

### 2016 Five Star and Urban Waters Grants

# Long-Eared Bat and Darter Habitat Restoration and Education at Turkey Creek Nature Preserve (AL)

Birmingham-Southern College

Birmingham-Southern College (BSC) and partners will expand educational programming and conduct restoration activities on 9 acres of the Turkey Creek Nature Preserve. Invasive removal and native re-plantings will support habitat of the endangered vermilion darter, as well as bat populations including the only confirmed Alabama colony of threatened northern long-eared bats. A bioswale/demonstration garden and surrounding pavilion will reduce stormwater runoff and enhance learning opportunities for visitors. Partners include the Freshwater Land Trust, the City of Pinson, the U.S. Fish and Wildlife Service, the Cawaco Resource and Development Council, Myhand Services, Goat Busters and Friends of Turkey Creek.

#### Bertram A. Hudson K-8 School Bio-Retention System (AL)

City of Birmingham

The City of Birmingham and partners will retrofit a portion of Bertram A. Hudson K-8 School with a bio-retention basin and pervious pavers. Activities will include restoration planning and design, stream/site maintenance and monitoring, outdoor learning and community outreach. Project will provide a reduction in pollution to Village Creek, help control the volume runoff exiting the site, and create learning opportunities for the Birmingham City School System about stormwater management. Partners include Bertram A. Hudson K-8 School, the University of Alabama at Birmingham's School of Engineering, George Washington Carver High School and Belgard Hardcastle.

#### Shoal Creek Stream Enhancement (AL)

City of Montevallo

The City of Montevallo and partners will protect Shoal Creek through restoration and communication activities. Project will stabilize the creek through dredging, invasive plant removal and native re-plantings. A plant identification booklet produced by University students will assist volunteers in restoration and educate on the importance of native plantings to erosion control. Partners include the Montevallo Arbor and Beautification Board, ARGOS, Shelby County and the University of Montevallo.

### What's the Catch: Monitoring and Conservation of Urban Waterways and Lakes in Metro-Phoenix (AZ)

Arizona State University

Arizona State University and partners will monitor and restore 85 acres of habitat including eight urban lakes/ponds, including adjacent segments of three canals and two river systems in the Phoenix-metro area. Partners, including 50 volunteers, will monitor four native fishes and two Endangered Species Act-protected migratory birds, monitor habitat, remove invasive

species, and assess and analyze aquatic and riparian habitat quality. All project participants will develop and present educational materials for a variety of audiences to increase awareness and promote community stewardship of urban aquatic resources. Partners include the U.S. Forest Service, the U.S. Fish and Wildlife Service, the Environmental Protection Agency, the Arizona Game and Fish Department, the Phoenix Zoo, two local Girl Scout Troops and the Friends of the Sonoran Desert.

## Rainbow Trout Restoration Project for the Arroyo Seco of Southern California Arroyo Seco Foundation

Arroyo Seco Foundation and partners will help restore rainbow trout populations by monitoring and surveying 12 miles of stream zone, engaging 20-40 volunteers a week who will propagate and care for native plants, removing 20 acres of invasive plant species, and conducting educational programs that will reach 1,000 individuals in the community. Project will take place in Los Angeles County, Angeles National Forest and the San Gabriel Mountains National Monument. Project partners include the Concerned Off Road Bicyclist Association, the Pasadena Altadena Coalition of Transformative Leaders, the Audubon Center at Debs Park and the Altadena Crest Trail Restoration Working Group.

## Restoring Endangered Butterfly Habitat and Engaging Youth in Milagra Ridge, San Mateo County (CA)

Golden Gate National Parks Conservancy

Golden Gate National Parks Conservancy and partners will improve the ecosystem health of the federally endangered Mission blue butterfly on 9.8 acres of habitat at Milagra Ridge in San Mateo County, California. Project will engage 206 volunteers who will help propagate and introduce host and nectar plants that are resistant to fungal pathogens that threaten this species. Project will also help prepare Milagra Ridge for the reintroduction of the Mission blue butterfly in 2017. Project partners include Oceana High School, the National Park Service, the U.S. Fish and Wildlife Service, City College of San Francisco and the California Garden Club.

# Urban Refuge Partnership with Denver Natural Resources at First Creek – DEN Open Space (CO)

City and County of Denver

City and County of Denver will engage youth and restore 200 acres of prairie grassland habitat by managing noxious weed and seeding native grass species. Project partners will remove an eight foot perimeter fence, build a new parking lot, and construct 6,600 feet of new trail, adding to the existing First Creek Trail. Project will revive an area of open space for the public that has been underutilized between Denver International Airport and Rocky Mountain Arsenal National Wildlife Refuge. Project partners include Denver Parks & Recreation, Outdoor Colorado, the U.S. Fish and Wildlife Service, the Mile High Youth Corps, Environmental Learning for Kids and the Denver International Airport.

# Wheat Ridge Greenbelt Restoration and Environmental Education Network (GREEN) (CO) Institute for Environmental Solutions

Institute for Environmental Solutions and partners will restore the ecological health of the Wheat Ridge Greenbelt open area and improve stormwater runoff, erosion and water quality for Clear Creek. Project will involve 100 volunteers, provide outreach to 1,000 community members, combine two innovative in-class workshops, a tree planting day, and a 3-year stewardship program. Project partners will plant 100 native shrubs and 50 native trees in the project area. Project partners include the Wheat Ridge Parks and Recreation Department, Kullerstrand Elementary School, architectural firm DesignWorkshop, the Sierra Club, Wheat Ridge Girl and Boy Scout Troops and the Colorado State Forest Service.

### Engaging Volunteers in the Hands-On Protection of Treasured Natural Landscapes in Southern Colorado

Rocky Mountain Field Institute, Inc.

Rocky Mountain Field Institute, Inc. and partners will provide opportunities for active community engagement in on-the-ground restoration and stewardship projects that enhance watershed health and function by restoring 20 acres of habitat while creating 100 jobs in the Southern Colorado and the Pikes Peak Region. Project partners will operate the program through meaningful and sustainable community partnerships, provide environmental education and training opportunities, and result in measurable ecological, educational and community benefits. Project partners include the U.S. Forest Service, the City of Colorado Springs, the Pikes Peak Community Foundation, Friends of Garden of the Gods, and school, civic, military, religious and community groups.

# GreenSkills Training to Benefit the Urban Watershed and Tree Canopy of New Haven (CT) New Haven Urban Resources Initiative

New Haven Urban Resources Initiative and partners will plant 500 trees and maintain 17 bioswales as a vehicle for training 12 adult ex-offenders and 36 teens in valuable urban forestry and green infrastructure maintenance skills. Project partners will enhance existing efforts to improve New Haven's community tree canopy through the development of training tools and workshops targeting multiple audiences. Project will improve outreach, education and foster increased and improved stewardship for tree canopy and stormwater management bioswales. Project partners include City of New Haven Parks, Common Ground High School, the Sound School, the Connecticut Department of Environmental Protection, EMERGE and the Yale School of Forestry & Environmental Studies.

### Expanding Urban Oases in the New Haven Harbor Watershed(CT)

National Audubon Society, Inc.

National Audobon Society, Inc. and partners will employ a model of community-based urban land stewardship that engages multiple stakeholders in restoration of urban green spaces to improve watershed health and provide quality habitat for migratory birds while also addressing critical community needs in the most underserved, overburdened neighborhoods of greater New Haven. Project will enhance 16 acres of habitat, complete an Important Bird Area conservation plan, engage 3,500 people through outreach, and involve 900 volunteers. Project

partners include Audubon CT, Common Ground, the New Haven Urban Resources Initiative, the U.S. Fish and Wildlife Service, the City of New Haven, Menunkatuck Audubon and Hamden Land Trust.

### Partnership for Anacostia River Restoration and Urban Bird Education (DC) - II

Earth Conservation Corps

Earth Conservation Corps and partners will continue to collaborate and facilitate water quality improvement and restoration programs focused on the Anacostia River, creating up to 8,500 square feet of new native wetlands along the Anacostia River with the help of 200 volunteers. Project will create workforce development for four youth and engage and educate the community while restoring riparian habitat along the Anacostia River. Project partners include Environment for the Americas, DC Audubon, Brent Elementary School, the Smithsonian Migratory Bird Center, Earth Conservation Corps and Maryland Wood Duck.

# Apple Snail Adoption Program: Teaching Youth about Effect of Invasives on Natural Ecosystems (FL)

Florida Atlantic University

Florida Atlantic University will implement the Apple Snail Adoption Program (ASAP) with at least 500 students by restoring 50 acres of habitat and planting 2,500 trees in South Florida. ASAP will focus on propagating and restoring native Florida apple snail populations and the removal of invasive exotic snails in two locations: the Arthur R. Marshall Loxahatchee National Wildlife Refuge (ARMLNW Refuge) and the Grassy Waters Everglades Preserve. Students will learn to identify and remove invasive plant material. ASAP will create lessons to engage students in their classes, raise Florida apple snails in the classroom, and provide field learning experience centered on wetland restoration activities in the designated wetland areas. Project partners include the ARMLNW Refuge, Jake Tuttle, the Harbor Branch Oceanographic Institute, Megan Davis, the Institute for Regional Conservation, Florida Atlantic University's Pine Jog Environmental Education Center, Ray Coleman, the Grassy Waters Preserve and Patrick Painter.

### Restoring Oyster Reefs in Choctawhatchee Bay through Community Stewardship (FL) Northwest Florida State College Foundation, Inc.

Northwest Florida State College Foundation and partners will construct 1 acre of oyster reef to address the decline of oyster habitat in Choctawhatchee Bay. Reefs will be built from recycled shell collected from local restaurants and bagged and placed through volunteer events. Project will enhance these reefs with living oysters grown through the Choctawhatchee Oyster Gardeners and Spat On! Youth Outreach programs, which will direct 300 trained stewards to move matured oysters to restoration sites during community events. Partners include the Choctawhatchee Basin Alliance, the City of Fort Walton Beach, the City of Valparaiso, Bluewater Bay Marina and Northwest Florida State College AmeriCorps.

#### Coastal Habitat Restoration in Northeast Miami Dade County (FL)

Museum of Science, Inc. dba Miami Science Museum

Museum of Science, Inc. dba Miami Science Museum and partners will restore 1.48 total acres of tropical hardwood hammock habitat near Oleta River State Park, in northeast Miami-Dade

County. Project will engage 300 volunteers over a 1-year period, who will mechanically remove residual invasive exotic plants and replant 400 trees and shrubs, all native to the tropical hardwood hammock biome. Volunteer citizen scientists will employ a series of monitoring protocols to determine the effectiveness of the restoration efforts based on native wildlife surveys that determine whether native flora and fauna are returning to the site post restoration. Project partners include Oleta River State Park, Miami-Dade County, Miami-Dade College and FedEx.

#### **Enota Park and Proctor Creek Restoration (GA)**

Trees Atlanta, Inc.

Trees Atlanta and partners will remove six acres of invasive species and trash, replant native species to stabilize slopes and streambanks, and highlight the project through adult and youth education programming. In addition, partners will redesign the portion of Proctor Creek that flows through the site and complete a full park design. Project will capitalize on the proximity and timing of the Atlanta BeltLine Westside Trail (Enota Park Portion) project set for completion by the end of 2017. Partners include the Atlanta BeltLine, Park Pride, the City of Atlanta and the Westview Community Organization.

#### **Proctor Creek Rain Garden Partnership (GA)**

**Emerald Corridor Foundation** 

Emerald Corridor Foundation and partners will engage the community in creating a rain garden demonstration project. The rain garden will use native vegetation and drainage techniques to restore habitat, support natural hydrology, and reduce stormwater runoff flows. Project will showcase green infrastructure and land stewardship as tools for urban watershed restoration and conservation. Partners include the Proctor Creek Community Partnership, the Greening Youth Foundation, the Grove Park Neighborhood Association and B+C Studio.

#### Restoring Bird-Friendly Habitat in Peachtree Creek Watershed (GA)

**Atlanta Audubon Society** 

Atlanta Audubon Society and partners will restore 15 acres of bird habitat on two sites in the Peachtree Creek Watershed and create baseline bird data to aid conservation planning. Project will provide numerous citizen science and education opportunities to the local community and double the partnership's local impact on bird habitat. Activities will result in 125 community volunteers engaged and 500 people educated. Partners include the Olmstead Linear Parks Alliance, the City of Clarkston, Friends of Friendship Forest, the Greening Youth Foundation, the National Audubon Society and the Georgia Native Plant Society.

### Cay Creek Wetland Demonstration Landscape: A Coastal Model (GA) - II

Coastal WildScapes

Coastal WildScapes and partners will enhance the Cay Creek Wetland Demonstration garden through native wetland species planting and stormwater control measures. Project will provide the coastal community with a model for enhancing native floral and faunal diversity at the intersection of wetland habitats and urbanized areas. Partners include the City of Midway, the

University of Georgia, the Georgia Department of Natural Resources, Keep Liberty Beautiful, the Orianne Society and Verdant Enterprises.

#### Postville Public-Private Partnership for Citywide Urban Conservation (IA)

Resource Conservation and Development for Northeast Iowa, Inc.

Resource Conservation and Development for Northeast Iowa, Inc. and partners will implement a diverse suite of urban stormwater best management practices on 2.35 acres of public and private land with the help of 15 volunteers in Postville, Iowa. Project will restore instream habitat and the riparian area of Williams Creek, a cold water trout stream within city limits, and remove impermeable surfaces associated with high-use sidewalks and public and private parking areas to replace them with permeable surfaces including permeable pavers, an infiltration trench, bioswale, native prairie plants and trees. Project will include fabrication and installation of three bilingual educational kiosks. Project partners include the City of Postville, Illinois Department of Natural Resources (IDNR) Fisheries, the IDNR State Revolving Loan Sponsored Projects Program, IDNR Resource Enhancement and Protection Program, the University of Iowa College of Engineering, the University of Iowa Office of Outreach and Engagement, the Iowa Department of Agriculture and Land Stewardship and the Turkey River Watershed Management Authority.

### Restore Wetland into Nature Park for Environmental Education (ID) - II

Nez Perce

The Nez Perce tribe and partners will continue build off Phase I to restore additional wetland areas and extend the interpretive trail located at Lapwai Nature Park along the edge of the Lapwai, Idaho tribal community. Project will eradicate 5 acres of invasive weeds, restore 0.25 miles of streambank, plant over 150 trees and 300 shrubs, educate over 950 tribal community members and over 450 non-members, engage over 362 student volunteers to implement restoration measures, build an additional 1,800 feet of trail, install two foot bridges, and create a beaver dam playground and a wetland observation platform. Project partners include Idaho Fish and Wildlife, the Lapwai School district, the Culdesac School district, the University of Idaho, the Nez Perce Soil Conservation District, Northwest Indian College and the Clearwater Basin Conservation Corp.

# Little Prairie on the Campus - Restoring Prairie on University of Illinois at Chicago's West Side University of Illinois at Chicago

University of Illinois at Chicago (UIC) and partners will restore 0.25 acres of prairie with help of 60 high school and college intern volunteers on "Little Prairie on the Campus," located on the west side of the UIC campus, in the Chicago River North Branch watershed. Project partners will provide training for campus project managers on incorporating and managing sustainable infrastructure and natural habitats and expand the UIC campus stormwater management plan. Project partners include UIC College Prep, Chicago Wilderness, the Morton Arboretum, YR&G Sustainability Consulting, the Cook County Forest Preserve, corporate volunteers and the Cook County Forest Preserve.

#### Mill Creek Healthy People/Healthy River Program (IN, OH)

Groundwork Cincinnati/Mill Creek

Groundwork Cincinnati/Mill Creek will restore and regenerate a total of 17 acres of wildlife habitat and wetlands in Muscatatuck Wildlife Refuge in Indiana and in multiple Mill Creek riverine/riparian sites in Cincinnati. Project partners will engage at least 960 participants, including 860 middle and high school students and 100 adult volunteers from Mill Creek neighborhoods and diverse organizations. Restoration will include preparing sites, removing invasive species, planting native hardwood trees, and planting edibles to provide food and habitat for diverse wildlife, including the black-crowned night heron and the Indiana bat. Project partners include Groundwork, Green Team, the U.S. Fish and Wildlife Service, the U.S. Forest Service, Easter Seals Work Resource Center, Cincinnati Public Schools, education/environmental agencies and three property owners.

#### Wetland Restoration at the Great Plains Nature Center, Wichita (KS)

Kansas Alliance for Wetlands and Streams

The Kansas Alliance for Wetlands and Streams will renovate an existing 2.6-acre wetland located at the Great Plains Nature Center in Wichita, Kansas with the help of 50 volunteers. Project partners will renovate the wetlands through dredging and installation of a water control structure to provide enhanced management ability. The wetland renovation project will result in habitat improvement, improved management of the wetland, and removal of invasive species from surrounding buffers and uplands. Project partners include the City of Wichita, the Kansas Department of Wildlife, Parks and Tourism, the U.S. Fish and Wildlife Service, Wester Energy, the Regional Economic Area Partnership, Wichita Clean Streams, Ducks Unlimited, the Kansas Department of Agriculture's Division of Conservation, Cargill Industries and the Whooping Crane Mitigation Fund.

# The Natural Classroom: Sustainable Restoration and Monitoring of Bayou Duplanier, Baton Rouge (LA)

The Water Institute of the Gulf

The Water Institute of the Gulf and partners will restore 26 acres of urban cypress wetlands along Bayou Duplanier in Baton Rouge, Louisiana with the help of 100 volunteers. Project partners will clear invasive plant species from the 26 acres, plant 180 native wetland trees and 1,080 native wetland grasses, as well as assess water quality (and overall ecosystem condition) and establish a sustainable water quality monitoring program for six new sites. The wetlands will be used as a 'natural classrom' educating 400 students during the project. Project partners include Lee Magnet High School, the Louisiana State University Agricultural Center and the U.S. Forest Service.

#### Marsh Restoration for the Birds and Us (LA)

**University of New Orleans** 

The University of New Orleans and partners will rebuild, renew and improve approximately 25 acres of freshwater – intermediate marsh in Bayou Sauvage National Wildlife Refuge (NWR) and Big Branch NWR in the Lake Pontchartrain estuary through on-the-ground marsh vegetation planting of native salt-tolerant species such as *Spartina alterniflora*. Youth education and

service learning projects will target approximately 400 underserved middle and high school students from the urban center of New Orleans to cultivate plants used in the project and monitor the restoration effort over time. Project partners include Common Ground Relief, the Bayou Sauvage NWR, the University of New Orlean's Coastal Education and Research Facility and local partners.

#### Beaver Dam Brook Stream Restoration and Education Program (MA)

Town of Framingham

Town of Framingham will restore approximately 800 linear feet of riparian buffers, remove 1 acre of invasive species, engage 600 people in the local community at the Beaver Dam Brook watershed in Framingham, Massachusetts. Project partners will hold workshops that will teach principles of ecology and sustainability through interactive and innovative approaches. Artwork developed at the workshops by local youth will be incorporated into educational signs to be installed along the riparian buffer at Mary Dennison Park. Project partners include the Town of Framingham, the Massachusetts Department of Environmental Protection, the OARS watershed group, the Boys & Girls Club of Metrowest, the Lake Cochituate Watershed Council and the Metropolitan Area Planning Council.

## Restoration Invasion at Magazine Beach: Stormwater Management and Habitat Stewardship (MA)

Charles River Watershed Association

Charles River Watershed Association and partners will improve American shad and river herring habitat by preventing 70,580 gallons of stormwater from entering the Charles River as runoff annually, restore 1.5 acres of riparian habitat, 1.6 acres of beachfront, and 0.3 acres of freshwater wetlands within the Magazine Beach area in Cambridge, Massachusetts. Project will work with volunteers to install and maintain rain gardens vegetated with native plants, control invasive common reed, false indigo and purple loosestrife in the wetland and riparian area, and replant the wetland with native plants that provide wildlife habitat. Project partners will hold five volunteer events to contribute to area restoration efforts, provide volunteers with rain garden maintenance training, provide educational programs for after-school groups, and hold a restoration showcase event to reintroduce Magazine Beach to the public. Project partners include the Massachusetts Department of Conservation and Recreation, the Cambridgeport Neighborhood Association, the City of Cambridge, Cambridge Public Schools and more.

# Renewing Urban Habitat: Managing Invasive Plants in the Mystic River Watershed (MA) Mystic River Watershed Association, Inc.

The Mystic River Watershed Association will organize a comprehensive invasive plant assessment and management program along a 4.7-mile stretch of urban park space in the Mystic River Reservation in Medford, Massachusetts. Project will bring together state, municipal and organizational partners to identify the most important sites to manage invasives for habitat restoration. Project partners will organize volunteer events for the cutting and removal of 25 acres of Oriental bittersweet, plan and execute native plantings, and educate and engage community members and corporate employees. Project partners include Friends of the

Mystic River, Groundwork Somerville, the Massachusetts Department of Conservation and Recreation, the City of Medford, Herbert Nolan and the Solomon Foundation.

#### **Springfield Urban Bird Treaty (MA)**

Regreen Springfield, Inc.

Regreen Springfield, Inc. and partners will inform 200 community members and 800 students about migratory bird conservation, and urban restoration projects aimed at creating and restoring 50 acres of bird habitat while employing 30 area youth in Springfield, Massachusetts. Restoration and habitat improvements for resident and migratory birds will span the metropolitan area, comprising a network of "Neighborhood Habitat Refuges" in strategic locations, including showcase refuges at Renaissance Expeditionary School and STEM Middle School, and a wildlife garden at the Springfield Science Museum. The refuge projects will enable students to participate in habitat restoration, curricula-based bird education, population monitoring, and bird conservation awareness. The wildlife garden will demonstrate features to improve bird habitat at home. Project partners include the Renaissance Expeditionary School, STEM Middle School, the Springfield Science Museum and more.

## Baltimore's Birds, Habitat and People: Advocating for Migratory Birds through Citizen Science (MD)

Baltimore Chesapeake Bay Outward Bound, Inc.

Baltimore Chesapeake Bay Outward Bound, Inc. and partners will engage students in citizen science and expand a demonstration area and the educational "Celebrate Baltimore Birds Day" event. Project will restore 3 acres of migratory bird habitat, while also involving 100 students in data collection in Gwynns Falls Leakin Park in Baltimore, Maryland. Project partners will remove invasives to enhance migratory bird habitat and the Gwynns Falls watershed. Project partners include Outward Bound, the National Aquarium, Baltimore City Recreation and Parks, the U.S. Fish and Wildlife Service, Green Street Academy and Towson University.

#### The Monarch Butterfly Community Conservation Program (MD)

National Aquarium in Baltimore, Inc.

National Aquarium in Baltimore, Inc. will work with three schools in Baltimore City to install a habitat garden and 600 native plants on their campus and provide in-class environmental education programming to complement the plantings. Project partners will engage 120 volunteers, including 60 students, and 800 community members during the project. Project partners include the U.S. Fish and Wildlife Service - Chesapeake Bay Field Office, the U.S. Fish and Wildlife Service - Patuxent Research Refuge, the National Wildlife Federation, the National Park Service and the Living Classrooms Foundation.

#### Maheras Gentry Native Island Restoration and Youth Education (MI)

The Greening of Detroit

The Greening of Detroit and partners will provide outreach and education to 725 community members, including 240 Detroit Public School youths in grades four through eight, 285 volunteers, including 120 youth, who will engage in hands-on community stewardship activities. Project partners will restore 1 acre of native prairie riparian habitat through invasive species

removal and management at Maheras Gentry Park, a City of Detroit park located on the waterfront of the Detroit River in Wayne County, Michigan. Project partners will include Detroit Audubon, Alliance for the Great Lakes, the Detroit Eastside Community Collaborative and the City of Detroit.

#### Canoemobile: Discovering Our Urban Wildlife Refuges (MN)

Wilderness Inquiry

Wilderness Inquiry and partners will introduce 1,200 urban youth and families to the Minnesota Valley National Wildlife Refuge, through place-based education and recreation activities and restoration of 15-acres along the Minnesota River. Project partners will provide environmental education to urban youth from Minneapolis and Saint Paul schools and teach technical job skills while exposing the youth to the refuge, hiking, restoring native plants, and engaging with refuge rangers. Project will provide two urban youth and one youth employment coordinator with jobs on the refuge. Project partners include the Minnesota Valley National Wildlife Refuge, Minneapolis and Saint Paul public schools, Saint Paul Right Track and more.

#### **CPR: Communities Protecting Rivers (MO)**

Blue River Watershed Association

Blue River Watershed Association and partners will conduct water quality monitoring, hold community charrettes to determine outcomes, engage community participants, utilize 675 volunteers in vacant lot cleanups, and convert three vacant lots into green spaces utilized for native plantings, community gardens and recreational spaces in Kansas City, Missouri. Project partners will reduce impacts of stormwater runoff to the Blue River from two neighborhoods within the Middle Blue River Watershed. Project partners include two Neighborhood Associations, the Heartland Conservation Alliance, Urban Ranger and Kansas City Water Services.

#### Greenway Renewal along Elizabeth's Urban Waters (NJ)

Groundwork Elizabeth

Groundwork Elizabeth and partners will foster the relationship between two river restoration projects in Elizabeth, New Jersey. Project partners will engage youth from low-income, minority communities in environmental projects that improve local streams and riparian habitats. Project will build stewardship around and improve access to amenities along the Elizabeth River and Travers Branch. Youth will improve habitat with native planting to benefit pollinators and songbirds. Three youth will be provided with jobs and training to help restore 25 acres of habitat. Partners include the Great Swamp National Wildlife Refuge, the U.S. Fish and Wildlife Service, Union County Department of Parks and Recreation and more.

#### Fish and Wildlife Youth Conservation Training Program (NY)

Groundwork Hudson Valley, Inc.

Groundwork Hudson Valley, Inc. will engage 100 volunteers, plant 20 native trees, and restore more than a quarter-mile of urban river habitat in a section of Saw Mill River in Westchester County, New York, that is relatively undisturbed by development and thus a critical habitat area for local fish populations within the watershed. Project partners will help prepare students

from elementary to high school for careers in fish and wildlife restoration. Project partners include the U.S. Fish and Wildlife Service, the National Park Service, Yonkers Public Schools and the New York State Department of Education.

### **Continuing Restoration along Torreon Wash (NM)**

Rio Puerco Alliance

Rio Puerco Alliance will provide 25 youth jobs, engage 40 volunteers, plant 1,000 cottonwoods and approximately 1,000 willows along the Torreon Wash in the Ojo Encino and Torreon Chapters of the Eastern Navajo Nation, in Sandoval and McKinley Counties, New Mexico. Project partners will install a mile of fencing to protect the plantings from livestock and wildlife, using a summer youth crew, in an area that has the lowest level of vegetative cover, with riparian vegetation almost non-existent, and the highest level of bare ground and erosion in the Rio Puerco Watershed. Project will increase wetland vegetation, moist soil, sinuosity in the stream channel, and decrease eroding banks. Project partners include the local community, the Sierra Club and the Ojo Encino Chapter workforce students.

#### Wetland Stewardship in the Bronx (NY) - II

Friends of Van Cortlandt Park

Friends of Van Cortlandt Park will hire 14 high school students who will plant 300 trees, restore, monitor and learn about the Tibbetts Wetland within Van Cortlandt Park, located in the Northwest Bronx watershed. Monitoring will include identifying potential sources of pollution and aquatic macroinvertebrate analysis. Project will increase the overall health of the wetland by removing invasive plants and replacing them with native vegetation while decreasing the amount of water leaving the wetland and entering the New York City sewer system. Project partners include local schools, New York City Parks, the Riverdale Neighborhood House, the Bronx Council for Environmental Quality, Manhattan College, the U.S. Geological Survey and the American Museum of Natural History.

# Restoration, Stewardship and Monitoring to Benefit Shorebirds in the Jamaica Bay Watershed (NY)

New York City Audubon Society, Inc.

New York City Audubon Society, Inc. and partners will protect migratory and nesting shorebirds in Jamaica Bay, New York City by engaging 390 volunteers, restoring 22 acres of habitat, organizing two beach cleanups, a marsh planting event and a dune planting event. Project will provide an educational component that will teach a three-part unit to Brooklyn middle schoolers, some from underserved areas, and continue a citizen science program of monitoring shorebirds and horseshoe crabs. Project partners will increase awareness of and decrease disturbance to nesting birds, as well as foster a sense of stewardship over the Jamaica Bay watershed. Project partners include the Rockaway Waterfront Alliance, the American Littoral Society, Sadhana, New York University's Wallerstein Collaborative, Audubon New York, New York City's Department of Parks & Recreation and New Jersey Audubon.

#### Cherry Street Legacy Neighborhood Conservation Engagement Project (OH)

Mercy St. Vincent Medical Center

Mercy St. Vincent Medical Center will implement a tree canopy plan, and support urban agriculture by establishing pollinator and rain gardens within the Cherry Street Legacy neighborhood in downtown Toledo, Ohio. Project partners will provide direct support to 20 neighborhood youth interns and two youth leaders, provide rain barrels and soil and water testing to 40 residents, engage seven partner organizations and 25 volunteers, provide education to at least 50 residents on water and soil quality issues, and engage 100 households in a dialogue about water and soil quality issues. Project partners include Mercy Health, the Glass City Goat Gals, Central Catholic High School, Scott High School and more.

## For the Benefit of All: Restoring Lower Abram Creek at NASA-Glenn Research Center (OH) Rocky River Watershed Council

Rocky River Watershed Council will engage 200 volunteers, restore and enhance 1.25 acres of floodplain wetland/vernal pool habitat adjacent to a headwater tributary of Abram Creek located on NASA-Glenn Research Center property in Brook Park, Ohio, and enhance habitat along 750 lineal feet of the same headwater tributary. Approximately 24-30 students from each school will assist with project monitoring and on-the-ground restoration activities. Project partners will complete minor streambank grading, excavate small areas of floodplain, add large woody debris to the stream channel, plant native floodplain and wetland trees and shrubs, and sow native vernal pool and floodplain seed mixes. Project partners include the Rocky River Watershed Council, the NASA-Glenn Research Center, the Cuyahoga Soil and Water Conservation District, Berea-Midpark High School, Fairview High School and the Ohio Wetlands Association

### Cascade Park Cuyahoga River Streambank Restoration (OH)

City of Akron

The City of Akron and partners will restore a .07-mile section of an eroding streambank in the Cascade Valley Metro Park in Akron, Ohio, utilizing natural stabilization methods, which will protect over 10 acres of forested wetlands. Project partners will layback the bank with tiers, install toe rock armoring, tree root wads, trees, live stakes, log weirs and native vegetation. Project will educate and engage the community through a permanent interpretive sign and hold a volunteer planting event for up to 100 volunteers. Project partners include the Cuyahoga Valley National Park, Summit Metro Parks, Friends of Metro Parks, the Summit County Engineer's Office and the Northeast Ohio Four County Regional Planning and Development Organization.

#### Meeks Run Restoration Project (PA)

Friends of the Pittsburgh Urban Forest

Friends of the Pittsburgh Urban Forest and partners will improve trail conditions, remove invasive species, and plant 300 native trees over three planting seasons on 30 acres in Montour Woods Conservation Area in Moon Township, Pennsylvania. 25-50 volunteers will provide support, and 25 students from Operation Better Block's Jr. Green Corps will participate in four service-learning activities to learn about forest ecology and gain hands-on experience in forest

restoration by removing invasive species, improving trail conditions, and planting trees. Project partners will provide support to develop a forest health monitoring protocol to utilize on restoration efforts. Project partners include Chatham University's Falk School of Sustainability, FedEx, Tree Pittsburgh, the Hollow Oak Land Trust and Operation Better Block Jr. Green Corps.

# Philly Wild: Neighborhood Environmental Stewardship and Action (PA) National Audubon Society, Inc.

The National Audubon Society, Inc. and partners will directly enhance 15 acres of habitat through planting 3,700 trees and shrubs, removing invasive plants on 23 acres, working on enhancing 2 miles of riparian corridor, and engaging 2,500 people in conservation projects in targeted watersheds in Philadelphia. Project will educate citizens about the importance of natural areas and healthy waterways in urban environments while providing them with the tools and opportunities to take conservation action. Project will collaborate with Philadelphia Water on high-priority projects that capture and treat stormwater and improve habitat. Other project partners include the Heinz National Wildlife Refuge, the Student Conservation Association, Philadelphia Parks & Recreation, PowerCorps, friends groups and local schools.

## Restoration and Monitoring Caño Boquilla Wetland System at the Rio Grande de Añasco Watershed (PR)

**Dewey University** 

Dewey University and partners will restore 3.6 miles of coastal wetlands, beach habitat and 0.4 mile of riverine banks in the Caño Boquilla Wetland System, a 120-acres natural reserve in Puerto Rico. Project will engage 300 community members and students (girl and boy scouts) through 24 outreach and educative activities to enhance community knowledge and commitment to protect the natural habitats and species of the area. Project partners will restore and monitor ecosystems that enhance coastal species habitat (resident and habitat migratory birds, waterfowls) and tree canopy (mangrove forest, beach habitat), while monitoring coastal and estuarine water quality. Project partners include three community-based organizations, the Department of Natural and Environmental Resources and the University of Puerto Rico, Mayagüez Campus.

### Revitalizing Urban Green Spaces within the Communities of Providence (RI)

Partnership for Providence Parks

The Partnership for Providence Parks will connect the urban community with their natural surroundings through environmental education, habitat restorations and instilling stewardship in neighborhood parks by restoring .25 acres, planting 10 trees, and establishing a schoolyard habitat in Providence, Rhode Island. Project partners will provide botanists, educators, biologists, volunteers, project direction and a historian. Project will sustain three jobs and create one new job, reach out to 5,860 community members through educational outreach, and engage 320 volunteers through habitat restoration projects. Project partners include the Department of Providence Parks, The Nature Conservancy, the University of Rhode Island, the Roger Williams Park Zoo, Audubon Society of Rhode Island, Providence schools and many more.

#### Wolf River Greenway Restoration (TN) - IV

Wolf River Conservancy, Inc.

The Wolf River Conservancy (WRC) will remove 65 acres of invasives and plant 1,500 trees at four target properties along the Wolf River in urbanized sections of the City of Memphis, Tennessee. Project partners will contribute manual labor, community organizing, bird expertise, project coordination, financial support and environmental education. An estimated 700 volunteers will assist the WRC in the restoration work, including WRC members, corporate volunteers and school students who participate in service projects as part of the environmental stewardship education component of the program, and an additional 400 community members will be engaged through public outreach and education. Project partners include the Shelby County 4-H, the Shelby Farms Park Conservancy, Shelby County schools, Clean Memphis, West Tennessee Ornithological and more.

### **Houston Regional Urban Riparian Restoration (TX)**

**Houston Wilderness** 

Houston Wilderness will restore 20 acres of wetland, remove 50 acres of invasive species, plant 200 trees, and monitor 12 streams in the Greater Houston region. The diverse ecology that will be protected along these targeted areas will allow for a variety of ecosystem services that provide a thriving habitat for the abundance of wildlife, migratory birds and butterflies in the region, and provide improved air and water quality, flood control, recreation and erosion control to millions of residents. Partners will provide technical assistance, restoration efforts, land access and land stewards, and environmental education. Project will engage 110 volunteers and reach out to 20,000 citizens through public outreach and education. Partners include Trees For Houston, Houston Audubon, the City of Houston, Texas A&M, SCA and many more.

#### Montopolis Wetland and Creek Rehab (TX)

Ecology Action of Texas

Ecology Action of Texas will restore 10 acres and 1 mile of riparian habitat, monitor two streams and plant 50 trees on the East Country Club Creek (CCCE) Watershed while providing service learning opportunities for the immediate Montopolis neighborhood and student populations. Partners will provide project coordination, volunteer recruitment, community outreach, ecological restoration, research, and manual labor. The project will engage 360 volunteers, educate 800 citizens, create one job and sustain three throughout the duration of the grant. Project will increase the native diversity and stability of the watershed's habitat along the underperforming CCCE as well as increase the watershed's capacity to withstand and more efficiently filter water and subsequent contamination during rain and flood events. Project partners include Keep Austin Beautiful, the Austin Parks Foundation, the Sierra Club, TreeFolks, Inc., the Austin Community College-Riverside and more.

### Escalante Watershed Restoration: Healthy Watersheds for Healthy Communities (UT)

**Grand Staircase Escalante Partners** 

Grand Staircase Escalante Partners will restore 46 acres of high-priority riparian habitat and monitor 17 streams within the Escalante Watershed, Garfield County, communities of Escalante

and Boulder, and within Grand Staircase Escalante National Monument. The healthy watershed will provide many ecosystem functions including nutrient cycling, carbon storage, erosion control, increased biodiversity, soil formation, wildlife movement corridors, water storage and filtration, flood control, recreation, and reduced vulnerability to invasive species, the effects of climate change, and other natural disasters. Project partners will provide funding, botany and wildlife expertise, contracting, project oversight, volunteers and technical support. Project will engage community members through the creation of 93 jobs, education outreach to at least 50, and volunteer opportunities for 68 individuals. Partners include the Walton Family Foundation, the U.S. Department of Agriculture's Natural Resource Conservation Service, The Nature Conservancy, the Utah Conservation Corps, the U.S. Fish and Wildlife Service and Grand Staircase Escalante National Monument.

### Role of Wetlands: Jordan River Ecology, Water Quality and Community (UT)

Jordan River Commission

The Jordan River Commission will restore wetlands in Riverton City, a key component in regional water quality, by restoring 10 acres of habitat, planting 240 trees, and monitoring the Jordan River. Project partners will provide manual labor, community outreach, wetland ecologist specialists, environmental educators and water quality scientists. Project will engage 380 volunteers and will reach out to 440 community members through public volunteer events and field work from school children. Project partners include Riverton City Parks & Recreation, the Utah Conservation Corps, the Utah Society for Environmental Education, the Utah Division of Water Quality, the Utah Division of Forestry, Fire & State Lands and the NatureWorks Alliance.

### **Building Capacity for Community Stewardship in South Park (WA)**

Duwamish River Cleanup Coalition/Technical Advisory Group

The Duwamish River Cleanup Coalition/Technical Advisory Group will remove 4.5 acres of invasive species, prevent 150,000 gallons of stormwater from entering waterways, plant 50 trees, and create 7 jobs in the Seattle neighborhood of South Park. Partners will help implement green infrastructure and tree plantings, and provide community outreach and stewardship leads. Project will engage 250 diverse, multilingual community members in on-theground restoration work and training, guided by 2 to 10 paid community leads, and will reach out to 400 community members and 250 volunteers through training tree giveaways and community presentations, ensuring sustainable community knowledge, empowering these individuals to ensure the long-term health of these restoration sites. Project partners include Urban Systems Design, SPARC, the Duwamish Alive! Coalition and local residents.

#### Puget Sound Starts at My School! (WA)

Snohomish Conservation District

The Snohomish Conservation District will prepare lesson plans that challenge 1,000 students in Environmental Systems Design Classes to help plan, design and maintain rain garden projects at all four Everett School District high schools to prevent 250,000 gallons of unfiltered stormwater from entering Washington's waterways. Project partners will provide gardening expertise, permits, education, cash contributions and project implementation. Project will engage

students through environmental place-based learning; education will go beyond textbooks as students apply knowledge and critical thinking to address local stormwater problems at their school while working alongside stormwater engineers. Project partners include the Snohomish Conservation District, the City of Everett Public Works, the City of Mill Creek Stormwater Management Department, Everett School District STEM administrators and high school teachers and Washington State University Extension Master Gardeners.

#### Tolt River Restoration (WA) - II

Mountains to Sound Greenway Trust

Mountains to Sound Greenway Trust will restore 4 acres of riparian floodplain near the Tolt and Snoqualmie Rivers near the City of Carnation, Washington, by removing 2 acres of invasive weeds, planting 1,000 native conifers and 2,000 native shrubs, engaging 250 volunteers, and working with local elementary schools to achieve community-based restoration. Partners will provide cash match, project development, coordination and implementation, community engagement, manual labor and environmental education. Community members will be involved with tree plantings, outdoor education and service learning opportunities, as well as through the eight jobs that will be created and the three jobs that will be sustained. Project partners include the Snoqualmie Tribe, the Greenway Trust, Carter Subaru, King County, AmeriCorps, various schools and more.

#### Milwaukee River Beerline Woodland Restoration (WI)

River Revitalization Foundation

River Revitalization Foundation will remove 27 acres of invasive species, restore 1 mile of river habitat, plant 550 trees, and involve 500 community members, including 350 volunteers within the city of Milwaukee and the adjacent 800 acres of urban greenway along the Milwaukee River. Project partners will provide volunteer labor, landscape architecture, project management and community outreach. High school students will be engaged through a youth job skills training program, college students through the removal of invasive species and the planting of native trees and herbaceous plants, and community members through outreach regarding urban conservation and restoration. Project partners include Milwaukee County Parks, the University of Wisconsin, Keep Greater Milwaukee Beautiful, the Milwaukee Area Workforce Investment Board and more.

#### Lake Sammamish Kokanee Restoration (WA)

Trout Unlimited, Inc.

Trout Unlimited (TU) will advance ongoing efforts to increase imperiled kokanee salmon populations 25-35 percent per year, restore 1 mile of stream and 10 acres of riparian habitat, engage 150 volunteers and 5,500 community members, including 500 youth near Seattle, Washington. Project partners will provide fisheries expertise and will work to reconnect and restore aquatic habitat that historically supported a robust kokanee population in the Lake Sammamish watershed, a designated Urban Wildlife Refuge. Community outreach efforts will raise the profile of kokanee and teach area residents and visitors about the inextricable connections among watershed health, kokanee and human activities. TU's youth education work will include development of indoor and outdoor classroom curricula to engage students,

particularly underserved youth, and provide them with knowledge and tools to contribute to the restoration of the iconic fish species. Project partners include the Snoqualmie Tribe and the Kokanee Workgroup.

### Restoring the Milwaukee River Watershed (WI) - II

Ozaukee Washington Land Trust, Inc.

The Ozaukee Washington Land Trust will implement the second phase of a large initiative to restore and enhance 1,200 acres of critical natural habitats in southeastern Wisconsin, plant 2,000 trees, remove 300 acres of invasive species, and monitor six streams. Each of the 15 properties are important resources of native habitat and for improving local water quality, andseveral feature designated "natural areas," as defined by the Southeastern Wisconsin Regional Planning Commission. Project partners will monitor wildlife populations, incorporate Youth Corps participants, deliver land management recommendations, and create environmental education opportunities for interns, volunteers and community members. OWLT will engage community members by sustaining three jobs and creating four new jobs, and will educate 100 volunteers through the project. Project partners include AmeriCorps, Workforce Development, Rotary Club Mequon, the Riveredge Nature Center, Great Lakes Ecological and more.