, oyster reefs and ribbed mussel beds at the tip of Basket Flats and at Northwest Reach. Project will protect the inlet of the Maurice River and provide resiliency and ecological uplift by protecting marsh and creating new habitat.

**\$4,881,064**

### **American Littoral Society** Nature-Based Solutions to Flooding in Giampietro Memorial Park (NJ)

Establish a comprehensive site plan to manage stormwater, restore 1 acre of wetland habitat and install a bioswale in Giampietro Memorial Park, Vineland, New Jersey. Project will work to engage community members, municipal officials and local decision-makers to promote the use of best management practices while reducing sediments and nutrients entering the nearby tributaries.

**\$170,000**

### **Canaan Valley Institute** Coordinating Eastern Brook Trout Joint Venture Strategies and Goals (multiple states)

Continue the activities of the Eastern Brook Trout Joint Venture in the historic range of the species. Project will refine the strategic objectives and key conservation priorities of the Eastern Brook Trout Joint Venture using the results of the recently completed status assessment of wild brook trout at the catchment scale.

**\$74,999**

### **Conserve Wildlife Foundation of New Jersey**

#### **Removing Derelict Crab Pots to Reduce Wildlife Entanglements in Coastal Marsh Waters (NJ)**

Remove up to 5 tons of marine debris from Barnegat Bay, New Jersey. Project will provide a bin to collect and remove derelict crab pots that pose a threat to coastal marsh species. **\$14,960**

### **Conserve Wildlife Foundation of New Jersey**

#### **Assessing Red Knot Survival Using Data from Delaware Bay and Lagoa do Peixe, Brazil (DE, BRA)**

Monitor recovery and stopover health of red knot and other shorebirds, estimate stopover population size and protect critical habitats to improve foraging conditions for migratory shorebirds in Delaware Bay, Delaware and Lagoa do Peixe, Brazil, two critical shorebird stopover sites. Project will create a better understanding of the impact of the threats to Lagoa do Peixe and surrounding areas and the red knot population as a whole. **\$75,000**

### **Delaware River Basin Commission**

#### **Water Management Studies to Inform Basin-wide Resource Planning (DE, NJ, NY, PA)**

Advance research in water management through completion of three studies focusing on water quality, contaminants of emerging concern and future water availability. Project will be used for planning efforts including consideration of future water supply projects, wastewater assimilative capacity, evaluation of pass-by flows, conservation releases, consumptive use mitigation triggers, freshwater flow needs to address sea-level rise and potential flow targets. **\$499,126**

### **Ducks Unlimited**

#### **Supawna Meadows National Wildlife Refuge Tidal Marsh Restoration (NJ)**

Restore, enhance and recreate 430 acres of existing and lost critical tidal freshwater marsh habitat at Supawna Meadows National Wildlife Refuge, New Jersey. Project will facilitate natural hydrologic regime through removal of excess rock in key channels, enhance marsh resilience via enhancing existing breakwaters along the Refuge border and conduct marsh elevation enhancement via dredge material placement. **\$750,000**

### **Groundwork Elizabeth**

#### **Urban Riparian Restoration and Community Engagement in Elizabeth, New Jersey**

Restore up to 1 mile of stream bank, mitigate flooding, remove and treat three acres for invasive plants, install a rain/pollinator garden and plant six types of indigenous species in Elizabeth, New Jersey. Project will enhance local wildlife habitat and attract up to 500 volunteers to perform park restoration and watershed management. **\$38,858**

### **Lake Hopatcong Commission**

#### **Streambank Stabilization in the Upper Musconetcong River Watershed (NJ)**

Design, permit, construct and monitor three streambank stabilization projects identified in the 2021 Upper Musconetcong River Watershed Implementation Plan. Project will enhance local wildlife habitat, reduce nutrient loads, provide volunteer activities and increase public access. **\$480,650**

### **Manomet**

#### **Managing American Oystercatchers and Minimizing Coastal Engineering Impacts Along the Atlantic Coast (multiple states)**

Coordinate the American oystercatcher recovery initiative, implement best management practices for disturbance and predation management along the U.S. Atlantic Coast and Gulf Coast of Florida and develop long-term improvements in coastal engineering protocols to restore habitats critical to focal shorebird species. Project will support the goals of the Atlantic Flyway Business Plan by creating a framework for long-term protection, restoration and creation of shorebird habitat at key sites. **\$189,999**

### **Musconetcong Watershed Association**

#### **Linking Up the Landscape: Connecting Recreation to Conservation in the Musconetcong Watershed (NJ)**

Create an online map with the location of recreational access points and the cultural and historic resources that give this part of the Delaware Watershed a unique regional identity. Project will complete a timely visitor readiness assessment, watershed-wide interpretive plan, and install access point signs with QR codes linked to the map for the new National Water Trail. **\$362,149**

### **New Jersey Audubon Society**

#### **Developing a Forest Stewardship Plan for the White Lake Natural Resource Area (NJ)**

Develop a State Approved Forest Stewardship Plan for the White Lake Natural Resource Area, located in Warren County, New Jersey. Project will enable the county to effectively and efficiently manage invasive species, improve wildlife habitat and ensure forest and watershed health at this preserved property. **\$77,640**

### **Partnership for the Delaware Estuary**

#### **Evaluating Outcomes of Coastal Salt Marsh Intervention Efforts (DE, NJ, PA)**

Develop the Marsh Futures Ecological Mapper system to provide landscape-level evaluation of changes to key salt marsh ecosystem services of proposed habitat-specific restoration efforts. Project will fill a vital evaluation gap in protecting coastal marshes by providing a mechanism to understand how specific intervention efforts can either support or diminish landscape-level ecosystem services of salt marshes with applicability across the Atlantic Coast. **\$300,000**

### **Partnership for the Delaware Estuary**

#### **Installation of Green Stormwater Infrastructure at Schools in Salem (NJ)**

Facilitate the development and installation of green infrastructure projects at schools and other public property in Salem, New Jersey. Project will address critical upstream stormwater management issues, reduce the amount of polluted runoff directly entering the Salem River and benefit water quality. **\$98,039**

### **Rutgers, The State University of New Jersey**

#### **Targeted Implementation of Green Stormwater Infrastructure in the Upper Salem River Watershed (NJ)**

Maximize pollutant reduction in the Upper Salem River Watershed through implementation of green stormwater infrastructure in climate-vulnerable urban and suburban landscapes. Project will significantly reduce non-point source pollution in stormwater and improve groundwater recharge. **\$220,000**

### **Rutgers, The State University of New Jersey**

#### **Using Whole-Room Ultraviolet Light in Mines to Reduce the Impact of White-Nose Syndrome (MI, NJ, NY)**

Test the efficacy of using whole-room ultraviolet (UV) light treatment on the fungus that causes white-nose syndrome in 10 mines that host hibernating populations of little brown bats in Michigan, New Jersey and New York. Project will test the ability of commercially available technology to benefit bats by killing or slowing growth of the fungus in summer, when bats are not present. **\$268,661**

### **Sand County Foundation**

#### **Midpoint Evaluation of NFWF's Great Lakes Business Plan (multiple states)**

Evaluate the success to date of the Great Lakes Business Plan in achieving its dedicated conservation objectives in the areas of streams, coastal wetlands, and water quality. Project will include a review of the ten sub-objectives within these three priority areas, as well as of the sixteen focus areas expected to achieve multiple overlapping outcomes. **\$195,526**

**South Jersey Land and Water Trust**

**Aggregating Green Stormwater Infrastructure in the Alloway and Muddy Run Watersheds (NJ)**  
Implement a concentrated approach of stormwater management practices and habitat restoration at three sites within the Alloway and Muddy Run focus areas within the Delaware River Watershed Initiative's Kirkwood-Cohansey Cluster. Project will build on prior success and restore water quality through installation of rainwater harvesting cisterns and wetland habitat restoration.  
**\$275,000**

**Stroud Water Research Center**

**Delaware River Restoration Fund Project Impact Assessments for Phase 2 – Stroud Monitoring (NJ, PA)**  
Monitor the impact of Delaware River Restoration Fund field practices on soil health and water quality and impact of farm restoration on stream health at a total of 10 selected project sites. Project will collaborate with the Academy of Natural Sciences in monitoring at nine of these sites.  
**\$295,000**

**The Nature Conservancy**

**Planning for the Pequest River (NJ)**  
Develop engineering designs and permitting for two dam removals on the Pequest River in New Jersey. Project will produce two shovel-ready projects to remove the first two blockages on the Pequest river, which will ultimately reduce local flooding and open the river for migratory fish passage.  
**\$307,368**

**Trout Unlimited**

**Developing Wild Trout Conservation Portfolio for New Jersey's Delaware Basin**  
Produce wild trout conservation plans for the Delaware Basin in northwestern New Jersey following Trout Unlimited's fine-scale Conservation Portfolio approach. Project will identify explicit protection and habitat restoration priorities needed to maintain and expand wild trout populations in New Jersey and will showcase novel, transferable methods that increase the efficiency and accuracy of baseline data collection for fine-scale portfolio development in other brook trout priority areas.  
**\$75,564**

**Upstream Alliance**

**Developing a Water Trail and Recreational Programming in Camden (NJ)**  
Engage over 2,000 members of the Camden community through hands-on recreational programming, hiring of local youth and promotion of public access on the previously inaccessible Cooper River in Camden, New Jersey. Project will also perform preliminary work to begin habitat restoration for migratory American shad and river herring.  
**\$500,000**

**NEW MEXICO****Carlsbad Soil and Water Conservation District**

**Vegetative Restoration of Blue Springs (NM)**  
Remove salt cedar and Russian olive trees in and around the riparian area of Blue Springs, an important spring on the Black River in Eddy County, New Mexico and eradicate mesquite in adjacent upland areas. Project will remove these invasive species in order to enhance soil, water, vegetation and wildlife habitat along the springs and wetlands.  
**\$207,501**

**Carlsbad Soil and Water Conservation District**

**Improving Grasslands and Fences to Restore Habitat Connectivity for Pronghorn (NM)**  
Restore grassland habitat by treating and removing invasive mesquite and creosote in the Indian Basin area of Eddy County to improve connectivity for pronghorn in the region. Project will remove invasives on more than 6,000 acres and remove or improve 10 miles of fencing.  
**\$378,603**

**CEHMM**

**Instream Flow Initiative for the Texas Hornshell Mussel (NM)**  
Provide instream flow for the Texas hornshell mussel in the Black and Delaware rivers through short or long-term water transactions in times of low flow. Project will develop a framework for a long-term plan and budget to maintain instream flows.  
**\$250,000**

**Chaves Soil and Water Conservation District**

**Southeast New Mexico Plains Pronghorn Restoration (NM)**  
Enhance grassland habitat and improve landscape connectivity for pronghorn across ranches and pastures in Chaves County, New Mexico. Project will restore nearly 5,000 acres of grassland habitat through mesquite brush control and install at least 5 miles of pronghorn-friendly fencing.  
**\$105,042**

**NatureServe**

**Research Support for Management of Pollinator Species (multiple states)**  
Conduct research to identify priority areas for on-the-ground monarch management actions such as habitat restoration and enrichment as well as to inform regulatory review. Project will map these areas and highlight those that are most used by monarchs, recognizing that monarchs tend to migrate along riparian and wetland corridors.  
**\$199,878**

**New Mexico Land Conservancy**

**Protecting Critical Habitat and Facilitating Pronghorn Movement on the Fort Union Ranch (NM)**  
Protect and improve habitat to enhance movement and migration for pronghorn and other wildlife dependent upon grasslands on Fort Union Ranch in northeast New Mexico. Project will remove or improve 14 miles of fence and permanently protect 7,000 acres of pronghorn habitat, including both winter and summer ranges.  
**\$390,547**

**Rio Grande Return**

**Polvadera Creek Sediment Stabilization and Ecosystem Restoration (NM)**  
Stabilize and enhance the aquatic and riparian habitats native to Polvadera Creek. Project will enhance and restore native Rio Grande cutthroat trout populations by protecting, restoring and enhancing habitats through erosion stabilization, barrier construction to limit off-road vehicle access, in-channel structure installation and vegetation planning.  
**\$54,587**

**Santa Clara Pueblo**

**Santa Clara Creek Headwaters Habitat Restoration (NM)**  
Restore vital Rio Grande cutthroat trout habitat in Santa Clara Creek, an area severely impacted by fire and debris deposition. Project will restore and enhance 3 acres of riparian habitat and 1,000 feet of stream through the construction of off channel ponds, establishing grade control, facilitating fish passage with the removal of natural barriers, revegetation of native plants, spreading mulch and woody debris and planting/transplanting of at least 30 conifer tree species.  
**\$114,999**

**The Nature Conservancy**

**Upper Gila Agricultural Diversion Replacement (NM)**  
Construct a permanent, fish-friendly diversion structure that will replace an existing push-up diversion at the upper end of the Cliff-Gila Valley. Project will enable irrigators to increase water availability for species and their habitats, remove barriers to flow, restore aquatic and riparian habitat and reconnect 48 miles of the Gila River.  
**\$150,000**

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

**Willow Creek Habitat Restoration (NM)**  
Restore stream morphology and function in Willow Creek to benefit Gila trout. Project will increase riparian cover and improve the stability of the stream and floodplain by utilizing native sourced materials that improve riparian and stream conditions.  
**\$100,000**



**NEW YORK****Academy of Natural Sciences of Drexel University****Delaware River Restoration Fund Project Impact Assessments for Phase 2 – ANS Modeling (DE, NJ, NY, PA)**

Deploy novel, high-resolution modeling techniques to quantify the positive impact of DRWI-associated restoration projects. Project will collaborate with the FieldDoc development team to develop and implement a series of Application Program Interfaces that enable DRWI grantees to run geospatial queries on project areas and model annual pollutant load reductions of nitrogen, phosphorus and sediment reduced as a result of project implementation.

**\$212,751**

**Buffalo Niagara Waterkeeper****Removing Brook Trout Passage Barrier and Restoring Stream Habitat in the Upper Tonawanda Creek (NY)**

Address impairments to habitat for native and naturalized Eastern Brook Trout and to improve the conditions of the surrounding riparian forest corridor by installing riparian plantings within the floodplain, replacing an undersized and degraded culvert with a climate-adaptive culvert and installing stream grade controls. Project will restore passage and expanded spawning habitat for brook trout and other aquatic species and enhance 3.7 miles of riparian habitat.

**\$256,455**

**Buffalo Niagara Waterkeeper****Designing a Buffalo Creek Floodplain Reconnection in the Town of West Seneca (NY)**

Provide technical oversight and coordination for analysis, field study and preliminary design of a reconnected floodplain on Buffalo Creek in West Seneca, New York, upstream of the flood-prone Lexington Green community, to mitigate flooding, improve resiliency throughout the community and downstream, and provide beneficial habitat for native species. Project will use nature-based solutions to mitigate flooding while providing for greater resiliency of the waterway, community and native habitat.

**\$115,347**

**Canaan Valley Institute****Coordinating Eastern Brook Trout Joint Venture Strategies and Goals (multiple states)**

Continue the activities of the Eastern Brook Trout Joint Venture in the historic range of the species. Project will refine the strategic objectives and key conservation priorities of the Eastern Brook Trout Joint Venture using the results of the recently completed status assessment of wild brook trout at the catchment scale.

**\$74,999**

**Catskill Mountainkeeper****Protecting Eastern Brook Trout Habitat through Invasive Management in the Beaverkill Valley (NY)**

Leverage a unique partnership of state, local and academic stakeholders to employ research-based best management practices and implement novel eDNA tools to combat hemlock woolly adelgid forest pest and maintain trout habitat and recreation opportunities at a popular public access site in the Beaverkill Valley. Project will develop tools that represent a tremendous gain in the effort to control hemlock woolly adelgid and will be transferable to other terrestrial invasive species programs.

**\$75,000**

**Cornell Cooperative Extension of Suffolk County****Marine Meadows Eelgrass Restoration for Long Island Sound (NY)**

Restore eelgrass, build public awareness and engage volunteers in restoration in the waters of Long Island Sound along eastern Long Island, New York. Project will plant eelgrass marine meadows to reduce wave action, stabilize the sea floor and trap sediment to maintain the integrity of local shorelines and improve water quality.

**\$293,122**

**Cornell Cooperative Extension of Suffolk County****New York Fleet Wide Electronic Vessel Trip Reporting and Education Initiative**

Execute an electronic reporting education program for New York commercial fishermen to raise awareness and knowledge of the existing “eTrips” and “Fish Online” electronic reporting programs. Project will engage 240 commercial fishermen through outreach and education to become proficient in the submission of electronic vessel trip reports, enhancing the speed and quality of fisheries dependent data.

**\$98,087**

**Delaware River Basin Commission****Water Management Studies to Inform Basin-wide Resource Planning (DE, NJ, NY, PA)**

Advance research in water management through completion of three studies focusing on water quality, contaminants of emerging concern and future water availability. Project will be used for planning efforts including consideration of future water supply projects, wastewater assimilative capacity, evaluation of pass-by flows, conservation releases, consumptive use mitigation triggers, freshwater flow needs to address sea-level rise and potential flow targets.

**\$499,126**

**Long Island Community Foundation****Delivery of the Long Island Sound Community Stewardship Fund Program – III (CT, NY)**

Deliver the Long Island Sound Stewardship Fund of the Long Island Sound Funders Collaborative (LISFC) in the Long Island Sound Study boundaries of Connecticut and New York. Project will enhance the partnership between LISFC and the U.S. Environmental Protection Agency around the common mission of restoring and protecting the health and living resources of the Sound based upon the Long Island Sound Comprehensive Conservation and Management Plan.

**\$100,000**

**Manomet****Managing American Oystercatchers and Minimizing Coastal Engineering Impacts Along the Atlantic Coast (multiple states)**

Coordinate the American oystercatcher recovery initiative, implement best management practices for disturbance and predation management along the U.S. Atlantic Coast and Gulf Coast of Florida and develop long-term improvements in coastal engineering protocols to restore habitats critical to focal shorebird species. Project will support the goals of the Atlantic Flyway Business Plan by creating a framework for long-term protection, restoration and creation of shorebird habitat at key sites.

**\$189,999**

**National Audubon Society****Avian Monitoring and Evaluation for the Sustain our Great Lakes Program (multiple states)**

Assist in monitoring NFWF’s impact on migratory shorebirds, waterfowl and marsh-nesting birds for NFWF’s Sustain our Great Lakes Program.

**\$484,097**

**National Audubon Society****Improving Forest Management to Benefit Birds in Upper Allegheny and Sinnemahoning Watersheds (NY, PA)**

Scale up previous efforts in the Sinnemahoning and Upper Allegheny watersheds of Pennsylvania and New York to implement strategies that improve habitat in large forest blocks. Project will educate 1,500 landowners about forest management, connect Audubon-trained foresters with 20 of those landowners, provide financial assistance to loggers doing cost-prohibitive harvests and restore 500 acres of young and mature forest habitat for golden-winged warbler, cerulean warbler and wood thrush.

**\$197,389**

**New York City Department of Parks and Recreation****Advancing Urban Wetland and Watershed Conservation through Stewardship (NY)**

Expand the New York City Department of Parks and Recreation Super Steward/Shorekeeper network. Project will care for at least 6 acres of natural area, as well as street trees and rain gardens in six priority watersheds in the New York-New Jersey Harbor Estuary and Long Island Sound.

**\$47,667**

**Rutgers, The State University of New Jersey Using Whole-Room Ultraviolet Light to Reduce Impact of White-Nose Syndrome (MI, NJ, NY)**

Test the efficacy of using whole-room ultraviolet (UV) light treatment on the fungus that causes white-nose syndrome in 10 mines that host hibernating populations of little brown bats in Michigan, New Jersey and New York. Project will test the ability of commercially available technology to benefit bats by killing or slowing growth of the fungus in summer, when bats are not present.

**\$268,661**

**Sullivan County****Neversink Watershed Management Plan (NY)**

Develop a Neversink Watershed Management Plan, hold a citizen science event and develop a walking trail along a section of the O&W Rail Trail in the Neversink Watershed, New York. Project will emphasize the community benefits of management, protection and on-the-ground restoration projects to ensure the necessary broad support from elected officials, landowners, businesses and other watershed stakeholders.

**\$500,000**

**Tioga County Soil and Water Conservation District of New York****Expanding Nutrient Management Across the Headwaters of the Chesapeake Bay (NY, PA)**

Improve water quality across agricultural and urban landscapes within the Headwaters of the Chesapeake Bay watershed in New York and Pennsylvania. Project will develop agricultural nutrient management plans to improve nitrogen and phosphorous management on farmland and urban nutrient management plans to minimize adverse environmental effects.

**\$500,000**

**Tioga County Soil and Water Conservation District of New York****Watershed Approach to Stream Corridor Restoration (NY, PA)**

Address water quality, stormwater retention, habitat restoration and watershed resiliency on a small subwatershed scale. Project will provide citizen stewardship opportunities and result in 57,439 pounds of sediment, 28 pounds phosphorus and 177 pounds of nitrogen being avoided annually.

**\$500,000**

**Tioga County Soil and Water Conservation District of New York****Expanding Partnerships and Building Capacity in the Chemung River Subbasin (NY)**

Build capacity to accelerate implementation of water improvement projects in the Upper Susquehanna River Watershed. Project will build partnership capacity by supporting partners' work and assisting them with the development of a strategic plan.

**\$50,000**

**Town of Brookhaven****Developing a Restoration Design for Degraded Saltmarshes of Southern Mastic Beach (NY)**

Develop final designs to restore 147 acres of degraded saltmarsh in Mastic Beach, New York, back to a natural floodplain to reduce flooding to neighboring communities and increase natural habitats and ecological diversity. Project will finalize plans and obtain all permits to remove a coastal road and create new habitats to reduce flooding, remove invasive plants and replant with native species, and communicate predicted sea-level flooding to Mastic residents.

**\$400,000**

**Trout Unlimited****Replacing Culvert to Reopen Brook Trout Habitat in Wylie Brook Watershed (NY)**

Replace an undersized culvert in Coventry, New York that is blocking trout passage. Project will open 2.8 miles of high quality habitat, expanding the brook trout stronghold.

**\$140,566**

**Trout Unlimited****Willowemoc Trout Habitat Improvement (NY)**

Implement larger scale stream restoration projects to enhance fish and wildlife habitat, improve water quality, help with flood mitigation and contribute to the health of the fisheries in the watershed. Project will complement ongoing and focused efforts to expand and secure native and wild trout strongholds, completing restoration activities targeting channel instability, loss of floodplain connectivity and degradation of instream habitat in these important trout waters.

**\$221,692**

**Virginia Polytechnic Institute and State University****Preventing Human Disturbance of Atlantic Flyway Shorebirds – III (multiple states)**

Address the threat of disturbance to red knot, American oystercatcher and whimbrel by implementing Community Based Social Marketing strategies for human disturbance reduction, developing a shorebird disturbance reduction toolkit for land managers and disseminating the results throughout the Atlantic Flyway shorebird network. Project will develop scalable conservation strategies that can be applied to change human behavior and improve shorebird survival and reproductive success.

**\$189,965**

**NORTH CAROLINA****Blue Ridge Resource Conservation and Development Council****Restoring the Bakersville Creekwalk with Natural Design and Native Vegetation (NC)**

Restore and stabilize a 900 linear foot section along the right descending bank and a 1400 linear feet section along the left descending bank of Cane Creek using natural channel design methods and native vegetation plantings. Project will reduce pollution impacts due to stormwater runoff and associated sedimentation, and restoration of stream corridors will provide important habitat during fish and wildlife migrations.

**\$45,000**

**Canaan Valley Institute****Coordinating Eastern Brook Trout Joint Venture Strategies and Goals (multiple states)**

Continue the activities of the Eastern Brook Trout Joint Venture in the historic range of the species. Project will refine the strategic objectives and key conservation priorities of the Eastern Brook Trout Joint Venture using the results of the recently completed status assessment of wild brook trout at the catchment scale.

**\$74,999**

**City of New Bern****Creating a Resiliency and Hazard Mitigation Plan for the City of New Bern (NC)**

Create a replicable city-wide Resiliency and Hazard Mitigation Plan, identify priority restoration sites, develop preliminary and 50% design, and work directly with stakeholders to meet the City's restoration and community resilience goals based on the results of its ongoing community capacity building and planning project. Project will analyze and implement sustainable nature-based solutions that will enable both its manmade and natural environments to be more resilient.

**\$150,000**

**Manomet****Managing American Oystercatchers and Minimizing Coastal Engineering Impacts Along the Atlantic Coast (multiple states)**

Coordinate the American oystercatcher recovery initiative, implement best management practices for disturbance and predation management along the U.S. Atlantic Coast and Gulf Coast of Florida and develop long-term improvements in coastal engineering protocols to restore habitats critical to focal shorebird species. Project will support the goals of the Atlantic Flyway Business Plan by creating a framework for long-term protection, restoration and creation of shorebird habitat at key sites.

**\$189,999**

**National Wildlife Federation****Expanding Longleaf Pine Restoration and Prescribed Fire Delivery in the North Carolina Sandhills**

Advance longleaf pine planting, prescribed burning and forest thinning on private lands within the Sandhills region of North Carolina, which will benefit longleaf pine and grassland adapted bird species, such as Bachman's sparrow and northern bobwhite. Project will engage 2,000 citizens through a fire festival, as well as 300 landowners through the North Carolina Sandhills Prescribed Burn Association and other outreach efforts to restore and enhance more than 8,600 acres of longleaf pine habitat.

**\$350,000**

**North Carolina Coastal Land Trust****Cape Fear Bottomlands Conservation (NC)**

North Carolina Coastal Land Trust will enhance local water quality and improve benthic and aquatic resources through the conservation of a 1,093 acre property of relatively pristine riverine habitat along 3.5 miles of the Cape Fear River and almost 1.5 miles along Indian Creek, a tributary to the Cape Fear River. Project will expand recreational access as a public gameland and potential ecotourism opportunities in Indian Creek.

**\$1,460,597**

**North Carolina State University****Expanding Prescribed Fire Delivery to Restore Southeast Forests (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 landowners, including underserved landowners and fire practitioners through technical assistance, training and outreach to increase the use of prescribed fire.

**\$180,000**

**Southeastern Association of Fish and Wildlife Agencies****Planning for Coastal Resilience through an Innovative Design Approach to Capacity Building (GA, NC, SC)**

Identify, assess and build regional teams to address hydrologic connectivity threats resulting from inadequate culvert structures in tidal systems. Project will focus on surveying, assessing and prioritizing sites with key regional partners from diverse backgrounds and aims to build a community of practice in each region to further aquatic conservation and community resiliency.

**\$200,000**

**The Longleaf Alliance****Coordinating Local Implementation Team Capacity and Landowner Technical Assistance and Outreach (multiple states) - V**

Improve and sustain coordination and exchange of information among 18 multi-partner local implementation teams that organize, plan and deliver conservation actions to restore and enhance the longleaf pine ecosystem. Project will support strategic on-the-ground restoration through conservation planning, as well as tracking and communication of longleaf pine restoration accomplishments.

**\$250,000**

**The Nature Conservancy****Restoring Longleaf Pine and At-Risk Species Habitat in the Cape Fear Arch Region (NC)**

Increase prescribed burning of longleaf pine habitat, build public support for longleaf conservation through the Fire in the Pines festival and mentor private landowners on longleaf pine restoration in eastern North Carolina. Project will establish 160 acres of longleaf pine, complete controlled burns on 22,554 acres and improve management of an additional 1,099 acres of longleaf pine habitat, benefiting red-cockaded woodpecker and Bachman's sparrow.

**\$299,942**

**Town of Nags Head****Developing a Head Estuarine Shoreline Management Plan for the Town of Nags Head (NC)**

Address the estuarine shoreline management in the Town of Nags Head while balancing land use, ecosystem health, public health and recreational opportunities. Project will prioritize shoreline management opportunities through a biogeographical inventory of existing shorelines, historical changes and impacts; identify shoreline best management practices, uses and policy; and explore regulatory issues to consider the impacts of future hazards on the estuarine system, such as sea level rise.

**\$75,000**

**Town of Navassa****Tidal Wetland Conservation at Navassa Waterfront Park (NC)**

Secure approximately 50 acres of tidal wetland for preservation through a conservation easement, while the remaining acreage will be used for a community park or public space and access to the bordering waterways. Project will conserve two parcels totaling 71 acres located approximately 0.3 miles south of Main Street in Navassa, North Carolina.

**\$1,650,591**

**Town of Navassa****Navassa Stormwater and Riparian Restoration (NC)**

Develop a comprehensive stormwater management plan incorporating both stormwater best management practices and the conservation and restoration of riparian wetlands and buffers for the Town of Navassa. Project will include removal of historic fill and debris; re-grading of original contours; planting with characteristic riparian hardwood seedlings; restoration of floodplain benches; and riparian buffer plantings.

**\$270,450**

**Town of Navassa****Indian Creek Natural Resource Restoration and Conservation (NC)**

Restore, enhance and preserve several types of habitats endemic to the Lower Cape Fear region along 1.75 miles of Indian Creek, a tributary of the Cape Fear River. Project will protect over 142 acres of high-quality tidal freshwater marsh and tidal cypress-gum swamp and 40 acres of 100-foot buffers along Indian Creek and Moll's Branch through a conservation easement.

**\$2,423,472**

**Town of Navassa****Moze Heritage Site Tidal Restoration (NC)**

Enhance riverine swamp forest along the northeastern portion of the Moze Heritage Site and enhance and preserve high marsh via the rehabilitation of historic rice field dikes. Project will result in the enhancement, restoration and/or conservation of 40 acres on the larger 300-acre site.

**\$241,500**

**Virginia Polytechnic Institute and State University****Preventing Human Disturbance of Atlantic Flyway Shorebirds – III (multiple states)**

Address the threat of disturbance to red knot, American oystercatcher and whimbrel by implementing Community Based Social Marketing strategies for human disturbance reduction, developing a shorebird disturbance reduction toolkit for land managers and disseminating the results throughout the Atlantic Flyway shorebird network. Project will develop scalable conservation strategies that can be applied to change human behavior and improve shorebird survival and reproductive success.

**\$189,965**



## NORTH DAKOTA

### American Bird Conservancy

Providing Technical Assistance for Conservation Management on Private Working Lands (MT, ND, SD, WY)  
Provide technical assistance to promote healthy grassland conservation to benefit grassland birds while meeting the economic bottom line for private landowners. Project will result in improved management on 6,500 acres through improved grazing rotations and fencing and water infrastructure and restore 350 acres by re-seeding annual cropland with native perennial grasses and forbs and 1,920 acres by removing windmills.  
**\$345,588**

### Ducks Unlimited

Restoring Habitat through the Northern Grasslands Restoration Incentives Program (MT, ND, SD, WY)  
Provide an additional set of conservation options for producers throughout the Northern Great Plains who provide habitat for declining grassland birds. Project will restore 2,000 acres of grassland habitat and place 16,000 acres under improved management.  
**\$128,533**

### North Dakota Natural Resources Trust

Reintroducing Dakota Skippers in North Dakota to Bolster Native Populations (ND)

Increase Dakota skipper populations by reintroducing individuals in North Dakota from populations in the Minnesota Zoo. Project will collect female Dakota skippers to create the world's first insurance population for North Dakota-derived Dakota skippers for reintroduction.  
**\$50,000**

## OHIO

### American Farmland Trust

Advancing Adoption of Regenerative Agriculture and Soil Health Practices (IN, OH)  
Build models of farmer engagement, benchmarking of farm practices, development of continuous improvement plans and implementation of improved soil health management practices in Ohio and Indiana. Project will develop 50 Best Management Practices recommendations to improve 15,000 acres of private working lands.  
**\$202,323**

### Ohio Department of Natural Resources

Acquiring Land for Inclusion into the Appalachian Hills Wildlife Area (OH)  
Acquire at least 40,596 acres of American Electric Power's ReCreation Lands. Project will help the state of Ohio to permanently protect forest and grassland habitat that supports viable populations of forest and upland wildlife species while providing Ohio and non-Ohio citizens with outdoor recreation opportunities.  
**\$535,000**

### National Audubon Society

Avian Monitoring and Evaluation for the Sustain our Great Lakes Program (multiple states)  
Assist in monitoring NFWF's impact on migratory shorebirds, waterfowl and marsh-nesting birds for NFWF's Sustain our Great Lakes Program.  
**\$484,097**

### Pheasants Forever

Accelerating Assistance to Landowners to Support Pollinators on Working Lands (OH)  
Provide technical assistance to private landowners to accelerate adoption of pollinator conservation practices in Ohio by hiring a Farm Bill biologist and sustaining a coordinating wildlife biologist. Project will restore 500 acres, improve 2,000 acres, develop 125 plans, host 50 workshops and reach 1,200 people.  
**\$300,000**

### Pollinator Partnership

Project Wingspan: Enhancing Agricultural Lands for Pollinators (IL, IN, MI, OH)  
Enhance and increase connectivity of pollinator habitat on Midwestern private agricultural lands and public conservation lands by providing technical assistance to landowners, collecting and distributing seeds and propagating seedlings. Project will collect 55 pounds of milkweed seeds, propagate 3,000 milkweed seedlings, host 14 events to engage 2,000 people and prescribe management actions to improve 2,000 acres of habitat.  
**\$99,570**

### Put-in-Bay Township Park District

Scheeff East Point Preserve Shoreline Stabilization through Scheeff East Point Restoration (OH)  
Complete engineering and permitting of natural shoreline restoration techniques at Scheeff East Point Preserve. Project will create engineering plans for the removal of the foreign debris, the replacement of this debris with bioengineered natural materials, as well as potentially the construction of an offshore reef with natural materials and techniques to further protect the shoreline from erosive wave action while also creating space for in lake aquatic habitat for native mussels and fish.  
**\$76,250**

### Sand County Foundation

Midpoint Evaluation of NFWF's Great Lakes Business Plan (multiple states)  
Evaluate the success to date of the Great Lakes Business Plan in achieving its dedicated conservation objectives in the areas of streams, coastal wetlands, and water quality. Project will include a review of the ten sub-objectives within these three priority areas, as well as of the sixteen focus areas expected to achieve multiple overlapping outcomes.  
**\$195,526**

### The Nature Conservancy

Restoring Habitat along the Cuyahoga River and Reducing Stormwater Runoff through Tree Planting (OH)  
Recruit and manage volunteers to implement a community forest restoration on 40 acres along the headwaters of the Cuyahoga River to reduce stormwater runoff and improve habitat. Project will control invasive species and capture 543,000 gallons of stormwater annually, stabilize soils, filter pollutants and connect to larger forest habitat by planting 5,200 trees.  
**\$278,000**

### Western Reserve Land Conservancy

Restoring Vacant Lots to Urban Green Space (OH)  
Create a public gathering space with a green infrastructure outdoor classroom from a paved, impervious surface to improve water quality in Lake Erie by removing hundreds of thousands of gallons of stormwater runoff annually, and to create more biodiverse habitat and a restored tree canopy in the urban core. Project will restore vacant lots in four Cleveland neighborhoods through clean-ups, soil remediation and the planting of 328 native trees as well as other native grasses and perennials.  
**\$309,750**

## OKLAHOMA

### American Bird Conservancy

Priority Bird Habitat Conservation in the West Gulf Coastal Plain/Ouachitas – II (AR, LA, OK, TX)  
Coordinate conservation delivery networks to restore forest and grassland habitats and monitor species response within the West Gulf Coastal Plain/Ouachitas geography of Arkansas, Louisiana, Oklahoma and Texas. Project will provide technical and financial assistance to private landowners to implement conservation practices on 3,000 acres benefiting Bachman's sparrow, prairie warbler and other forest and grassland-dependent bird species.  
**\$213,995**

### North Carolina State University

Expanding Prescribed Fire Delivery to Restore Southeast Forests (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 landowners, including underserved landowners and fire practitioners through technical assistance, training and outreach to increase the use of prescribed fire.  
**\$180,000**

**Pheasants Forever**

Expanding the Audubon Conservation Ranching Program on Private Working Grasslands (KS, OK)

Build upon the success of the Audubon Conservation Ranching Program (ACR) partnership in Oklahoma and expanding ACR technical assistance efforts and resources into Kansas. Project will result in the direct enhancement and protection of 90,000 acres of grassland, soil and water resources in Oklahoma and Kansas, keep viable working lands productive and demonstrate the benefits of wildlife habitat conservation and regenerative grazing practices with participating producers.

**\$200,000**

**The Nature Conservancy**

Increasing Technical Assistance for Grassland Conservation in the Red Hills (KS, OK)

Increase capacity for The Nature Conservancy's Red Hills Initiative, a 10-year community-based conservation effort for the Red Hills landscape of Kansas and Oklahoma that provides a full suite of technical private lands assistance, such as prescribed burn and regenerative grazing plans, as well as assistance with management of invasive species. Project will improve management on 100,000 acres and restore 50,000 acres of private working lands.

**\$250,017**

**OREGON****Crook County Soil and Water Conservation District**

Restoring High Desert Habitat for Elk, Mule Deer and Pronghorn in the Maury Mountains (OR)

Restore high desert migration corridor habitat in the Maury Mountains by treating and removing invasive juniper and grasses and reseeding native fobs and bunchgrasses to increase forage quality and cover habitat for elk, mule deer and pronghorn. Project will work with private landowners to restore or improve 1,300 acres.

**\$73,855**

**Midwater Trawlers Cooperative**

Setting Course for Success: Improving Catch Handling and Electronic Monitoring Data Use (CA, OR, WA)

Improve electronic monitoring catch handling requirements to be more operationally efficient while still supporting catch accountability and expand data use for science in the West Coast groundfish fishery. Project will result in electronic monitoring data being used to benefit stock assessment and management and retain existing electronic monitoring users while addressing the concerns of prospective users.

**\$256,000**

**NatureServe**

Research Support for Management of Pollinator Species (multiple states)

Conduct research to identify priority areas for on-the-ground monarch management actions such as habitat restoration and enrichment as well as to inform regulatory review. Project will map these areas and highlight those that are most used by monarchs, recognizing that monarchs tend to migrate along riparian and wetland corridors.

**\$199,878**

**Oregon Department of Land Conservation and Development Planning for Community and Ecosystem Resilience on the Oregon Coast (OR)**

Engage coastal communities in a formal process to identify specific resilience needs and develop a planning framework to push projects forward to advanced stages of coastal resilience activities in Oregon's estuarine areas. Project will empower coastal communities to plan and implement coastal resilience activities and leverage existing planning frameworks to accomplish broader resiliency goals and restoration priorities in highly vulnerable estuaries.

**\$250,152**

**Port of Garibaldi**

Recycling of Derelict Fishing Gear in Tillamook Bay (OR)

Maintain an existing bin for derelict fishing gear at the Port of Garibaldi. Project will intercept and haul about 25 tons of fishing gear for recycling or conversion to energy.

**\$11,184**

**Portland Audubon**

Improving Bird Safety in the Portland Metropolitan Area (OR, WA)

Reduce various detrimental urban impacts to birds in Oregon and Washington. Project will: 1) expand the Bird Safe/Dark Skies program; 2) educate architects and design professionals about bird-safe design; 3) coordinate with the City of Portland and Multnomah County to embed bird-friendly building standards into green building plans; 4) develop window demonstration projects; 5) organize public events; and 6) integrate bird-safe elements into habitat restoration projects.

**\$50,000**

**The Mule Deer Foundation**

Increasing Cross-Jurisdictional Coordination in Sagebrush Habitat (multiple states)

Increase cross-jurisdictional coordination with state agencies and other partners to implement projects on big game migration corridors and in sage-grouse core habitats. Project will improve habitat through treating invasive species, conservation easements, mesic and wet meadow habitat restoration, removing or improving fencing and restoring 3,000 acres of shrubland habitat.

**\$395,012**

**Trout Unlimited**

Enhancing Instream Flow in the Grande Ronde Basin (OR)

Identify, prioritize and develop water transactions in the Grande Ronde Basin of Oregon. Project will restore flow to the Wallowa and Catherine Creek subbasins to improve habitat critical to the recovery of endangered salmonids throughout the region.

**\$935,477**

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

Rehabilitation of Upper Trout Creek to Benefit Mid-Columbia River Steelhead (OR)

Restore and enhance stream habitat in Upper Trout Creek to benefit Mid-Columbia River steelhead. Project will restore 15.5 miles of stream through large wood placement, improve 3 miles of floodplain connectivity and plant native vegetation along 8 miles of riparian habitat.

**\$63,822**

**Western Rivers Conservancy**

Recovering a Strategic Steelhead Sanctuary on the Umatilla River (OR)

Acquire an 820-acre property and its water rights, including 2 miles of Umatilla River and the lower mile of Birch Creek to benefit steelhead. Project will place a conservation easement on another 165 acres that encompasses the floodplain and convey the property's fee to the Confederated Tribes of the Umatilla Indian Reservation.

**\$30,000**

**PENNSYLVANIA****Academy of Natural Sciences of Drexel University**

Assessment of Northern Snakehead Feeding in the Delaware River Estuary (NJ, PA)

Assess the feeding impacts of Northern Snakehead on alosines and species of management concern in the Delaware River Estuary through site surveys by boat electrofishing. Project will guide future management and predict potential impacts for species of management concern such as striped bass, American eel, American shad and herring species.

**\$75,046**

**Academy of Natural Sciences of Drexel University**

Delaware River Restoration Fund Project Impact Assessments – II

Deploy novel, high-resolution modeling techniques to quantify the positive impact of DRWI-associated restoration projects. Project will develop and implement a series of Application Program Interfaces that enable DRWI grantees to run geospatial queries on project areas and model annual pollutant load reductions of nitrogen, phosphorus and sediment reduced.

**\$212,751**

### **Academy of Natural Sciences of Drexel University**

#### **Delaware River Restoration Fund Project Impact Assessments for Phase 2 (NJ, PA)**

Conduct preliminary selection and design of monitoring plans for a subset of restoration projects funded under the Delaware River Restoration Fund. Project assessments will include monitoring water chemistry, habitat, macroinvertebrates, fish and algae at these sites as they inform its success in improving stream ecosystems.

**\$280,956**

### **Allegheny County Parks Foundation**

#### **North Park Riparian Buffer Restoration and Streambank Rehabilitation (PA)**

Restore 2.1 acres of riparian buffer and 2,000 linear feet of streambank of North Fork Pine Creek in Allegheny County to mitigate stormwater impacts and improve soil health, water and air quality while providing food and habitat for wildlife. Project will stabilize eroded stream bank, remove invasive species and plant native species of trees, shrubs and meadow mix while providing monitoring and engagement opportunities.

**\$49,751**

### **Alliance for the Chesapeake Bay**

#### **Leveraging New Corporate Clean Water Partnerships in Lancaster and Lebanon Counties (PA)**

Engage corporate partners to install agricultural best management practices on farms within Lancaster and Lebanon counties, Pennsylvania. Project will support dairy farmers in reducing nutrient and sediment pollution from their work.

**\$500,000**

### **American Bird Conservancy**

#### **Restoring Dynamic Forest Structure for Priority Birds in the Delaware River Watershed (PA) - V**

Develop and implement a comprehensive forest management strategy targeting long-term availability of diverse forest age classes and structural complexity benefiting the entire reproductive cycle of golden-winged warbler, cerulean warbler and wood thrush. Project will draft comprehensive plans for three new Dynamic Forest Restoration Blocks and will continue to implement previously planned management and avian-response monitoring activities.

**\$749,999**

### **American Rivers**

#### **Paper Mill Dam Removal and Restoration (PA)**

Remove the Paper Mill Dam and restore the adjacent riparian corridor in Reading, Pennsylvania. Project will restore river flows and natural processes in Cacoosing Creek, benefit local fisheries, improve recreation, eliminate outdated infrastructure, remove a public safety hazard and restore native riparian vegetation.

**\$154,314**

### **American Rivers**

#### **Assessing Opportunities for Mill Creek Riparian, Floodplain and Stream Restoration (PA)**

Identify viable opportunities for riparian and floodplain restoration and dam removal in Mill Creek in Lancaster, Pennsylvania. Project will look at the causes of impairment and sources of sedimentation to identify how dam removal and floodplain restoration work could align with current stormwater management practices in order to holistically restore watersheds and reduce sediment pollution to the Chesapeake Bay and its tributary rivers and streams.

**\$49,955**

### **Audubon Society of Western Pennsylvania**

#### **Habitat Restoration and Enhancement for Pollinators in Pennsylvania**

Support monarch butterflies and other pollinators in Pennsylvania by planting flowering trees and shrubs, cultivating milkweed seedlings, conducting invasive species control, adjusting mowing practices and monitoring bumble bees. Project will restore 145 acres, improve 130 acres, propagate 6,800 seedlings and reach 1,000 people on private agricultural lands and public nature reserves.

**\$91,703**

### **Audubon Society of Western Pennsylvania**

#### **Restoring and Improving Rights-of-Way for Pollinators (PA)**

Restore and improve over 150 acres of rights-of-way in Pennsylvania to provide habitat for monarch butterflies and other pollinators by implementing invasive species control, planting native species and monitoring bumble bees. Project will restore 95 acres, improve 56 acres and propagate 4,400 milkweed seedlings.

**\$99,280**

### **Blair County Conservation District**

#### **Connecting Urban and Agricultural Sectors for Accelerated Water Quality Improvements (PA)**

Install stream restoration projects, riparian buffers and green infrastructure through municipality partnerships, and partner with farmers to stabilize farm lanes and in-field erosion/scouring sites and host workshops to encourage the adoption of these practices. Project will accelerate water quality improvements by networking with existing and new partners to install sound water quality improvements in Blair County - the Beaverdam, Frankstown and Little Juniata watersheds.

**\$664,428**

### **Bradford County Conservation District**

#### **Bradford County Accelerated Watershed Implementation Plan Development – II (PA)**

Accelerate planning of Bradford County's Watershed Implementation Plan in the areas of stream rehabilitation, agricultural management, stream crossing replacement and forestry. Project will create designs for stream rehabilitation and crossings, comprehensive nutrient management, riparian buffer installation and reforestation.

**\$49,995**

### **Brandywine Conservancy**

#### **and Museum of Art Hoffman's Mill Dam Removal (PA)**

Improve aquatic habitat and restore free-flowing waters across the full width of Brandywine Creek. Project will build upon dam removal efforts downstream in the State of Delaware and contribute to efforts to restore migratory shad to the Brandywine after a 200-year absence.

**\$151,723**

### **Brandywine Red Clay Alliance**

#### **Developing a Watershed Restoration Plan for the Red Clay Creek Watershed (PA)**

Develop a watershed restoration plan for the Lower West Branch Red Clay Creek Watershed. Project will address impairments to the stream and riparian habitats to improve water quality and restore aquatic and riparian buffer habitats, acting as a road map to prioritize and aggregate best management practices including floodplain reconnections, stream restoration projects and stormwater management retrofits.

**\$78,502**

### **Canaan Valley Institute**

#### **Coordinating Eastern Brook Trout Joint Venture Strategies and Goals (multiple states)**

Continue the activities of the Eastern Brook Trout Joint Venture in the historic range of the species. Project will refine the strategic objectives and key conservation priorities of the Eastern Brook Trout Joint Venture using the results of the recently completed status assessment of wild brook trout at the catchment scale.

**\$74,999**

### **Conservation Foundation**

#### **of Lancaster County**

#### **Lancaster Clean Water Partners Collaborating and Scaling Up Stormwater Management (PA)**

Coordinate stormwater management projects in priority catchments where Lancaster County's agriculture and stormwater land uses intersect in unique ways. Project will accelerate efforts to implement the Countywide Action Plan, advancing conservation education, sustaining outreach, delisting up to half-mile segments of stream in priority catchments and extending the impact of the Lancaster Clean Water Partners' collaborative effort.

**\$969,326**



**Cumberland County Commissioners****Clean Water Cumberland Scaling Up Implementation in Cumberland County (PA)**

Provide infrastructure to bundle contracting of agricultural best management practices across several priority farms. Project will formalize and enhance capacity of Clean Water Cumberland and create impactful improvements to water quality in Cumberland County and downstream.

**\$500,000**

**Delaware River Basin Commission****Water Management Studies to Inform Basin-wide Resource Planning (DE, NJ, NY, PA)**

Advance research in water management through completion of three studies focusing on water quality, contaminants of emerging concern and future water availability. Project will address future water supply projects, wastewater assimilative capacity, evaluation of pass-by flows, conservation releases, consumptive use mitigation triggers, freshwater flow needs to address sea-level rise and potential flow targets.

**\$499,126**

**Ducks Unlimited****John Heinz National Wildlife Refuge Henderson Marsh Restoration (PA)**

Restore the hydrology of 150 acres of tidal marsh habitat in the Henderson Marsh at John Heinz National Wildlife Refuge. Project will improve marsh function to reduce flooding in local underserved communities, enhance and expand recreational opportunities for kayaking and fishing and increase public access for environmental education of diverse audiences.

**\$750,000**

**Franklin County Conservation District  
Developing a Watershed Action Plan for Franklin County (PA)**

Develop a Priority Watershed Action Plan for Franklin County to determine sources of nutrients and sediment in seven subwatersheds in Franklin County, Pennsylvania. Project will identify best management practices for implementation to assist with the pollution reduction targets and water quality improvement goals identified in Franklin's Countywide Action Plan.

**\$50,000**

**Glenolden Borough****Improving Wildlife and Aquatic Habitat in Glenolden Community Park (PA)**

Stabilize 550 linear feet of streambank, establish a riparian buffer and redirect flows to a wetland in Glenolden Community Park, Philadelphia. Project will become a feature of the park that provides valuable water quality and habitat improvements in the area and is made possible through a robust partnership between the Borough and eight other municipalities as well as several nonprofit organizations and county agencies.

**\$175,000**

**John Bartram Association****A Riverfront Classroom on the Schuylkill: Community Engagement in Southwest Philadelphia (PA)**

Construct a new watershed education facility to complement the forthcoming freshwater mussel hatchery at Bartram's Garden with the Partnership for the Delaware Estuary in Philadelphia, Pennsylvania. Project will provide unparalleled hands-on opportunities for public and K–12 watershed education, focusing on community access and youth-driven, collaborative stewardship.

**\$250,000**

**Lititz Borough****Designing a Stormwater Treatment Plan in Lititz Borough (PA)**

Design a stormwater treatment plan for the Lititz Borough Regional Stormwater Facility to assist in managing existing stormwater runoff. Project will determine the best method for achieving large stormwater treatment, volume control and water quality benefits in the project area and in the catchment.

**\$20,000**

**Lititz Run Watershed Alliance****Designing Floodplain Restoration in Santo Domingo Creek (PA)**

Conduct site assessments and design for a floodplain restoration project along 2,500 feet of the Santo Domingo Creek within the Lititz Run priority subwatershed in Lancaster, Pennsylvania. Project will include a geomorphic site assessment, detailed topographic survey and evaluation of bank erosion rates, culminating in a design including a report and detailed design drawings.

**\$50,000**

**Manheim Township****Restoring Priority Stream in Manheim Township (PA)**

Restore and improve the overall stream health and function of local and regional bodies of water in Manheim Township. Project will restore the degraded stream channel along approximately 1,507 linear feet of an unnamed tributary to the Conestoga River, 1,172 linear feet of Landis Run and 1,567 linear feet of Bachman Run; providing pollutant load reductions of approximately 190,560 pounds of sediment, 217 pounds of nitrogen and 100 pounds of phosphorus annually.

**\$457,500**

**National Audubon Society****Avian Monitoring and Evaluation for the Sustain our Great Lakes Program (multiple states)**

Assist in monitoring NFWF's impact on migratory shorebirds, waterfowl and marsh-nesting birds for NFWF's Sustain our Great Lakes Program.

**\$484,097**

**National Audubon Society****The Philadelphia Pollinator Project: Working at the Intersection of Community and Conservation (PA)**

Improve urban habitat conditions for year-round and migratory pollinators and birds, improve access to and condition of open spaces for underserved Philadelphia neighborhoods, and support monitoring and data collection efforts in Philadelphia County, Pennsylvania. Project will create a framework for a community-led pollinator habitat network in Philadelphia, deepening community engagement, sparking community action through volunteerism and creating employment opportunities for local youth.

**\$460,809**

**National Audubon Society****Improving Forest Management to Benefit Birds in Upper Allegheny and Sinnemahoning Watersheds (NY, PA)**

Scale up previous efforts in the Sinnemahoning and Upper Allegheny watersheds of Pennsylvania and New York to implement strategies that improve habitat in large forest blocks. Project will educate 1,500 landowners about forest management, connect Audubon-trained foresters with 20 of those landowners, provide financial assistance to loggers doing cost-prohibitive harvests and restore 500 acres of young and mature forest habitat for golden-winged warbler, cerulean warbler and wood thrush.

**\$197,389**

**National Wild Turkey Federation****Expanding Pollinator Habitat for Monarch Butterflies and Pollinators at Letterkenny Army Depot (PA)**

Increase the quantity and quality of habitat for frosted elfin, regal fritillary and other pollinators at Letterkenny Army Depot in Pennsylvania through mechanical forestry cutting, prescribed burning, herbicide application, disking and planting diverse seed mixes. Project will restore 201 acres from forest to grassland and enhance 1,632 acres.

**\$99,999**

**Partnership for the Delaware Estuary****Developing Propagation and Rearing Methods for Freshwater Mussels in the Lower Delaware River Basin (DE, PA)**

Develop propagation and rearing methods for three rare species of freshwater mussels that inhabit the tidal freshwater zone of the Delaware River Basin. Project will address a key bottleneck in the restoration and damage mitigation for these species and will also contribute to immediate and future water quality goals as progeny produced by the study will be planted into pilot living shoreline projects where they can deliver ecosystem services.

**\$164,002**

**Partnership for the Delaware Estuary****Evaluating Outcomes of Coastal Salt Marsh Intervention Efforts (DE, NJ, PA)**

Develop the Marsh Futures Ecological Mapper system to provide landscape-level evaluation of changes to key salt marsh ecosystem services of proposed habitat-specific restoration efforts. Project will fill a vital evaluation gap in protecting coastal marshes by providing a mechanism to understand how specific intervention efforts can either support or diminish landscape-level ecosystem services of salt marshes with applicability across the Atlantic Coast.

**\$300,000**

**Pasa Sustainable Agriculture****Creating a Regenerative Organic Dairy Industry (PA)**

Integrate dairy farms to an education and peer-to-peer learning network, coordinate regenerative farm business plan processes for dairy farms to regenerate soil and set the farm on a sustainable and profitable pathway, certify dairy farms in the Regenerative Organic Certified standard. Project will work with project partners TeamAg and the Origin Milk Company to pioneer a model of 100% grass-fed dairy that grows soil health, improves water quality and sustains family farms.

**\$997,350**

**Pennsylvania Department****of Conservation and Natural Resources****Creating Healthy Watersheds through Partnerships and Implementation in Flourishing Landscapes (PA)**

Accelerate implementation pace of watershed forestry best management practices like riparian forest buffer, urban forest planting and conservation landscaping implementation through partner-funded outreach, large contract plantings, investments in professional development and creation of experiential learning labs. Project will galvanize Pennsylvania's existing riparian forest buffer and lawn conversion partnerships to elevate their ability to outreach and implement.

**\$1,000,000**

**Pennypack Ecological Restoration Trust****Farmstead Park Green Stormwater Infrastructure – I (PA)**

Improve green stormwater infrastructure and restore habitat at Farmstead Park, transforming a little-used and inaccessible park space into a showcase for several types of green stormwater infrastructure that are appropriate to the unique soils, hydrology and riparian conditions of the area. Project will utilize a cost-effective and targeted approach to improve water quality, flood resilience and enable utilization of the park while also serving to connect the community to the waterway.

**\$345,917**

**Regional Science Consortium****Controlling Invasive Species to Enhance Wetland Habitat at Presque Isle State Park (PA)**

Restore and enhance 400 acres of wetland habitat at Presque Isle State Park through invasive species control, plant propagation, seed bank collections and wildlife monitoring. Project will include: 1) the re-treatment and expanded treatment of invasives; 2) propagation and installation of head-started native plants; 3) plant success assessment; 4) seed bank development and 5) the monitoring of plants, macroinvertebrates, freshwater mussels, fish, amphibians, bats and bird populations.

**\$784,645**

**Ruffed Grouse Society****Increasing Technical Assistance to Implement Management Plans that Improve Habitat on Private Forestland (PA)**

Expand the availability of funding, technical support and coordination capacity for existing forest management plans to overcome barriers to sustainable forest management on public and private lands in the Laurel Highlands and Pennsylvania Wilds landscapes in Pennsylvania. Project will restore 484 acres of young forest habitat to benefit golden-winged warbler and monitor 500 acres using autonomous recording units and point counts to document species response to best management practices.

**\$200,000**

**Salisbury Township****Restoring Floodplain by Addressing Legacy Sediment in Pequea Creek (PA)**

Restore floodplain along approximately 1,427 linear feet of an unnamed tributary to Pequea Creek in Salisbury Township, Lancaster, Pennsylvania. Project will provide water quality benefits, flood reduction, native habitat creation and enhancements and additional ecosystem services to the Pequea Creek Watershed, other downstream waters and ultimately the Chesapeake Bay.

**\$500,000**

**Sand County Foundation****Midpoint Evaluation of NFWF's Great Lakes Business Plan (multiple states)**

Evaluate the success to date of the Great Lakes Business Plan in achieving its dedicated conservation objectives in the areas of streams, coastal wetlands, and water quality. Project will include a review of the ten sub-objectives within these three priority areas, as well as of the sixteen focus areas expected to achieve multiple overlapping outcomes.

**\$195,526**

**Schuylkill Conservation District****Little Mahanoy Creek Headwaters Restoration Plan Development (PA)**

Develop a detailed watershed restoration plan for the headwaters of Little Mahanoy Creek Watershed. Project will provide a blueprint for managing stormwater in the watershed, restoring habitat in the headwaters and improving water quality to protect the unimpaired downstream sections where trout are reproducing naturally.

**\$50,000**

**South Londonderry Township****Stream Stabilization and Riparian Forest Buffer Installation in Killinger Creek (PA)**

Improve water quality and stream health in Killinger Creek by reducing the pollutant loading rates that contribute to existing stream impairments and increasing in-stream and forested habitat for wildlife species. Project will stabilize and restore 1,700 feet of Killinger Creek, plant a 35-foot riparian forest buffer on both streambanks, and educate the community on why these projects are important for clean water.

**\$220,000**

**Stroud Water Research Center****Accelerating Best Management Practice Implementation in Lancaster and Chester Counties (PA)**

Develop comprehensive nutrient management plans for farms in Lancaster and Chester counties. Project will support farmers interested in agricultural best management practices by removing a barrier to implementation and incentivizing the installation of forest buffers.

**\$499,797**

**Stroud Water Research Center****Delaware River Restoration Fund Project Impact Assessments for Phase 2 – Stroud Monitoring (NJ, PA)**

Monitor the impact of Delaware River Restoration Fund field practices on soil health and water quality and impact of farm restoration on stream health at a total of 10 selected project sites. Project will collaborate with the Academy of Natural Sciences in monitoring at nine of these sites.

**\$295,000**

**The Little Conestoga Creek Foundation****Restoring Floodplain to Improve Water Quality in Little Conestoga Creek (PA)**

Implement best management practices to restore floodplain and address nitrogen, phosphorous and sediment in Little Conestoga Creek in Pennsylvania. Project will restore floodplain, reduce flooding, provide habitat creation and restore biodiversity.

**\$440,000**

### **The Pennsylvania Fish and Boat Commission**

#### **Improving Public Access and Recreation in the Pennsylvania Portion of the Delaware River – II**

Improve public fishing and boating access and recreation by providing grants to public entities, including townships, boroughs, municipal and county governments as well as to nonprofit groups for the planning, acquisition, development, expansion and rehabilitation of public boating facilities located in the Pennsylvania portion of the Delaware River Watershed. Project will ensure that boaters and anglers in the Delaware River watershed have safe, clean and updated boating facilities.

**\$400,000**

### **Tioga County Soil and Water Conservation District of New York**

#### **Watershed Approach to Stream Corridor Restoration in the Headwaters of the Chesapeake Bay (NY, PA)**

Assess and implement improvements to address water quality, stormwater retention, habitat restoration and watershed resiliency on a small subwatershed scale. Project will provide citizen stewardship opportunities and result in 57,439 pounds of sediment, 28 pounds phosphorus and 177 pounds of nitrogen being avoided annually within the Upper Susquehanna and Chemung River Watersheds.

**\$500,000**

### **Tioga County Soil and Water Conservation District of New York**

#### **Expanding Nutrient Management Across the Headwaters of the Chesapeake Bay (NY, PA)**

Expand Nutrient Management Planning efforts to improve water quality across agricultural and urban landscapes within the Headwaters of the Chesapeake Bay watershed in New York and Pennsylvania. Project will develop agricultural nutrient management plans to improve nitrogen and phosphorous management on farmland and urban nutrient management plans to minimize adverse environmental effects on high risk and priority urban areas.

**\$500,000**

### **University of Pittsburgh**

#### **Automated Acoustic Monitoring of Focal Bird Species in the Delaware River Watershed (PA)**

Deploy 600 automated acoustic recorders to monitor populations of golden-winged warbler, wood thrush, cerulean warbler and four additional bird species in five dynamic forest restoration blocks located in the Delaware River watershed. Project will analyze the recordings with machine learning species classifiers and expert human listeners, estimate species occupancy and abundance at each site, and develop a handbook and new software interface for partners in the watershed.

**\$162,194**

### **University of Pittsburgh**

#### **Implementing Automated Acoustic Monitoring in the Laurel Highlands and Pennsylvania Wilds (PA)**

Monitor population responses of golden-winged warbler, cerulean warbler and wood thrush in four large forest blocks in the Laurel Highlands and Pennsylvania Wilds focal geographies that are being managed to create a diversity of habitats. Project will place automated acoustic recorders at 500 locations over 3,875 acres in three State Game Lands and in Ohiopyle State Park, to collect an estimated 87,500 hours of observation and develop a standardized monitoring protocol for future efforts.

**\$198,748**

### **Western Pennsylvania Conservancy**

#### **Restoring Habitat for Native Brook Trout by Removing Barriers and Improving Instream Habitat (PA)**

Restore aquatic habitat for eastern brook trout on the Middle Fork of the East Branch of the Clarion River in Pennsylvania by removing barriers to aquatic organism passage, improving instream habitat through the addition of large wood, and stabilizing stream banks and adjacent roadways. Project will replace seven barriers with bridge structures, remove two road-stream crossings and one relic jack dam, and reconstruct the stream channel using Stream Simulation and Design methods.

**\$199,452**

### **Western Pennsylvania Conservancy**

#### **Reconnecting 40 Miles of Habitat for Key Brook Trout Populations in the Middle Youghieny River (PA)**

Restore aquatic connectivity for native eastern brook trout by removing barriers to aquatic organism passage on Dunbar Creek and Ramcat Run, tributaries of the Youghieny River in the Laurel Highlands of Pennsylvania. Project will remove three barriers to fish passage on two streams that will open up 40 miles of high-quality historic habitat, and will conduct 100 new culvert assessments.

**\$199,903**

### **Western Pennsylvania Conservancy**

#### **Assessing and Prioritizing Restoration Actions in the First Fork Sinnemahoning Creek watershed (PA)**

Complete a comprehensive assessment of the First Fork Sinnemahoning Creek watershed to develop prioritized restoration projects for collaborative implementation. Project will develop a framework to implement best management practices aimed towards reducing nutrient and sediment contributions and improving eastern brook trout habitat.

**\$49,559**

### **Western Pennsylvania Conservancy**

#### **Assessment of Pennsylvania Cold-water Streams to Determine the Presence of Native Brook Trout**

Coordinate the sampling of previously unassessed cold-water streams in Pennsylvania for the presence or absence of wild trout so the state can designate qualifying streams with a higher level of protection from development activities. Project will sample at least 1,000 streams across the state and analyze results to determine how many streams can be designated as Class A wild trout streams, the highest level of protection.

**\$63,423**

### **White Clay Watershed Association**

#### **Development of a Targeted Watershed Assessment Report and Restoration Plan in Avondale Borough (PA)**

Identify restoration opportunities that mitigate flooding in Avondale Borough, Pennsylvania while also improving water quality and habitat in the White Clay Creek National Wild and Scenic Watershed. Project will complete a watershed assessment study and develop a comprehensive restoration plan to inform future restoration projects to benefit an at-risk environmental justice community.

**\$75,000**

### **Wildlands Conservancy**

#### **Stream Restoration in the Mud Run Watershed (PA)**

Remove an obsolete dam, stabilize the streambanks and establish new riparian buffer areas at two critical locations in the Mud Run Watershed, Pennsylvania. Project will restore free-flowing conditions, improve habitat and water quality for native trout populations and filter pollutants and nutrients from stormwater runoff from roadways adjacent to the stream through installation of riparian buffer plantings.

**\$75,113**

### **Wildlands Conservancy**

#### **Dam Removal and Streambank Restoration in Durham Township (PA)**

Remove a dam and complete streambank replanting in Durham Township, Pennsylvania. Project will restore 3.5 miles of stream, mitigate streambank erosion, flooding and water quality issues while benefiting key species including American eel, freshwater mussels and native fish species such as brook trout.

**\$105,000**



**Wyoming Valley Sanitary Authority**

**Accelerating Green Infrastructure Implementation in Wyoming Valley (PA)**  
Implement green infrastructure demonstration projects, form a stormwater steering committee, recommend updates to municipal codes and policies to remove implementation barriers, provide education and training for design and assess areas for further opportunities. Project will scale up green infrastructure implementation, build broader public and private sector acceptance, accelerate the rate of water quality improvements and cultivate and enhance partnership and network growth.  
**\$848,440**

**RHODE ISLAND****Cape Cod Commercial Fishermen's Alliance**

**Electronic Monitoring Innovations in the New England Groundfish Fishery (MA, ME, NH, RI)**  
Support the implementation and advancement of electronic monitoring in the New England Groundfish fishery at an operational scale serving as a national example of the third party audit model. Project will reduce the cost of video review, increase fishermen compliance and reduce barriers to entry for interested fishermen through on-deck innovations and advances in artificial intelligence.  
**\$275,437**

**Gulf of Maine Research Institute**

**Maximized Retention Electronic Monitoring the New England Groundfish Fishery (MA, ME, NH, RI)**  
Prepare the maximized retention electronic monitoring program for implementation in the New England groundfish fishery. Project will continue collecting data for fishing year 2021 with a focus on testing catch handling methods for high-volume fishing vessels and collaboratively identify and overcome steps necessary to implement this program through extensive outreach and stakeholder workshops.  
**\$500,000**

**Harbor Light Software**

**Piloting a Rhode Island Volunteer Angler Reporting Application**  
Create a volunteer recreational angler logbook for use on tablets and smart phones to collect recreational data from the angling public and promote its usage among recreational anglers in Rhode Island. Project will explore innovative approaches to encourage and retain fishermen participation in the use of the software to report their fishing efforts, with input from the recreational fishing community in the design of the software and outreach activities to encourage its use.  
**\$126,000**

**Manomet**

**Managing American Oystercatchers and Minimizing Coastal Engineering Impacts Along the Atlantic Coast (multiple states)**  
Coordinate the American oystercatcher recovery initiative, implement best management practices for disturbance and predation management along the U.S. Atlantic Coast and Gulf Coast of Florida and develop long-term improvements in coastal engineering protocols to restore habitats critical to focal shorebird species. Project will support the goals of the Atlantic Flyway Business Plan by creating a framework for long-term protection, restoration and creation of shorebird habitat at key sites.  
**\$189,999**

**Massachusetts Division of Marine Fisheries**

**Developing a Framework for Ropeless Fishing in New England (MA, ME, NH, RI)**  
Characterize the issues and challenges associated with the integration of on-call or ropeless fishing gear technology into New England fisheries. Project will evaluate the issues using semi-structured interviews and workshops with experts in the field, synthesize perspectives and analyze the technical, legal and socioeconomic challenges and opportunities to develop a set of recommendations for further work, including in situ testing and policy development.  
**\$170,861**

**New England Marine Monitoring**

**Kept Catch Data from Electronic Monitoring in the New England Groundfish Fishery (MA, ME, NH, RI)**  
Develop machine learning tools that use existing electronic monitoring data to collect information on kept catch in the New England groundfish fishery through testing three catch monitoring approaches across a variety of vessels. Project will derive kept catch data useful for science and management from video already being collected in the New England audit and maximum retention electronic monitoring programs and explore how this impacts program costs.  
**\$225,962**

**Rhode Island Department of Environmental Management, Division of Marine Fisheries Marine Mammal Stranding Response in Rhode Island**

Respond to marine mammal stranding events in Rhode Island. Project will gather information at stranding events including location, measurements and photo documentation, which will afford regional stranding organizations the information needed to determine necropsy options and the opportunity for additional data collection based on animal condition, location of stranding and available resources.  
**\$25,545**

**University of Rhode Island**

**Creating a Dune and Habitat Restoration Plan for Green Hill Pond in the South Shore of Rhode Island**  
Survey and model a detailed design, cost estimations and permitting of an optimal nature-based dune restoration scenario and dredging of an adjacent pond in the Green Hill Pond area along the south shore of Rhode Island, specifically 1.5 miles of a barrier beach and 500 acres of coastal pond. Project will reduce the coastal flooding risk for the coastal communities around the pond and aim to restore and protect the habitats of the adjacent pond by improving water quality.  
**\$129,191**

**SOUTH CAROLINA****Canaan Valley Institute**

**Coordinating Eastern Brook Trout Joint Venture Strategies and Goals (multiple states)**  
Continue the activities of the Eastern Brook Trout Joint Venture in the historic range of the species. Project will refine the strategic objectives and key conservation priorities of the Eastern Brook Trout Joint Venture using the results of the recently completed status assessment of wild brook trout at the catchment scale.  
**\$74,999**

**Chesterfield County**

**Advancing Longleaf Pine Restoration on Private Lands in the South Carolina Sandhills Region**  
Establish and improve 3,200 acres of longleaf pine forest on private lands in Chesterfield and Darlington counties, South Carolina, which will benefit northern bobwhite, Bachman's sparrow and southern hognose snake. Project will utilize geospatial data to improve outreach to high priority landowners, provide technical and financial assistance to private landowners to restore and maintain longleaf pine and increase prescribed burning capacity with a burn specialist.  
**\$259,000**

**Manomet**

**Managing American Oystercatchers and Minimizing Coastal Engineering Impacts Along the Atlantic Coast (multiple states)**  
Coordinate the American oystercatcher recovery initiative, implement best management practices for disturbance and predation management along the U.S. Atlantic Coast and Gulf Coast of Florida and develop long-term improvements in coastal engineering protocols to restore habitats critical to focal shorebird species. Project will support the goals of the Atlantic Flyway Business Plan by creating a framework for long-term protection, restoration and creation of shorebird habitat at key sites.  
**\$189,999**

**North Carolina State University****Expanding Prescribed Fire Delivery to Restore Southeast Forests (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 landowners, including underserved landowners and fire practitioners through technical assistance, training and outreach to increase the use of prescribed fire.

**\$180,000**

**Southeastern Association of Fish and Wildlife Agencies****Planning for Coastal Resilience through an Innovative Design Approach to Capacity Building (GA, NC, SC)**

Identify, assess and build regional teams to address hydrologic connectivity threats resulting from inadequate culvert structures in tidal systems. Project will focus on surveying, assessing and prioritizing sites with key regional partners from diverse backgrounds and aims to build a community of practice in each region to further aquatic conservation and community resiliency.

**\$200,000**

**The Longleaf Alliance****Coordinating Local Implementation Team Capacity and Landowner Technical Assistance and Outreach – V (multiple states)**

Improve and sustain coordination and exchange of information among 18 multi-partner local implementation teams that organize, plan and deliver conservation actions to restore and enhance the longleaf pine ecosystem. Project will support strategic on-the-ground restoration through conservation planning, as well as tracking and communication of longleaf pine restoration accomplishments.

**\$250,000**

**The Longleaf Alliance****Conserving Longleaf Forests, Wildlife Habitat and Water Resources through Innovative Partnerships (FL, GA, LA, SC, TX)**

Restore and enhance 5,000 acres of longleaf pine habitat within priority drinking water supply watersheds in the Southeast. Project will build partnerships between forestry and conservation organizations, landowners and drinking water supply utilities and provide private landowners with technical and financial assistance to restore and enhance longleaf pine habitat, protecting drinking water supplies and benefiting the gopher frog and other at-risk forested-wetland dependent species.

**\$411,000**

**The Nature Conservancy****Sewee Longleaf Restoration and Enhancement – III (SC)**

Restore, maintain and protect more than 60,000 acres of longleaf pine habitat on public and private lands in the South Carolina coastal plain, benefiting birds and imperiled amphibians. Project will deploy a seasonal fire crew to increase prescribed burning, expand private landowner engagement through a forest landowners association, protect working forests and longleaf pine habitat through voluntary conservation easements and host a fire festival to build a culture supportive of burning.

**\$300,000**

**Virginia Polytechnic Institute and State University****Preventing Human Disturbance of Atlantic Flyway Shorebirds – III (multiple states)**

Address the threat of disturbance to red knot, American oystercatcher and whimbrel by implementing Community Based Social Marketing strategies for human disturbance reduction, developing a shorebird disturbance reduction toolkit for land managers and disseminating the results throughout the Atlantic Flyway shorebird network. Project will develop scalable conservation strategies that can be applied to change human behavior and improve shorebird survival and reproductive success.

**\$189,965**

**SOUTH DAKOTA****American Bird Conservancy****Providing Technical Assistance for Conservation Management on Private Working Lands (MT, ND, SD, WY)**

Provide technical assistance to promote healthy grassland conservation to benefit grassland birds while meeting the economic bottom line for private landowners. Project will result in improved management on 6,500 acres through improved grazing rotations and fencing and water infrastructure and restore 350 acres by re-seeding annual cropland with native perennial grasses and forbs and 1,920 acres by removing windmills.

**\$345,588**

**Ducks Unlimited****Restoring Habitat through the Northern Grasslands Restoration Incentives Program (MT, ND, SD, WY)**

Provide technical assistance through the Northern Grasslands Restoration Incentives Program to provide an additional set of conservation options for producers throughout the Northern Great Plains who provide habitat for declining grassland birds. Project will restore 2,000 acres of grassland habitat and place 16,000 acres under improved management.

**\$128,533**

**Ducks Unlimited****Increasing Technical Assistance to Improve Water Quality with Soil Health Retention (SD)**

Increase Ducks Unlimited's technical assistance capacity to work with growers interested in expanding regenerative agriculture principles that improve water quality, benefit wildlife and improve profitability across eastern South Dakota. Project will implement 50 Best Management Practices to improve management on 50,000 acres of private working lands.

**\$137,463**

**Pheasants Forever****Using Decision-Support Tools to Deliver Grassland Bird Conservation (MT, SD, WY)**

Implement a protocol to identify tracts on private land in western South Dakota, eastern Montana and eastern Wyoming with the highest value to grassland nesting passerines. Project will enroll 10,000 acres in grazing systems, integrate 50 ranchers with local stewardship resources, restore 5,000 acres of grassland habitat, improve 13 miles of fencing and restore 15 acres of riparian and wetland habitat.

**\$421,561**

**Rocky Mountain Bird Observatory****Community-Led Conservation of Grassland Habitat on Private Working Lands (MT, NE, SD, WY)**

Maintain grassland connectivity through community-led conservation efforts, supported by sound science from diverse knowledge sources and facilitated through habitat enhancement and restoration by qualified Private Lands Wildlife Biologists. Project will provide and deliver technical support for fish and wildlife habitat conservation, restoration and improved management on 5,000 acres of private lands.

**\$214,192**

**South Dakota Agricultural Land Trust****Increasing Technical Assistance Capacity for Grassland Conservation Easements (SD)**

Significantly increase capacity to engage with private landowners and secure conservation easements in South Dakota. Project will place at least 2,000 acres of priority grassland habitat on private lands under conservation easement.

**\$393,282**

**World Wildlife Fund****Improving Grazing Management (MT, SD)**

Improve grassland habitat on working lands by utilizing management agreements, prescribed grazing and changes in infrastructure to facilitate management in the Missouri-Milk River and Dakota Grasslands. Project will improve management on 90,000 acres to conserve grassland habitat and improve population trends for priority grassland songbirds, greater sage-grouse and pronghorn.

**\$451,155**

## TENNESSEE

### 2021 Guy Bradley Award

#### Federal Winner (TN)

Retired Special Agent in Charge Timothy Santel from the U.S. Fish and Wildlife Service is the federal level recipient of the 2021 Guy Bradley Award. The Nashville Zoo is the beneficiary organization of his \$2,500 award. **\$2,500**

### Canaan Valley Institute

#### Coordinating Eastern Brook Trout Joint Venture Strategies and Goals (multiple states)

Continue the activities of the Eastern Brook Trout Joint Venture in the historic range of the species. Project will refine the strategic objectives and key conservation priorities of the Eastern Brook Trout Joint Venture using the results of the recently completed status assessment of wild brook trout at the catchment scale. **\$74,999**

### Cumberland River Compact

#### Implementing Low-Cost Stream and Riparian Buffer Restoration on Private Lands (KY, TN)

Engage landowners in hands-on stream bank repair of headwater streams and restoration of the riparian buffers within priority watersheds in the Cumberland Plateau region of Kentucky and Tennessee. Project will train landowners and students from historically black colleges and universities on stream restoration techniques and plant 14,000 trees along 4 miles of stream, benefiting fish, freshwater mussels and other species. **\$149,999**

### Limestone Valley Resource Conservation and Development Council

#### Water Quality Conservation in the Conasauga River Watershed (GA, TN)

Build on previous project efforts to work with local agricultural and business landowners to improve water quality in the Conasauga River watershed. Project will create partnerships and conduct outreach in order to implement water quality best management practices and bolster conservation efforts in support of published recovery plans for 10 of the listed fish and mussel species in the basin. **\$256,304**

### Mississippi River Trust

#### Forested Wetland Restoration in the Lower Mississippi River Floodplain – II (multiple states)

Reforest and protect frequently flooded, marginal cropland on private lands through the adoption of USDA Wetland Reserve Easements in the active floodplain of the Lower Mississippi River. Project will establish 10,285 acres of bottomland hardwood forest to expand and enhance habitat and improve water quality, benefiting the Louisiana black bear, swamp rabbit, forest birds, waterfowl and freshwater fish. **\$780,000**

### North Carolina State University

#### Expanding Prescribed Fire Delivery to Restore Southeast Forests (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 landowners, including underserved landowners and fire practitioners through technical assistance, training and outreach to increase the use of prescribed fire. **\$180,000**

### Ruffed Grouse Society

#### Restoring Forest Habitat for Wildlife in the Cumberland Plateau (KY, TN)

Improve forest health through forest restoration and management to benefit at-risk wildlife species on private and public lands in the Cumberland Plateau region of Kentucky and Tennessee. Project will work with public land managers and private landowners to restore and enhance more than 12,000 acres of shortleaf pine and oak forest habitat to improve populations of golden-winged warbler, ruffed grouse and other woodland and savanna-dependent species. **\$199,807**

### Tennessee Aquarium

#### Monitoring Status of Bridled Darters and Assessing Threats to Blue Shiners (AL, GA, TN)

Monitor abundance and genetic health of the bridled darter and assess threats to federally threatened blue shiners in the Coosa River drainage. Project will utilize snorkeling, eDNA surveys and DNA analysis from tissues to monitor bridled darters and will utilize geographic information systems, fish passage assessments, eDNA surveys and habitat comparisons to other watersheds to assess threats to blue shiners. **\$113,097**

### TennGreen Land Conservancy

#### Soak Creek Farm Grassland and Shortleaf Pine Restoration (TN)

Restore grassland and shortleaf pine habitats, treat native hemlocks for the invasive hemlock woolly adelgid along creeks flowing to the Soak Creek State Scenic River and engage young conservationists and landowners through educational events in Bledsoe and Rhea counties in Tennessee. Project will burn 338 acres of early successional habitat, plant 60,000 shortleaf pine seedlings and treat 48 acres of hemlock, benefiting prairie warbler and other grassland birds, as well as aquatic species. **\$215,000**

### The Nature Conservancy

#### Conserving the Cumberland Forest in Tennessee

Conserve at least 15,000 acres in Tennessee for public recreation, sustainable forestry and wildlife habitat management in the Central Appalachians. Project will ensure the protection of habitat for multiple, high priority aquatic and terrestrial species; provide critical habitat linkage of over 280,000 acres between Tennessee and Kentucky; generate revenues for the local economy via sustainable forestry; and support outdoor recreation. **\$620,000**

### Trout Unlimited

#### Restoring Connectivity to Native Brook Trout Habitat in the French Broad Watershed (TN)

Reconnect native Southern Appalachian brook trout habitat on two tributaries to the French Broad River by replacing culverts blocking aquatic organism passage with fully passable structures. Project will reconnect 4 miles of native brook trout habitat and 29 miles of small stream network, allowing genetically distinct, endemic populations of brook trout better access to breeding habitat and thermal refuge. **\$70,871**

### Wolf River Conservancy

#### Wolf River Greenway Restoration VI (TN)

Remove 25 acres of invasives, plant 1,500 trees and clean up trash and debris from key locations along the Wolf River in urbanized sections of the City of Memphis, Tennessee. Project will engage 800 residents to protect and restore the watershed features and hydrological functions of sites currently impacted by invasive plant species, stormwater runoff, erosion, pollution and illegal dumping, especially along the urban sections of the Wolf River. **\$38,837**

## TEXAS

### American Bird Conservancy

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

Coordinate conservation delivery networks to restore forest and grassland habitats and monitor species response within the West Gulf Coastal Plain/Ouachitas geography of Arkansas, Louisiana, Oklahoma and Texas. Project will provide technical and financial assistance to private landowners to implement conservation practices on 3,000 acres benefiting Bachman's sparrow, prairie warbler and other forest and grassland-dependent bird species. **\$213,995**

### **Big Bend Soil and Water Conservation District**

#### **Grassland Restoration on Working Lands in the Big Bend Soil and Water Conservation District – II (TX)**

Restore native grassland habitat for use by pronghorn and migratory grassland birds in Brewster and Jeff Davis counties in West Texas. Project will install pronghorn-friendly fence and conduct brush management to control expansion of nonnative species, including mesquite, tarbush, whitebrush, acacia and creosote.

**\$180,000**

### **Borderlands Research Institute-Sul Ross State University**

#### **Restoring Marfa and Marathon Grassland Habitat for Wintering Migratory Birds (TX)**

Restore grassland in wintering habitat for priority migratory grassland bird species, including Baird's sparrow, Sprague's pipit, chestnut-collared longspur and thick-billed longspur in the Marfa and Marathon grasslands of Texas. Project will treat 3,500 acres of mesquite invaded grassland to increase habitat connectivity and increasing grassland patch size for wintering bird populations.

**\$180,674**

### **Gentner Consulting Group**

#### **Deepwater Horizon Oceanic Fish Restoration Project Project Monitoring and Evaluation (multiple states)**

Conduct requisite statistical analyses to evaluate key performance indicators for the project in accordance with the Oceanic Fish Restoration Project Monitoring Plan. Project will estimate bycatch reduction and alternative gear performance during the remaining repose years and will support evaluation of the overall performance of the project following the final repose year.

**\$430,600**

### **Gulf Coast Bird Observatory**

#### **Upgrading Radio Tracking Infrastructure to Improve Migratory Bird Detection (TX)**

Improve existing Motus infrastructure (an automated radio telemetry program that tracks migratory birds) with Cellular Tracking Technologies SensorStations which provide highly localized position information that is unable to be tracked through traditional Motus nanotags. Project will update 15 structures to support monitoring efforts of migrating birds throughout the Texas coast.

**\$32,021**

### **Gulf Fisheries Research Foundation**

#### **Remote Electronic Monitoring for the Gulf of Mexico For-Hire Reef Fish Fishery (AL, FL, TX)**

Develop remote electronic monitoring for the Gulf of Mexico for-hire reef fish fishery using wireless video and data transfer, onboard artificial intelligence, cloud data storage and remote video review. Project will explore incentives specific to the for-hire industry, develop an image library for regulated species, explore artificial intelligence to minimize video review costs and contribute information for science and management, including post-release mortality estimates.

**\$396,343**

### **Houston Advanced Research Center Establishing Conservation Priorities and Restoring Urban Habitat in the Greater Houston Region (TX)**

Establish and communicate conservation priorities for wildlife habitat in the growing Greater Houston Region and restore 9.5 acres of riparian habitat in three underserved urban parks. Project will plant 2,175 native trees and create a 0.25 acres native pocket prairie for families with little access to nature and disseminate the State of the Birds analyses, report and data tools via community events and education programs.

**\$50,000**

### **Louisiana Tech University**

#### **Restoring Longleaf Using Grazing and Prescribed Fire (LA, TX)**

Enhance 1,000 acres of longleaf pine forests in southwestern Louisiana and southeastern Texas by integrating cattle grazing with prescribed burning. Project will monitor ecological benefits of prescribed burning with cattle grazing on multiple private forestlands on which it is being conducted and landowners and natural resource professionals will be trained on these benefits as well as the logistics of cattle grazing in longleaf pine through a multi-media outreach program.

**\$224,500**

### **Manomet**

#### **Improving Management of Birds Migrating through the Gulf Coastal Plain of Texas**

Use GPS tracking devices to identify stopover locations of birds passing through the Gulf Coastal Plain of Texas to document habitat use, threats and to develop a species distribution model to indicate areas of importance. Project will compile species data into a best management practices document that summarizes the state of knowledge for supporting migratory grassland shorebirds.

**\$86,154**

### **North Carolina State University**

#### **Expanding Prescribed Fire Delivery to Restore Southeast Forests (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 landowners, including underserved landowners and fire practitioners through technical assistance, training and outreach to increase the use of prescribed fire.

**\$180,000**

### **Parks and Wildlife Foundation of Texas Northern Hudspeth County Grassland Restoration (TX)**

Conduct herbicide application to restore at least 6,000 acres of brush-invaded dry mixed prairie in northern Hudspeth County, Texas. Project will strategically expand the existing grassland for the greatest net gain of contiguous, usable habitat for grassland obligate species like pronghorn.

**\$250,000**

### **Pheasants Forever**

#### **Providing Technical Assistance to Improve Grassland Bird Habitat in Edwards Plateau (TX)**

Promote habitat stewardship actions designed to conserve priority grassland and shrubland birds in the Edwards Plateau ecoregion by adding conservation technical assistance capacity to the Grassland Restoration Incentives Program. Project will restore 5,000 acres of grassland habitat and provide landowner technical assistance and planning to improve management on 4,000 acres.

**\$236,322**

### **Pheasants Forever**

#### **Increasing Habitat Quality on Private Working Lands for Lesser Prairie Chicken in Playa Lake (TX)**

Increase capacity and wildlife-specific expertise within the Playa Lake region to increase quality habitat for lesser prairie chicken populations and other southwestern grassland dependent wildlife populations. Project will design 75 management plans with Best Management Practices incorporated to improve management on 30,000 acres of private working lands.

**\$100,000**

### **Rocky Mountain Bird Observatory Regional Surveying for Grassland Bird Communities in the Trans-Pecos (TX)**

Continue rigorous bird monitoring and install a new automated telemetry (Motus) site to further understand the non-breeding ecology of grassland birds in the Chihuahuan Desert, including Sprague's pipit and chestnut-collared longspur. Project will track the movements of tagged grassland birds to estimate within-season movement and seasonal survival for these species and inform on-the-ground range management.

**\$236,000**



**Stantec Consulting Services****Gulf-wide In-water Sea Turtle Monitoring Plan (multiple states)**

Develop a statistically sound plan for the establishment of a coordinated Gulf-wide network for collection and compilation of critical abundance, demographic, and biological information on sea turtles in the Gulf of Mexico. Project will provide important context for project-level monitoring at individual sites where restoration is implemented and will assist with comparisons across multiple projects. **\$224,267**

**Texas A&M Forest Service****Longleaf Pine Restoration and Management on Private Lands in East Texas**

Restore, enhance and conserve longleaf pine and bottomland hardwood ecosystems on private lands in East Texas. Project will plant 200 acres of longleaf pine, improve an additional 2,500 acres of existing longleaf habitat through other forest management treatments, improve 500 acres of bottomland hardwood habitat and protect 500 acres of existing longleaf pine habitat with conservation easements, benefiting northern bobwhite, Bachman's sparrow and Swainson's warbler. **\$150,000**

**Texas Water Trade****Pecos River Flow Restoration (TX)**

Restore riverine, riparian and wetland systems that can provide habitat for Pecos gambusia, Texas hornshell and avian species, including Bell's vireo in the Pecos River watershed. Project will address complex water quality and scarcity concerns for the benefit of both wildlife and agricultural uses and develop a mitigation strategy for habitat loss and impairment resulting from a small set of orphan wells in Pecos County. **\$229,331**

**The City of South Padre Island****Feasibility Study and Design of the Laguna Madre Living Shoreline (TX)**

Create a bayside living shoreline using an innovative new design approach that will encourage ecological diversity and deliver community protection against environmental stressors. Project will develop an arrangement of intertidal berms to establish pocketed wetlands that play roles in heavy metal absorption, decreased wave energy, coastal erosion, storm surge buffer and habitat restoration. **\$150,000**

**The Conservation Fund****Restoring Coastal Prairie Habitat to Benefit Grassland Birds in the Lower Rio Grande Valley (TX)**

Restore coastal prairie habitat in the Lower Rio Grande Valley, Texas to provide habitat for Gulf Coast grassland-dependent birds, including the federally endangered aplomado falcon, the proposed-threatened black rail and state-threatened Botteri's sparrow and white-tailed hawk. Project will restore 525 acres of native coastal prairie habitat through invasive species management of encroaching brush and replanting of native grasses and forbs. **\$156,604**

**The Longleaf Alliance****Coordinating Local Implementation Team Capacity and Landowner Technical Assistance and Outreach – V (multiple states)**

Improve and sustain coordination and exchange of information among 18 multi-partner local implementation teams that organize, plan and deliver conservation actions to restore and enhance the longleaf pine ecosystem. Project will support strategic on-the-ground restoration through conservation planning, as well as tracking and communication of longleaf pine restoration accomplishments. **\$250,000**

**The Longleaf Alliance****Conserving Longleaf Forests, Wildlife Habitat and Water Resources through Innovative Partnerships (FL, GA, LA, SC, TX)**

Restore and enhance 5,000 acres of longleaf pine habitat within priority drinking water supply watersheds in the Southeast. Project will build partnerships between forestry and conservation organizations, landowners and drinking water supply utilities and provide private landowners with technical and financial assistance to restore and enhance longleaf pine habitat, protecting drinking water supplies and benefiting the gopher frog and other at-risk forested-wetland dependent species. **\$411,000**

**Trinity Park Conservancy****Increasing Stewardship of the Trinity River and Adjacent Wetlands (TX)**

Cultivate community stewardship of riparian and wetland habitats in Dallas, Texas. Project will increase outreach to marginalized neighborhoods and youth programs and utilize an array of partnerships to improve the environmental health along the Trinity River and its adjacent wetlands. **\$47,774**

**Trinity River Authority of Texas****Installing Trash Barriers in Village Creek Lake Arlington Watershed and Fort Worth Parks (TX)**

Purchase, install and maintain multiple trash barriers at highly visible and heavily littered locations within Village Creek Lake Arlington (VCLA) Watershed and the City of Fort Worth Parks. Project will aid in the expansion of the UpSpire Waterways litter prevention program as well as increase community engagement in addressing root causes of litter by restoring 21,128 acres of VCLA watershed and 807 acres within the City of Fort Worth through removal of up to 1,332 lbs of trash per month. **\$39,600**

**Wildlife Habitat Federation****Private Landowner Outreach and Technical Assistance to Restore Watersheds (TX)**

Help land managers develop management plans and enroll in Farm Bill programs to improve working land function, enhance habitat and increase the quantity and quality of water in three Texas watersheds to benefit aquatics species in the Gulf Coast region. Project will increase technical assistance capacity, improving management of 20,000 acres and using Farm Bill financial programs to assist 30 landowners with implementation of their habitat management plans. **\$207,003**

**UTAH****Bear River Land Conservancy****Increasing the Pace and Scale of Conservation Easements in the Bear River Watershed (ID, UT, WY)**

Increase the pace and scale of conservation easements in the Bear River Basin of Utah, Idaho and Wyoming. Project will accelerate the pace of land conservation through creative thinking, successful partnerships and an ability to work with and communicate effectively with landowners and partners while pursuing opportunities to streamline and expedite conservation easements. **\$180,000**

**NatureServe****Research Support for Management of Pollinator Species (multiple states)**

Conduct research to identify priority areas for on-the-ground monarch management actions such as habitat restoration and enrichment as well as to inform regulatory review. Project will map these areas and highlight those that are most used by monarchs, recognizing that monarchs tend to migrate along riparian and wetland corridors. **\$199,878**

**Rocky Mountain Bird Observatory**

Evaluating Impact of Conservation Activities on Sagebrush Obligate Songbirds (CO, ID, UT, WY)

Evaluate the impacts of conifer removal and control of annual grasses conservation projects on sagebrush obligate songbirds in the Rocky Mountain Rangelands Region. Project will provide a long-term assessment of which projects benefit sagebrush obligate songbirds and help guide future conservation investments.

**\$231,169**

**Summit Land Conservancy**

Increasing Capacity for Conservation Easements on Working Lands (UT)

Increase capacity to place permanent conservation easements on working lands containing sensitive wetlands, key migratory corridors and critical wildlife habitat in the upper Weber and Provo River watersheds in Summit, Wasatch, Weber and Morgan counties. Project will place conservation easements on 4,854 acres of privately owned working agricultural lands and open spaces.

**\$175,010**

**The Mule Deer Foundation**

Increasing Cross-Jurisdictional Coordination in Sagebrush Habitat (multiple states)

Increase cross-jurisdictional coordination with state agencies and other partners to implement projects on big game migration corridors and in sage-grouse core habitats. Project will improve habitat through treating invasive species, conservation easements, mesic and wet meadow habitat restoration, removing or improving fencing and restoring 3,000 acres of shrubland habitat.

**\$395,012**

**Utah Division of Wildlife Resources**

Non-native Fish Management and Habitat Restoration on the Escalante River (UT)

Remove and monitor nonnative fish in Slickrock Saddle Bench Spring and the Escalante River to benefit roundtail chub, bluehead sucker and flannelmouth sucker populations. Project will restore and improve 0.5 miles of riparian and aquatic habitat.

**\$50,750**

**VERMONT****Canaan Valley Institute**

Coordinating Eastern Brook Trout Joint Venture Strategies and Goals (multiple states)

Continue the activities of the Eastern Brook Trout Joint Venture in the historic range of the species. Project will refine the strategic objectives and key conservation priorities of the Eastern Brook Trout Joint Venture using the results of the recently completed status assessment of wild brook trout at the catchment scale.

**\$74,999**

**Connecticut River Watershed Council**

Restoring Habitat for Eastern Brook Trout in Thirty-one Priority Watersheds (VT)

Increase in-stream habitat, enhance habitat complexity, restore river function, improve water quality and enhance the long-term persistence of native eastern brook trout in 31 priority sub-watersheds of the Connecticut River in Vermont. Project will install large wood along 10 miles of wild brook trout streams and work with 12 private forest landowners.

**\$84,206**

**Connecticut River Watershed Council**

Increasing Technical Assistance to Benefit Northeast Turtles on Private Working Lands (MA, NH, VT)

Provide private landowners with technical assistance to accelerate on-the-ground delivery and implementation of Farm Bill conservation programs designed to specifically benefit two Working Lands for Wildlife priority species: wood turtle and spotted turtles in the Connecticut River watershed. Project will develop 15 best management practices to improve water quality through reductions in sediment and nutrients runoff, plus riparian buffer plantings to improve habitat for rare freshwater turtles.

**\$100,000**

**State of Vermont Natural Resources****Conservation Council (NRCC)**

Implement and Enhance Streamside Forests to Improve Riparian Habitats in Priority Watersheds (VT)

Restore and manage at least 25 acres of forested riparian buffers in targeted high priority areas for eastern brook trout to improve and sustain habitat quality over time. Project will protect and restore healthy forests and rivers that provide important habitat for freshwater mussels and fish, native turtles, birds and pollinators.

**\$200,000**

**Winooski Natural Resources****Conservation District**

Restoring Access to Critical Cold Water Habitat for Eastern Brook Trout on the Winooski River (VT)

Remove a barrier to fish passage on the Jail Branch of the Winooski River in Vermont, restoring access to critical cold water refuge habitat for eastern brook trout. Project will remove one barrier and reconnect more than 14 miles of upstream habitat, while also restoring instream habitat and improving floodplain function and water quality.

**\$50,000**

**VIRGINIA****Alliance for the Chesapeake Bay**

Creating a Green Corridor in the Fulton Business District (VA)

Create an accessible, park-like corridor in the Fulton Hill Business District in Richmond, Virginia. Project will improve water quality in this urban area by implementing green storm water infrastructure practices to treat and capture storm water runoff and reduce urban heat island impacts while improving Fulton's climate resiliency and implementing the Launch Fulton Green Jobs Initiative.

**\$500,000**

**Alliance for the Chesapeake Bay**

Accelerating Conservation Action through Clean Water Partnerships (VA)

Assist farmers with developing conservation plans that prioritize installing agricultural best management practices on dairy farms such as: livestock exclusion from streams, riparian forest buffers, rooftop runoff controls, manure management and nutrient management plans. Project will leverage existing partnerships to engage the corporate community in incentivizing their dairy producers to implement these practices and promote sustainably sourced dairy products.

**\$1,000,000**

**American Bird Conservancy**

Restoring Forest Age-Class and Structural Diversity in Two Forest Blocks in the Blue Ridge Focal Geography (VA)

Restore forest habitat age-class and structural diversity to benefit multiple focal bird species by implementing treatments on two large forest blocks in Bath and Rockbridge counties in Virginia. Project will engage consulting foresters to write comprehensive forest management plans for more than 5,000 acres of public and private forest, implement best management practices on at least 130 acres for golden-winged warbler, cerulean warbler and wood thrush and monitor population response of target species.

**\$114,509**

**American Forests**

Leveraging Urban Forests for Climate, Health and Tree Equity Scores (MD, VA, DC)

Build a deep-dive Tree Equity Score Analyzer tool for use across the greater Washington metropolitan region. Project will provide a way to set urban forestry narratives, plan strategies and focus resources on communities of highest need to improve tree canopy where its benefits are most needed.

**\$49,911**

**Canaan Valley Institute****Coordinating Eastern Brook Trout Joint Venture Strategies and Goals (multiple states)**

Continue the activities of the Eastern Brook Trout Joint Venture in the historic range of the species. Project will refine the strategic objectives and key conservation priorities of the Eastern Brook Trout Joint Venture using the results of the recently completed status assessment of wild brook trout at the catchment scale.

**\$74,999**

**Center for Natural Capital****Planning to Remove the Rapidan Mill Dam (VA)**

Complete planning and assessment work necessary to remove the obsolete Rapidan Mill dam in Rapidan, Virginia, which is currently an obstruction to species such as shad, American eel, sea lamprey and blueback herring. Project will address pre-project data collection including fish assemblage studies, engineering bathymetry, sediment analysis and community concerns in order to support the work needed to remove or greatly modify the dam and promote fish passage.

**\$49,627**

**City of Manassas, VA****Developing a Watershed Resources Master Plan for the City of Manassas (VA)**

Complete a Watershed Resources Master Plan to consolidate management approaches and guide implementation of water quality improvement strategies. Project will survey citizens regarding water resources, inform elected officials and professional staff on strategies to improve water quality, inventory improvement opportunities and produce a long-term implementation plan to guide future decision making.

**\$50,000**

**City of Virginia Beach****Department of Public Works****Designing a Network of Marsh Terrace Ridges to Achieve Restoration and Flood Resilience (VA)**

Develop design plans and secure permits for a network of marsh terrace ridges and perimeter breakwaters to restore at least 260 acres of marsh island and aquatic vegetation habitat that has historically provided both environment and flood reduction benefits to the surrounding community. Project will result in a community-supported, shovel-ready project that demonstrates the efficacy of the first-ever application of marsh terraces in the Mid-Atlantic region.

**\$135,124**

**College of William and Mary, Virginia Institute of Marine Science****RecFish: Engaging Recreational Anglers as Community Scientists Using a Mobile App (MD, VA)**

Develop a smartphone application, called RecFish, that allows recreational anglers in Maryland and Virginia to automatically identify, measure and log their catch to enhance their fishing experience while contributing data to the RecFish database as community scientists. Project will engage 10 vessels in testing the application along with relevant government entities and supplement existing data collected through fisheries surveys allowing for enhanced analysis.

**\$323,163**

**College of William and Mary, Virginia Institute of Marine Science****Living Shoreline Design on Monroe Bay (VA)**

Design a living shoreline for a critical area of erosion along 1,500 feet of shoreline in Monroe Bay in the Town of Colonial Beach, Virginia. Project will create a design to protect infrastructure for the Town including a main road and utilities, provide habitat through marsh restoration, reduce sedimentation by stopping erosion of the upland bank and reduce nutrient runoff to the Bay by creating a buffer along the shore.

**\$39,000**

**Conservation Innovation Fund****Accelerating Agricultural Conservation in Virginia through Pay-for-Performance Procurement Systems**

Develop a pay-for-performance, outcomes-based approach to agricultural conservation in the Commonwealth of Virginia. Project will focus on the Shenandoah Valley and position the state to accelerate and expand pay-for-performance approaches to agricultural conservation in order to address the immediate objectives of The Commonwealth under its Chesapeake Bay Watershed Implementation Plan.

**\$50,000**

**Evergreen SWCD****Restoring Water Quality and Nesting Habitat for Eastern Hellbender in Middle Fork Holston River (VA)**

Restore aquatic habitat for eastern hellbender and freshwater mussels and their host fish species by installing nesting rocks for hellbender, stabilizing the riverbank and enhancing riparian habitat on the Middle Fork of the Holston River in Southwest Virginia. Project will install 50 nesting rocks, stabilize 2 miles of riverbank to reduce erosion, restore 11 acres of riparian forest buffer and monitor nest box occupancy while refining the design to meet conservation practice standards.

**\$99,134**

**Greene County****Developing a Green Infrastructure Master Plan for the Greene County Visitor Center (VA)**

Develop a green infrastructure master plan to address water quality concerns at the Greene County visitor center in Ruckersville, Virginia. Project will lay the groundwork for addressing impervious surfaces at the Center, improving water quality in the upper Rapidan River and providing a high-quality stormwater demonstration site.

**\$23,500**

**James River Association****Stewarding Riparian Buffers and Conservation Workforce through a Resilient Collaborative Model (VA)**

Restore riparian habitats through forested buffers and explore streambank erosion solutions in the Middle and Upper James River watershed. Project will develop innovative solutions towards the following goals: 1) build a resilient collaborative model to sustain consortium, 2) accelerate riparian buffer implementation in the James River Watershed and 3) increase local competency in streambank erosion and stabilization.

**\$1,000,000**

**Manomet****Managing American Oystercatchers and Minimizing Coastal Engineering Impacts Along the Atlantic Coast (multiple states)**

Coordinate the American oystercatcher recovery initiative, implement best management practices for disturbance and predation management along the U.S. Atlantic Coast and Gulf Coast of Florida and develop long-term improvements in coastal engineering protocols to restore habitats critical to focal shorebird species. Project will support the goals of the Atlantic Flyway Business Plan by creating a framework for long-term protection, restoration and creation of shorebird habitat at key sites.

**\$189,999**

**North Carolina State University****Expanding Prescribed Fire Delivery to Restore Southeast Forests (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 landowners, including underserved landowners and fire practitioners through technical assistance, training and outreach to increase the use of prescribed fire.

**\$180,000**

**Richmond Hill****Designing Green Stormwater Infrastructure in Richmond Hill (VA)**

Develop a site assessment and concept plan for green stormwater infrastructure improvements to be developed for Richmond Hill and the City of Richmond's downslope Taylor's Hill Park. Project will engage a workforce development program to design and develop a plan to guide implementation of future stormwater improvements at Richmond Hill aimed at increasing onsite filtration and diminishing the impact of stormwater in the area.

**\$38,803**

**Ridge to Reefs****Implementing a Spring Bioreactor and Creating and Enhancing Wetlands (MD, VA)**

Construct a denitrifying bioreactor on a spring in Lacey Springs, Virginia, design a second spring bioreactor on a springhead draining into a tributary of Smith Creek and construct wetlands on a farm in Worton, Maryland. Project will reduce nitrogen and benefit in-stream conditions for brook trout and provide habitat for American black duck.

**\$246,142**

**Rivanna Conservation Alliance****Designing Rivanna River Restoration in Riverview Park (VA)**

Conduct engineering design and outreach for stream, outfall and riparian buffer restoration within Riverview Park in Charlottesville, Virginia. Project will accelerate on-the-ground restoration to improve the health and function of the urban corridor of the Rivanna River through capacity building, public engagement and engineering design.

**\$50,000**

**Tazewell Soil and Water Conservation District****Improving Soil Health and Water Quality for Eastern Hellbender and Freshwater Mussels (VA)**

Improve soil health and water quality for aquatic species including freshwater mussels, eastern brook trout and eastern hellbender by reducing bacteria and sediment runoff on the Holston and Clinch rivers in Tazewell County, Virginia. Project will engage agricultural producers in utilizing no-till seeders, increasing forage and biomass plantings, expanding cover crop use and installing livestock exclusion fencing on 600 acres of croplands and pasturelands.

**\$148,890**

**The Conservation Fund****Protecting Upland Forest Habitat on Virginia's Eastern Shore**

Permanently protect 8,654 acres of forested uplands along the Eastern Shore of Virginia to provide critical habitat for resident and migratory birds. Project will mitigate for the future loss of the Eastern Shore's coastal marsh due to sea level rise, create a sustainable management plan for wildlife habitat, provide connectivity to other conserved lands, expand public access for recreation and create economic development through conservation tourism.

**\$600,000**

**The Longleaf Alliance****Coordinating Local Implementation Team Capacity and Landowner Technical Assistance and Outreach – V (multiple states)**

Improve and sustain coordination and exchange of information among 18 multi-partner local implementation teams that organize, plan and deliver conservation actions to restore and enhance the longleaf pine ecosystem. Project will support strategic on-the-ground restoration through conservation planning, as well as tracking and communication of longleaf pine restoration accomplishments.

**\$250,000**

**The Nature Conservancy****Restoring Longleaf Pine Habitat in Virginia**

Advance longleaf pine habitat restoration on 11,860 acres of private and public lands in southeastern Virginia through longleaf seedling planting, prescribed burning, selective timber thinning and groundcover restoration. Project will benefit savanna-dependent bird species, including northern bobwhite and also will support red-cockaded woodpecker recovery through translocation of birds to the Great Dismal Swamp National Wildlife Refuge.

**\$204,949**

**The Nature Conservancy****Managing and Mitigating Sea-level Rise Impacts on American Oystercatcher (VA)**

Develop a plan that identifies and prioritizes American oystercatcher habitat restoration opportunities in Virginia's coastal lagoon system. Project will result in critical guidance for management strategies to build the resiliency of American oystercatcher populations into the future, increasing reproductive output and population growth within the most important breeding area along the Atlantic Coast.

**\$48,517**

**The Piedmont Environmental Council****Installing and Restoring Riparian Buffers in the Upper Rappahannock and Potomac watersheds (VA)**

Restore 80 acres of riparian buffers on private land in the Upper Rappahannock and Upper Potomac watersheds in Virginia. Project will plant and maintain native tree buffers on stream-side properties, expedite implementation of livestock exclusion fencing and other agriculture best management practices and assist landowners in completing 10 new conservation easements with protected riparian buffers.

**\$263,802**

**Trout Unlimited****Restoring and Reconnecting Brook Trout Strongholds in the South Branch of the Potomac (VA, WV)**

Mitigate a large barrier to fish migration on the North Fork of the South Branch of the Potomac River, reconnecting and restoring two of the largest brook trout strongholds in the Chesapeake Bay watershed. Project will reconnect 150 miles of headwater sources, improve water quality and habitat through agricultural best management practices and help to create a 239-square-mile brook trout stronghold super patch.

**\$492,619**

**Upper Mattaponi Indian Tribe****Synthesizing Data from the Middle York River Watershed for Region-Wide Planning (VA)**

Explore and prioritize end-user needs in the middle York River Watershed to inform the most relevant development of a regional data synthesis and the creation of an integrated watershed-wide report on watershed management. Project will create a comprehensive regional report that can be integrated into a future watershed product, focusing on information such as water quality, flooding, land use, habitat vulnerability, social vulnerability, cultural resources and community science monitoring.

**\$50,000**

**Virginia Association of Soil and Water Conservation Districts****Providing Cost-Share Funding to Implement Chesapeake Bay Water Quality Improvements (VA)**

Guide individual stormwater best management practice implementation by providing cost-share funds in targeted sub-watersheds of Virginia. Project will review and vet applications to maximize impact of funds.

**\$500,000**



### **Virginia Department of Conservation and Recreation**

#### **Accelerating Living Shoreline Implementation in Rural Coastal Virginia**

Develop a cache of shovel-ready projects with engineering designs, provide financial incentives to construct 1,373 feet of new living shorelines and document installation of recently implemented shoreline management projects. Project will grow and enhance existing partnerships and measurably accelerate both the geographic scale and the rate of implementation of living shorelines across rural coastal Virginia, a priority best management practice in Virginia's Chesapeake Bay Phase III Watershed Implementation Plan. **\$1,000,000**

## **WASHINGTON**

### **Capitol Hill Housing Foundation**

#### **Promoting Stewardship of Wildlife Habitat in the Capitol Hill Neighborhood of Seattle (WA)**

Engage at least 50 volunteers to support a habitat enhancement guide for a habitat corridor along 11th Avenue in the Capitol Hill neighborhood of Seattle. Project will work to form a more resilient community around the corridor, linking approximately 60 acres of previously isolated greenspace with the goal of: 1) enhancing urban habitat for birds; 2) reducing hazards to birds; and 3) educating and engaging urban communities in conserving birds and their habitats. **\$40,000**

### **Cascadia Conservation District**

#### **Increasing Adoption of Water Conservation Practices for Anadromous Salmonid (WA)**

Accelerate the implementation of irrigation efficiency and other agricultural conservation practices by conducting outreach and technical assistance to private landowners in the Entiat, Lake Chelan, Stemilt-Squillchuck and Wenatchee watersheds. Project will bring 50 acres under improved management and implement 15 best management practice plans with private landowners to conserve 25 million gallons of water per year. **\$78,281**

### **Chelan County Natural Resource Department**

#### **Restoring Streamflow for Salmon and Steelhead in the Wenatchee River Watershed (WA)**

Improve instream flow in the Wenatchee River watershed, Washington, for federally listed salmon, steelhead and bull trout by providing on-farm technical assistance to facilitate the implementation of conservation practices. Project will provide outreach and technical assistance to develop water conservation plans and engineered designs, and implement best management practices to conserve nearly 100 million gallons of water per year. **\$100,000**

### **Friends of the San Juans**

#### **Bolster Protection of Forage Fish Habitat to Increase Survival of Juvenile Chinook Salmon (WA)**

Foster relationships with public and private landowners to prevent further loss of forage fish and juvenile Chinook salmon habitat from shoreline hardening in San Juan County, Washington. Project will engage landowners through site visits, feasibility studies and preliminary design to protect and restore vital rearing and feeding habitat for out-migrating Chinook salmon. **\$84,796**

### **Long Live the Kings**

#### **Protecting Chinook and Steelhead Salmon from Harbor Seal Predation (WA)**

Test an innovative seal deterrent technology, the GenusWave acoustic startle device in the Nisqually Estuary, Washington. Project will test the effectiveness of the acoustic startle device, reducing predation-related mortality of juvenile Chinook and providing a nonlethal option to address predation. **\$152,538**

### **Midwater Trawlers Cooperative**

#### **Setting Course for Success: Improving Catch Handling and Electronic Monitoring Data Use (CA, OR, WA)**

Improve electronic monitoring catch handling requirements to be more operationally efficient while still supporting catch accountability and expand data use for science in the West Coast groundfish fishery. Project will result in electronic monitoring data being used to benefit stock assessment and management and retain existing electronic monitoring users while addressing the concerns of prospective users. **\$256,000**

### **Mountains to Sound Greenway Trust**

#### **Fostering Stewardship to Improve Urban Wildlife Habitat in Seattle (WA)**

Develop and implement a sustainable community engagement model to foster long term restoration of the City of Seattle's Parks and Natural Areas. Project will improve urban native tree canopy and understory and improve habitat for the endangered Chinook salmon, while fostering connections with underrepresented communities. **\$41,974**

### **NatureServe**

#### **Research Support for Management of Pollinator Species (multiple states)**

Conduct research to identify priority areas for on-the-ground monarch management actions such as habitat restoration and enrichment as well as to inform regulatory review. Project will map these areas and highlight those that are most used by monarchs, recognizing that monarchs tend to migrate along riparian and wetland corridors. **\$199,878**

### **Nisqually River Foundation**

#### **Recovering Chinook Salmon and Steelhead Through Riparian Restoration (WA)**

Empower 1,300 local students to become stewards of natural resources, particularly steelhead and Chinook salmon, through riparian restoration projects, civic engagement and community science. Project will engage 750 students to share the results of water quality monitoring and stewardship actions including planting 4,500 trees and restoring 11 acres of riparian habitat while advancing local watershed conservation plans by convening diverse stakeholders. **\$42,166**

### **Northwest Youth Corps**

#### **Lower Eld Inlet Conservation and Education (WA)**

Restore up to 20 acres on the Lower Eld Inlet and the McLane Creek Estuary through invasive vegetation removal, native plant installation and mulching. Project will use trained citizens and volunteers to create a shoreline buffer to absorb storm surge and rising sea levels and enhance water quality and habitat for migratory and resident bird species, mammals, amphibians and Chinook salmon. **\$31,575**

### **Ocean Wise Conservation Association**

#### **Reducing Disturbance of Southern Resident Killer Whales from Vessel Traffic (WA)**

Reduce physical and acoustic disturbance of southern resident killer whales caused by vessel traffic in Washington State waters. Project will increase the use and functionality the WhaleReport Alert System in British Columbia and Washington State to enable voluntary measures to benefit killer whales. **\$99,979**

### **Okanogan Conservation District**

#### **Partnering with Producers to Restore Instream Flow in the Methow and Okanogan River Basins (WA)**

Produce high-resolution orthomosaic and thermal maps to plan irrigation efficiency improvements that benefit instream flow for anadromous salmon species in northcentral Washington. Project will improve irrigation management by implementing 25 best management practices plans to reduce water usage and improve instream flow conditions, conserving more than 6.6 million gallons of water per year. **\$115,656**

### **Pacific Marine Mammal Center**

#### **Developing Standards for Early Indicators of Change in Killer Whale Health (WA)**

Evaluate the feasibility of remotely assessing early indicators of change in Southern Resident killer whale health while in the Salish Sea. Project will enhance the early identification of declining or improving health of whales and understand relationships in body condition, fecundity and survivorship. **\$53,566**

**Pheasants Forever****Restoring Fire-Impacted Sagebrush and Forest Habitat in Big Game Migration Corridors (WA)**

Improve winter range habitat quality and migration corridors for mule deer in eastern Washington by implementing conservation and restoration projects in the highest-priority Mule Deer Management Zone that will promote robust and sustainable populations of mule deer. Project will restore 1,450 acres of habitat burned in 2020, enhance 600 acres of public land and close roads to vehicle access, thereby enhancing winter range for mule deer in the area.  
**\$261,423**

**Portland Audubon****Improving Bird Safety in the Portland Metropolitan Area (OR, WA)**

Reduce various detrimental urban impacts to birds in Oregon and Washington. Project will: 1) expand the Bird Safe/Dark Skies program; 2) educate architects and design professionals about bird-safe design; 3) coordinate with the City of Portland and Multnomah County to embed bird-friendly building standards into green building plans; 4) develop window demonstration projects; 5) organize public events; and 6) integrate bird-safe elements into habitat restoration projects.  
**\$50,000**

**Quileute Tribe****Lower Quillayute River Restoration (WA)**

Implement restoration actions on the Quillayute River, through a combination of riverbank stabilization, construction of a boat launch serving the dual purposes of better access for tribal fishermen while reducing bank erosion and excavation of side channels with placement of woody material to provide off-channel habitat for salmonids and other fish species. Project will restore floodplain connectivity, improve habitat, address erosion and protect regionally vital infrastructure.  
**\$1,500,000**

**Salmon-Safe****Engaging Puget Sound Developers to Increase Water Quality to Benefit Killer Whale Populations (WA)**

Implement best management practices for stormwater runoff on 25 high priority development sites in the Puget Sound region. Project will expand the “Clean Water for Salmon, Clean Water for Killer Whales” campaign to reduce water quality impacts on the Puget Sound via strategic application of certification, developer incentives and other market-based tools.  
**\$75,000**

**San Juan County Public Works****Improving Recreational Boater Behavior and Compliance Around Southern Resident Killer Whales (WA)**

Improve recreational boater regulatory compliance around Southern Resident killer whales in the Salish Sea. Project will expand the whale warning flag program to additional critical habitat areas and develop new and innovative outreach campaigns to increase awareness of regulations with targeted audiences known to have high non-compliance.  
**\$52,342**

**Skagit County Public Works****Restoring Habitat for Chinook Salmon in the South Fork of the Skagit River (WA)**

Complete construction and restoration of 5 acres of off-channel pool habitat along the South Fork of the Skagit River in Washington. Project will create vital rearing habitat for juvenile Chinook salmon, ultimately increasing prey availability for Southern Resident killer whales.  
**\$200,000**

**The Mule Deer Foundation****Increasing Cross-Jurisdictional Coordination in Sagebrush Habitat (multiple states)**

Increase cross-jurisdictional coordination with state agencies and other partners to implement projects on big game migration corridors and in sage-grouse core habitats. Project will improve habitat through treating invasive species, conservation easements, mesic and wet meadow habitat restoration, removing or improving fencing and restoring 3,000 acres of shrubland habitat.  
**\$395,012**

**The Nature Conservancy****Restoring Habitat for Chinook Salmon in Port Susan Bay Estuary (WA)**

Restore 35 acres of rearing habitat and monitor the effect of restored hydrologic connectivity on salmonids and marsh habitats at Port Susan Bay, Washington. Project will improve habitat connectivity, lower site salinity and vegetation growth in support of Chinook salmon, a vital food source for Southern Resident killer whales.  
**\$200,000**

**Washington Department of Fish and Wildlife**  
**Lite Electronic Monitoring Proof-of-Concept for the Washington Dungeness Crab Fishery**

Evaluate the Archipelago Electronic Monitoring Lite system in the coastal Washington commercial Dungeness crab fishery which relies on state and tribal co-management of the resource. Project will engage 12 vessels to test whether this system can improve the precision, accuracy and timeliness of fishing effort and location data information by validating fishers' logbook submissions and allowing the transition to electronic reporting in the fishery.  
**\$95,294**

**Washington Department of Fish and Wildlife****Testing Electronic Monitoring in Columbia River Fisheries (WA)**

Test the effectiveness of electronic monitoring to improve and automate monitoring and in-season reporting of the lower Columbia River, Washington gillnet, tangle net and alternative gear fisheries necessary for determining fishery impacts on Endangered Species Act listed salmon stocks. Project will engage nine vessels in testing of electronic monitoring systems and enhance data available for management.  
**\$85,000**

**Whidbey Camano Land Trust****Conducting a Feasibility Study and Creating a Restoration Design for Livingston Bay (WA)**

Determine the feasibility of estuary and wetland restoration, with the goal of acquiring and subsequently restoring critical habitat on approximately 292 acres of diked farmland in Livingston Bay on Camano Island in the Puget Sound of Washington State. Project will determine feasibility of restoring diked farmland to its former tidal estuary and wetland condition to increase available critical habitat and improve community resilience of this regionally identified critical nearshore habitat.  
**\$155,000**

**WEST VIRGINIA****Bat Conservation International****Creating Native Prairie in Right-of-Ways to Increase Insects for Declining Bat Populations (IL, WV)**

Improve foraging conditions for bats as a long-term and scalable strategy to improve survival and aid recovery of bat populations impacted by White-nose Syndrome. Project will determine if restoring native plant communities on rights-of-way in Illinois and West Virginia can increase available insect prey for bats, particularly during fall and spring.  
**\$224,999**

**Canaan Valley Institute****Berkeley County Green Infrastructure Implementation and Workforce Development Partnership (WV)**

Combine implementation of stream restoration and green infrastructure projects with hands-on training to create the region's first green collar workforce. Project will combine design, installation and maintenance of best management practices for water quality improvements with training, improve local understanding and appreciation for sediment and nutrient removal methods and create a workforce pipeline for local governments and nonprofits to pull from for future implementation.  
**\$751,476**

**Canaan Valley Institute****Coordinating Eastern Brook Trout Joint Venture Strategies and Goals (multiple states)**

Continue the activities of the Eastern Brook Trout Joint Venture in the historic range of the species. Project will refine the strategic objectives and key conservation priorities of the Eastern Brook Trout Joint Venture using the results of the recently completed status assessment of wild brook trout at the catchment scale.

**\$74,999**

**Friends of the Cheat****Removing a Barrier to Fish Passage on the Cheat River to Restore Historic Habitat (WV)**

Reconnect historic riverine habitat for eastern hellbender, eastern brook trout and freshwater mussels and reduce sedimentation to improve water quality on the mainstem of the Cheat River in West Virginia. Project will remove one barrier to aquatic organism passage, restore access to more than 74 miles of stream and hundreds more miles of tributaries and identify areas that are suitable for occupancy by hellbenders and eight species of freshwater mussel.

**\$199,081**

**Sustainable Forestry Initiative****Testing New Methods to Engage Institutional Landowners in Sustainable Forestry in a Landscape Context (WV)**

Develop and test effective means to engage certified institutional landowners and family landowners in West Virginia in implementation of dynamic forest block management that benefits forest bird species. Project will improve 7,650 acres of forest habitat, increase occupancy and abundance of golden-winged warbler, cerulean warbler and wood thrush on 20 sites and establish a path for institutional landowners to meet Sustainable Forestry Initiative landscape requirements for certification.

**\$199,856**

**The Potomac Conservancy****Establishing and Protecting Riparian Forest Buffers in the Eastern Panhandle of West Virginia**

Reduce nitrogen, phosphorous and sediment pollution and restore riparian habitat while addressing clean drinking water goals in the eastern panhandle of West Virginia. Project will accelerate implementation of riparian forest buffers to reduce polluted runoff and improve water quality, conserve existing high-value riparian buffers with perpetual conservation easements and conduct targeted outreach to enhance the implementation and long-term protection of riparian forest buffers.

**\$357,792**

**Trout Unlimited****Restoring and Reconnecting Brook Trout Strongholds in the South Branch of the Potomac (WV, VA)**

Mitigate a large barrier to fish migration on the North Fork of the South Branch of the Potomac River, reconnecting and restoring two of the largest brook trout strongholds in the Chesapeake Bay. Project will reconnect 150 miles of headwater sources, improve water quality and habitat through agricultural best management practices and help to create a 239 square mile brook trout stronghold super patch.

**\$492,619**

**University of Maryland Environmental Finance Center****Integrating Water Quality Improvement with Hazard Mitigation in West Virginia's Eastern Panhandle**

Tailor the Environmental Finance Center's blended learning model for improving local water quality to the Eastern Panhandle of West Virginia and integrate it with ongoing hazard mitigation planning. Project will expand the capacity of governments to take action on water quality improvements and hazard mitigation needs in a coordinated way that creates efficiencies and reduces implementation costs.

**\$49,998**

**WISCONSIN****Brown County****Providing Technical Assistance to Farmers for Cover Crop and No-Till Practices in Brown County (WI)**

Build off the momentum of the Fox Demonstration Farms by providing an opportunity for other farms to try soil health practices (cover crops, no-till planting) on their farm which will significantly reduce the non-point sediment and phosphorus pollutants that impair the Fox River, Bay of Green Bay and Lake Michigan. Project will implement Best Management Practices on 1,000 acres of farmland, preventing 290,000 pounds of sediment runoff pollution from entering the watershed annually.

**\$130,000**

**City of Greenfield****Restoring Urban Biodiversity and Riparian Habitat Quality in Honey Creek (WI)**

Improve habitat resilience to development and non-point source pollution and enhance and safeguard critical habitat for native species within the headwaters of Honey Creek. Project will protect urban biodiversity and habitat quality through floodplain/riparian wetland restoration, fish passage improvement, main channel re-meandering, in-stream restoration, improved green space and community access.

**\$225,000**

**Clean Wisconsin****Increasing Vegetative Green Stormwater Infrastructure Installation in Garden Homes (WI)**

Install green stormwater infrastructure including trees, bioswales and rain gardens to reduce stormwater runoff while also providing cooling, improving air quality and providing pollinator habitat in Garden Homes, a highly urbanized neighborhood. Project will plant 100 trees and install vegetative infrastructure to add nearly 9.2 million gallons of stormwater storage annually.

**\$116,510**

**Door County Land Trust****Conserving and Restoring Stony Creek through a Fee Acquisition in Door County (WI)**

Protect 1 mile of stream bank on Stony Creek in Door County, WI, by placing a fee acquisition on 43 acres of land on the Kruswick property. Project will preserve habitat for native animals and plants, especially habitat that supports Lake Michigan fisheries and migratory birds, and provide public access to the creek and property for recreational activities such as hiking, fishing, bird watching, hunting and snowshoeing.

**\$83,000**

**Fox-Wolf Watershed Alliance****Expanding Technical Assistance for Regenerative Agriculture Practices in the Fox-Wolf Basin (WI)**

Provide training to local land conservation departments throughout the Fox-Wolf Basin in Northeast Wisconsin. Project will implement best management practices for cover crop, no-till, manure management and rotational grazing 6,000 acres of farmland, preventing 1,500 pounds of phosphorus and 450,000 pounds of sediment runoff pollution from entering the watershed annually.

**\$299,913**

**Glacierland Resource Conservation and Development Council****Increasing Technical Assistance to Conserve Grassland Habitat in the Rock River Basin (WI)**

Conduct conservation planning and provide technical assistance and education and outreach regarding managed rotational grazing systems to farmers in Wisconsin's Rock River basin region. Project will implement 85 Best Management Practices on 400 acres of private working lands aimed at decreasing agricultural runoff, improving water quality, increasing wildlife habitat and ecosystem resiliency, as well as improving the livelihoods of local farmers.

**\$149,994**

**Milwaukee Board of School Directors,  
Milwaukee Public Schools**  
Implementing Green Infrastructure to Reduce  
Stormwater Runoff from Schoolyards in  
Milwaukee (WI)

Support the detailed design, permitting and construction of green infrastructure at five high-need urban schools. Project will: 1) address Milwaukee's stormwater needs and provide education and outreach with local nonprofit water-focused programming; 2) provide support for the development of outdoor classrooms, enhanced recreational facilities and STEAM curricular connections; and 3) plant 90 stormwater trees with educational signage to identify plantings and build awareness.

**\$49,996**

**Milwaukee Board of School Directors,  
Milwaukee Public Schools**  
Designing and Constructing Green Stormwater  
Infrastructure at Five Milwaukee Public  
Schools (WI)

Design and construct green stormwater infrastructure at five public schools in Milwaukee to reduce stormwater runoff and engage community youth in environmentally conscious programming. Project will replace asphalt with 26,810 square feet of bioswales, native plantings and other green infrastructure as well as plant more than 100 trees to add 4.3 million gallons of stormwater storage annually.

**\$600,000**

**National Audubon Society**  
Avian Monitoring and Evaluation  
for the Sustain our Great Lakes Program  
(multiple states)

Assist in monitoring NFWF's impact on migratory shorebirds, waterfowl and marsh-nesting birds for NFWF's Sustain our Great Lakes Program.

**\$484,097**

**Natural Resources Foundation  
of Wisconsin**

Increasing Pollinator Habitat Availability in  
Prairies and Grasslands (WI)

Restore and improve habitat for the monarch butterfly, regal fritillary, rusty patched bumble bee and other at-risk pollinator species across a network of public and private lands in southwest Wisconsin by collecting and planting native seeds, clearing brush, controlling invasive species, conducting prescribed burns and monitoring pollinators. Project will restore 267 acres and improve 1,570 acres at 12 public sites and host 44 events reaching 340 people.

**\$100,000**

**Ozaukee Washington Land Trust**  
Restoring Coastal Wetland Habitat for  
Migratory Birds at the Forest Beach Migratory  
Preserve (WI)

Improve biodiversity and safeguard coastal habitat by restoring wetlands, planting diverse tree and shrub species, replacing impervious surfaces with native vegetation and controlling invasive plants. Project will restore and enhance 116 acres of permanently protected Lake Michigan shoreline at Forest Beach Migratory Preserve.

**\$229,009**

**Quasimondo Physical Theatre**  
Increasing Community Resiliency through  
Green Stormwater Infrastructure in Old North  
Milwaukee (WI)

Expand green stormwater infrastructure in an underserved Milwaukee community, prevent runoff pollutants from entering Lake Michigan and increase local ecological equity. Project will add 46,000 gallons of stormwater storage annually by installing a native rain garden, bioswales, a stormwater orchard, three permeable pavement mosaics designed by local minority artists, and a green wall.

**\$75,000**

**Sand County Foundation**  
Fostering Technical Assistance to Advance  
Regenerative Agriculture in the Lake Michigan  
Basin (WI)

Integrate a performance-based conservation incentive system, based on quantified environmental outcomes and promoted within farmer networks in existing watershed-based projects, to accelerate the adoption of regenerative agriculture and leverage conservation funding for farmers. Project will assist 25 farmers with whole-farm conservation plans and outcomes modeling on 15,000 acres of new regenerative agriculture practices.

**\$300,000**

**Sand County Foundation**  
Midpoint Evaluation of NFWF's Great Lakes  
Business Plan (multiple states)

Evaluate the success to date of the Great Lakes Business Plan in achieving its dedicated conservation objectives in the areas of streams, coastal wetlands, and water quality. Project will include a review of the ten sub-objectives within these three priority areas, as well as of the sixteen focus areas expected to achieve multiple overlapping outcomes.

**\$195,526**

**Sheboygan County**  
Enhancing the Ecological Integrity and Wildlife  
Use of Sheboygan Marsh (WI)

Improve aquatic and wetland habitat within Sheboygan Marsh and increase public access and educational opportunities. Project will improve up to 400 acres of habitat by restoring marsh and wetland hydrology, improving wildlife habitat, controlling invasive species and developing recreational facilities.

**\$200,000**

**University of Wisconsin - Green Bay**  
Restoring Riparian and Oak Savanna Habitat in  
the Wequiock Creek Natural Area (WI)

Restore Midwestern oak savanna/wet meadow and riparian forest in a newly acquired natural area along Wequiock Creek, adjacent to the Point au Sable Nature Reserve in lower Green Bay, Wisconsin. Project will control invasive species and restore a native riparian corridor by widening native habitats along a stream corridor adjacent to a natural area with Great Lakes coastal wetlands, hardwood swamp and oak woodland.

**\$146,360**

**Wisconsin Department  
of Natural Resources**  
Improving Habitat for Karner Blue Butterfly,  
Rusty Patched Bumble Bee and Other  
Pollinators (WI)

Restore or enhance barrens, savannas and grasslands in Wisconsin for Karner blue butterflies, Poweshiek skipperling and rusty patched bumble bees through seed collections, interseeding, prescribed burning, invasive species control and brush control. Project will restore 50 acres and improve 1,100 acres on public lands, collect 100 pounds of milkweed seed, conduct 25 workshops, reach 250 people and create the Pollinator Preservation Initiative for seed collecting.

**\$99,996**

**Woodland Dunes Nature Center  
and Preserve**  
Engaging Local Communities in Restoration  
and Enhancement of Coastal Preserves (WI)

Restore native hardwood and coniferous forests, wetlands and prairie habitats in the Woodland Dunes Nature Center and Preserve and support environmental programming for local school districts. Project will restore or enhance wildlife and migratory bird stopover habitat at a variety of coastal preserve sites.

**\$268,320**



## WYOMING

### American Bird Conservancy

Providing Technical Assistance for Conservation Management on Private Working Lands (MT, ND, SD, WY)

Provide technical assistance to promote healthy grassland conservation to benefit grassland birds while meeting the economic bottom line for private landowners. Project will result in improved management on 6,500 acres through improved grazing rotations and fencing and water infrastructure and restore 350 acres by re-seeding annual cropland with native perennial grasses and forbs and 1,920 acres by removing windmills.

**\$345,588**

### Ducks Unlimited

Restoring Habitat through the Northern Grasslands Restoration Incentives Program (MT, ND, SD, WY)

Provide technical assistance through the Northern Grasslands Restoration Incentives Program to provide an additional set of conservation options for producers throughout the Northern Great Plains who provide habitat for declining grassland birds. Project will restore 2,000 acres of grassland habitat and place 16,000 acres under improved management.

**\$128,533**

### Friends of the Teton River

Advancing Adoption of Agricultural Best Management Practices Through Landowner Education (ID, WY)

Provide targeted educational opportunities for agricultural producers that accelerate the adoption of farming and ranching best management practices in the Teton Watershed to benefit water quality, quantity and yellowstone cutthroat trout. Project will employ workshops and peer-to-peer education, engage 20 producers in a pilot program, improve management on 1,650 acres, reduce nitrogen and sediment runoff and increase long-term adoption of sustainable land and water management practices.

**\$197,280**

### NatureServe

Research Support for Management of Pollinator Species (multiple states)

Conduct research to identify priority areas for on-the-ground monarch management actions such as habitat restoration and enrichment as well as to inform regulatory review. Project will map these areas and highlight those that are most used by monarchs, recognizing that monarchs tend to migrate along riparian and wetland corridors.

**\$199,878**

### Pheasants Forever

Using Decision-Support Tools to Strategically Deliver Grassland Bird Conservation (MT, SD, WY)

Collaboratively implement a tract-prioritization protocol based on grassland habitat decision-support tools to identify tracts on private land in western South Dakota, eastern Montana and eastern Wyoming with the highest value to grassland nesting passerines. Project will enroll 10,000 acres in grazing systems, integrate 50 ranchers with local stewardship resources, restore 5,000 acres of grassland habitat, improve 13 miles of fencing and restore 15 acres of riparian and wetland habitat.

**\$421,561**

### Rocky Mountain Bird Observatory

Community-Led Conservation of Grassland Habitat on Private Working Lands (MT, NE, SD, WY)

Maintain grassland connectivity through community-led conservation efforts, supported by sound science from diverse knowledge sources and facilitated through habitat enhancement and restoration by qualified Private Lands Wildlife Biologists. Project will provide and deliver technical support for fish and wildlife habitat conservation, restoration and improved management on 5,000 acres of private lands.

**\$214,192**

### Rocky Mountain Bird Observatory

Evaluating Impact of Conservation Activities on Sagebrush Obligate Songbirds (CO, ID, UT, WY)

Evaluate the impacts of conifer removal and control of annual grasses conservation projects on sagebrush obligate songbirds in the Rocky Mountain Rangelands Region. Project will provide a long-term assessment of which projects benefit sagebrush obligate songbirds and help guide future conservation investments.

**\$231,169**

### The Mule Deer Foundation

Increasing Cross-Jurisdictional Coordination in Sagebrush Habitat (multiple states)

Increase cross-jurisdictional coordination with state agencies and other partners to implement projects on big game migration corridors and in sage-grouse core habitats. Project will improve habitat through treating invasive species, conservation easements, mesic and wet meadow habitat restoration, removing or improving fencing and restoring 3,000 acres of shrubland habitat.

**\$395,012**

### Wyoming Game and Fish Department

Treating Invasives and Improving Fences to Restore Big Game Migratory Corridor Habitat (WY)

Restore and improve big game migration corridors and crucial ranges directly benefiting the Dubois, Platte Valley, Sublette and Wyoming Range mule deer herd units. Project will implement 4,076 acres of invasive weed treatments, modify 21.9 miles of fences and conduct land restoration on 2,750 acres of public land.

**\$591,000**

### Wyoming Stock Growers Land Trust

Permanently Protecting Migratory Bird Habitat on Waliser Ranch Through a Conservation Easement (WY)

Acquire a conservation easement on a working family ranch in Carbon County, Wyoming to permanently protect the agricultural, wildlife and other conservation values of the property. Project will place 1,432 acres under conservation easement thereby securing habitat for more than 160 bird species.

**\$165,000**

## U.S. TERRITORIES

### AMERICAN SAMOA

#### University of Hawaii

##### Creating a Living Shoreline along Lions Park to Enhance the Critical Estuarine Habitat (AS)

Create a living shoreline on Tutuila Island in U.S. Territory of American Samoa along Lions Park to enhance the critical estuarine habitat in the adjacent Pala Lagoon and serve as a concrete demonstration of alternative erosion protection to traditional seawalls. Project will create a locally suitable design for the living shoreline project, resulting in the protection of critical infrastructure, improvement of water quality by increased filtration and enhanced biodiversity.

**\$337,037**

### PUERTO RICO

#### North Carolina State University

##### Expanding Prescribed Fire Delivery to Restore Southeast Forests (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 landowners, including underserved landowners and fire practitioners through technical assistance, training and outreach to increase the use of prescribed fire.

**\$180,000**

#### Protectores de Cuencas

##### Evaluating Success of Land-based Pollution Management for Coral Habitat (PR)

Pilot a cost-effective water quality and sediment monitoring program, including citizen science monitoring, sediment traps, remote sensing, data sondes and watershed modeling in Culebra, Puerto Rico. Project will evaluate land-based pollution to help management in reducing sediment reaching nearshore coral and seagrass habitats, while engaging the local community and federal and local government.

**\$150,866**

#### Scuba Dogs Society

##### Urban Coastal Conservation and Monitoring of Leatherback Turtles Through Public Participation (PR)

Restore three beaches with leatherback nesting habitat in San Juan, Puerto Rico. Project will develop a solid waste and marine debris prevention program, collect beach water and microplastic samples and implement monitoring and educational outreach for the leatherback nesting season.

**\$36,555**

#### The Ocean Foundation

##### Electronic Monitoring for the Caribbean Small Boat Highly Migratory Species Fishery (PR)

Pilot electronic monitoring on small vessels operating in the Puerto Rico highly migratory species commercial fishery and convene a workshop to share lessons learned from a similar effort completed by the Quinault Indian Nation. Project will improve data collection in a fishery with no current reporting requirements and demonstrate a proven path towards small scale fishery electronic monitoring for U.S. Caribbean fishermen.

**\$234,317**

#### University of Puerto Rico at Aguadilla

##### Using Mangrove Restoration to Improve Coastal Community Resilience in Puerto Rico

Restore 59 hectares in four hurricane-destroyed basin mangroves to improve storm protections and ecosystem services for three coastal communities in Puerto Rico through hazardous dead tree removal, tidal flow restoration, mangrove seedlings plantings and monitoring equipment installation. Project will help protect more than 300 structures from storm surges, engage three communities, two universities and 500 volunteers and implement an innovative shelterwood harvest system.

**\$596,268**

### U.S. VIRGIN ISLANDS

#### The Nature Conservancy

##### Strengthening Coastal Resilience through Coral Reef Restoration (VI)

Restore coral reef habitat across 150 acres of marine protected area in East End Marine Park, St. Croix, U.S. Virgin Islands using a restoration approach that combines the culture and out planting of multiple species of corals produced and a comprehensive monitoring program to promote effective restoration. Project will strengthen coastal and community resilience to extreme weather, waves and flooding while expanding habitat for ecologically, commercially and recreationally important fisheries.

**\$1,204,552**

# UNITED STATES AND INTERNATIONAL FISCAL YEAR 2021 CONSERVATION INVESTMENTS

## CANADA

### Alberta Conservation Association

Enhancing Habitat and Connectivity for Pronghorn and Sage-Grouse by Improving Fences (Canada, MT)

Enhance sage-grouse critical habitat by assessing range condition and signing habitat conservation strategy letters with private landowners. Project will improve 40,000 acres of habitat by removing 5 miles of page wire fencing and converting it to a wildlife friendly fencing to enhance sage-grouse habitat and retrofitting 50 miles of existing fencing to facilitate easier pronghorn movement.

**\$150,000**

### Nature Conservancy of Canada

Conserving McIntyre Ranch to Protect Contiguous Habitat for Migratory Birds and Pronghorn (Canada)

Conserve one of the largest private ranches in Canada, the McIntyre Ranch, protecting high priority grassland habitat to benefit migratory grassland birds and pronghorn while allowing the ranch to continue functioning under range management best practices. Project will place 54,894 under conservation easement.

**\$300,000**

### Ocean Wise Conservation Association

Reducing Disturbance of Southern Resident Killer Whales from Vessel Traffic (Canada, WA)

Reduce physical and acoustic disturbance of Southern Resident killer whales caused by vessel traffic in Washington State waters. Project will increase the use and functionality of the WhaleReport Alert System in British Columbia and Washington State to enable voluntary measures to benefit killer whales.

**\$99,979**

### University of California - Santa Cruz

Improving a Meta-Population Viability Analysis Tool for Threatened and Endangered Seabirds (multiple states)

Improve a meta-population viability analysis (mPVA) tool to help prevent seabird extinctions. Project will incorporate sea-level rise and financial return on investment data to enhance seabird mPVA conservation planning and decision support tool.

**\$125,000**

### University of Saskatchewan

Improving Survival of Little Brown Bats in Agricultural Landscapes of the Northern Great Plains (Canada)

Determine best management practices for conserving populations of little brown bats in agricultural landscapes at the leading edge of white-nose syndrome (WNS) in the Northern Great Plains. Project will identify how agricultural practices and exposure to pesticides influence bat activity, condition, survival and reproductive success.

**\$189,519**

## LATIN AMERICA AND THE CARIBBEAN

### Areas Costeras y Recursos Marinos

Work With Fishermen at Priority Ports to

Reduce Leatherback Sea Turtle Bycatch in Peru

Identify management approaches to bycatch reduction and recruit and train fishermen to reduce sea turtle mortality. Project will test LED lights on driftnets used in artisanal fisheries in the ports of the Ica region and engage driftnet and longline fishermen to increase sea turtle bycatch reporting and promote proper turtle handling and release.

**\$77,294**

### Arizona State University

Develop and Test Bycatch Reduction Technology to Expand Use in Mexico

Advance gillnet bycatch reduction solutions for loggerhead and leatherback turtles and promote fisheries that result in less sea turtle bycatch in Mexico. Project will engage with local fishing communities to support the expansion of innovative fishing gear technologies to reduce the risk of bycatch in artisanal fisheries of Pacific Mexico.

**\$341,208**

### CIMAD

In-Water Surveys to Assess Juvenile Hawksbill Sea Turtles in Gorgona Natural National Park, Colombia

Reassess the hawksbill sea turtle aggregation at Gorgona National Park to evaluate potential changes in population size. Project will conduct in-water surveys to provide an updated baseline along this coastal area of the Colombian Pacific to evaluate its importance as a foraging site to the population.

**\$17,939**

### Equilibrio Azul

Hawksbill Sea Turtle Conservation in Machalilla National Park and Surrounding Beaches in Ecuador

Protect primary nesting and foraging habitats for hawksbill turtles in and around Machalilla National Park in Ecuador. Project will protect and monitor the only known consistent nesting beaches for the eastern Pacific hawksbill population in South America.

**\$35,999**

### Ecolibrium

Pacific Loggerhead and Leatherback Turtle Recovery Through Bycatch Reduction Efforts in Mexico

Support loggerhead and leatherback sea turtle recovery by reducing bycatch in gillnet and longline fisheries in U.S.-Mexico waters. Project will conduct a comprehensive evaluation to define the most practicable bycatch reduction approaches and coordinate with participating communities and Mexican government officials to create a framework for sustained and expanded efforts.

**\$274,950**

### Fauna and Flora International

Aid Hawksbill and Leatherback Turtle Population Recovery in Nicaragua Through Threat Reduction

Provide a comprehensive conservation program for eastern Pacific leatherback and hawksbill sea turtles in Nicaragua. Project will reduce bycatch in key foraging grounds, improve nesting and hatching success at three priority sites and contribute to regional monitoring programs.

**\$95,175**

### Grupo de Ecología y Conservación de Islas

Assessing the Ashy Storm-Petrel Breeding Population on Baja California Pacific Islands

Assess the breeding population of ashy storm-petrel on the Baja California Islands in Mexico. Project will monitor three ashy storm-petrel breeding locations in Mexico as part of the first range-wide monitoring effort, conduct social attraction to enhance current breeding at one location, mitigate threats to protect and improve breeding habitat and provide information that will assist future management and conservation actions.

**\$90,000**

Grupo de Ecología y Conservación de Islas Nonnative Predator Removal and Seabird Translocation on Guadalupe Island

Eradicate nonnative predators that threaten seabird populations and complete a translocation of black-footed albatross to establish a new high island sea-level rise resilient and predator free colony on Guadalupe Island in Mexico. Project will establish a new population of black-footed albatross, complete seabird monitoring and social attraction and conduct environmental education and outreach efforts to support seabird conservation.

**\$1,200,000**

Grupo de Ecología y Conservación de Islas Protecting and Monitoring the Townsend's Shearwater on the Revillagigedo Archipelago, Mexico – II

Continue protection of Townsend's shearwater on the Revillagigedo Archipelago of Mexico. Project will confirm the success of nonnative predator eradication efforts on Socorro Island, will monitor Townsend's shearwater, improve social attraction systems, initiate rodent removal on Clarión Island and implement biosecurity protocols across the archipelago.

**\$450,000**



**Grupo Tortuguero de las Californias****Engage Fishers to Reduce Eastern Pacific Leatherback Turtle Bycatch Near Nesting Beaches in Mexico**

Identify and test collaborative solutions to reduce the incidental capture of eastern Pacific leatherback turtles in proximity to their primary nesting beaches in Southern Mexico. Project will reduce bycatch at two hot spots by working with local fishers and authorities to design and test modified fishing gear.

**\$239,997**

**Grupo Tortuguero de las Californias****Engaging Communities in Bycatch Reduction Strategies Along Pacific Mexico**

Identify and test sea turtle bycatch reduction strategies in northwestern Mexico to improve loggerhead and leatherback turtle survival. Project will conduct rapid bycatch assessments in communities, organize fishers learning exchanges and conduct community outreach to reduce bycatch along the Pacific coast of Mexico.

**\$587,951**

**Oikonos - Ecosystem Knowledge****Conservation of the Pink-Footed Shearwater in Chile – IV**

Continue pink-footed shearwater conservation efforts to improve breeding metrics and adult survival in Chile. Project will assess fencing benefits on nesting success, advance capabilities of detecting and controlling invasive mammals in breeding colonies, restore breeding habitat to improve reproductive success, complete various light projects to reduce seabird fallout and investigate mortalities in fisheries.

**\$325,000**

**Pacific Rim Conservation****Creating Resilient Tropical Seabird Colonies through Translocation (HI, MEX)**

Continue seabird translocations to James Campbell National Wildlife Refuge on the north shore of O'ahu, Hawai'i and begin translocations of black-footed albatrosses to Guadalupe Island, Mexico. Project will translocate up to 225 chicks (three species) and 42 eggs (black-footed albatross) to two sea-level rise resilient and predator free locations in an effort to create long-term resilient seabird colonies.

**\$390,000**

**SUBMON****Reduce Impacts to Sea Turtles From Artisanal Fisheries Along Pacific Costa Rica and Panama**

Implement an official training program for longline fishermen along the Pacific coasts of Costa Rica and Panama to reduce sea turtle mortality from bycatch. Project will assess bycatch rates at suspected hot spot ports and establish a government recognized training program for fishermen in the best handling and release techniques of captured sea turtles.

**\$110,457**

**The Leatherback Trust****Increase Nesting Beach Quality to Maximize Hatchling Output of Leatherback Turtles in Costa Rica**

Increase hatching and emergence success of leatherback sea turtles in Costa Rica. Project will increase nesting beach quality through climate mitigation strategies, predation and poaching reduction and by decreasing light pollution.

**\$70,000**

**The Ocean Foundation****Population Viability Analysis of Eastern Pacific Hawksbill Turtles**

Develop the first comprehensive population viability analysis for eastern Pacific hawksbills. Project will estimate annual survival at priority nesting and foraging sites and incorporate information on reproductive parameters and bycatch rates to formulate a population model that can evaluate conservation scenarios and validate population viability.

**\$93,947**

**University of California - Santa Cruz****Improving a Meta-Population Viability Analysis Tool for Threatened and Endangered Seabirds (multiple states)**

Improve a meta-population viability analysis (mPVA) tool to help prevent seabird extinctions. Project will incorporate sea-level rise and financial return on investment data to enhance the existing seabird mPVA conservation planning and decision support tool.

**\$125,000**

**ASIA - INDONESIA****French Polynesia****Island Conservation****Removing Invasive Rodents to Recover****Polynesian Storm-Petrels on Kamaka Island**

Complete a drone-based operation to remove Pacific rats from Kamaka Island in the southeast region of French Polynesia to improve breeding success of at-risk seabirds, including the endangered Polynesian storm-petrel. Project will remove rodents from 124 acres to restore breeding habitat and allow for recolonization of Polynesian storm-petrel, which will serve as the foundation for future management on Henderson Island.

**\$48,441**

**MARIANA ISLANDS****Mariana Islands Nature Alliance****Improving Coral Reef Restoration Outcomes in the Commonwealth of the Northern Mariana Islands**

Gain a comprehensive understanding of how outplanting strategies and site-level environmental conditions influence coral reef restoration outcomes in the Commonwealth of the Mariana Islands. Project will inform future coral reef restoration and management decisions and increase local restoration capacity by contributing to the expansion of an existing coral nursery.

**\$50,000**



A young loggerhead  
sea turtle swimming  
in the Atlantic Ocean





# **GULF ENVIRONMENTAL BENEFIT FUND**

## **FISCAL YEAR 2021 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 pled 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 2021 in accordance with the terms of the plea agreements. Since its inception in 2013, NFWF has awarded approximately \$1.5 billion to projects in the Gulf States.

## ALABAMA

### City of Foley

#### Bon Secour River Headwaters Restoration – Phase II

Begin implementation phase of an effort to improve approximately 1 mile of streambank and construct a 70-acre wetland system designed to treat urban runoff that is adversely affecting downstream fisheries. The constructed wetlands will address nutrient, sediment and debris flow to improve water quality in the lower Bon Secour River and Bon Secour Bay.  
**\$5,100,000**

### City of Foley

#### Wolf Creek Headwaters Restoration – Phase I

Complete the engineering and design phase of a project to improve water quality within the Wolf Creek headwaters. This project area is the largest source of artificially high sediment runoff to Wolf Bay, an Outstanding Alabama Water. The project would consist of approximately 7,000 linear feet of stream restoration/stabilization, 36 acres of riparian wetland restoration, and a constructed wetland with floodplain enhancement encompassing the major headwaters of Wolf Creek.  
**\$500,000**

### City of Mobile

#### Mobile Bay Shore Habitat Conservation and Acquisition Initiative – Phase II (Amendment)

Acquire, protect and restore high-priority properties containing undeveloped intertidal habitat within three distinct areas of the City of Mobile (Dog River, Garrows Bend and Three Mile Creek watersheds). Amendment to acquire 45 acres of coastal habitat along the Brookley bayfront.  
**\$2,000,000**

### Mobile County Commission

#### Dauphin Island Causeway Shoreline Restoration Project – Phase II

Complete the design of and construct a 3-mile breakwater and 60 acres of coastal marsh in Mobile Bay, on the east side of the Dauphin Island Causeway. This effort will create and protect critical coastal marsh habitat, enable natural processes to maintain nearshore habitats, and reduce the force of wave energy to the shoreline.  
**\$28,362,000**

### South Alabama Land Trust

#### Dauphin Island Bird Habitat Acquisition and Enhancement Program

Acquire and enhance important bird habitats on Dauphin Island to benefit shorebirds, wading birds and seasonal migrants. Due diligence and landowner outreach will be undertaken as the first step to acquire an estimated 13 acres of undeveloped habitat to protect critically important migratory stopover habitat and facilitate management of contiguous blocks of conservation lands.  
**\$1,994,425**

### Town of Dauphin Island

#### Dauphin Island East End Beach and Dune Restoration – Phase I

Complete engineering, design, and permitting for the restoration of nearly a mile of beach and dune habitat on the east end of Dauphin Island, a 14-mile long barrier island off the coast of Mobile County. The initial project concept is to place an estimated 1.2 million cubic yards of sand along 4,800 feet of shoreline to restore 35 acres of beach and dune habitat. Additional measures such as planting and sand fencing would be included, as appropriate, to assist in retaining sand on the restored beach and dune system.  
**\$1,400,000**

## FLORIDA

### Axiom Data Science

**Increased Capacity for Marine Mammal Response – GulfMAP Database Transition**  
 Transition the GulfMAP data entry system to a centralized cloud-based system to enhance data management and facilitate the integration of GulfMAP data within NOAA's new CETACEAN data entry system. GulfMap was originally created to enhance data collection for Gulf-wide marine mammal stranding events.  
**\$149,885**

### Clearwater Marine Aquarium

#### Increased Capacity for Marine Mammal Response (Amendment)

Enhance the marine mammal stranding network along the Florida Gulf Coast by providing established stranding organizations with supplemental staff, equipment and provisions to improve stranding response and data collection efforts. Project will provide for minimal capacity requirements to allow the organization to contribute critical stranding data to a centralized database on marine mammal health. Amendment to continue project activities until 2023.  
**\$217,229**

### Florida Fish and Wildlife Conservation Commission

#### Restoring Florida's Shorebird and Seabird Populations – Phase II

Expand upon foundational work in Phase I to recover imperiled shorebird (American oystercatcher, snowy plover, Wilson's plover) and seabird (least tern, black skimmer) populations within the state using five strategies: reduce human disturbance, manage habitat, manage predation, inform management and track outcomes, and improve regulatory coordination. Phase II will use information gained in Phase I to evaluate and revise population targets for each focal species and will include an evaluation of the cost-effectiveness of the five strategies. This phase will also enhance management of rooftop colonies to enhance nesting success and refine the use of predation management to maximize population benefits.  
**\$2,863,762**

### Florida Fish and Wildlife Conservation Commission, Fish and Wildlife Research Institute

#### Restoring Florida's Shorebird and Seabird Populations – Phase II

Expand upon foundational work in Phase I to recover imperiled shorebird (American oystercatcher, snowy plover, Wilson's plover) and seabird (least tern, black skimmer) populations within the state using five strategies: reduce human disturbance, manage habitat, manage predation, inform management and track outcomes, and improve regulatory coordination. Phase II will use information gained in Phase I to evaluate and revise population targets for each focal species and will include an evaluation of the cost-effectiveness of the five strategies. This phase will also enhance management of rooftop colonies to enhance nesting success and refine the use of predation management to maximize population benefits.  
**\$3,764,634**

### Florida Fish and Wildlife Conservation Commission, Fish and Wildlife Research Institute

#### Marine Mammal Pathobiology Lab

Construct a marine mammal pathobiology facility on the campus of Eckerd College in Pinellas County. The facility will serve as a hub for high-quality marine mammal necropsy activities that will increase understanding of the causes of illness and death, and inform early detection and intervention of anthropogenic and natural threats in marine mammals that strand off Florida's Gulf Coast.  
**\$6,766,000**



### **Florida Fish and Wildlife Conservation Commission, Fish and Wildlife Research Institute**

#### **Increased Capacity for Marine Mammal Response (Amendment)**

Enhance the marine mammal stranding network along the Florida Gulf Coast by providing established stranding organizations with supplemental staff, equipment and provisions to improve stranding response and data collection efforts. Project will provide for minimal capacity requirements to allow the organization to contribute critical stranding data to a centralized database on marine mammal health. Amendment to continue project activities until 2023.

**\$510,277**

### **Gulf World Marine Institute**

#### **Increased Capacity for Marine Mammal Response (Amendment)**

Enhance the marine mammal stranding network along the Florida Gulf Coast by providing established stranding organizations with supplemental staff, equipment and provisions to improve stranding response and data collection efforts. Project will provide for minimal capacity requirements to allow the organization to contribute critical stranding data to a centralized database on marine mammal health. Amendment to continue project activities until 2023.

**\$141,917**

### **Mote Marine Laboratory**

#### **Increased Capacity for Marine Mammal Response (Amendment)**

Enhance the marine mammal stranding network along the Florida Gulf Coast by providing established stranding organizations with supplemental staff, equipment and provisions to improve stranding response and data collection efforts. Project will provide for minimal capacity requirements to allow the organization to contribute critical stranding data to a centralized database on marine mammal health. Amendment to continue project activities until 2023.

**\$239,075**

### **National Audubon Society**

#### **Restoring Florida's Shorebird and Seabird Populations – Phase II**

Expand upon foundational work in Phase I to recover imperiled shorebird (American oystercatcher, snowy plover, Wilson's plover) and seabird (least tern, black skimmer) populations within the state using five strategies: reduce human disturbance, manage habitat, manage predation, inform management and track outcomes, and improve regulatory coordination. Phase II will use information gained in Phase I to evaluate and revise population targets for each focal species and will include an evaluation of the cost-effectiveness of the five strategies. This phase will also enhance management of rooftop colonies to enhance nesting success and refine the use of predation management to maximize population benefits.

**\$3,292,620**

### **Tall Timbers Research**

#### **Ladson Tract Conservation Easement**

Permanently protect approximately 1,837 acres of habitat in the Big Bend region of Florida through a conservation easement. Over 1.8 miles of the Wacissa River and 2.4 miles of the Aucilla River are within the property boundaries, along with numerous sinks and springs that are a direct link to the underlying Floridian aquifer. The tract contains tidally influenced river systems and mature hydric hammock forests that help buffer tidal surge, store floodwater, reduce stormwater erosion, and deliver important freshwater to the coast.

**\$1,654,000**

### **University of Florida**

#### **Increased Capacity for Marine Mammal Response (Amendment)**

Enhance the marine mammal stranding network along the Florida Gulf Coast by providing established stranding organizations with supplemental staff, equipment and provisions to improve stranding response and data collection efforts. Project will provide for minimal capacity requirements to allow the organization to contribute critical stranding data to a centralized database on marine mammal health. Amendment to continue project activities until 2023.

**\$133,199**

## **MISSISSIPPI**

### **Mississippi Department of Environmental Quality**

#### **Migratory Bird Habitat Creation in the Lower Mississippi River Valley**

Create and enhance over 7,600 acres of migratory bird habitat in the Lower Mississippi River Valley. The project would ensure adequate shallow-water habitat is maximized within wildlife management areas, to meet or exceed the foraging requirements of numerous shorebirds, wading birds, and waterfowl populations during their southward migration to the Gulf of Mexico.

**\$6,027,000**

### **Mississippi Department of Environmental Quality**

#### **Reef Fish Assessment for Mississippi Coastal and Nearshore Waters: Restoration through Improved Data Collection and Management – Phase IV (Amendment)**

Complete the final phase of data collection efforts to assess reef fish populations in coastal Mississippi and nearshore Gulf of Mexico waters through biological, environmental, and fishery-dependent components that will provide necessary data to reduce scientific uncertainty around factors influencing red snapper and reef fish population structures. Amendment to continue project activities until 2024.

**\$500,000**

### **The Nature Conservancy**

#### **Enhancement of St. Louis Bay Oyster Reef**

Expand an existing oyster reef in St. Louis Bay in Mississippi by 20 acres. Restoration will be accomplished through the deployment of clutch material at an existing 10-acre oyster reef site to add acreage and increase vertical relief. The vertical relief will ensure greater resilience to occasional incidents of low dissolved oxygen as well as enhance fisheries habitat.

**\$2,858,000**

## **TEXAS**

### **Ducks Unlimited**

#### **Hydrological Restoration of Brazoria National Wildlife Refuge Wetlands – Phase II**

Restore and enhance the natural hydrology of the Chocolate Bay Prairie Unit (CBPU) of Brazoria National Wildlife Refuge, a 9,500-acre expanse of critical coastal wetland and prairie habitat located in Brazoria County. The goal of this project is to remedy the negative effects of past alterations within the CBPU and to restore wetland hydrology that will mimic natural surface flow conditions and flood duration in a coastal grassland and wetland landscape.

**\$911,000**

**Ducks Unlimited****Greens Lake Shoreline Protection and Marsh Construction Project – Phase II**

Construct 3.3 miles of shoreline protection breakwaters along a highly eroded section of the Gulf Intercoastal Waterway adjacent to the Greens Lake Marsh Complex. The Greens Lake Marsh Complex is a 5,100-acre coastal marsh complex adjacent to West Galveston Bay that consists of ecologically important coastal habitats including fresh and brackish coastal marsh, transitional high marsh and coastal prairie, dendritic tidal channels, and open water containing submerged aquatic vegetation and oyster beds. These habitats are critically important for numerous species of waterfowl, shorebirds and wading birds.

**\$4,025,000**

**Texas General Land Office****Powderhorn Lake and Matagorda Bay Shoreline Conservation – Phase I**

Engineer and design more than 2 miles of shoreline stabilization within the Powderhorn State Park and Wildlife Management Area, a newly established conservation property made possible through the GEBF-funded acquisition of the historic Powderhorn Ranch in 2014. This project is part of a multi-phased shoreline stabilization and habitat conservation project that ultimately aims to reduce shoreline erosion and protect 5,300 acres of wetlands, including approximately 1,000 acres of emergent estuarine marsh along the shores of Powderhorn Lake and Matagorda Bay.

**\$560,000**

**Texas General Land Office****Carancahua Bay Habitat Preservation and Enhancement – Phase II**

Complete engineering, design and construction of a 2-mile living shoreline to protect and restore the mouth of Carancahua Bay in Calhoun County. This investment will directly protect more than 1,000 acres of salt marsh, oysters, seagrass, and shallow water habitat complex, as well as up to 75% of intertidal salt marsh within the Salt and Redfish lake areas of the bay (624 acres).

**\$6,100,000**

**The Nature Conservancy****Powderhorn West Conservation Easement**

Purchase a conservation easement on approximately 10,000 acres known as the Powderhorn West Ranch. The Powderhorn West Ranch is immediately adjacent to the 17,000-acre Powderhorn State Park and Wildlife Management Area purchased through the GEBF in 2014. The property is made up of substantial tidal marshes and flats, intermediate and brackish wetlands, wet prairies, and shorelines on Powderhorn Lake, which is part of the Matagorda Bay system, one of the most productive nurseries on the Texas Gulf Coast.

**\$5,379,000**

**U.S. Fish and Wildlife Service****Bahia Grande Habitat Restoration – Phase II**

Complete two components critical to the overall restoration of the Bahia Grande Unit of the Laguna Atascosa National Wildlife Refuge. The first component would complete design and construction of breakwaters to protect three bird nesting islands, totaling 17 acres. These quickly eroding islands support a broad list of shrub and ground nesting waterbirds such as herons, egrets, ibis, terns, skimmers and gulls, including what is likely the largest gull-billed tern nesting colony in the United States. The second component of this project will restore the hydrology of the Paso Corvinas wetlands, totaling 670 acres. Historic channelization and irrigation lead to high salinities and frequent drying out of these once-highly productive wetlands in Paso Corvinas.

**\$5,640,000**

# **IMPACT-DIRECTED ENVIRONMENTAL ACCOUNTS (IDEA)**

## FISCAL YEAR 2021 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

#### Eyak Lake Weir Restoration (AK) – Phase 1

Complete the first phase of a larger effort to improve aquatic organism passage in Eyak Lake in Cordova, Alaska by replacing a damaged, failing weir at the lake's outlet. Project will assess current conditions, engage community members and partners, and produce a report of concept designs and cost estimates to help select final concept for advancing to design and construction.

**\$41,075**

#### Federal Criminal Case

*U.S. v. Polar Tankers, Inc.; U.S. v. Arne J.*

*Fuglvog*

### Ukpeagvik Iñupiat Corporation

#### U.S. Army Corps of Engineers Endowment - AR-9 Mitigation Site (AK)

Perform long-term land management of mitigation land in Utqiavik, Alaska.

**\$12,240**

*Mitigation*

### University of Alaska Anchorage

#### Supporting Steller Sea Lion Recovery Research with the Alaska Native Science and Engineering Program and the Alaska SeaLife Center (AK)

Conduct Steller sea lion recovery research in the Exclusive Economic Zone in Alaska. Project supports students in the Alaska Native Science and Engineering Program who will work in partnership with the Alaska SeaLife Center.

**\$8,974**

#### Federal Criminal Case

*U.S. v. Herm. Dauelsberg GmbH & Co. KG*

## CALIFORNIA

### Althouse and Meade

#### California Department of Fish and Wildlife Endowment - Palo Prieto Conservation Bank

Perform long-term land management of mitigation land in San Luis Obispo and Kern counties, California.

**\$47,514**

*Mitigation*

### Audubon California

#### Lake Isabella Willow Flycatcher Stewardship Project (CA)

Continue to restore 1,150 acres of Southwestern willow flycatcher habitat to compensate for impacts of long-term operations of the Lake Isabella reservoir, in cooperation with the U.S. Army Corps of Engineers and the U.S. Fish and Wildlife Service.

**\$126,485**

*Mitigation*

### Bill Luce Consulting

#### San Joaquin River Restoration Settlement Implementation Technical Advisory Committee Services (CA)

Assist and advise the Restoration Administrator in the implementation of the San Joaquin River Restoration Settlement. Project will restore flow and salmon populations to the San Joaquin River below Friant Dam.

**\$26,890**

*Other*

### California Department of Fish and Wildlife

#### California Department of Fish and Wildlife Endowment - 2003 Kern River Exp Project

Perform long-term management of mitigation land in Kern and San Bernardino counties, California.

**\$23,260**

*Mitigation*

### California Department of Fish and Wildlife

#### California Department of Fish and Wildlife Endowment - Agua Hedionda Lagoon

Perform long-term management of mitigation land in San Diego County, California.

**\$736**

*Mitigation*

### California Department of Fish and Wildlife

#### California Department of Fish and Wildlife Endowment - Alton North Conservation Bank

Perform long-term management of mitigation land in Napa County, California.

**\$5,309**

*Mitigation*

### California Department of Fish and Wildlife

#### California Department of Fish and Wildlife Endowment - American Canyon Ecological Reserve

Perform long-term management of mitigation land in Napa County, California.

**\$20,038**

*Mitigation*

### California Department of Fish and Wildlife

#### California Department of Fish and Wildlife Endowment - Borax Mine Overburden

Perform long-term management of mitigation land in Kern and San Bernardino counties, California.

**\$39,122**

*Mitigation*

### California Department of Fish and Wildlife

#### California Department of Fish and Wildlife Endowment - Brewer Parcel

Perform long-term management of mitigation land in Shasta County, California.

**\$1,017**

*Mitigation*

### California Department of Fish and Wildlife

#### California Department of Fish and Wildlife Endowment - Burke-Robey

Perform long-term management of mitigation land in Humboldt County, California.

**\$6,713**

*Mitigation*

### California Department of Fish and Wildlife

#### California Department of Fish and Wildlife Endowment - Cherry Ranch

Perform long-term management of mitigation land in Sonoma County, California.

**\$3,082**

*Mitigation*

### California Department of Fish and Wildlife

#### California Department of Fish and Wildlife Endowment - Coalinga Prison

Perform long-term management of mitigation land in Fresno County, California.

**\$9,461**

*Mitigation*

### California Department of Fish and Wildlife

#### California Department of Fish and Wildlife Endowment - DAVIS Preserve

Perform long-term management of mitigation land in Sonoma County, California.

**\$3,399**

*Mitigation*

### California Department of Fish and Wildlife

#### California Department of Fish and Wildlife Endowment - Delano Prison

Perform long-term management of mitigation land in Kern County, California.

**\$4,985**

*Mitigation*

### California Department of Fish and Wildlife

#### California Department of Fish and Wildlife Endowment - Eden Landing Ecological Reserve

Perform long-term management of mitigation land in Alameda County, California.

**\$5,683**

*Mitigation*

### California Department of Fish and Wildlife

#### California Department of Fish and Wildlife Endowment - Gobbi Preserve

Perform long-term management of mitigation land in Sonoma County, California.

**\$10,333**

*Mitigation*

### California Department of Fish and Wildlife

#### California Department of Fish and Wildlife Endowment - Gorman Creek

Perform long-term management of mitigation land in Imperial County, California.

**\$1,133**

*Mitigation*



**California Department of Fish and Wildlife**  
California Department of Fish and Wildlife  
Endowment - Hambro Acquisition  
Perform long-term management of mitigation  
land in Del Norte County, California.  
\$8,962  
*Mitigation*

**California Department of Fish and Wildlife**  
California Department of Fish and Wildlife  
Endowment - Hazel Mitigation Bank  
Perform long-term management of mitigation  
land in Sonoma County, California.  
\$12,820  
*Mitigation*

**California Department of Fish and Wildlife**  
California Department of Fish and Wildlife  
Endowment - Indian Wells Valley  
Perform long-term management of  
mitigation land in Kern County, California.  
\$1,699  
*Mitigation*

**California Department of Fish and Wildlife**  
California Department of Fish and Wildlife  
Endowment - Kern River Pipeline  
Perform long-term management of  
mitigation land in Kern, San Bernardino, and  
Mojave counties, California.  
\$14,786  
*Mitigation*

**California Department of Fish and Wildlife**  
California Department of Fish and Wildlife  
Endowment - Margaret Preserve  
Perform long-term management of  
mitigation land in Sonoma County,  
California.  
\$3,190  
*Mitigation*

**California Department of Fish and Wildlife**  
California Department of Fish and Wildlife  
Endowment - Margaret West Conservation  
Bank  
Perform long-term management of  
mitigation land in Sonoma County,  
California.  
\$5,552  
*Mitigation*

**California Department of Fish and Wildlife**  
California Department of Fish and Wildlife  
Endowment - Misc Mojave Projects LB  
Perform long-term management of  
mitigation land in San Bernardino County,  
California.  
\$12,520  
*Mitigation*

**California Department of Fish and Wildlife**  
California Department of Fish and Wildlife  
Endowment - North Baja Pipeline  
Perform long-term management of mitigation  
land in Riverside and Imperial counties,  
California.  
\$21,561  
*Mitigation*

**California Department of Fish and Wildlife**  
California Department of Fish and Wildlife  
Endowment - Oceanic Community  
Perform long-term management of  
mitigation land in Kern County, California.  
\$2,266  
*Mitigation*

**California Department of Fish and Wildlife**  
California Department of Fish and Wildlife  
Endowment - Old Oregon Trail  
Perform long-term management of  
mitigation land in the city of Redding,  
California.  
\$2,506  
*Mitigation*

**California Department of Fish and Wildlife**  
California Department of Fish and Wildlife -  
Renewable Energy Action Team Endowment  
- Catalina and Pacific Wind  
Perform long-term management of  
mitigation land in Kern County, California.  
\$47,703  
*Mitigation*

**California Department of Fish and Wildlife**  
California Department of Fish and Wildlife  
Endowment - South Sonoma Business Park  
Perform long-term management of  
mitigation land in Sonoma County,  
California.  
\$1,660  
*Mitigation*

**California Department of Fish and Wildlife**  
California Department of Fish and Wildlife  
Endowment - Slippery Rock Conservation  
Bank  
Perform long-term management of  
mitigation land in Sonoma County,  
California.  
\$11,647  
*Mitigation*

**California Department of Fish and Wildlife**  
California Department of Fish and Wildlife  
Endowment - Statewide Electric Fence  
Perform long-term management of  
mitigation land in Tulare County, California.  
\$2,039  
*Mitigation*

**California Department of Fish and Wildlife**  
California Department of Fish and Wildlife  
Endowment - Topaz Solar Farm  
Perform long-term management of  
mitigation land in San Luis Obispo County,  
California.  
\$291,365  
*Mitigation*

**California Department of Fish and Wildlife**  
California Department of Fish and Wildlife  
Endowment - Tuscarora Pipeline  
Perform long-term management of  
mitigation land in Modoc County, California.  
\$4,305  
*Mitigation*

**California Department of Fish and Wildlife**  
California Department of Fish and Wildlife  
Endowment - San Diego ESP&CSP  
Perform long-term management of  
mitigation land in San Diego County,  
California.  
\$5,665  
*Mitigation*

**California Department of Fish and Wildlife**  
California Department of Fish and Wildlife  
Endowment - San Vicente (TET)  
Perform long-term management of  
mitigation land in San Diego County,  
California.  
\$1,133  
*Mitigation*

**California Department of Fish and Wildlife**  
California Department of Fish and Wildlife  
Endowment - Swift-Turner Mitigation Bank  
Perform long-term management of  
mitigation land in Sonoma County,  
California.  
\$5,427  
*Mitigation*

**California Department of Fish and Wildlife**  
California Department of Fish and Wildlife  
Endowment - Tarplant Reserve  
Perform long-term management of  
mitigation land in Santa Barbara County,  
California.  
\$850  
*Mitigation*

**California Department of Fish and Wildlife**  
California Department of Fish and Wildlife  
Endowment - Western Riverside Multiple  
Species Habitat Conservation Plan  
Perform long-term management of  
mitigation land in Riverside County,  
California.  
\$331,709  
*Mitigation*

**California Department of Fish and Wildlife**  
California Department of Fish and Wildlife  
Endowment - Wister Pond Operation and  
Maintenance  
Conduct long-term operation and  
maintenance of Wister Pond in San Diego  
County, California.  
\$18,391  
*Mitigation*

**California Department of Fish and Wildlife**  
California Department of Fish and Wildlife  
Endowment - Wister Pond Water Source  
Purchase water from Imperial Irrigation  
District to benefit Wister Pond in San Diego  
County, California.  
\$23,175  
*Mitigation*

**California Department of Fish and Wildlife**

California Department of Fish and Wildlife  
Endowment - YUBA DRIVE MP

Perform long-term management of mitigation land in Sonoma County, California.

**\$3,036**

*Mitigation*

**California Department of Fish and Wildlife**

California Department of Fish and Wildlife  
Initial and Capital Account - SCE TRTP Fremont Valley

Conduct short-term management of mitigation land in Kern, Los Angeles, and San Bernardino counties, California.

**\$27,091**

*Mitigation*

**California Department of Fish and Wildlife**

- Office of Spill Prevention and Response  
Guadalupe Restoration Maintenance and Operations (CA)

Fund the California Department of Fish and Wildlife for administrative costs incurred in the response, containment, and cleanup of the Guadalupe Restoration maintenance and operations.

**\$26,870**

*State Civil Case*

**California Department of Parks and Recreation**

California State Parks Endowment - Morro  
Shoulderband Snail Habitat Management

Perform long-term management of mitigation land in San Luis Obispo County, California.

**\$12,249**

*Mitigation*

**California Invasive Plant Council**

Managing Invasive Sea Lavender in the San Francisco Estuary (CA) – Phase II

Protect native plant and wildlife habitat in San Francisco Estuary tidal marshes by controlling invasive sea lavender. Project will map and remove sea lavender using early intervention techniques aimed at reversing the spread of the plant before it significantly degrades important marsh and upland habitats.

**\$199,573**

*Federal Criminal Case*

*Multiple prosecutions*

**California State University - Stanislaus**

Tipton Kangaroo Rat Monitoring and Shrub Assessment on Unit 15 of Kern National Wildlife Refuge (CA)

Monitor the endangered Tipton kangaroo rat and assess Tipton kangaroo rat habitat on Unit 15 of Kern National Wildlife Refuge.

**\$9,842**

*Mitigation*

**California Trout**

South Fork Floodplain Connectivity (CA)

– Phase III

Restore floodplain function and instream habitat complexity within a .85 mile reach of the South Fork of the Scott River, a major tributary to the Klamath River in Siskiyou County, California. This project will include the excavation of an inset floodplain, large-wood habitat complexity, side-channel connectivity and habitat enhancement, riparian planting, and effectiveness monitoring, and is intended to continue restoration and enhancement efforts in a high priority reach for the benefit of coho salmon.

**\$67,674**

*Mitigation*

**California Trout**

Santa Paula Creek Water Quality Assessment Project (CA)

Conduct a water quality assessment in Santa Paula Creek, located in Ventura County, California, that will identify potential sources of fecal bacteria and other toxins and assess the direct risk they present to steelhead and other native species. Project will complete a critical part of a larger effort to restore passage to 12 miles of historic habitat for southern California steelhead.

**\$126,714**

*Federal Criminal Case*

*U.S. v. Wal-Mart Stores, Inc.*

**City of Santa Rosa**

California Department of Fish and Wildlife  
Endowment - Airfield Neighborhood Park

Perform long-term management of mitigation land in Sonoma County, California.

**\$7,643**

*Mitigation*

**Coastal Watershed Council**

River Health Days: Community-Based Habitat Enhancement of the Lower San Lorenzo River (CA)

Implement ten River Health Day volunteer events, evaluate and adapt a planting program, and purchase watershed-specific native plants for installation each year along the lower San Lorenzo River in Santa Cruz, California. Project will increase biodiversity and ecosystem function to sustainable levels to benefit special status species.

**\$15,000**

*State Civil Case*

**Corvus Ecological Consulting**

2021 Common Raven Monitoring and Management within Desert Tortoise Conservation Areas / California Common Raven Monitoring and Management Strata Proposal Joshua Tree National Park and Pinto Mountains Critical Habitat Unit (CA)

Conduct raven monitoring and management for protection of federally listed desert tortoise in Joshua Tree National Park and Pinto Mountains Critical Habitat Unit in California.

**\$118,449**

*Mitigation*

**Desert Tortoise Preserve Committee**

Renewable Energy Action Team Endowment - Manzana Wind (CA)

Perform long-term management of mitigation land in Kern County, California.

**\$11,929**

*Mitigation*

**East Bay Regional Park District**

Albany Beach Habitat Restoration (CA)

Monitor and maintain the habitat restoration that was previously completed for the Albany Beach Restoration and Public Access project. Project will focus on continued maintenance and additional plantings in the expanded and enhanced dunes and wetlands to help establish native dune and wetland plants and manage invasive weeds over a three-year period.

**\$101,500**

*Federal Criminal Case*

*Multiple prosecutions*

**Fagundes Agribusiness**

California Department of Fish and Wildlife  
Initial and Capital Account - Cross Creek West

Conduct short-term management of mitigation land in Kings County, California.

**\$18,170**

*Mitigation*

**Fletcher Ranch Road Properties**

California Department of Fish and Wildlife  
Endowment - Mountain House Conservation Bank (CA)

Perform long-term management of mitigation land in Alameda County, California.

**\$3,372**

*Mitigation*

**FlowWest**

San Joaquin River Restoration Settlement Implementation Technical Advisory Committee Services (CA)

Assist and advise the Restoration Administrator in the implementation of the San Joaquin River Restoration Settlement. Project will restore flow and salmon populations to the San Joaquin River below Friant Dam.

**\$60,000**

*Other*

**Gold Ridge Resource Conservation District**

Alder Creek Ranch Erosion Control Project - Riparian Revegetation (CA)

Stabilize the banks of a tributary to a salmonid habitat stream in the lower Russian River watershed in Sonoma County at three sites downstream of an agricultural pond. Project will include excavation of eroding banks, placement of rock armor as bank protection, installation of cattle exclusion fencing, and revegetation and irrigation of the project area.

**\$23,000**

*State Civil Case*

**Gold Ridge Resource Conservation District**  
Willow Creek and Green Valley/Atascadero  
Creek Light Detection and Ranging Survey  
Project (CA)

Acquire Light Detection and Ranging elevation datasets for the lower floodplain of Willow Creek and a portion of the floodplain of lower Atascadero Creek- both subwatersheds of the lower Russian River. Project will address existing data gaps and substantially contribute to the design of projects to improve ecological function, provide habitat, and facilitate fish passage.  
\$20,801  
*State Civil Case*

**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.  
\$8,038  
*Mitigation*

**Habitat Restoration Sciences**

**California Department of Fish and Wildlife Endowment - JAL Preserve**  
Perform long-term management of mitigation land in San Diego County, California.  
\$13,280  
*Mitigation*

**Habitat Restoration Sciences**

**San Diego County Endowment - Greenhills Ranch (CA)**  
Perform long-term management of mitigation land in San Diego County, California.  
\$21,575  
*Mitigation*

**Hanson Environmental**

**San Joaquin River Restoration Settlement Implementation Technical Advisory Committee Services (CA)**  
Assist and advise the Restoration Administrator in the implementation of the San Joaquin River Restoration Settlement. Project will restore flow and salmon populations to the San Joaquin River below Friant Dam.  
\$18,000  
*Other*

**Ironwood Consulting**

**Ivanpah Valley Desert Tortoise Connectivity Study (CA, NV)**  
Conduct the field survey component of the Ivanpah Valley Desert Tortoise Connectivity Study led by University of Nevada Reno. Project will help University of Nevada Reno analyze demography, density, demographic connectivity, genetic connectivity, immune function, and habitat condition for desert tortoise within 10, 1km2 study plots.  
\$544,795  
*Mitigation*

**J&D Basile**

**California Department of Fish and Wildlife Initial and Capital Account - Cross Creek East**  
Conduct short-term management of mitigation land in Tulare and Kings counties, California.  
\$18,170  
*Mitigation*

**Kowa American Corporation**

**Environmental Protection Project: Purchase of Spotting Scopes and Wide Angle Zoom Eyepiece (CA)**  
Purchase equipment for the California Department of Fish and Wildlife, Law Enforcement Division to investigate and help prevent environmental crimes including habitat destruction, over-limit fishing, illegal hunting, and pollution incidents in Sonoma County, California.  
\$6,998  
*State Civil Case*

**McBain Associates**

**San Joaquin River Restoration Settlement Implementation Technical Advisory Committee Services (CA)**  
Assist and advise the Restoration Administrator in the implementation of the San Joaquin River Restoration Settlement. Project will restore flow and salmon populations to the San Joaquin River below Friant Dam.  
\$114,964  
*Other*

**Mendocino County Resource Conservation District**

**California Department of Fish and Wildlife Endowment - Willits Bypass**  
Perform long-term management of mitigation land in Mendocino County, California.  
\$563,641  
*Mitigation*

**Mid Klamath Watershed Council**

**Horse Creek Coho Habitat Reclamation Design Project (CA)**  
Provide conceptual level designs for both instream and off-channel coho salmon spawning and rearing habitat along three miles of Horse Creek, a Klamath River tributary located within the Upper Klamath Sub-basin. Project will produce topographic surveys and a hydraulic/hydrologic report which will characterize existing conditions and mapping of treatment types and locations identified within the reach.  
\$49,920  
*Mitigation*

**Mid Klamath Watershed Council**

**Beaver Creek Barrier Removal Project (CA)**  
Conduct a barrier assessment and removal project located on private residential property on Beaver Creek. Project will evaluate site conditions through a topographic survey and complete the environmental compliance component of the barrier removal project.  
\$27,897  
*Mitigation*

**Mojave Desert Land Trust**

**California Department of Fish and Wildlife Endowment - Renewable Energy Action Team Endowment - Hidden Valley**  
Perform long-term management of mitigation land in San Bernardino and Imperial counties, California.  
\$80,782  
*Mitigation*

**Mojave Environmental Holdings**

**California Department of Fish and Wildlife Endowment - Cuddeback-Kramer Preserve (RE Cinco & RE Rosamond One and Two)**  
Perform long-term management of mitigation land in San Bernardino County, California.  
\$62,132  
*Mitigation*

**Mountains Recreation and Conservation Authority**

**California Department of Fish and Wildlife Initial and Capital Account - Stickleback Ranch for Foothill Feeder**  
Conduct short-term management of mitigation land in Los Angeles County, California.  
\$134,969  
*Mitigation*

**Multicultural Education for Resources**

**Issues Threatening Oceans Foundation Inc. Education and Outreach Program at San Buenaventura State Beach (CA)**  
Provide reduced tuition for underprivileged children enrolled in the Marine Science Beach Camps program at San Buenaventura State Beach.  
\$2,500  
*Federal Civil Case*

**National Fish and Wildlife Foundation**

**Ahwahnee Meadow Restoration Long-Term Management and Maintenance Fund (CA)**  
Establish a fund to pay the costs of long-term management of a mitigation site at Ahwahnee Meadow in Yosemite National Park, California.  
\$80,468  
*Mitigation*

**National Fish and Wildlife Foundation**

**Powell Meadow Restoration Long-Term Management and Maintenance Fund (CA)**  
Establish a fund to pay the costs of long-term management of a mitigation site at Powell Meadow in the Sequoia National Forest in California.  
\$106,678  
*Mitigation*

**National Park Service**

Ahwahnee Meadow Restoration Project (MET-1) Project Development Plan Technical Assistance, Project Implementation, and Interim Management and Monitoring (CA) Develop, implement, and monitor a Sacramento District California In-Lieu Fee Program mitigation project entitled, "Ahwahnee Meadow Restoration Project (MET-1) Project." Project will restore aquatic resources and ensure long-term protection of the project site in Yosemite National Park in California.

**\$199,722**  
*Mitigation*

**National Park Service**

California Department of Fish and Wildlife-Renewable Energy Action Team Endowment - Mojave Milkweed Perform long-term management of mitigation land in San Bernardino County, California.

**\$2,585**  
*Mitigation*

**Plumas Corporation**

Powell Meadow Restoration Project (KER-1) Project Implementation and Interim Management and Monitoring (CA) Implement and monitor a Sacramento District California In-Lieu Fee Program mitigation project entitled, "Powell Meadow Restoration Project (KER-1) Project." Project will restore aquatic resources and ensure long-term protection of the project site in Sequoia National Forest in California.

**\$201,000**  
*Mitigation*

**Point Millerton Ranch**

California Department of Fish and Wildlife Endowment - Point Millerton Perform long-term management of mitigation land in Madera County, California.

**\$11,949**  
*Mitigation*

**Prunuske Chatham**

Herndon and Reedley College Tree Replanting - Pacific Gas and Electric Company San Joaquin Valley Habitat Conservation Plan (CA) Plant over 3,000 trees for the fulfillment of the Master Streambed Alteration Agreement in the Pacific Gas and Electric Company San Joaquin Valley Habitat Conservation Plan.

**\$80,914**  
*Mitigation*

**Rancho Purisima**

Pacific Gas and Electric Company Multiple Region Habitat Conservation Plan - La Purisima Conservation Bank Credit Purchase (CA) Purchase 45 acres of Santa Barbara California tiger salamander species credits from La Purisima Conservation Bank to provide mitigation for the Santa Barbara Distinct Population Segment of California tiger salamander under the Pacific Gas and Electric Company Multiple Region Habitat Conservation Plan.

**\$1,215,000**  
*Mitigation*

**San Mateo Resource Conservation District**

Pacific Gas and Electric Company Bay Area Habitat Conservation Plan - San Bruno Mountain Lower West Peak Restoration (CA) Fund unrealized implementation, monitoring, or maintenance activities for the San Bruno Mountain Lower West Peak Restoration Project in San Mateo County, California.

**\$14,478**  
*Mitigation*

**Santa Paula Creek Mitigation Bank**

California Department of Fish and Wildlife Endowment - Santa Paula Creek Mitigation Bank Long-term management of mitigation land in Ventura County, California.

**\$4,231**  
*Mitigation*

**Scott River Watershed Council**

Miners-French Creek Confluence Habitat Enhancement and Effectiveness Monitoring Project, Siskiyou County (CA) Improve spawning and rearing habitat for coho salmon on key spawning and rearing streams in Siskiyou County, California. Project will provide immediate benefit to coho salmon through the permitting and implementation of engineered plans and specifications, including placement of seven large wood structures and five willow weave baffles, and planting of 400 willow stems and 30 cottonwood poles.

**\$210,797**  
*Mitigation*

**Sempervirens Fund**

Mill Creek Dam Removal Implementation and Monitoring Project (CA) Remove a diversion dam on Mill Creek, which supports one of the only self-sustaining runs of the Central California Coast coho salmon and a run of Central California Coast steelhead, in northern Santa Cruz County. Project will include dam removal, permitting and engineering oversight, revegetation, final as-built construction drawings, pre- and post-construction monitoring, and the development of storytelling resources.

**\$25,000**  
*State Civil Case*

**Suisun Resource Conservation District**

Future of the Salt Marsh Harvest Mouse and Other Native Wetland Species in the San Francisco Estuary (CA) - Phase II Address the lack of comprehensive recovery information for the salt marsh harvest mouse and other small mammals through a unified assessment and survey approach. Project will conduct a coordinated survey; the resulting data will be used to create heat maps of populations summarizing their likely resiliency.

**\$198,354**  
*Federal Criminal Case*  
*Multiple prosecutions*

**Sundance Biology**

Common Raven Monitoring and Management in Chemehuevi Critical Habitat Unit Stratum / Remote Egg Oiling Implementation in Chemehuevi Critical Habitat Unit Stratum (CA) Conduct raven monitoring and management for protection of federally listed desert tortoise in Chemehuevi Critical Habitat Unit in California.

**\$63,292**  
*Mitigation*

**Sundance Biology**

Common Raven Monitoring and Management in Mojave National Preserve, Piute-Fenner and Ivanpah Critical Habitat Units Stratum / Remote Egg Oiling Implementation in Mojave National Preserve, Piute-Fenner and Ivanpah Critical Habitat Units Stratum (CA) Conduct raven monitoring and management for protection of federally listed desert tortoise in Mojave National Preserve, Piute-Fenner Critical Habitat Unit, and Ivanpah Critical Habitat Unit in California.

**\$117,854**  
*Mitigation*

**Sundance Biology**

Common Raven Monitoring and Management in Fremont-Kramer Critical Habitat Unit Stratum / Remote Egg Oiling Implementation in Fremont-Kramer Critical Habitat Unit (CA) Conduct raven monitoring and management for protection of federally listed desert tortoise in Fremont-Kramer Critical Habitat Unit (includes portions within Edwards Air Force Base and Desert Tortoise Research Natural Area) in California.

**\$155,630**  
*Mitigation*

**Sundance Biology**

Common Raven Monitoring and Management in Superior-Cronese Critical Habitat Unit and Fort Irwin's Southeast Conservation Area Stratum / Remote Egg Oiling Implementation in Superior-Cronese Critical Habitat Unit and Fort Irwin's Southeast Conservation Area Conduct raven monitoring and management for protection of federally listed desert tortoise in Superior-Cronese Critical Habitat Unit and Fort Irwin's Southeast Conservation Area in California.

**\$155,837**  
*Mitigation*

**Sundance Biology**

Common Raven Monitoring and Management in Chuckwalla Bench Critical Habitat Unit Stratum / Remote Egg Oiling Implementation in Chuckwalla Bench Critical Habitat Unit Stratum (CA) Conduct raven monitoring and management for protection of federally listed desert tortoise in Chuckwalla Bench Critical Habitat Unit in California.

**\$94,119**  
*Mitigation*



**The Bay Institute**

San Joaquin River Restoration Settlement  
Implementation Technical Advisory Committee  
Services (CA)

Assist and advise the Restoration Administrator in the implementation of the San Joaquin River Restoration Settlement. Project will restore flow and salmon populations to the San Joaquin River below Friant Dam.

**\$163,882**

*Other*

**The Restoration Trust**

The Restoration Trust - Roberts Ranch  
Endowment (CA)

Perform long-term land management of mitigation land in Alameda County, California.

**\$9,561**

*Mitigation*

**The Restoration Trust**

Wetland Management of Bordon Ranch (CA)

Perform long-term management of mitigation land in Solano County, California.

**\$10,289**

*Mitigation*

**Thomas K. Moss**

California Department of Fish and Wildlife  
Endowment - Pletz Residence

Perform long-term management of mitigation land in Monterey County, California.

**\$3,319**

*Mitigation*

**Thomas R. Johnson**

San Joaquin River Restoration Settlement  
Implementation Restoration Administrator  
Services (CA)

Assist in the implementation of the San Joaquin River Restoration Settlement by serving as Restoration Administrator under the terms of the settlement. Project will restore flow and salmon populations to the San Joaquin River below Friant Dam.

**\$168,500**

*Other*

**Transition Habitat Conservancy**

California Department of Fish and Wildlife  
Endowment-Renewable Energy Action Team  
Endowment - Fremont-Kramer

Perform long-term management of mitigation land in San Bernardino County, California.

**\$123,638**

*Mitigation*

**Trout Unlimited**

San Joaquin River Restoration Settlement  
Implementation Technical Advisory Committee  
Services (CA)

Assist and advise the Restoration Administrator in the implementation of the San Joaquin River Restoration Settlement. Project will restore flow and salmon populations to the San Joaquin River below Friant Dam.

**\$19,000**

*Other*

**Tule Basin Farms**

Pacific Gas and Electric Company Multiple  
Region Habitat Conservation Plan - Option  
Payment for Giant Garter Snake Rice Habitat  
Conservation (CA)

Secure up to 178 acres of giant garter snake rice habitat under the Pacific Gas and Electric Company Multiple Region Habitat Conservation Plan.

**\$100,000**

*Mitigation*

**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 Mojave and Colorado Deserts located within California.

**\$81,700**

*Mitigation*

**U.S. Department of the Interior,****U.S. Fish and Wildlife Service - Region 2**

U.S. Fish and Wildlife Service Southwest  
Region 2 Endowment - Houston Toad Captive  
Breeding Long-Term Support

Perform captive breeding program activities for the federally endangered Houston toad.

**\$31,029**

*Mitigation*

**University of Nevada Reno**

Conservation Corridors  
for Desert Tortoises (CA, NV)

Conduct research on the connectivity among desert tortoise populations impacted by the installation of utility-scale solar facilities in the Mojave Desert. Project will analyze genetic structure of tortoise populations, study the potential influences of anthropogenic disturbance on genetic connectivity, monitor desert tortoise demographics and movement, and monitor changes in landscape disturbance in the study area over time.

**\$2,003,254**

*Mitigation*

**Ventana Wildlife Society**

Rebuild the Fire-Destroyed Release Facility at  
the Big Sur Condor Sanctuary (CA)

Rebuild the condor release facility at Big Sur Condor Sanctuary that was destroyed in August 2020 by the Dolan Fire. Project will reconstruct critical infrastructure that serves as a key asset for releasing captive-bred condors to the wild; trapping condors to assess individual health, provide medical treatments, and monitor for trends and threats; and expanding the range of the California condor.

**\$70,000**

*Federal Criminal Case*

*U.S. v. Wal-Mart Stores, Inc.*

**Westervelt Ecological Services**

Bullock Bend Mitigation Bank Credit Purchase  
(3.02 Credits) (CA)

Purchase of 2.50 Salmonid/Riverine Riparian and 0.52 Salmonid/Riverine Riparian/Swainson's Hawk Nesting Buffer Credits from the Bullock Bend Mitigation Bank under National Fish and Wildlife Foundation's Sacramento District California In-Lieu Fee Program ("ILF Program"). The credit purchase fulfills a NFWF compensatory mitigation obligation resulting from the ILF Program's authorized sale of 3.02 Aquatic Resource Credits in the Cache/Putah Rivers Aquatic Resource Service Area.

**\$483,200**

*Mitigation*

**Westervelt Ecological Services**

California Department of Fish and Wildlife

Initial and Capital Account - Kings River

Mitigation Site

Conduct short-term management of mitigation land in Fresno County, California.

**\$11,774**

*Mitigation*

**Westervelt Ecological Services**

California Department of Fish and Wildlife

Initial and Capital Account - Alkali Flats

Mitigation Site

Conduct short-term management of mitigation land in Kern County, California.

**\$11,885**

*Mitigation*

**Westervelt Ecological Services**

California Department of Fish and Wildlife

Initial and Capital Account - Cottonwood Creek

Conduct short-term management of mitigation land in Tulare County, California.

**\$43,205**

*Mitigation*

**Westervelt Ecological Services**

California Department of Fish and Wildlife

Initial and Capital Account - CD Hillman

Conduct short-term management of mitigation land in Kern County, California.

**\$30,180**

*Mitigation*

**Westervelt Ecological Services**

U.S. Fish and Wildlife Service Endowment -  
PG&E Palermo (CA)

Perform long-term management of mitigation land in Butte, Yuba, and Sutter counties, California.

**\$7,368**

*Mitigation*

**Westervelt Ecological Services**

California Department of Fish and Wildlife  
Endowment - Dutchman Creek Conservation  
Bank

Perform long-term management of mitigation land in Merced County, California.

**\$54,397**

*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.

**\$19,043**

*Mitigation*

**Westervelt Ecological Services**

California Department of Fish and Wildlife Endowment - Maxwell Planned Unit Development

Perform long-term management of mitigation land in Colusa County, California.

**\$8,299**

*Mitigation*

**Westervelt Ecological Services**

California Department of Fish and Wildlife Endowment - Meridian Ranch Mitigation Bank

Perform long-term management of mitigation land in Butte County, California.

**\$12,183**

*Mitigation*

**White Rabbit Associates**

Pacific Gas and Electric Company Multiple Region Habitat Conservation Plan - White Rabbit Parcel Purchase (CA)

Purchase 33.6 acres of property in Santa Cruz County to provide conservation credit for Santa Cruz long-toed salamander, California red-legged frog, and California tiger salamander under the Pacific Gas and Electric Company Multiple Region Habitat Conservation Plan.

**\$679,000**

*Mitigation*

**Wildlands**

Sacramento River Ranch Wetlands Mitigation Bank Credit Purchase (CAP-3) (CA)

Purchase of 0.46 Freshwater Marsh Complex Credits from the Sacramento River Ranch Wetlands Mitigation Bank under National Fish and Wildlife Foundation's Sacramento District California In-Lieu Fee Program ("ILF Program"). The credit purchase fulfills a NFWF compensatory mitigation obligation resulting from the ILF Program's authorized sale of 0.46 Aquatic Resource Credits in the Cache/Putah Rivers Aquatic Resource Service Area.

**\$64,400**

*Mitigation*

**WRA**

Mendota Wetland Restoration Project Development Plan (CA)

Develop a Project Development Plan for the National Fish and Wildlife Foundation's Sacramento District California In-Lieu Fee Program mitigation project entitled, "Mendota Wetland Restoration Project Development Plan" located in the Kings River Aquatic Resource Service Area. Project will restore aquatic resources and ensure long-term protection of the aquatic resource functions and values of the project site in Fresno County, California.

**\$16,595**

*Mitigation*

**COLORADO****ACES Automation**

Replacement of Variable Frequency Drive Pumps at Hogback Fish Passage (CO, NM)  
Fund the replacement of variable frequency drive pumps at Hogback Fish Passage.

**\$7,523**

*Mitigation*

**Aquatic Consultants**

Razorback Sucker Block Net Project (CO, NM, UT)

Fund the purchase and installation of netting in both East and West Avocet ponds. Project will predator train the sportfish on one side of the net and razorback suckers on the other side.

**\$21,200**

*Mitigation*

**Colorado River Water Conservation District**

Water Lease to Benefit Endangered Fishes in the Yampa River (CO)

Fund the lease of 1,500 acre-feet of water from Elkhead Reservoir in 2020. Project will benefit endangered fish in the Yampa River.

**\$75,000**

*Mitigation*

**Colorado Water Trust**

2021 Ruedi Reservoir Water Lease (CO)

Fund the lease of 1,500 acre-feet of water from Ruedi Reservoir in 2021 to benefit the endangered fishes in the Colorado River.

**\$60,000**

*Mitigation*

**Pentair Aquatic Eco-Systems**

Palisade High School Fish Hatchery Project (CO)

Purchase of supplies and materials for the establishment of a fish hatchery on the Palisade High School grounds. Project will support the endangered fish of the Colorado River.

**\$1,905**

*Mitigation*

**SWCA Environmental Consulting**

Reintroducing Humpback Chub into the Upper Colorado River Basin (CO)

Fund a white paper on the reintroduction of the humpback chub into the Upper Colorado River Basin.

**\$38,808**

*Mitigation*

**Texas A&M AgriLife Research**

Pilot Study to Assess Accumulation of Dietary Methylmercury in Colorado Pikeminnow (CO, NM, UT)

Fund the investigation of the reproductive effects of mercury in Colorado pikeminnow in the San Juan River.

**\$6,233**

*Mitigation*

**U.S. Department of the Interior,****U.S. Fish and Wildlife Service - Region 2**

Assessing the Reproductive Effects of Methylmercury on the Diet of Colorado Pikeminnow (CO, NM, UT)

Fund the quantification of the reproductive effects of methylmercury in the diet of Colorado pikeminnow at concentrations likely experienced by fish in the wild.

**\$112,541**

*Mitigation*

**FLORIDA****Ocean Aid 360**

The Ghost Trap Rodeo, Scale-Up: Diverse Groups Affecting Sustainable Habitat Improvement Through Removal and Reduction of Marine Debris in the Form of Derelict Crab Traps and Fishing Gear (FL)

Conduct long-term quantifiable ecological habitat improvement in nearshore benthic waters of five Florida estuaries. Project will remove marine debris, specifically derelict crab traps and fishing gear, and create a bycatch species inventory report.

**\$60,000**

*Federal Criminal Case*

*U.S. v. Princess Cruise Lines, LTD.*

**U.S. Department of Agriculture, Animal and Plant Health Inspection Service, Wildlife Services, National Wildlife Research Center**

Beaver Control to Benefit Okaloosa Darter Recovery Efforts (FL)

Control of beaver population to assist U.S. Fish and Wildlife Service with restoration of critical habitat for the Okaloosa darter. Project will take place on Eglin Air Force Base property in the state of Florida.

**\$71,914**

*Mitigation*

**University of Florida**

A Pilot Study of Sponge Enhancement and Restoration in the Tarpon Springs Region of Florida (FL)

Conduct a pilot study of natural living sponge populations for enhancement and restoration in Tarpon Springs, Florida. Project will benefit natural sponges through enhancement and restoration activities including aquaculture methods focused on specific target areas for sponge growth.

**\$13,724**

*Federal Criminal Case*

*U.S. v. Nicholas Skaroulis*

## HAWAII

### Pacific Rim Conservation

#### Kaua'i Seabird Habitat Conservation Plan Mitigation Site (HI)

Establish a seabird mitigation site. Project will perform near term mitigation activities including installing predator proof fencing, promoting seabird social attraction, controlling barn owl and feral cats, and project management activities such as annual reporting and coordination with agencies.

**\$812,187**

*Mitigation*

### Pacific Rim Conservation

#### Vegetation Clearing for the Honopu Predator Proof Fence (HI)

Fund vegetation removal for the installation of the Honopu Predator Proof Fence.

Vegetation will be removed from a 13 foot wide swath in preparation for fence-line installation and will protect an existing breeding colony of Newell's shearwaters and potentially attract both Hawaiian petrels and band-rumped storm-petrels into the same location.

**\$54,219**

*Mitigation*

### Queen Emma Land Company

#### Reduce Chronic Sedimentation and Restore Resilience to South Kohala Reefs (HI)

Remove unmanaged feral goats from the Pele Kane Watershed to significantly decrease erosion and subsequent sedimentation of nearshore coral reefs. Project will allow vegetation to re-establish in critical and susceptible erosion-prone areas, preventing sedimentation runoff.

**\$2,760**

*State Civil Case*

### Ridge to Reefs

#### Reducing Land-based Sources of Pollution at Three Priority Sites in Maui Nui (HI)

Implement sediment and nutrient reducing practices to reduce run-off onto three reef tracks in Maui Nui. Project will work with management and local partners in West and South Maui and on Lana'i to install best practices, pilot new approaches, and plan for further implementation actions.

**\$1,000**

*Federal Criminal Case*

*U.S. v. Keoje Marine Co. Ltd.*

## KENTUCKY

### Delta Land Services

#### Mitigation Services To Support Fanshell Mussel (KY)

Fund mitigation services provided in support of a fanshell mussel mitigation project along the Licking River in Kentucky.

**\$33,855**

*Mitigation*

## LOUISIANA

### Louisiana State University

#### Agricultural Center

#### Assessment of Water and Sediment Contamination in Major Waterways in South and Southwest Louisiana (LA)

Assess contamination and pollution risk of river waters and sediments in south and southwest Louisiana. Project will conduct a comprehensive analysis of existing sediment and water quality data to provide needed insight into the current water and soil conditions.

**\$56,994**

*Federal Criminal Case*

*U.S. v. Pelican Refining Company, LLC.*

## MASSACHUSETTS

### North American Marine Environment

#### Protection Association (NAMEPA)

#### Operation Compliance - Massachusetts (MA)

Educate seafarer and shoreside personnel on the need for International Convention for the Prevention of Pollution from Ships (MARPOL) compliance and provide educational tools to support MARPOL compliance in Massachusetts ports. Project will increase compliance with MARPOL and help conserve ocean resources including habitats, fish, and coral reefs.

**\$23,000**

*Federal Criminal Case*

*U.S. v. MSC Ship Management (Hong Kong)*

## MONTANA

### River Design Group

#### Lost Trail National Wildlife Refuge Restoration Project (MT)

Fund project management and coordination for Lost Trail National Wildlife Refuge Restoration Stream and Wetland Design.

**\$9,157**

*Mitigation*

### River Design Group

#### Swan River National Wildlife Refuge Wetland Restoration (MT)

Fund professional services on the Swan River National Wildlife Refuge Restoration Project.

**\$39,490**

*Mitigation*

## NEVADA

### Harney Electric Cooperative

#### Hycroft Mitigation Project (NV)

Complete retrofits of existing electrical poles that are hazardous to golden eagle populations in Kings River Valley, Nevada as mitigation for impacts associated with lawful mining activities at Hycroft Mine in Nevada.

**\$462,695**

*Mitigation*

### Ironwood Consulting

#### Ivanpah Valley Desert Tortoise Connectivity Study (CA, NV)

Conduct the field survey component of the Ivanpah Valley Desert Tortoise Connectivity Study led by University of Nevada Reno. Project will help University of Nevada Reno analyze demography, density, demographic connectivity, genetic connectivity, immune function, and habitat condition for desert tortoise within 10, 1km2 study plots.

**\$544,795**

*Mitigation*

### Sean M. Murphy

#### Stump Springs Augmentation

#### Monitoring Plan (NV)

Coordinate with U.S. Fish and Wildlife Service, U.S. Geological Survey, and Bureau of Land Management to develop a revised Mojave desert tortoise monitoring plan for the Stump Springs Regional Augmentation Site, as mitigation and minimization measures for a nearby development project to determine if these translocations are successful in augmenting the Stump Springs Mojave desert tortoise population in Clark County, Nevada.

**\$50,096**

*Mitigation*

### University of Nevada Reno

#### Conservation Corridors for Desert Tortoises (CA, NV)

Conduct research on the connectivity among desert tortoise populations impacted by the installation of utility-scale solar facilities in the Mojave Desert. Project will analyze genetic structure of tortoise populations, study the potential influences of anthropogenic disturbance on genetic connectivity, monitor desert tortoise demographics and movement, and monitor changes in landscape disturbance in the study area over time.

**\$2,003,254**

*Mitigation*

## NEW JERSEY

### American Littoral Society

#### Restoring Ecologically Beneficial and Resilient Infrastructure at the Mouth of Maurice River (NJ)

Create hybrid living shoreline, hybrid rock revetment, oyster reefs, and ribbed mussel beds at the tip of Basket Flats and at Northwest Reach. Project will protect the inlet of the Maurice River and provide resiliency and ecological uplift by protecting marsh and creating new habitat.

**\$400,000**

*Federal Criminal Case*

*U.S. v. Columbia Shipmanagement LTD;*

*U.S. v. Columbia Shipmanagement GmbH*

**Groundwork Elizabeth****The Trotters Branch/Elizabeth River Restoration Project (NJ)**

Enhance the natural functioning of streambed ecosystems at the Trotters Branch of the Elizabeth River, in the Newark Bay Watershed. Project will mitigate pollution and extraordinary runoffs, address erosion threatening the natural state of the water flow, and improve natural plant and wildlife at the site via environmental restoration for the repair, enhancement, and preservation of fish and wildlife.

**\$224,861**

**Federal Criminal Case**

*U.S. v. D'Amico Shipping Italia, S.P.A.*

**New Jersey Tree Foundation****Downtown District Street Trees (NJ)**

Support street tree planting efforts in Newark, New Jersey's Downtown District. Project will reduce flooding and pollution in the Passaic River through stormwater retention techniques to help decrease Combined Sewer System overflows.

**\$9,873**

**Federal Criminal Case**

*U.S. v. D'Amico Shipping Italia, S.P.A.*

**NEW MEXICO****ACES Automation**

Replacement of Variable Frequency Drive Pumps at Hogback Fish Passage (CO, NM)  
Fund the replacement of variable frequency drive pumps at Hogback Fish Passage.

**\$7,523**

**Mitigation****Aquatic Consultants****Razorback Sucker Block Net Project (CO, NM, UT)**

Fund the purchase and installation of netting in both East and West Avocet ponds. Project will predator train sportfish on one side of the net and Razorback suckers on the other.

**\$21,200**

**Mitigation****Ecosystems Research Institute****San Juan River Habitat Assessment (NM) – Phase II**

Assess important habitats for endangered fishes in the San Juan River.

**\$138,467**

**Mitigation****Metro Medical Equipment and Supply****Determining Age at Maturity of Razorback Sucker in the San Juan River Equipment Purchase (NM)**

Fund the purchase of equipment to determine the age at reproductive maturity for razorback sucker in the San Juan River using histology. Project will have clear management implications for recovery of the species in the San Juan River.

**\$35,871**

**Mitigation****Prairie AquaTech****Feed for Endangered Fish (NM)**

Fund the purchase of feed for endangered fish down at Dexter, New Mexico. Project is part of a pilot study assessing the effects of Mercury on the reproductive success of Colorado pikeminnow.

**\$5,154**

**Mitigation****Texas A&M AgriLife Research****Pilot Study to Assess Accumulation of Dietary Methylmercury in Colorado Pikeminnow (CO, NM, UT)**

Fund the investigation of the reproductive effects of mercury in Colorado pikeminnow in the San Juan River.

**\$6,233**

**Mitigation****U.S. Department of the Interior, U.S. Fish and Wildlife Service - Region 2 Assessing the Reproductive Effects of****Methylmercury on the Diet of Colorado Pikeminnow (CO, NM, UT)**

Fund the quantification of the reproductive effects of methylmercury in the diet of Colorado pikeminnow at concentrations likely experienced by fish in the wild.

**\$112,541**

**Mitigation****University of New Mexico Foundation****CITES Cactus Conservation- Support for Work at University of New Mexico (NM)**

Facilitate the conservation and preservation of collected CITES cactus specimens through the University of New Mexico Herbarium.

**\$1,250**

**Federal Criminal Case**

*U.S. v. Simon Andreas Langer*

**NEW YORK****City Parks Foundation****Coastal Classroom Summer Institute (NY)**

Provide education programs for New York City youth, free of charge, in public parks around New York City. Project will serve 40 middle school students, work with four high school students and one college intern, and engage approximately 200 community members, providing hands-on service learning opportunities and fostering appreciation for coastal wildlife and natural resources.

**\$30,000**

**Other****Council on the Environment****North River Fund Directed Donation (NY)**

Fund activities that will benefit the environmental and natural resources of the State of New York located within the jurisdiction of New York State Department of Environmental Conservation Region 2, with emphasis on areas in and around the North River Wastewater Treatment Plant located on the Hudson River, west of the West Side Highway from 137th Street to 145th Street.

**\$2,805**

**Other****Fund for the City of New York****Living Shoreline at West Pond in the Jamaica Bay Wildlife Refuge (NY)**

Fund the construction of a living shoreline at West Pond in the Jamaica Bay Wildlife Refuge in Queens, New York.

**\$4,000,000**

**Other****Innovasea Marine Systems Canada Inc.****St. Lawrence River Multispecies Telemetry Project (NY)**

Fund the purchase of equipment and materials for establishing a telemetry array throughout the St. Lawrence River and a multispecies tagging and movement study.

**\$593,208**

**Mitigation****JB's Excavation Services****French Creek Wetland Restoration Project (NY)**

Fund the French Creek Wetland Restoration Project.

**\$90,650**

**Mitigation****John Wiley & Sons****Publishing Fees for Journal Article in American Fisheries Society (NY)**

Fund the publishing of a journal article, "Tracking Stocking Success in a Long-Lived Species through Genetics and Demographics: Evidence of Natural Reproduction in Lake Sturgeon after Twenty-Two Years," in American Fisheries Society based on research funded by the St. Lawrence Fish Enhancement, Mitigation, and Research Fund Program.

**\$1,030**

**Mitigation****National Audubon Society****For the Birds! Environmental Education Program (NY)**

Deliver hands-on environmental education programming to students and community members living within the Coney Island Creek Watershed. Project will inspire a culture of lifelong environmental stewardship in Coney Island through activities that build awareness of local ecosystems and human impacts.

**\$29,726**

**Other**



**PS 110K PTA**

**Eco Schools: Reusable Bag Giveaway (NY)**  
Purchase of reusable gallon sized bags for the four Eco Schools located in Greenpoint (PS 110, PS 31, PS 34, MS 126). Purchase of the reusable bags will reduce the use of single use plastic bags that are often on a school supply list.  
**\$21,609**  
*Other*

**The Research Foundation for the State University of New York**

**Status of Mooneye in the Oswegatchie River Project (NY) – Phase I**  
Provide background information to inform conservation, restoration, and enhancement efforts that may be necessary to recover Mooneye, a Fish Enhancement Mitigation and Research Fund focal species. Project will determine sampling areas, time of spawning, and develop a set of best practices for surveying Mooneye.  
**\$16,535**  
*Mitigation*

**The Research Foundation for the State University of New York**

**St. Lawrence River Fish Habitat Conservation Strategy: Evaluation of Habitat Enhancements and Development of Novel Restoration Approaches (NY) – IV**  
Continue to advance progress associated with the Fish Habitat Conservation Strategy partnership. Project will continue to foster significant partnerships among resource management agencies, conservation organizations, and academia in the proactive management of fish habitat to improve natural reproduction of native fishes.  
**\$589,343**  
*Mitigation*

**The Wetland Trust**

**Bog Turtle Habitat Restoration (NY)**  
Fund bog turtle habitat restoration and monitoring.  
**\$2,500**  
*Mitigation*

**Town Square**

**Environmentally Friendly Equipment Purchase for Events in Greenpoint (NY)**  
Fund the purchase of four clean electric/ solar-powered generators and solar panels to serve the Greenpoint community in an environmentally sustainable way. Purchases will help bring clean energy to Greenpoint.  
**\$11,778**  
*Other*

**U.S. Department of the Interior, U.S. Fish and Wildlife Service - New York Field Office**  
**St. Lawrence Fish Enhancement, Mitigation, and Research Fund Miscellaneous Expenses (NY)**

Support fish enhancement, mitigation, and research projects in the St. Lawrence River.  
**\$253,000**  
*Mitigation*

**U.S. Department of the Interior, U.S. Fish and Wildlife Service - New York Field Office**  
**Status of Mooneye in the Oswegatchie River: Equipment Purchase (NY)**

Fund the purchase of equipment associated with a project that will provide background information to inform conservation, restoration and enhancement efforts that may be necessary to recover mooneye, a Fish Enhancement, Mitigation and Research Fund focal species.  
**\$1,106**  
*Mitigation*

**NORTH CAROLINA****Appalachian State University**

**Interactions Between the Red Swamp Crayfish and Two Endemic Procambarus Species in North Carolina (NC)**  
Fund a study on the red swamp crayfish, which is a problematic and fast-spreading exotic species in North Carolina waters. Project will give resources managers information as to the conservation status of native crayfish species and how the introduced red swamp crayfish may be affecting native crayfish.  
**\$174,999**  
*Federal Criminal Case*  
*U.S. v. Duke Energy Carolinas; U.S. v. Duke Energy Progress*

**Conserving Carolina**

**Pleasant Grove Floodplain Restoration and Enhancement (NC)**  
Conduct a large-scale, holistic restoration and enhancement of degraded floodplain, stream, and wetland habitats located along the French Broad River and Little Willow Creek in the Crab Creek township of Henderson County, North Carolina. Project will restore the natural form and function of the floodplain by restoring hydrology, enhancing habitat for muskellunge, amphibians, reptiles, and birds, improving water quality, and reconnecting streams and rivers to their floodplains.  
**\$425,000**  
*Federal Criminal Case*  
*U.S. v. Duke Energy Carolinas; U.S. v. Duke Energy Progress*

**Foothills Conservancy of North Carolina**  
**Wilson Creek National Wild & Scenic River Conservation Acquisition (NC)**

Fund acquisition related costs to support the acquisition of 93.23 acres of land along Wilson Creek in Caldwell County, North Carolina. Project will protect and improve water quality in the Catawba River Watershed.  
**\$50,000**  
*Federal Criminal Case*  
*U.S. v. Duke Energy Carolinas; U.S. v. Duke Energy Progress*

**Foothills Conservancy of North Carolina**  
**Wilson Creek Gorge Acquisition (NC)**

Fund acquisition related costs to support the acquisition and conveyance of approximately 323 acres of land surrounding Wilson Creek in Caldwell, North Carolina. Project will protect and improve water quality in the Catawba River Watershed.  
**\$80,000**  
*Federal Criminal Case*  
*U.S. v. Duke Energy Carolinas; U.S. v. Duke Energy Progress*

**North Carolina Coastal Land Trust**

**Cape Fear/TCI Timber Tract Acquisition (NC)**  
Fund part of the purchase of a 272-acre property that lies near the Town of East Arcadia in Bladen County, North Carolina. Project will enhance local water quality through conservation of mature floodplain forest along 1.1 miles of the Cape Fear River, conserve a portion of a significant natural heritage area, and protect important fish and wildlife habitat.  
**\$275,000**  
*Federal Criminal Case*  
*U.S. v. Duke Energy Carolinas; U.S. v. Duke Energy Progress*

**North Carolina Wildlife Resources Commission**

**Cape Fear Darlington Veneer Tract Acquisition (NC)**  
Acquire 296 acres of land in Pender County, North Carolina, which is bounded on three sides by three distinct tributaries to further the protection and improvement of water quality in the Cape Fear River Watershed. NFWF will be providing funding for approximately 272 acres of the 296-acre tract.  
**\$257,000**  
*Federal Criminal Case*  
*U.S. v. Duke Energy Carolinas; U.S. v. Duke Energy Progress*

**North Carolina Wildlife Resources Commission**

**Kings Bridge Acquisition (NC)**  
Acquire an 85 acre floodplain tract located near Haywood Road and crossing the French Broad River in Henderson County, North Carolina.  
**\$425,000**  
*Federal Criminal Case*  
*U.S. v. Duke Energy Carolinas; U.S. v. Duke Energy Progress*

### North Carolina Wildlife Resources Commission

#### 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 success.

**\$18,000**

*Federal Criminal Case*

*U.S. v. Duke Energy Carolinas; U.S. v. Duke Energy Progress*

### North Carolina Wildlife Resources Commission

#### Mills Tract Acquisition (NC)

Acquire 105 acres of property along the Dan River that adjoins the existing Hill Farm Game Land in Stokes County, North Carolina. Protected species include James River spiny mussel, orange-fin madtom, and Roanoke logperch.

**\$460,000**

*Federal Criminal Case*

*U.S. v. Duke Energy Carolinas; U.S. v. Duke Energy Progress*

### North Carolina Wildlife Resources Commission

#### Myrtle Head Simmons Tract Acquisition (NC)

Acquire 127 acres of land in Brunswick County, North Carolina, adjacent to Juniper Creek Game Land and natural heritage areas along the Waccamaw River.

**\$290,000**

*Federal Criminal Case*

*U.S. v. Duke Energy Carolinas; U.S. v. Duke Energy Progress*

### North Carolina Wildlife Resources Commission

#### Myrtle Head Simmons Tract Acquisition (NC)

Acquire 127 acres of land in Brunswick County, North Carolina, adjacent to Juniper Creek Game Land and natural heritage areas along the Waccamaw River.

**\$215,000**

*Federal Criminal Case*

*U.S. v. Duke Energy Carolinas; U.S. v. Duke Energy Progress*

### North Carolina Wildlife Resources Commission

#### Restoration of Habitat at Kings Bridge Tract (NC)

Fund the floodplain restoration of an 87-acre parcel adjacent to the French Broad River. Project will restore hydrologic connectivity of the ditched and drained French Broad River floodplain to the French Broad River and restore native vegetation as appropriate.

**\$115,000**

*Federal Criminal Case*

*U.S. v. Duke Energy Carolinas; U.S. v. Duke Energy Progress*

## NORTH DAKOTA

### Black Hills Raptor Center

#### Black Hills Raptor Center: Eagle and Raptor Rehabilitation Center (ND, SD)

Support the conservation of eagles and raptors in the Prairie regions of North and South Dakota with a veterinary radiograph portable x-ray system to provide timely and accurate medical care towards the rehabilitation of injured birds.

**\$13,042**

*Mitigation*

## OREGON

### Coos Watershed Association

#### Williams River Habitat Connectivity (OR)

Restore a channel in the Williams River to address a major barrier that limits salmonid access to 21 miles of critical rearing and spawning habitats for Oregon Coast coho salmon. Project will widen the channel, place rootwads to increase bank stability and stream complexity, increase the distance between the road and stream, and revegetate the riparian area with native plants to reduce fine sediments inputs and increase shade.

**\$171,959**

*Federal Criminal Case*

*Multiple prosecutions*

### Harney Electric Cooperative

#### Cal Flats Solar Retrofit Project-2017 Permit (OR)

Complete retrofits of existing electrical poles that are hazardous to golden eagle populations in Harney County, Oregon, as mitigation for impacts associated with construction activities by Cal Flats Solar LLC in Monterey County, California.

**\$234,992**

*Mitigation*

### Harney Electric Cooperative

#### Cal Flats Solar Retrofit Project-2018 Permit (OR)

Complete retrofits of existing electrical poles that are hazardous to golden eagle populations in Harney County, Oregon, as mitigation for impacts associated with construction activities by Cal Flats Solar LLC in Monterey County, California.

**\$210,382**

*Mitigation*

### Rogue River Watershed Council

#### Salt Creek River Mile 0.5 (OR)

Improve irrigation infrastructure and perform native plant restoration to benefit Oregon Coast coho salmon habitat and reduce fish passage barriers in Salt Creek, tributary to Little Butte Creek. Project will remove diversion infrastructure and replace it with a pumping station, piping, and water application, and the project will plant native seeds and plugs to rehabilitate areas disturbed by construction activity.

**\$81,446**

*Federal Criminal Case*

*Multiple prosecutions*

### Rogue River Watershed Council

#### South Fork Little Butte Creek RM 6.8 & 7.6 – Ecological Restoration (OR)

Improve oversummering and overwintering conditions for Oregon Coast coho salmon in the South Fork Little Butte Creek, tributary to Little Butte Creek. Project will conduct large wood installation and side-channel restoration, fence construction, chemical and mechanical weed treatments, juvenile fish and riparian planting area monitoring, and riparian area stewardship.

**\$29,254**

*Federal Criminal Case*

*Multiple prosecutions*

## PENNSYLVANIA

### Conor Gillespie

#### Pennsylvania Wetlands In-lieu Fee Document Review Payment (PA)

Fund the final review of a Quality Assurance/Quality Control functional document for the Pennsylvania Wetlands In-lieu Fee Program.

**\$1,650**

*Mitigation*

### Magnolia Land Partners

#### Enhancement and Protection of Bog Turtle and Bat Habitats (PA)

Enhance and protect bog turtle and bat habitats in Oley Township, Pennsylvania.

**\$5,000**

*Mitigation*

## SOUTH DAKOTA

### Black Hills Raptor Center

#### Black Hills Raptor Center: Eagle and Raptor Rehabilitation Center (ND, SD)

Support the conservation of eagles and raptors in the Prairie regions of North and South Dakota with a veterinary radiograph portable x-ray system to provide timely and accurate medical care towards the rehabilitation of injured birds.

**\$13,042**

*Mitigation*

## UTAH

### Aquatic Consultants

#### Razorback Sucker Block Net Project

(CO, NM, UT)

Fund the purchase and installation of netting in both East and West Avocet ponds. Project will predator train the sportfish on one side of the net and razorback suckers on the other side.

**\$21,200**

*Mitigation*

**FISHBIO****Pilot Implementation of Trapping Options Identified From Feasibility Study at Piute Farm Waterfall (UT)**

Construct, deliver, install, and train in the operation of the seining corral and modular fyke net at the Piute Farms waterfall. Project will ensure these trapping techniques can be employed at the waterfall, estimate the ideal number of people and time needed to efficiently operate these traps, and compare the effectiveness among trapping techniques to determine whether these techniques should continue to be employed for conservation efforts related to the endangered Colorado pikeminnow and razorback sucker.

**\$67,210**

*Mitigation*

**Texas A&M AgriLife Research****Pilot Study to Assess Accumulation of Dietary Methylmercury in Colorado Pikeminnow (CO, NM, UT)**

Fund the investigation of the reproductive effects of mercury in Colorado pikeminnow in the San Juan River.

**\$6,233**

*Mitigation*

**U.S. Department of the Interior,****U.S. Fish and Wildlife Service - Region 2****Assessing the Reproductive Effects of Methylmercury on the Diet of Colorado Pikeminnow (CO, NM, UT)**

Fund the quantification of the reproductive effects of methylmercury in the diet of Colorado pikeminnow at concentrations likely experienced by fish in the wild.

**\$112,541**

*Mitigation*

**VIRGINIA****Nutrien Ag Solutions****Herbicide Application at Great Dismal Swamp National Wildlife Refuge (VA)**

Fund the treatment of *Phragmites australis* via aerial herbicide application at Great Dismal Swamp National Wildlife Refuge in Suffolk, Virginia.

**\$65,000**

*Other*

**WASHINGTON****Port of Lopez****Port of Lopez Mobile Marine Pumpout Vessel (WA)**

Preserve the integrity of the marine environment in Fisherman Bay, Washington, and help keep the waters of the Salish Sea free of pollution and nutrient loading. Project will provide a mobile marine pump out vessel during the boating season to reduce the amount of illegal dumping of marine sewage holding tanks.

**\$100,000**

*Federal Criminal Case*

*U.S. v. Princess Cruise Lines, LTD.*

**WEST VIRGINIA****Allstar Ecology****Spruce Mountain Bat Mitigation (WV)**

Fund the support of bat mitigation on Spruce Mountain, West Virginia.

**\$13,038**

*Mitigation*

**WYOMING****Conservation Science Global****Assessing Risk To Golden Eagles From Turbine Development (WY)**

Create a model of the risk of wind energy development to golden eagles to reduce negative effects. Project will use telemetry data from Wyoming golden eagles as input to spatially-explicit risk models built on resource selection functions.

**\$7,500**

*Federal Criminal Case*

*U.S. v. PacifiCorp Energy*

**Rocky Mountain Raptor Program****Rehabilitation of Golden Eagles and Raptors of Southeast Wyoming (WY)**

Provide golden eagle and raptor rescue and rehabilitation care in Carbon and Converse County, Wyoming. Project will support daily food, medical, and veterinary needs of rescued raptors and golden eagles along with collecting post care release data.

**\$46,428**

*Federal Criminal Case*

*U.S. v. PacifiCorp Energy*

**Teton Raptor Center****Using Artificial Nesting Trees to Enhance Golden Eagle Breeding Populations in Northeastern Wyoming (WY)**

Enhance golden eagle populations and breeding habitat in northeast Wyoming. Project will provide artificial nesting trees or enhance cottonwood trees that can not support an eagle nest to allow eagles to nest and reproduce.

**\$60,605**

*Mitigation*

**Wyoming Game and Fish Department****Park County Carcass Management Program and Conflict Reduction (WY)**

Continue efforts to minimize black bear, grizzly bear, and gray wolf conflicts and increase human safety in Park County, Wyoming. Project will remove livestock carcasses off private lands where there have historically been grizzly bear, black bear, and wolf conflicts.

**\$13,028**

*Federal Criminal Case*

*U.S. v. William Kenneth Stoner; U.S. v. James Paul Brent*

**GUAM****North American Marine Environment Protection Association****Marine Environmental Awareness and MARPOL Compliance Training Program - Territory of Guam (GU)**

Develop an interactive, multi-faceted environmental educational program that supports and promotes International Convention for the Prevention of Pollution from Ships (MARPOL) compliance by seafarers and port leadership including maritime industry-related staff across all employee levels for the Guam Region.

**\$249,987**

*Federal Criminal Case*

*U.S. v. Pacific International Lines (Private) Limited*



## PHOTOGRAPHY

Tom Young (cover, monarch butterfly) Alex Mustard, Minden Pictures (p. 1, manatee), David Tipling (p. 2, wild turkey), James D. Watt, Blue Planet Archives (p. 67, loggerhead sea turtle), Andy Rouse, Minden Pictures (p. 85, grizzly bear), Daniel W. Clark, U.S. Fish and Wildlife Service (back cover, "Wisdom," a Laysan albatross)

A mother grizzly bear  
comforting her cub  
in Alaska







#### **NATIONAL HEADQUARTERS**

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#### **ON THE FRONT COVER**

A monarch butterfly feeding  
on the nectar of swamp  
milkweed in the Midwest

#### **ON THE BACK COVER**

"Wisdom," the world's oldest  
known wild bird (shown here in  
2014), and her mate successfully  
hatched yet another chick on  
Midway Island in early 2021.  
Scientists first identified and  
banded Wisdom in 1956. They  
estimate that she is at  
least 70 years old.

