

2008 5-STAR RESTORATION SUBGRANT AWARDEES

The Five-Star Restoration Matching Grants Program provides grants to support community-based wetland, riparian and coastal habitat restoration projects that build diverse partnerships and foster local natural resource stewardship through education, outreach and training activities. Projects must involve diverse partnerships of ideally five organizations that contribute funding, land, technical assistance, workforce support and/or other in-kind services. Matching funds are not required but contributions from project partners are strongly encouraged. This grant program is a partnership of the National Fish and Wildlife Foundation, the National Association of Counties, the Wildlife Habitat Council, Southern Company and Pacific Gas and Electric in cooperation with the U.S. Environmental Protection Agency.

EPA Region 1

Maine

Project Title: Community-based Eelgrass Restoration in Upper Frenchman Bay

Recipient: Mt. Desert Island Biological Laboratory

Awarded Funds:	\$19,400
<u>Matching Funds:*</u>	<u>\$37,200</u>
Total Project Costs:	\$56,600

Project Area: Hancock, Bar Harbor, Maine

The Mt. Desert Island Biological Laboratory will work with the Town of Bar Harbor's Marine Resources Committee, Aquaculture Harvesters LLC., the College of the Atlantic, and community volunteers to reestablish 4.8 acres of healthy eelgrass beds, further develop methods for eelgrass transplantation, evaluate the success of this effort, document the colonization of eelgrass by larvae of commercially important marine resources and continue to monitor water quality at Hadley Point in Eastern Bay. The project will engage the public through with eel grass aquarium displays and written outreach materials.

EPA Region 2

New Jersey

Project Title: Protecting the Dead River Swamp

Recipient: Passaic River Coalition

Awarded Funds:	\$14,100
<u>Matching Funds:*</u>	<u>\$317,840</u>
Total Project Costs:	\$331,940

Project Area: Bernards Township, Somerset County, New Jersey

The Passaic River Coalition will work with Green Acres for Dead River Swamp, McNulty Downstate Verizon Pioneers, Rolling Hills Girl Scouts, Community Service Workers of Bernards, and Property Owner of Dead River Swamp to protect and restore the Dead River Swamp by gaining permanent title of the swamp and removing construction debris, automotive dumping debris, and invasive plant species. This project will erect nesting boxes for Barred owls, and inventory the flora and fauna of Dead River Swamp.

EPA Region 3

Maryland

Project Title: Community-Based Restoration of Atlantic White Cedar Habitat

Recipient: The National Aquarium in Baltimore

Awarded Funds:	\$19,552
<u>Matching Funds:*</u>	<u>\$19,329</u>
Total Project Costs:	\$38,881

Project Area: Bishopville, Worcester County, Maryland

The National Aquarium in Baltimore will work with Underwood & Associates, the Maryland Conservation Corps, Partner Schools and Maryland Coastal Bays to restore and enhance the ecosystem in the upper St. Martins River in the Maryland Coastal Bays. The project will provide a unique, hands-on experience for students to restore critical Atlantic white cedar (AWC) habitat by adapting a successful tidal wetland nursery program, to grow AWC saplings on the school grounds. This program will include three schools and will engage as many as six teachers and 150 students in the growing, monitoring and planting of 900 AWC as part of a large-scale restoration effort. A demonstration pond with an additional 300 AWC will be constructed at Assateague State Park by the Maryland Conservation Corps (MCC). The 1,200 trees produced will provide enough material to re-vegetate 1.75 acres of wetlands in the Coastal Bays watershed.

Virginia

Project Title: Taylor Tract Park Wetland Restoration/Enhancement Project

Recipient: Roanoke County Department of Parks, Recreation and Tourism

Awarded Funds:	\$10,000
<u>Matching Funds:*</u>	<u>\$14,500</u>
Total Project Costs:	\$24,500

Project Area: Roanoke, Roanoke County, Virginia

The Roanoke County Dept of Parks, Recreation & Tourism will work with Friends of the Roanoke County Public Library, Roanoke County Public Schools, Penn Forest Elementary School, Engineering Concepts, Inc., Virginia Dept. of Environmental Quality to create, restore or enhance six acres of wetlands on the site of the new South County Library. An integrated trail system, including boardwalk trails and two observation platforms will be constructed to provide an opportunity for wetland exploration, education and interpretation. The project will also develop an environmental education program that will focus on the role that wetlands play in water quality improvement, floodwater storage, fish and wildlife habitat, aesthetics and biological productivity.

EPA Region 4

Alabama 1

Project Title: Dune Plant Nursery and Restoration

Recipient: Murphy High School

Awarded Funds:	\$10,000
<u>Matching Funds:*</u>	<u>\$8,000</u>
Total Project Costs:	\$18,000

Project Area: Dauphin Island, Mobile County, Alabama

Murphy High School will work with the US Fish and Wildlife Service, the City of Dauphin Island, Dune Doctors, Dauphin Island Sea Lab, and the Dauphin Island Property Owner's Association to restore 4 acres of coastal dune habitat in and around the Bon Secour National Wildlife Refuge. Students will construct and maintain a sea oat nursery on the Murphy High School campus to plant the sea oats on beaches and barrier islands to improve habitat for an endangered dune mouse species. The sea oat nursery will also provide stock for other local community restoration projects.

Alabama 2

Project Title: Seven Springs Restoration Phase II

Recipient: Freshwater Land Trust

Awarded Funds:	\$32,000
<u>Matching Funds:*</u>	<u>\$32,000</u>
Total Project Costs:	\$64,000

Project Area: Birmingham, Jefferson County, Alabama

The Freshwater Land Trust, the U.S. Fish and Wildlife Service, Samford University's Department of Biology, the Southern Environmental Center, Lawson State Community College and Faith Apostolic will expand a 4,000 foot riparian buffer, meditation garden, and outdoor

classroom on the grounds of Faith Apostolic church to protect the Seven Springs wetlands system and an endangered population of the watercress darter. Lawson State Community College horticulture students will use the meditation gardens as a training ground for use of appropriate native landscape materials and provide routine maintenance. Students from Richard Arrington Elementary school will learn about the biodiversity within their own community through field trips to the Environmental Education Center being developed as part of a larger effort undertaken by Faith Apostolic Church.

Florida 1

Project Title: The Reclamation Project

Recipient: Miami Science Museum

Awarded Funds:	\$25,000
<u>Matching Funds:*</u>	<u>\$27,500</u>
Total Project Costs:	\$52,500

Project Area: Miami, Florida

The Miami Science Museum will partner to restore coastal mangrove ecosystems to Miami-Dade County. The project will collect seedlings and artistically exhibit them in plastic cups throughout the city during their germination phase and return approximately 3,300 seedlings to former habitats throughout the county. The project will reclaim degraded coastal habitats while increasing awareness of South Florida’s ecological challenges. Project partners include the Miami Science Museum, Mr. Xavier Cortada, Hands-On Miami, Citizens for a Better South Florida, and Miami-Dade County.

Florida 2

Project Title: Jones Creek East Stream Restoration Project

Recipient: Escambia County, FL – Neighborhood & Environmental Services Department

Awarded Funds:	\$40,000
<u>Matching Funds:*</u>	<u>\$218,000</u>
Total Project Costs:	\$258,000

Project Area: Pensacola, Florida

Escambia County will partner to restore and protect 2.5 acres of wetlands, including 2,200 linear feet of riparian habitat along Jones Creek. As part of this effort, Escambia County will re-contour the existing creek channel to create a floodplain and improve water quality for the area and extend the existing boardwalk to offer guided tours providing educational opportunities. Project partners include Escambia County, the Florida Department of Environmental Protection,

Emerald Coast Utilities Authority, Bay Area Resource Council, and the Barrancas Community Improvement Association.

Georgia 1

Project Title: Evans Mill Historic Site Riparian Restoration

Recipient: Dekalb County

Awarded Funds:	\$17,500
<u>Matching Funds:*</u>	<u>\$17,700</u>
Total Project Costs:	\$35,200

Project Area: Dekalb County, Georgia

DeKalb County will partner to restore and protect over half an acre of wetland, including 200 linear feet of riparian buffer along Pole Bridge Creek. The restoration effort will remove litter and debris, and plant native species to enhance the forested wetland habitat. The old mill site will also serve as a rest and picnic area to be explored by visitors utilizing new educational signage. Additionally, the project will engage 3,600 students at five local schools in environmental education activities connecting to their curriculum. Project partners include DeKalb County's Parks Department, Parks and Greenspace Office and Department of Watershed Management, Salem Middle School, University of Georgia Extension 4H Program, and the University of Georgia Alumni Association DeKalb Chapter.

Georgia 2

Project Title: Alcovy River at East End Wetlands Restoration

Recipient: Georgia Wildlife Federation

Awarded Funds:	\$40,000
<u>Matching Funds:*</u>	<u>\$103,939</u>
Total Project Costs:	\$143,939

Project Area: Covington, Newton County, Georgia

The Georgia Wildlife Foundation will partner to restore and protect 3.5 acres of wetlands along the Alcovy River at East End road in Covington, Georgia. The project will also create a demonstration site to educate the community about the economic and ecological values of healthy riverine ecosystems in conjunction with Oxford College of Emory University. Project partners include the Georgia Wildlife Foundation, The Conservation Fund, Georgia Future Farmers of America-Future Career and Community Leaders of America, Georgia River Fishing, Newton County Keep Covington/Newton Beautiful, Oxford College of Emory University, Georgia Department of Natural Resources, Georgia Department of Environmental Protection

Division Adopt-A-Stream and Rivers Alive, Georgia Exotic Pest Plant Council, Newton County Extension and Master Gardeners, and Air Conditioning Specialists, Inc.

Georgia 3

Project Title: Lindsey Creek Restoration

Recipient: Chattahoochee RiverWatch, Inc.

Awarded Funds:	\$20,000
<u>Matching Funds:*</u>	<u>\$48,000</u>
Total Project Costs:	\$68,000

Project Area: Columbus, Muscogee County, Georgia

The Chattahoochee River Watch, Inc. will partner with the Columbus Consolidated Government, Columbus State University Environmental Science Program, and the Georgia Forestry Commission to plant restore 2.2 miles riparian forest buffer along Lindsey Creek. The project will engage the local community in stewardship of their water resources and help produce an education video about the impacts of stormwater and nonpoint source pollution on water quality in the Chattahoochee River Watershed.

Georgia 4

Project Title: Swamp Creek Riparian Restoration

Recipient: Conasauga River Alliance

Awarded Funds:	\$30,000
<u>Matching Funds:*</u>	<u>\$32,500</u>
Total Project Costs:	\$62,500

Project Area: Dalton, Whitfield County, Georgia

The Conasauga River Alliance will partner with Whitfield County, the Georgia Environmental Protection Division, Limestone Valley RC&D Council, D2 Land & Water Resources, Inc., and private landowners to treat 500 linear feet of collapsing streambank to restore riparian integrity to a 3800-foot segment of Swamp Creek, a tributary to the Conasauga River. The site will be used for an in-field, community-based workshop to showcase actual installation of currently under utilized ecologically preferable streambank stabilization techniques to area developers, designers, and landowners. The project will include a workshop and subsequent conservation field tours to help engage other landowners in the benefits of natural streambank stabilization techniques.

Georgia 5

Project Title: Chicopee Woods Riparian Habitat Restoration

Recipient: Elachee Nature Science Center

Awarded Funds:	\$30,000
<u>Matching Funds:*</u>	<u>\$35,000</u>
Total Project Costs:	\$65,000

Project Area: Gainesville, Hall County, Georgia

The Elachee Nature Science Center will partner with the Chicopee Woods Area Park Commission, the Chicopee Woods Weed Management Area, the Georgia Exotic Pest Plant Council, and the City of Gainesville in the treatment of 15 acres of exotic invasive plants in the riparian forests of the Chicopee Woods. The project will restore a diverse native plant community and enhance wildlife habitat, while educating the public, local elementary students, and training volunteers about the threat of exotic invasive plants in Georgia.

Georgia 6

Project Title: Trail Creek Riparian Buffer Restoration

Recipient: Upper Oconee Watershed Network

Awarded Funds:	\$14,800
<u>Matching Funds:*</u>	<u>\$24,600</u>
Total Project Costs:	\$39,400

Project Area: Athens, Georgia

The Upper Oconee Watershed Network will partner to restore 800 feet of riparian buffer in the Trail Creek Watershed while educating citizens on the relationships among residential land management, and riparian habitat condition, stream health, water quality, and the species that depend on these wetlands. This project will provide local residents with tools to initiate their own backyard wetland habitat improvements and the project will conduct a series of workshops to educate and engage local citizens in watershed health and maintenance. Project partners include the Upper Oconee Watershed Network, Oconee River Greenway Commission, Chicopee/Dudley Neighborhood Association, University of Georgia, Athens-Clarke County departments of Leisure Services, Public Works, and Central Services, and the Athens Garden Club.

Kentucky

Project Title: Millcreek Elementary Stream and Wetlands Restoration Project and Outdoor Classroom

Recipient: University of Kentucky Research Foundation

Awarded Funds:	\$20,000
<u>Matching Funds:*</u>	<u>\$46,600</u>
Total Project Costs:	\$66,600

Project Area: Lexington, Kentucky

The University of Kentucky Research Foundation will partner to create 2178 square feet of wetland, and restore 625 feet of riparian buffer and fish habitat along Millcreek, a tributary to West Hickman Creek. The habitat will serve as an outdoor classroom for local schools, improve water quality and increase habitats while providing professional training for teachers. Project partners include the University of Kentucky, United States Fish and Wildlife Service Partners for Fish, Fayette County Schools, University of Louisville Stream Institute, Bluegrass Stream, LLC, Ecogro Inc., Millcreek School Parents, Natural Resources Conservation Service, Kentucky Division of Conservation, Kentucky Department of Fish and Wildlife Resources, Sheltoewe Wetland Coalition, Tracy Farmer Center for the Environment, and the Lexington/Fayette Urban County Government.

Mississippi

Project Title: Restoration at Depot Creek

Recipient: City of Lucedale

Awarded Funds:	\$11,979
<u>Matching Funds:*</u>	<u>\$12,015</u>
Total Project Costs:	\$23,994

Project Area: Lucedale, George County, Mississippi

The City of Lucedale will partner with the Land Trust for the Mississippi Coastal Plain, the Boy Scouts of America, The Nature Conservancy, MSU Extension Service, and Replant South Mississippi to restore approximately 1,350 linear feet of riparian corridor that winds through the City of Lucedale's 29 acre greenway. The project will engage the local community in long term resource stewardship and rehabilitate 18 acres of wetlands using native tree and herbaceous plant species.

North Carolina 1

Project Title: Restoring a Riparian Buffer by Eradicating Invasive Species and Planting Natives on Smith Creek

Recipient: New Hanover County

Awarded Funds:	\$7,700
<u>Matching Funds:*</u>	<u>\$8,000</u>
Total Project Costs:	\$15,700

Project Area: Wilmington, New Hanover, North Carolina

The New Hanover County Planning Department will work with Smith Creek Watershed Planning Group, Cape Fear River Watch, Murrayville Elementary School, and the New Hanover Soil and Water Conservation District to restore 500 feet of riparian buffer along Smith Creek. The partnership will eradicate non-native and invasive species in the buffer area and then plant several native varieties. The restoration will help control erosion and sedimentation, stormwater runoff, and flooding, while providing a native habitat for wildlife. The Smith Creek Watershed Planning Group is currently creating a plan for the Smith Creek watershed that will include an assessment of the watershed conditions as well as major threats and opportunities. The plan will include an educational and outreach component where residents, businesses and other stakeholders are included.

North Carolina 2

Project Title: Creek Restoration as Teacher Training Lab

Recipient: Water Resources Planning Committee, Appalachian State University

Awarded Funds:	\$9,200
<u>Matching Funds:*</u>	<u>\$36,600</u>
Total Project Costs:	\$45,800

Project Area: Boone, Watauga County, North Carolina

The Appalachian State University Water Resources Planning Committee will work with the National Committee for the New River, the Kraut Creek Committee, NC Cooperative Extension, and the Northwest Regional Educational Service Alliance to improve 185 linear feet of riparian buffer habitat of Boone Creek. Middle-school science teachers will learn to use techniques to identify the causes of creek degradation, learn about restoration techniques, and learn how to conduct pre and post restoration monitoring activities. These teachers will integrate this knowledge into water-related aspects of their curriculum in accordance with National Science Education Standards. The teacher training will occur simultaneously with a restoration project designed to re-establish native plants and to reduce erosion.

EPA Region 5

Indiana

Project Title: Portage Lakefront Park Restoration Project

Recipient: Portage Parks Department

Awarded Funds:	\$40,000
<u>Matching Funds:*</u>	<u>\$258,916</u>
Total Project Costs:	\$298,916

Project Area: Portage, Porter County, Indiana

The City of Portage Parks Department will work Soil Solutions, Inc., Indiana Dunes National Lakeshore, Save the Dunes Council, Indiana Lake Michigan Coastal Program, and Portage Township Schools to restore 14.3 acres of Lake Michigan coastal dune habitat in Portage Lakefront Park. Restoration activities will include installation of native plant plugs and seed, installation of rain gardens around two parking lots, and the creation of a natural resource management plan for Portage Lakefront Park. The partners will team with the Portage Township School system to develop a K-12 outdoor science education curriculum which will focus on five diverse natural areas within the city of Portage as outdoor classroom sites, one of which will be Portage Lakefront Park, a natural dune system.

EPA Region 6

Louisiana

Project Title: Bayou Segnette Cypress Plantings

Recipient: Jefferson Parish Dept. of Environmental Affairs

Awarded Funds:	\$23,800
<u>Matching Funds:*</u>	<u>\$37,376</u>
Total Project Costs:	\$61,176

Project Area: Westwego, LA

The Jefferson Parish Department of Environmental Affairs will partner to restore and protect 10,560 feet of riparian buffer along the Bayou Segnette Waterway. The restoration effort will plant approximately 1,400 cypress trees along the waterway and will provide the owners of nearby camps with educational residents' guides regarding landscaping with native species, controlling exotic and invasive species, and the value of riparian wetland habitat to the ecosystem. Project partners include Jefferson Parish Department of Environmental Affairs, Louisiana Department of Natural Resources, Bayou Segnette Boaters Association, Engineers without Borders New Orleans Chapter, Coalition to Restore Coastal Louisiana, Westwego Beautification Committee, National Park Service, and Barataria Terrebonne National Estuary Program.

New Mexico

Project Title: La Mancha Wetland Project

Recipient: Southwest Environmental Center

Awarded Funds:	\$15,000
<u>Matching Funds:*</u>	<u>\$126,000</u>
Total Project Costs:	\$141,000

Project Area: Mesilla, New Mexico

The Southwest Environmental Center will partner to restore and protect 6 acres of wetlands, and 500 feet of fish habitat as well as 2,000 linear feet of riparian buffer along the Lower Rio Grande River. The project will also provide opportunities for ecological study, research and monitoring by university students and mentoring for high school students from southern New Mexico. Project partners include the Southwest Environmental Center, the Town of Mesilla, International Boundary and Water Commission, Alma d'Arte High School, New Mexico State University Department of Fisheries and Wildlife, and New Mexico State University's Scientifically Connected Communities Program.

EPA Region 7

EPA Region 8

Colorado

Project Title: Gunnison Gorge National Conservation Area Invasive Species Control & Restoration Project

Recipient: Uncompahgre Plateau Project (UP Project)

Awarded Funds:	\$40,000
<u>Matching Funds:*</u>	<u>\$150,000</u>
Total Project Costs:	\$190,000

Project Area: Delta, Colorado

The Uncompahgre Plateau Project will partner to restore and protect 23 miles of riparian buffer along the Gunnison River. The restoration effort will remove invasive plants, and restore native species to enhance the river-side habitat. This project will also engage local residents in educational efforts about invasive species management and watershed health. Educational signs will be established at multiple trailheads to provide additional information to users of the trail system. Project partners include the Uncompahgre Plateau Project, Bureau of Land Management, Delta County Weed Board, Chaco Sandals Company Volunteers, and Gunnison Gorge National Conservation Area Friends groups.

EPA Region 9

California 1

Project Title: Canyons & Communities Project (CCP)

Recipient: Aquatic Adventures Science Education Foundation

Awarded Funds:	\$25,000
<u>Matching Funds:*</u>	<u>\$75,000</u>

Total Project Costs: \$100,000

Project Area: Community of City Heights, San Diego County, California

The Aquatic Adventures Science Education Foundation will work with the City of San Diego Parks & Recreation Open Space Division, Hamilton Elementary School, Project C.L.E.A.N, San Diego Canyonlands, Inc., the Swan Canyon Neighborhood Associations, and Institute for Public Strategies to engage the local community in the restoration of two acres of wetlands and two acres of coastal sage scrub in a highly urbanized watershed. The project will engage diverse community members in education, government, law enforcement, business, residential and other sectors. The project will result in improved environmental health, public access, structured education and outdoor recreation opportunities, and a community wetland stewardship program.

California 2

Project Title: San Francisquito Creek Restoration Project

Recipient: Save The Bay (Save San Francisco Bay Association)

Awarded Funds:	\$40,000
<u>Matching Funds:*</u>	<u>\$103,580</u>
Total Project Costs:	\$143,580

Project Area: San Francisquito Creek City: Palo Alto County: Santa Clara

Save The Bay will mobilize and train at least 750 middle school, high school and community volunteers to re-vegetate and enhance tidal salt marsh vegetation diversity and abundance at the mouth of San Francisquito Creek in Palo Alto for the benefit of fish, shorebirds and other wildlife. Save The Bay volunteers will apply scientifically-sound technical methods to restore critical habitat on 6.2 acres, through the removal of invasive species, site-specific seed collection plant propagation, and out-plantings. Through hands-on experiential education, volunteers will gain an understanding and appreciation for the science of San Francisco Bay, threats to its health, and opportunities to be active stewards of this natural resource.

California 3

Project Title: Mori Point Habitat Restoration

Recipient: Golden Gate National Parks Conservancy

Awarded Funds:	\$20,000
<u>Matching Funds:*</u>	<u>\$76,033</u>
Total Project Costs:	\$96,033

Project Area: Mori Point: Pacifica County: San Mateo

The Golden Gate National Parks Conservancy in partnership with the National Park Service is currently implementing a restoration plan at Mori Point, a stunning 110-acre property on the Pacific Coast that was impacted by prior land uses. Anticipated environmental outcomes include the control of non-native plant species, removal of debris from prior land uses, creation of breeding and/or foraging habitat for threatened species (California red-legged frog) and endangered species (San Francisco garter snake), and re-vegetation with native plants. Because Mori Point is a relatively new acquisition to the Golden Gate National Parks, the anticipated educational outcomes are to inform and engage local school groups and communities in projects and activities designed to help them to restore and learn more about caring for these beautiful parklands. This grant will help complete the community based restoration and plant.

California 4

Project Title: Eco-Oakland Environmental Education Program

Recipient: Golden Gate Audubon Society

Awarded Funds:	\$20,000
<u>Matching Funds:*</u>	<u>\$187,100</u>
Total Project Costs:	\$207,100

Project Area: San Leandro Bay City: Oakland County: Alameda

Golden Gate Audubon's Eco-Oakland Program stresses place-based, experiential learning, focusing on creeks, wetlands, and beaches, and helps children and their families learn how to become environmental stewards of their local watershed resources. This project will restore roughly 22,000 square feet of critical marsh lands at Martin Luther King, Jr. Regional Shoreline Park's wetland complex, plus additional riparian lands in the watershed. Although the area is not large, the goal is to remove all exotics in the area and restore healthy natives to control erosion, filter pollutants, and provide wildlife habitat. This area provides habitat for many species, including roughly five percent of the world's population of federally endangered California clapper rails, and is an important foraging area for endangered brown pelicans and California least terns. The wetlands are also a critical migratory stopover along the Pacific Flyway and host one of the most significant shorebird and waterfowl populations in the Central Bay. Over the next year, Eco-Oakland Program participants will bring direct benefits to the San Leandro Bay watershed complex by removing invasive plants from approximately 13,000 square feet of wetlands at the Martin Luther King, Jr. Regional Shoreline, including pepper weed, Russian thistle, and fennel. The participants will replace these invasives with native plants such as coyote brush, marsh rosemary, bee plant, gum plant, red fescue, creeping wild rye, sticky monkey flower, western goldenrod, and seaside wooly sunflower. The organizations will also conduct restoration (removal of invasives and trash, planting of native species) along approximately 17,000 linear feet of riparian land at Horseshoe Creek (a tributary of Lion Creek), guided by a restoration plan developed with the City of Oakland's Watershed Program.

California 5

Project Title: Rheem Creek Restoration and Watershed Education Project

Recipient: Urban Creeks Council

Awarded Funds:	\$39,573
<u>Matching Funds:*</u>	<u>\$205,570</u>
Total Project Costs:	\$245,143

Project Area: Rheem Creek Watershed City: San Pablo County: Contra Costa

The Rheem Creek Restoration and Watershed Education Project will restore native habitat to a 500-linear-foot reach of Rheem Creek at the entrance to the Contra Costa College campus. The project will remove a monoculture of invasives, design and install a diverse riparian plant palette while educating college students and the public about the benefits of stream restoration and native ecosystems. The educational component of the project will involve community members and students in restoration and watershed ecology by outreaching to neighborhoods close to the college, establishing a Watershed Curriculum and hiring ten stipend interns to help design and install the project.

California 6

Project Title: BioSITE SEED

Recipient: Children's Discovery Museum of San Jose

Awarded Funds:	\$11,290
<u>Matching Funds:*</u>	<u>\$19,421</u>
Total Project Costs:	\$30,711

Project Area: Guadalupe Watershed City: San Jose County: Santa Clara

The BioSITE (Students Investigating Their Environment) SEEDS program of Children's Discovery Museum of San Jose will work with the San Jose Unified School District, Santa Clara Valley Water District, Save the Bay, Guadalupe Coyote Resource Conservation district, and Merritt Community College to restore 3800 linear feet of riparian habitat in the Guadalupe Watershed of Santa Clara County. BioSITE currently engages high school students as teachers of fourth graders to conduct water quality. This project will add a restoration component to the program, involving high school students in conducting vegetation surveys, removing detrimental invasive species, and replanting appropriate native trees, shrubs, and groundcover. Data collection at three different creek sites will help to determine the success of the project.

California 7

Project Title: Enhancing Red-legged Frog Habitat and Educational Experiences at Serendipity Farms

Recipient: Community Alliance with Family Farmers

Awarded Funds:	\$35,751.33
<u>Matching Funds:*</u>	<u>\$35,800.00</u>
Total Project Costs:	\$71,551.33

Project Area: Carmel River/Carmel River Lagoon City: Carmel County: Monterey

Community Alliance with Family Farmers, partnering with the Wild Farm Alliance and Monterey Bay Aquarium, will provide opportunities for students to restore wetland and riparian habitat for the endangered CA red-legged frog and Carmel River steelhead trout while furthering development of an educational center on CA Department of Parks and Recreation land at Serendipity Farms. California red-legged frog will benefit from the project's restoration of a degraded site occupied primarily by non-native weeds, and Carmel River steelhead trout, present directly downstream, will benefit from cleaner water. Students will learn basic principles of on-farm biodiversity conservation through classroom presentations and by planting a native riparian/wetland vegetative buffer zone between cropland and the existing drainage. Student-generated biodiversity farm plans and ongoing water quality and vegetative monitoring will offer further learning opportunities as well as provide project evaluation. Students and teachers in the Carmel Valley will learn watershed conservation and sustainable agriculture, in both theory and practice.

California 8

Project Title: Audubon Bobcat Ranch Oak Woodland Corridors

Recipient: Audubon California Landowner Stewardship Program

Awarded Funds:	\$40,000
<u>Matching Funds:*</u>	<u>\$116,200</u>
Total Project Costs:	\$156,200

Project Area: Putah Creek Watershed City: Winters County: Yolo

The Audubon Bobcat Ranch Oak Woodland Corridor project will provide critical conservation benefits by reestablishing an ecological connection between the Dry Creek tributaries and the main channel of Putah Creek while creating a viable wildway managed by local landowners. The project will offer educational benefits to local high school students who will participate in restoration activities through the Student Landowner Education and Watershed Stewardship (SLEWS) Program. Through hands-on restoration projects, Audubon seeks to promote an understanding of the local ecosystem and foster a culture of conservation. There is no better way to learn about the connection between a healthy ecosystem and responsible stewardship of a working landscape than for students to plunge shovels into the soil and participate in broad-based habitat restoration.

California 9

Project Title: Community-based Coastal Dune Restoration at the Manila Dunes

Recipient: Friends of the Dunes

Awarded Funds:	\$38,800
<u>Matching Funds:*</u>	<u>\$52,000</u>
Total Project Costs:	\$90,800

Project Area: Humboldt Bay City: Arcata/Eureka County: Humboldt

Friends of the Dunes plan to restore 4 acres of coastal dune habitat at the Manila Dunes Recreation Area, working with Humboldt County students, community volunteers and the California Conservation Corps (CCC). In addition, Friends of the Dunes will develop a service learning curriculum for the Adopt a Dune education program which will enhance student understanding of the need for restoration and provide opportunities to put their knowledge into action, and design an educational program for the local CCC. The proposed project will employ manual restoration methods developed by The Nature Conservancy that have proven successful at eradicating invasive species and restoring native plant communities and rare plant populations on coastal dunes on the North Spit. Restoration will enhance dune mat and northern foredune grassland communities and rare and endangered plant populations on the property. This project will contribute to the ecosystem-level restoration efforts being carried out by several government agencies and non-profit organizations on the North Spit. Three rare plant species occur on the Celestre property: beach layia (*Layia carnosa*), dark-eyed gilia (*Gilia millefoliata*), and pink-sand verbena (*Abronia umbellata* ssp. *breviflora*). Beach layia is a federally and State listed endangered species. Dark-eyed gilia and pink sand-verbena are listed by the California Native Plant Society (CNPS) as 1B (CNPS 2007). Although the endangered Humboldt Bay wallflower (*Erysimum menziesii* ssp. *eurekaense*) does not occur on the property, approximately 1,000 plants occur on the adjacent MDRA, and another population occurs just north of the property on parcels recently acquired by the Friends of the Dunes. Humboldt Bay wallflower will likely spread onto the property in the future as a result of increased suitable habitat due to restoration work.

California 10

Project Title: Mill Creek Enhancement

Recipient: The Round Valley Indian Tribes

Awarded Funds:	\$40,000
<u>Matching Funds:*</u>	<u>\$180,300</u>
Total Project Costs:	\$220,300

Project Area: Mill Creek City: Covelo County: Mendocino

The Round Valley Indian Tribes will enhance instream and riparian conditions for salmon, steelhead, migratory birds, and sensitive species on nearly 2.5 miles of Mill Creek by installing boulders, root wads, logs, bioengineered bank stabilization structures, and extensive riparian tree

plantings to reduce erosion, stabilize banks, and improve instream and riparian habitats throughout the project area (52 acres). Working with the Tribes, local schools will incorporate the project area into their “Adopt a Stream” program where field visits to the site will be included as part of their educational curriculum.

Nevada

Project Title: Legacy Sediment and the Next Generation: Restoration and Education in Deer Creek

Recipient: American Rivers

Awarded Funds:	\$31,500
<u>Matching Funds:*</u>	<u>\$198,200</u>
Total Project Costs:	\$229,700

Project Area: Deer Creek City: Nevada City _County: Nevada

The Legacy Sediment and Next Generation Project is aimed at producing both concrete environmental and educational outcomes. This multiple partner effort is centered on restoring function to a unique floodplain habitat in a Sierra stream in California. These depositional areas, in an otherwise high gradient, bedrock-constrained stream are considered “biological hotspots” and are critical to the health of the system. This project involves re-distributing legacy sediments so that the creek can adequately access its floodplain, and planting of native riparian vegetation. Environmental outcomes of this three-acre restoration include greater habitat for migratory and riparian songbirds as well as fish, aquatic invertebrates, amphibians and other wildlife including species of special concern. In addition, the project will promote groundwater recharge, carbon sequestration, and filter storm water. These impacts will be captured and quantified through pre-restoration monitoring, as well as three years of post restoration monitoring. In addition, the project will be integrated into local 7th-12th grade students’ environmental and cultural curriculum through both in-class and on-site educational activities including: 1) use of NAAEE’s Environmental Education Materials: Guidelines for Excellence to develop and select environmental educational material; 2) creation of Environmental Resource Libraries; 3) in-field water quality monitoring; 4) direct participation in floodplain restoration; 5) historical and cultural research; and 6) adoption of an “Eco-Pal” program in which high school students partner with middle-school students to jointly learn about the riverine system. In this way, this project will help build the next generation of river stewards. The results of this education program will be captured through pre- and post learning surveys.

EPA Region 10

Oregon

Project Title: End Creek Wetlands Restoration Education

Recipient: Blue Mountains Conservancy

Awarded Funds:	\$40,000
Matching Funds:*	\$41,600
Total Project Costs:	\$81,600

Project Area: La Grande, Union County, Oregon

The Blue Mountains Conservancy will work with the Oregon Community Foundation, Eastern Oregon University, the Oregon Department of Fish and Wildlife, Oregon Rural Action, the Hells Canyon Preservation Council, GROWISER, the Umatilla Confederated Tribes and local schools to restore 550 acres of native vernal wetland system. Project site hydrology has been restored and native vegetation will be enhanced, monitored and inventoried by this partnership.

Undergraduate students of Eastern Oregon University will be involved in monitoring water quality and studying the return of native vegetation and aquatic invertebrates to the area. Two K-12 education professionals will develop outdoor education curriculum and an on-site field lab in a restored barn on the property for use by the county school district. The site will provide critical natural habitat for several endangered aquatic and terrestrial species.

Washington

Project Title: Riparian Restoration and Education Project

Recipient: Yakama Nation Wildlife, Range, & Vegetation Resources Management Program

Awarded Funds:	\$17,288
Matching Funds:*	\$18,576
Total Project Costs:	\$35,864

Project Area: Toppenish, Yakima County, Washington State

The Yakama Nation will work with Earth Corps, the Bonneville Power Administration, and the Yakima Basin Environmental Education Program to improve fish habitat, enhance habitat for cultural plant species, decrease native weed species, and restore degraded wetlands and montane meadows on an estimated 800 acres of land. This project will combine watershed-scale restoration, education on Native American cultural resources, and mentoring of young adults and children. The project will pair international natural resource managers from Earth Corp with tribal high school students to foster global perspectives on restoration, mentor corps members on arid land issues, watershed-scale restoration, and local cultural perspectives, and give tribal High School students career experience in natural resource management.