

NATIONAL FISH AND WILDLIFE FOUNDATION

2017 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 2017, NFWF funded more than 730 conservation projects across the nation, generating an on-the-ground conservation impact of more than \$693 million.

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Impact-Directed Environmental Accounts

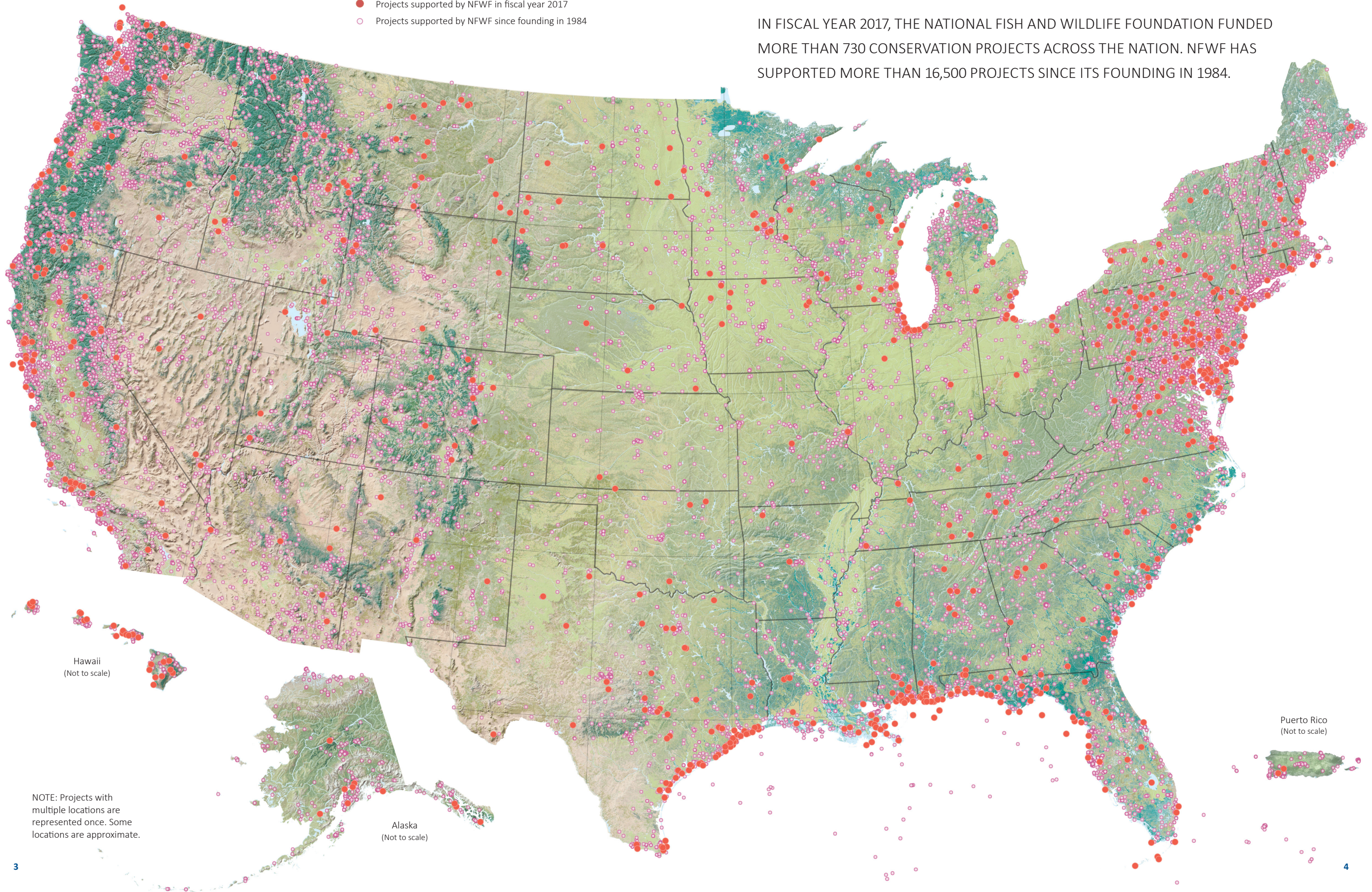
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KEY

- Projects supported by NFWF in fiscal year 2017
- Projects supported by NFWF since founding in 1984

NFWF CONSERVATION INVESTMENTS

IN FISCAL YEAR 2017, THE NATIONAL FISH AND WILDLIFE FOUNDATION FUNDED MORE THAN 730 CONSERVATION PROJECTS ACROSS THE NATION. NFWF HAS SUPPORTED MORE THAN 16,500 PROJECTS SINCE ITS FOUNDING IN 1984.



Hawaii
(Not to scale)

Alaska
(Not to scale)

Puerto Rico
(Not to scale)

NOTE: Projects with multiple locations are represented once. Some locations are approximate.

UNITED STATES AND U.S. TERRITORIES

FISCAL YEAR 2017 CONSERVATION INVESTMENTS

ALABAMA

Alabama Forestry Foundation

Improving Habitat for At-Risk Species in the Alabama Cumberlands

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

\$150,000

Alabama Forestry Foundation

Improving Habitat for At-Risk Species in Southwest Alabama Longleaf Forests

Engage 74 family forest owners in southwest Alabama to restore and enhance 2,600 acres of longleaf pine forests through planting, thinning, prescribed burning and invasive species control. Project will prioritize activities around ongoing longleaf pine- restoration projects on land managed by private, state and federal landowners, thereby enhancing the landscape value for at-risk species.

\$175,000

Alabama Forestry Foundation

My Alabama Woods — Shortleaf Pine in the Alabama Cumberlands

Expand previous efforts to reach forest landowners in the Cumberlands of Alabama using modern marketing tools and techniques and engage them in sustainable forest management in shortleaf pine habitats, focusing on both restoration of shortleaf pine on public and private land and increasing the burning capacity. Project will impact 4,400 acres, including 1,400 acres of shortleaf pine restoration.

\$200,000

Alabama Wildlife Federation

Native Grassland Establishment and Capacity Building in Alabama — III

Provide technical assistance, outreach and information to private landowners, contractors, and resource professionals to establish or enhance grassland habitat throughout Alabama. Project will increase awareness of the ecological value of native grassland habitat, foster an environment of collaboration among project partners and restore 3,000 acres of grassland habitat for northern bobwhite quail and other grassland birds.

\$125,331

Cahaba Riverkeeper

Cahaba River Assessment, Education and Restoration Program (AL)

Reforest 4 acres along two riparian sections of the Cahaba River with locally sourced trees planted by 200 volunteers. Project will expand water-quality testing and drought-damage assessment to benefit 131 rare and endangered fish populations as well as implement a conservation education program targeting disadvantaged youths and educators.

\$20,000

Forest Landowners Association

Engaging Working Forest Landowners, Building Stakeholder Collaboration and Developing Solutions (AL, FL, GA, LA)

Establish or enhance 2,000 acres of longleaf pine habitat and host Forest Forums and Timber Talks to bring together landowners, the U.S. Fish and Wildlife Service, and other key stakeholders. Project will engage large-working-forest landowners and forest consultants in key longleaf pine priority areas to increase communication and identify specific actions for addressing barriers to longleaf restoration.

\$125,000

Freshwater Land Trust

Irondale Riverwalk Restoration (AL)

Restore, stabilize and replant a 0.18-acre riparian buffer to enhance water quality and stabilization of the Cahaba River in eastern Jefferson County, Alabama. Project will remove invasive species, establish native species and enhance riparian areas to increase local biodiversity and enhance recreational opportunities for the local community.

\$37,194

Manomet

American Oystercatcher Aerial Survey and Population Recovery along the Atlantic Flyway (multiple states)

Estimate the current population of American oystercatchers via a cooperative aerial and ground survey with partners in the American Oystercatcher working group. Project will contribute directly to the overall goals of increasing the population size of American oystercatchers within the United States by 30 percent between 2009 and 2019, while contributing to the conservation of associated beach nesting and migratory shorebirds.

\$200,000

The Longleaf Alliance

Coordinating Local Implementation Team Capacity and Landowner Technical Assistance and Outreach — III (multiple states)

Support the Longleaf Implementation Team Consul role, which helps accelerate coordination and exchange of information among 17 multi-partner local implementation teams. Project will support a new GIS specialist position designed to build and improve GIS capacity and collaboration.

\$274,500

The Longleaf Alliance

Longleaf Restoration in the Gulf Coastal Plain Ecosystem Partnership Landscape (AL, FL) — III

Establish 333 acres of longleaf pine and improve an additional 55,350 acres of existing longleaf habitat through prescribed fire and private landowner outreach and technical assistance. Project will translocate 140 gopher tortoises, a candidate species for possible listing under the Endangered Species Act, and provide technical assistance and educational opportunities for private landowners.

\$300,000

The Longleaf Alliance

Red-cockaded Woodpecker Translocation Support (AL, FL, GA, MS)

Translocate 60 red-cockaded woodpeckers to properties designated as recovery sites by the U.S. Fish and Wildlife Service. Project will manage and improve 6,000 acres of longleaf pine forest, providing high quality habitat for nesting and foraging.

\$169,519

The Nature Conservancy

Talladega Mountains Longleaf Pine Restoration (AL, GA) — II

Establish 447 acres of longleaf pine and improve 17,700 acres of existing longleaf habitat with prescribed fire on public and private lands, with the support of a seasonal fire crew. Project will develop a conservation plan to prioritize and guide future restoration and conduct outreach to engage private landowners to restore longleaf pine.

\$205,453

The Nature Conservancy

Upper Village Creek Tree Canopy Restoration (AL)

Restore 1.7 acres and perform invasive plant removal along 1,000 linear feet of stream bank at Village Creek. Project will engage the community in restoring Birmingham's tree canopy, enhancing local air and water quality.

\$30,497

ALASKA

Anchorage Park Foundation

Bureau of Land Management Campbell Tract Streambank Restoration (AK)

Provide 24 youths with jobs where they will perform approximately 300-400 feet of streambank restoration across two sites along Campbell Creek in Anchorage. Project will provide erosion control on a road that gives access to one of the areas main trail heads.

\$49,940

Angoon Community Association

Trails to Tradition: Angoon Youth Conservation Corps (AK)
Hire six tribal youths to be placed in remote field camps, where they will be given safety training, conduct habitat restoration through controlling invasive weeds and improving riparian areas, conduct 3.6 acres of invasive weed surveys, clean up shoreline marine debris and improve a community garden. Project will directly benefit the Angoon community and Admiralty Island.
\$46,157

Bristol Bay Heritage Land Trust Assessment of Sockeye Salmon Spawning Populations in Iliamna Lake (AK)

Estimate sockeye abundance and use at Iliamna Lake, provide advice on the risk of development and human interaction, identify beach spawning sites for long-term monitoring, determine and document changes in distribution and variation of spawning, and recommend best management practices for protection of identified spawning sites.
\$51,200

Environment for the Americas

Celebrate Birds: Latino Youth in Avian Conservation and Education (AK, CA, CO, OR, WA)
Introduce underrepresented Latino youths to careers in natural resources while restoring 9 acres of habitat. Project will engage youth in migratory bird research to increase their knowledge of science, scientific studies and research protocols along the west coast from California to Alaska.
\$69,000

Friends of Alaska National Wildlife Refuges Expanding Outreach Capacity for the Friends of Alaska National Wildlife Refuges (AK)

Expand outreach capacity by increasing awareness and visibility through informative education material. Project will increase number of volunteers and bring more people to Alaska's 16 National Wildlife Refuges.
\$5,903

Kenai Watershed Forum

Crooked Creek Fish Passage Improvement (AK)
Determine the efficacy of a fish passage barrier removal and restoration project. Project will quantify and compare the amount of juvenile Chinook and coho salmon that migrate along an identified reach of Crooked Creek prior to and after completion of construction activities.
\$123,976

The Conservation Fund

Improving Fish Passage to Restore Salmon and Dena'ina Culture (AK)
Restore the Eklutna River north of Anchorage. Project will help restore historic salmon runs that were central to the Dena'ina culture for thousands of years.
\$181,700

Tyonek Tribal Conservation District

Indian Creek Watershed Fish Passage Restoration (AK)
Remove undersized culverts at three sites in the Indian Creek Watershed and replace them with appropriate sized culverts to restore access to 9.5 miles of stream and 147 acres of lake spawning and rearing habitat for coho and pink salmon.
\$70,000

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

Interagency eDNA Database of Fish Distributions (multiple states)
Develop a large environmental DNA database, website and digital tools to coordinate monitoring and promote information exchange among all agencies of aquatic species in rivers and streams in the Western United States. Project will support development of models and maps showing distributions of native and invasive species to provide decision support for strategic investment strategies related to environmental stressors, habitat degradation, invasive species and preservation of native species.
\$89,362

U.S. Department of the Interior, U.S. Fish and Wildlife Service, Region 7 Hydrologic Data Collection in the Mat-Su Basin for Salmon Conservation (AK)

Collect hydrologic data on Moose Creek, tributary to the Deshka River in the Mat-Su/ Copper River Basin, using a stream gauge installed and maintained by the U.S. Geological Survey. Project will be part of a network of gauges that provide data for instream flow water reservation applications as part of the interagency Mat-Su Water Reservation Program.
\$37,100

U.S. Department of the Interior, U.S. Fish and Wildlife Service, Region 7 Tongass "Top Five" Fish Passage Restoration Design Initiative (AK)

Develop an interagency partnership to identify, prioritize, field verify, select and contract for engineered designs at no less than five fish passage restoration sites across the Tongass National Forest.
\$100,000

Wildlife Conservation Society Empowering Youths in Barrier Island Ecosystems (AK)

Train three rural and urban Alaskan youths to develop educational materials about the people and wildlife that depend on the barrier island ecosystems of northern Alaska. Project will also train one rural or urban Alaskan youth as a field research technician, who will work closely with a field crew to evaluate the current conditions of eider breeding grounds.
\$71,401

ARIZONA**Arizona Game and Fish Department Fish Barrier Modification and Apache Trout Monitoring (AZ)**

Modify an existing fish barrier on Bear Wallow Creek. Project will conduct monitoring of recently established recovery populations on the Apache-Sitgreaves national forests with anticipated increases in the abundance of Apache trout throughout their occupied range.
\$100,000

Arizona Game and Fish Department, Native Fish

Refining Propagation Techniques for Endangered Desert Fish (AZ)
Maintain and improve propagation techniques for refuge populations of endangered desert fish, such as spikedace and loach minnow, for restocking into waterways of the Colorado River Basin. Project will support ongoing efforts at the Arizona Game and Fish Department's Aquatic Research and Conservation Center to refine propagation techniques for endangered desert fish.
\$99,506

Bureau of Land Management, Safford Field Office

Riparian Studies and Habitat Restoration — II (AZ)
Improve habitat restoration and provide inventory and monitoring for riparian resources in southeastern Arizona. Project will target local Native American youths, offering paid internships to strengthen database management and GIS applications of new and historic data.
\$75,000

Conservation Legacy

Ancestral Lands Conservation Corps (AZ, NM)
Engage Native American youths and young adults in conservation-service learning opportunities in partnership with Native American communities, Bureau of Indian Affairs and other Agency partners. This project will engage 10 underserved young adults in Albuquerque and the Hopi Tribe to complete various conservation activities at National Park Service sites.
\$39,500

Eastern Nevada Landscape Coalition Establishing a Lower Colorado River Cooperative Weed Management Area (AZ, CA, NV)

Create and establish a Lower Colorado River Cooperative Weed Management Area along approximately 250 river corridor miles. Project will mobilize organizations, develop a Memorandum of Understanding, and create a priority list of invasive plant species in an effort to partner on a watershed scale to reduce the impacts of invasive species along the Colorado River.
\$13,707

Gila Watershed Partnership

Engaging Youth in Riparian Restoration (AZ)
Continue a five-year program to control ecological, social and economic threats from invasive tamarisk and to re-establish native habitat for the endangered southwestern willow flycatcher and threatened western yellow-billed cuckoo. Project will hire local youths to restore 50 acres of riparian habitat by monitoring revegetation sites, removing invasive tamarisk and other associated invasive species, and implementing experimental restoration plans along the Upper Gila River in Arizona.
\$50,751

The Trust for Public Land Conservation of Cienega Grassland Ranch (AZ)

Protect 16,500 acres of high-quality native grasslands and wildlife habitat in the Sky Island Region of southeastern Arizona. Project will secure permanent protection of the Cienega Grassland Ranch through conservation easements.
\$225,000

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

Interagency e-DNA Database of Fish Distributions (multiple states)
Develop a large environmental DNA database, website and digital tools to coordinate monitoring and promote information exchange among all agencies of aquatic species in rivers and streams in the Western United States. Project will support development of models and maps showing distributions of native and invasive species to provide decision support for strategic investment strategies related to environmental stressors, habitat degradation, invasive species and preservation of native species.
\$89,362

U.S. Department of the Interior, U.S. Fish and Wildlife Service, Arizona Fisheries Resources Office Apache Trout Conservation on the Fort Apache Indian Reservation (AZ)

Implement activities on the Fort Apache Indian Reservation that are identified in the Apache Trout Business Plan. Project will include the removal of non-native trout from five to seven recovery populations, population and habitat surveys in seven to 10 streams, and barrier evaluations on eight to 10 natural and artificial barriers that isolate populations of Apache trout from non-native trout found downstream.
\$50,000

ARKANSAS**Beaver Watershed Alliance Initiating Community Stewardship through Watershed Discovery (AR)**

Address rapid land use change by installing five green infrastructure demonstration sites in public places for stormwater management and wildlife habitat creation for monarch butterflies and other wildlife; remove invasive plant species and develop a conservation plan for 97 acres of upland urban forest; establish 20 acres of riparian forest along 4 miles of tributaries; and increase community engagement in the impaired Town Branch watershed in Fayetteville.
\$37,711

CALIFORNIA**Amah Mutsun Land Trust**

Restoring Coastal Prairie to Protect and Promote Ecological and Cultural Resources (CA)
Restore 10 acres of sensitive coastal prairie in the Whitehouse Creek watershed to increase the abundance of native plant species and enhance habitat for the endangered San Francisco garter snake and federally threatened California red-legged frog. Project will provide jobs for nine youths of the Amah Mutsun Tribal Band, reduce fire danger, protect cultural resources, deliver outreach to 85 community members, remove invasive plants and reintroduce native plants.
\$27,451

American Bird Conservancy Restoring Fire-Affected Riparian Habitat in the Los Padres National Forest (CA)

Develop multi-partner, multi-year ecological restoration action plans at two riparian vegetation impaired sites impacted by the Zaca fire to benefit at-risk species, including least Bell's vireo, southwestern willow flycatcher, yellow-billed cuckoo, steelhead trout and amphibians. Project will result in an expanded network of professionals and experts convened to gather information and provide recommendations that will directly influence next-stage implementation.
\$182,350

American Conservation Experience Southern California Conservation Corps Angeles National Forest Restoration

Establish a collaborative partnership to advance a wide array of post-fire restoration activities in areas burned and affected by the Copper, Ranch and Sayre fires. Project will focus on removal of non-native invasive vegetation removal, seed collection and propagation, micro-trash removal, trail system improvements and aquatic organism passage improvements.
\$204,510

American Rivers

Restoring Wilderness Meadows in Sequoia and Kings Canyon National Parks (CA)
Accelerate wilderness meadow restoration by prioritizing wilderness meadows for restoration and demonstrating wilderness-appropriate restoration techniques. Project will assess and prioritize 50 meadows for restoration, advancing conservation of critical wet meadow habitat for a suite of species that reside in the parks, including Yosemite toad and two species of yellow-legged frog.
\$86,339

Amigos de los Rios Copper Fire Red-Legged Frog Community Habitat Restoration and Education (CA)

Coordinate efforts among local partners to lead community citizen science events within the Copper Fire area. Project will develop and install interpretive kiosks and associated web content about the Copper Fire restoration area's natural and cultural history, telling the story of the U.S. Forest Service's efforts to restore post-fire habitat for the sensitive and endangered species, focusing on red-legged frog, arroyo chub and unarmored threespine stickleback.
\$25,000

Audubon California

From Foothills to Bay: Fostering Urban Youth as San Francisco Watershed Caretakers (CA)
Introduce at-risk youth to the importance of watersheds in the highly urbanized San Francisco estuary by implementing monitoring to track health of creeks, coordinating with community groups on clean-up, invasive plant removal and planting 200 native trees. Project will establish outreach through public schools, engage 140 volunteers and conduct local events to increase awareness and action in watershed conservation.
\$49,449

Blue Ocean Gear

Remote Detection and Location of Lost or Derelict Crab Traps (CA)
Develop and test a prototype device that can communicate the location and identification of lost Dungeness crab traps back to shore. Project will demonstrate the ability to locate traps that have been lost or entangled in marine life, which enables their retrieval more quickly and thereby reduces the long-term impact of the derelict gear.
\$27,306

Blue Tomorrow**Forest Road Inventory and Erosion Assessment in Angeles National Forest (CA)**

Survey up to 50 miles of forest roads in the Copper, Ranch and Sayre fire areas to assess the adequacy and effectiveness of road best management practices, identify sediment sources impacting aquatic habitat, and evaluate the condition of culverts and other road infrastructure. Project will identify restoration opportunities to benefit aquatic habitat and improve future firefighting efforts by identifying road safety and integrity issues in the Angeles National Forest road network. **\$108,518**

Blue Tomorrow**Los Padres National Forest Road Inventory and Erosion Assessment (CA)**

Survey forest roads using the geomorphic road analysis inventory package to assess the adequacy and effectiveness of road best management practices, identify sedimentation sources impacting aquatic habitat and evaluate the condition of culverts and other road infrastructure. This project will reveal restoration opportunities that will benefit aquatic habitat utilized by endangered species and improve future firefighting efforts by identifying road safety and integrity issues across approximately 200 miles of the Los Padres National Forest road network. **\$206,720**

Blue Tomorrow**Los Padres National Forest Stream Condition Inventory — II (CA)**

Survey up to 10 miles of stream length using stream condition inventory and California’s Surface Water Ambient Monitoring Program protocols. Survey data will be evaluated from both project phases and used to assess habitat conditions, sedimentation impacts from fires and forest roads, stream restoration opportunities and track the effectiveness of restoration activities. **\$160,205**

Blue Tomorrow**Stream Condition Inventory in Angeles National Forest (CA)**

Survey eight reaches within the San Francisquito watershed in Angeles National Forest using stream condition inventory protocols developed for the Pacific Southwest Region. Project will use survey data to assess habitat conditions (including critical habitat for California red-legged frog), sedimentation and other impacts from the Copper Fire; identify stream restoration opportunities; and track the effectiveness of restoration activities. **\$120,980**

Boise State University**Modeling Golden Eagle Foraging Habitat with in Desert Renewable Energy****Conservation Area (CA)**

Boise State University will utilize data collected within the Desert Renewable Energy Conservation Plan to identify eagle flight altitude patterns. Project will describe likelihood of eagles being at low altitudes and thus at risk from ground habitat loss. **\$153,000**

California Conservation Corps**Auburn Shaded Fuel Break (CA)**

Provide 15 youths with jobs to remove ground fuels, thin trees and learn about fire hazard reduction. Project will develop and maintain a shaded fuel break atop the American River Canyon along the urban-wildland interface zone between the City of Auburn and the Auburn State Recreation Area in California. **\$25,000**

California Conservation Corps**California Conservation Corps and Bureau of Reclamation Folsom Lake Shaded Fuel Break**

Hire 12 young adults to conduct fuel reduction work near the shores of Folsom Reservoir, along the border of the Folsom Lake State Recreation Area in El Dorado County, by thinning dense vegetation and removing dead and dying fuels that can support intense fire behavior. Project will develop a shaded fuel break along 25 acres of land, prioritized by Bureau of Reclamation. **\$49,920**

California Invasive Plant Council**Eradication of Moroccan Knapweed (CA)**

Initiate a concerted effort to eradicate all known populations of Moroccan knapweed. Project will engage three weed management areas to map distribution, initiate control activities and communicate across the region to ensure new populations are detected and treated. **\$89,934**

California State Coastal Conservancy**San Francisco Bay Living Shorelines Project at Giant Marsh (CA)**

Support living shorelines project at Giant Marsh. Project will focus on the native Olympia oyster restoration components, including construction and monitoring of a constructed reef and eelgrass plantings. **\$400,000**

California Trout**Modoc Plateau Meadows Assessment and Restoration Design Project (CA)**

Assess meadow conditions in the Upper Pit River Watershed to carry out phases 1 and 2 of a meadow restoration project. Project will identify and prioritize three sites for restoration. Phase 2 will include design, permitting and compliance for the prioritized meadows. **\$61,883**

California Trout**Rose Valley Lakes System Design Alternatives Analysis Project (CA)**

Develop an alternative analysis and feasibility study to prevent spread and propagation of aquatic invasive species in the Rose Valley Lakes System and Sespe Creek watershed. Project will help support recovery of the federally endangered Southern California steelhead and increase their resiliency to future fire, drought, aquatic invasive species threats or disturbances. **\$190,043**

Central Coast Salmon Enhancement**Sediment Reduction Assessment and Aquatic Protection (CA)**

Conduct a quantitative erosion and sediment delivery assessment, with planning and prioritized erosion control actions for forest roads and fuel breaks within Los Padres National Forest and Manzanita Creek watershed. Activities will rapidly evaluate and implement multiple fish and water quality-friendly best management practice projects across 60 miles of road and fuel breaks to reduce human-caused erosion and sediment delivery to streams, protect water quality and restore/protect critical habitat for southern steelhead. **\$236,780**

Channel Islands Restoration**Treatment and Monitoring of Tamarisk in the Sisquoc River Watershed — II (CA)**

Monitor and continue treatment of areas of the Sisquoc River, Forester’s Leap Canyon and Manzanita Creek. Volunteers will survey approximately 15 miles of stream channel and river bed to confirm the effectiveness of treatment and follow up with additional herbicide application as needed, supporting watershed quality, diversity and resilience. **\$189,211**

Concerned Resource**and Environmental Workers****Alamar Saddle to Jackson Trail Restoration Project (CA)**

Restore the upper Sisquoc River trail from Alamar Saddle to Jackson Trail of the Los Padres National Forest. Project will eliminate sources of erosion, restore trail and improve passage for hikers, stock and resource managers along a 20-mile route previously degraded by the Zaca fire. **\$170,095**

Condor Trail Association**Post-Piru Fire Restoration Planning for Condor and Aqua Blanca Trails (CA)**

Conduct a comprehensive survey of existing trail conditions, perform preliminary assessments for engineering and guidance of future assessments and develop a program of work for potential restoration activities along the Aqua Blanca trail. Project will result in actionable information to guide next-step actions for recovering area of trail impacted by Piru fire. **\$25,125**

Eastern Nevada Landscape Coalition**Establishing a Lower Colorado River Cooperative Weed Management Area (AZ, CA, NV)**

Create and establish a Lower Colorado River Cooperative Weed Management Area along approximately 250 river corridor miles. Project will mobilize organizations, develop a memorandum of understanding, and create a list of priority invasive plant species in an effort to partner on a watershed scale to reduce the impacts of invasive species along the Colorado River. **\$13,707**

Environment for the Americas**Assessment, Prioritization, and Planning for Restoration Activities in Angeles National Forest (CA)**

Provide detailed information about the post-fire conditions on the Sayre, Copper and Ranch burn areas to support effective restoration, revegetation and conservation projects. Project will utilize an innovative approach that integrates NASA’s next-generation technology for mapping vegetation with on-the-ground verification of plant communities. **\$287,547**

Environment for the Americas**Celebrate Birds: Latino Youth in Avian Conservation and Education (AK, CA, CO, OR, WA)**

Introduce underrepresented Latino youths to careers in natural resources while restoring 9 acres of habitat. Project will engage youth in migratory bird research to increase their knowledge of science, scientific studies and research protocols along the West Coast from California to Alaska. **\$69,000**

Farallon Institute**California Current Seabird and Forage Fish Conservation Initiative (CA, OR, WA)**

Provide critical information and work closely with the National Marine Fisheries Service to ensure it is part of new stock assessment and management strategy evaluation efforts for anchovy. **\$250,000**

Gold Ridge Resource Conservation District**Improving Streamflows in Green Valley Creek through Rainwater Catchments on the Shaw Property (CA)**

Construct two rainwater catchment systems on a rural residential parcel in the upper Green Valley watershed to capture and store rainwater to satisfy summer/fall dry season demand for landscape and garden irrigation and horse watering. Project will eliminate all dry season use of water from a shallow alluvial well along the creek for outdoor, non-potable purposes to benefit endangered coho salmon. **\$30,000**

Gold Ridge Resource Conservation District**Restoring Fish Passage in Upper Green Valley (CA)**

Restore fish passage and stabilize the channel grade through a 600-foot reach of upper Green Valley Creek, a tributary to the Russian River. Project will ensure passage for juvenile and adult coho salmon to an additional 4,810 feet of high-quality spawning and rearing habitat. **\$30,000**

Grenada Irrigation District**Shasta River Flow Enhancement (CA)**

Design and engineer a pipeline to permanently provide water for instream benefit for the southern portion of the Shasta River watershed and develop an operations plan that will define critical periods of year and life stages where diversion reduction will be implemented. Project will allow for 12-14 cubic feet per second of water right to remain instream to benefit coho and Chinook salmon, steelhead and lamprey. **\$191,200**

Klamath Bird Observatory**Bird Monitoring Training Positions for Underserved Community Youth (CA)**

Expand an existing riparian restoration research program to include full life-cycle monitoring of yellow-breasted chats breeding along the Trinity River, and improve outreach to underserved communities, especially Native American youth. This program will create two four-month field technician positions to provide training and practical experience in bird monitoring techniques and offer additional opportunities for career development. **\$39,455**

Los Angeles Audubon Society**Ballona Creek Watershed Youth Leadership Program (CA)**

Engage approximately 2,500 underserved youths and hundreds of community volunteers in educational and habitat restoration activities throughout the Ballona Creek watershed. Project will educate students on the watershed through field trips, hands-on habitat restoration activities, and an after-school environmental leadership program, a youth summit and hands-on restoration of 2 acres of coastal sage scrub and 7.7 acres of beach habitat. **\$50,000**

Los Padres Forest Association**Los Padres Forest Association Zaca Fire Trail Restoration and Conservation — II (CA)**

Continue sustainable trail restoration along the system of U.S. Forest Service trails that were damaged as a result of the 2007 Zaca fire. Project will complement the approximate 50 miles of trails restored in Phase I with another 50 miles of system trail restoration and maintenance, with a priority focus on those trails with discernible environmental protection elements. **\$397,087**

Los Padres Forest Association**Planning and Restoration of Cold Spring Trail (CA)**

Reroute a section of the Cold Spring Trail out of the Gibraltar Reservoir flood and sedimentation-prone lowlands and up onto the more sustainable eastern hillside. Project will reroute a 1.5 miles segment of trail out of areas impacted by Zaca fire silt and sediment deposition, providing long-term protection of these sensitive and dynamic areas and ensuring a safer, resilient and stable pathway through this area. **\$108,601**

Margaret Kadoyama Consulting**Seabird Protection Network / Common Murre Restoration Program Evaluation (CA)**

Evaluate the effectiveness of the past decade of work performed through the Seabird Protection Network, which works to reduce human disturbance to seabirds and other wildlife along the central California coast. This project supports the preferred restoration alternative identified in the Luckenbach Restoration Plan. **\$16,000**

National Forest Foundation**Post-fire Chaparral Restoration in Angeles National Forest (CA)**

Restore native chaparral and coastal sage scrub plant communities lost to fire, and remove invasive plants in the Copper, Sayre, Ranch and Station fire burn areas of Angeles National Forest. Project will focus on weed eradication, collection of propagules for storage, propagation of plants for restoration, education and outreach, and best practices for growing nursery container plants. **\$495,803**

Northcoast Marine Mammal Center**Response and Rehabilitation of Northern Elephant Seal Pups (CA)**

Support rehabilitation of northern elephant seal pups after an unusually high number of rescues in 2016. Project will support repairs to the facility that are required after care for 31 animals in one year so that the facility can continue to provide high quality care into the future. **\$11,659**

Northwest California Resource**Conservation and Development Council****Improve Fish Passage for Salmonids in Manzanita Creek (CA)**

Improve passage conditions for salmonids through increased flow conditions and accessibility of 2.6 miles of spawning and rearing habitat. Project will develop a design for restoration of the Manzanita Creek to a natural stream bottom and establish an implementation plan for working in the remote location. **\$19,586**

Northwest California Resource Conservation and Development Council Planning for Restoration of Fish Passage in East Weaver Creek (CA)

Develop a design and preliminary environmental permit review for activities to regain access to migration, spawning and juvenile rearing habitat for salmonids and other native fish species. Project will seek to restore critical habitat for federally threatened coho salmon, Klamath Mountains Province Distinct Population Segment steelhead, Pacific lamprey, and four resident fish species, while assuring a reliable water supply to the community.
\$27,088

Plumas Corporation Rock Creek Meadow Restoration Planning Project (CA)

Complete planning, design, permitting, and pre-construction monitoring for the restoration of montane meadow along Rock Creek within the North Fork Feather River watershed. Project will result in an implementation-ready project to restore approximately 206 acres of meadow, with a design that incorporates conservation recommendations for great gray owl and willow flycatcher.
\$64,114

Point Reyes Bird Observatory — Point Blue Conservation Science

Associations Among Seabird Mortality Events and Demography Trends in Central California Integrate and analyze data on seabird carcass deposition, seabird demography and ocean climate data to provide an assessment of the significance of seabird mortality events and the ability to identify when management responses may be called for.
\$59,977

Point Reyes Bird Observatory — Point Blue Conservation Science

Evaluating Success and Improving Outcomes of Pond-and-Plug Meadow Restoration (CA) Implement an applied research project to evaluate the effects of pond-and-plug restoration on meadow-dependent birds to provide needed adaptive management feedback to improve and guide future meadow restoration in Sierra meadow watersheds. Project findings will be used to identify projects that are under-performing in their capacity to support meadow bird habitat and engage the stakeholders involved in those projects to design habitat enhancements that will maximize conservation outcomes.
\$96,808

Regents of the University of California — Davis
Developing a Decision Support Tool for Post-fire Restoration in Angeles National Forest (CA) Develop a post-fire restoration tool for resource managers focusing on the Copper, Ranch and Sayre fires. Project will result in the creation of priorities for post-fire restoration, maps of spatially explicit restoration priorities in the fire scar areas and a corresponding suite of native species for restoration activities.
\$169,021

Resource Institute San Francisquito Canyon Aquatic Barriers Restoration Program (CA)

Implement Natural Channel Designs at two proposed aquatic organism passage barrier sites in San Francisquito Canyon. Project will benefit unarmored three-spine stickleback and California red-legged frog and restore more natural hydrologic processes in San Francisquito Creek.
\$461,843

Rocky Mountain Bird Observatory Outreach Delivery in Sagebrush Ecosystem (multiple states)

Reprint copies of Pocket Guide to Sagebrush Birds and Pocket Guide to Sagebrush following requests from several federal and state agencies and conservation districts.
\$20,000

San Francisco Estuary Institute Klamath Basin Monitoring Program Coordination and Member Support (CA, OR)

Provide assistance with data sharing, quality-control standards for monitoring and support for restoration efforts led by Klamath Basin Monitoring Program members. Project will continue and expand critical program coordination and member support.
\$66,877

Santa Barbara Botanic Garden Illuminating Botanical Black Holes to Guide Restoration in the Zaca and Jesusita Fire Areas (CA)

Conduct comprehensive rare and invasive plant surveys throughout the Zaca and Jesusita fire sites and identify areas in need of recovery projects and collecting seed for conservation and restoration. Project will reveal both high-value and compromised habitat, as well as eroded or otherwise degraded areas.
\$180,967

Santa Ynez Band of Chumash Indians Tribal Wildfire Forest Restoration Fellowship Program (CA)

Provide natural resources training for tribal youths through partnerships with other conservation groups active within the Los Padres National Forest fire recovery program. Project will focus on building skills in natural resources for tribal descendants while contributing to habitat restoration, invasive species control and stream restoration.
\$32,767

Scott River Water Trust Accounting for Flow Enhancement Efforts in French Creek (CA)

Monitor the effects of leased water over two irrigation seasons using the wetted perimeter analysis method within three reaches of the French Creek watershed. Project will improve understanding of the relationship between instream flows and aquatic habitat condition in a critical tributary to the Scott River in California's Klamath Basin.
\$68,217

Sierra Foothill Conservancy Bean Meadow Restoration Project (CA)

Measure meadow restoration success and validate restoration benefits of the Bean Meadow restoration over the next three years, including benefits to special status species such as willow flycatcher, great gray owl, yellow warbler and western pond turtle. Project will provide critical outreach to other Sierra meadow owners regarding meadow restoration success and grazing, and provide assistance in assessing meadow condition using the Meadow Condition Scorecard.
\$164,138

Siskiyou Resource Conservation District Prioritizing and Developing Flow Enhancement Projects on French Creek (CA)

Work with voluntary water users within the lower 3 miles of French Creek (tributary to the Scott River) in the assessment of surface water diversion delivery, recommend system improvements, investigate the feasibility of improvement options and assist in the negotiation of conserved water being returned instream. Project will lead to quantifiable flow improvements, which will subsequently reduce stressors to the limiting life stage of salmonids.
\$75,757

Siskiyou Resource Conservation District Scott River Flow Enhancement and Irrigation Efficiency (CA)

Identify and develop water conveyance and on-farm irrigation improvements that will decrease surface water diversion rates on the Scott River. Project will benefit coho salmon and Chinook salmon, steelhead trout and other aquatic wildlife.
\$40,000

Social and Environmental Entrepreneurs Treatment and Monitoring of Tamarisk in the Cuyama River Watershed — II (CA)

Monitor and continue treatment of tamarisk in the Cuyama River Watershed, Rancho Nuevo Creek, Deal Canyons and portions of the Cuyama River. Volunteers will survey 18 miles of stream channel and river bed to confirm the effectiveness of treatment and follow up with additional herbicide application as needed.
\$25,000

Sonoma Resource Conservation District Improving Streamflows in Mark West Creek through Rainwater Catchment (CA)

Install a rainwater catchment system on the Blake/Buckwalter property to provide for the outdoor non-potable water needs of the landowner and to reduce the amount of water withdrawn from an existing groundwater well near an unnamed tributary to Mark West Creek. This project will improve summer streamflow in the Mark West Creek, a tributary to the Russian River, to benefit endangered coho salmon in the critical dry summer months.
\$39,565

Sonoma Resource Conservation District Improving Streamflows in Mark West Creek through Rainwater Catchment (CA)

Install two 30,000-gallon rainwater storage tanks for the outdoor non-potable water needs of the landowner and irrigation needs for a large community garden to reduce the amount of water withdrawn from an existing groundwater well near an unnamed tributary of Mark West Creek. Project will improve summer streamflow in the Mark West Creek watershed to benefit endangered coho salmon in critical dry, summer months.
\$154,709

Sonoma Resource Conservation District Improving Streamflows in Mill Creek through Rainwater Catchment (CA)

Install a rainwater catchment system at Westside School to offset summer pumping from a near-stream well. Project will improve summer coho salmon habitat by increasing streamflow in Mill Creek, a tributary to the Russian River, through decreasing surface water diversions during the dry summer months.
\$10,500

Sonoma Resource Conservation District Landowner Assistance for Streamflow Enhancement in Sonoma County's Salmonid-bearing Streams (CA)

Sonoma Resource Conservation District will provide engineering and technical assistance to private landowners along salmonid-bearing coastal streams to improve instream flows through water conservation, winter water storage and groundwater recharge. Project will result in the development of at least eight comprehensive water conservation plans and/or engineered designs for flow enhancement projects in priority watersheds.
\$195,000

South Yuba River Citizens League Van Norden Meadow Restoration (CA)

Conduct a restoration project at the Van Norden Meadow area in California to improve hydrologic function and raise the base flow of the South Yuba River and Upper Castle Creeks. Project will remove reed canary grass, plant native vegetation plantings and reconnect an abandoned channel in the meadow.
\$98,517

TerrainWorks Improving Prioritization of Restoration Activities Pre and Post Fire in Angeles National Forest (CA)

Apply advanced geospatial tools in the Copper, Ranch and Sayre fire areas to create a quantitative, consistent and replicable method to improve prioritizing restoration activities focused on aquatic habitats, riparian corridors, post-fire erosion, flash flooding and roads. Project will conduct a pre-fire analysis for prioritizing thinning, prescribed burning and road work, to maximize benefits to aquatic and riparian environments.
\$117,285

TerrainWorks Prioritization and Performance Accounting in the Los Padres National Forest (CA)

Apply advanced geospatial tools in the Zaca, Piru and Jesusita fire areas to create a quantitative, consistent and replicable method to improve prioritizing restoration activities focused on aquatic habitats, riparian conditions, post-fire erosion and roads. Project will utilize the U.S. Forest Service's Watershed Condition Framework to guide restoration targets, predict restoration effectiveness.
\$127,450

The Bay Institute Bay Area Film and Lecture Series on Derelict Fishing Gear (CA)

Inform the surrounding community about the concerns around derelict fishing gear in the coastal waters off San Francisco Bay and actions that can reduce and prevent further loss of fishing gear in the marine environment. Project will create an analysis and action agenda for addressing derelict fishing gear in the San Francisco Bay Area and implement a variety of education and outreach activities such as a film and lecture series.
\$10,762

The Nature Conservancy Beaver-based Restoration in Priority Watersheds in the Sierra Meadows (CA)

Create a spatially explicit prioritization of meadows across the Sierra Nevada for beaver-based restoration, with particular focus on habitat creation for willow flycatchers and threatened and endangered frog species. Beavers provide an inexpensive, scalable solution to restore incised meadows and increase floodplain connectivity, surface and groundwater storage and dry season baseflow.
\$138,510

The Nature Conservancy Water Balance Study on the Shasta River (CA)

Quantify zones of accretion and depletions on the Shasta River. Project will include installation of stage gages, development of reliable stage/discharge relationships, and regular assessment of diversion withdraws, groundwater pumping, and stream inputs in order to create a water balance flow model for the river.
\$49,968

The Xerces Society for Invertebrate Conservation Restoring Overwintering and Breeding Habitat for the Monarch Butterfly's Western Population (CA)

Restore and enhance priority habitats in California to benefit the western monarch population. Project will work with public and private partners to restore and enhance 37 acres of coastal overwintering habitat and more than 600 acres of breeding habitat on working lands and natural areas in the Central Valley.
\$249,990

TreePeople Forest Aid on the Copper and Sayre Fire Scars in Angeles National Forest (CA)

Bring together forestry and community engagement programs to help restore chaparral areas affected by the Copper, Ranch and Sayre fires. Project will use innovative techniques for long-term invasive management, and revegetate these landscapes to restore resilient native plant communities, including gathering and propagating seeds to build plant stocks for current and future restoration work.
\$377,839

TreePeople "Good Heart" Chicana/o and Native Science Children's Forest Watershed-Learning Laboratory (CA)

Engage students and parents in the restoration and ongoing monitoring of national forest land and support the development, delivery and testing of curriculum that is both scientifically contemporary and inclusive of Native American ancestral knowledge. Project will include management of one acre of invasive species, revegetation of one acre of chaparral, harvest of half a pound of native seed and development of one culturally relevant curriculum unit.
\$40,782

Trout Unlimited Deer Creek Streamflow Improvement Alternatives Analysis (CA)

Analyze streamflow improvement alternatives for Deer Creek, an eastside tributary of the Sacramento River and one of the three most important tributaries for Central Valley spring-run Chinook salmon, a federally listed species that has suffered dramatic declines during the recent drought. Project will develop a conceptual plan to protect about 10 cubic feet per second (cfs) of water instream year-round, and up to 30 cfs during critical migration periods in May and June.
\$50,000

Trout Unlimited**Lahontan Cutthroat Trout Conservation and Recovery (CA, NV)**

Conduct a range-wide genetic assessment of Lahontan cutthroat trout populations to produce population-specific extinction probabilities and involve landowners in restoration activities by establishing new safe harbor agreements. Project will increase public awareness of restoration efforts and will secure 10 additional miles of trout habitat in California’s Walker Basin headwaters. **\$420,508**

Trout Unlimited**Streamflow and Groundwater Monitoring and Accounting in the Russian River Watershed (CA)**

Monitor groundwater levels in the upper Green Valley watershed, a tributary to the Russian River, and incorporate new and innovative technology into existing streamflow monitoring program. Project will build on seven years of work to increase streamflow during the dry season and to quantitatively demonstrate the benefit of these new projects on streamflow and coho survival. **\$85,000**

Trout Unlimited**Streamflow Improvement to Restore Russian River Coho Populations (CA)**

Integrate targeted outreach, streamflow and fisheries monitoring, project development and implementation, and strategic changes in water rights and policy to restore a viable self-sustaining population of coho salmon in the Russian River. Project will build on seven years of work to increase streamflow during the dry season and to quantitatively demonstrate the benefit of these new projects on streamflow and coho survival. **\$500,000**

Truckee River Watershed Council**Boca Complex Meadows Restoration (CA)**

Complete required planning activities to ready three meadow restoration projects for implementation, including a watershed assessment of the Boca complex, conceptual restoration design of two meadow sites, final design for one meadow site, establishment of pre-project monitoring on all three meadows, and stakeholder coordination. Project will restore 75 acres of meadows, increasing available breeding habitat for willow flycatchers. **\$107,053**

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

Complete final restoration design and environmental compliance for a 900-acre meadow, including 2 miles of degraded stream channel. Project will result in the restoration of a high priority degraded Sierra Nevada meadow system in the northeastern Truckee River watershed and increase available breeding habitat for willow flycatcher. **\$157,629**

University of California**Evaluation and Biological Control of Invasive Riparian Plants in River Systems (CA)**

Address needs of riparian vegetation by mitigating impacts of invasive plants to biodiversity and ecosystem function and reducing herbicide use on public landscapes. Project will evaluate the status of invasive plants in riparian systems and potential for biological control. **\$124,972**

University of California — Santa Barbara**E-DNA to Map Aquatic Species Within Angeles National Forest Fire Scars (CA)**

Gain information on the presence and distribution of native and non-native aquatic species of interest using environmental DNA. Collect water samples from various locations in watersheds within and near the Copper, Ranch and Sayre fire scars; DNA will be filtered and extracted from these samples and used to determine the presence of each species of interest. **\$145,730**

University of California — Santa Barbara**Large-scale Mapping of Post-fire Recovery Success Following the Zaca fire (CA)**

Map post-fire recovery trajectories of vegetation cover for the entire Zaca fire scar using Landsat remotely sensed data. Areas of anomalous recovery rate, either high or low, will be identified. **\$184,001**

University of California — Santa Barbara**Using e-DNA to Map the Distributions of Aquatic Species in Zaca, Piru and Jesusita Fire-affected Areas (CA)**

Collect water samples for environmental DNA to determine presence of selected species of management interest in streams affected by the Zaca, Piru and Jesusita fires. Results will then be used to map the distribution of target species and will be compared to data on the history, intensity and extent of wildfire in surrounding areas to guide species management on the Los Padres National Forest. **\$168,184**

University of California — Santa Cruz**Algae Restoration in San Francisco Bay — II (CA)**

Implement habitat restoration in areas near San Leandro Marina that will lead to recovery of brown algae found in intertidal waters in areas damaged as a result of the Cosco Busan Oil Spill. Project will combine an understanding of the life history of algae with the goal of minimum impact to donor populations. **\$244,706**

U.S. Department of Agriculture,**U.S. Forest Service****Interagency e-DNA Database of Fish Distributions (multiple states)**

Develop a large environmental DNA database, website and digital tools to coordinate monitoring and promote information exchange among all agencies of aquatic species in rivers and streams in the Western United States. Project will support development of models and maps showing distributions of native and invasive species to provide decision support for strategic investment strategies related to environmental stressors, habitat degradation, invasive species, and preservation of native species. **\$89,362**

U.S. Department of Agriculture,**U.S. Forest Service,****Pacific Southwest Research Station Developing Strategies to Prevent and Address Species Introductions in Angeles National Forest (CA)**

Develop a plan to prevent and manage inadvertent Phytophthora pathogen introductions. Project will evaluate the incidence and impacts of Phytophthoras in disturbed and undisturbed sites on the west side of the Angeles National Forest. **\$99,581**

U.S. Department of the Interior,**U.S. Geological Survey,****Western Ecological Research Center Assessment of Least Bell’s Vireo and Southwestern Willow Flycatcher in Angeles National Forest (CA)**

Evaluate least Bell’s vireo and southwestern willow flycatcher habitat in the areas affected by the Copper and Ranch fires in San Francisquito and Piru creeks. Project will survey suitable habitats for the presence of Least Bell’s Vireo and southwestern willow flycatchers, and the results will determine future management actions for long-term management of these species. **\$92,888**

U.S. Department of the Interior,**U.S. Geological Survey — Western****Ecological Research Center****Post-fire Fish Community Assessments in San Francisquito Canyon (CA)**

Evaluate the fish community in San Francisquito Canyon in order to understand the impacts from the 2002 Copper Fire on the current habitat and fish assemblage. Project will provide guidance to improve, protect and restore/rehabilitate the fish community within San Francisquito Canyon. **\$68,321**

Watershed Research and Training Center**Hayfork Youth Crew Continuing the Path to Natural Resource Leadership (CA)**

Employ 12 youths to maintain 60 miles of trails, remove 45 acres of invasive weeds and maintain wildland fire lines on the Shasta-Trinity National Forest South Fork Trinity River Management Unit in northern California. Project will educate the youth crew, as well as elementary-age children, and engage them in activities such as Environmental Camp, Indian Valley Summer Camp, Salmon Education Day and Wetland Education. **\$21,821**

West Virginia University Research**Corporation****California Condor Wildfire and Micro-trash Risk Assessment in Los Padres National Forest (CA)**

Identify overlaps between wildfire risk, exposure to micro-trash, and condor roosting and ground foraging habitat using accelerometer data from telemetered condors in Los Padres National forest. Project’s long-term goals include developing targeted vegetation management that conserves important condor habitat. **\$225,361**

Western Rivers Conservancy**Creating a Cold-Water Refuge for Klamath River Salmon (CA)**

Transform 47,097 acres in northwestern California into a cold-water sanctuary for Klamath River salmon and a continuous forested landscape. Project will acquire the final 8,582 acres of a 47,097-acre project area in the Klamath-Siskiyou ecoregion, which includes the single most important cold-water refuge for coho and Chinook salmon in the entire 10 million-acre Klamath River ecosystem. **\$500,000**

COLORADO**Colorado Youth Corps Association****Putting Diverse Youth to Work for Conservation (CO)**

Engage two accredited youth corps crews in restoration projects that will reduce the risk of wildland fire and improve wildlife habitat, including restoring brood-rearing habitat used by Gunnison sage-grouse. Project will reduce wildlife conflicts with livestock grazing, restore wetlands and improve groundwater storage. **\$37,950**

Environment for the Americas**Celebrate Birds: Latino Youth in Avian Conservation and Education (AK, CA, CO, OR, WA)**

Introduce underrepresented Latino youths to careers in natural resources while restoring 9 acres of habitat. Project will engage youth in migratory bird research to increase their knowledge of science, scientific studies, and research protocols along the west coast from California to Alaska. **\$69,000**

Friends of the Front Range Wildlife Refuges**Building Capacity for Friends of the Front Range Wildlife Refuges (CO)**

Develop and improve capacity to strengthen organization’s membership and presence on the refuges. Project will increase ability to achieve its mission of supporting the Front Range Wildlife Refuges. **\$3,372**

Metropolitan State University of Denver**Investigation of Degraded Sites and Riparian Restoration along South Platte River (CO)**

Engage 30 high school and college students to improve water quality and fish populations along the South Platte River through the Denver Metro Area. Project will monitor six identified sites with degraded water quality to determine sources of impairments, teach students proper sampling techniques and generate data to characterize the health of the river and design restoration plans to help mitigate water quality degradation along one acre of habitat. **\$31,445**

Rocky Mountain Bird Observatory**Outreach Delivery in Sagebrush Ecosystem (multiple states)**

Reprint copies of Pocket Guide to Sagebrush Birds and Pocket Guide to Sagebrush following requests from several federal and state agencies and conservation districts. **\$20,000**

Rocky Mountain Field Institute**Southern Colorado Natural Landscapes****Youth and Adult Volunteer Environmental Stewardship Program**

Engage 75 to 100 young conservation crew members in on-the-ground stewardship and restoration projects to conserve wildlife habitat that will benefit white-tailed deer and various bird species in the Pikes Peak Region of southern Colorado. Project will remove 2 acres of Mexican locust and other invasive plant species and restore 20 acres of riparian habitat through erosion control, hillslope stabilization and trail improvement projects to reduce sedimentation from slopes and gullies. **\$30,000**

U.S. Department of Agriculture,**U.S. Forest Service****Interagency e-DNA Database of Fish Distributions (multiple states)**

Develop a large environmental DNA database, website and digital tools to coordinate monitoring and promote information exchange among all agencies of aquatic species in rivers and streams in the Western United States. Project will support development of models and maps showing distributions of native and invasive species to provide decision support for strategic investment strategies related to environmental stressors, habitat degradation, invasive species, and preservation of native species. **\$89,362**

Uncompahgre/Com**Western Colorado High School Summer Science and Engineering Internship Program (CO)**

Employ eight high school students with paid internships to monitor vegetation and fuels density, invasive species, riparian health, fish populations, and bird and small mammal response to treatments on the Uncompahgre Plateau in rural western Colorado. Project will give interns the opportunity to job shadow with a variety of U.S. Forest Service professionals, increasing conservation awareness and encouraging their interest in future careers. **\$22,000**

CONNECTICUT**Abt Associates****Monitoring Hurricane Sandy Coastal Resiliency Program’s Socioeconomic Northeast Impacts (multiple states)**

Conduct socioeconomic monitoring for 38 Hurricane Sandy coastal resiliency projects throughout the Northeast from Virginia to Maine. Project will measure and advance the state of knowledge around coastal resilience’s socioeconomic impacts on human health and safety, property and infrastructure protection and enhancement, and community resilience. **\$2,242,026**

National Audubon Society**Managing Human Disturbance on Shorebirds along the Atlantic Coast (multiple states)**

Produce a framework to improve the effectiveness of disturbance reduction strategies for the Atlantic Flyway. Project will bring together partners from Canada to Florida to provide shorebird site managers with best management practices for managing human disturbance, along with essential tools and key indicators for measuring progress along the Atlantic Flyway. **\$200,000**

University of New Hampshire**Demonstrating Efficacy of Young Forest Restoration for New England Cottontail and Birds (CT, ME, NH)**

Document for the first time population level response of New England cottontails and other young-forest-dependent species to previous and planned early successional forest habitat management activities in Connecticut, New Hampshire and Maine. Project will use a capture-recapture population estimate combined with a pellet survey on 30 sites totaling 482 acres and will develop a landscape scale model to predict future abundance on 28,800 acres of restored habitat. **\$174,838**

U.S. Department of the Interior, U.S. Fish and Wildlife Service, Region 5
Ecological Monitoring of Hurricane Sandy Aquatic Connectivity Sites (CT, MA, MD, NJ, RI)
Monitor ecological resilience changes at nine aquatic connectivity sites in the Northeast. Project will contribute crucial knowledge that will be used to improve aquatic connectivity system cost-effectiveness and functionality.
\$2,882,850

DELAWARE

Abt Associates
Monitoring Hurricane Sandy Coastal Resiliency Program's Socioeconomic Northeast Impacts (multiple states)
Conduct socioeconomic monitoring for 38 Hurricane Sandy coastal resiliency projects throughout the Northeast from Virginia to Maine. Project will measure and advance the state of knowledge around coastal resilience's socioeconomic impacts on human health and safety, property and infrastructure protection and enhancement, and community resilience.
\$2,242,026

Alliance for the Chesapeake Bay
Supporting Local Governments and Diverse Partners to Restore the Chesapeake Bay (multiple states)
Enhance networking and information-sharing activities to advance watershed restoration efforts. Project will engage nearly 6,000 individuals within the Chesapeake Bay Watershed through an annual Chesapeake Watershed Forum, a Local Government Forum, regional forums and an online networking tool.
\$140,000

Land Trust Alliance
Chesapeake Land & Water Initiative (multiple states)
Deploy an integrated and innovative approach to accelerate permanent land protection for water quality across the Chesapeake Bay watershed. Project will enhance stewardship strategies with land trusts, watershed groups, state land trust associations, and other conservation and civic partners.
\$150,000

Manomet
American Oystercatcher Aerial Survey and Population Recovery along the Atlantic Flyway (multiple states)
Estimate the current population of American oystercatchers via a cooperative aerial and ground survey with partners in the American Oystercatcher working group. Project will contribute directly to the overall goals of increasing the population size of American oystercatchers within the United States by 30 percent between 2009 and 2019, while contributing to the conservation of associated beach nesting and migratory shorebirds.
\$200,000

Mid-Atlantic 4R Nutrient Stewardship Association
Increasing Farmer Adoption of Nutrient Stewardship Practices (DE, MD, PA)
Accelerate the implementation of 4R Nutrient Stewardship practices (right nutrient source applied at the right rate, at the right time, and in the right place) in key watersheds in the Chesapeake Bay.
\$401,424

The Nature Conservancy
Restoration Practices for Water Quality and Habitat Improvements on the Nanticoke River (DE)
Increase and improve forest habitat and water quality through technical assistance to the agricultural community in Delaware's portion of the watershed and reforestation at the Middleford North Preserve. Project will reforest approximately 73 acres of lands ranked as high-priority areas for both water quality and wildlife habitat under the Nanticoke River Watershed Restoration Plan.
\$198,275

U.S. Department of the Interior, National Park Service
Evaluating Beach and Dune Resilience Restoration in the Mid-Atlantic (DE, NJ, NY)
Collect ecological metrics critical to evaluating beach and dune resilience in Delaware, New Jersey and New York. Project will conduct ecological monitoring that will be used to inform future beach and dune resilience knowledge and management.
\$784,264

U.S. Department of the Interior, U.S. Fish and Wildlife Service, Region 5
Assessing the Ecological Effectiveness of Hurricane Sandy Northeast Marsh Restoration Projects (multiple states)
Measure the ecological effectiveness for 23 innovative marsh restoration sites. Project will contribute data critical for the assessment of these new marsh restoration techniques' ecological benefits and cost-effectiveness.
\$2,600,000

U.S. Department of the Interior, U.S. Fish and Wildlife Service, Region 5
Evaluating the Ecological Effectiveness of Hurricane Sandy Marsh Restoration Projects (DE, NJ, VA)
Conduct ecological monitoring useful for evaluating marsh restoration techniques and effectiveness at national wildlife refuges, including Prime Hook, Forsythe, Cape May, and Great Dismal Swamp. Project will build upon previous ecological monitoring and contribute to the evaluation of innovative marsh restoration techniques.
\$2,780,633

DISTRICT OF COLUMBIA

Alliance for the Chesapeake Bay
Supporting Local Governments and Diverse Partners to Restore the Chesapeake Bay (multiple states)
Enhance networking and information sharing activities to advance watershed restoration efforts. Project will engage nearly 6,000 individuals representing watershed organizations and local governments within the Chesapeake Bay Watershed through an annual Chesapeake Watershed Forum, a Local Government Forum, regional forums and an online networking tool.
\$140,000

Anacostia Watershed Society
Saving Our Native Grasslands (DC, MD)
Engage 400 elementary students from Washington, D.C., and Maryland and 150 adult volunteers to restore riparian meadow habitat and increase biodiversity in the Anacostia watershed. Project will remove 1 acre of invasive plants, plant native wildflower species along 17 acres of parkland along the river and create habitat structures to support native songbird and pollinator species.
\$39,378

Low Impact Development Center
Incorporating Green Infrastructure into Urban Agriculture Programs (DC)
Develop a comprehensive nutrient and sediment control program in Washington, D.C., that promotes the integration of green infrastructure best management practices with sustainable urban agriculture programs. Project will install 0.2 acres of best management practices that will annually avoid 770 pounds of sediment, 0.8 pounds of phosphorus and 7.1 pounds of nitrogen from entering local waters annually.
\$199,249

Quantified Ventures
Scaling Private Finance for Green Stormwater Infrastructure through RainPay (DC)
Create sustainable financing and business strategies that can help expand RainPay, Anacostia Waterfront Trust's innovative green infrastructure implementation program. Project will lead to significant reductions in nutrients and sediment to the Anacostia River, greener neighborhoods and increased awareness of the value of restoration activities.
\$49,989

FLORIDA

Alachua Conservation Trust
Less-Than-Fee Beachfront Acquisition Strategies to Protect and Enhance Sea Turtle Nesting Habitat (FL)
Analyze a feasibility assessment for using coastal conservation easements in priority locations for sea turtle conservation in Florida and continue to negotiate for the acquisition of conservation-focused interests. Project also will continue to increase coastal Floridians' knowledge and awareness of sea turtle conservation and private land conservation tools through educational opportunities for interested stakeholders.
\$50,000

Alachua Conservation Trust
Ocala Regional Implementation Team — IV (FL)
Establish 357 acres of longleaf pine and improve more than 5,000 acres of existing longleaf habitat through the use of prescribed fire and mechanical and herbicide treatments of hardwoods. Project will support the recovery of the federally endangered red-cockaded woodpecker in Ocala National Forest, as well as the establishment of longleaf at the Camp Blanding Join Training Center.
\$244,192

Fish and Wildlife Foundation of Florida
Invasive Lionfish Control and Management in the Coral Reef Systems of Southeast Florida (FL)
Coordinate an education, research and management initiative to reduce the population growth and spread of the invasive lionfish species across southeast Florida. Project will coordinate removal derbies to remove thousands of non-native lionfish in one-day events, research attractants to increase their capture and conduct collection, handling and culinary workshops.
\$89,500

Florida Fish and Wildlife Conservation Commission, Fish and Wildlife Research Institute
Reducing Coral Reef Fish Bycatch and Mortality in Spiny Lobster Traps (FL)
Test if the size and placement of escape gaps can reduce coral reef fish bycatch and mortality in the Florida spiny lobster fishery. Commercial fishermen will then use the traps to provide practical experience in real-world fishing conditions to see if escape gaps can reduce coral reef fish bycatch and improve or maintain lobster catch at the same time.
\$81,826

Florida Forest Service
Private Landowner Outreach for Longleaf Pine Restoration (FL)
Restore 1,100 acres and enhance an additional 1,450 acres of longleaf pine in priority areas through technical assistance to private landowners. Project will create comprehensive management plans, promote Farm Bill programs, teach longleaf pine management, and increase participation in certification programs.
\$150,000

Forest Landowners Association
Engaging Working Forest Landowners, Building Stakeholder Collaboration and Developing Solutions (AL, FL, GA, LA)
Establish or enhance 2,000 acres of longleaf pine habitat and host Forest Forums and Timber Talks to bring together landowners, the U.S. Fish and Wildlife Service and other key stakeholders. Project will engage large working forest landowners and forest consultants in key longleaf pine priority areas to increase communication and identify specific actions for addressing barriers to longleaf restoration.
\$125,000

Friends and Volunteers of Refuges — Florida Keys
Enhancing Capacity of Friends and Volunteers of Refuges — Florida Keys
Enhance capacity and presence of Friends and Volunteers of Refuges — Florida Keys at the new Nature Store to increase their ability to support Florida National Wildlife Refuges. Project will draw additional Friends volunteer to assist with refuge support.
\$4,755

Manomet
American Oystercatcher Aerial Survey and Population Recovery along the Atlantic Flyway (multiple states)
Estimate the current population of American oystercatchers via a cooperative aerial and ground survey with partners in the American Oystercatcher working group. Project will contribute directly to the overall goals of increasing the population size of American oystercatchers within the United States by 30 percent between 2009 and 2019, while contributing to the conservation of associated beach nesting and migratory shorebirds.
\$200,000

Marine Applied Research
Online Tool to Provide Access to Baseline Information on Coral Reef Condition (FL)
Develop an online interface that allows annual coral reef monitoring data in United States to be readily merged into reports for easy analysis and adaptive management. Project will produce a State of Coral Reefs report for the U.S. coral jurisdictions and develop a process that ensures that similar reports can be created efficiently in the future.
\$149,966

National Audubon Society
Managing Human Disturbance on Shorebirds along the Atlantic Coast (multiple states)
Produce a framework to improve the effectiveness of disturbance reduction strategies for the Atlantic Flyway. Project will bring together partners from Canada to Florida to provide shorebird site managers with best management practices for managing human disturbance, along with essential tools and key indicators for measuring progress along the Atlantic Flyway.
\$200,000

Northwest Florida State College
Foundation
Citizen Science and Community-based Restoration for the Coastal Dune Lakes of Walton County (FL)
Improve 70 acres of aquatic habitat and restore 4 acres of dune habitat. Through community-based restoration and citizen-scientist initiatives, project will expand the understanding of the globally rare, critically imperiled Coastal Dune Lakes of Walton County.
\$40,000

Phillip and Patricia Frost Museum of Science
East Greynolds Park Mangrove Habitat Restoration (FL)
Restore 3.44 acres of degraded mangrove habitat critical to native wildlife, including the endangered American crocodile and West Indian manatee, at Greynolds Park in Miami-Dade County. Project will engage 400 volunteers to restore natural ground elevation by removing large invasive plants and replanting native saltwater wetland plants, enhancing public green spaces and mitigating coastal erosion.
\$33,153

Southeastern Association of Fish and Wildlife
Advancing Water Conservation on Private Lands in the Apalachicola-Chattahoochee-Flint River Basin (FL)
Promote water conservation best management practices on 6,000 acres of agricultural lands within the Apalachicola-Chattahoochee-Flint (ACF) River basin. Project will protect flow to benefit habitat for six federally listed mussel species, gulf sturgeon and a host of other endemic species native to the Chipola River and ACF basin.
\$250,000

Tall Timbers Research
Expanding Red-cockaded Woodpeckers in Georgia and Florida
Install artificial nest cavities and translocate 25 red-cockaded woodpeckers on private lands in the Red Hills region of Florida and Georgia. Project will treat more than 38,000 acres of existing longleaf with prescribed fire to improve and maintain forage and nesting habitat for translocated woodpeckers.
\$119,878

The Everglades Foundation

George Barley Water Prize Sponsorship (FL)
 Sponsor the Everglades Foundation’s George Barley Water Prize at a level of \$1 million. This innovation challenge seeks to deliver technologies that remove excess phosphorus from phosphorous-polluted fresh water systems to improve water quality and ecosystem health.
\$1,000,000

The Longleaf Alliance

Coordinating Local Implementation Team Capacity and Landowner Technical Assistance and Outreach — III (multiple states)
 Support the Longleaf Implementation Team Consul role, which helps accelerate coordination and exchange of information among 17 multi-partner local implementation teams that organize, plan and deliver conservation actions to restore and enhance the longleaf pine ecosystem. Project will also support a new GIS Specialist position designed to build and improve GIS capacity and collaboration.
\$274,500

The Longleaf Alliance

Longleaf Restoration in the Gulf Coastal Plain Ecosystem Partnership Landscape — III (AL, FL)
 Establish 333 acres of longleaf pine and improve an additional 55,350 acres of existing longleaf habitat through prescribed fire and private landowner outreach and technical assistance. Project will translocate 140 gopher tortoises, a candidate species for possible listing under the Endangered Species Act, and provide technical assistance and educational opportunities for private landowners.
\$300,000

The Longleaf Alliance

Red-cockaded Woodpecker Translocation Support (AL, FL, GA, MS)
 Translocate 60 red-cockaded woodpeckers to properties designated as recovery sites by the U.S. Fish and Wildlife Service. Project will manage and improve 6,000 acres of longleaf pine forest, providing high quality habitat for nesting and foraging.
\$169,519

The Nature Conservancy – Florida

Apalachicola Longleaf Restoration Initiative — V (FL)
 Establish 862 acres of longleaf pine and improve more than 25,000 acres of existing longleaf habitat through the use of prescribed fire and planting of native ground cover on public and private lands. Project will benefit Tyndall Air Force Base, improving habitat both on and off base for numerous wildlife species, including the eastern indigo snake, a federally threatened species, as well as the gopher tortoise and Bachman’s sparrow.
\$300,000

The Nature Conservancy

Longleaf Pine Restoration and Management in the Okefenokee/Osceola Landscape (FL, GA)
 Establish 2,574 acres of longleaf pine and improve management of an additional 27,880 acres of existing longleaf habitat on public and private lands. Project will continue training young people living below the poverty level to serve on longleaf restoration teams, build prescribed fire capacity and educate private landowners.
\$300,000

GEORGIA

Athens Land Trust

Beech Haven Restoration through Athens Youth Conservation Stewards (GA)
 Establish a corps of Athens Youth Conservation Stewards to remove invasive species on 25 acres and improve wildlife habitat and water quality. Project will provide teens from underserved communities with employment experience and leadership skills while improving an important public space in their community.
\$40,000

Atlanta Audubon Society

Restoring Bird-friendly Habitat at Blue Heron Nature Preserve (GA)
 Replace invasive species with native, bird-friendly plants on 3 acres and conduct avian surveys at the Land O Lakes unit of Blue Heron Nature Preserve. Project will engage 50 volunteers and 300 participants in educational outreach and provide quality foraging, nesting and stopover habitat for birds in metro Atlanta.
\$20,297

EcoAddendum

Urban Stewardship and Restoration for Proctor and Utoy Watersheds (GA)
 Restore 6.2 acres of floodplain, Piedmont mesic hardwood forest, 4,350 linear feet of streambank, and 100 feet of riparian vegetation in the Proctor Creek watershed in west Atlanta. Project will implement restoration planning, on-the-ground community-based habitat restoration and educational outreach to help manage stormwater runoff and improve habitat connectivity.
\$50,000

Forest Landowners Association

Engaging Working Forest Landowners, Building Stakeholder Collaboration and Developing Solutions (AL, FL, GA, LA)
 Establish or enhance 2,000 acres of longleaf pine habitat and host Forest Forums and Timber Talks to bring together landowners, the U.S. Fish and Wildlife Service and other key stakeholders. Project will engage large working forest landowners and forest consultants in key longleaf pine priority areas to increase communication and identify specific actions for addressing barriers to longleaf restoration.
\$125,000

Georgia Department of Natural Resources

Conservation of Atlantic Shorebirds on Georgia Coast
 Map horseshoe crab spawning areas in Georgia, confirm red knot consumption of their eggs and use this information to highlight key areas where human disturbance threatens spring sites for red knots. Project will produce an estimate of several demographic parameters and complete a Wilson’s plover predator exclosure project. Work will also support two island shorebird technicians to monitor nests, trap predators and advocate for nesting shorebirds.
\$75,000

Gwinnett Tech Foundation

Urban Gardens and Wetland Restoration at Gwinnett Technical College (GA)
 Protect and restore .9 acres of existing wetlands on the campus of Gwinnett Technical College in Lawrenceville. Project will engage students, staff and the community in capturing and treating stormwater runoff and protect downstream waters.
\$50,000

Howard B. Stroud Elementary School

Creekside Trail Restoration and Education at Stroud Elementary (GA)
 Restore a ¼-mile creek-side trail, 4,500 linear feet of riparian habitat and 48 acres of surrounding forest to directly improve water quality and aquatic and terrestrial habitat. Project will provide learning opportunities to Stroud Elementary students and the local community in water quality monitoring and protection, plant and animal life, wetland function, and educational and career opportunities in the environmental field.
\$49,330

Manomet

American Oystercatcher Aerial Survey and Population Recovery along the Atlantic Flyway (multiple states)
 Estimate the current population of American oystercatchers via a cooperative aerial and ground survey with partners in the American Oystercatcher working group. Project will contribute directly to the overall goals of increasing the population size of American oystercatchers within the United States by 30 percent between 2009 and 2019, while contributing to the conservation of associated beach nesting and migratory shorebirds.
\$200,000

Savannah Tree Foundation

Marsh Protection Promenade (GA)
 Improve marshline habitat and tidal creek water quality, filter 1.7 acres of surface area for stormwater runoff and reduce erosion on the campus of Savannah State University in Chatham County. Project will augment both the immediate and long-term health of coastal marsh habitat and provide educational and recreational benefits to the local community.
\$29,115

Tall Timbers Research

Expanding Red-cockaded Woodpeckers in Georgia and Florida (FL, GA)
 Install artificial nest cavities and translocate 25 red-cockaded woodpeckers on private lands in the Red Hills region of Florida and Georgia. Project will treat more than 38,000 acres of existing longleaf with prescribed fire to improve and maintain forage and nesting habitat for translocated woodpeckers.
\$119,878

The Longleaf Alliance

Coordinating Local Implementation Team Capacity and Landowner Technical Assistance and Outreach — III (multiple states)
 Support the Longleaf Implementation Team Consul role, which helps accelerate coordination and exchange of information among 17 multi-partner local implementation teams that organize, plan and deliver conservation actions to restore and enhance the longleaf pine ecosystem. Project will also support a new GIS Specialist position designed to build and improve GIS capacity and collaboration.
\$274,500

The Longleaf Alliance

Fort Stewart/Altamaha Longleaf Restoration Partnership — III (GA)
 Establish 140 acres of longleaf pine, treat an additional 21,600 acres with prescribed fire and build a network of public and private landowners focused on native groundcover restoration through prescribed burns, native seed collection and planting. Project will improve habitat for the gopher tortoise and other longleaf-dependent species on public and private lands within close proximity to Fort Stewart and Townsend Bombing Range.
\$300,000

The Longleaf Alliance

Red-cockaded Woodpecker Translocation Support (AL, FL, GA, MS)
 Translocate 60 red-cockaded woodpeckers to properties designated as recovery sites by the U.S. Fish and Wildlife Service. Project will manage and improve 6,000 acres of longleaf pine forest, providing high quality habitat for nesting and foraging.
\$169,519

The Nature Conservancy

Longleaf Pine Restoration and Management in the Okefenokee/Osceola Landscape (FL, GA)
 Establish 2,574 acres of longleaf pine and improve management of an additional 27,880 acres of existing longleaf habitat on public and private lands. Project will continue training young people living below the poverty level to serve on longleaf restoration teams, build prescribed fire capacity, and educate private landowners through a prescribed fire manager certification session, two landowner workshops and a longleaf academy.
\$300,000

The Nature Conservancy

Talladega Mountains Longleaf Pine Restoration — II (AL, GA)
 Establish 447 acres of longleaf pine and improve 17,700 acres of existing longleaf habitat with prescribed fire on public and private lands, with the support of a seasonal fire crew. Project will develop a conservation plan to prioritize and guide future restoration and conduct outreach to engage private landowners to restore longleaf pine.
\$205,453

HAWAII

American Bird Conservancy

Conserving the Endangered Seabirds of Hono a Na Pali Natural Area Reserve, Kauai — II (HI)
 Continue predator control work to protect three threatened seabird species at Hanakapiai Mauka (Hanakapiai) and Hanakoa, Hawaii. Project will establish a “rapid response team” to target control efforts throughout the Hono o Na Pali Natural Area Reserve on Kauai during the seabird breeding season where hot spots of predator activity are identified.
\$268,925

American Bird Conservancy

Establishing New Populations of Endangered Seabirds at Kilauea Point National Wildlife Refuge (HI) — II
 Continue work to establish a new colony of endangered Hawaiian seabirds in the Nihoku Restoration Area within Kilauea Point National Wildlife Refuge, Kaua’i. Project will translocate a third cohort in 2017 that will consist of up to 20 Hawaiian petrel and 20 Newell’s shearwater chicks. Prior to translocation, the partners will continue restoration of the Nihoku Restoration Area, identify and monitor donor chicks, and monitor the Nihoku site for non-native predators, including barn owl.
\$214,110

American Bird Conservancy

Saving Hawaii’s Imperiled Forest Birds — IX (HI)
 Advance habitat restoration and management for Hawaiian forest birds on the Big Island, Maui and Kauai. Project will maintain 47 miles of fence around Palila Critical Habitat on Mauna Kea, translocate up to eight Maui parrotbills to the Wailaulau translocation site, conduct predator control over a total of 16,434 critical habitat acres, restore 612 acres of core breeding habitat on Maui and the Big Island, and conduct population surveys, remote sensing and acoustic surveys on Kauai.
\$337,409

Conservation International Foundation

Sustainably Managing Coral Reefs and Fisheries in Milolii, South Kona, Hawaii (HI)
 Develop a management plan for the Milolii Community-based Subsistence Fishing Area. Project will assist community leaders in establishing a management plan for sustainable fisheries and establish a monitoring program to understand the long-term ecosystems impacts of the selected management strategies.
\$59,384

Island Conservation

Midway Atoll Seabird Restoration (HI)
 Complete the next steps of planning, compliance, and necessary field studies to inform operational procedures for a mouse eradication on Midway Atoll.
\$827,472

Kupu

Kupu’s Youth Corps Teams Work to Preserve Hawaii’s Natural and Cultural Resources (HI)
 Engage 30-40 diverse youth volunteers in important resource protection projects at Department of Interior sites across the state of Hawaii. Project will include mountain and coastal restoration through invasive species removal, native planting and predator control, as well as trail restoration.
\$69,987

Kupu

Protecting Threatened Dry Forest at Pu’u Wa’awa’a Forest Reserve (HI)
 Hire five young adults to help clear an 8-acre area of invasive vegetation, remove non-native silver oak saplings, collect native seeds, and plant 320 native plants over a 6-acre area at Pu’u Wa’awa’a State Forest Reserve and Laupahoehoe Forest. Project will improve some of the most threatened ecosystems in Hawaii.
\$31,655

Maui Nui Marine Resource Council

South Maui Community Coastal Water Quality Monitoring Program (HI)
 Expand federally accredited community water quality monitoring program to South Maui to help understand areas of land-based runoff to nearshore coral reefs. Project will outfit a laboratory with water-quality monitoring supplies and equipment, train leads and volunteers, and begin coastal water quality sampling in a region with biologically important coral reefs.
\$75,190

North Shore Community Land Trust

Kahuku Point Coastal Strand Restoration Job Opportunity (HI)
 Employ local youths to restore approximately 50 acres of coastal strand ecosystem at Kahuku Point on the island of Oahu. Project will host monthly work days for volunteers, school groups and companies at Kahuku Point, where they will remove invasive plants, plant natives and remove marine debris from the coastline.
\$20,000

Pacific Rim Conservation

Locating Semnant Newell’s Shearwater

Colonies in Oahu (HI)

Conduct systematic, island-wide searches for both Newell’s shearwater and Hawaiian petrel using acoustic monitoring, and, if warranted, ground searching to identify breeding colonies. **\$66,524**

Project S.E.A.-Link

Using Social Marketing Strategies to Address Polluted Stormwater Runoff in West Maui (HI)

Engage the communities and local business of West Maui through a storm-drain stenciling program. Project will raise awareness around the harmful impact of land-based pollution upon coral reefs and promote green practices by local property owners through partnering local property managers, community groups, youth and County of Maui personnel in a stewardship activity. **\$30,000**

Pulama Lanai

Hawaiian Petrel Monitoring and Colony Protection on the Island of Lana’i (HI)

Implement priority activities that will reduce predation, increase petrel colony monitoring to evaluate threats and the effects of management actions, assess the feasibility of conservation fencing for even greater predator protection and provide personnel support to execute these activities. **\$166,153**

Ridge to Reefs

Decrease Sedimentation in Honokowai Watershed in West Maui to Benefit Nearshore Coral Reefs (HI)

Stabilize soil through vegetation planting to prevent runoff from dirt roads and abandoned agricultural lands from being transported into the gulches and out to the coral reefs in West Maui. Project will mitigate sedimentation runoff at eight previously prioritized sites and prioritize opportunities to reduce nutrient loading from nearshore development such as golf courses and hotels in the Honokowai and Wahikuli watersheds. **\$80,000**

The Coral Reef Alliance

Clean Water for Reefs: Halting Reef-Damaging Sediment Runoff by Restoring Lo’i Kalo in the Honokowai Priority Watershed, West Maui (HI)

Restore historical taro (lo’i) beds in the Honokowai watershed to reduce land-based runoff to coral reefs and produce a guidebook on how to effectively employ this practice as a stream restoration tool across Hawaii. Project will provide a demonstration site for using traditional agriculture to provide filtration for excess sediment and nutrients and to quantify the load reduction benefits of this practice for consideration in future projects. **\$120,001**

The Nature Conservancy

Setting Hawaii’s Coral Reef Fisheries on a Path to Sustainability through Community-Based Management Plan fisheries management and assess data-limited stocks of key coral reef species in Hawaii, with a focus on the West Maui priority area. Project team will use the innovative FishPath software to provide scientific and decision-making capacity that improves sustainable management of nearshore fish stocks and directly engages state/federal agencies and local fishing communities. **\$100,000**

U.S. Fish and Wildlife Service

Feral Pig Control at Hakalau Forest National Wildlife Refuge (HI)

Implement and evaluate strategies to control feral pigs at Hakalau Forest National Wildlife Refuge to maintain recent habitat improvements, including re-forestation of pasturelands and plantings of endangered and rare native plants and associated gains in endangered and other native bird populations. Project will include pig surveys, fence maintenance, ungulate-control activities, as well as the analysis, coordination and management of data and activities. **\$285,000**

University of Hawaii

Evaluate Herbivore Management for Supporting Recovery and Resiliency in Hawaii’s Coral Reefs

Work with state managers to evaluate the role of herbivorous fish in the resiliency of coral reefs and to identify management strategies that are both practical and ecologically effective to reach management goals. Project will address the threat of unsustainable extraction of key reef fish (particularly herbivores) in Hawaii through the co-development of a decision-support tool that combines coral resiliency science with fishery management data. **\$48,453**

University of Hawaii – Manoa

Advancing New Molecular Tools to Identify Thresholds of Key Stressors to Coral Reefs (HI)

Establish tools to provide qualitative and quantitative analyses of common threats to coral health to aid in building reduction targets and monitoring metrics for assessing ecosystem response to management interventions. Project will build on successful tests in the field to further refine and reduce the costs of application to meet the needs of local managers. **\$75,128**

University of Hawaii — Manoa

Hawaii Island Early Detection, Rapid Response Youth Conservation Team

Provide two youths with conservation experience removing 300 acres of invasive Albizia trees from stream banks, forest reserves, and fallow land to reduce nitrate/nitrite inputs to Hilo Bay. Project will measure reduced disturbance to native habitat by stream water chemistry sampling before and after removal to demonstrate efficacy of the removal effort. **\$48,573**

Zoological Society of San Diego

Reintroduction of the ‘Alala to Hawaii Island

Implement an intensive captive propagation and reintroduction program for the ‘alala on Hawaii Island. Project will continue efforts to restore one of the rarest birds in the world, concluding with the release of captive-reared ‘alala. All release candidates will be prepared for release following a thorough, peer-reviewed plan, including behavioral conditioning/training to recognize native fruits, avoid predators, and promote flock cohesion. **\$160,158**

IDAHO

Franklin Soil and Water Conservation District

Middle Bear River Restoration and Livestock Exclusion (ID)

Exclude 9,745 feet of the Bear River from livestock access and restore 3,600 feet of highly eroding streambank to benefit Bonneville cutthroat trout. Project will engage more than 50 community members to stabilize erodible streambanks and re-establish riparian habitat by implementing fencing, planting native plants and removing invasive plants. **\$49,128**

Friends of Deer Flat Wildlife Refuge

Native Sagebrush Steppe Restoration at Deer Flat National Wildlife Refuge (ID)

Restore 2 acres of upland habitat near the Deer Flat National Wildlife Refuge visitor center. Project will re-establish native bunch grasses and shrubs to benefit wildlife and visitors to the refuge. **\$2,500**

Friends of the Teton River

Development and Implementation of Local Water Bank in the Teton River Watershed (ID)

Develop and implement a local water bank in the Teton River watershed to help ensure water availability, collect stream flow data and contribute to the watershed-wide conservation strategy. Project will develop a strategy for forming and operating a water bank to meet the specific needs of water users; value water rights and establish a pricing structure for water leases and sales. **\$47,850**

Land Trust Treasure Valley

Boise Multicultural Habitat Enhancement (ID)

Engage youths and adults through a multicultural volunteer stewardship program in developing and implementing a five-year plan to restore sustainable bird and non-game wildlife habitat on 12 acres of weed-dominated upland shrub and grassland near the Boise River. Project will engage 700 volunteers in restoring native vegetation by removing weeds and cultivating and planting native plants. **\$37,133**

Northwest Youth Corps

Lake Cascade Habitat Management and Female Workforce Development Program (ID)

Provide employment for eight female youth corps members who will work in a designated Conservation Open Space, with the main goal of keeping it undeveloped on Bureau of Reclamation land north of Cascade. Project will restore up to 50 acres of habitat around Lake Cascade as part of a larger wetland restoration, erosion control and habitat improvement project. **\$48,566**

Rocky Mountain Bird Observatory

Outreach Delivery in Sagebrush Ecosystem (multiple states)

Reprint copies of Pocket Guide to Sagebrush Birds and Pocket Guide to Sagebrush following requests from several federal and state agencies and conservation districts. **\$20,000**

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

Interagency e-DNA Database of Fish Distributions (multiple states)

Develop a large environmental DNA database, website and digital tools to coordinate monitoring and promote information exchange among all agencies of aquatic species in rivers and streams in the Western United States. Project will support development of models and maps showing distributions of native and invasive species to provide decision support for strategic investment strategies related to environmental stressors, habitat degradation, invasive species, and preservation of native species. **\$89,362**

Washington Recreation**and Conservation Office**

Columbia Basin States Cooperative Weed Management Area (ID, MT, OR, WA, WY)

Establish a Cooperative Weed Management Area to address invasive plants in the Columbia River Basin. Project will bring together tribal, state, federal, provincial and nongovernmental organizations to focus on developing early detection and rapid response plans for cross-boundary invasive plant species. **\$65,000**

Wilderness Science Education

Watershed Connection Idaho Youth Conservation Employment and Career Development at Snake River — II (ID)

Provide 48 underserved Idaho youths with paid habitat restoration work experience and job readiness training on projects that benefit areas of the Snake River and Lower Salmon River managed by the Bureau of Land Management and U.S. Forest Service. Project will maintain 24 miles of trail, restore 6 miles of riparian habitat and 15 acres of upland habitat benefiting bull trout riparian habitat and steelhead trout watersheds. **\$67,750**

ILLINOIS**Chicago Park District**

Improving Hydrology and Riparian Habitat at Big Marsh Natural Area (IL)

Improve hydrology and enhance degraded riparian areas at Big Marsh Natural Area in southeast Chicago. Project will establish 5.6 acres of native riparian habitat along 1.37 miles of creek and adjacent marsh banks, and improve water flow between sections of the 252-acre marsh. **\$621,668**

City of Blue Island

Completing Connections: Community and Canal in Blue Island (IL)

Complete the west segment of the Cal-Sag Trail and reclaim 12.8 acres of vacant land for public greenspace to improve public access and enhance habitat. Project will restore riparian habitat with native upland prairie plants, plant 50 trees and complete the final 2 miles of trail. **\$300,000**

City of Evanston

Enhancing Migratory Bird Habitat Along the North Shore Channel (IL)

Create and enhance migratory bird habitat along the North Shore Channel in Evanston’s Ladd Arboretum to provide crucial support for the tens of thousands of birds that pass through the region annually and strengthen community engagement in natural habitat stewardship. Project will engage community volunteers to restore 3.75 acres of habitat and add bird-friendly plantings in four nearby public parks. **\$100,000**

Field Museum of Natural History

Expanding Strategic Urban Habitat Conservation Approaches for Monarchs (multiple states)

Engage small- and mid-size metropolitan areas along the monarch butterfly’s eastern migratory corridor to develop strategic urban conservation planning tools tailored to smaller municipalities. Project will help urban practitioners identify the best locations and practices for creating monarch butterfly habitat at the local scale. **\$147,988**

Lake County Forest Preserve District

Connecting Coastal Wetlands; Strategic Habitat Restoration for Species of Concern (IL)

Restore connecting habitat key to sustaining and enhancing the biodiversity of the rare Lake Plain ecosystem. Project will restore critical blocks of land via invasive plant and prescribed burn management strategies to increase acreage of connected quality habitat for Blanding’s turtle and other federally and state listed species of concern. **\$1,000,000**

Lake County Forest Preserve District

Landscape-Scale Restoration at Middlefork Savanna (IL)

Restore 62 acres of riparian habitat adjacent to the North Branch of the Chicago River at Middlefork Savanna to improve habitat and water quality for native fish, wildlife and plant species. Project will control invasive species and seed native plant species to stabilize 4,643 linear feet of streambank and create high-quality habitat in one of northeast Illinois’ most important sites for biodiversity. **\$79,542**

Pheasants Forever

Adding Technical Capacity to Deliver Monarch Practices on Private Lands (multiple states)

Provide technical assistance to private landowners to enroll lands into Conservation Stewardship Program and Environmental Quality Incentives Program. Project will utilize the organization’s Farm Bill biologist team to deliver high-quality monarch butterfly feeding and breeding habitat across eight states. **\$683,980**

The Board of Trustees of the University of Illinois

Coordinating Monarch Conservation in Transportation and Utility Rights-of-Way (IL)

Coordinate monarch butterfly habitat conservation in transportation and utility rights-of-ways through the Rights-of-Way as Habitat Working Group. Project will continue to build the capacity of the working group and develop a national geospatial database to measure the extent and condition of monarch habitat managed by rights-of-way organizations. **\$250,000**

The Wetlands Initiative

Accelerating Use of Constructed Wetlands as a Nutrient-Removal Solution in Agricultural Watersheds (IL)

Accelerate implementation of farm-based constructed wetlands, an underutilized Farm Bill conservation practice designed to remove excess nutrients from tile drainage, to help achieve a reduction in nutrient losses into waterways. Project will provide technical assistance to farmers and collaborate closely with resource conservation agency staff and agriculture-sector partners to drive installation of constructed wetlands in priority watersheds in northern and central Illinois. **\$120,002**

The Wetlands Initiative

Increasing Monarch Habitat and Milkweed Availability at Midewin National Tallgrass Prairie (IL)

Establish high-quality native prairie and wetland habitat containing significant milkweed resources and a diversity of nectar sources to benefit breeding and migrating monarchs. Project will restore and enhance 479 acres and collect 5 pounds of regionally adapted milkweed seed to use at Midewin National Tallgrass Prairie and other restoration sites. *\$166,497*

University of Illinois at Chicago

Green Stormwater Infrastructure at University of Illinois at Chicago (IL)

Install green infrastructure at the Arlington Mall Plaza to increase stormwater storage capacity by 55,069 gallons. Project will remove 19,000 square feet of impervious surface, plant more than 14,500 square feet with native plants, install 11,300 square feet of rain gardens, and assess stormwater reductions and changes to the water balance generated by green infrastructure. *\$251,848*

Village of Midlothian

Improving Green Stormwater Infrastructure in Midlothian Village (IL)

Improve green stormwater infrastructure through a community-led initiative to reduce recurring flooding. Project will remove 7,000 square feet of impervious surface, install a porous asphalt parking lot and rain garden, and plant native plant species to add 120,000 gallons of stormwater storage capacity and prevent 375 pounds of sediment from entering the system annually. *\$150,440*

INDIANA**Field Museum of Natural History**

Expanding Strategic Urban Habitat Conservation Approaches for Monarchs (multiple states)

Engage small- and mid-size metropolitan areas along the monarch butterfly's eastern migratory corridor to develop strategic urban conservation planning tools tailored to smaller municipalities. Project will help urban practitioners identify the best locations and practices for creating monarch butterfly habitat at the local scale. *\$147,988*

Keep Indianapolis Beautiful

Community-Based Habitat Restoration Along the Fall Creek Waterway (IN)

Engage 20 college students and 500 volunteers in habitat restoration and education to improve native habitats along the Fall Creek Waterway in Indianapolis. Project will restore 20 acres of habitat by removing invasive plant species such as Asian bush honeysuckle and Asian mulberry, and replant area with native vegetation. *\$47,553*

Pheasants Forever

Adding Technical Capacity to Deliver Monarch Practices on Private Lands (multiple states)

Provide technical assistance to private landowners to enroll lands into Conservation Stewardship Program and Environmental Quality Incentives Program. Project will utilize the organization's Farm Bill biologist team to deliver high-quality monarch butterfly feeding and breeding habitat across eight states. *\$683,980*

Sanitary District of Michigan City

Michigan City Cheney Run Stormwater Design and Installation (IN)

Design and construct wetlands to mitigate the Cheney Run watershed's urban pollution discharged to Trail Creek, which flows into Lake Michigan, through the Cheney Run outfall. Project will reduce urban runoff impairments through the design and installation of approximately 5 acres of constructed wetlands that will manage and treat stormwater, reduce erosion and sedimentation of Trail Creek, and add 37.5 million gallons of stormwater storage capacity annually. *\$650,000*

Save the Dunes Conservation Fund

Little Calumet and Deep River Public Use and Habitat Enhancement (IN)

Save the Dunes Conservation Fund will restore habitat and improve public access to 128 acres of in-stream and riparian habitat of the Little Calumet River and Deep River. Project will restore agricultural farmland to native oak savanna, control invasive species, open up river channels for paddlers, install two pervious surface parking lots, enhance and develop trails and revitalize public use of natural areas. *\$281,918*

Save the Dunes Conservation Fund

Northwest Indiana Panne Restoration Project (IN)

Restore unmanaged panne wetland communities throughout northwest Indiana. Project will establish a holistic approach to panne wetland management across jurisdictional boundaries, including two years of invasive plant control in the pannes and surrounding areas to benefit species such as the federally listed Pitcher's thistle. *\$69,810*

Shirley Heinze Land Trust

Riparian Restoration within the White Ditch and Trail Creek Watersheds (IN)

Map and treat invasive species such as reed canary grass, multiflora rose, vinca vine, oriental bittersweet and Japanese knotweed for two consecutive seasons on 40.2 acres (three parcels). Project will improve habitat, biodiversity and ecosystem resilience in a state imperiled natural area and improve habitat conditions for migratory birds, rare reptiles and amphibians, moths and butterflies, and rare and threatened native plants. *\$64,721*

The Student Conservation Association

Grand Calumet Watershed Tree Conservation (IN)

Reduce stormwater and sediment runoff and restore degraded riparian habitat in the Grand Calumet watershed to complement ongoing Grand Calumet Area of Concern habitat restoration efforts. Project will add 59,000 gallons of stormwater storage capacity by strategically planting 1,000 native trees in riparian zones, and build public capacity and engagement by offering training in basic arboriculture to residents across the region. *\$127,418*

IOWA**Iowa Natural Heritage Foundation**

Monarch Butterfly Flyway Restoration (IA)

Continue and expand the restoration work begun under phase 1 and 2 of the Iowa Butterfly Flyway project by coordinating a series of restoration projects in central Iowa. Project will establish 500 acres of monarch habitat in the Wetland Management District and along the Interstate 380 corridor by planting diverse native prairie species, including milkweed and nectaring species. *\$165,000*

Field Museum of Natural History

Expanding Strategic Urban Habitat Conservation Approaches for Monarchs (multiple states)

Engage small- and mid-size metropolitan areas along the monarch butterfly's eastern migratory corridor to develop strategic urban conservation planning tools tailored to smaller municipalities. Project will help urban practitioners identify the best locations and practices for creating monarch butterfly habitat at the local scale. *\$147,988*

Pheasants Forever

Adding Technical Capacity to Deliver Monarch Practices on Private Lands (multiple states)

Provide technical assistance to private landowners to enroll lands into Conservation Stewardship Program and Environmental Quality Incentives Program. Project will utilize the organization's Farm Bill biologist team to deliver high-quality monarch butterfly feeding and breeding habitat across eight states. *\$683,980*

U.S. Department of the Interior, U.S. Fish and Wildlife Service, Region 3

Expanding Monarch Butterfly Habitat Connectivity (IA, MN)

Improve and connect diverse native prairie sites for monarch butterfly breeding and migratory habitat. Project will restore and enhance more than 460 acres on 14 permanently protected grassland sites. *\$103,137*

KANSAS**Midwest Association of Fish and Wildlife Agencies**

Coordinating Monarch Butterfly Conservation Strategies across the Central United States (KS)

Coordinate and track the implementation of conservation strategies and actions identified in the Mid-America Monarch Conservation Strategy. Project will provide capacity for regional coordination to translate the strategy into on-the-ground conservation actions that are efficient, organized and targeted. *\$156,201*

The Kansas Association of Conservation Districts

Monarch Butterfly RCPP (KS)

Provide technical assistance to landowners and operators to identify conservation practices they can implement to improve monarch butterfly habitat on their lands. Project will conduct small-group planning sessions and develop one-on-one contacts with individuals interested in establishing and/or improving beneficial habitat. *\$75,497*

Western Association of Fish and Wildlife Agencies

Lesser Prairie-Chicken Habitat Restoration — Removing Trees from the Grasslands (KS)

Restore 600-1,000 acres of lesser prairie chicken habitat using the conservation strategy identified in the Western Association of Fish and Wildlife Agencies. The Southern Great Plain CHAT, a decision support tool created by the Western Governors Association, will be used to target potential areas for restoration to increase habitat connectivity. *\$197,309*

Western EcoSystems Technology

A Study of the Potential Impacts of a Wind Energy Development on a Lesser Prairie-Chicken Population in Central Kansas (KS)

Conduct a telemetry study to estimate the potential effects of a wind energy development on a lesser prairie-chicken population. *\$530,000*

KENTUCKY**Friends of Clarks River NWR**

Wildlife Heritage and Outdoor Festival (KY)

Host an outdoor festival to celebrate and educate the community about the outdoor legacy of Western Kentucky and the Clarks River National Wildlife Refuge. Project will connect the community with nature and highlight ways to contribute to the conservation and sustainability of natural resources. *\$7,655*

The Forest Stewards Guild

Restoring Pine-Oak Forests in the Cumberland Plateau through Exporting Best Practices from Two Model Forests (KY, TN)

Enhance 1,145 acres of headwaters forest habitat on two privately owned tracts at Coal and Whites Creek in Cumberland County to protect and diversify wildlife habitat. Project will construct cattle fencing and create native grassland and shortleaf pine habitat through planting and prescribed burns. *\$149,983*

The Nature Conservancy — Kentucky

Aquatic Restoration on Green River (KY)

Remove barriers to fish passage on Green River and complete a scientific. Project will result in 198 miles of free-flowing river between the Rochester Dam and Green River Lake Dam in Kentucky. *\$50,000*

LOUISIANA**Audubon Nature Institute**

Enhanced Capability and Outreach for the Coastal Wildlife Network (LA)

Develop a stronger marine stranding network for the state of Louisiana through increased data quality and quantity collection to determine more accurate causes of death of marine wildlife. Project also will support the development of a volunteer corps and outreach programs to increase public awareness around stranding in communities of the northern Gulf coast region. *\$91,676*

Ducks Unlimited

Louisiana Chenier Plain Rice Stewardship

Enhance more than 2,000 acres of working wetlands on private lands and support the conservation of 25,000 acres of rice lands. Project will result in increased staff time, technical assistance, programmatic support and technology implementation to protect and enhance working rice lands in southwest Louisiana. *\$200,000*

Forest Landowners Association

Engaging Working Forest Landowners, Building Stakeholder Collaboration and Developing Solutions (AL, FL, GA, LA)

Establish or enhance 2,000 acres of longleaf pine habitat and host Forest Forums and Timber Talks to bring together landowners, the U.S. Fish and Wildlife Service and other key stakeholders. Project will engage large working forest landowners and forest consultants in key longleaf pine priority areas to increase communication and identify specific actions for addressing barriers to longleaf restoration. *\$125,000*

Groundwork New Orleans

The Rain Garden Program: Managing Stormwater through Youth Green Infrastructure Skills Training (LA)

Implement a rain garden project in New Orleans neighborhoods by installing four raingardens, planting 100 trees and other native vegetation, and identifying and implementing other best management practices to mitigate flooding in communities. Projects also will implement a trash and litter prevention campaign, and provide youths with hands-on job training and mentorship opportunities. *\$50,000*

Lake Pontchartrain Basin Foundation

Swamp Habitat Reforestation (LA)

Restore 41 acres of swamp forest and engage 750 volunteers in planting 8,000 trees, benefiting 18 species of concern, including the bald eagle, prothonotary warbler, mottled duck, swallow-tailed kite, Louisiana black bear and alligator snapping turtle. Project will increase storm surge protection for the largest urban areas in southeast Louisiana. *\$90,133*

Manomet

American Oystercatcher Aerial Survey and Population Recovery along the Atlantic Flyway (multiple states)

Estimate the current population of American oystercatchers via a cooperative aerial and ground survey with partners in the American Oystercatcher working group. Project will contribute directly to the overall goals of increasing the population size of American oystercatchers within the United States by 30 percent between 2009 and 2019, while contributing to the conservation of associated beach nesting and migratory shorebirds. *\$200,000*

Restore the Earth Foundation

Montegut Bald Cypress Forest Marsh Restoration at Pointe-aux-Chenes Wildlife Management Area — II (LA)

Restore 200 acres of freshwater bald cypress forest marsh through 20,000 tree plantings on a 4,000-acre landmass at Pointe-aux-Chenes Wildlife Management Area. Project will improve water quality, enhance community resilience and provide habitat to support fish, bird and wildlife species native to the area. *\$105,000*

The Conservation Fund

Working Lands, Water and Wildlife Protection at Live Oak Farm in Vermilion Parish (LA)

Conserve 800 acres of working farmland containing critical wildlife and waterfowl habitat in Vermilion Parish, representing the first phase in a long-term strategy to protect the entire 5,800-acre farm. Project will protect lands of high ecological and economic value that will otherwise remain at risk of conversion to another use or poor management practices. *\$500,000*

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

Support the Longleaf Implementation Team Consul role, which helps accelerate coordination and exchange of information among 17 multi-partner local implementation teams that organize, plan and deliver conservation actions to restore and enhance the longleaf pine ecosystem. Project will also support a new GIS Specialist position designed to build and improve GIS capacity and collaboration.
\$274,500

The Nature Conservancy**Pineywoods Longleaf Restoration — V (LA)**

Protect and restore at least 1,500 acres of longleaf pine in a six-parish West-Central Louisiana Ecosystem Partnership Conservation Area anchored by the Fort Polk/Kisatchie National Forest Significant Geographic Area. Project will improve landowner outreach, including through events such as a longleaf pine private landowner field day and a technical workshop for longleaf restoration practitioners.
\$226,118

The Trust for Public Land**Conserving Fleming Plantation (LA)**

Conserve the 3,476-acre Fleming Plantation as an addition to Jean Lafitte National Historical Park. Project will improve the ecological integrity of the Louisiana Gulf Coast while expanding opportunities for public recreation and building resilience against storm surge and other climate-induced threats.
\$610,000

MAINE**Abt Associates****Monitoring Hurricane Sandy Coastal Resiliency Program's Socioeconomic Northeast Impacts (multiple states)**

Conduct socioeconomic monitoring for 38 Hurricane Sandy coastal resiliency projects throughout the Northeast from Virginia to Maine. Project will measure and advance the state of knowledge around coastal resilience's socioeconomic impacts on human health and safety, property and infrastructure protection and enhancement, and community resilience.
\$2,242,026

Downeast Salmon Federation**Beaverdam Stream: Opening a Habitat-Rich Tributary of the East Machias River (ME)**

Make habitat-rich areas of Beaverdam Stream accessible to endangered Atlantic salmon and other sea-run fish species. Project will remove a fish barrier and reconnect the stream to the river and the Gulf of Maine, restoring one of the highest priority habitats in the Downeast Salmon Habitat Recovery Unit and will protect 850 feet of riparian buffer.
\$41,671

Maine Audubon Society**Helping Private Landowners Improve Mature Forest Habitat for Birds in the Lower Kennebec River (ME)**

Improve mature forest habitat for forest-dwelling birds, including the black-throated blue warbler, and identify priority sites to improve riparian habitat that benefits eastern brook trout and diadromous fish populations. Project will improve 300 acres of mature forest habitat for multiple bird species and assess the best areas for riparian habitat restoration, especially those sites that intersect with undeveloped forest.
\$96,372

Maine Rivers**Restoring River Herring Access to China Lake by Modifying Barriers for Diadromous Fish Species (ME)**

Remove six fish passage barriers or install fish passages on Outlet Stream in Vassalboro to restore historic access for river herring and other diadromous fish to China Lake, a historically important spawning habitat. Project will restore more than 5 miles of aquatic connectivity between China Lake, the Sebasticook River and the ocean, resulting in an expected annual run of between 800,000 and 950,000 river herring.
\$200,000

National Audubon Society**Managing Human Disturbance on Shorebirds along the Atlantic Coast (multiple states)**

Produce a framework to improve the effectiveness of disturbance reduction strategies for the Atlantic Flyway. Project will bring together partners from Canada to Florida to provide shorebird site managers with best management practices for managing human disturbance, along with essential tools and key indicators for measuring progress along the Atlantic Flyway.
\$200,000

Project SHARE**Restoring Aquatic Connectivity for Eastern Brook Trout and River Herring on the Machias River (ME)**

Restore aquatic connectivity and instream habitat on the Machias and East Machias rivers in Maine for eastern brook trout, Atlantic salmon and river herring. Project will replace 16 culverts, remove five remnant barriers and add large wood habitat structure, re-connecting 25.9 miles of historic cold water spawning habitat and improving habitat complexity and historic flow processes.
\$200,000

University of New Hampshire**Demonstrating Efficacy of Young Forest Restoration for New England Cottontail and Birds (CT, ME, NH)**

Document for the first time population-level response of New England cottontails and other young-forest-dependent species to previous and planned early successional forest habitat management activities in Connecticut, New Hampshire and Maine. Project will use a capture-recapture population estimate combined with a pellet survey on 30 sites totaling 482 acres and will develop a landscape scale model to predict future abundance on 28,800 acres of restored habitat.
\$174,838

Vermont Center for Ecostudies**Documenting Bicknell's Thrush Use of Commercial Young Forest for Lower Elevation Breeding (ME, NH, VT)**

Document how Bicknell's thrush uses young forest habitat in managed commercial forest stands in New Hampshire and Maine and identify the specific stand characteristics associated with occupancy during the breeding season. Project will use the data to revise and update the existing best management practices in forests managed for production of timber and pulpwood.
\$50,609

MARYLAND**Abt Associates****Monitoring Hurricane Sandy Coastal Resiliency Program's Socioeconomic Northeast Impacts (multiple states)**

Conduct socioeconomic monitoring for 38 Hurricane Sandy coastal resiliency projects throughout the Northeast from Virginia to Maine. Project will measure and advance the state of knowledge around coastal resilience's socioeconomic impacts on human health and safety, property and infrastructure protection and enhancement, and community resilience.
\$2,242,026

AECOM**Water Quality Retrofit Prioritization and Implementation Plan for Benedictine School (MD)**

Assess and evaluate the campus of the Benedictine School, located in Caroline County, to identify opportunities for water quality retrofits and the disconnection of previously untreated impervious areas. Project will develop a prioritization plan for the design and construction of water quality facilities, based on a cost-benefit analysis, for the treatment of sediment, nitrogen and phosphorous.
\$14,811

Alliance for the Chesapeake Bay**Supporting Local Governments and Diverse Partners to Restore the Chesapeake Bay (multiple states)**

Enhance networking and information-sharing activities to advance watershed restoration efforts. Project will engage nearly 6,000 individuals representing watershed organizations and local governments within the Chesapeake Bay Watershed through an annual Chesapeake Watershed Forum, a Local Government Forum, regional forums and an online networking tool.
\$140,000

Anacostia Watershed Society**Saving Our Native Grasslands (DC, MD)**

Engage 400 elementary students from Washington, D.C., and Maryland and 150 adult volunteers to restore riparian meadow habitat and increase biodiversity in the Anacostia watershed. Project will remove 1 acre of invasive plants, plant native wildflower species along 17 acres of parkland along the river and create habitat structures to support native songbird and pollinator species.
\$39,378

Chesapeake Bay Foundation**Healthy Waters Round Table: Improved Water Quality Through Rural Regional Collaboration (MD)**

Assist local governments on Maryland's rural Eastern Shore to develop increased stormwater management capacity and implement best management practices that help meet mandated goals for improved water quality.
\$316,003

Chesapeake Bay Foundation**One-on-One Farm Stewardship Program for Increased Agricultural Best Management Practices (MD, WV)**

Work one-on-one with farmers of the Upper Potomac watershed in Maryland and West Virginia to provide technical assistance and support to increase adoption of agricultural best management practices that improve water quality, increase productivity of farming operations and enhance wildlife habitat. Project will install forested riparian buffers and stream exclusion fencing, stabilize streambanks, restore pastures and wetlands, and convert cornfields to grazing pastures.
\$200,000

Civic Works**Installing Urban Rain Gardens and Training Stormwater Stewards for Stormwater Management (MD)**

Install rain gardens that impact 3 acres of urban surfaces in community spaces, train stormwater stewards to maintain the spaces, and provide ongoing training, stipends, support, and resources to increase community engagement in Baltimore City stormwater management and increase water quality of local waters running to the Chesapeake Bay.
\$196,621

Eastern Shore Land Conservancy**Envision the Choptank: Coordinating Efforts for a Healthy Choptank River (MD)**

Coordinate various organizations, agencies and community groups to develop collaborative, evidence-based solutions that enhance the health and productivity of native oyster reefs and provide a swimmable and fishable Choptank River. Project will provide the nutrient and stormwater reductions equivalent to 50 rain barrels and five rain gardens.
\$80,778

Gunpowder Valley Conservancy**Mobilizing Communities to Enhance Stream Restoration Projects for Stormwater Treatment (MD)**

Install stormwater best management practices, including rain barrels, rain gardens, micro-bioretenion practices, conservation landscaping and forest buffers, and mobilize communities to reduce nutrient and sediment runoff, manage stormwater and restore forests and streams in the Middle River, Tidal Gunpowder, Bird River and Lower Gunpowder Falls watersheds.
\$200,000

Howard EcoWorks**Soak It Up: Reducing Stormwater Runoff in Ellicott City (MD)**

Engage up to 500 residents and businesses to implement up to 66 best management practices and construct 8,550 square feet of rain garden, 32,500 square feet of conservation landscape and 1,000 linear feet of forest buffer to reduce stormwater runoff in Ellicott City.
\$153,761

Land Trust Alliance**Chesapeake Land & Water Initiative (multiple states)**

Deploy an integrated and innovative approach to accelerate permanent land protection for water quality across the Chesapeake Bay watershed. Project will enhance stewardship strategies with land trusts, watershed groups, state land trust associations, and other conservation and civic partners.
\$150,000

Living Classrooms Foundation**People and Pollinators at Masonville Cove (MD)**

Increase native habitat for native pollinators, including the monarch butterfly, across 54 acres by planting 5,000 plants and collecting 800 pounds of trash from the Patapsco River watershed. Engage 1,500 local South Baltimore residents, with a specific focus on the Latino population, in urban watershed education and conservation activities at the Masonville Cove Environmental Education Center in Baltimore.
\$49,945

Lower Shore Land Trust**Targeting Conservation Lands on Maryland's Lower Eastern Shore for Improved Bay Health**

Accelerate restoration and permanently protect critical conservation lands through targeted mapping and landowner outreach in Wicomico, Somerset, and Worcester counties. Project will hold multiple landowner workshops, develop and disseminate outreach materials about Farm Bill programs, and deliver gains for water quality benefits by permanently protecting 1,000 acres in priority watersheds.
\$179,628

Manomet**American Oystercatcher Aerial Survey and Population Recovery along the Atlantic Flyway (multiple states)**

Estimate the current population of American oystercatchers via a cooperative aerial and ground survey with partners in the American Oystercatcher working group. Project will contribute directly to the overall goals of increasing the population size of American oystercatchers within the United States by 30 percent between 2009 and 2019, while contributing to the conservation of associated beach nesting and migratory shorebirds.
\$200,000

Maryland Department of Natural Resources Strengthening the Impact of Riparian Forest Buffers on Water and Habitat Quality (MD, PA, VA, WV)

Improve outreach and management of forest buffers and natural filters in the Chesapeake Bay Watershed, capitalizing on the region's networks and providing focused leadership to advance landscape-based implementation and community outreach. Project will plant more than 200 acres of trees through the implementation of forest buffers, backyard buffers, and community tree planting.
\$325,273

Mid-Atlantic 4R Nutrient Stewardship Association**Increasing Farmer Adoption of Nutrient Stewardship Practices (DE, MD, PA)**

Accelerate the implementation of 4R Nutrient Stewardship practices (right nutrient source applied at the right rate, at the right time, and in the right place) in key watersheds in the Chesapeake Bay.
\$401,424

Midshore Riverkeeper Conservancy**Restoration through a Conservation Drainage Program (MD)**

Create a regional conservation drainage program that tests new agricultural best management practice technologies that have great potential to reduce nutrient and sediment entering the Chesapeake Bay. Project will retrofit old and failing drain tile lines with the latest conservation practices and create a drainage water management plan to maximize the benefits of the new system.
\$451,959

National Audubon Society**Increasing Resilience of Transitional Tidal Marsh for Enhanced Wintering Waterfowl Bird Habitat (MD)**

Extend the head of a small tidal creek in order to alleviate chronic waterlogging and halt and reverse marsh erosion in 100 acres of high marsh and enhance tidal exchange and ecosystem function in newly transitioned marsh and halt and reverse the fragmentation and erosion of high marsh, bringing back lost habitat for birds like the American black duck at Farm Creek Marsh, a tributary of Fishing Bay.
\$149,266

Oyster Recovery Partnership**Improving Oyster Restoration Siting to Maximize Available Habitat and Environmental Benefits (MD)**

Develop tools to improve understanding of where suitable oyster bottom occurs and the habitat characteristics associated with those bottom types and repopulate and monitor 15 acres of oyster reefs with 60 million oysters deployed on bottom habitat identified from modeling and underwater images.
\$200,000

Parks and People Foundation

Branches: Improving the Lives and Environment of Baltimore City Youth (MD)
Employ 20 underserved, Baltimore youths and 10 interns to remove a quarter acre of invasive plants and remove trash to restore .75 acres of land at Druid Hill Park, Leakin Park and local housing communities in West Baltimore. Project will include tree planting, tree care and maintenance, removal of impervious surfaces, and the installation of rain gardens and rain barrels.
\$50,000

Pigtown Main Street**Washington Boulevard Green Infrastructure Project (MD)**

Install green infrastructure, stormwater and pedestrian enhancements along Washington Boulevard in Pigtown, a neighborhood of Baltimore. Project will replace impervious surfaces with native plants and vegetation.
\$149,893

Smithsonian Institution**Rhode to Restoration: Collaboration to Restore Rhode River’s Water Quality (MD)**

Restore the water quality and habitat of the degraded Rhode River through catalyzing a new collaborative network of stakeholders to identify and carry out solutions. Project will construct two acres of restored oyster reef in the Rhode River and increase citizen participation and education in restoration efforts.
\$199,510

The Washington College Center for**Environment and Society
Natural Lands: Installing Buffers and Restoring Wetlands to Reduce Runoff (MD)**

Install native warm-season grass buffers for the benefit of bobwhite quail and restore wetlands to reduce nutrient and sediment runoff from agricultural land in the identified high priority zones of the upper and middle Eastern Shore. Project will establish 285 acres of native grass buffers and 16 acres of wetlands.
\$499,955

Town of Denton**Stormwater Stream Drainage Management Study in The Town of Denton, Maryland**

Develop a study for treating existing stormwater runoff that drains into the Choptank River from the south area of the town of Denton. Project focuses on two subwatersheds of more than 750 acres that drain into two natural drainage streams, which outfall directly into the Choptank River.
\$50,000

**U.S. Department of the Interior,
U.S. Fish and Wildlife Service, Region 5
Assessing the Ecological Effectiveness of Hurricane Sandy Northeast Marsh Restoration Projects (multiple states)**

Measure the ecological effectiveness for 23 innovative marsh restoration sites. Project will contribute data critical for the assessment of these new marsh restoration techniques’ ecological benefits and cost-effectiveness.
\$2,600,000

**U.S. Department of the Interior,
U.S. Fish and Wildlife Service, Region 5
Assessing the Effectiveness of Living Shoreline Projects in the Northeast (MD, NJ, VA)**

Record ecological monitoring data for living shoreline restoration projects in the Northeast. Project will contribute to the assessment of this emerging resilience technique’s understanding, cost effectiveness and ecological benefits.
\$1,104,270

**U.S. Department of the Interior,
U.S. Fish and Wildlife Service, Region 5
Ecological Monitoring of Hurricane Sandy Aquatic Connectivity Sites (CT, MA, MD, NJ, RI)**

Monitor ecological resilience changes at nine aquatic connectivity sites in the Northeast. Project will contribute crucial knowledge that will be used to improve aquatic connectivity system cost-effectiveness and functionality.
\$2,882,850

**U.S. Department of the Interior,
U.S. Geological Survey
Collecting Ecological Data and Models of Living Shoreline Restoration Projects (MD, NJ, NY, VA)**

Collect ecological monitoring data and conduct modeling of living shoreline restoration projects. Project will contribute to the assessment of this new technique’s wave and energy reduction benefits
\$1,195,728

MASSACHUSETTS**Abt Associates****Monitoring Hurricane Sandy Coastal Resiliency Program’s Socioeconomic Northeast Impacts (multiple states)**

Conduct socioeconomic monitoring for 38 Hurricane Sandy coastal resiliency projects throughout the Northeast from Virginia to Maine. Project will measure and advance the state of knowledge around coastal resilience’s socioeconomic impacts on human health and safety, property and infrastructure protection and enhancement, and community resilience.
\$2,242,026

Manomet**American Oystercatcher Aerial Survey and Population Recovery along the Atlantic Flyway (multiple states)**

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\$200,000

**Massachusetts Audubon Society
Demonstrating Integrated Forest Management Practices at a Large Scale to Benefit Focal Birds (MA)**

Develop a long-term forest management demonstration program that projects out 100 years of rotational forest management for early and late successional forest habitat on Massachusetts Audubon’s 1,000-acre Elm Hill Wildlife Sanctuary. Project will utilize an enhanced version of a previously developed decision-support tool at two sites to improve 30 acres of habitat for American woodcock and 99 acres for the black-throated blue warbler.
\$82,175

**Mystic River Watershed Association
Trees: Providing Ecosystem Benefits and Community Engagement Opportunities in Somerville (MA)**

Organize a comprehensive tree planting and maintenance project that will directly engage 160 community members to increase tree planting, mitigate stormwater runoff and improve habitat in Somerville. Project will involve 160 community members in planning for tree plantings and apply GIS and other analytical tools to identify sites that promise the best results in energy reduction, stormwater benefit and habitat improvement.
\$33,792

Regreen Springfield**Abbey Brook Watershed Restoration and Youth Green Steward Expedition Initiative (MA)**

Engage 20 community members and 10 students in restoring 4.2 acres of the Abbey Brook Watershed to improve habitat for macroinvertebrates, reptiles and amphibians as well as enhance stream bed resiliency and water quality. Project will repopulate area with native plants, remove trash and debris, stabilize stream bank to improve erosion control and monitor water quality.
\$49,975

**U.S. Department of the Interior,
U.S. Fish and Wildlife Service, Region 5
Assessing the Ecological Effectiveness of Hurricane Sandy Northeast Marsh Restoration Projects (multiple states)**

Measure the ecological effectiveness for 23 innovative marsh restoration sites. Project will contribute data critical for the assessment of these new marsh restoration techniques’ ecological benefits and cost-effectiveness.
\$2,600,000

**U.S. Department of the Interior,
U.S. Fish and Wildlife Service, Region 5
Ecological Monitoring of Hurricane Sandy Aquatic Connectivity Sites (CT, MA, MD, NJ, RI)**

Monitor ecological resilience changes at nine aquatic connectivity sites in the Northeast. Project will contribute crucial knowledge that will be used to improve aquatic connectivity system cost-effectiveness and functionality.
\$2,882,850

MICHIGAN**American Bird Conservancy****Creating, Restoring and Managing Early Successional Habitat in the Great Lakes (MI, MN, WI)**

Create, restore and manage high-quality, early successional habitat to rebuild golden-winged warbler populations throughout its breeding range. Project will create, manage and develop habitat in select demonstration areas, and when combined with training and technical support, will educate land managers about golden-winged warbler habitat creation and maintenance.
\$150,000

**Chandler Park Conservancy
Chandler Park Wetland Project (MI)**

Construct a 2-acre wetland to capture and treat more than 2 million gallons of stormwater annually. Project will supplement the wetland with native plantings, including more than 100 upland trees installed, to capture and treat runoff routed to the wetland area.
\$452,237

Clark Township**Flower Bay Wetland Restoration (MI)**

Improve fish passage, stream flow and hydrology to Flower Bay and Loon Point wetlands through road stream crossing remediation. Project will restore and reconnect 86 acres of wetland and spawning habitat for northern pike, yellow perch, and small mouth bass.
\$219,340

Ducks Unlimited**Cripple Point Coastal Wetland Restoration (MI)**

Enhance 28 acres of coastal wetland habitat at Pointe Mouillee State Game Area in Monroe County. Project will result in 28 acres of coastal wetland management, improved wetland functions, long-term control and management of aquatic invasive species. Project will benefit several species of conservation concern, including red knots, king rails, Caspian terns and Foster’s terns.
\$161,404

Grand Valley Metro Council**Grand River Rainscaping Program:
Treating Urban Stormwater Naturally (MI)**

Introduce, educate and certify 150 volunteer community members in Kent County to restore urban, impervious landscapes with native, site suitable vegetation and other green infrastructure installation and maintenance to treat stormwater naturally on more than 3,200 square feet in three subwatersheds, which all drain to the Grand River and Lake Michigan.
\$50,000

**Huron Pines Resource Conservation
and Development Council
Improving Critical Brook Trout Habitat in the Northern Lake Huron Basin (MI)**

Replace nine road-stream crossings, reconnect 77 miles of upstream habitat for brook trout and other native and species, and reduce inputs of sediment and other pollutants by 19.7 tons per year through improvements of road/stream crossings. Project will improve freshwater resources and benefit communities across Northeast Michigan.
\$455,337

**Land Conservancy of West Michigan
Flower Creek Dunes Expansion
and Restoration Project (MI)**

Acquire and restore 20 acres of Lake Michigan shoreline property directly adjacent to the Flower Creek Dunes Nature Preserve. Project will acquire, restore and manage the property to ensure critical dune and wetland habitat supporting the federally endangered Pitcher’s thistle species is protected in perpetuity.
\$335,394

Michigan Audubon Society**Greater Lansing Area Bird-friendly Communities Program (MI)**

Engage the Greater Lansing area in urban species conservation, native habitat creation and window-hazard reduction to help curb declining chimney swift and purple martin bird populations. Project will restore 65 acres of habitat through invasive species removal, native vegetation planting, creation of nesting and roosting structures and community outreach.
\$30,649

**National Audubon Society
Wild Indigo Nature Exploration Detroit Expansion (MI)**

Engage leaders and staff members of organizations in underserved communities to serve as urban naturalists and promote stewardship of the woodland, meadow, marsh and coastal wetland ecosystems, and migratory birds of Detroit River region.
\$42,251

**Saginaw Conservation District
Nutrient and Sediment Reduction Through Conservation Planning to Benefit the Ecology of the Saginaw Bay Watershed (MI)**

Market and design nutrient management plans for local producers within the priority watersheds that drain into the Saginaw Bay. Project will reduce nutrient and sediment loading within the sub-watersheds, which will reduce sedimentation, eutrophication and algae blooms within the Saginaw Bay.
\$150,000

**Pheasants Forever
Adding Technical Capacity to Deliver Monarch Practices on Private Lands (multiple states)**

Provide technical assistance to private landowners to enroll lands into Conservation Stewardship Program and Environmental Quality Incentives Program. Project will utilize the organization’s Farm Bill biologist team to deliver high-quality monarch butterfly feeding and breeding habitat across eight states.
\$683,980

**Superior Watershed Partnership
Improving Stream Habitat and Aquatic Connectivity Project in Michigan’s Upper Peninsula**

Work collaboratively to restore aquatic connectivity and improve riparian habitat in the Lake Superior and Lake Michigan basins of Michigan’s Upper Peninsula. Project will remove two fish passage barriers and open 38 miles of stream, restore 1 acre of riparian habitat and reduce an estimated 40,000 pounds of sediment per year from road stream crossing sites.
\$455,756

The Nature Conservancy — Michigan

Detroit River-Western Lake Erie CWMA: Managing priority invasive species in coastal marshes (MI)

Survey priority aquatic and upland invasive species and operationalize plans to reduce invasive Phragmites and other invasive plants across more than 8,800 acres of ecologically and recreationally vital Lake Erie coastal wetlands. Project will use survey data to prioritize treatments, track and map invasive species locations and treatments, and remove invasives from at least 776 acres of coastal wetlands. **\$269,148**

Tip of the Mitt Watershed Council

Little Traverse Bay Watershed Green Infrastructure Initiative (MI)

Implement green infrastructure projects within the city of Petoskey, including on-the-ground installation of green roofs, rain gardens, bioretention basins and tree box filters. Project will install 6,000 square feet of bioretention and 3,200 square feet of green roof, collectively adding 575,000 gallons of stormwater storage capacity annually. **\$115,594**

Western Michigan University

Field Application of Chitosan to Halt the Progression of White-Nose Syndrome in Bats (MI, TX)

Test if the treatment of chitosan, a powerful biocidal agent, can halt progression of white-nose syndrome (WNS) in bats in Michigan and Texas. Project will test if chitosan is able to halt progression in occurrence and loads at sites where the fungal pathogen causing WNS has been detected for the first time; and whether chitosan improves bat survival and decreases fungal loads. **\$278,225**

Wildlife Management Institute

Early Successional Wildlife Habitat Technical Assistance in the Great Lakes Basin (MI, MN, OH, PA, WI)

Provide expert technical assistance in the recruitment of private landowners for projects completed under the EQIP program of the Farm Bill to benefit golden-winged warbler, American woodcock and a host of young forest species that depend on early successional habitat. **\$160,000**

MINNESOTA

American Bird Conservancy
Creating, Restoring and Managing Early Successional Habitat in the Great Lakes (MI, MN, WI)
 Create, restore and manage high-quality, early successional habitat to rebuild golden-winged warbler populations throughout its breeding range. Project will create, manage and develop habitat in select demonstration areas, and will educate land managers about golden-winged warbler habitat creation and maintenance. **\$150,000**

Cook County Soil and Water Conservation District
Poplar River Restoration (MN)
 Restore high-quality cold water trout stream habitat to benefit brook trout and improve water quality in a Lake Superior watershed. Project restoration will include natural channel design to reconnect floodplains and reduce streambank erosion. **\$156,000**

Field Museum of Natural History
Expanding Strategic Urban Habitat Conservation Approaches for Monarchs (multiple states)
 Engage small- and mid-size metropolitan areas along the monarch butterfly's eastern migratory corridor to develop strategic urban conservation planning tools tailored to smaller municipalities. Project will help urban practitioners identify the best locations and practices for creating monarch butterfly habitat at the local scale. **\$147,988**

Friends of Sherburne National Wildlife Refuge
Friends of Sherburne National Wildlife Refuge Improving Communications Capacity (MN)
 Strengthen capacity through a communications initiative to increase volunteer involvement and support new projects. Project will help the Friends organization share refuge information and encourage visitors to participate in educational programs. **\$15,000**

Friends of the Mississippi River
Urban Mississippi River Corridor Habitat Restoration and Monitoring Program (MN)
 Engage community volunteers and local schools to restore 117 acres of native habitat along the Mississippi River in the Minneapolis and St. Paul region. Project will support long-term ecological management of six urban sites by conducting restoration activities included in regional park master plans and local natural resource management plans and by building relationships with high school teachers and students to conduct wildlife monitoring of sites during and after restoration. **\$49,962**

Land Stewardship Project
Water Quality and Wildlife Benefit in the Chippewa River Watershed (MN)
 Use a targeted approach based on monitoring GIS analysis to meet water quality and wildlife goals by engaging farmers, landowners and public land managers to increase continuous living cover, reduce erosion and nutrient loss, and improve farm profit through innovations and enrollment in public and private conservation programs. Project will demonstrate how working farmlands incorporating biodiversity and continuous land cover on farmland provides landscape-level benefits of clean water, bird habitat and resilient communities. **\$167,077**

Mississippi Park Connection
Community Conservation Action for Three Park Sites on the Mississippi River (MN)
 Engage 1,000 volunteers to plant 4,000 diverse tree species and restore 22 acres of critical wildlife habitat in floodplain areas of the Mississippi River. **\$30,469**

Refuge Friends
Goat Grazing Restoration Demonstrations at the Minnesota Valley National Wildlife Refuge
 Restore 2 acres of oak savanna at the Minnesota Valley National Wildlife Refuge with goat grazing to benefit native species and serve as a demonstration plot for land managers and visitors. Project will clear and seed oak habitat and engage and educate community members. **\$13,964**

Regents of the University of Minnesota
Implementing the Monarch Conservation Science Partnership's Integrated Monitoring Strategy (MN)
 Strengthen capacity and coordination of multiple partners across the nation in implementing a unified monitoring strategy for monarch butterflies and their habitats. Project will generate information to improve Monarch Conservation Science Partnership's models that inform national monarch population and habitat targets, identify and quantify the relative magnitude of potential threats to monarchs, and inform strategies for implementing habitat enhancement. **\$222,392**

Stewardship Network
Creation of a Southern St. Louis County Cooperative Weed Management Area (MN)
 Establish a Cooperative Weed Management Area for southern St. Louis County in northeastern Minnesota. Project will improve collaboration and coordination of the network of organizations that are currently working to control invasive species throughout the globally rare St. Louis Estuary, a gateway to Superior National Forest and the Boundary Waters Canoe Area Wilderness. **\$154,405**

U.S. Department of the Interior, U.S. Fish and Wildlife Service, Region 3
Expanding Monarch Butterfly Habitat Connectivity (IA, MN)
 Improve and connect diverse native prairie sites for monarch butterfly breeding and migratory habitat. Project will restore and enhance more than 460 acres on 14 permanently protected grassland sites. **\$103,137**

Wildlife Forever
Deploying CD3 Cleaning Stations with National Clean Drain Dry Initiative (MN)
 Work with partners to rapidly prototype, install and evaluate the effectiveness of aquatic invasive species cleaning station techniques at pilot locations across Minnesota. Project will guide the development of a self-contained, cost-effective, boater-operated cleaning, draining, drying and disposing station for the prevention of invasive species. **\$151,007**

Wildlife Management Institute
Early Successional Wildlife Habitat Technical Assistance in the Great Lakes Basin (MI, MN, OH, PA, WI)
 Provide expert technical assistance in the recruitment of private landowners for projects completed under the EQIP program of the Farm Bill to benefit golden-winged warbler, American woodcock and a host of young forest species that depend on early successional habitat. **\$160,000**

MISSISSIPPI

Friends of Noxubee Refuge
Building Community Engagement at Sam D. Hamilton Noxubee National Wildlife Refuge (MS)
 Increase organizational capacity and community engagement through outdoor canoeing and kayaking events. Project will bring visitors outdoors to learn about environmental conservation and the importance of the refuge. **\$7,700**

Manomet
American Oystercatcher Aerial Survey and Population Recovery along the Atlantic Flyway (multiple states)
 Estimate the current population of American oystercatchers via a cooperative aerial and ground survey with partners in the American Oystercatcher working group. Project will contribute directly to the overall goals of increasing the population size of American oystercatchers within the United States by 30 percent between 2009 and 2019, while contributing to the conservation of associated beach nesting and migratory shorebirds. **\$200,000**

Mississippi Land Trust
Sandhill Crane Refuge Acquisition in Jackson County (MS)
 Place 80 acres of grassland in Jackson County under permanent conservation easement. Project will protect an agricultural property that provides important habitat for the critically endangered Mississippi sandhill crane and is currently used by up to nine cranes (7 percent of the wild population) for foraging and raising young. **\$115,469**

The Longleaf Alliance
Coordinating Local Implementation Team Capacity and Landowner Technical Assistance and Outreach — III (multiple states)
 Support the Longleaf Implementation Team Consul role, which helps accelerate coordination and exchange of information among 17 multi-partner local implementation teams that organize, plan and deliver conservation actions to restore and enhance the longleaf pine ecosystem. Project will also support a new GIS Specialist position designed to build and improve GIS capacity and collaboration. **\$274,500**

The Longleaf Alliance
Red-cockaded Woodpecker Translocation Support (AL, FL, GA, MS)
 Translocate 60 red-cockaded woodpeckers to properties designated as recovery sites by the U.S. Fish and Wildlife Service. Project will manage and improve 6,000 acres of longleaf pine forest, providing high-quality habitat for nesting and foraging. **\$169,519**

The Nature Conservancy
Longleaf Restoration on Private Lands in South Mississippi's Piney Woods
 Establish 784 acres of longleaf pine and enhance an additional 2,500 acres of existing longleaf habitat with prescribed fire on private lands to benefit habitat for Bachman's sparrow, bobwhite quail, gopher tortoise and numerous other wildlife species. Project will engage 850 private landowners through outreach and technical assistance with 12 new landowners enrolled in stewardship programs. **\$300,000**

MISSOURI

City of St. Louis
Urban Vitality and Ecology Neighborhood Green Space Program (MO)
 Connect north St. Louis residents to nature through the strategic conversion of underutilized land into new community green spaces. Project will engage 100 volunteers and increase access to nature, provide wildlife habitat for pollinators and migratory birds, support youth jobs and address stormwater overflow through implementation of green infrastructure best management practices. **\$50,000**

Field Museum of Natural History
Expanding Strategic Urban Habitat Conservation Approaches for Monarchs (multiple states)
 Engage small- and mid-size metropolitan areas along the monarch butterfly's eastern migratory corridor to develop strategic urban conservation planning tools tailored to smaller municipalities. Project will help urban practitioners identify the best locations and practices for creating monarch butterfly habitat. **\$147,988**

Missouri Conservation Heritage Foundation
Implementing the Missouri Monarch and Pollinator Conservation Plan
 Establish and enhance habitat for monarch butterflies to meet habitat goals set in the Missouri Monarch and Pollinator Conservation Plan. Project will work with partners to restore and enhance nearly 300 acres throughout rural, urban and suburban landscapes across the state. **\$244,445**

Pheasants Forever
Adding Technical Capacity to Deliver Monarch Practices on Private Lands (multiple states)
 Provide technical assistance to private landowners to enroll lands into Conservation Stewardship Program and Environmental Quality Incentives Program. Project will utilize the organization's Farm Bill biologist team to deliver high-quality monarch butterfly feeding and breeding habitat across eight states. **\$683,980**

MONTANA

Alberta Conservation Association
Designing a Multi-species Approach for Conserving Connectivity in the Northern Great Plains (MT, AB)
 Use pronghorn as a model for designing and applying a multi-species approach for connectivity in the Northern Great Plains regions of Montana and Canada. Project will model seasonal range for pronghorn and run fence-density scenarios, overlay multi-species GIS maps to identify priority seasonal range and corridor habitats for priority species, and complete on-the ground fence modifications within the jurisdictions. **\$156,223**

American Bird Conservancy
Enhancing Grasslands Biodiversity and Productivity in the Northern Great Plains (MT, ND, SD, WY)
 Promote educational opportunities and land stewardship activities in the core of the Northern Great Plains by offering workshops and providing conservation technical assistance, developing conservation plans, assisting private and tribal landowners in enrolling in Farm Bill programs, and coordinating with federal land managers on activities that will enhance habitat for grassland birds while maintaining sustainable land use. **\$230,000**

Big Blackfoot Chapter of Trout Unlimited**Restoration of Bull Trout and Westslope Cutthroat Trout in the Blackfoot River Watershed (MT)**

Eliminate entrainment of native westslope cutthroat trout and bull trout in an irrigation diversion and restore 4,000 feet of instream and riparian habitat in the Blackfoot River watershed of Montana. Project will upgrade an unscreened irrigation diversion with a fish screen and head gate, and improve stream bank stability, instream and riparian habitat, and floodplain connectivity along Nevada Creek. *\$72,466*

Bureau of Land Management,**Miles City Field Office****Woven Wire Fence Modification (MT)**

Modify existing fences in the Montana range of the Northern Great Plains that do not meet specifications for wildlife, primarily pronghorn and mule deer. Project will replace many miles of woven wire fence in crucial pronghorn winter range and high-use areas to wildlife-friendly specifications to facilitate movement of pronghorn across the landscape. *\$46,042*

Climate Conservation**Supporting Landscape Integrity in the Missouri Headwaters Basin of the High Divide (MT)**

Pilot a process for improving integration of terrestrial and freshwater management efforts to optimize joint benefits to terrestrial and freshwater conservation targets in the Missouri Headwaters Basin of the High Divide. Project will inform conservation strategy in the High Divide region and help partner groups to rigorously prioritize efficient, effective management actions. *\$72,125*

Five Valleys Land Trust**Rock Creek Confluence Habitat Restoration and Education Partnership (MT)**

Restore 112 acres of degraded grassland and riparian habitat that is home to bull trout and westslope cutthroat trout, at the confluence of Rock Creek and the Clark Fork River. Project will engage 550 community members, including youth groups and adults, in nature-based education, hands-on restoration and development of a trail and interpretive signs to enhance learning opportunities for visitors. *\$37,133*

Fort Belknap Indian Community**Black-footed Ferret Management at Fort Belknap (MT)**

Manage and increase reintroduced black-footed ferret population and associated black-tailed prairie dog colony habitat on the Fort Belknap Reservation in Montana. Project will conduct annual sylvatic plague mitigation, ferret population and habitat surveys, reintroductions, vaccination and identification tagging. Project aims to increase the ferret population on the Reservation to at least 30 breeding adults. *\$212,514*

Greater Yellowstone Coalition**Westfork Gallatin Watershed Restoration (MT)**

Engage 60 volunteers in restoring 90 miles of riparian habitat in the West Fork Watershed in Southwestern Montana, home to native westslope cutthroat trout. Project will remove non-native and hybrid fish, restore headwater tributary habitat, reintroduce westslope cutthroat trout and educate local residents about the importance of the habitat. *\$49,929*

Missoula County Weed District**Establishment of Biological Weed Control Insectaries (MT)**

Establish collectible populations of biocontrol agents for yellow and Dalmatian toadflax, leafy spurge, and Russian and spotted knapweed throughout Montana. Project will enable land managers to successfully incorporate biological weed control into their noxious weed management program as an efficient and sustainable management tool. *\$34,257*

Montana Conservation Corps**Great Northern Restoration Project (MT, ND, SD, WY)**

Engage 49 youths to complete sage grouse habitat enhancements through fence removal, road obliteration, native plant restoration and noxious weed removal. Project also will work with the Bureau of Reclamation to engage 38 participants on projects, including Russian olive removal to support restoration of cottonwood galleries and willow stands, and a variety of fencing projects to remove wildlife hazards. *\$83,874*

Montana Fish, Wildlife and Parks**Reducing Human-Caused Grizzly Bear Mortalities throughout the Cabinet-Yaak Ecosystem (MT)**

Continue to support the Cabinet-Yaak Ecosystem bear specialist on-call to resolve bear conflicts quickly, using methods that attempt to prevent the death of bears. Project will conduct public programs and workshops to increase community awareness of grizzly bear behavior and biological needs, including hunter-education programs to reduce the risk of the accidental killing of a grizzly bear due to misidentification. *\$50,000*

Montana Land Reliance**ABN Ranch Agricultural Lands Easement in Chouteau County, Montana**

Provide assistance to complete the acquisition of the ABN Ranch Agricultural Lands Easement in Chouteau County. Project will conserve the ranch property, a native grassland that offers habitat for year-round species such as greater sage grouse, migratory grasslands passerines, pronghorn and mule deer. *\$162,500*

Montana Land Reliance**Support for an Eastern Manager Position in Helena (MT)**

Support an eastern manager position for the Montana Land Reliance, headquartered in Helena. Project will support the new staff member, whose primary objective will be to assist in moving forward five critical existing projects in sage grouse habitat and building a program in eastern Montana for donated conservation easements. *\$96,000*

Montana Outdoor Legacy Foundation**Monitoring Grizzly Bears in the Northern Continental Divide Ecosystem (MT)**

Support several seasonal biologists with the goal of reducing grizzly bear deaths that result from human interactions. Project will support biologists in tracking, trapping and successfully transferring bears away from conflict areas, and include an educational aspect for the surrounding communities. *\$220,000*

Petroleum County Conservation District**Feasibility Study for a Conservation Collaborative in Winnett, Montana**

Complete an in-depth assessment of the feasibility of organizing a locally led group from the Winnett community to purchase grazing land that would be managed by the local group for grazing and implementing grassland conservation practices. Project will focus on enhancing habitat for pronghorn and greater sage grouse populations, while also providing opportunities for the local ranching community to become more sustainable. *\$32,500*

Ranchers Stewardship Alliance**Restoration and Enhanced Management of Montana's Milk River Grasslands through Sustainable Ranching**

Utilize a diverse, community-led partnership to implement restoration and enhanced management in the critically important landscape of Montana's Milk River grasslands. Project will directly support conservation objectives of grassland habitat conservation and improved outcomes for grassland passerines, pronghorn and greater sage-grouse. *\$300,000*

Rocky Mountain Bird Observatory**Adding Capacity for Stewardship of Private Lands in the Northern Great Plains (MT, ND, SD, WY)**

Build local capacity to implement on-the-ground conservation by supporting three stewardship biologist positions in three focal areas of the Northern Great Plains. Project will establish public-private conservation partnerships, provide targeted outreach to landowners, and implement grassland habitat enhancement and restoration projects. *\$230,000*

Rocky Mountain Bird Observatory**Informing Conservation and Management of Declining Grassland Birds in the Northern Great Plains Through Demographic Monitoring (MT)**

Complete ongoing data collection, coordination and analysis of grassland bird demographic monitoring (for Baird's and grasshopper sparrows, Sprague's pipit, chestnut-collared longspur and lark bunting) in eastern Montana. Activities include radio-tagging grassland birds to estimate survival, nest searching and monitoring to estimate reproductive success, point-count surveys to estimate density, and vegetation sampling to assess habitat relationships across space and time. *\$200,000*

Rocky Mountain Bird Observatory Integrated Monitoring of Birds in the Northern Great Plains (MT, NE, ND, SD, WY)

Estimate abundance, density and occupancy of birds in the Northern Great Plains, and make that data available to partners and management agencies each year. Project will allow management agencies to assess the status of grassland bird populations in the Northern Great Plains at the local and regional scale, which can be used to better understand changes in bird populations and how best to manage them. *\$125,000*

Rocky Mountain Bird Observatory Outreach Delivery in Sagebrush Ecosystem (multiple states)

Reprint copies of Pocket Guide to Sagebrush Birds and Pocket Guide to Sagebrush following requests from several federal and state agencies and conservation districts. *\$20,000*

The Blackfeet Tribe**Agriculture Resource Management Plan on Blackfeet Indian Reservation (MT)**

Complete an Agricultural Resource Management Plan for the Blackfeet Indian Reservation that includes an environmental assessment following National Environmental Policy Act guidelines. The project will generate the tribe's strategic plan for the comprehensive management of the reservations resources, including wildlife and more than 1 million acres of rangelands. *\$102,626*

The Nature Conservancy**Candidate Conservation Agreements with Assurances for Grassland Birds and Greater Sage-Grouse (MT)**

Hire a range ecologist dedicated to administering candidate conservation agreements with assurances. Project will incentivize more than 100,000 acres of habitat protection on private lands in eastern and southwest Montana, retaining and improving habitat at the landscape-wide scale necessary for these species to survive. *\$100,000*

The Nature Conservancy**Decision Support Tool for the Missouri River Headwaters (MT, ND, SD)**

Convene resource professionals from federal, state and NGO partners to collect and analyze a variety of data to complete modeling and resulting map products that identify priority watersheds and areas within the Missouri River headwaters and prairies of South Dakota, North Dakota, Montana and Wyoming. Projects will make these maps available to partners, agencies, and area landowners. *\$75,000*

The Nature Conservancy**Funk Ranch Conservation Easement (MT)**

Acquire a conservation easement for the Funk Ranch property, consisting of about 9,500 acres within the Missouri-Milk River Grasslands. The ranch is located within the Bitter Creek Conservation Area, which has been identified as a high priority for conservation by multiple conservation organizations as well as state and federal agencies. *\$150,000*

The Nature Conservancy**Natural Water Storage Solutions to Improve Flows in the Missouri Headwaters Basin (MT)**

Increase critical late-season flows and restore streams, rivers, floodplains, and wetlands across the Missouri Headwater Basins by scaling up application beaver mimicry structures to reconnect floodplains and removal of conifers. Project will improve water quality, water quantity and habitat across the Missouri Headwaters system. *\$159,250*

Turner Endangered Species Fund**North Fork Spanish Creek Westslope Cutthroat Trout Restoration (MT)**

Restore native westslope cutthroat trout population to 17 miles of upper North Fork Spanish Creek in the Gallatin River watershed of southwestern Montana and protect with a fish movement barrier. Project will more than double the historic habitat occupied by native trout in the Gallatin River basin and provide a large, self-sustaining population as a source of individuals for restoration elsewhere. *\$90,000*

U.S. Department of Agriculture,**U.S. Forest Service****Interagency e-DNA Database of Fish Distributions (multiple states)**

Develop an environmental DNA database, website and digital tools to promote information exchange among all agencies of aquatic species in rivers and streams in the Western United States. Project will support development of models and maps showing distributions of native and invasive species to provide decision support for strategic investment strategies related to environmental stressors, habitat degradation, invasive species, and preservation of native species. *\$89,362*

U.S. Department of the Interior,**U.S. Fish and Wildlife Service — Black-footed Ferret Conservation Center**

Application of Sylvatic Plague Vaccine to Support Black-footed Ferret Recovery (MT, SD)
Implement sylvatic plague management through vaccine production and population monitoring to enhance and expand black-footed ferret recovery efforts in the Northern Great Plains. Project will occur on four sites, three in South Dakota and one in Montana, and will enhance 4,900 acres. *\$450,000*

Washington Recreation and Conservation Office**Columbia Basin States Cooperative Weed Management Area (ID, MT, OR, WA, WY)**

Establish a Cooperative Weed Management Area to address invasive plants in the Columbia River Basin. Project will bring together tribal, state, federal, provincial and nongovernmental organizations to focus on developing early detection and rapid response plans for cross-boundary invasive plant species. *\$65,000*

World Wildlife Fund**Using the Plowprint to Monitor Grassland Conversion Across the Northern Great Plains (MT, NE, ND, SD, WY)**

Update and expand geospatial data analysis to evaluate landscape change metrics for the Northern Great Plains ecoregion. Project will use newest and best available data to track rates of agricultural conversion, monitor previously converted lands and identify risk factors for remaining intact habitat. *\$20,000*

NEBRASKA**Nebraska Community Foundation FBO Rainwater Basin Joint Venture****Public-Private Conservation Partnership in the Nebraska Sandhills**

Improve grassland habitat in Nebraska's Sandhills, a 19,300-square-mile dune formation and one of the largest contiguous grasslands in the United States. Project will include including eastern red cedar removal on 1,890 acres, grazing management infrastructure development on 1,860 acres of grasslands, and 15,000 acres of prescribed. *\$149,040*

Nebraska Game and Parks Commission**Monarch Butterfly Habitat in Eastern Nebraska**

Nebraska Game and Parks Commission will enhance 10,000 acres and restore an additional 600 acres of native tallgrass prairie and oak savanna, benefiting breeding, nectaring and migration habitat for monarch butterflies. Project will use a variety of techniques on public and private lands, including prescribed fire, invasive shrub and tree control, planned grazing and planting native milkweed and nectar plants. *\$200,000*

Rocky Mountain Bird Observatory

Outreach Delivery in Sagebrush Ecosystem (multiple states)

Reprint copies of Pocket Guide to Sagebrush Birds and Pocket Guide to Sagebrush following requests from several federal and state agencies and conservation districts. \$20,000

Sandhills Task Force

Sandhills Native Ecosystem

Partnership Project (NE)

Improve grassland wildlife habitat in Nebraska’s Sandhills on privately owned land by controlling eastern red cedar infestations on 4,875 acres and improving grazing systems on an additional 3,000 acres. Project will control cedar infestations by use of prescribed fire and mechanical treatment and improve grazing systems by installing necessary watering locations and fence and by establishing a management plan with the landowner. \$200,000

World Wildlife Fund

Using the Plowprint to Monitor Grassland Conversion Across the Northern Great Plains (MT, NE, ND, SD, WY)

Update and expand geospatial data analysis to evaluate landscape change metrics for the Northern Great Plains ecoregion. Project will use newest and best available data to track rates of agricultural conversion, monitor previously converted lands and identify risk factors for remaining intact habitat. \$20,000

NEVADA**Eastern Nevada Landscape Coalition**

Establishing a Lower Colorado River Cooperative Weed Management Area (AZ, CA, NV)

Create and establish a Lower Colorado River Cooperative Weed Management Area along approximately 250 river corridor miles. Project will mobilize organizations, develop a Memorandum of Understanding, and create a list of priority invasive plant species in an effort to partner on a watershed scale to reduce the impacts of invasive species along the Colorado River. \$13,707

Great Basin Institute

Haypress-Edwards Creek Lek Pinyon Juniper Removal Program (NV)

Employ 10 youth to restore about 480 acres of greater sage grouse habitat through the removal of invasive pinyon-juniper trees in the Smith Creek area of the Northern Desatoya Mountains. Project will enable crews to then treat larger volume of habitat and make a greater impact on the most recently disturbed sage grouse habitat. \$50,079

Outside Las Vegas Foundation

Fostering Stewardship in Urban Communities through Native Habitat Education (NV)

Expand an existing schoolyard native habitat program to restore 7 acres of native habitat for monarch butterflies and desert tortoises in urban Las Vegas. Project will engage approximately 1,000 underserved youths through 30 education programs and 10 field trips. \$26,513

Rocky Mountain Bird Observatory

Outreach Delivery in Sagebrush Ecosystem (multiple states)

Reprint copies of Pocket Guide to Sagebrush Birds and Pocket Guide to Sagebrush following requests from several federal and state agencies and conservation districts. \$20,000

Trout Unlimited

Lahontan Cutthroat Trout Conservation and Recovery (CA, NV)

Conduct a range-wide genetic assessment of Lahontan cutthroat trout populations to produce population-specific extinction probabilities and involve landowners in restoration activities by establishing new safe harbor agreements. Project will increase public awareness of restoration efforts and will secure 10 additional miles of trout habitat in California’s Walker Basin headwaters. \$420,508

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

Interagency e-DNA Database of Fish Distributions (multiple states)

Develop a large environmental DNA database, website and digital tools to coordinate monitoring and promote information exchange among all agencies of aquatic species in rivers and streams in the Western United States. Project will support development of models and maps showing distributions of native and invasive species to provide decision support for strategic investment strategies related to environmental stressors, habitat degradation, invasive species, and preservation of native species. \$89,362

NEW HAMPSHIRE**Abt Associates**

Monitoring Hurricane Sandy Coastal Resiliency Program’s Socioeconomic Northeast Impacts (multiple states)

Conduct socioeconomic monitoring for 38 Hurricane Sandy coastal resiliency projects throughout the Northeast from Virginia to Maine. Project will measure and advance the state of knowledge around coastal resilience’s socioeconomic impacts on human health and safety, property and infrastructure protection and enhancement, and community resilience. \$2,242,026

Belknap County Conservation District

Restoring Instream Woody Habitat Structure to Benefit Eastern Brook Trout (NH)

Restore instream habitat structure that will re-establish natural stream conditions and create pools and spawning habitat for eastern brook trout on Poorfarm Brook in the Gunstock Recreation Area. Project will install large woody material in 28 locations to restore 2 miles of historic habitat to be used as a demonstration of the effectiveness of the technique. \$55,730

New Hampshire Department of Transportation

Improving a Road-Stream Crossing in Stratford to Benefit Eastern Brook Trout and Mammals (NH)

Restore aquatic connectivity in the Connecticut River Valley by replacing a culvert in a priority site for eastern brook trout and enhance terrestrial connectivity for multiple mammal species. Project will connect 1.6 miles of upstream cold-water habitat and install a dry ledge to allow fishers, minks, bobcats and other mammals to cross safely under northern New Hampshire’s busiest road. \$138,329

University of New Hampshire

Demonstrating Efficacy of Young Forest Restoration for New England Cottontail and Birds (CT, ME, NH)

Document for the first time population-level response of New England cottontails and other young-forest-dependent species to previous and planned early successional forest habitat management activities in Connecticut, New Hampshire and Maine. Project will use a capture-recapture population estimate combined with a pellet survey on 30 sites totaling 482 acres and will develop a landscape scale model to predict future abundance on 28,800 acres of restored habitat. \$174,838

University of New Hampshire

Using Science-Based Forestry Practices to Target and Recruit Landowners in Key Watersheds (NH)

Develop multiple forest management regimes to benefit priority forest birds, including wood thrush and the black-throated blue warbler, based on existing forest inventory data. Project will enable 82 landowners to implement the appropriate management practices to improve 1,500 acres of early successional and late successional habitat. \$102,942

Vermont Center for Ecostudies

Documenting Bicknell’s Thrush Use of Commercial Young Forest for Lower Elevation Breeding (ME, NH, VT)

Document how Bicknell’s thrush uses young forest habitat in managed commercial forest stands in New Hampshire and Maine and identify the specific stand characteristics associated with occupancy during the breeding season. Project will use the data to revise and update the existing best management practices in forests managed for production of timber and pulpwood. \$50,609

NEW JERSEY**Abt Associates**

Monitoring Hurricane Sandy Coastal Resiliency Program’s Socioeconomic Northeast Impacts (multiple states)

Conduct socioeconomic monitoring for 38 Hurricane Sandy coastal resiliency projects throughout the Northeast from Virginia to Maine. Project will measure and advance the state of knowledge around coastal resilience’s socioeconomic impacts on human health and safety, property and infrastructure protection and enhancement, and community resilience. \$2,242,026

American Littoral Society

Applying Green Infrastructure at Schools and Parks (NJ)

Install eight green stormwater infrastructure practices and educate students and residents in the Cohansey and Maurice River Watershed. Project will improve 2 acres of impervious cover, prevent 1.8 million gallons of stormwater runoff and restore 0.60 acres of riparian habitat. \$219,387

Association of New Jersey Environmental Commissioners

Installing Green Infrastructure and Pollution Reduction Practices (NJ)

Install green stormwater infrastructure and conduct outreach and education for municipal officials and residents in Vineland. Project will prevent 80,000 gallons of stormwater runoff from entering the watershed and educate 500 individuals about green stormwater infrastructure and water quality. \$175,803

Conserve Wildlife Foundation of New Jersey

Assessing Impact of Aquaculture Activities on Horseshoe Crabs and Red Knots on the Delaware Bay (NJ)

Address four data-deficient aspects of the interaction of horseshoe crab and red knot with aquaculture activities on Delaware Bay to improve conservation and management of these resources. Project work will be applied to improve conservation measures designed to minimize impacts of aquaculture on the red knot. \$55,000

Conserve Wildlife Foundation of New Jersey

Assessing Recovery of Red Knots and Atlantic Flyway Site-based Targets (NJ)

Develop a new framework with metrics and goals that can assess flyway-wide progress towards recovery for the red knot and other Atlantic flyway shorebirds. Project will engage key people from all sectors of the flyway with expertise on red knots and monitoring to develop the framework. \$25,150

Friends of Forsythe National Wildlife Refuge

Building Capacity and Outreach at Edwin B.

Forsythe National Wildlife Refuge (NJ)

Expand capacity and outreach through an enhanced online presence and website. Project will engage community members and visitors and support the overall mission of the refuge. \$4,250

Groundwork Elizabeth

Gifford Pinchot’s Legacy Developing the Next Generation from Grey Towers to Urban Frontiers (NJ, PA)

Engage 36 volunteers and 12 youths from economically diverse and challenged urban communities through removal of invasive plants, trail drainage, waterbars and trail brushing. Project will educate youths about habitat restoration and potential careers in conservation. \$35,446

Manomet

American Oystercatcher Aerial Survey and Population Recovery along the Atlantic Flyway (multiple states)

Estimate the current population of American oystercatchers via a cooperative aerial and ground survey with partners in the American Oystercatcher working group. Project will contribute directly to the overall goals of increasing the population size of American oystercatchers within the United States by 30 percent between 2009 and 2019, while contributing to the conservation of associated beach nesting and migratory shorebirds. \$200,000

New Jersey Audubon Society

Installing Agricultural Best Management Practices in the Kirkwood-Cohansey (NJ)

Increase enrollment in and implementation of practices such as riparian buffers, filter strips, pollinator habitats, cover crops and livestock fencing to improve streams, wetlands and groundwater resources in the Kirkwood-Cohansey Aquifer area. Project will improve management of 500 acres, restore 2 miles of riparian buffer and conduct outreach to 2,500 individuals. \$150,000

New Jersey Audubon Society

Overcoming Obstacles II: Creating Golden-winged Warbler Habitat (NJ)

New Jersey Audubon Society will improve habitat for the golden-winged warbler throughout northern New Jersey by providing technical and financial assistance to private landowners enrolled in the Working Lands for Wildlife conservation incentive program. Project is part of a multiyear, multipartner, landscape-scale conservation initiative to rebuild and maintain healthy populations of golden-winged warblers and associated young-forest species. \$100,000

North Jersey RC&D Area

Conservation Planning Assistance in the New Jersey Highlands

Update and complete up to 40 agricultural conservation plans for landowners on preserved farmland in the New Jersey Highlands. Project will help implement up to 24 conservation plans that would result in nearly 4,000 acres under improved conservation management practices. \$99,750

North Jersey RC&D Area

Streamlined Conservation Partner Planning Tool (NJ, NY, PA)

Develop a user-friendly conservation planning tool that will help field staff, landowners and producers understand and implement conservation practices more effectively. Project will build capacity of partner agencies to use the planning and assessment tools. \$60,000

Pinelands Preservation Alliance

Implementing the Save the Source Landscape Makeover Program to Improve Water Quality (NJ)

Implement the “Save the Source Landscape Makeover Program” that will leverage green stormwater infrastructure and agricultural best management practices by providing rain garden rebates, performing assessments and offering incentives to farmers in the Kirkwood-Cohansey. Project will implement best management practices on at least 50 acres and green stormwater infrastructure on 18 acres. \$250,000

South Jersey Land and Water Trust

Green Infrastructure and Stream Buffer Restoration in the Muddy Run Watershed (NJ)

Implement green stormwater infrastructure, restore riparian habitat, and conduct outreach about agricultural and stormwater best management practices in the Muddy River Watershed. Project will prevent more than 27,000 gallons of stormwater and 69 pounds of sediment from entering the system each year. \$138,075

Sussex County Municipal Utilities Authority-Walkkill River Watershed Management Group

Building Awareness of Green Infrastructure in the Upper Paulins Kill Watershed (NJ)

Engage the communities of the Upper Paulins Kill Watershed to develop and install green stormwater infrastructure practices, including rain gardens and porous asphalt at McKeown Elementary School and Memory Park. Project will prevent approximately 1.6 million gallons of stormwater from entering the watershed. *\$177,555*

U.S. Department of the Interior, National Park Service

Evaluating Beach and Dune Resilience Restoration in the Mid-Atlantic (DE, NJ, NY)

Collect ecological metrics critical to evaluating beach and dune resilience in Delaware, New Jersey and New York. Project will conduct ecological monitoring that will be used to inform future beach and dune resilience knowledge and management. *\$784,264*

U.S. Department of the Interior, U.S. Fish and Wildlife Service, Region 5

Assessing the Ecological Effectiveness of Hurricane Sandy Northeast Marsh Restoration Projects (multiple states)

Measure the ecological effectiveness for 23 innovative marsh restoration sites. Project will contribute data critical for the assessment of these new marsh restoration techniques’ ecological benefits and cost-effectiveness. *\$2,600,000*

U.S. Department of the Interior, U.S. Fish and Wildlife Service, Region 5
Assessing the Effectiveness of Living Shoreline Projects in the Northeast (MD, NJ, VA)

Record ecological monitoring data for living shoreline restoration projects in the Northeast. Project will contribute to the assessment of this emerging resilience technique’s understanding, cost effectiveness and ecological benefits. *\$1,104,270*

U.S. Department of the Interior, U.S. Fish and Wildlife Service — Region 5
Ecological Monitoring of Hurricane Sandy Aquatic Connectivity Sites (CT, MA, MD, NJ, RI)

Monitor ecological resilience changes at nine aquatic connectivity sites in the Northeast. Project will contribute crucial knowledge that will be used to improve aquatic connectivity system cost-effectiveness and functionality. *\$2,882,850*

U.S. Department of the Interior, U.S. Geological Survey

Collecting Ecological Data and Models of Living Shoreline Restoration Projects (MD, NJ, NY, VA)

Collect ecological monitoring data and conduct modeling of living shoreline restoration projects. Project will contribute to the assessment of wave and energy reduction benefits. *\$1,195,728*

U.S. Department of the Interior, U.S. Fish and Wildlife Service, Region 5

Evaluating the Ecological Effectiveness of Hurricane Sandy Marsh Restoration Projects (DE, NJ, VA)

Conduct ecological monitoring useful for evaluating marsh restoration techniques and effectiveness at national wildlife refuges, including Prime Hook, Forsythe, Cape May and Great Dismal Swamp. Project will build upon previous ecological monitoring and contribute to the evaluation of innovative marsh restoration techniques. *\$2,780,633*

U.S. Department of the Interior, U.S. Geological Survey

Monitoring Hurricane Sandy Beach and Marsh Resilience in New York and New Jersey (NJ, NY)

Collect ecological resilience metrics for seven beach and marsh restoration projects in New York and New Jersey. Project will provide ecological data useful for evaluating cost-effectiveness and ecological benefits for these restoration techniques. *\$2,599,475*

NEW MEXICO

Conservation Legacy

Ancestral Lands Conservation Corps (AZ, NM)
Engage Native American youths and young adults in conservation-service learning opportunities in partnership with Native American communities, Bureau of Indian Affairs, and other Agency partners. This project will engage 10 underserved young adults in Albuquerque and the Hopi Nation to complete various conservation activities at National Park Service sites. *\$39,500*

Conservation Legacy

Bureau of Reclamation Navajo Youth Monitoring Partnership (NM)
Employ five Native American young adults to conduct 40 miles of baseline information gathering through at sites that will be impacted by a 280-mile water pipe infrastructure project through Northern New Mexico. Project will collect data to be used to develop guidelines for successful post-pipeline-construction planting and seeding, and support efforts to mitigate impacted areas and ensure they are meeting revegetation standards. *\$46,184*

Friends of Valle de Oro National Wildlife Refuge

Building Capacity for Friends of Valle de Oro National Wildlife Refuge (NM)
Develop online capacity to allow the Friends of Valle de Oro to expand community outreach and engagement on the Refuge. Project will increase the Friends capacity to increase exposure and community engagement of this urban National Wildlife Refuge. *\$9,039*

Rocky Mountain Bird Observatory

Outreach Delivery in Sagebrush Ecosystem (multiple states)

Reprint copies of Pocket Guide to Sagebrush Birds and Pocket Guide to Sagebrush following requests from several federal and state agencies and conservation districts. *\$20,000*

U.S. Department of Agriculture,

U.S. Forest Service

Interagency e-DNA Database of Fish Distributions (multiple states)

Develop a large environmental DNA database, website and digital tools to coordinate monitoring and promote information exchange among all agencies of aquatic species in rivers and streams in the Western United States. Project will support development of models and maps showing distributions of native and invasive species to provide decision support for strategic investment strategies related to environmental stressors, habitat degradation, invasive species, and preservation of native species. *\$89,362*

NEW YORK

Abt Associates

Monitoring Hurricane Sandy Coastal Resiliency Program’s Socioeconomic Northeast Impacts (multiple states)

Conduct socioeconomic monitoring for 38 Hurricane Sandy coastal resiliency projects throughout the Northeast from Virginia to Maine. Project will measure and advance the state of knowledge around coastal resilience’s socioeconomic impacts on human health and safety, property and infrastructure protection and enhancement, and community resilience. *\$2,242,026*

Alliance for the Chesapeake Bay Supporting Local Governments and Diverse Partners to Restore the Chesapeake Bay (multiple states)

Enhance networking and information sharing activities to advance watershed restoration efforts. Project will engage nearly 6,000 individuals representing watershed organizations and local governments within the Chesapeake Bay Watershed through an annual Chesapeake Watershed Forum, a Local Government Forum, regional forums and an online networking tool. *\$140,000*

Atlantic Marine Conservation Society

Marine Mammal Stranding Response in New York
Build capabilities in New York to fill gap in network coverage after a previous member reduced commitments to respond to dead marine mammals. Project will provide a new marine mammal stranding network member with equipment, staffing support and training to immediately address stranding needs. *\$62,423*

Bronx River Alliance

A Tree Grows in the Bronx (NY)

Control invasives such as Japanese knotweed and restore native habitat through planting of native vegetation in 1.4 acres of the Bronx Forest. Project will teach students about trees and the forest ecosystems and empower community volunteers to take an active role in restoring the Bronx Forest native ecology. *\$30,000*

Friends of Hudson River Park

The Hudson River Park Plastic Marine Debris Removal and Education Program (NY)

Improve 400 in-water acres of the Hudson River Park with shoreline cleanup events with 30 community volunteers, who will remove hundreds of pounds of macro-debris and microplastics. Project will analyze materials collected from shoreline and in-water cleanup and form a marine debris education curriculum to be offered among the Park’s K-12 environmental education programs. *\$37,622*

Friends of Wertheim National Wildlife Refuge

Navigating Change through Strategic Planning (NY)

Strategic planning in coordination with the refuge staff and the U.S. Fish and Wildlife Service to create long-term goals and innovative programs. Project will increase capacity of the Friends organization to engage community members with the refuge. *\$5,500*

Groundwork Buffalo

Groundwork Buffalo and Iroquois National Wildlife Refuge: Engaging Urban Conservationists (NY)

Teach youths about native habitats, water systems and waterway connectivity while working on habitat restoration projects such as invasive species removal, water culvert assessments and a demonstration project. Project will revitalize parts of Buffalo within Willert Park and a portion of the adjacent business district and involve an educational component at the Iroquois National Wildlife Refuge. *\$32,632*

Land Trust Alliance

Chesapeake Land & Water Initiative (multiple states)

Deploy an integrated and innovative approach to accelerate permanent land protection for water quality across the Chesapeake Bay watershed. Project will enhance stewardship strategies with land trusts, watershed groups, state land trust associations, and other conservation and civic partners. *\$150,000*

Manomet

American Oystercatcher Aerial Survey and Population Recovery along the Atlantic Flyway (multiple states)

Estimate the current population of American oystercatchers via a cooperative aerial and ground survey with partners in the American Oystercatcher working group. Project will contribute directly to the overall goals of increasing the population size of American oystercatchers within the United States by 30 percent between 2009 and 2019, while contributing to the conservation of associated beach nesting and migratory shorebirds. *\$200,000*

National Audubon Society

Managing Human Disturbance on Shorebirds along the Atlantic Coast (multiple states)

Produce a framework to improve the effectiveness of disturbance reduction strategies for the Atlantic Flyway. Project will bring together partners from Canada to Florida to provide shorebird site managers with best management practices for managing human disturbance, along with essential tools and key indicators for measuring progress along the Atlantic Flyway. *\$200,000*

National Audubon Society

Restoring young forests in the Great Lakes Basin of New York

Create early-successional forest habitat for golden-winged warbler and American woodcock in New York’s portion of the Great Lakes Basin. Project will reach 3,600 landowners, provide technical assistance, assist 15 landowners with applying to EQIP, and facilitating project implementation to restore habitat functionality to 750 acres of forest to support up to 35 golden-winged warblers and 35 American woodcock. *\$84,799*

North Jersey RC&D Area

Streamlined Conservation Partner Planning Tool (NJ, NY, PA)

Develop a user-friendly conservation planning tool that will help field staff, landowners and producers understand and implement conservation practices more effectively. Project will build capacity of partner agencies to use the planning and assessment tools. *\$60,000*

Paul Smith’s College of Arts and Sciences
Improving Water Quality Monitoring for Fish Habitats in Upper Saranac Lake (NY)

Establish an automated lake monitoring system for the Upper Saranac Lake that will transmit water quality to the greater lake community. Project will enhance current monitoring efforts by providing data about stressors on fish habitat to inform the development of plans to improve that habitat. *\$175,000*

Pinchot Institute for Conservation

Delaware RCPP Technical Assistance (NY)
Provide technical assistance to support the overall objective of Regional Conservation Partnership Program in the New York portion of the Delaware Basin. Project will protect and improve water quality and wildlife habitat by helping landowners manage their forests, riparian areas and streams. *\$136,000*

Syracuse University
Creating Watershed Implementation Plans for mitigating stormwater in Kettle Lakes (NY)

Produce watershed implementation plans for four kettle lakes in the Tioughnioga River watershed, which is tributary to the Chenango River, then the Susquehanna River. Project will provide three community-supported, concept-level project opportunities, which would reduce nutrient and sediment pollution in this chain of kettle lakes. *\$50,000*

Tioga County Soil and Water Conservation District

Building Upon an Integrated Watershed Approach (NY, PA)

Integrate efforts across the watershed focusing on three key “implementation focus areas”: agriculture, streams and wetlands. Project participants will work with a suite of modeling tools to identify areas for buffers, wetland restoration and floodplain enhancement work in riparian corridors based on high-resolution land cover data. *\$877,210*

Trout Unlimited

Breakneck Creek Fish Passage Improvement (NY)

Replace a road-stream crossing to reconnect 9.7 miles of cold-water habitat and provide full passage for aquatic organisms in a stream targeted for future brook trout reintroduction. Project also will address flood resiliency and in-stream habitat impairments by installing a passage structure that will mimic natural stream bed and may include pools, riffles and other habitat features. *\$197,107*

U.S. Department of the Interior, National Park Service

Evaluating Beach and Dune Resilience Restoration in the Mid-Atlantic (DE, NJ, NY)

Collect ecological metrics critical to evaluating beach and dune resilience in Delaware, New Jersey and New York. Project will conduct ecological monitoring that will be used to inform future beach and dune resilience knowledge and management. *\$784,264*

**U.S. Department of the Interior,
U.S. Fish and Wildlife Service, Region 5**
Assessing the Ecological Effectiveness of
Hurricane Sandy Northeast Marsh Restoration
Projects (multiple states)

Measure the ecological effectiveness for 23 innovative marsh restoration sites. Project will contribute data critical for the assessment of these new marsh restoration techniques’ ecological benefits and cost-effectiveness.
\$2,600,000

**U.S. Department of the Interior,
U.S. Geological Survey**

Collecting Ecological Data and Models of Living Shoreline Restoration Projects (MD, NJ, NY, VA) Collect ecological monitoring data and conduct modeling of living shoreline restoration projects. Project will contribute to the assessment of this new technique’s wave and energy reduction benefits
\$1,195,728

**U.S. Department of the Interior,
U.S. Geological Survey**

Monitoring Hurricane Sandy Beach and Marsh Resilience in New York and New Jersey (NJ, NY) Collect ecological resilience metrics for seven beach and marsh restoration projects in New York and New Jersey. Project will provide ecological data useful for evaluating cost-effectiveness and ecological benefits for these restoration techniques.
\$2,599,475

NORTH CAROLINA

Conserving Carolina
Developing the Next Generation of Carolina
Mountain Conservationists (NC)

Employ six youths from diverse cultural, ethnic and economic backgrounds to perform public land restoration activities in Henderson, Transylvania and parts of adjoining counties in the Blue Ridge Mountains. Project will include 3 miles of trail maintenance and development and 10 acres of invasive species removal, tree planting and other habitat restoration.
\$12,500

Manomet
American Oystercatcher Aerial Survey and
Population Recovery along the Atlantic Flyway
(multiple states)

Estimate the current population of American oystercatchers via a cooperative aerial and ground survey with partners in the American Oystercatcher working group. Project will contribute directly to the overall goals of increasing the population size of American oystercatchers within the United States by 30 percent between 2009 and 2019, while contributing to the conservation of associated beach nesting and migratory shorebirds.
\$200,000

National Audubon Society
Managing Human Disturbance on Shorebirds
along the Atlantic Coast (multiple states)

Produce a framework to improve the effectiveness of disturbance reduction strategies for the Atlantic Flyway. Project will bring together partners from Canada to Florida to provide shorebird site managers with best management practices for managing human disturbance, along with essential tools and key indicators for measuring progress along the Atlantic Flyway.
\$200,000

North Carolina Wildlife Resources Commission
Stones Creek Game Land, RASP Short Term
Land Management Agreement (NC)

Restore habitat and manage for the federally endangered red-cockaded woodpecker on the 2,575-acre Stones Creek Game Land adjacent to Marine Corps Base Camp Lejeune as part of the Recovery and Sustainment Program. Project will establish 1,600 acres of longleaf pine and improve existing longleaf stands by thinning hardwoods and prescribed burning, and provide habitat for at least 12 red-cockaded woodpecker territories.
\$377,188

Piedmont Conservation Council
Town of Hillsborough Public Works Relocation
and Eno River Restoration (NC)

Conduct 2-acre ecological restoration project to enhance the Eno River as it flows along the town of Hillsborough’s Public Works Facility. Project will remove debris and impervious surfaces in a floodplain, establish 1.5-acres of riparian habitat and perform reforestation, invasive species removal and site monitoring.
\$49,982

Sandhills Area Land Trust
Longleaf Restoration on Private Lands in the
North Carolina Sandhills SGA — II (NC)

Establish 600 acres of longleaf pine and enhance an additional 6,800 acres of existing longleaf pine habitat on private lands in the North Carolina Sandhills region through education, outreach and expansion of a prescribed-burn association. Project will build public support for prescribed fire through extensive education programs that will reach at least 3,500 youth and local citizens.
\$250,000

The Longleaf Alliance
Coordinating Local Implementation Team
Capacity and Landowner Technical Assistance
and Outreach — III (multiple states)

Support the Longleaf Implementation Team Consul role, which helps accelerate coordination and exchange of information among 17 multi-partner local implementation teams that organize, plan and deliver conservation actions to restore and enhance the longleaf pine ecosystem. Project will also support a new GIS Specialist position designed to build and improve GIS capacity and collaboration.
\$274,500

**The Nature Conservancy,
North Carolina Chapter**

Cape Fear Arch Longleaf Initiative — III (NC) Establish 318 acres of longleaf pine and enhance 11,465 acres of existing longleaf habitat through prescribed burning and removal of mid-story hardwoods, and increase potential cavity trees for the endangered red-cockaded woodpecker. Project will expand private landowner and community outreach efforts, including a community event dedicated to increasing awareness of prescribed fire.
\$300,000

University of North Carolina-Wilmington
Youth Education and Student-Engineered
Solutions to the Problem of Derelict Fishing
Nets (NC)

Travel to schools in five coastal counties to deliver interactive STEM curriculum focused on ghost nets and their impacts on marine habitats and organisms such as the North Atlantic right whale. Project will increase student knowledge of ghost nets, improve understanding of their impacts, and inspire students to take action to mitigate the problem through student-engineered solutions as proposed technological innovations.
\$70,631

NORTH DAKOTA

American Bird Conservancy
Enhancing Grasslands Biodiversity and
Productivity in the Northern Great Plains
(MT, ND, SD, WY)

Promote educational opportunities and land stewardship activities in the core of the Northern Great Plains by offering workshops and providing conservation technical assistance, developing conservation plans, assisting private and tribal landowners in enrolling in Farm Bill programs, and coordinating with federal land managers on activities that will enhance habitat for grassland birds while maintaining sustainable land use.
\$230,000

Audubon Dakota
Red River Urban Stewardship Network (ND)

Engage at least 120 students and community members and improve 72.6 acres of habitat for various prairie, water and woodland bird species such as western meadowlark, bald eagle, purple martin, woodpeckers, waterfowl and great blue heron at the Urban Woods and Prairie’s Initiative Nature Park, Lion’s Conservancy in Fargo. Project will establish pollinator plots, reduce invasive species, and promote erosion control along Red River riparian areas.
\$31,249

Ducks Unlimited
Accelerated Conservation Delivery through
Diversified Partnerships in the Northern Great
Plains (ND)

Ducks Unlimited will support and expand an emerging coalition between agricultural groups and conservation partners providing technical assistance capacity to North Dakota landowners interested in voluntary Farm Bill conservation programs and other conservation options that promote a working lands approach. The partnership will influence more than 20,000 acres over two years and assist and engage hundreds of landowners across the state.
\$199,975

Montana Conservation Corps
Great Northern Restoration Project
(MT, ND, SD, WY)

Engage 49 youths to complete sage grouse habitat enhancements through fence removal, road obliteration, native plant restoration and noxious weed removal. Project also will work with the Bureau of Reclamation to engage 38 participants on projects, including Russian olive removal to support restoration of cottonwood galleries and willow stands, and a variety of fencing projects to remove wildlife hazards.
\$83,874

Prairie Pothole Partners
Restoring Native Prairie Habitat for Monarch
Butterflies (ND)

Prairie Pothole Partners will connect existing and previously restored native prairie sites by restoring former cropland to diverse prairie habitat. Project will restore 200 acres and collect 50 pounds of native forb species, including four species of milkweed to use in the restoration.
\$50,000

Rocky Mountain Bird Observatory
Adding Capacity for Stewardship of Private
Lands in the Northern Great Plains
(MT, ND, SD, WY)

Build local capacity to implement on-the-ground conservation by supporting three stewardship biologist positions in three focal areas of the Northern Great Plains. Project will establish public-private conservation partnerships, provide targeted outreach to landowners, and implement grassland-habitat enhancement and restoration projects.
\$230,000

Rocky Mountain Bird Observatory
Outreach Delivery in Sagebrush Ecosystem
(multiple states)

Reprint copies of Pocket Guide to Sagebrush Birds and Pocket Guide to Sagebrush following requests from several federal and state agencies and conservation districts.
\$20,000

The Nature Conservancy
Establishing a Decision Support Tool for
Conservation Priorities in the Missouri River
Headwaters (MT, ND, SD, WY)

Convene resource professionals from federal, state and NGO partners to collect and analyze a variety of data to complete modeling and resulting map products that identify priority watersheds and areas within the Missouri River headwaters and prairies of South Dakota, North Dakota, Montana and Wyoming. Projects will make these maps available to partners, agencies, and area landowners via an online tool.
\$75,000

**U.S. Department of the Interior,
U.S. Fish and Wildlife Service**
Eastern North Dakota Monarch Butterfly
Habitat Restoration

Restore and enhance native grasses, forbs and milkweed on private lands to benefit monarch butterfly breeding habitat. Project will plant approximately 354 acres with a diverse mix of regionally appropriate native forbs and grasses, and implement rotational grazing systems on 3,355 acres of grassland habitat.
\$110,184

World Wildlife Fund
Using the Plowprint to Monitor Grassland
Conversion Across the Northern Great Plains
(MT, NE, ND, SD, WY)

Update and expand geospatial data analysis to evaluate landscape change metrics for the Northern Great Plains ecoregion. Project will use newest and best available data to track rates of agricultural conversion, monitor previously converted lands, and identify risk factors for remaining intact habitat.
\$20,000

OHIO

**Cuyahoga River Community Planning
Organization**
Removing Impervious Surface in the Doan
Brook/Lake Erie Watershed (OH)

Remove approximately 2,000 square feet of impervious parking lot in an underserved neighborhood and replace it with a rain garden of native trees and plants that will reduce stormwater runoff, improve water quality and enhance wildlife habitat in the Doan Brook watershed in Cleveland. Project will train community members to design and implement green infrastructure to create new green spaces and educate residents about the benefits of green infrastructure.
\$30,000

**Cuyahoga Soil and Water Conservation
District**
Mirror Valley Brook Trout Habitat Restoration
(OH)

Enhance road crossings and streambanks to reduce sediment impacts to brook trout habitat, specifically spawning habitat. Project will enhance roadside ditches, road crossings and streambanks to reduce sediment loading to by up to 325 tons per year.
\$50,000

Friends of Ottawa National Wildlife Refuge
Increasing Capacity for the Friends of Ottawa
National Wildlife Refuge (OH)

Improve capacity for volunteer and member management to enhance the organizations strategy and goals. Project will increase the number of members, the visibility of the Refuge, and capacity for the Friends to partner with the Refuge.
\$5,592

Madison SWCD Upper Paint Creek
Mississippi River Basin Technical Assistance
(OH)

Hire one new full-time employee to work with private landowners and operators to adopt voluntary best management practices that reduce sediment and nutrient loading and benefit the aquatic species in Upper Paint Creek and Mississippi River Basin. Project will reduce 7,000 tons of sediment; 6,400 pounds of phosphorus and 20,000 pounds of nitrogen through participation in Upper Paint Creek Mississippi River Basin Initiative.
\$60,000

Metroparks of Toledo District
Toledo East Riverfront Restoration Phase I (OH)

Metroparks Toledo will work with project partners to restore 21 acres of former brownfields along the Maumee River near downtown Toledo. Project will install 48,500 square feet of natural wetlands that will capture 1.2 million gallons of untreated annual stormwater runoff, plant more than 600 trees and restore 1,385 linear feet of degraded Maumee River shoreline.
\$500,000

The Nature Conservancy
Restoring Coastal Wetlands at Toussaint State
Wildlife Area (OH)

Restore and enhance approximately 125 acres of emergent wetlands and lowland shrub wetlands within western Lake Erie’s coastal zone at the Toussaint State Wildlife Area. Project will result in increased water management capacity, invasive species control, habitat management capacity, habitat sustainability, and hydrologic connectivity within a critical Lake Erie coastal wetland.
\$608,811

The Trust for Public Land

Revitalizing Akron’s Summit Lake through Environmental Assessment, Park Planning and Engagement (OH)

Engage 300 community members in assessing, monitoring and developing plans for a 174-acre project site at Summit Lake and its surrounding landscape. Project will revitalize an overgrown area with low water quality and underused access to quality green space for the nearby low-income community, and remediate Akron’s freshwater aquatic habitat resources to benefit largemouth bass, catfish and other species. *\$49,964*

Wildlife Management Institute

Early Successional Wildlife Habitat Technical Assistance in the Great Lakes Basin (MI, MN, OH, PA, WI)

Provide expert technical assistance in the recruitment of private landowners for projects completed under the EQIP program of the Farm Bill to benefit golden-winged warbler, American woodcock and a host of young forest species that depend on early successional habitat. *\$160,000*

OKLAHOMA**American Bird Conservancy**

Oaks and Prairies Joint Venture Grassland Bird Restoration Focus Areas (OK, TX)

Support two grassland bird biologists who will work with existing partner agency and private landowners to provide specific expertise in grassland bird ecology, habitat needs and habitat management to support comprehensive natural resource planning, improve landowner understanding, and conduct habitat and population monitoring. *\$239,963*

George Milksch Sutton Avian Research Center
Attwater’s Prairie-Chicken Captive Breeding Facility (OK)

Construct a dedicated facility in which to breed and condition for release one of the most endangered birds in North America, the Attwater’s prairie-chicken. Project will use a combination of old and progressive, new techniques in hopes to revolutionize future success efforts for gallinaceous birds. *\$1,000,000*

Parks and Wildlife Foundation of Texas
Restoring Grassland Habitat for Species of Greatest Conservation Need on Private Lands in Texas and Oklahoma

Enhance or restore 13,570 acres of habitat for grassland bird species identified as targets in various plans. Project will lead to increasing quality and quantity of grassland habitat for species of greatest conservation need and the development of a publication containing guidelines for best management practices for landowners and operators in Texas and Oklahoma. *\$220,000*

Pheasants Forever

Adding Technical Capacity to Deliver Monarch Practices on Private Lands (multiple states)

Provide technical assistance to private landowners to enroll lands into Conservation Stewardship Program and Environmental Quality Incentives Program. Project will utilize the organization’s Farm Bill biologist team to deliver high-quality monarch butterfly feeding and breeding habitat across eight states. *\$683,980*

Taking Care of Texas

Monarch Butterfly Symposium (OK, TX)

Convene experts and organizations engaged in monarch research and conservation in Texas and Oklahoma to ensure a more comprehensive partner conservation strategy and optimize the effectiveness of recovery efforts. Project will support a symposium of monarch conservation partners and scientists. *\$301,959*

OREGON**Audubon Society of Portland**

Advancing Bird-Friendly Building and Lighting Design in the Portland Area — II (OR)

Build awareness, educate and support for actions to minimize bird collision hazards in the Portland metropolitan region, home to more than 220 species of migratory birds. Project will perform outreach to raise awareness about bird-safe building and lighting design, create an educational curriculum for students and increase public awareness of the issue. *\$50,000*

Caldera

Caldera’s Natural Resource Stewards Program (OR)

Employ four youths and involve 20 volunteers in surveying more than 6,000 acres of invasive plants, removing approximately 2,000 acres of invasive plants, restoring 50 acres of native plants, and restoring 10 miles of trails at Deschutes National Forest along the Metolius River and Whychus Creek. Project will introduce students to conservation professionals and careers, educate them on conservation issues in the region and provide them with skills that may lead to careers in conservation. *\$20,053*

Cascade Pacific RC&D

Create Oregon Dunes Cooperative Weed Management Area and Early Detection Rapid Response Network

Create a cooperative weed management area and early detection rapid response network to conserve the Oregon Dunes. Project will restore 200 acres of targeted habitat, engage more than 40 volunteers, and protect critical habitat for threatened and endangered species, including western snowy plover and sand verbena. *\$82,000*

City of Eugene, Oregon

West Eugene Wetlands Youth Conservation Program (OR)

Employ up to 30 youths to conduct trail maintenance activities and riparian planting of native species such as California black oak, snowberry, Douglas spirea, and common camas in the West Eugene Wetlands. Project will restore 53 acres of land by focusing on treating woody vegetation encroachment and invasions of Himalayan blackberry and Scotch broom, two species which expand rapidly and dramatically change the nature of prairies from grass and forb-dominated to shrub-dominated. *\$75,000*

Coos Watershed Association

Natural Resource Youth Leaders in the Coos Watershed (OR)

Employ at least 18 at-risk youths to maintain 37 acres at local restoration sites, build and repair fences, maintain trails, remove trash, collect data, maintain a native plant nursery and remove 10 acres of invasive species in Coos County. Project will focus on monitoring salmon life cycles, watershed restoration, forestry practices, sustainable resources, and plant identification to improve watershed health, train youth in natural resource and restoration focused work. *\$49,442*

Coquille Watershed Association

Coquille Wetland Livestock Exclusion and Native Species Establishment (OR)

Restore fish access to 1.3 stream miles of low-gradient floodplain stream, create a small wetland complex and improve off-channel, over-wintering habitat for Oregon coastal coho in designated critical coho habitat in southern Oregon’s Coquille River. Project will install 6,000 feet of wildlife-friendly, livestock-exclusion fencing and plant 2,000 native species. *\$31,075*

Environment for the Americas

Celebrate Birds: Latino Youth in Avian Conservation and Education (AK, CA, CO, OR, WA)

Introduce underrepresented Latino youths to careers in natural resources while restoring 9 acres of habitat. Project will engage youth in migratory bird research to increase their knowledge of science, scientific studies, and research protocols along the west coast from California to Alaska. *\$69,000*

Farallon Institute

California Current Seabird and Forage Fish Conservation Initiative (CA, OR, WA)

Provide critical information and work closely with the National Marine Fisheries Service to ensure it is part of new stock assessment and management strategy evaluation efforts for anchovy. *\$250,000*

Friends of Malheur

National Wildlife Refuge

Enhancing Visitor Opportunities at Malheur National Wildlife Refuge (OR)

Enhance visitor center space to provide environmental and cultural educational opportunities. Project will increase volunteer participation and improve the Friends ability to assist with the goals of the National Wildlife Refuge System. *\$13,625*

Friends of the Willamette Valley National Wildlife Refuge Complex

Creating an Outdoor Environmental Education Experience at William L. Finley National Wildlife Refuge (OR)

Repurpose a popular trail to create an outdoor environmental education destination in rare native habitat types. Project will include bilingual environmental education stations, habitat interpretation and a sheltered observation pavilion where refuge visitors and visiting school groups can interact with and learn about conserving valuable valley wildlife, habitats and ecosystems. *\$15,000*

North Fork John Day Watershed Council
Grant County Youth Bat Surveys (OR)

Engage 45 students in a bat monitoring project designed to collect data on bat colonies and populations on 18 acres in the Blue Mountains of Oregon, specifically at Wollowa-Whitman National Forest, Umatilla National Forest, and Malheur National Forest. Project will collect important data to help restore bat populations, which have been declining due to white nose syndrome. *\$24,650*

Oregon Museum of Science and Industry
Willamette Riverbank Riparian Habitat Restoration and Management (OR)

Restoring a half-mile section of shoreline at the Oregon Museum of Science and Industry located on the Willamette River in Portland. Project will develop a riverbank restoration and management plan, remove invasive plants and planting natives, engage community members with restoration and volunteer events and develop riparian habitat and water quality demonstrations at the museum. *\$49,971*

Oregon State University
Estimating Survival of Captive-Reared, Endangered Suckers in Upper Klamath Lake (OR)

Monitor the release of captive-reared, endangered Lost River and shortnose sucker populations through radio tagging, boat surveys, aerial surveys and fixed-location receivers in Upper Klamath Lake. Project will provide the data necessary to estimate survival and determine the level of production necessary to sustain their populations in the lake. *\$400,000*

Phoenix School of Roseburg

Roseburg Bureau of Land Management Umpqua Natural Resources Pathway (OR)

Employ 12 youths who will perform green infrastructure improvements, conduct 4 miles of in-stream restoration, remove 12 acres of invasive weeds, and conduct technical field surveys related to ecosystem restoration planning and wildlife habitat monitoring. Project will enroll youths in a field science college course and learn career-specific skills in the natural resources field. *\$39,047*

Rocky Mountain Bird Observatory
Outreach Delivery in Sagebrush Ecosystem (multiple states)

Reprint copies of Pocket Guide to Sagebrush Birds and Pocket Guide to Sagebrush following requests from several federal and state agencies and conservation districts. *\$20,000*

San Francisco Estuary Institute
Klamath Basin Monitoring Program

Coordination and Member Support (CA, OR)

Provide assistance with data sharing, quality-control standards for monitoring, and support for restoration efforts led by Klamath Basin Monitoring Program members. Project will continue and expand critical program coordination and member support. *\$66,877*

The Freshwater Trust

Upper Sandy River Basin Habitat Restoration (OR)

Benefit salmon and steelhead in the Sandy River basin by accelerating the recovery of naturally functioning conditions within the stream channels and floodplain areas of Salmon River and Still Creek. Project will reactivate flow to five historic side channels, construct 31 large wood habitat structures, place boulders, and place additional large wood in side channels and on stream margins. *\$87,814*

The Wetlands Conservancy

Kellogg Creek Wetland Restoration and Community Planning and Outreach (OR)

Restore 23.4 acres of existing wetland habitat at Hearthwood and Minthorn preserves and identify 10 acres of new wetland enhancement and creation projects. Project will build community interest and involvement in improving the ecological functions of Kellogg Creek through field trips, community forums, citizen science and information exchanges. *\$34,072*

Trout Unlimited

Butte Creek Mill Hydropower Water Rights Lease (OR)

Secure a one-year instream lease of 22.62 to 24.40 cubic feet per second of the very senior Butte Creek Mill hydropower water right on Little Butte Creek, a tributary to the Rogue River, benefiting SONCC coho salmon and Chinook salmon. Project will protect the instream flow from upstream diversion by the Medford/Rogue River Valley Irrigation District and will lead to a permanent deal to transfer the acquired water right instream by 2019 for the benefit of anadromous and resident fish on Little Butte Creek. *\$3,300*

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

Integration of Novel Grazing Practices with Salmonid Restoration on Public Range Allotments (OR)

Implement, monitor and evaluate a novel but practical set of cattle grazing practices for integration with stream and riparian restoration activities to support recovery of threatened steelhead and Chinook salmon in a long-term restoration experiment. Results will be relevant to management of millions of acres of public range allotments in the Western United States, where salmonid recovery is a primary goal and cattle grazing is a dominant land use. *\$62,496*

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

Interagency e-DNA Database of Fish Distributions (multiple states)

Develop a large environmental DNA database, website and digital tools to coordinate monitoring and promote information exchange among all agencies of aquatic species in rivers and streams in the Western United States. Project will support development of models and maps showing distributions of native and invasive species to provide decision support for strategic investment strategies related to environmental stressors, habitat degradation, invasive species, and preservation of native species. *\$89,362*

Washington Recreation
and Conservation Office

Columbia Basin States Cooperative Weed Management Area (ID, MT, OR, WA, WY)

Establish a Cooperative Weed Management Area to address invasive plants in the Columbia River Basin. Project will bring together tribal, state, federal, provincial, and nongovernmental organizations to focus on developing early detection and rapid response plans for cross-boundary invasive plant species. *\$65,000*

Willamette Partnership**Jade District Greening (OR)**

Build systems needed to move from five to eight initial community greening action projects to a scale that will reduce exposure to pollutants and improve water quality in East Portland’s Jade District. Project will build community capacity to engage in restoration and create a framework to track and communicate the development and environmental benefits of tree canopy and greenspaces.
\$29,976

PENNSYLVANIA**Alliance for the Chesapeake Bay****Supporting Local Governments and Diverse Partners to Restore the Chesapeake Bay (multiple states)**

Enhance networking and information sharing activities to advance watershed restoration efforts. Project will engage nearly 6,000 individuals representing watershed organizations and local governments within the Chesapeake Bay Watershed through an annual Chesapeake Watershed Forum, a Local Government Forum, regional forums and an online networking tool.
\$140,000

American Bird Conservancy**Restoring Dynamic Forest Structure for Priority Birds in the Delaware River Watershed (PA)**

Develop and implement a comprehensive forest management strategy for two dynamic forest restoration blocks in the Pocono Mountains that targets the long-term availability of diverse forest age classes. Project will benefit the entire reproductive cycle of golden-winged warbler, cerulean warbler and wood thrush.
\$74,513

American Farmland Trust**Women for the Land: Voices for Soil and Water Conservation in the Chesapeake Bay Watershed (PA, VA)**

Provide direct on-farm technical assistance to graduates of American Farmland Trust’s Women for the Land’s Learning Circles for conservation of the Chesapeake Bay. Project will provide one-on-one assistance to 20 women landowners, implement nutrient and pasture management plans and 10 livestock exclusions.
\$195,056

Brandywine Conservancy and Museum of Art Feasibility Assessment for Improving Stormwater Management in the Plum Run Watershed (PA)

Conduct a feasibility assessment that will develop a suite of stormwater management techniques and conduct outreach within the upper reaches of the Plum Run. Project will educate 400 people and four municipalities on identifying and prioritizing green stormwater infrastructure.
\$67,246

Brandywine Conservancy and Museum of Art Oxford Region Multi-Municipal Stormwater Management Program (PA)

Develop a regional stormwater management program to help restore and protect impaired local streams and the Chesapeake Bay. Project will assess existing stormwater management strategies and identify and prioritize implementation of best management practices to meet water quality goals.
\$44,502

Brandywine Red Clay Alliance**Stream and Buffer Restoration of the Plum Run (PA)**

Restore 5,100 feet of Plum Run, an impaired stream, using stream bank stabilization, in-stream structures and a buffer to achieve water quality standards.
\$182,687

California University of Pennsylvania Sampling Unassessed Waters in Southwestern Pennsylvania for the Presence of Brook Trout

Document the status of eastern brook trout populations in at least 20 streams in southwestern Pennsylvania that have never been assessed. Project will provide data to the state that will be used to designate, as appropriate, streams as a Class A wild trout stream, which indicates exceptional water quality and provides a higher level of protection from development activities.
\$5,480

Center for Aquatic Sciences**Building Awareness of the Positive Role of Industry Investments in Conservation (PA)**

Educate the public on the issue of marine debris through youth-led programming to promote positive stewardship behavior. Project will engage underserved youth in STEM learning, increase visitation of the Philadelphia area’s Adventure Aquarium and highlight the role of industry as a partner in conservation.
\$24,171

Center for Watershed Protection**Capital Region Council of Governments-Based Regional Stormwater Program (PA)**

Assist the Capital Region Council of Governments in building a regional approach to managing and delivering MS4-related programs. This project will focus on the priority areas that include an increased ability to track, monitor and manage stormwater management programs and assets.
\$49,575

Cheltenham Township**Pervious Parking and Stormwater Management at Curtis Arboretum (PA)**

Reduce runoff and improve water quality at Curtis Arboretum by implementing 3.25 acres of managed native grass and wildflower meadows and installing porous pavement on an expanded visitor parking area. Project will result in 4.50 acres of best management practices for stormwater runoff.
\$100,000

City of Lancaster**Increasing Tree Canopy in Lancaster (PA)**

Plan and coordinate a citywide tree-planting campaign in Lancaster to increase the urban tree canopy. Project will improve water quality in the Conestoga River Watershed and inform public about trees and their benefits to encourage increased planting.
\$31,650

Conservation Foundation of Lancaster County**Partnership for Accelerated Water Quality Efforts in Lancaster County (PA)**

Facilitate a public-private partnership to accelerate nutrient loading reduction in Lancaster County’s waters, the region contributing Pennsylvania’s highest nutrient loadings to the Chesapeake Bay. Project will create a focused, concentrated and accelerated effort to address water quality in Lancaster County by bringing partners and programs into collaboration resulting in a county collaborative with enhanced efforts, resources and framework that will have a greater impact on water quality.
\$750,000

Groundwork Elizabeth**Gifford Pinchot’s Legacy Developing the Next Generation from Grey Towers to Urban Frontiers (NJ, PA)**

Engage 36 volunteers and 12 youths from economically diverse and challenged urban communities through removal of invasive plants, trail drainage, waterbars and trail brushing. Project will educate youths about habitat restoration and potential careers in conservation.
\$35,446

Indiana University of Pennsylvania Research Institute**Identifying Populations of Eastern Brook Trout in Tributaries of the Upper Allegheny River (PA)**

Survey at least 40 previously unassessed streams in the Upper Allegheny River and Sandy Lick Creek watersheds for wild trout populations, especially eastern brook trout. Project will submit survey data to the Pennsylvania Fish and Boat Commission to be used by the state of Pennsylvania, if appropriate, to provide additional protection from development activities.
\$11,998

John Bartram Association**Returning to the River: Youth-Powered Scholarship on the Schuylkill (PA)**

Advance wetland, riparian and coastal habitat restoration along a half-mile stretch of riverfront at Schuylkill River, the city’s only natural tidal wetlands. Project will provide community engagement, education and stewardship, including providing 10 underserved youths with paid positions that involve water quality monitoring and stormwater management responsibilities.
\$33,539

Juniata College**Detecting Eastern Brook Trout Populations in the Trough, Standing Stone and Moshannon Basins (PA)**

Sample at least 20 previously unassessed streams in the Trough, Standing Stone and Moshannon watersheds for the presence of eastern brook trout and other wild trout. Project will engage students in the field, and the data collected will be used by the state to designate, if appropriate, streams as supporting the natural reproduction of trout, which provides additional protection from development.
\$5,864

Kettle Creek Watershed Association**Kettle Creek Nonpoint Source Sediment Reduction and Riparian Reforestation (PA)**

Construct two streambank stabilization projects and one riparian planting project along Kettle Creek. Project will utilize designs and permits completed by Trout Unlimited.
\$43,662

Lancaster Farmland Trust**Long-term Pollution Reduction via Permanent Protection of Farmland and Conservation Practices (PA)**

Place 310 acres under long-term easement and annually remove 127,900 pounds of sediment, 9,611 pounds of phosphorus and 36,988 pounds of nitrogen from local waters through enhanced nutrient management. Project will implement an innovative approach to water quality improvement that couples two proven strategies: the permanent protection of farmland and the implementation of conservation practices on farmland.
\$490,713

Land Trust Alliance**Chesapeake Land & Water Initiative (multiple states)**

Deploy an integrated and innovative approach to accelerate permanent land protection for water quality across the Chesapeake Bay watershed. Project will enhance stewardship strategies with land trusts, watershed groups, state land trust associations, and other conservation and civic partners.
\$150,000

Lock Haven University**Surveying Unassessed Streams for Eastern Brook Trout in North Central Pennsylvania**

Sample at least 20 streams for the presence of eastern brook trout within a 50-mile radius of Lock Haven. Project will collect data on eastern brook trout populations that will be used by the state to designate, as appropriate, streams as Class A wild trout streams, which provides a greater level of protection from future development.
\$5,228

Lock Haven University**Testing Polyethylene Glycol to Combat White-Nose Syndrome (PA)**

Test Polyethylene Glycol 8000 (PEG), a polyether compound used to control fungal plant pathogens causing white-nose syndrome in Pennsylvania. Project will evaluate the capacity of PEG to inhibit the pathogen’s growth in bat hibernacula; the effectiveness of environmental application of PEG in reducing fungal and infection load on bats; and non-target effects of PEG application.
\$91,795

Lycoming College**Sampling for Eastern Brook Trout in Tributaries of the Pine Creek Drainage (PA)**

Sample at least 40 streams in the Pine Creek drainage in Tioga and Potter counties for the presence of eastern brook trout and other wild trout. Project will collect fish, chemistry, and spatial data, and the data will be submitted to the state for review and potential listing as a Class A wild trout stream, which provides a greater level of protection from development.
\$8,038

Marietta Borough**Marietta Region Green Action Plan (PA)**

Provide a regional, watershed-based approach to prioritize and implement stormwater best management practices that will improve water quality. Project will provide regional solutions to improve water quality and address flood mitigation associated with stormwater runoff.
\$46,630

Maryland Department of Natural Resources**Strengthening the Impact of Riparian Forest Buffers on Water and Habitat Quality (MD, PA, VA, WV)**

Improve outreach and management of forest buffers and natural filters in the Chesapeake Bay Watershed, capitalizing on the region’s networks and providing focused leadership to advance landscape-based implementation and community outreach. Project will plant more than 200 acres of trees through the implementation of forest buffers, backyard buffers, and community tree planting.
\$325,273

Mid-Atlantic 4R Nutrient Stewardship Association**Increasing Farmer Adoption of Nutrient Stewardship Practices (DE, MD, PA)**

Accelerate the implementation of 4R Nutrient Stewardship practices (right nutrient source applied at the right rate, at the right time, and in the right place) in key watersheds in the Chesapeake Bay.
\$401,424

Mifflin County Conservation District**Increased Implementation of Comprehensive Riparian Buffer Models in the Juniata River Basin (PA)**

Install riparian-specific best management practices through innovative methods and a diversity of programs to improve water quality in the Juniata River Basin. Project will reach new audiences to implement 2.5 miles of riparian restoration through livestock exclusions fencing, instream habitat restoration and riparian forest buffer installations.
\$173,971

National Audubon Society**Philly Wild: Developing a Corridor of Habitat (PA)**

Enhance 15 acres of habitat through educating and engaging 2,700 people in habitat projects, creating a corridor of pockets of habitat in Southwest and West Philadelphia. Project will plant 1,500 trees and shrubs, remove invasive plants, enhance a riparian buffer along 1 mile of stream and engage community in stewardship of water resources.
\$49,437

National Audubon Society**Western PA Business Plan for Restoration of Healthy Forests and Freshwater Habitat (PA)**

Advise the geographic planning process of the Richard King Mellon Foundation’s “Western Pennsylvania Business Plan for Restoration of Healthy Forests and Freshwater Habitat” plan. Project will develop an implementation plan for each of the 11 focal geographies that collectively will achieve the goals and objectives defined in the plan.
\$50,000

North Jersey RC&D Area**Streamlined Conservation Partner Planning Tool (NJ, NY, PA)**

Develop a user-friendly conservation planning tool that will help field staff, landowners and producers understand and implement conservation practices more effectively. Project will build capacity of partner agencies to use the planning and assessment tools.
\$60,000

Pennsylvania Department of Conservation and Natural Resources**Stream ReLeaf: Reinvigorating the Replanting of Pennsylvania’s Streamsides**

Formalize the Riparian Forest Buffer Advisory Committee, a collaborative effort of more than 40 organizations in Pennsylvania, in order to realize efficiencies in riparian forest buffer outreach, technical assistance and implementation. Project will dramatically increase riparian forest buffer implementation in the Chesapeake Bay Watershed Region of Pennsylvania, resulting in significant reductions of nutrient and sediment pollution flowing from Pennsylvania into the Chesapeake Bay.
\$750,000

Partnership for the Delaware Estuary**Middle Schuylkill Agricultural Restoration Initiative to Implement Best Management Practices (PA)**

Implement whole-farm agricultural best management practices, attract and educate additional farmers on the importance of conservation stewardship, engage new and innovative partners and improve surface water quality in three watersheds in Berks County. Project will provide technical assistance to 20 farmers, provide outreach to 600 individuals and restore 2.5 miles of riparian buffers. **\$500,000**

Pennsylvania State University**Surveying Central Pennsylvania Streams for the Presence or Absence of Eastern Brook Trout Populations (PA)**

Survey at least 40 previously unassessed streams for the presence of eastern brook trout. Project will provide data to the state that will be used to designate, as appropriate, streams as a Class A wild trout stream, which provides a greater protection from development. **\$11,500**

Pittsburgh Parks Conservancy**McKinley Park: The Urban Forest for Ecological Restoration, Education and Community Engagement (PA)**

Complete a baseline survey of the diversity, distribution and health of 35 acres of woodland in McKinley Park, which will support the development of a forest map, a list of priorities and an ecological restoration plan. Project will include park-based environmental education for children attending summer camp and hands-on training for high school students and adults in workforce development programs. **\$35,000**

Rettew Associates**Evaluating the Capacities of MS4 Municipalities to Implement a Regional Pollution Reduction Plan (PA)**

Evaluate the technical and administrative capabilities of MS4 municipalities located in the Cocalico Creek Watershed to administer and implement a regional PRP. Project will include a detailed analysis of the strengths, weaknesses, opportunities and challenges inherent in each municipality, which will be used to establish the framework that builds the administrative and technical capacity of the regional partnership. **\$47,779**

Spring Creek Chapter of Trout Unlimited**Improve Water Quality and Aquatic Habitat in Spring Creek Watershed (PA)**

Implement restoration projects at three sites throughout the Spring Creek Watershed, restoring 1.12 miles of streambank and 4.29 acres of riparian habitat. Project will restore the habitat needed to support a self-sustaining, wild eastern brook trout and brown trout fishery in the watershed and improve downstream water quality. **\$160,700**

Stroud Water Research Center**Agricultural Best Management Practices in the Brandywine-Christina (PA)**

Provide outreach, technical and financial assistance to landowners to plan and implement whole farm best management practices, leverage state and federal sources for costs, and offer vouchers for forested buffers in the Christina River basin. Project will engage up to 60 farmers and community leaders about agricultural best management practices, restore 1.5 miles of riparian habitat and restore 3 acres of wetlands that will result in reduced pollutant loads and improved water quality. **\$150,000**

Stroud Water Research Center**Partnering for Accelerated Agricultural Best Management Practices in South-Central Pennsylvania (PA)**

Partner with major nongovernmental organizations and the private agricultural services sector to deliver agricultural best management practices in south-central Pennsylvania, prioritizing subwatersheds in Lancaster and Chester counties, to improve local and Chesapeake Bay water quality. Project will result in 24 farms installing nearly 200 best management practices, including 14.6 acres of forested buffers. **\$749,945**

Stroud Water Research Center**Western Pennsylvania Business Plan for Restoration of Healthy Forests and Freshwater Habitat**

Develop an implementation plan for each of the 11 focal geographies that collectively will achieve the goals and objectives defined in the “Western Pennsylvania Business Plan for Restoration of Healthy Forests and Freshwater Habitat.” Project coordinate efforts for the development of these 11 implementation plans, working with Richard King Mellon Foundation and other organizations. **\$50,000**

Susquehanna University**Detecting Eastern Brook Trout Presence in Susquehanna River Tributary Streams (PA)**

Sample at least 40 tributary streams to the Susquehanna River for the presence of eastern brook trout and other wild trout. Project will provide data to the state that will be used to designate, as appropriate, streams as a Class A wild trout stream, which provides a greater protection from development. **\$12,010**

Sustainable Chesapeake**Pennsylvania Subsurface Application of Manure Initiative**

Demonstrate an innovative financing strategy that incentivizes custom applicators to invest in new equipment and encourage manure injection to reduce nutrient loss to streams in the Chesapeake Bay watershed in the South Central Susquehanna Basin. **\$199,031**

The Trust for Tomorrow**Restoring the Impaired Headwaters of a High-Quality Trout Stream (PA)**

Improve water quality and Eastern brook trout habitat in Plum Creek on agricultural lands in Pennsylvania through the implementation of stream and wetland restoration, agricultural best management practices, riparian buffer restoration and nutrient management planning. Project will result in reduced agricultural pollution, restored high quality aquatic habitat and targeted technical assistance to landowners. **\$196,209**

Tioga County Conservation District**Bringing Back Eastern Brook Trout Through Bank Stabilizations (PA)**

Implement bank stabilization projects for a minimum of 2,000 feet and install a minimum of 2 acres of riparian buffer to reduce sediment and nutrient transport downstream of the Canoe Camp Creek. Project will lead to the recolonization of the eastern brook trout. **\$84,330**

Tioga County Soil and Water Conservation District**Building Upon an Integrated Watershed Approach (NY, PA)**

Integrate efforts across the watershed focusing on three key “implementation focus areas”: agriculture, streams and wetlands. Program participants will work with a suite of modeling tools to identify areas for buffers, wetland restoration and floodplain enhancement work in riparian corridors based on high-resolution land cover data. **\$877,210**

Trout Unlimited**Aquatic Connectivity and Nonpoint Source Pollution at Road-Stream Crossings (PA)**

Collaborate among partnering agencies and organizations to successfully and cost-effectively increase aquatic connectivity for eastern brook trout and reduce sediment pollution and road-stream crossings. Project will open 15 miles of brook trout habitat by replacing three culverts. **\$195,418**

Trout Unlimited**Assessing Eastern Brook Trout Presence in the Clearfield and Chest Creek Watersheds (PA)**

Complete 40 fishery surveys on previously unassessed streams within the Clearfield Creek and Chest Creek watersheds of western Pennsylvania to determine the presence of native eastern brook trout. Project will provide data used by the state to designate Class A wild trout waters that receive additional protection from development, while also providing an educational experience and technical training for three college interns. **\$13,093**

Trout Unlimited**Completing Road/Stream Crossing Assessments in the Delaware River Watershed (PA)**

Complete a minimum of 130 assessments of road-stream crossings for aquatic organism passage that are encountered while completing the Unassessed Waters Initiative eastern brook trout surveys in the Delaware River basin. Project will prioritize culvert replacements that will most improve aquatic connectivity in critical watersheds of Pennsylvania. **\$8,867**

Trout Unlimited**Eastern Brook Trout Surveys in the Black Creek, Lehigh River and Aquashicola Creek Watersheds of the Delaware River Basin (PA)**

Carry out at least 75 fishery surveys for Eastern brook trout on previously unassessed streams within the Lackawaxen River, Johnson Creek, Aquashicola Creek, Pohopoco Creek, Lehigh River, Jordan Creek, Ontelaunee Creek and Black Creek watersheds of Pennsylvania. Project will provide data used by the state to designate Class A wild trout waters that receive additional protection from development. **\$21,997**

University of Maryland Environmental Finance Center**Financing Plan for Regional Stormwater Management in Lebanon County (PA)**

Work with the participating communities of the Lebanon County Clean Water Alliance to develop a financing strategy to support the implementation of their shared Chesapeake Bay Pollution Reduction Plan recently developed by the Center for Watershed Protection. **\$50,000**

University of Maryland Environmental Finance Center**Financing Plan for Regional Stormwater Management in the Oxford Region (PA)**

Develop a five- to 10-year strategy for financing a regional stormwater management plan involving six-municipalities in the Oxford Region of Chester County. Project will set out arrangements and guidance for funding the implementation of the stormwater plan in an equitable and cost-effective manner. **\$49,927**

U.S. Department of the Interior,**U.S. Forest Service****Development of Ultra-Violet Light as a Treatment for White-Nose Syndrome in Bats (PA, WI)**

Test whether UV light may be used to selectively kill the fungal pathogen causing white-nose syndrome while minimizing impacts to normal skin microbes found on bats in Wisconsin and Pennsylvania. Project will assess if UV light, which has already been shown to be a DNA-damaging agent to the pathogen, is a cost-effective control strategy for increasing survival of WNS-affected bats. **\$155,946**

Western Pennsylvania Conservancy**Detecting Presence of Eastern Brook Trout in Sinnemahoning Creek, Upper Allegheny and Wills Creek Watersheds (PA)**

Sample at least 40 previously unassessed streams in several priority watersheds around the Allegheny National Forest, Sinnemahoning Creek and Wills Creek. Project will determine whether eastern brook trout and other wild trout are present. Project data will be used by the state to designate, as appropriate, the streams as Class A wild trout streams, which offers a higher level of protection from development. **\$12,000**

Western Pennsylvania Conservancy**Road/Stream Crossing Assessments in Priority Watersheds of Western Pennsylvania**

Assess the condition of as many road/stream crossings as possible in designated priority watersheds for eastern brook trout identified by the Pennsylvania Fish and Boat Commission. Project will provide data to the North Atlantic Aquatic Connectivity Collaborative database and will be used to prioritize sites for future culvert replacements that improve aquatic connectivity for wild trout populations. **\$5,000**

Western Pennsylvania Conservancy**Protection of Critical Habitat and Water Quality in the Chesapeake Bay Watershed (PA)**

Permanently protect 750 acres of land, with significantly higher acreage numbers possible, to protect critical habitat and water quality through conservation easements and fee acquisitions within the Chesapeake Bay Watershed in Pennsylvania, an impaired area due to agricultural operations. **\$199,173**

Western Pennsylvania Conservancy**Western PA Business Plan for Restoration of Healthy Forests and Freshwater Habitat (PA)**

Assist in developing an implementation plan for each of the 11 focal geographies that collectively will achieve the goals and objectives defined in the “Western Pennsylvania Business Plan for Restoration of Healthy Forests and Freshwater Habitat.” Project will develop the forest and aquatic habitat targeting for each plan and develop the protocol for post-project aquatic monitoring. **\$50,000**

Wildlife Management Institute**Early Successional Wildlife Habitat Technical Assistance in the Great Lakes Basin (MI, MN, OH, PA, WI)**

Provide expert technical assistance in the recruitment of private landowners for projects completed under the EQIP program of the Farm Bill to benefit golden-winged warbler, American woodcock and a host of young forest species that depend on early successional habitat. **\$160,000**

Williamsport Sanitary Authority**Stormwater Management Program Development Project (PA)**

Determine all stormwater management services currently being provided within Williamsport and identify a desired level of service. Project will establish an equivalent residential unit based on the ratio of permeable to impermeable surface for all residential, commercial and nonprofits within the city of Williamsport. **\$50,000**

RHODE ISLAND**Abt Associates****Monitoring Hurricane Sandy Coastal Resiliency Program’s Socioeconomic Northeast Impacts (multiple states)**

Conduct socioeconomic monitoring for 38 Hurricane Sandy coastal resiliency projects throughout the Northeast from Virginia to Maine. Project will measure and advance the state of knowledge around coastal resilience’s socioeconomic impacts on human health and safety, property and infrastructure protection and enhancement, and community resilience. **\$2,242,026**

Partnership for Providence Parks**Providence Urban Bird Treaty (RI)**

Enhance urban habitat for birds, including restoration of 2 acres of habitat at Moses Brown Schoolyard by removing invasive plants, trash and debris, and planting native vegetation at Providence Parks in Providence. Project will engage 340 community volunteers in bird-focused citizen science projects, enhance the environmental education opportunities for underserved youths and increase awareness of migratory birds throughout the metropolitan area. **\$49,358**

The Nature Conservancy**Restoring Aquatic Passage for River Herring and Other Diadromous Fish on the Pawtucket River (RI)**

Decrease flooding and restore fish passage in the Pawcatuck River for American shad, American eel and river herring. Project will create a fishway in place of Bradford Dam, opening up 77 miles of upstream habitat and providing fish access to close to 2,000 acres of historic spawning and nursery areas. **\$158,624**

U.S. Department of the Interior,**U.S. Fish and Wildlife Service, Region 5****Assessing the Ecological Effectiveness of Hurricane Sandy Northeast Marsh Restoration Projects (multiple states)**

Measure the ecological effectiveness for 23 innovative marsh restoration sites. Project will contribute data critical for the assessment of these new marsh restoration techniques’ ecological benefits and cost-effectiveness. **\$2,600,000**

U.S. Department of the Interior, U.S. Fish and Wildlife Service — Region 5 Ecological Monitoring of Hurricane Sandy Aquatic Connectivity Sites (CT, MA, MD, NJ, RI)
Monitor ecological resilience changes at nine aquatic connectivity sites in the Northeast. Project will contribute crucial knowledge that will be used to improve aquatic connectivity system cost-effectiveness and functionality. **\$2,882,850**

SOUTH CAROLINA

Chesterfield County Soil and Water Conservation District Sandhills Longleaf Pine Conservation — V (SC)
Establish or enhance 3,500 acres of longleaf pine habitat through implementation of existing Environmental Quality Incentive Program contracts and technical assistance. Project will seed 25 acres, burn 500 acres on private lands and facilitate the development of a long-range longleaf conservation plan. **\$292,500**

Manomet American Oystercatcher Aerial Survey and Population Recovery along the Atlantic Flyway (multiple states)
Estimate the current population of American oystercatchers via a cooperative aerial and ground survey with partners in the American Oystercatcher working group. Project will contribute directly to the overall goals of increasing the population size of American oystercatchers within the United States by 30 percent between 2009 and 2019, while contributing to the conservation of associated beach nesting and migratory shorebirds. **\$200,000**

National Audubon Society Managing Human Disturbance on Shorebirds along the Atlantic Coast (multiple states)
Produce a framework to improve the effectiveness of disturbance reduction strategies for the Atlantic Flyway. Project will bring together partners from Canada to Florida to provide shorebird site managers with best management practices for managing human disturbance, along with essential tools and key indicators for measuring progress along the Atlantic Flyway. **\$200,000**

The Longleaf Alliance Coordinating Local Implementation Team Capacity and Landowner Technical Assistance and Outreach — III (multiple states)
Support the Longleaf Implementation Team Consul role, which helps accelerate coordination and exchange of information among 17 multi-partner local implementation teams that organize, plan and deliver conservation actions to restore and enhance the longleaf pine ecosystem. Project will also support a new GIS Specialist position designed to build and improve GIS capacity and collaboration. **\$274,500**

The Longleaf Alliance Red-cockaded Woodpecker Private Lands Conservation Initiative – II (SC)
Translocate red-cockaded woodpeckers from the Francis Marion National Forest to private properties enrolled in South Carolina’s safe harbor program. Project will translocate up to 20 woodpeckers to three to five properties, improving the size and demographic stability of the targeted populations. **\$107,782**

The Longleaf Alliance South Lowcountry-ACE Basin Longleaf Ecosystem Restoration Partnership (SC) — IV
Educate private landowners through workshops and academies, assist in longleaf planting and management through fire and herbicide treatments, and restore populations of gopher tortoises and red-cockaded woodpeckers through management assistance. Project will establish 400 acres of new longleaf and burn 1,700 acres of existing longleaf habitat. **\$250,000**

The Nature Conservancy, South Carolina Sewee Longleaf Restoration and Enhancement (SC)
Support the Sewee Longleaf Conservation Cooperative through longleaf restoration, prescribed fire outreach and education, longleaf mapping and strategic planning, and wildlife population surveys. Project will plant 100 acres of longleaf seedlings on private and public lands, conduct 50 acres of understory treatment, and improve 36,900 acres of existing longleaf pine habitat with prescribed fire. **\$250,000**

SOUTH DAKOTA

American Bird Conservancy Grasslands Biodiversity and Productivity in the Northern Great Plains (MT, ND, SD, WY)
Promote educational opportunities and land stewardship activities in the core of the Northern Great Plains by offering workshops and conservation technical assistance, developing conservation plans, assisting landowners in enrolling in Farm Bill programs, and coordinating with federal land managers while maintaining sustainable land use. **\$230,000**

Lower Brule Sioux Tribe Conserving Prairie Wildlife in Central South Dakota
Continue a partnership with federal, state and nongovernment agencies to conserve prairie wildlife species of concern. Project will include species monitoring, data management and analysis, management recommendations, outreach and assistance to tribal producers, and capacity building and retention. **\$362,454**

Montana Conservation Corps Great Northern Restoration Project (MT, ND, SD, WY)
Engage 49 youths to complete sage grouse habitat enhancements through fence removal, road obliteration, native plant restoration and noxious weed removal. Project also will work with the Bureau of Reclamation to engage 38 participants on projects, including Russian olive removal to support restoration of cottonwood galleries and willow stands, and a variety of fencing projects to remove wildlife hazards. **\$83,874**

Rocky Mountain Bird Observatory Adding Capacity for Stewardship of Private Lands in the Northern Great Plains (MT, ND, SD, WY)
Build local capacity to implement on-the-ground conservation by supporting three stewardship biologist positions in three focal areas of the Northern Great Plains. Project will establish public-private conservation partnerships, provide targeted outreach to landowners, and implement grassland habitat enhancement and restoration projects. **\$230,000**

Rocky Mountain Bird Observatory Outreach Delivery in Sagebrush Ecosystem (multiple states)
Reprint copies of Pocket Guide to Sagebrush Birds and Pocket Guide to Sagebrush following requests from several federal and state agencies and conservation districts. **\$20,000**

SD Cattlemen’s Association Feasibility Study for an Agricultural-based Land Trust in South Dakota
Identify the best way to proceed with initial implementation of a nonprofit land trust to address this gap for South Dakota’s agricultural landowners. Project will address high grassland conversion rates in South Dakota and conduct a feasibility study and initial implementation of an agricultural land trust, which will provide landowners with a new conservation tool and a vehicle for land conservation funding. **\$100,000**

South Dakota Grassland Coalition Enhancing Rangeland Ecology by Improving Ranch Management Options (SD)
Focus on infrastructural and land improvement tools to improve management of land within the grasslands of western South Dakota. Project will work with a minimum of 14 private landowners to improve habitat on a minimum of 12,100 acres through long-term conservation agreements and will include habitat improvement techniques such as fencing and water development for grazing. **\$199,755**

South Dakota State University Identifying Native Habitats in the Dakota Grassland Focus Area of Western South Dakota
Implement a land-use inventory project focused on identifying native land tracts within and near the Dakota, Sandhill and Powder River-Thunder Basin Grassland regions of western South Dakota. Project will result in accurate identification of western South Dakota lands with a high probability of being truly native habitat and has the potential to dramatically impact public and private conservation planning and prioritization. **\$100,000**

The Nature Conservancy Establishing a Decision Support Tool for Conservation Priorities in the Missouri River Headwaters (MT, ND, SD, WY)
Convene resource professionals from federal, state and NGO partners to collect and analyze a variety of data to complete modeling and resulting map products that identify priority watersheds and areas within the Missouri River headwaters and prairies of South Dakota, North Dakota, Montana and Wyoming. Projects will make these maps available to partners, agencies, and area landowners via an online tool. **\$75,000**

U.S. Department of Agriculture, U.S. Forest Service Native Prairie Restoration in Grand River National Grasslands (SD)
Implement native prairie restoration and management on 460 acres on the Grand River National Grasslands and adjacent Bureau of Reclamation land. Project also will fund noxious weed treatments to conserve, maintain and improve existing native grasslands. **\$56,770**

U.S. Department of the Interior, U.S. Fish and Wildlife Service — Black-footed Ferret Conservation Center Application of Sylvatic Plague Vaccine to Support Black-footed Ferret Recovery (MT, SD)
Implement sylvatic plague management through vaccine production and population monitoring to enhance and expand black-footed ferret recovery efforts in the Northern Great Plains. Project will occur on four sites, three in South Dakota and one in Montana, and will enhance 4,900 acres of black-footed ferret habitat. **\$450,000**

World Wildlife Fund Using the Plowprint to Monitor Grassland Conversion Across the Northern Great Plains (MT, NE, ND, SD, WY)
Update and expand geospatial data analysis to evaluate landscape change metrics for the Northern Great Plains ecoregion. Project will use newest and best available data to track rates of agricultural conversion, monitor previously converted lands and identify risk factors for remaining intact habitat. **\$20,000**

TENNESSEE

Bedford County Soil Conservation District Duck River Watershed Riparian Buffer Initiative (TN)
Restore and enhance 100 acres of riparian forests and herbaceous cover on degraded streams in Tennessee’s Duck River watershed to benefit water quality and improve habitat for birds, including the northern bobwhite quail and prairie warbler, amphibians and aquatic species. Project will develop transferable tools to identify priority conservation sites and increase awareness on the benefits of riparian buffers. **\$100,000**

Friends of Tennessee National Wildlife Refuge Friends of Tennessee National Wildlife Refuge Peer-to-Peer Workshop (TN)
Coordinate and host a peer-to-peer training workshop for Friends organizations. Training sessions will cover topics such as board leadership, memberships and volunteers, and promoting citizen science to increase the capacity and success of the Friends organizations. **\$15,000**

Lincoln County Soil Conservation District Elk River Watershed Buffer Initiative — II (TN)
Restore 150 acres of forested and herbaceous riparian buffers on degraded streams within priority subwatersheds of Tennessee’s Elk River watershed to benefit water quality and improve habitat for birds, amphibians and aquatic species. Project will develop transferable tools to identify priority conservation sites and increase awareness on the benefits of riparian buffers. **\$199,590**

Shelby Farms Park Conservancy Wolf River Wetland Restoration — II (TN)
Continue the restoration of the Wolf River at Shelby Farms Park in Memphis by removing invasive Chinese privet. Project will test another mode of invasive species management, strengthen partnerships and raise awareness in the community about the importance of protecting watersheds and native species. **\$50,000**

Tennessee Parks and Greenways Foundation Riparian Habitat and Shortleaf Pine at Whites and Coal Creek Headwaters (TN)
Enhance 1,600 acres of headwaters forest habitat on two privately owned tracts at Coal and Whites creeks in Cumberland County to protect and diversify wildlife habitat. Project will construct cattle fencing and create native grassland and shortleaf pine habitat through planting and prescribed burns. **\$115,000**

The Conservation Fund Protecting Working Hardwood Forestland and Bat Habitat in Skinner Mountain Forest (TN)
Acquire 14,882 acres of working hardwood forestland in Tennessee’s Cumberland Plateau to protect critical karst habitat for seven bat species of greatest conservation need; most notably three listed bat species: Indiana bat, gray bat and northern long-eared bat. Project will protect important ecological sites, increase connectivity, sustain forestry jobs and create public recreation opportunities in Skinner Mountain Forest. **\$500,000**

The Forest Stewards Guild Restoring Pine-Oak Forests in the Cumberland Plateau (KY, TN)
Enhance 1,145 acres of headwaters forest habitat on two privately owned tracts at Coal and Whites creeks in Cumberland County to protect and diversify wildlife habitat. Project will construct cattle fencing and create native grassland and shortleaf pine habitat through planting and prescribed burns. **\$149,983**

The University of Tennessee Demonstration of Dynamic Silvicultural Systems for Shortleaf Pine Restoration on the Cumberland Plateau (TN)
Restore shortleaf pine and pine-hardwood forests on 682 acres, protect water quality and channel integrity on 3.5 miles of streams, and enhance 60 acres of riparian forests impacted by recent wildfires and invasive species. Project will develop robust growth and yield models and provide technical information to landowners and managers. **\$100,000**

TEXAS

American Bird Conservancy Oaks and Prairies Joint Venture Grassland Bird Restoration Focus Areas (OK, TX)
Support two grassland bird biologists who will work with existing partner agency and private landowners to provide specific expertise in grassland bird ecology, habitat needs, and habitat management to support comprehensive natural resource planning, improve landowner understanding and conduct habitat and population monitoring. **\$239,963**

American YouthWorks Big Bend National Park Window Trail Rehabilitation (TX)
Rehabilitate Big Bend National Park with the assistance of youths. This project will lead to better erosion control, trail tread surface and overall improved trail conditions. **\$38,983**

Buell Central**Buell Green Conservation and Restoration Program (TX)**

Help conserve and restore 50 acres around the Rio Grande Watershed by planting native trees and plants such as Texas ebony and milkweeds at local schools, parks and around the communities of Pharr. Project will launch an Adopt-a-Park Program in which students can learn about native plants and habitats and the importance of conservation practices.

\$50,000

Coastal Prairies Coalition**Texas Coastal Prairie Conservation**

Strengthen coastal resilience and conserve living resources through conservation and management on private lands as part of the overall Gulf Coast Conservation Initiative. Project will provide landowner outreach to enroll 100 acres of additional wetlands in the Natural Resources Conservation Service’s Agricultural Conservation Easement Program and conduct habitat restoration on 2,000 acres already under easement.

\$250,000

Compatible Lands Foundation**Working with U.S. Military Base to Improve Monarch Butterfly Habitat (TX)**

Enhance monarch breeding and migratory habitat on or adjacent to four U.S. military bases. Project will plant native milkweed and nectar plants and control invasive species to improve 325 acres of habitat.

\$235,992

Environmental Defense Fund**Improving Private Lands through the Monarch Butterfly Habitat Exchange (TX)**

Improve monarch butterfly habitat on private ranch lands through five pilot projects under the Monarch Butterfly Habitat Exchange. Project will enhance 3,426 acres through a combination of planting milkweed and other nectar plants, managed grazing, mowing, prescribed fire and invasive species control.

\$128,467

Friends of High Plains Refuges Complex Wildflower Demonstration Gardens (TX)

Construct two wildflower demonstration gardens that will benefit local wildlife and create educational opportunities for visitors. Project will use locally collective native seeds to create habitat and establish a native seed bank for future use.

\$9,590

Friends of Laguna Atascosa National Wildlife Refuge**Habitat Restoration and Outreach (TX)**

Restore estuarine wetlands, coastal prairie and tamaulipan thornscrub habitat at Holly Beach for species such as the aplomado falcon. Project will result in improved habitat across 1,500 acres.

\$14,984

Houston Wilderness**Establishing Urban Monarch Habitat through the Tri-Regional Monarch Flyway Strategy (TX)**

Increase the quality and connectivity of monarch butterfly habitat in three urban regions throughout southeast Texas. Project will build and coordinate a regional network to create or enhance approximately 110 acres across 50 different sites, primarily by increasing the availability of milkweed and other nectar sources.

\$236,344

Houston Wilderness**Galveston Bay Oyster Reefs and Migratory Bird Habitat Facilitation Project (TX)**

Increase the number of oyster reefs and migratory bird islands created in Galveston Bay through use of dredge material and coordination of living shorelines with planned and existing environmental projects by stakeholder partners. Project will provide critical habitat for increases in populations of oysters as well as whooping cranes.

\$50,000

Houston Wilderness**Lower Brays Bayou Riparian Restoration (TX)**

Restore and enhance 15 acres of riparian corridor along and near Mason Park to improve the quality of water flowing into Houston’s many waterways. Project will educate community members on the importance of stewardship, engage area population in watershed restoration through outreach, provide access to restored areas and install interpretative signage.

\$50,000

Manomet**American Oystercatcher Aerial Survey and Population Recovery along the Atlantic Flyway (multiple states)**

Estimate the current population of American oystercatchers via a cooperative aerial and ground survey with partners in the American Oystercatcher working group. Project will contribute directly to the overall goals of increasing the population size of American oystercatchers within the United States by 30 percent between 2009 and 2019, while contributing to the conservation of associated beach nesting and migratory shorebirds.

\$200,000

National Wildlife Federation**Advancing Monarch Butterfly Conservation in Texas Cities**

Work with large cities across Texas to finalize and implement monarch conservation plans that will improve breeding and migratory habitat and engage millions of citizens. Project will build capacity through technical and organizational support within each city to shift from planning to on-the-ground implementation of their action plans.

\$250,000

Parks and Wildlife Foundation of Texas**Restoring Grassland Habitat for Species of Greatest Conservation Need on Private Lands in Texas and Oklahoma**

Enhance or restore 13,570 acres of habitat for grassland bird species identified as targets in various plans. Project will lead to increasing quality and quantity of grassland habitat for species of greatest conservation need and the development of a publication containing guidelines for best management practices for landowners and operators in Texas and Oklahoma.

\$220,000

Pheasants Forever**Adding Technical Capacity to Deliver Monarch Practices on Private Lands (multiple states)**

Provide technical assistance to private landowners to enroll lands into Conservation Stewardship Program and Environmental Quality Incentives Program. Project will utilize the organization’s Farm Bill biologist team to deliver high-quality monarch butterfly feeding and breeding habitat across eight states.

\$683,980

REAL School Gardens**Creating Learning Gardens to Grow Environmental Stewards in North Texas**

Install three learning gardens at high-poverty elementary schools in the Dallas-Fort Worth area, which spans the Blackland Prairie and Cross Timbers and Prairies ecoregions. Project will raise environmental awareness and restore native habitats for species such as the monarch, anise swallowtail and gulf fritillary butterflies.

\$50,000

Taking Care of Texas**Monarch Butterfly Symposium (OK, TX)**

Convene experts and organizations engaged in monarch research and conservation in Texas and Oklahoma to ensure a more comprehensive partner conservation strategy, and optimize the effectiveness of recovery efforts. Project will support a symposium of monarch conservation partners and scientists.

\$301,959

Texas A&M AgriLife Research**Texas A&M Applied Biodiversity Sciences Conservation Scholars Program**

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

\$200,000

Texas A&M Forest Service**Facilitating Longleaf Conservation in the Longleaf Ridge Significant Geographic Area (TX) — III**

Provide education, outreach, and technical and financial assistance within the Longleaf Ridge Significant Geographic Area in east Texas. Project will restore 950 acres of longleaf pine, enhance an additional 4,400 acres of existing longleaf, and educate 200 private landowners.

\$295,200

Texas A&M Forest Service**Fostering Longleaf Conservation in the Big Thicket SGA (TX) — III**

Provide education, outreach and technical and financial assistance to restore and enhance the longleaf pine and bottomland hardwood ecosystems within the Big Thicket Significant Geographic Area. Project will restore 850 acres of longleaf pine, enhance an additional 3,850 acres of existing longleaf and educate 200 private landowners.

\$298,990

Texas Rice Industry Coalition for the Environment**Central Texas Coast Wildlife Management Areas**

Restore and enhance an estimated 1,762 acres of native prairie and wetland habitat on four Texas Parks and Wildlife Department wildlife management areas on the Central Coast. Restoration work includes 600 acres of prairie restoration and 1,162 acres of wetland enhancement and restoration.

\$47,125

Texas Tech University**Manipulating Microclimates in Texas to Reduce Disease Severity from White-Nose Syndrome in Bats**

Investigate a captive hibernation approach to test the feasibility of microclimate manipulation to address white-nose syndrome in Texas. Project will examine how bats and pathogens respond to environmental manipulations; and how bat behavioral responses across a microclimatic gradient affect disease outcomes to minimize disease severity and increase bat survival.

\$321,845

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

Support the Longleaf Implementation Team Consul role, which helps accelerate coordination and exchange of information among 17 multi-partner local implementation teams that organize, plan and deliver conservation actions to restore and enhance the longleaf pine ecosystem. Project will also support a new GIS Specialist position designed to build and improve GIS capacity and collaboration.

\$274,500

U.S. Department of the Interior,**U.S. Fish and Wildlife Service, Region 2 Monarch Habitat on Private Lands in Texas**

Enhance more than 8,000 acres of monarch butterfly habitat through the Partners for Fish and Wildlife program. Project will work with private landowners to improve habitat and increase milkweed and nectar plant availability vital for monarch breeding as well as spring and fall migrations.

\$250,000

U.S. Department of the Interior,**U.S. Fish and Wildlife Service, Balcones Canyonlands NWR Utilizing Prescribed Fire to Enhance Monarch Butterfly Habitat in Central Texas**

Conduct prescribed burning to enhance monarch habitat on private lands through the Partners for Fish and Wildlife program. Project will improve 7,000 acres of habitat to support the monarch’s fall and spring migration.

\$175,000

Western Michigan University**Field Application of Chitosan to Halt Progression of White-Nose Syndrome in Bats (MI, TX)**

Test if the treatment of chitosan, a powerful biocidal agent, can halt progression of white-nose syndrome (WNS) in bats in Michigan and Texas. Project will test if chitosan is able to halt progression in occurrence and loads at sites where the fungal pathogen causing WNS has been detected for the first time; and whether chitosan improves bat survival and decreases fungal loads.

\$278,225

UTAH**American Conservation Experience****Planting for Restoration and Sowing Seeds of Conservation (UT)**

Employ 16 youths to help restore sites located at Beaver Dam Wash National Conservation Area and the Red Cliffs National Conservation Area, which are habitats for the endangered Mojave Desert tortoise. Project will plant 5,000 native plants to establish native seed sources for natural regeneration of the native plant community upon which the endangered desert tortoise relies.

\$44,000

American Conservation Experience**Youth Development Opportunities on Sensitive Species Habitat and Infrastructure (UT)**

Provide training, education and hands-on habitat restoration experience to 40 youths, who will remove 29 acres of invasive plant species on high-priority lands that are critical to sage grouse and migratory bird habitats located west of Cedar City. Project will remove and treat these invasive plants, which will provide the opportunity for native plants to regrow and begin to re-establish a functioning ecosystems.

\$57,600

Rocky Mountain Bird Observatory**Outreach Delivery in Sagebrush Ecosystem (multiple states)**

Reprint copies of Pocket Guide to Sagebrush Birds and Pocket Guide to Sagebrush following requests from several federal and state agencies and conservation districts.

\$20,000

Trout Unlimited**Restore Native Fish Habitat and Build Sustainable Grazing Practices in the Weber River (UT)**

Improve the resilience of Bonneville cutthroat trout and bluehead sucker populations in the Weber River and its tributaries. Project will modify or remove 10 migration barriers and irrigation diversions to reconnect 43.5 miles of habitat, and collaborate with landowners to improve grazing practices on approximately 26 acres of rangeland to reduce sediment loading.

\$99,683

U.S. Department of Agriculture,**U.S. Forest Service****Interagency e-DNA Database of Fish Distributions (multiple states)**

Develop a large environmental DNA database, website and digital tools to coordinate monitoring and promote information exchange among all agencies of aquatic species in rivers and streams in the Western United States.

Project will support development of models and maps showing distributions of native and invasive species to provide decision support for strategic investment strategies related to environmental stressors, habitat degradation, invasive species, and preservation of native species.

\$89,362

Utah State University**The Sagebrush Ecosystem Alliance (UT)**

Work with the Intermountain West Joint Venture and the Bureau of Land Management to implement a demonstration project, the Sagebrush Ecosystem Alliance, which will assist in enhancing collaborative sagebrush conservation in northwest Utah. Projects will build field-level capacity for collaborative sagebrush conservation and create efficiency in managing public land uses and implementing restoration projects in the sagebrush ecosystem.

\$100,000

Utah State University**Utah Conservation Corps Bike Crew Temple Fork Juniper Lop and Scatter Program**

Hire a four-person youth crew who will complete 10 weeks of work contributing to the overall restoration of 2,000 acres of Uinta-Wasatch-Cache National Forest. Project will provide crew with cargo bikes to transport camping gear and tools to project site where they will lop and scatter all invasive juniper trees, which will allow more water to drain into nearby streams that support Bonneville cutthroat trout habitat.

\$34,000

VERMONT

Vermont Center for Ecostudies

Documenting Bicknell’s Thrush Use of Commercial Young Forest for Lower Elevation Breeding (ME, NH, VT)

Document how Bicknell’s thrush uses young forest habitat in managed commercial forest stands in New Hampshire and Maine and identify the specific stand characteristics associated with occupancy during the breeding season. Project will use the data to revise and update the existing best management practices in forests managed for production of timber and pulpwood. *\$50,609*

VIRGINIA

Abt Associates

Monitoring Hurricane Sandy Coastal Resiliency Program’s Socioeconomic Northeast Impacts (multiple states)

Conduct socioeconomic monitoring for 38 Hurricane Sandy coastal resiliency projects throughout the Northeast from Virginia to Maine. Project will measure and advance the state of knowledge around coastal resilience’s socioeconomic impacts on human health and safety, property and infrastructure protection and enhancement, and community resilience. *\$2,242,026*

Alliance for the Chesapeake Bay Supporting Local Governments and Diverse Partners to Restore the Chesapeake Bay (multiple states)

Enhance networking and information sharing activities to advance watershed restoration efforts. Project will engage nearly 6,000 individuals representing watershed organizations and local governments within the Chesapeake Bay Watershed through an annual Chesapeake Watershed Forum, a Local Government Forum, regional forums and an online networking tool. *\$140,000*

Arlington County, Virginia

Cooperative Weed Management Area (VA)
Develop the Northern Virginia Cooperative Weed Management Area to build institutional capacity to manage invasive plants in the region. Project will develop a five-year management plan, implement three pilot projects to manage habitat along the Washington and Old Dominion Trail, engage volunteers and improve management practices to support a variety of birds and other wildlife species. *\$140,000*

Center for Watershed Protection Advancing Green Infrastructure (VA)

Expand the use of green infrastructure in Fauquier County to improve water through demonstration projects. Project will install a stormwater wetland, reducing input of nitrogen, phosphorus and sediment. *\$187,951*

Chesapeake Bay Foundation

Oyster Restoration in the Lafayette River (VA)
Establish 3.25 acres of new oyster reef in the Lafayette River, a tributary of the larger Elizabeth River system, in Norfolk, enhance the population of native Eastern oysters in the Lafayette River and engage the watershed community in oyster restoration projects. *\$199,665*

City of Hopewell

Reducing Local Impacts on the Chesapeake Bay through Riverside Park’s Stream Restoration (VA)
Significantly reduce nitrogen, phosphorus and sediment in the Appomattox River, the James River and the Chesapeake Bay by integrating innovative stormwater management practices into public greenways. Project will restore an actively eroding stream channel and wetlands supporting a 296-acre urban watershed. *\$451,000*

Friends of the Rappahannock Rappahannock Headwater Stream Buffer and Conservation Initiative (VA)

Protect and restore healthy riparian buffers in the headwater counties of the upper Rappahannock and Rapidan river watersheds through nutrient and sediment reduction, habitat creation, volunteer engagement, and community outreach. Project will provide technical assistance, materials and labor to property owners to establish riparian buffers on their property. *\$91,965*

Land Trust Alliance Chesapeake Land & Water Initiative (multiple states)

Deploy an integrated and innovative approach to accelerate permanent land protection for water quality across the Chesapeake Bay watershed. Project will enhance stewardship strategies with land trusts, watershed groups, state land trust associations, and other conservation and civic partners. *\$150,000*

Manomet

American Oystercatcher Aerial Survey and Population Recovery along the Atlantic Flyway (multiple states)

Estimate the current population of American oystercatchers via a cooperative aerial and ground survey with partners in the American Oystercatcher working group. Project will contribute directly to the overall goals of increasing the population size of American oystercatchers within the United States by 30 percent between 2009 and 2019, while contributing to the conservation of associated beach nesting and migratory shorebirds. *\$200,000*

Maryland Department of Natural Resources

Strengthening the Impact of Riparian Forest Buffers on Water and Habitat Quality (MD, PA, VA, WV)

Improve outreach and management of forest buffers and natural filters in the Chesapeake Bay Watershed, capitalizing on the region’s networks and providing focused leadership to advance landscape-based implementation and community outreach. Project will plant more than 200 acres of trees through the implementation of forest buffers, backyard buffers, and community tree planting. *\$325,273*

National Wildlife Federation

Choose Clean Water Conference (VA)

Bring together regional leaders from local watershed organizations, environmental and conservation organizations, the philanthropic community, government officials and businesses for a two-day long educational and networking experience. *\$35,000*

National Wildlife Federation

Creating Monarch Habitat in the Eastern Migratory Corridor (VA)

Enhance 1,000 acres of urban monarch butterfly habitat in municipalities committed to the Mayor’s Monarch Pledge. Project will provide technical assistance and pollinator seeds and plants to municipalities throughout the eastern migratory corridor to restore 150 acres and enhance 850 acres. *\$141,366*

Pamunkey Indian Tribe

Shore Protection and Living Shoreline on Pamunkey River (VA)

Address erosion along the shoreline of the Pamunkey Indian Tribe’s Reservation to increase water quality in the Pamunkey River in Virginia. Project will create a management plan for 13 miles of shoreline and construct a living shoreline to reduce sedimentation to the river and restore approximately 6,630 square feet of freshwater marsh habitat. *\$199,544*

Rivanna Conservation Alliance

Rivanna River Restoration Project (VA)

Improve water quality through buffer plantings, obstructions removal, streambank restoration, river access and stormwater retrofit rain gardens. Project will include river monitoring, reporting and volunteer training, fish identification, documentation and restoration and community engagement. *\$199,432*

Skeo Solutions

Gillies Creek Green Infrastructure Plan (VA)

Improve water quality in the James River from facilitated partnership building. Project will include prioritized projects, watershed stewardship and a replicable collaboration model. *\$48,864*

The Elizabeth River Project

Oyster Restoration in the Lafayette River (VA)

Restore oyster habitat in the Elizabeth River, reducing nitrogen concentrations by oysters filtering algae. Project will construct 2.25 acres of oyster reef, not only providing habitat for oysters, but also for fin fish, crabs, mussels, and feed grounds for birds. *\$200,000*

The Elizabeth River Project

Restoring Broad Creek (VA)

Improve stormwater management and coastal community resiliency by implementing innovative drainage management solutions in Norfolk’s Ingleside community. Project will result in annual pollution reductions of 26.76 pounds of phosphorus, 97.81 pounds of nitrogen and 7,090.86 pounds of sediment. *\$499,999*

The Longleaf Alliance

Coordinating Local Implementation Team Capacity and Landowner Technical Assistance and Outreach — III (multiple states)

Support the Longleaf Implementation Team Consul role, which helps accelerate coordination and exchange of information among 17 multi-partner local implementation teams that organize, plan and deliver conservation actions to restore and enhance the longleaf pine ecosystem. Project will also support a new GIS Specialist position designed to build and improve GIS capacity and collaboration. *\$274,500*

The Piedmont Environmental Council

Bolton Branch Restoration Project (VA)

Reconnect 1.38 miles of eastern brook trout habitat and restore riparian buffers along Bolton Branch, a headwater stream of the Jordan River in the Upper Rappahannock watershed. In addition, 100 Upper Rappahannock private and public landowners will be targeted through education and engagement activities and habitat restoration opportunities. *\$108,005*

Timmons Group

Water Quality at Constitution Park (VA)

Develop a preliminary engineering report and conceptual design plans for stormwater management facilities at Constitution Park. Project will determine the most suitable practices for the site to treat stormwater runoff from adjacent areas and maximize the usable space in a meaningful way. *\$49,990*

Town of Broadway

Reducing Sediment Transport (VA)

Reduce sediment and nutrient pollution and improve instream and riparian habitat in Linville Creek Stream by restoring 1,150 linear feet of Linville Creek and 210 linear feet of an unnamed tributary. Project will result in a total of 1,360 linear feet of restoration using natural channel design techniques. *\$200,000*

Town of Glasgow

Stormwater Retrofit for Decreased Nutrient, Sediment and Stormwater Volume (VA)

Improve downstream water quality, provide flood attenuation for the town of Glasgow, and engage regional partners to provide outreach and promote similar projects in other small localities. Project will result in a constructed wetland and bioretention facility. *\$182,206*

U.S. Department of the Interior, U.S. Fish and Wildlife Service, Region 5 Assessing the Ecological Effectiveness of Hurricane Sandy Northeast Marsh Restoration Projects (multiple states)

Measure the ecological effectiveness for 23 innovative marsh restoration sites. Project will contribute data critical for the assessment of these new marsh restoration techniques’ ecological benefits and cost-effectiveness. *\$2,600,000*

U.S. Department of the Interior, U.S. Fish and Wildlife Service, Region 5 Assessing the Effectiveness of Living Shoreline Projects in the Northeast (MD, NJ, VA)

Record ecological monitoring data for living shoreline restoration projects in the Northeast. Project will contribute to the assessment of this emerging resilience technique’s understanding, cost effectiveness and ecological benefits. *\$1,104,270*

U.S. Department of the Interior, U.S. Fish and Wildlife Service, Region 5 Evaluating the Ecological Effectiveness of Hurricane Sandy Marsh Restoration Projects (DE, NJ, VA)

Conduct ecological monitoring useful for evaluating marsh restoration techniques and effectiveness at national wildlife refuges, including Prime Hook, Forsythe, Cape May and Great Dismal Swamp. Project will build upon previous ecological monitoring and contribute to the evaluation of innovative marsh restoration techniques. *\$2,780,633*

U.S. Department of the Interior, U.S. Geological Survey

Collecting Ecological Data and Models of Living Shoreline Restoration Projects (MD, NJ, NY, VA)

Collect ecological monitoring data and conduct modeling of living shoreline restoration projects. Project will contribute to the assessment of this technique’s wave and energy reduction benefits. *\$1,195,728*

University of Virginia

Conservation Scholars Support (VA)

Support senior undergraduate and professional school students for a 10-week period, with emphasis given outstanding students and students from under-represented groups in conservation. Project will identify summer internship topics and professional mentors. *\$100,000*

Virginia Association of Soil and Water Conservation Districts

Stormwater Best Management Practices (VA)
Advance a financial cost-share and technical assistance program for voluntary installation of stormwater best management practices that addresses water quality concerns on land where no other cost-share program is available. Project will lead to the installation of approximately 180 stormwater best management practice projects on residential, commercial, industrial and municipal properties. *\$750,000*

Virginia Department of Forestry Initiative to Restore Longleaf Pine — II

Establish 1,100 acres of longleaf pine and enhance an additional 5,100 acres of existing longleaf habitat on private and state-owned lands in southeast Virginia. Project will establish an inter-agency burn crew to increase prescribed fire capacity, continue support of a longleaf restoration specialist to provide outreach and technical assistance to landowners and cultivate a network of private landowners to serve as longleaf champions. *\$150,000*

WASHINGTON

City of Poulsbo

South Fork Dogfish Creek Restoration through Centennial Park (WA)

Improve stream ecology by building 600 feet of soft surface trails and restoring riparian habitat along 400 feet of Dogfish Creek, a steelhead salmon bearing stream that runs through Kitsap County. Project will remove invasive plant species, plant native plants and add public access and education to the area. *\$26,850*

Conservation Northwest

Wildlife Management Strategies (WA)

Continue to build capacity to adequately communicate, plan and implement a sequence of strategic actions, including providing capacity for continued coordination of the Working for Wildlife initiative in the Okanogan Valley. Project will include community events, landowner outreach and coordination, focal species monitoring and habitat conservation projects. *\$143,865*

Duwamish River Cleanup Coalition/ Technical Advisory Group

Community Stewardship in South Park (WA)

Remove 4.5 acres of invasive species, prevent 150,000 gallons of stormwater from entering waterways, plant 50 trees and create seven jobs in the Seattle neighborhood of South Park. Project will focus on ongoing restoration and stewardship of native Chinook salmon and steelhead trout habitat, as well as the local air and water quality issues alongside the Duwamish River Superfund Site. *\$39,139*

EarthCorps

North Cascades National Park: Stewardship and Maintenance (WA)

Support the greenhouse manager with nursery maintenance to properly grow and maintain native plant stock, provide vegetative resource support, maintain trails impacted by erosion and human use, and provide construction and repair services to a remote front country campsite on the north end of Ross. Project also will construct fire pits, tent pads and picnic tables.
\$44,864

Environment for the Americas

Celebrate Birds: Latino Youth in Avian Conservation and Education (AK, CA, CO, OR, WA)

Introduce underrepresented Latino youths to careers in natural resources while restoring 9 acres of habitat. Project will engage youth in migratory bird research to increase their knowledge of science, scientific studies, and research protocols along the west coast from California to Alaska.
\$69,000

Farallon Institute

California Current Seabird and Forage Fish Conservation Initiative (CA, OR, WA)

Provide critical information and work closely with the National Marine Fisheries Service to ensure it is part of new stock assessment and management strategy evaluation efforts for anchovy.
\$250,000

Hood Canal Salmon Enhancement Group

Development of the Hood Canal Watershed Cooperative Weed Management Area (WA)

Create the Hood Canal Watershed Cooperative Weed Management Area. Project will develop a framework to provide a long-term strategy, identify priorities and stakeholders and create an invasive species inventory database.
\$163,996

Kwiaht: Center for the Historical

Ecology of the Salish Sea

Expanding an Urban Salt Marsh (WA)

Enhance 10 acres of Weeks Wetland, critical habitat for shorebirds, migratory waterfowl and resting seabirds. Project will provide public access for birding and wildflower enjoyment, prepare final designs for the enhancement of habitat quality and remove invasive weeds.
\$29,340

Lincoln County Conservation District

Expanding the Channeled Scablands

Cooperative Weed Management Area for Greater Sage Grouse (WA)

Expand programs into the range of the greater sage grouse to provide technical and financial assistance to landowners to control invasive species and restore rangelands. Project will provide annual workshops on the ecology and impacts of invasive species, and control strategies in an effort to restore and protect habitat for the greater sage grouse.
\$74,902

Madrona Institute

Coast Salish Stewardship Corps Tribal and Island Youth Cultural and Natural Heritage (WA)

Engage 33 youths on a tribal outreach activity in the San Juan Archipelago. Project will integrate island and tribal youth while learning Coast Salish stewardship practices by participating in Coast Salish canoe culture, which imparts the connectivity of the health of ecosystems directly to the health of its people.
\$74,018

Mid-Columbia Fisheries Enhancement Group

Habitat Restoration and Conservation on the Okanogan-Wenatchee National Forest (WA)

Employ four youths and 10 interns to conduct habitat restoration work at Okanogan-Wenatchee National Forest. Project will restore a half-mile of instream restoration through log placement, restore 2 acres of riparian habitat through vehicle prevention barriers, remove 30 barriers to allow better access to bull trout for spawning, and collect fish distribution data.
\$49,911

Nooksack Salmon Enhancement

Association

Whatcom Stream Stewards Program: Engaging Community in Restoration, Education and Stewardship (WA)

Restore 15 acres of riparian habitat to improve water quality and habitat for Chinook salmon, bull trout and steelhead salmon in the Puget Sound and Whatcom County. Project will engage five local resource management partners and 2,500 volunteers to plant 5,000 trees and remove 6 acres of invasive vegetation.
\$29,889

Northwest Straits Marine

Conservation Foundation

Sustainable Crabbing Gear Program (WA)

Create and implement a program to promote the manufacture and sale of crab pots equipped with escapement mechanisms deemed 100 percent effective through a previous crab pot escapement study. Project will create consumer messaging developed through social marketing research, and use this messaging to promote the sale of sustainable crab pots.
\$40,559

Northwest Youth Corps

Northwest Youth Corps San Juan Island National Monument Conservation Program (WA)

Deploy six youths to carry out 13 acres of invasive removal, flagging of 100 acres of property boundaries, 1,200 feet of beach cleanup, restoration of 1,000 linear feet of vegetation, 5 miles of trail construction and maintenance, and 2,000 feet of fence construction at the San Juan Islands National Monument. Project will benefit diverse species from breeding seabirds to harbor seals to rare plants.
\$63,707

Puget Sound Restoration Fund

Native Oyster Restoration (WA)

Restore 5 acres of native Olympia oyster bed habitat in Washington’s Dyes Inlet, where less than 5 percent of the original core population remains. Project will produce and outplant 500,000 hatchery-restoration grade juvenile oysters, spread seeded cultch on private tidelands to engage and build stewardship among property owners.
\$30,071

Rocky Mountain Bird Observatory

Outreach Delivery in Sagebrush Ecosystem (multiple states)

Reprint copies of Pocket Guide to Sagebrush Birds and Pocket Guide to Sagebrush following requests from several federal and state agencies and conservation districts.
\$20,000

San Juan Islands Conservation District

Bringing Island Youth Together in Conservation (WA)

Employ 22 youths of diverse background to conduct on-the-ground restoration projects and biological monitoring for research and recovery efforts in the San Juan Islands. Project will include seed collection, wildlife monitoring and assessments, 100 acres of invasive species removal, and trails restoration.
\$74,190

Save Habitat and Diversity of Wetlands

Shadow Lake Alder Grove Restoration (WA)

Restore 10 acres of forest at Shadow Lake Nature Preserve, which is adjacent to critical salmon-bearing waters feeding into the Puget Sound. Project will restore biodiversity and wildlife habitat, while increasing carbon storage and stormwater mitigation through invasive species removal and planting of native species.
\$30,000

Skagit Fisheries Enhancement Group

Upper Skagit Knotweed and Invasive Control Project (WA)

Expand efforts to control Japanese knotweed and other invasive plant species in the Skagit watershed through early detection efforts and volunteers. Project will continue knotweed control in the Upper Skagit watershed and expand knotweed control work downstream into 62 miles of stream length within 454 square miles of the Middle Skagit region.
\$90,400

Thurston Conservation District

Prairies and Pollinators Program (WA)

Restore 54 acres of prairies of Thurston County inhabited by five federally listed species: mazama pocket gopher, Oregon spotted frog, Taylor checkerspot butterfly, streaked horned lark and golden paintbrush. Project will engage students and other community members to restore prairies through removal of invasive plants and disbursal of seeds.
\$30,000

Trout Unlimited

Building Local Capacity for Pacific Salmon Conservation (WA)

Bring together the Okanogan Land Trust, the Colville Tribe, the Okanogan Conservation District, and Natural Resources Conservation Service to build local capacity and provide technical assistance to private landowners that will promote instream flows and benefit Pacific Salmon. Project will increase in-stream flows and improve on-farm management practices on at least 2,000 acres.
\$148,488

U.S. Department of Agriculture,

U.S. Forest Service

Interagency e-DNA Database of Fish Distributions (multiple states)

Develop a large environmental DNA database, website and digital tools to coordinate monitoring and promote information exchange among all agencies of aquatic species in rivers and streams in the Western United States. Project will support development of models and maps showing distributions of native and invasive species to provide decision support for strategic investment strategies related to environmental stressors, habitat degradation, invasive species, and preservation of native species.
\$89,362

WEST VIRGINIA

Alliance for the Chesapeake Bay

Supporting Local Governments and Diverse

Partners to Restore the Chesapeake Bay (multiple states)

Enhance networking and information sharing activities to advance watershed restoration efforts. Project will engage nearly 6,000 individuals representing watershed organizations and local governments within the Chesapeake Bay Watershed through an annual Chesapeake Watershed Forum, a Local Government Forum, regional forums and an online networking tool.
\$140,000

Chesapeake Bay Foundation

Farm Stewardship Program for Increased Agricultural Best Management Practices (MD, WV)

Work one-on-one with farmers of the Upper Potomac watershed in Maryland and West Virginia to provide technical assistance and support to increase adoption of agricultural best management practices that improve water quality, increase productivity of farming operations, and enhance wildlife habitat. Project will install forested riparian buffers and stream exclusion fencing, stabilize streambanks, restore pastures and wetlands, and convert cornfields to grazing pastures.
\$200,000

Eastern Panhandle Planning and

Development Council

Manure de Force (WV)

Develop a comprehensive poultry manure management program in West Virginia. Project will expand the manure market and increase demand for poultry manure sourced from the Eastern Panhandle and Potomac Valley Regions of West Virginia.
\$200,000

Land Trust Alliance

Chesapeake Land & Water Initiative (multiple states)

Deploy an integrated and innovative approach to accelerate permanent land protection for water quality across the Chesapeake Bay watershed. Project will enhance stewardship strategies with land trusts, watershed groups, state land trust associations, and other conservation and civic partners.
\$150,000

Maryland Department of Natural Resources

Strengthening the Impact of Riparian Forest

Buffers on Water and Habitat Quality (MD, PA, VA, WV)

Improve outreach and management of forest buffers and natural filters in the Chesapeake Bay Watershed, capitalizing on the region’s networks and providing focused leadership to advance landscape-based implementation and community outreach. Project will plant more than 200 acres of trees through the implementation of forest buffers, backyard buffers, and community tree planting.
\$325,273

Trout Unlimited

Upper Greenbrier Aquatic Restoration (WV)

Partner with the Monongahela National Forest to re-create habitat and hydrologic conditions that will improve natural systems resilience and reconnect migration venues for native fish, such as the eastern brook trout. Project will conduct restoration activities to upgrade the condition class of the East Fork, Middle River and West Fork watersheds.
\$94,481

WISCONSIN

American Bird Conservancy

Early Successional Habitat in the Great Lakes (MI, MN, WI)

Create, restore and manage high-quality, early successional habitat to rebuild golden-winged warbler populations throughout its breeding range. Project will create, manage and develop habitat in select demonstration areas, and when combined with training and technical support, will educate land managers about golden-winged warbler habitat creation and maintenance.
\$150,000

City of New Berlin

Wetland Ecology Trail (WI)

Enlist more than 100 volunteers for trash and debris removal, to remove invasive species and to re-establish native prairie plantings to benefit resident birds, migratory songbirds, owls and waterfowl. Project will create the path for a 1.13 mile interpretive ecological trail to educate the community about the local habitat and the importance of conserving the area.
\$31,454

City of Sturgeon Bay

Bradley Lake Coastal Wetland Restoration (WI)

Re-establish the historic surface hydrologic connection between Bradley Lake and Sturgeon Bay on Lake Michigan to restore a 30-acre coastal wetland environment. Project will result in increased spawning, nursery and forage habitat to support fish, such as northern pike, birds and other wildlife.
\$200,969

Door County Soil and Water Conservation

Department

Phosphorus Reduction in the Sugar, Silver and Renard Creek Watersheds (WI)

Provide technical assistance for best management practices within the Sugar Creek, Silver Creek and Renard Creek watersheds, which outlet to Green Bay. The primary outcome of this project is to reduce total phosphorus levels within the watersheds.
\$53,000

Field Museum of Natural History

Expanding Strategic Urban Habitat Conservation Approaches for Monarchs (multiple states)

Engage small- and mid-size metropolitan areas along the monarch butterfly’s eastern migratory corridor to develop strategic urban conservation planning tools tailored to smaller municipalities. Project will help urban practitioners identify the best locations and practices for creating monarch butterfly habitat at the local scale.
\$147,988

Friends of Necedah National Wildlife Refuge

Building a Viewing Platform at Necedah

National Wildlife Refuge (WI)

Build a fishing and viewing platform to provide water access and educational opportunities. Project will increase the number of volunteers and partnering organizations on the refuge and enhance visitor experiences.
\$15,000

Great Lakes Community Conservation Corps

Island Restoration Initiative (WI)

Recruit youths from high-poverty neighborhoods to serve in 20 Corps member positions designated as next-generation conservationists who work more than 18 months to improve access to and maintain 10 acres collectively within the native ecosystem of Bureau of Land Management islands in the Rock River, Wisconsin River and nearby inland lakes.
\$20,000

Harbor District

Harbor District Five Star Habitat Hotels (WI)
Build, plant, install and monitor fish habitat along 9 miles of channelized urban shoreline for resident and migrating fish species, including lake sturgeon, largemouth and smallmouth bass, channel and flathead catfish, yellow perch, lake trout and 33 other species. Project will engage low-income, inner-city youth in Milwaukee to create submerged habitat features and planter baskets on steel bulkhead walls to provide forage opportunities and cover for fish species.
\$44,837

Milwaukee County War Memorial Greenprint for Milwaukee Shoreline (WI)
Milwaukee County War Memorial will implement a combination of terraced bioretention, porous pavement and native plantings during the War Memorial Center site renovation along the Lake Michigan shoreline in downtown Milwaukee. Project will store an annual average of 1.4 million gallons of stormwater, while enhancing habitat for tens of thousands of migrant birds and other shoreline wildlife.
\$473,826

Oconto County Land Conservation Division Accelerating Phosphorus Reduction in Green Bay through Nutrient Management and Sediment Control (WI)
Hire a conservation planner to review and develop nutrient management plans and implement best management practices on agricultural land. The intent of the program will be to reduce phosphorous and sediment loading into the streams and tributaries that flow into Green Bay.
\$62,463

Ozaukee County, Wisconsin Buser Creek Fish Passage Restoration (WI)
Replace or remediate up to six fish passage impediments in Buser Creek, a part of the Milwaukee River Watershed. Project will result in the reconnection and enhancement of 1.58 stream miles and 82 acres of wetland for native migratory fish.
\$50,000

Pheasants Forever Adding Technical Capacity to Deliver Monarch Practices on Private Lands (multiple states)
Provide technical assistance to private landowners to enroll lands into Conservation Stewardship Program and Environmental Quality Incentives Program. Project will utilize the organization's Farm Bill biologist team to deliver high-quality monarch butterfly feeding and breeding habitat across eight states.
\$683,980

Southwest Badger Resource Conservation and Development Council Kickapoo Collaborative (WI)
Bring together landowners, experts and volunteers in the Kickapoo River Watershed to get boots-on-the-ground targeted installation of high priority best management NRCS practices. Project will result in landowner implementation of practices that expand grassland bird habitat, reduce pollutants released to the watershed and preserve 250 miles of world-class trout streams.
\$200,000

St. Croix River Association Invasive Species Coordination and Biological Control in Northwestern Wisconsin
Develop a comprehensive and coordinated approach to preventing, detecting and controlling spotted knapweed. Project will support a part-time coordinator to establish spotted knapweed biological control agents throughout Wisconsin with a focus on the Northwest Barrens habitat as part of a broader statewide biological control effort.
\$31,800

Trout Unlimited North Branch Oconto River Cold-Water Habitat Restoration (WI)
Restore the natural hydrologic conditions of 2.6 miles of the North Branch Oconto River through the removal of the remnants of three mill dams and the replacement of two road stream crossings. Project will result in an improvement in water quality, water temperatures and physical habitat throughout and beyond the restored reach of river, improving aquatic ecosystem resiliency and habitat conditions for cold-water species, including native brook trout.
\$36,299

Trout Unlimited Reconnecting Cold-Water Habitat on a the Chequamegon-Nicolet National Forest (WI)
Remove seven to 10 barriers to aquatic organism passage to reconnect 30 miles of cold-water habitat within priority subwatersheds in the Lake Michigan and Lake Superior basins on and adjacent to the Chequamegon-Nicolet National Forest. Project will restore critical habitat for brook trout and other species.
\$275,261

Urban Ecology Center Improving Habitat through Community Engagement in Milwaukee's Primary Environmental Corridor (WI)
Restore 38 acres by removing invasive plant species, revegetate hills to provide erosion control, perform a prescribed burn and educate community about sustainable land stewardship practices. Project will engage 500 volunteers to help maintain the Milwaukee Rotary Centennial Arboretum as an urban oasis with diverse native Wisconsin plant communities.
\$30,000

U.S. Department of Agriculture, U.S. Forest Service Development of Ultra-Violet Light as a Treatment for White-Nose Syndrome in Bats (PA, WI)
Test whether UV-light may be used to selectively kill the fungal pathogen causing white-nose syndrome while minimizing impacts to normal skin microbes found on bats in Wisconsin and Pennsylvania. Project will assess if UV-light, which has already been shown to be a DNA-damaging agent to the pathogen, is a cost-effective control strategy for increasing survival of WNS-affected bats.
\$155,946

U.S. Department of the Interior, U.S. Geological Survey Development and Testing of Vaccine Candidates to Reduce White-Nose Syndrome in Bats (WI)
Develop and evaluate several vaccine candidates for white-nose syndrome in affected bats in Wisconsin. Project will test methods for delivering vaccines to bats and develop a potential vaccine candidate to be applied to affected species to reduce fungal growth on bats and resulting morbidity and mortality of bats throughout North America.
\$360,342

Waukesha County Land Conservancy Habitat Restoration and Monitoring in the Bark and Scuppernong River Watersheds (WI)
Restore 42 acres of rare mussel, fish, reptile and bird species habitat at the Bark and Scuppernong River Watersheds of southeastern Wisconsin. Project will remove invasive species, plant native species to re-establish native natural communities, and educate and engage the public.
\$29,713

Wildlife Management Institute Early Successional Wildlife Habitat Technical Assistance in the Great Lakes Basin (MI, MN, OH, PA, WI)
Provide expert technical assistance in the recruitment of private landowners for projects completed under the EQIP program of the Farm Bill to benefit golden-winged warbler, American woodcock and a host of young forest species that depend on early successional habitat.
\$160,000

Wisconsin Department of Natural Resources Enhancing Monarch Butterfly Habitat along the Mississippi River Corridor (WI)
Restore and enhance critical monarch butterfly breeding, feeding and migratory stopover habitat on public and private lands along the Mississippi River. Project will use a variety of techniques including planting, prescribed burning and invasive species control to restore and enhance more than 700 acres of habitat.
\$69,800

WYOMING

American Bird Conservancy Grasslands Biodiversity and Productivity in the Northern Great Plains (MT, ND, SD, WY)
Promote educational opportunities and land stewardship activities in the core of the Northern Great Plains by offering workshops and providing conservation technical assistance, developing conservation plans, assisting private and tribal landowners in enrolling in Farm Bill programs, and coordinating with federal land managers on activities that will enhance habitat for grassland birds while maintaining sustainable land use.
\$230,000

Friends of Pathways Snow King Horse Trail Restoration (WY)
Employ five youths to address maintenance and invasive species issues on recreational trails at Snow King Mountain. Project will restore 4.43 miles of trail by tilling, breaking down the upslope and downhill edge, reseeding the trail, covering the trails with biodegradable aspen erosion netting, adding drainage feature to system trails, and using downed timber and signage to make physical barriers to close these trails.
\$20,000

Grand Teton National Park Foundation Protecting Antelope Flats, Grand Teton National Park (WY)
Protect the 640-acre Antelope Flats inholding within Grand Teton National Park by purchasing it from the state of Wyoming. Project will prevent the development of this parcel and thus ensure that the natural and scenic resource value of Grand Teton National Park remains protected in perpetuity.
\$1,000,000

Montana Conservation Corps Great Northern Restoration Project (MT, ND, SD, WY)
Engage 49 youths to complete sage grouse habitat enhancements through fence removal, road obliteration, native plant restoration and noxious weed removal. Project also will work with the Bureau of Reclamation to engage 38 participants on projects, including Russian olive removal to support restoration of cottonwood galleries and willow stands, and a variety of fencing projects to remove wildlife hazards.
\$83,874

Rocky Mountain Bird Observatory Adding Capacity for Stewardship of Private Lands in the Northern Great Plains (MT, ND, SD, WY)
Build local capacity to implement on-the-ground conservation by supporting three stewardship biologist positions in three focal areas of the Northern Great Plains. Project will establish public-private conservation partnerships, provide targeted outreach to landowners, and implement grassland habitat enhancement and restoration projects.
\$230,000

Rocky Mountain Bird Observatory Outreach Delivery in Sagebrush Ecosystem (multiple states)
Reprint copies of Pocket Guide to Sagebrush Birds and Pocket Guide to Sagebrush following requests from several federal and state agencies and conservation districts.
\$20,000

The Nature Conservancy Establishing a Decision Support Tool for Conservation Priorities in the Missouri River Headwaters (MT, ND, SD, WY)
Convene resource professionals from federal, state and NGO partners to collect and analyze a variety of data to complete modeling and resulting map products that identify priority watersheds and areas within the Missouri River headwaters and prairies of South Dakota, North Dakota, Montana and Wyoming.
\$75,000

Trout Unlimited Upper Green River Native Fish Initiative (WY)
Implement five projects that will reconnect Colorado River cutthroat trout and other native fish populations in the Upper Green River Basin in Wyoming at a landscape scale. Project will open 42 miles of stream for fish migration.
\$95,000

U.S. Department of Agriculture, U.S. Forest Service Interagency e-DNA Database of Fish Distributions (multiple states)
Develop a large environmental DNA database, website and digital tools to coordinate monitoring and promote information exchange among all agencies of aquatic species in rivers and streams in the Western United States. Project will support development of models and maps showing distributions of native and invasive species.
\$89,362

Washington Recreation and Conservation Office Columbia Basin States Cooperative Weed Management Area (ID, MT, OR, WA, WY)
Establish a Cooperative Weed Management Area to address invasive plants in the Columbia River Basin. Project will bring together tribal, state, federal, provincial and nongovernmental organizations to focus on developing early detection and rapid response plans.
\$65,000

World Wildlife Fund Using the Plowprint to Monitor Grassland Conversion Across the Northern Great Plains (MT, NE, ND, SD, WY)
Update and expand geospatial data analysis to evaluate landscape change metrics for the Northern Great Plains ecoregion. Project will use newest and best available data to track rates of agricultural conversion, monitor previously converted lands and identify risk factors for remaining intact habitat.
\$20,000

U.S. TERRITORIES

AMERICAN SAMOA Ridge to Reefs Community Based Watershed Action Plan to Increase Resilience for Coral Reefs in Vatia (AS)
Assist the American Samoa Coral Reef Advisory Group and other local partners in creating a community based watershed plan and engage the community in one project to address water quality. Project will identify sources of pollution, restoration projects and estimated costs, as well as provide a roadmap for implementation to achieve identified goals in threat reduction and nearshore coral reef improvements.
\$85,000

PUERTO RICO

Protectores de Cuencas Implement Sediment and Erosion Control Practices in Guánica Watershed to Benefit Coral Reefs (PR)
Employ and evaluate the effectiveness of different methods to stabilize erosion from dirt roads throughout upland farms with highly erodible steep slopes in the Guanica Watershed. Project will develop guidance for farmers and the National Resource Conservation Service regarding the most suitable methods to be implemented and will stabilize at least 20 acres along eroded roadways.
\$148,465

Villanova University Establish a Monitoring Program for the Guánica Watershed Management Plan (PR)
Deploy new wireless remote sensors to measure sediment and nutrient runoff from the Lajas Valley agricultural area in the greater Guanica Watershed. Project will inform management of threat sources and peak periods from the Lajas Valley and determine whether the health of the Guánica Bay reefs is changing more than time as a result of restoration efforts within the watershed.
\$84,964

U.S. VIRGIN ISLANDS

The Student Conservation Association Student Conservation Association Youth Conservation Corps crew at Virgin Islands National Park (VI)
Conduct field labor projects such as removal of invasive plants on trails in visitor-use area and wildlife and vegetation monitoring. Project will place two Youth Conservation Corps crew leaders who will be responsible for running the YCC member crew at Virgin Islands National Park.
\$114,999

UNITED STATES AND INTERNATIONAL FISCAL YEAR 2017 CONSERVATION INVESTMENTS

ASIA, INDIA AND THE PACIFIC

Conservation International Foundation Expanding the Reach of Community-Based Resource Management for Coral Reefs in the Solomon Islands

Empower communities in the Solomon Islands to select strategies, such as the prohibition on the use of cyanide, protection of spawning areas, and limits on mangrove harvesting, to meet their management goals for the coral reef and fish resources under their control. Project will work with 10 communities overseeing an estimated 700 square miles of coral reef habitat to establish conservation measures and sustainably manage their marine resources.
\$60,856

Indonesia Locally Managed Marine Area Foundation

Expand Community-Based Coral Reef Conservation to 100 Additional Communities in Eastern Indonesia
Expand and strengthen the locally managed marine areas network in Eastern Indonesia through outreach, training and coordination with the District government. Project will expand community-based coral reef management to 100 new communities, bringing an estimated 450,000 acres of coral reef into the network for sustainable management.
\$45,000

The University of Guam

Use Fish DNA to Create a New Predictive Fisheries Management Tool for Micronesia
Create a new tool that combines fisheries-dependent data with genetic markers to predict how important reef fish families such as parrotfishes, surgeonfishes, snappers, and emperorfishes will respond to different types of fishing pressure. Project will build off available data to help managers determine what types of regulations (i.e. bag limits or size limits) are best suited for the evolutionary adaptations of the species to maintain a sustainable population.
\$48,445

CANADA

Alberta Conservation Association Designing a Multispecies Approach for Conserving Connectivity in the Northern Great Plains (MT, AB)

Use pronghorn as a model for designing and applying a multispecies approach for connectivity in the Northern Great Plains regions of Montana and Canada. Project will model seasonal range for pronghorn and run fence density scenarios, overlay multi-species GIS maps to identify priority seasonal range and corridor habitats for priority species, and complete on-the ground fence modifications within the jurisdictions.
\$156,223

Miistakis Institute for the Rockies (Alberta)

Facilitating Pronghorn Movements in the Canadian Portion of the Northern Great Plains
Develop a participatory science program for ensuring safe movement of pronghorn across highways in the Canadian portion of the Great Northern Plains. Project will test pinch points, and build public support through a citizen science approach, with stakeholders and the public being engaged in science and conservation action to the benefit of pronghorn and other wildlife species impaired by road fragmentation.
\$71,200

National Audubon Society Managing Human Disturbance on Shorebirds along the Atlantic Coast (multiple states)

Produce a framework to improve the effectiveness of disturbance reduction strategies for the Atlantic Flyway. Project will bring together partners from Canada to Florida to provide shorebird site managers with best management practices for managing human disturbance, along with essential tools and key indicators for measuring progress along the Atlantic Flyway.
\$200,000

Saskatchewan Stock Growers Association Habitat Restoration and Management on Private Rangelands in Southwest Saskatchewan

Investigate innovative ways to engage livestock producers to conserve and restore native grasslands and species at risk habitat in southwest Saskatchewan. Project will complete four habitat management agreements enhancing 4,000 acres and four habitat restoration agreements restoring 500 acres will be implemented with ranchers who manage native grasslands in southwestern Saskatchewan.
\$200,000

The Nature Conservancy of Canada Restoring Northern Monarch Butterfly Breeding Habitat (Canada)

Nature Conservancy of Canada will restore 130 acres of former agricultural fields in the northern breeding range of the eastern monarch population's migratory corridor. Project will establish 50 acres in the Southern Norfolk Sand Plain Natural Area and 80 acres in the Manitoba Tall Grass Prairie Preserve, expanding previously restored habitat.
\$80,000

Thompson Rivers University Developing a Probiotic Approach to Reduce Severity of White-Nose Syndrome in Bats (Canada)

Develop a probiotic cocktail from bacteria and fungi naturally found on healthy bat wings; and apply it to bat roosts to prevent white-nose syndrome in Canada. Project will alter wing flora so there is more representation of microbes to delay or prevent the growth of the fungal pathogen causing white-nose syndrome.
\$149,921

Walpole Island First Nation

Restoring Shoreline and Riparian Habitat (ON)
Walpole Island First Nation will rehabilitate a segment of eroded shoreline and riparian areas along the St. Clair River Area of Concern at Walpole Island First Nation, Ontario. Project will improve riparian habitat using techniques that benefit fish and wildlife, improve water quality.
\$98,000

LATIN AMERICA AND THE CARIBBEAN

American Bird Conservancy

Eliminating Threats to Priority Seabirds in Chile — VIII
Advance conservation efforts for the IUCN-listed pink-footed shearwater through activities to protect and enhance colonies on all three of their known Chilean breeding islands.
\$375,199

American Bird Conservancy Protecting Townsend's Shearwaters on Isla Socorro, Mexico

Continue work to restore Isla Socorro to its original predator-free state, which, in turn, will result in an increase in the nesting success and population of Townsend's shearwaters. Project will complete the predator eradication, initiate absence confirmation monitoring, and continue monitoring Townsend's shearwater and the endemic fauna of Isla Socorro, Mexico.
\$409,797

Bird Studies Canada Site Assessments for the Red Knot Population Overwintering at Bahía Lomas, Chile

Complete an assessment of habitat use by red knots at their most important wintering area, Bahía Lomas Western Hemisphere Shorebird Reserve Network and Ramsar Site in Chile. Project will serve as a pilot for how the Motus Wildlife Tracking System might be adapted and replicated to advance the goals of the Atlantic Flyway Shorebird Initiative.
\$105,000

BirdsCaribbean Reducing Shorebird Harvest Pressure

Address several focal species that are harvested by hunters in Guadeloupe. Project will complete bag checks in Port Louis swamp to estimate local harvest and conduct broad-scale interviews to allow for an estimate of archipelago-wide harvest numbers.
\$63,092

Equilibrio Azul Eastern Pacific Hawkbill Nest and In-water Conservation (Ecuador)

Continue research and conservation of the Eastern Pacific hawkbill sea turtles at Ecuador's Machalilla National Park. Project will engage apnea-diving fisherman that fish in hawkbill aggregation rookeries to increase conservation ethic.
\$20,000

Fauna and Flora International**Leatherback Sea Turtle Nest Protection in the Eastern Pacific (Mexico, Nicaragua, Costa Rica)**

Contribute to the recovery of Eastern Pacific leatherback sea turtles through increased nest protection and hatchling production on primary and secondary nesting beaches in Mexico, Nicaragua and Costa Rica. Project will generate comprehensive maps of regional nest abundance, increase protection on secondary beaches, and implement measures to increase hatchling productivity on primary beaches.

\$160,000

Gulf and Caribbean Fisheries Institute Establish a Learning Network to Build Capacity for Coral Reef Management in the Wider Caribbean (Yucatan)

Establish a peer-to-peer learning exchange network for marine protected area managers in 10 countries within the Wider Caribbean. Project will provide training and peer-to-peer learning exchanges and support site-specific follow-up projects to address management capacity needs identified in the 2017 management capacity assessment.

\$129,360

International Boundary and Water Commission (USIBWC)**Colorado River Native Habitat Restoration Project: Laguna Grande — V (Mexico)**

Restore 54 acres of riparian habitat at the Laguna Grande site along the lower Colorado River riparian corridor in Mexico under Minute 319. Project will eliminate non-native plant species and restore native plant species; implement water delivery operations to irrigate the newly restored areas and to maintain the groundwater and salinity levels necessary to support the hydrological needs of restored areas; conduct ecological monitoring of and reporting on restored vegetation and wildlife.

\$261,911

International Boundary and Water Commission (USIBWC)**Colorado River Native Habitat Restoration Project: Miguel Aleman — IV (Mexico)**

Restore riparian habitat at the Miguel Aleman site along the lower Colorado River riparian corridor in Mexico under Minute 319. Project aims to restore 100 acres of native vegetation habitat in the flood zone, produce 22,400 greenhouse trees/shrubs, and generate a monitoring report that will determine the survival rate and success of the planted trees and wildlife impacts of the restoration efforts.

\$843,684

Island Conservation**Juan Fernandez Archipelago Seabird Restoration (Chile)**

Develop stakeholder capacity and support for multi-species eradications in the Juan Fernández Archipelago through eradication planning for Alejandro Selkirk Island.

\$450,636

Grupo de Ecología y Conservación de Islas**Seabird Conservation: Eradication of Feral Cats from Guadalupe Island, Mexico**

Scale-up feral cat control on Guadalupe Island to full eradication in the coming four years. Project also will continue monitoring seabirds and conducting social attraction for Laysan albatross, and will start social attraction for black-footed albatross on Guadalupe, and Zapato and Morro Prieto islets.

\$1,200,000

La Cruz Habitat Protection Project Reforesting Monarch Butterfly Overwintering Habitat in Central Mexico

Restore monarch butterfly overwintering habitat within the Monarch Butterfly Biosphere Reserve in central Mexico. Project will produce and distribute 120,000 native tree seedlings to reforest an estimated 267 acres.

\$60,000

MPA Enforcement International LLC Enhancing Enforcement Capacity for Coral Reef Management and Protection in the Turks & Caicos Islands

Provide tailored enforcement training for park, law enforcement and management personnel working in marine protected areas of the Turks and Caicos Islands. Project will include a country-specific assessment of enforcement needs, followed by a customized training workshop with participation from relevant enforcement agencies.

\$75,000

Pro Delphinus**Reduce Bycatch of Leatherback Sea Turtles in Gillnet Fisheries in Peru and Ecuador**

Monitor leatherback bycatch using onboard observers and electronic monitoring, conduct net illumination trials to test bycatch reduction potential and evaluate incentives-based mechanisms to changing fishing practices in six fishing communities with high interaction rates. Project will determine whether illuminated nets are a viable option for reducing unsustainable bycatch in targeted gillnet fisheries in Peru and Ecuador and help establish a bycatch monitoring and reduction program in Ecuador.

\$230,000

Rare**Integrating Ecology and Population Connectivity into Marine Area Management for the Mesoamerican Reef (Mexico, Guatemala Quintana Roo)**

Support coral reef regional planning across 12 priority reefs in Mexico, Belize, Guatemala, and Honduras by building local capacity to interpret ecological and genetic data and using available models to manage important reef fish stocks beyond protected area boarders. Project will provide training for at least two management organizations in each of the four countries to develop targeted conservation strategies and monitor changes in coral reef ecosystems resulting from management.

\$119,601

Sandy Island/Oyster Bed Marine Protected Area**Enhance Mangrove Resilience and Protection through Adaptive Management Strategies in Grenada**

Develop a robust protocol for the effective management of mangrove habitats at the Sandy Island/Oyster Bed Marine Protected Area in Grenada Grenadines. Project will secure the largest mangrove system in the Eastern Caribbean through establishment of a management and monitoring plan, training of park personnel, and engagement of volunteers in stewardship projects.

\$45,000

The Ocean Foundation**Explore and Test Gear Alternatives to Reduce Hawksbill Sea Turtle Bycatch in El Salvador**

Test gear modifications in the lobster gillnet fishery for potential in reducing hawksbill sea turtle bycatch at priority sites in El Salvador. Project will continue to monitor bycatch across three sites in and near the Gulf of Fonseca and build collaborative relationships with fishing communities to identify and test economically neutral or beneficial options for reducing unsustainable bycatch.

\$89,999

OTHER INTERNATIONAL**Royal Society for the Protection of Birds Seabird Restoration on Gough Island (UK)**

Restore Gough Island, a UK territory in the Tristan da Cunha Group for 23 species of nesting seabirds and two endemic landbirds, including Tristan albatross, Atlantic petrel and great shearwater. Project will eradicate invasive house mice and Sagina, a perennial matt-forming invasive plant, to protect seabird nesting habitat and eliminate predation and direct mortality on more than 600,000 seabirds chicks annually.

\$2,000,000

World Wildlife Fund**Supporting Albatross Bycatch Mitigation in Europe**

Place student and professional scientific observers onboard commercial longline fishing vessels in the Russian Far East to assess their streamer deployment efficacy. Project will partner with the School of Fisheries and Aquatic Resources at Kamchatka State Technical University (KSTU) to continue an elective course on independent observer techniques, which provides training in recording seabird and other bycatch, assisting with streamer deployment, and recording target catch.

\$50,000

GULF ENVIRONMENTAL BENEFIT FUND

FISCAL YEAR 2017 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 2017 in accordance with the terms of the plea agreements. Since its inception in 2013, NFWF has awarded nearly \$1 billion to projects in Gulf States.

ALABAMA

Alabama Department of Conservation and Natural Resources

Alabama Coastal Bird Stewardship Program
Conserve priority shorebird and coastal waterbird populations by establishing a two-year bird stewardship, monitoring, and outreach program in coastal Alabama.
\$1,462,000

Alabama Department of Conservation and Natural Resources

Gulf Highlands Conservation Acquisition
Acquire, conserve and manage 113 acres with 2,700 feet of Gulf frontage and exceptional beach/dune habitat, the largest undeveloped beach-front parcel remaining in coastal Alabama. Protection of this key habitat will benefit nesting sea turtles, migratory birds and shorebirds, and allow its continued function as refuge for the endangered Alabama beach mouse.
\$36,000,000

Alabama Department of Conservation and Natural Resources, Marine Resources Division

Multifaceted Fisheries and Ecosystem Monitoring in Alabama's Marine Waters and the Gulf of Mexico – Phase III
Monitor recreationally and commercially important reef and estuarine species of interest in priority Alabama waters through fishery-independent (trawls, bottom long lines, vertical lines) and fishery-dependent surveys (recreational red snapper harvest, commercial blue crab harvest rates). Data will be used to improve ecosystem-based management capabilities, assess the recovery of reef fish stocks in association with other fisheries restoration efforts and improve and expand single-species stock assessments for managed fish species. Project also will incorporate habitat characterization through side-scanning sonar, water quality monitoring and acoustic tracking of tagged fish species.
\$4,406,200

City of Gulf Shores

Bon Secour — Oyster Bay Wetland Acquisition Project

Acquire, protect and restore approximately 836 acres of diverse coastal habitat in the city of Gulf Shores. The tidal marshes, maritime forests and freshwater swamps located in this project area are important habitat for many species of conservation significance, including various wading birds and commercially important shellfish and finfish.
\$12,511,400

Mobile Bay National Estuary Program/ Marine Environmental Sciences Consortium

Fowl River Watershed Restoration: Coastal Spits and Wetlands Project — I
Restoration of important coastal spits and wetlands within the lower reaches of Fowl River is a significant priority action identified in the recently completed Fowl River Watershed Management Plan, funded under a prior GEBF award. This project will fund engineering and design studies to develop a solution to stabilize and protect four priority in-river wetland spits and restore marshland throughout the intertidal portions of lower Fowl River.
\$1,127,000

The Nature Conservancy

Dauphin Island Conservation Acquisition
Acquire approximately 8 acres of remaining undeveloped beachfront (1,200 linear feet) on a mid-island section of Dauphin Island. This primary barrier island provides important nesting, loafing, stopover and foraging habitats for a variety of coastal birds, shorebirds, neotropical migrants and other avian species, as well as nesting habitat for endangered sea turtles.
\$2,697,971

The Nature Conservancy

Grand Bay Acquisition (Amendment)
Expand the acquisition activities of the original project to include an additional 1,940 acres of priority coastal habitat along Grand Bay adjacent to existing protected lands (Alabama Forever Wild and Grand Bay National Wildlife Refuge).
\$4,000,000

The Nature Conservancy

Lightning Point Acquisition and Restoration Project — I
Protect and restore a key stretch of coastal shoreline at the mouth of Bayou La Batre River. Specifically, the project includes the acquisition of more than 100 acres of coastal habitat and the engineering and design for restoring approximately 28 acres of marsh and 1.5 miles of intertidal nearshore breakwater. The acquisition targets represent more than 2 miles of nearly contiguous undeveloped waterfront adjacent to existing protected lands owned by the state, Mobile County, and the city of Bayou La Batre.
\$5,903,100

Town of Dauphin Island

Dauphin Island Conservation Acquisition
Acquire approximately 8 acres of remaining undeveloped beachfront (1,200 linear feet) on a mid-island section of Dauphin Island. This primary barrier island provides important nesting, loafing, stopover and foraging habitats for a variety of coastal birds, shorebirds, neotropical migrants and other avian species, as well as nesting habitat for endangered sea turtles.
\$870,560

FLORIDA

Dolphins Plus

Increased Capacity for Marine Mammal Response
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.
\$496,451

Florida Fish and Wildlife Conservation Commission

Restoring Florida's Shorebird and Seabird Populations — I
Establish a dedicated shorebird and seabird program across the Florida Gulf Coast, with a goal to reverse the continued population declines in five focal species and begin to increase them over time. To achieve this goal, the project will focus on five strategies: 1) reduction of human disturbance, 2) habitat management, 3) predation management, 4) addressing data gaps/information needs and 5) improving regulatory coordination.
\$2,922,688

Florida Fish and Wildlife Conservation Commission, Fish and Wildlife Research Institute

Enhanced Assessment of Gulf of Mexico Fisheries: Fisheries Dependent Monitoring — IV
Improve marine fisheries data collection for enhancement of stock assessments and fisheries management of important species along the Florida Gulf Coast. Project will collect harvest data for red snapper and other reef fish from recreational and commercial fishermen.
\$1,742,615

Florida Fish and Wildlife Conservation Commission, Fish and Wildlife Research Institute

Enhanced Assessment of Gulf of Mexico Fisheries: Fisheries Independent Monitoring — IV
Implements a significant and meaningful expansion of the collection of fishery-independent data in the northern and eastern Gulf of Mexico. These data will be used to assess the recovery of offshore assemblages in association with restoration efforts implemented in response to the Deepwater Horizon oil spill; improve and expand single-species stock assessments for managed species; and foster improved ecosystem-based assessment and management capabilities.
\$4,500,000

Florida Fish and Wildlife Conservation Commission, Fish and Wildlife Research Institute

Restoring Florida's Shorebird and Seabird Populations — I

Establish a dedicated shorebird and seabird program across the Florida Gulf Coast, with a goal to reverse the continued population declines in five focal species and begin to increase them over time. To achieve this goal, the project will focus on five strategies: 1) reduction of human disturbance, 2) habitat management, 3) predation management, 4) addressing data gaps/information needs and 5) improving regulatory coordination. **\$4,252,259**

Gulf World Marine Institute Increased Capacity

for Marine Mammal Response

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. **\$462,607**

National Audubon Society

Restoring Florida's Shorebird and Seabird Populations — I

Establish a dedicated shorebird and seabird program across the Florida Gulf Coast, with a goal to reverse the continued population declines in five focal species and begin to increase them over time. To achieve this goal, the project will focus on five strategies: 1) reduction of human disturbance, 2) habitat management, 3) predation management, 4) addressing data gaps/information needs, and 5) improving regulatory coordination. **\$3,987,746**

University of Florida

Recovery and Resilience of Oyster Reefs in the Big Bend of Florida

Restore a degraded chain of oyster reefs in the Big Bend area of Florida to promote resilience and ecological benefit to a 50,000 acre coastal landscape comprised of vast salt marshes, seagrass beds and coastal forests that collectively host numerous fish and wildlife species of conservation and economic importance. Restoration actions will add elevation and durability to an existing, degraded reef chain by adding suitable base material and oyster shell with the goal of improving salinity regulation in the surrounding coastal zone, reducing recovery time of oysters following mortality events, and improving oyster reef resiliency to the long-term effects of sea level rise. **\$8,334,400**

LOUISIANA

Louisiana Coastal Protection and Restoration Authority

Mississippi River Mid-Basin Sediment Diversion Program Management

Provide program-level support for the management of the Mid-Barataria and Mid-Breton Sediment Diversion projects through the engineering and design phase, resulting in increased efficiencies in the delivery of construction-ready projects. **\$16,099,200**

Louisiana Coastal Protection and Restoration Authority

Mid-Barataria Sediment Diversion: Engineering and Design — II

Build on previous work to complete the engineering and design of the Mid-Barataria sediment diversion. Once constructed, the diversion is anticipated to convey up to 75,000 cubic feet per second of sediment-rich river water, introducing approximately 150 million tons of new sediment into Barataria Basin over a 50-year projection. Earlier investments advanced this project to a critical phase of design and these funds will result in a fully designed and permitted project ready to be constructed. **\$101,641,104**

Louisiana Coastal Protection and Restoration Authority

Mid-Breton Sediment Diversion: Engineering and Design

Initiate and complete engineering and design of the Mid-Breton Sediment Diversion project in Plaquemine Parish, Louisiana. Once constructed, the sediment diversion is anticipated to convey up to 35,000 cubic feet per second of sediment-rich river water, introducing approximately 70 million tons of new sediment into the Breton Sound Basin over a 50-year projection. Earlier investments advanced the planning necessary for this project to commence the engineering, design and environmental review. This investment will result in a fully designed and permitted project ready to be constructed. **\$90,701,600**

National Oceanic and Atmospheric Administration, National Marine Fisheries Service

Mid-Barataria Sediment Diversion: Engineering and Design — II

To support necessary permits and permissions related to implementation of the sediment diversion, this project will provide information on stock structure and connectivity through assessment of Barataria Bay dolphin use of the adjacent Terrebonne/Timbalier estuarine system and fine scale movements of dolphins in response to changing environmental conditions within Barataria Bay. **\$704,596**

MISSISSIPPI

Mississippi Department of Environmental Quality

Habitat Restoration and Conservation in Turkey Creek — I

Conserve important habitat and enhance water quality in the 30,000-acre Turkey Creek watershed through habitat and stream conservation and restoration. The project will use fee simple land and easement acquisition, focused in the lower reaches of the Turkey Creek watershed, to protect key wetland and riparian habitats. Restoration on these and other previously protected lands will include hydrologic restoration of wetlands, riparian buffers, invasive species management, debris removal and stream bank stabilization. **\$7,536,400**

Mississippi Department of Environmental Quality

Habitat Restoration: Federal Lands Program — I

Enhance and restore habitat on federal lands in coastal Mississippi through invasive species removal, forest thinning, prescribed burning and control of non-native mammals. This project focuses on restoring and conserving coastal habitat on federal lands to improve and maintain their benefit to fish and wildlife, enhance water quality to coastal bays through improved forest management, and promote resilience within coastal ecosystems. **\$5,946,094**

Mississippi Department of Environmental Quality

Acquisition of Priority Tracts for Coastal Habitat Connectivity — I

Enhance coastal habitat connectivity and increase core conservation areas within the Mississippi Coastal Preserves system, the Gulf Islands National Seashore, and the Grand Bay National Wildlife Refuge. Priority parcels will be identified, utilizing the Mississippi Comprehensive Ecosystem Restoration Tool, based on several key factors including adjacency to land parcels that are currently managed by the state or federal government, the existence of a target species or habitat, and the susceptibility to changing conditions, such as marsh migration, and changes in water salinity or quality. **\$17,433,000**

Mississippi Department of Environmental Quality

Coastal Bird Stewardship in Mississippi — II

This project expands, in both scope and duration, an earlier GEBF-funded Mississippi Coastal Bird Stewardship project. This four-year initiative will continue to benefit beach nesting and wintering shorebirds and seabirds, will expand habitat improvements for shorebirds and other migratory species, as well as filling key information gaps to support marsh bird conservation. Monitoring efforts will improve understanding of coastal bird population responses to ongoing restoration actions. **\$6,280,400**

TEXAS

Colorado River Land Trust

Matagorda Wetlands Acquisition and Conservation

Acquire and permanently conserve more than 600 acres of coastal wetland habitat on the East Matagorda Peninsula near the mouth of the Colorado River, along East Matagorda Bay. The property includes dunes, coastal prairie, tidal flats, and extensive fringing tidal marshes lining the edge of the bay. **\$1,000,000**

Galveston Bay Foundation

Dollar Bay-Moses Lake Wetlands Restoration and Protection — II

This construction project will restore and protect more than 500 acres of degraded wetlands and protect 6,800 linear feet of vulnerable shorelines from erosion within the Dollar Bay-Moses Lake complex in Galveston Bay. **\$850,000**

Houston Audubon Society

Smith Oaks Bird Sanctuary Rookery Island Restoration and Enhancement

Create two rookery islands and enhance existing colonial waterbird nesting habitat for thousands of birds that utilize the globally significant habitat at the Smith Oaks Bird Sanctuary in High Island. The two nesting islands will be constructed using the channel dredge material from adjacent water bodies, which will result in deeper trenches creating a barrier preventing access to the islands by predators. Additionally, water control structures will direct freshwater runoff into ponds that are critical foraging area. **\$239,800**

Jefferson County

Hydrologic Restoration of the Salt Bayou Watershed

This construction project will build two fresh water siphons that will restore freshwater flow to 18,000 acres of wetlands within the Salt Bayou Watershed, the largest contiguous estuarine marsh complex in Texas. The siphons will reconnect freshwater flows from north of the Gulf Intracoastal Waterway to the fragile coastal wetlands to the south. This fresh water will flush saltwater out of the wetlands and prevent erosion and conversion of marsh to open water. **\$4,500,000**

Texas General Land Office

Salt Bayou Beach Ridge Restoration — Engineering and Design

Complete engineering and design for the restoration of the beach ridge system between High Island and Sea Rim State Park on the Texas Upper Coast. The total length of the beach ridge restoration is 20 miles, of which 3 miles has recently been restored as a pilot effort that will inform the final design. **\$1,500,000**

The Nature Conservancy

Mad Island Marsh Preserve Shoreline Protection and Coastal Ecosystem Restoration — I

This planning and engineering project is the first phase of an effort to protect more than 6,000 acres of critically important coastal prairie and marsh ecosystem. The ultimate goal of the project is to install a 2.3 mile nearshore breakwater to stem the persistent erosion and habitat loss at the Nature Conservancy's Mad Island Marsh Preserve along the mid coast of Texas in Matagorda Bay. Slowing the shoreline loss at the mouth of the Mad Island Lake Bayou is critical to maintaining the salinity gradient of this estuarine system. **\$100,000**

Trust for Public Land

Follets Island Land Acquisition and Conservation Program — I

Acquire and permanently conserve more than 230 acres of pristine coastal dune and wetland landscape on Follets Island, a Texas barrier island southeast of the densely populated Galveston Island. Once acquired, these three tracts will expand the existing 441-acre "Follets Island Conservation Initiative" tract, acquired by Texas Parks and Wildlife in 2014. **\$1,266,000**

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

Bahia Grande Restoration: Colonial Bird Nesting Islands Protection — I

Conduct a feasibility study, alternatives analysis and 30 percent engineering design for the protection of bird nesting islands, totaling 36 acres in size, in the Bahia Grande Unit of Laguna Atascosa National Wildlife Refuge near Port Isabel. **\$200,000**

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

Bahia Grande Restoration: Paso Corvinas — I

Provide engineering and design specifications for actions required to restore tidal connectivity and enhance 670 acres of wetlands within Paso Corvinas, part of the Bahia Grande System adjacent to the Laguna Madre in south Texas. **\$200,000**

IMPACT-DIRECTED ENVIRONMENTAL ACCOUNTS (IDEA) FISCAL YEAR 2017 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.

ALABAMA

Alabama Department of Conservation and Natural Resources

Gulf Highlands Conservation Acquisition — Acquisition Only (AL)
Acquisition of Gulf Highlands Property, Alabama.
\$7,000, Federal Criminal Case U.S. v. Donald Vidrine

ALASKA

Alaska Department of Fish and Game
Anadromous Cataloging and Fish Inventory in Select Arctic Ocean Drainages (AK)
Conduct a rapid, systematic inventory of anadromous and resident fish distribution and associated aquatic and riparian habitat in select Arctic Ocean drainages within the National Petroleum Reserve — Alaska (NPR-A). Project will use established protocols, and target streams will be selected to fill gaps in coverage of the State of Alaska's Catalog of Waters Important for the Spawning, Rearing, or Migration of Anadromous Fishes in freshwater habitats expected to support anadromous fish populations that are likely to be impacted by human activities.
\$175,330, Federal Criminal Case U.S. v. Noble Drilling (U.S.) LLC

Manomet
Pre-migratory Movements and Habitat Use of Shorebirds on Alaska's North Slope
Employ cutting-edge tracking technology to answer critical questions about what habitats are used by shorebirds as they prepare for southbound migration. Project will provide information on how breeding shorebirds move to and among stopover sites along the Arctic Coast in order to gauge how changes in coastal areas are affecting shorebirds life cycles.
\$98,382, Federal Criminal Case U.S. v. Noble Drilling (U.S.) LLC

Nuka Research and Planning
Establishment of the Aleutian Islands Waterway Safety Committee (AK)
Establish an Aleutian Islands Waterway Safety Committee (AI WSC) as an independent, Alaska nonprofit organization that has the support and participation of key constituents engaged with maritime operations in the Aleutian Islands region. Project will provide a forum for identifying, assessing, planning, communicating, and implementing operational and environmental practices that promote safe, efficient and environmentally sound maritime operations in a waterway.
\$180,000, Federal Criminal Case U.S. v. IMC Shipping Co. PTE.LTD

The Great Land Trust
Settlers Bay Natural Area Acquisition (AK)
Acquire and donate a 295-acre parcel of undeveloped land adjacent to Knik Arm in Upper Cook Inlet to the Mat-Su Borough for conservation. Project will prevent development on lands that are important estuarine, nearshore, riparian, riverine and coastal wetlands habitats, identified by the National Oceanic and Atmospheric Administration, critical to the Cook Inlet Beluga whale, salmon populations, and 169 species of migratory birds and waterfowl.
\$66,400, Federal Criminal Case U.S. v. Freddie Joe Hankins

U.S. Department of the Interior, Bureau of Land Management
Development of a Verified Method to Estimate Detection Probability of Aerial Surveys for Steller's Eiders Breeding in the Barrow Triangle Area of the National Petroleum Reserve (AK)
Improve aerial survey methods used to measure abundance and trend of Endangered Species Act-listed Steller's eider breeding population within the National Petroleum Reserve — Alaska (NPR-A). The project will create a verified method to estimate detection probability using aerial surveys, produce a method to estimate population trends, and continue to provide information about annual distribution of breeding Steller's eiders in order to support the Steller's eider recovery program in the NPR-A.
\$141,622, Federal Criminal Case U.S. v. BP Exploration (Alaska) Inc.

U.S. Department of the Interior, U.S. Fish and Wildlife Service, Alaska Maritime National Wildlife Refuge
Monitoring McKay's Buntings and Rock Sandpipers on St. Matthew Island (AK)
Conduct a population and threat assessment for McKay's bunting and Pribilof Rock sandpiper. Project will develop models of avian abundance and population change; estimate reproductive success and nest failure rates relative to predation and habitat characteristics; assess current and future threats; and develop a monitoring program to assess changes in population size and habitat characteristics.
\$87,584, Federal Criminal Case U.S. v. Noble Drilling (U.S.) LLC

U.S. Department of Agriculture, U.S. Forest Service
Assessing the Vulnerability to Climate in Prince William Sound Watersheds (AK)
Conduct a study to assess the vulnerability of watersheds in Prince William Sound (PWS) to the potential effects of a changing climate. The project will establish 15 monitoring locations in PWS to measure air temperature, surface stream water temperature, and shallow streambed gravel/water temperature at the approximate burial depth of salmon eggs to monitor the incubation temperatures over the winter.
\$60,000, Federal Criminal Case U.S. v. Polar Tankers, Inc.

World Wildlife Fund
Reducing Polar Bear Mortality by Implementing Human-bear Conflict Reduction Measures in 3 Alaskan Villages
Improve the resilience of the Chuckchi polar bear subpopulation in Alaska by reducing unnecessary polar bear mortality that arises from human-polar bear conflict. Project will provide continuing support to the Kingikmiut Nanuuq Patrol in Wales, Alaska; expand the program to other interested villages within the Chukchi Sea polar bear subpopulation range; and increase understanding of human-polar bear conflicts in Chukchi Sea coastal communities.
\$199,161, Federal Criminal Case U.S. v. Noble Drilling (U.S.) LLC

ARIZONA

Ecosystems Research Institute
San Juan River Basin Recovery Implementation Program Habitat Monitoring (AZ)
Determine if recent trends in lost habitat has been reversed given the high runoff experienced by the San Juan River in the spring of 2016.
\$79,532, Mitigation

Sonotronics
Fish Sonic Tags for the San Juan River (AZ)
Supply fish sonic tags for the San Juan River Recovery Implementation Program.
\$32,535, Mitigation

CALIFORNIA

Bajada Ecology
2017 Raven Studies in Chemehuevi Desert Bureau of Land Management Area of Critical Environmental Concern/Critical Habitat Units (CA)
Research the interaction between desert tortoises and common ravens in the Chemehuevi Desert Bureau of Land Management Area of Critical Environmental Concern/Critical Habitat Units.
\$79,490, Mitigation

Bajada Ecology
2017 Raven Studies in Joshua Tree National Park (CA)
Research the interaction between desert tortoises and common ravens in Joshua Tree National Park.
\$52,329, Mitigation

Bajada Ecology
2017 Raven Studies in Ord-Rodman Bureau of Land Management Area of Critical Environmental Concern / Critical Habitat Units (CA)
Research the interaction between desert tortoises and common ravens in the Ord-Rodman Bureau of Land Management Area of Critical Environmental Concern/Critical Habitat Units.
\$70,645, 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.

\$21,018, Mitigation

California Department of Parks and Recreation

County State Parks Endowment, Morro Shoulderband Snail Habitat Management
Long-term management of mitigation land in San Luis Obispo County.

\$10,961, Mitigation

California Department of Fish and Wildlife

California Department of Fish and Wildlife Endowment, Wister Pond Operation and Maintenance
Long-term operation and maintenance of Wister Pond in San Diego County.

\$16,679, Mitigation

California Department of Parks and Recreation

McGrath Lake Restoration Activities — VI (CA)
Restore activities for McGrath Lake and Mandalay.

\$100,000, Federal Civil Case

United States of America, et al. v. Berry Petroleum Company

California State University, Stanislaus

Wildlife Surveys on Kern NWR (CA)
Conduct surveys for San Joaquin kit foxes, Tipton kangaroo rats and blunt-nosed leopard lizards on Kern National Wildlife Refuge.

\$1,142, Mitigation

California State University, Stanislaus

Wildlife Surveys on Kern NWR (CA)
Conduct surveys for San Joaquin kit foxes, Tipton kangaroo rats and blunt-nosed leopard lizards on Kern National Wildlife Refuge- II

Determine the presence of listed species on Unit 15 of Kern National Wildlife Refuge.
\$7,514, Mitigation

California Trout

Fish Passage Design at Interstate 5 Bridge Array on Trabuco Creek (CA)

Design a fish passage project to support endangered Southern California steelhead recovery in Orange County. Project provides for technical studies and engineering design for passage of juvenile and adult steelhead through a complex barrier on Trabuco Creek, a major tributary to San Juan Creek.
\$173,873, Federal Criminal Case U.S. v. Wal-Mart Stores, Inc.

Chicago Title Company

Bay Area Habitat Conservation Plan Property Acquisition (CA)
Support mitigation property acquisition of fee title to acquire 344 acres of land in Contra Costa County to support several endangered species, including Alameda whip snake, red-legged frog, California tiger salamander, kit fox and burrowing owl.
\$2,072,560, Mitigation

Christian A. Hagen

Desert Managers Group Raven Workshop Presenter Directed Disbursement (CA)
Make presentation on desert tortoise conservation at the Desert Manager Group’s Raven Workshop in Palm Springs.
\$500, Mitigation

City of Berkeley

South Sailing Cove Parking Lot Renovation Project (CA)
Provide a low-maintenance asphalt parking lot for safe recreational use at the South Sailing Cove of the Berkeley Marina. Project will repave the badly rutted gravel east parking lot; provide new striping and safe Americans With Disabilities Act accessible paths of travel; and install a stormwater treatment bioswale system.
\$214,630, State Civil Case

City of Pacifica

Pacifica Pier Restoration Project (CA)
Repair the Pacifica Pier so that it may remain open to the public for recreational use. Project will provide contractual services for design and project management for repair work, remove and replace lights, repair the deck access lid and wooden hand rails, and develop design documents to solicit bids for a set of additional deck hatch covers that are close to failing.
\$95,805, State Civil Case

Coastal Conservation and Research

Construction of Red-legged Frog Habitat (CA)
Restore 6 acres of wetlands within the Castroville Slough (2 miles north of the town of Castroville at the center of the Monterey Bay), which will provide high quality habitat for all life stages of the red-legged frog.
\$55,200, Mitigation

Corvus Ecological Consulting

2017 Raven Studies in Fremont-Kramer Bureau of Land Management Area of Critical Environmental Concern / Critical Habitat Units (CA)
Conduct research on the interaction between desert tortoises and common ravens in Fremont-Kramer Bureau of Land Management Area of Critical Environmental Concern/Critical Habitat Units.
\$91,631, Mitigation

Corvus Ecological Consulting

2017 Raven Studies in the Mojave National Preserve and Piute-Fenner Desert Wildlife Management Area (CA)
Conduct research on the interaction between desert tortoises and common ravens in the Mojave National Preserve and the Piute-Fenner Desert Wildlife Management Area.
\$135,043, Mitigation

County of San Luis Obispo

Avila Beach Bob Jones Bike Path — III (CA)
Conduct environmental review and engineering of a segment of the Bob Jones Pathway at Avila Beach, California. The project will result in the acquisition and restoration of at least 2 acres of biologically sensitive riparian habitat.
\$172,000, State Civil Case

Desert Tortoise Preserve Committee

Renewable Energy Action Team Initial and Capital- Manzana Wind (CA)
Perform short-term management of mitigation land in Kern County.
\$11,373, Mitigation

FlowWest

San Joaquin River Restoration FlowWest Technical Advisory Committee Services (CA)
Assist and advise the San Joaquin River Restoration Administrator regarding the implementation of San Joaquin River Restoration.
\$10,044, Other

GS Black

Shasta River Coho Protection Through Diversion Enhancement (CA)
Replace existing fish screen and intake structure with a new intake structure and screen to protect coho salmon and other salmonids from entrainment. Project complements an overall objective throughout the Shasta River watershed to improve diversion impact and entrainment of salmonids through diversion.
\$103,533, Mitigation

Guadalupe-Nipomo Dunes Center

2017 Education Programs Project (CA)
Provide the public with educational programs, including in-class programming for elementary school students, after-school programs held in collaboration with partner locations between Lompoc and San Luis Obispo, field trips to Oso Flaco Lake, hands-on educational events at the Dunes Center, and walks around Guadalupe and the Dunes Complex.
\$125,000, State Civil Case

Habitat Restoration Sciences

San Diego County Endowment, Greenhills Ranch (CA)
Long-term management of mitigation land in San Diego County.
\$19,308, Mitigation

Habitat Restoration Sciences

California Department of Fish and Wildlife Endowment - Joli Ann Leichtag Preserve
Long-term management of mitigation land in San Diego County.
\$11,884, Mitigation

Hardshell Labs

Desert Management Group Raven Workshop Presenter Directed Disbursement (CA)
Present on desert tortoise conservation at the Desert Manager Group’s Raven Workshop in Palm Springs.
\$500, Mitigation

HPR II

California Department of Fish and Wildlife Initial and Capital and Endowment - California Valley Solar Ranch
Perform short-term and long-term management of mitigation land in San Luis Obispo County.
\$201,773, Mitigation

Institute for Wildlife Studies

Non-lead Ammunition Outreach and Education (CA)
Implement a program to provide non-lead outreach and education to hunters within the southern California region, focusing on the Tehachapi and Transverse ranges. Project will consist of giving talks, showing demonstration materials, and providing outreach materials to hunter groups at organization events, clinics or classes, and special hunting events such as the International Sportsmen’s Expositions and Shooting Demonstration events.
\$84,000, Mitigation

Karuk Tribe

Lower Seiad Creek Channel Restoration — IV (CA)
Complete the implementation of a large-scale channel restoration and habitat enhancement project on Seiad Creek. Project will enhance survival and fitness of coho salmon through the restoration of floodplain function and creation of spawning habitat.
\$249,848, Mitigation

Koopmann Family Trust

California Department of Fish and Wildlife Initial and Capital, Koopmann Preserve
Perform short-term management of mitigation land in Alameda County.
\$8,545, Mitigation

Marvin A. Meyers and Patricia A. Meyers, Trustees of the Marvin and Patricia Meyers Living Trust

Alkali Sink Conservation Bank Credit Purchase, San Joaquin Valley Habitat Conservation Plan (CA)
Purchase 100 credit acres from the Alkali Sink Conservation Bank to benefit the San Joaquin Habitat Conservation Plan.
\$800,000, Mitigation

Mid Klamath Watershed Council

Klamath River Coho Habitat Enhancement, Monitoring and Design Project (CA)
Construct and monitor off-channel salmonid rearing habitat within the Middle Creek Subbasin. Project will create at least 20,000 square feet of off-channel habitat and enhance a total of 4,000 linear feet of stream channel, monitor 19 off-channel sites, plant riparian vegetation surrounding the 19 off-channel sites and coordinate invasive weed removal, and develop four additional sites for off-channel habitat.
\$175,806, Mitigation

Mojave Desert Land Trust

California Department of Fish and Wildlife Renewable Energy Action Team Endowment - Hidden Valley
Perform long-term management of mitigation land in San Bernardino and Imperial counties.
\$72,289, Mitigation

Mojave Environmental Holdings

California Department of Fish and Wildlife Initial and Capital, Cuddeback-Kramer Preserve
Perform short-term management of mitigation land in San Bernardino County.
\$61,389, Mitigation

National Park Foundation

Drakes Estero Restoration (CA)
Restore Drakes Estero to its natural wilderness condition. Project is an important component of a larger project to remove 95 oyster racks and debris left from historic aquaculture operations and will promote the re-establishment of 2.8 acres of high-quality native eelgrass habitat that will contribute to the health of Drakes Estero and the species that depend on it.
\$100,000, Federal Criminal Case various federal criminal prosecutions

Nelson Facilitation

Desert Management Group Raven Workshop Facilitator Directed Disbursement (CA)
Facilitate the Desert Manager Group’s Raven Workshop in Palm Springs.
\$10,072, Mitigation

New York University

Enforcement Gaps Interface for Wildlife Trafficking Tailored to California
Customize the Enforcement Gaps Interface (EGI), a supervised machine-learning algorithm that can examine commercial sites, as well as social media, to detect sales of potentially illegal wildlife in California. Project will modify the EGI tool to search for species, websites and sellers in California and will focus specially on wildlife on the California Threatened and Endangered Species List, as well as other species that are priorities for the California Department of Fish and Wildlife and the U.S. Fish and Wildlife Service in California.
\$23,000, Federal Criminal Case U.S. v. Hedley’s Humpers, LTD.

Ojai Valley Land Conservancy

Arundo Eradication at Camp Comfort (CA)
Treat 5.8 acres of recently removed Arundo donax with herbicide for two years. Project involves 6 herbicide treatments and biological monitoring of 5.8 acres of Arundo.
\$10,979, Federal Criminal Case U.S. v. Wal-Mart Stores, Inc.

Oregon State University

Myxozoan Fish Disease Research and Monitoring (CA)
Complete the development of mathematical models for predicting Ceratomyxa shasta-related mortality in juvenile coho salmon. Project will improve our understanding of C. shasta infection risk of salmonids and provide increased opportunities for management.
\$42,701, Mitigation

Pacific Gas and Electric Company

Acquisition of Sierra Health Foundation Property (CA)
Acquisition of 542.17 acres of vernal pool property in Placer County to fulfill the mitigation needs of the multiregion Habitat Conservation Plan.
\$50,000, Mitigation

Point Millerton Ranch

California Department of Fish and Wildlife Endowment, Point Millerton, aka Tract 4870
Perform long-term management of mitigation land in Madera County.
\$10,429, Mitigation

Point Reyes Bird Observatory, dba Point Blue Conservation Science

Ensuring a Resilient Tidal Marsh Ecosystem Through Healthy Upland Transition Zones (CA)
Identify the components of transition zone habitat that best benefit California ridgeway’s rails and provide recommendations for creating, restoring, and enhancing transition zones in the San Francisco Bay. Project will be accomplished by conducting rail surveys at marsh sites that differ with respect to features of the transition zone habitat, and surveys will be coordinated and carried out both during winter extreme tides and storms and during the spring breeding season.
\$76,119, Federal Criminal Case various federal criminal prosecutions

River Partners

Creation of Brush Rabbit Mounds on Dos Rios Ranch – San Joaquin Valley Habitat Conservation Plan (CA)
Creation of riparian brush rabbit habitat on the fully protected Dos Rios Ranch in Stanislaus County.
\$134,940, Mitigation

Salmon River Restoration Council**Salmon River Coho Rearing Habitat Enhancement Project (CA)**

Restore and maintain habitat connectivity within all tributaries of the Salmon River during the summer low-flow period, and remove and manipulate blockages to coho salmon migration. Project will improve critical coho rearing habitat by increasing cover, pool depth and habitat complexity, with manual modifications and the addition of small and large wood and brush bundles.

\$22,924, Mitigation

Santa Barbara Zoo**Nest Management of Condors (CA)**

Monitor condor nests in southern California and collect data to determine the causes of nest failure. Project will help in the efforts to adopt a formal adaptive management approach, continue intensive monitoring of breeding and nesting, and intervene where nesting problems exist in order to supplement the current population with wild-fledged chicks.

\$50,000, Federal Criminal Case

US v. Wal-Mart Stores, Inc.

Scott River Water Trust**French Creek Coho Enhancement through Flow Augmentation: 2017 (CA)**

Enhance in-stream conditions for juvenile coho salmon through seasonal water transactions in the French Creek drainage, and, when applicable, within other high priority areas of the Scott River system. Project will help maintain a constructive working relationship with landowners, water-users and associated partners with the goal of obtaining seasonal or long-term water transactions and, if possible, permanent water detections.

\$45,920, Mitigation

Scott River Watershed Council**Juvenile Coho Habitat Improvement Using Beaver Dams II (CA)**

Restore juvenile coho salmon rearing habitat in the Scott River watershed. Project will restore off-channel coho summer rearing habitat and overwintering habitat by building three beaver dam analogues on existing floodplain side channels on French Creek, a coho-bearing tributary to the Scott River with the resulting increased growth and survival.

\$58,801, Mitigation

Scott River Watershed Council**Enhance and Increase Juvenile Coho Salmon Off-Channel Habitat in the Scott River Watershed — I (CA)**

Identify and prioritize high value restoration sites where coho-rearing habitat can be enhanced within key cold water reaches of the Scott River system. Project will create a conceptual approach that seeks to optimize habitat complexity and extend the quantity and quality of slow, deep-water habitats during baseflow periods; design objectives to improve floodplain connectivity; and increase habitat complexity within instream and offchannel areas.

\$108,097, Mitigation

Southern Sierra Research Station**Biological Studies in Support of Endangered Species Act Compliance for Routine and Long-term Operation of Isabella Dam and Reservoir (CA)**

Conduct surveys on southwestern willow flycatcher and least bell's vireo surveys, as well as brown-headed cowbird point count surveys and control in the South Fork Wildlife Area from late April to late August in 2017. Project will evaluate habitat suitability for the flycatcher and vireo as well as conduct nest monitoring for any flycatcher or vireo nests.

\$61,861, Other

Sundance Biology**2017 Raven Studies in Superior-Cronese Bureau of Land Management Area of Critical Environmental Concern (CA)**

Conduct research on the interaction between desert tortoises and common ravens in the Superior-Cronese Bureau of Land Management Area of Critical Environmental Concern / Critical Habitat Units and Fort Irwin's Southeast Conservation Area.

\$188,726, Mitigation

The Bay Institute**Bay Institute Technical Advisory Committee Services (CA)**

Assist and advise the San Joaquin River Restoration Administrator regarding the implementation of the San Joaquin River restoration.

\$32,327, Other

The Bay Foundation**Southern California White Abalone Restoration Research Project**

Conduct research to restore populations of the endangered white abalone in Southern California. Project will test conditioning, spawning, and outplanting methods that can be applied to white abalone in the future.

\$5,000, Federal Criminal Case

U.S. v. HotelsAB Downtown Employees LLC, dba Standard Hotels

The Living Desert**Desert Tortoise Information and Education Program (CA)**

Facilitate desert tortoise education and outreach for communities, clubs, schools, businesses and local public agencies to increase awareness of desert tortoise conservation needs and actions and to reduce raven populations. Project aims to specifically reduce the human subsidy of raven populations as identified as an essential component to the Renewable Energy Action Team and the Desert Managers Group Raven Program.

\$99,079, Mitigation

The Restoration Trust**Wetland Management of Bordoni Ranch (CA)**

Perform long-term management of Bordoni Ranch Mitigation Area in Solano County.

\$9,208, Mitigation

Thomas K. Moss**California Department of Fish and Wildlife Endowment — Pletz Residence (CA)**

Perform long-term management of mitigation land in Monterey County.

\$2,970, Mitigation

Transition Habitat Conservancy**California Department of Fish and Wildlife****Renewable Energy Action Team Endowment**

Perform long-term management of mitigation land in San Bernardino County.

\$100,741, Mitigation

Transition Habitat Conservancy**Coolgardie Restoration and Eagle Habitat Protection (CA)**

Acquisition of 295 route markers for installation in golden eagle foraging habitat within the Coolgardie Travel Management Subregion. Project will help ensure that off-highway vehicle activity stays on designated routes and away from sensitive golden eagle areas.

\$4,828, Mitigation

Trout Unlimited**Pennington Creek Steelhead Barrier Removal Project (CA)**

Restore connectivity and access to critical spawning and rearing habitat for South-Central California steelhead in the Chorro Creek watershed in San Luis Obispo County. Project will eliminate a diversion structure and fish ladder identified as a significant fish passage barrier and replace it with a diversion intake allowing full up and downstream juvenile passage, and reconstruct the stream channel in the vicinity of the existing barrier.

\$8,978, Federal Criminal Case

U.S. v. Wal-Mart Stores, Inc.

University of California - Santa Cruz**Updating Database Management System for Effective Use by the California Condor Recovery Program (CA)**

Assist the U.S. Fish and Wildlife Service with effective management of condors in central and southern California on a short-term and long-term basis. Project will compile and provide critical information on the daily status, behavior, blood lead, and reproductive status of each condor in the wild in California and each condor held in captivity.

\$5,875, Federal Criminal Case

U.S. v. Wal-Mart Stores, Inc.

University of Nevada, Reno**Renewable Energy Action Team Account, Mitigation Effectiveness Monitoring Sub-Account Conservation Corridors for Desert Tortoises (CA)**

Complete monitoring studies of the desert tortoise in California's Mojave Desert. The project will address genetic connectivity, demographic connectivity, changes in the health status of populations in response to habitat changes associated with development projects, and the effects of climate and between site habitat suitability on connectivity between populations.

\$1,148,265, 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.

\$58,000, Mitigation

Ventura County Watershed Protection District**Matilija Dam Ecosystem Restoration Project Estuarine and Coastal Modeling (CA)**

Provide detailed modeling of sediments delivered to the Ventura River Estuary and nearshore waters as a result of the removal of Matilija Dam to assess effects on estuarine and marine habitats. Project is an integral component of a larger local ecosystem restoration project to create and sustain instream, riparian, estuarine, and coastal habitats along the Ventura River, and migratory access to upstream habitats for endangered southern California steelhead trout.

\$278,002, Federal Criminal Case

U.S. v. Wal-Mart Stores, Inc.

West Virginia University Research Corporation California Condor Flight Response in a Variable Meteorological and Topographic Environment: Phase I

Record movements of California condors to understand how their flight behavior, especially altitude above ground level, responds to variations in topography and weather. Project will provide information on condor flight behavior to predict risk to birds from existing and proposed individual turbines within current and future condor range and identify wind or topographic variables that may be preferentially used by condors.

\$30,000, Mitigation

Westervelt Ecological Services**California Department of Fish and Wildlife Endowment, Maxwell Planned Unit Development**

Long-term management of mitigation land in Colusa County, California.

\$7,426, Mitigation

Westervelt Ecological Services**Cosumnes Floodplain Mitigation Bank Credit Purchase (CA)**

Purchase 0.6 Floodplain Mosaic Wetland Credits from the Cosumnes Floodplain Mitigation Bank.

\$82,716, Mitigation

William C. Webb**Desert Managers Group Raven Workshop Presenter Directed Disbursement (CA)**

Give presentation on desert tortoise conservation at the Desert Manager Group's Raven Workshop in Palm Springs.

\$500, Mitigation

William Ian Boarman**Desert Managers Group Raven Workshop Presenter Directed Disbursement (CA)**

Give presentation on desert tortoise conservation at the Desert Manager Group's Raven Workshop in Palm Springs.

\$500, Mitigation

COLORADO**A. Lawrence Kolz****Standardization of Recovery Program Electrofishing Fleet (CO)**

Provide members of the San Juan River Recovery Implementation Program electrofishing fleet with guidelines for standardizing their electrode arrays to facilitate standardization of the power output for their electrofishing.

\$850, Mitigation

Blue Skies Consulting**Digital Aerial Photography on the San Juan River (CO)**

Conduct digital aerial photography to support habitat mapping efforts on the San Juan River.

\$52,500, Mitigation

Global Conservation Network**Colorado Pikeminnow Population Viability Analysis**

Use a population viability analysis to help assess species extinction risk and as a tool for the U.S. Fish and Wildlife Service, program managers, and species experts to reach a decision for downlisting.

\$30,200, Mitigation

Maybell Irrigation District**Automated Gate for Return of Elkhead Reservoir Releases (CO)**

Install a remotely controlled automated gate and measuring device 1 mile downstream of the Maybell Canal headgate that will promptly return any Elkhead releases diverted into the canal to the Yampa River.

\$66,600, Mitigation

Municipal Treatment Equipment**Hogback Gate Repair (CO)**

Manage two states' contributions to the San Juan River Endangered Fish Recovery Program. Recovery strategies include research, habitat restoration and management, in-stream flow acquisitions, and raising fish in hatcheries for stocking.

\$17,444, Mitigation

Pat Martinez**Standardization of Recovery Program Electrofishing Fleet (CA)**

Provide members of the San Juan River Recovery Implementation Program electrofishing fleet with guidelines for standardizing their electrode arrays to facilitate standardization of the power output for their electrofishing.

\$350, Mitigation

Rocky Mountain Bird Observatory**Sagebrush Obligate Songbird Conservation (CO, WY)**

Partners will increase science-based sagebrush habitat conservation delivery for migratory birds in Colorado and Wyoming, with additional capacity for outreach and on-the-ground habitat enhancement projects.

\$2,500, Federal Criminal Case

U.S. v. Encana Oil and Gas, Inc.

SWCA Environmental Consulting**Technical Assistance to the Upper Colorado River Fish Recovery Program**

Assist U.S. Fish and Wildlife Service, in coordination with the Recovery Program, with completing revision of four endangered fish species recovery plans. Project's revisions will be assimilated with past and new information, and consistent with the Endangered Species Act, implementing regulations, and the U.S. Fish and Wildlife Service handbook for recovery plan development.

\$59,696, Mitigation

FLORIDA**Florida Fish and Wildlife Conservation Commission, Fish and Wildlife Research Institute****Enhanced Assessment of Gulf of Mexico Fisheries (Fisheries Dependent Monitoring) — IV (FL)**

Enhance marine fisheries data collection program for development of stock assessments and fisheries management of important stocks in the Gulf of Mexico. Project aims to facilitate the replenishment and protection of living resources including red snapper, other reef fishes, and associated marine resources through improved data collection.

\$7,000, Federal Criminal Case

U.S. v. Donald Vidrine

Hillsborough County**Hardbottom Mapping and Characterization Within Tampa Bay Hillsborough County Waters (FL)**

Develop a map product of hard and live bottom habitats in the Hillsborough County waters south of the Gandy Bridge and west and south of Interbay Peninsula. Project will lead to the development of protection and restoration targets for this habitat within Tampa Bay.

\$23,000, Federal Criminal Case

U.S. v. Merlando Corlis

Manatee County**Robinson Preserve Oyster Reef Habitat Enhancement (FL)**

Enhance a larger habitat improvement effort occurring at Robinson Preserve in Manatee County by creating 2 acres of new oyster reef habitat within the preserve.

\$12,900, Federal Criminal Case

various federal criminal prosecutions

Mote Marine Laboratory

Upgrade Sea Water System at the Mote Marine Lab Facility (FL)

Upgrade the sea water supply and filtration system for the purpose of improving the operation of an educational, research, and conservation facility. Project will provide the necessary equipment to provide better water quality and reliability for the live coral tanks. *\$48,000, Federal Criminal Case U.S. v. Ammon Covino*

Socialize With Education Empowerment Trust Yourself

Captain’s Kids and Clean Waterways (FL)

Restore 1 acre of coastal wetland habitat. Project will plant 18,000 plants to secure newly placed sand and provide basic monitoring through established education programs and internships. *\$50,000, Federal Criminal Case U.S. v. Briese Schifffahrts GmbH & Co. KG*

HAWAII**Conservation Metrics**

Automated Acoustic Surveys for Hawaiian Petrel, Newell’s Shearwater, Band-rumped Storm-Petrel, and Barn Owl (HI)
Analyze data from 20 song meters deployed on Lanai for 97 days in 2016. *\$13,803, Mitigation*

Conservation Metrics

Automated Acoustic Surveys for Hawaiian Petrel, Newell’s Shearwater, and Band-rumped Storm-Petrel on Lanai (HI)
Analyze data from 10 song meters deployed on Lanai for five months in 2016. *\$11,914, Mitigation*

Conservation Metrics

Automated Acoustic Surveys for Hawaiian Seabirds on Lanai, Hawaii
Deploy a total of 23 automated acoustic sensors to survey for Hawaiian seabird species on the island of Lanai. *\$8,495, Mitigation*

Ho’iilina Ranch

Fence Maintenance and Ungulate Control at Kona Forest Unit (HI)
Fence conservation lands and remove feral ungulates from the Kona Forest Unit of Hakalau Forest National Wildlife Refuge. *\$14,550, Other*

The Nature Conservancy

Designing Marine Managed Areas to Protect Coral Reefs and Nearshore Ecosystems (HI)
Assist the state of Hawaii in designing a resilient statewide marine managed areas network that considers the entire ecosystem, including humans, to maintain healthy, productive and resilient coral reefs, fisheries and watersheds. Project includes a gap analysis of Hawaii’s existing network of Marine Managed Areas. *\$179,932, Federal Criminal Case U.S. v. Doorae Shipping, Co. LTD.*

University of Hawaii, Manoa

Monitoring of Endangered Seabirds on Lanai (HI)
Conduct field surveys and monitor changes to determine current population size and add to knowledge of three endangered and threatened native seabird species on Lanai. *\$50,163, Mitigation*

KANSAS**Alexander Pump and Services**

Installation of Pump Station at Flint Hills National Wildlife Refuge (KS)
Install electric pump for supplying water to 500 acres of wetlands within the Flint Hills National Wildlife Refuge. *\$54,440, Mitigation*

LOUISIANA**Louisiana Coastal Protection and Restoration Authority**

Mid-Barataria Sediment Diversion: Engineering and Design — II (LA)
Use the sediments and freshwater from the river to re-establish delta wetland building and sustain a gradient of habitat types that support estuarine resident and dependent organisms. Project will facilitate design and permitting efforts to restore deltaic wetlands in Louisiana’s Barataria basin with a sediment diversion from the Mississippi River. *\$15,000, Federal Criminal Case U.S. v. Donald Vidrine*

The Trust for Public Land

Conserving Fleming Plantation (LA)
Conserve the 3,476-acre Fleming Plantation as an addition to Jean Lafitte National Historical Park. Project will improve the ecological integrity of the Louisiana Gulf Coast, while expanding opportunities for public recreation and building resiliency against storm surge and other climate induced threats. *\$130,000, Federal Criminal Case various federal criminal prosecutions*

MARYLAND**Maryland Department of Natural Resources**

Equipment Purchase and Operational Funding for Maryland Department of Natural Resources Police
Provide funding for equipment purchases and operational funds for the re-establishment of the Maryland Department of Natural Resources Police Aviation Unit. *\$249,992, Federal Criminal Case various federal criminal prosecutions*

MONTANA**River Design Group**

Lost Trail National Wildlife Refuge Restoration Project (MT)
Provide project management and coordination for Lost Trail National Wildlife Refuge Restoration Stream and Wetland Design *\$10,202, Mitigation*

The Blackfoot Challenge

Coordination, Restoration, and Mitigation for Priority Species in Northwestern Montana
Conduct coordination, restoration, and mitigation work in northwestern Montana related to U.S. Fish and Wildlife Service priority species, including grizzly bears, bull trout, westslope cutthroat trout and trumpeter swans. *\$48,000, Mitigation*

NEW JERSEY**Martin, Ottaway, van Hemmen and Dolan**

Cost Analysis of Compliance with MARPOL Annex I Oily Water Separator Regulations (NJ)
Conduct a cost analysis of compliance versus non-compliance with MARPOL Annex I oily water waste disposal regulations. Project will quantify various costs required to maintain compliance with oily water separator regulations, such as crew training, oil content monitor calibration, and consumable replacement, as well as the risk of large fines incurred in the case of discovery and prosecution of non-compliance by the U.S. Coast Guard, Department of Justice. *\$26,110, Federal Criminal Case U.S. v. Overseas Shipholding Group*

NEW MEXICO**Biomark**

Installation of Passive Integrated Transponder Antenna at Hogback Bypass Canal (NM)
Install six passive integrated transponder antennas in the naturalized bypass channel at the Hogback Canal to detect endangered fish. *\$23,149, Mitigation*

Keller-Bliesner Engineering

San Juan River Fish Antennae Installation (NM)
Provide equipment, labor and supervision to support Reclamation to reinstall an RM 136.4 antennae and install antennas in the sluice channel directly below Hogback Diversion. *\$14,088, Mitigation*

Public Service Company of New Mexico

Hogback Fish Weir Maintenance (NM)
Maintain the Hogback fish weir on behalf of the San Juan River Recovery Implementation Program. *\$43,005, Mitigation*

Purdue University

Fatty Acid Analysis for the San Juan River Recovery Implementation Program (NM)
Sample and analyze fatty acids to support the San Juan River Recovery Implementation Program. *\$6,448, Mitigation*

The Nature Conservancy

San Juan River Phase II Channel Restoration Site Monitoring (NM)
Obtain information on the availability and persistence of aquatic habitats at the restored site and the relative abundance of larval and small-bodied fish using them. Project will measure seasonal and annual changes in habitat features and fish abundance in the restored secondary channel, compare the relative abundance of fish collected in different habitats to determine if preferences exist, and compare habitat features and fish abundances in the restored channel with a reference secondary channel. *\$70,509, Mitigation*

The Nature Conservancy

Floodplain Wetland Restoration, San Juan River — III (NM)
Implement a third phase of habitat restoration projects on the San Juan River. Project will restore a floodplain wetland, a habitat type that has been lost from the San Juan and used for site selection, engineering, archaeological surveys, preliminary design and permitting of the project. *\$153,045, Mitigation*

Zohnnie Construction Industries

Boat Shed on the San Juan River (NM)
Build a boat shed to house research equipment on Navajo Nation property along the San Juan River. *\$79,909, Mitigation*

NEW YORK**Cornell Cooperative Extension Association of Suffolk County**

Marine Meadows Program Fluke Habitat Restoration Project (NY)
Conduct five Marine Meadows Program Workshops as a way to engage the public in large-scale eelgrass habitat-restoration work. The project will lead to the re-establishment of eelgrass habitat in the waters surrounding Long Island, New York. *\$24,500, Federal Criminal Case U.S. v. Kaminisky*

Vemco

American Eel Telemetry Study (NY)
Purchase acoustic receiver and flotation collar for an American Eels tracking study. *\$67,094, Mitigation*

New York Botanical Garden

Conservatory Permeable Paver Stormwater Detention Lot Project (NY)
Install 11,136 square feet of permeable pavers in an existing impervious parking area. This project will improve the water quality of the Bronx River that in turn discharges into Long Island Sound by reducing the volume of runoff and the quantity of pollution entering the combined storm and sewer. *\$204,535, State Civil Case*

Saint Regis Mohawk Tribe

Dam Removal Effects: Initial Passage, Penetration, and Community Change (NY)
Document use of the newly opened connectivity corridor resulting from removal of the Hogansburg Dam and fish assemblage changes near and upstream of the dam. *\$92,150, Mitigation*

U.S. Department of the Interior, U.S. Fish and Wildlife Service, New York Field Office

Lake Sturgeon Restoration Project- U.S. Fish and Wildlife Service Hatchery Assistance (NY)
Provide ongoing support for Lake Sturgeon restoration projects. *\$25,000, Mitigation*

U.S. Department of the Interior, U.S. Fish and Wildlife Service, New York Field Office

Little Sucker Brook Walleye Spawning Enhancement (NY)
Restoration of Little Sucker Brook Fish Passage as part of the St. Lawrence enhancement, mitigation and research project to improve walleye spawning enhancement. *\$18,487, Mitigation*

U.S. Department of the Interior, U.S. Fish and Wildlife Service, New York Field Office

St. Lawrence Fish Enhancement, Mitigation, and Research Fund Expenses (NY)
Support fish enhancement, mitigation and research projects in the St. Lawrence River. *\$150,433, Mitigation*

U.S. Department of the Interior, U.S. Geological Survey, Great Lakes Science Center

Dam Removal Effects: Initial Passage, Penetration, and Community Change — II (NY)
Document use of the newly opened connectivity corridor resulting from removal of the Hogansburg Dam and fish assemblage changes near and upstream of the dam. *\$65,516, Mitigation*

Various Recipients

Cranberry Creek Restoration Project (NY)
Restore Cranberry Creek as part of the St. Lawrence enhancement, mitigation, and research project. *\$82,484, Mitigation*

Various Recipients

Oak Island Restoration Project (NY)
Restore Oak Island as part of the of the St. Lawrence enhancement, mitigation and research project. *\$160, Mitigation*

Various Recipients

Omar Dam Fish Passage Project (NY)
Improve fish passage in the St. Lawrence River Basin. *\$15,899, Mitigation*

Various Recipients

Oswegatchie River Fish Passage Project (NY)
Restoration of Oswegatchie River Fish Passage as part of the St. Lawrence enhancement, mitigation, and research project *\$50,142, Mitigation*

Wildlife Conservation Society

A Restraint/Chute System to Enhance Propagation of Asian One-Horned Rhinoceroses at the Bronx Zoo (NY)
Design a custom-built restraint chute to fit in one of the indoor rhino stalls at the Bronx Zoo’s Wild Asia facility, and constructed so that it can be easily and quickly assembled or disassembled. Project will enable staff to collect blood, urine and/or fresh fecal samples to monitor estrous periods, allow staff to conduct ultrasound examinations to follow fetal development during pregnancies, and reduce the number of times rhinos would need to be chemically immobilized for veterinary purposes. *\$50,000, Federal Criminal Case U.S. v. Robert W. Newman*

NORTH CAROLINA**Conserving Carolina**

Hollamon Tract Purchase (NC)
Acquire the 101-acre Hollamon Tract, located at the confluence of the French Broad and the Mud Creek in Henderson County. Project will result in a comprehensive site restoration that will improve water quality, wetlands and aquatic habitat. *\$440,000, Federal Criminal Case U.S. v. Duke Energy Carolinas; U.S. v. Duke Energy Progress*

Conserving Carolina

Mountain Bogs National Wildlife Refuge and Management (NC)
Bring 115 acres of bog property into conservation and improve wetland hydrology on at least 15 acres. The properties will ultimately become part of the Mountain Bogs National Wildlife Refuge and will support the recovery of four federally listed species: mountain sweet pitcher plant, bunched arrowhead, swamp pink, and bog turtle. *\$1,343,000, Federal Criminal Case U.S. v. Duke Energy Carolinas; U.S. v. Duke Energy Progress*

National Audubon Society
 Habitat Management for Colonial Nesting Waterbirds in the Lower Cape Fear River (NC)
 Treat and improve the habitats on two islands in the Lower Cape Fear River, Ferry Slip and South Pelican Islands, over three annual breeding and non-breeding cycles to sustain and improve the numbers of nesting waterbirds. Project will involve a combination of mechanical treatments, application of fire, and use of herbicide and will maintain the bare sandy substrates necessary for nesting and reproductive success of a suite of priority species.
\$82,183, Federal Criminal Case
U.S. v. Duke Energy Carolinas; U.S. v. Duke Energy Progress

National Audubon Society
 Planning Phase of Oyster Restoration in the Lower Cape Fear River (NC)
 Fund analysis and permitting phase of a project that will restore and establish oyster reefs associated with six islands in the Lower Cape Fear River in Brunswick and New Hanover counties in North Carolina. Project will include pre-construction monitoring and assessment of oyster abundance, recruitment, and demography as well as monitoring of American oystercatcher and other priority species in the area to help assess the long-term effects of the project on these priority species.
\$98,122, Federal Criminal Case
U.S. v. Duke Energy Carolinas; U.S. v. Duke Energy Progress

North Carolina Division of Parks and Recreation
 Lake Waccamaw Hydrilla Control (NC)
 Eradicate the invasive aquatic plant, Hydrilla verticillata, in Lake Waccamaw through use of aquatic herbicides. Project will suppress hydrilla growth in the lake, preventing its spread and protecting the federally threatened Waccamaw silverside and numerous endemic fish and mussels.
\$200,000, Federal Criminal Case
U.S. v. Duke Energy Carolinas; U.S. v. Duke Energy Progress

North Carolina State University
 Aquatic Species Restoration and Research at the Eastern Aquatic Conservation Facility at Yates Mill (NC)
 Conduct research on imperiled mollusks and non-game fishes in North Carolina to benefit their conservation and restoration. Project will place an emphasis on tasks related to captive propagation and culture, water quality and riparian environment improvement, and their services to the ecosystem.
\$1,120,000, Federal Criminal Case
U.S. v. Duke Energy Carolinas; U.S. v. Duke Energy Progress

North Carolina Wildlife Resources Commission
 Little River Land Acquisition (NC)
 Acquisition of the Shoe Heel tract, an approximately 64-acre parcel of riparian land located on the Little River in the Neuse River basin in Johnston County. Project will help protect several imperiled species, including the Tar River spiny mussel, yellow lance, Carolina madtom, and Atlantic pigtoe.
\$250,000, Federal Criminal Case
U.S. v. Duke Energy Carolinas; U.S. v. Duke Energy Progress

North Carolina Wildlife Resources Commission
 Mulberry Mill Meadow Bog Restoration (NC)
 Restore Mulberry Mill Meadow Bog located in Wilkes County. Project will include stabilization of the head cuts, removal of sediment immediately east of the wetland, constructing a diversion, installation of log sills to reduce stormwater flow volume and velocity through the wetland, and enhancement of habitat in the surrounding uplands.
\$100,000, Federal Criminal Case
U.S. v. Duke Energy Carolinas; U.S. v. Duke Energy Progress

Piedmont Land Conservancy
 Dan River Game Land Acquisition (NC)
 Purchase approximately 650 acres of Phase 1 of the Galloway Tract. The Galloway Tract is one of the most significant conservation sites in the Piedmont because of its diverse wildlife.
\$599,998, Federal Criminal Case
U.S. v. Duke Energy Carolinas; U.S. v. Duke Energy Progress

The Nature Conservancy, North Carolina Chapter
 Mountain Bog National Wildlife Refuge Acquisition and Management (NC)
 Place permanent protections on the 5-acre Dalton tract, an upland parcel adjacent to McClure's Bog. Project will directly support the recovery of the endangered mountain sweet pitcher plant, the threatened swamp pink, as well as the bog turtle, a species of concern.
\$289,942, Federal Criminal Case
U.S. v. Duke Energy Carolinas; U.S. v. Duke Energy Progress

U.S. Department of the Interior, U.S. Fish and Wildlife Service, Pee Dee NWR
 Pee Dee Floating Classroom (NC)
 Convert an existing fishing pier into a floating classroom for local school groups. The project will allow for increased environmental education programming at Pee Dee National Wildlife Refuge.
\$29,300, Federal Criminal Case
U.S. v. Duke Energy Carolinas; U.S. v. Duke Energy Progress

OHIO

Cleveland Museum of Natural History
 Legacy Living Places Reprint (OH)
 Print publications to promote Lake Erie Allegheny Partnership activities.
\$12,846, Other

OREGON

Tillamook County
 Southern Flow Corridor, Landowner Preferred Alternative (OR)
 Protect and restore 519 acres of tidal wetland habitat in the upper Tillamook Bay. The project directly addresses the loss and simplification of estuarine rearing habitat for the five native salmonid species in Tillamook Bay.
\$300,000, Federal Criminal Case
various federal criminal prosecutions

TENNESSEE

Nashville Zoo
 Rhinoceros Awareness and Conservation Education: RACE to Save the Rhino (TN)
 Install interpretative signage and tents around the 40-acre African Savanna exhibit. This project will inform, intrigue, and motivate guests about the white rhinoceros and the plights facing this animal in order to motivate them to take action to save the rhino and other endangered species.
\$110,001, Federal Criminal Case
U.S. v. Robert W. Newman

TEXAS

The University of Texas at Austin
 Monofilament Line Bin Building and Placement (TX)
 Build at least 12 vinyl monofilament recycling bins with signage, place in strategic locations around Port Aransas and encourage head boats to mount on their decks for use.
\$900, Federal Criminal Case
U.S. v. Navi Ship Management Services

The University of Texas at Austin
 South Texas Marine Debris Education Campaign
 Create a marine debris campaign in south Texas that targets recreational fisherman. Project will develop impactful media that can be incorporated into recreational fishing/hunting conservation groups, as well as distributed throughout the southern Texas Gulf Coast Region.
\$72,993, Federal Criminal Case
U.S. v. Navi Ship Management Services

Thomas E. Smith
 Tom Smith Land Acquisition Consulting (TX)
 Support Tom Smith's work as a habitat consultant throughout the Southwestern United States on various projects in partnership with landowners and agencies. Mr. Smith will facilitate the transfer of habitats suitable to meet the purposes of each projects.
\$94,905, Mitigation

U.S. Department of the Interior, U.S. Fish and Wildlife Service, Texas Mid-Coast Refuge Complex
 Willy Family Tract Acquisition (TX)
 Purchase the Willy Family Tract, an 84.2-acre parcel of old-growth forest habitat located on the Brazos River in Brazoria County.
\$168,400, Mitigation

UTAH

Biomark
 Installation of Passive Integrated Transponder Antenna at McElmo Creek (UT)
 Install permanent passive integrated transponder antennas in the gabions at McElmo Creek bridge.
\$32,251, Mitigation

ERO Resources Corporation
 Environmental Services for Green River Canal Fish Barrier Project (UT)
 Conduct field surveys and research as necessary to make a Section 7 determination and provide supporting rationale on critical habitat for two federally listed species: razorback sucker and Colorado pikeminnow.
\$6,695, Mitigation

Montgomery Archaeological Consultants
 Cultural Resource Services for the Green River Canal Fish Screen (UT)
 Conduct a Class III inventory of the Green River Canal Company's proposed fish screen project area in Emery County.
\$2,641, Mitigation

RP Wetlands and Waterfowl
 Machine Lake Mitigation Bank Credit Purchase
 Purchase 1.77 emergent marsh credits from the Machine Lake Mitigation Bank.
\$97,350, Mitigation

VIRGINIA

Conservation Services
 2017 Tree Planting Project (VA)
 Plant 14,000 bald cypress and 14,000 water tupelo seedlings at the Great Dismal Swamp National Wildlife Refuge.
\$25,750, Other

Georgia Southern University Research and Service Foundation
 Genetic Restoration of Endangered Roanoke Logperch (VA)
 Increase the genetic viability of the Goose Creek population of endangered Roanoke logperch by transplanting individuals from a genetically diverse population in the Roanoke River. Project will increase the probability of persistence for the Goose Creek population and help inform future translocation activities for this and other species.
\$94,772, Federal Criminal Case
U.S. v. Duke Energy Carolinas; U.S. v. Duke Energy Progress

Halifax County Service Authority
 Spill Response Preparedness, Halifax County (VA)
 Develop a spill response preparedness plan that identifies and diminishes potential contamination sources and hazards associated with the transport and conveyance of certain commercial, agricultural, and consumer use products within the Dan River basin region. Project will focus on identifying hazards related to the regions roads where potential contaminants are transported and how such events and discharges could be mitigated and controlled should there be a major or minor release into source water.
\$50,000, Federal Criminal Case
U.S. v. Duke Energy Carolinas; U.S. v. Duke Energy Progress

The Elizabeth River Project
 Restoring the "Lost Branch" of the Elizabeth River (VA)
 Improvement to the Indian River and Broad Creek tributaries from scores of F to at least D for Enterococcus bacteria, and improve the overall water quality score for the Eastern Branch from D to C. Project will accelerate nutrient and sediment reductions for the Elizabeth River's Eastern Branch.
\$90,900, Federal Criminal Case
U.S. v. Omega Protein, Inc. (E.D. VA)

Town of Clarksville
 Town of Clarksville Spill Response Plan (VA)
 Development of a spill response plan for Clarksville. Project will enable the town to be prepared to respond to a coal spill near the water intake at the bridge from neighboring rail lines that supply the Mecklenburg Power Station.
\$25,000, Federal Criminal Case
U.S. v. Duke Energy Carolinas; U.S. v. Duke Energy Progress

U.S. Department of the Interior, U.S. Fish and Wildlife Service, Region 5
 Dan River Watershed Mussel Restoration and Recovery (VA)
 Develop a propagation technology and culture techniques for the James spiny mussel, Atlantic pigtoe, green floater and triangle floater, and produce yellow lamp mussel juveniles. Project will fund genetic analysis to evaluate broodstock collection sites and establish viable mussel release and monitoring sites in the Roanoke River basin with an emphasis on the Dan River watershed.
 \$600,000, Federal Criminal Case
U.S. v. Duke Energy Carolinas; U.S. v. Duke Energy Progress

Virginia Marine Resources Commission
 Fisheries Law Enforcement Equipment Procurement (VA)
 Purchase law enforcement equipment to be utilized for the protection of the Chesapeake Bay and its associated fishery stocks.
\$69,985, Federal Criminal Case
various federal criminal prosecutions

WASHINGTON

South Puget Sound Salmon Enhancement Group
 West Oakland Bay Restoration and Conservation (WA)
 Enhance salt marsh habitat and restore the Goldsborough Creek Delta for federally listed fish and wildlife in the Goldsborough Creek Estuary/Oakland Bay. Project benefits include, but are not limited to, the support of federal and state salmon recovery goals, restoration of 21.7 acres of nationally declining estuarine, intertidal-emergent salt marsh wetlands, and marine riparian enhancement.
\$2,634, Federal Criminal Case
U.S. v. Bryan Stowe

U.S. Department of the Interior, U.S. Fish and Wildlife Service, Bear River Estuary Restoration — V (WA)
 Restore 200 acres of the Bear River estuary in Wallapa Bay. Project will remove an outer dike and tide gate at the Riekkola Unit of the Willapa National Wildlife Refuge.
\$67,925, Federal Criminal Case
U.S. v. Wiegardt Bros., Inc.

WISCONSIN

University of Wisconsin, Madison
 Signal Processing and Deep Learning Digital Images for Wood Species Identification (WI)
 Advance the accuracy and algorithmic underpinnings of the machine-vision wood identification system called the Xylotron.
\$299,989, Federal Criminal Case
U.S. v. Lumber Liquidators, Inc. (E.D. VA)

WYOMING**Cellular Tracking Technologies****Eagle Risk Assessments, Telemetry Units (WY)**

Purchase telemetry units, which will assist with building databases of locations of eagles, turbines and fatalities. Project will link these data to external environmental datasets, and then build resource selection functions of eagle and turbines and then overlay them to predict risk.

\$90,050, Federal Criminal case

U.S. v. PacifiCorp Energy

Raptor View Research Institute**Estimating Natal Origins of Immature Golden****Eagles killed on Wind Farms in Wyoming**

Use stable hydrogen isotope analysis utilizing the weighed growing season average precipitation to reveal natal origins of immature golden eagles found as mortalities on wind farms in Wyoming. This project will sample first-generation feathers and data will be placed on a raptor-specific reference map for North America.

\$51,060, Federal Criminal Case

U.S. v. Duke Energy Renewables, Inc.

Rocky Mountain Elk Foundation**Home Ranch Conservation Easement (WY)**

Purchase a conservation easement on approximately 136 acres of high-quality riparian, wetland, shrubland and meadow habitats for the benefit of golden eagles, elk and a suite of other wildlife. Project will protect key forage habitat in close proximity to known nest locations for resident golden eagles and along a known migration corridor for migratory golden eagles.

\$65,620, Federal Criminal Case

U.S. v. Duke Energy Renewables, Inc.

Teton Raptor Center**Eagle Rehabilitation and Conservation (WY)**

General expenses and lodging support for eagle rehabilitation center in Wyoming.

\$3,597, Federal Criminal case

U.S. v. Duke Energy Renewables Inc.

U.S. Department of the Interior,**U.S. Geological Survey****Assessing Risk to Golden Eagles from Turbine Development (WY)**

Predict risk to eagles from wind energy development in Wyoming. Project will use telemetry data to build risk models and then test them with data on turbine-specific known fatalities of eagles.

\$270,650, Federal Criminal Case

US v. PacifiCorp Energy

Wildlands Photography and Bio-Consulting**Assessing Risk to Golden Eagles from Turbine Development: Eagle Trapping and Telemetry (WY)**

Capture free-flying Wyoming golden eagles and telemeter them with GPS-cellular telemetry systems.

\$100,000, Federal Criminal Case

U.S. v. PacifiCorp Energy

Wyoming Stock Growers Land Trust**Purple Sage Ranch Conservation Easement (WY)**

Secure a perpetual conservation easement on approximately 2,285 acres of the Purple Sage Ranch. Project will ensure that the ranch retains its current open space nature and protects a variety of important wildlife habitats, including golden eagle breeding and migration habitat.

\$640,356, Federal Criminal Case

U.S. v. PacifiCorp Energy

Photography: Tony Bynum

(cover, moose),

National Geographic

(p. 3-4, terrain)



NFWF

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