

**Long Island Sound Futures Fund 2014
Grants in New York and Connecticut**

HABITAT RESTORATION PROJECTS - CT
ON-THE-GROUND

Ed Bills Fish Passage and Floodplain Restoration (CT) (#45395)

Recipient: The Nature Conservancy

Grant Amount: \$150,000

Recipient Match Contribution: \$53,213

Total Project Funds: \$203,213

Project Area: East Branch, Eightmile River, Lyme, CT

The Nature Conservancy will open up 8.3 river miles and restore 6 acres of floodplain and wetland, and 0.5 miles of riparian habitat, along the Eightmile River, CT. Project will remove a barrier, restore a natural channel, construct riffles for fish, and seed and plant floodplain habitat with native trees and shrubs.

The project will improve access to 8.3 miles of valuable upstream river by removing the last barrier to fish passage along the East Branch of the Eightmile River for: sea lamprey, American eel, Atlantic salmon and brook trout; and blueback herring and alewife, diadromous fish species important to Long Island Sound. The Eightmile River, a federally designated Wild and Scenic River, is the first significant tributary to the lower Connecticut River which flows into Long Island Sound. Major activities include: barrier removal to open fish passage, excavation and riffle construction to achieve historic channel alignment, stabilizing and managing built-up sediment to avoid mobilization into the river, grading, seeding and planting 6 acres of floodplain habitat with a native plant mix and woody shrubs and trees to shade the banks and river benefitting cold water fish, and sharing information about the restoration at the Eightmile River Wild & Scenic Riverfest attended by over 500 people. Project partners include: American Rivers, CT Department of Energy and Environmental Protection, US Fish and Wildlife Service, National Oceanic and Atmospheric Administration, and the Eightmile River Wild & Scenic Committee.

Hyde Pond Fish Passage and Riparian Restoration (CT) (#45084)

Recipient: Connecticut Fund for the Environment

Grant Amount: \$149,999.33

Recipient Match Contribution: \$37,500

Total Project Funds: \$187,499.33

Project Area: Whitford Brook, Mystic River, Old Mystic, CT

Connecticut Fund for the Environment will open up 4.1 stream miles and restore 8 acres of riparian habitat along Whitford Brook, Connecticut. Project will remove an existing fishpass and

barrier, restore the natural channel and streambed and engage 100 volunteers in project monitoring and planting the riparian corridor.

The project will provide access to 4.1 miles of valuable stream for migratory species including alewife, blueback herring, sea-run brook trout and American shad, which use this stream to travel to fresh water from Long Island Sound to spawn. Restoring fish passage by removing the 1st of 4 barriers on Whitford Brook is part of an ongoing strategy to restore an important riverine migratory corridor, a priority coastal habitat type of the Long Island Sound Study. The project will also improve natural stream resiliency and restore the floodplain contributing to downstream flood control. Major activities include: removing the existing fish ladder and barrier; restoring the natural stream pattern, dimension, profile, streambed and channel; engaging 50 volunteers to plant an 8 acre riparian corridor with seedlings and native plugs, shrubs and trees and 50 students to conduct water quality and vegetative monitoring; and installing signs and holding one event celebrating project completion for the community. Project partners include: CT Department of Energy and Environmental Protection, US Fish and Wildlife Service, the Towns of Groton and Stonington, Avalonia Land Conservancy, Grasso Technical High School, Ledyard Vocational Agriculture School, and the dam owner.

Wetland and Coastal Grassland Restoration at Dodge Paddock and Beal Reserve (CT) (#45459)

Recipient: Sea Research Foundation, Inc.

Grant Amount: \$45,316.22

Recipient Match Contribution: \$98,762

Total Project Funds: \$144,078.22

Project Area: Dodge Paddock and Beal Preserve, Stonington, CT

Sea Research Foundation will restore 1 acre freshwater wetland and salt marsh and .6 acres of dune/grassland at Dodge Paddock and Beal Preserve, Stonington, CT. Project will remove invasive vegetation, replant with native plants, conduct monitoring, create a management plan; and conduct community education and stewardship.

The project will restore one acre of freshwater wetland, one acre of salt marsh and .6 acres of dune/grassland at Dodge Paddock and Beal Preserve to improve habitat for resident fish, wildlife, and migratory waterbirds, and enhance the resiliency of this coastal buffer system by implementing climate adaptive planning and planting. As with many sites around Long Island Sound, the Preserve has faced natural and anthropogenic challenges to its health including: disrupted tidal flow causing poor drainage, invasion by non-native plants and mosquitos, upland stormwater runoff which fills the marsh with polluted rainwater and sediment, and the residue of Superstorm Sandy, which plugged a culvert and pushed sand, gravel and debris into the marsh. This effort is one part of a larger project to rebalance the freshwater wetlands, tidal wetlands, and grasslands. Major activities include; conducting community-based planning and developing a planting and long-term management plan; engaging 350 volunteer stewards to remove invasive vegetation, replant habitat with 1,000+ native seedlings, shrubs and trees; delivering project monitoring; and outreach and education about the project with 5 educational signs, videos and social media, through Mystic Aquarium's extended learning programs, and at a National Estuary

Day event. Project partners include: Avalonia Land Conservancy, CT Department of Energy and Environmental Protection, and Mystic Aquarium, a division of Sea Research Foundation.

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HABITAT RESTORATION PROJECTS - NY
ON-THE-GROUND

Tackling Mile-a-Minute Invasive Plant at Pelham Bay Park (NY) (#44988)

Recipient: New York City Department of Parks and Recreation

Grant Amount: \$150,000

Recipient Match Contribution: \$150,000

Total Project Funding: \$300,000

Project Area: Pelham Bay Park, Bronx, NY

New York City Department of Parks and Recreation will tackle control of mile-a-minute on 60 acres of coastal forest and grassland at Pelham Bay Park. Project will apply mechanical, chemical and biological control targeted to site conditions and infestation level; and then plant areas with 4,000 trees and 2,000 shrubs assisted by 15 volunteers.

The project will tackle control of mile-a-minute (MAM) on 60 acres of coastal forest and grassland at Pelham Bay Park, home to over 400 species of wildlife and the largest contiguous native forest, scrub and grassland communities in the city. MAM has only recently taken root around the Sound. Before 1980 it was found in the eastern US in five counties of Pennsylvania and Maryland. Today it is found in 10 eastern states and the infestation at Pelham Bay Park is a dispersal point for the Long Island Sound region. Addressing the spread is important because MAM poses a threat to these habitats around the Sound which provide habitat, absorb stormwater run-off and buffer the coastline. The project will use a treatment strategy including: mowing where MAM is intermixed with sensitive native vegetation; post-emergent chemical control in areas with new or patchy infestation, pre-emergent chemical control in areas with established infestation; and rapid clearing and planting of gaps in the tree canopy with 4,000 trees and 2,000 shrubs. The project will monitor 5,000 newly released weevils (a biocontrol agent) to determine if the species will control MAM long-term. A corps of 15 volunteers will receive training to combat MAM in two workshops; and the public will be kept informed about the project with informative signs and social media outreach updates. Project partners include: USDA-APHIS and University of Delaware.

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HABITAT RESTORATION PROJECTS - NY
Planning

Coastal Habitat Restoration Planning at Alley Pond Park (NY) (#45449)

Recipient: City Parks Foundation

Grant Amount: \$60,000

Recipient Match Contribution: \$118,000

Total Project Funding: \$178,000

Project Area: Alley Pond Watershed and Alley Pond Park, Queens, NY

The City Parks Foundation will produce 3 restoration plans for up to 23 acres of tidal wetland & coastal forest in Alley Creek Watershed, NY. Project will develop designs, cost estimates, custom specifications and/or regulatory guidance using a community-driven model to inform habitat restoration and management of local parkland.

The project will prepare plans, custom specifications, functional designs, and cost estimates for up to 17 acres of salt marsh and coastal forest to restore ecosystem functions such as flood control, shoreline protection and water pollution filtration. The shoreline at the mouth of Alley Creek has lost approximately 10 acres of vegetated marsh since 1974. This is of critical concern because fringe urban marshes in the city have little room to move inland in response to sea-level rise. The projects will plan for clean sand placement, invasives removal, planting native salt marsh species, reducing impervious areas, and restoring habitat. Major activities include: Site 1- prepare a functional concept design, cost estimates and custom specifications to address fill removal and restoration of 5 acres of salt marsh and 5 acres of coastal shrubland and forest; Site 2- prepare a functional design, cost estimates, and a stewardship engagement plan to remove marine debris and restore 2 acres of salt marsh and coastal shrub habitat; and Site 3-prepare a conceptual design and regulatory guidance for a 1 acre pilot restoration project to develop a model for re-establishing 6 acres of salt marsh on the water's edge lost to erosion along Little Neck Bay. The community review of designs at meetings and charrettes. Project partners are: The Natural Areas Conservancy, New York City Department of Parks & Recreation, Natural Resources Group, and Alley Creek Watershed Technical Advisory Committee.

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WILDLIFE CONSERVATION PROJECTS – CT

Bird and Beach Stewardship by a Youth Conservation Corps (CT) (#45444)

Recipient: National Audubon Society, Inc. (Audubon Connecticut)

Grant Amount: \$41,159

Recipient Match Contribution: \$56,138

Total Project Funding: \$97,297

Project Area: Pleasure Beach, Bridgeport, CT

National Audubon Society (Audubon Connecticut) will deploy 10 students to encourage the 3,300 members of the public to share 63 acres of shoreline with beach-nesting birds at Pleasure Beach in Bridgeport, Connecticut. Project will train students to educate beachgoers and monitor nesting areas; and educate 35 staff from 10 municipalities about managing habitat areas.

The project will deploy 10 students as WildLife Guards to educate 3,300 members of the public to share 63 acres of shoreline habitat with beach nesting birds including state threatened Least Terns and federally threatened/state threatened Piping Plovers. Pleasure Beach is one of the largest blocks of intact barrier beach remaining in Connecticut and a historically important nesting area for the birds. In 2014 the City of Bridgeport reopened Pleasure Beach, putting the beach-going public in direct contact with the wildlife and habitat for the first time since 1996. The WildLife Guards program is a major component of a plan to balance the needs of endangered species with recreational uses of the beach. Two project objective are to reduce disturbance of habitat so that at least one pair of Piping Plovers successfully fledges 1-2 chicks in 2015; and to see a dozen pairs of Least Terns establish a colony. Major activities involve: training 10 students from Bridgeport High School to work alongside Audubon field biologists stewarding, monitoring, and raising public awareness, conducting a workshop for 35 City staff who have responsibilities for Pleasure Beach and municipal officials from 10 communities on the coast to share management practices; and implementing a social media campaign around minimizing beach disturbance. Project partners include: Audubon Connecticut, City of Bridgeport, Student Conservation Association, and US Fish and Wildlife Service.

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WATER QUALITY PROJECTS - CT ***ON-THE-GROUND***

Implementing Green Infrastructure to Manage Stormwater in New Haven (CT) (#45203)

Recipient: New Haven Urban Resources Initiative

Grant Amount: \$149,971.20

Recipient Match Contribution: \$264,748

Total Project Funding: \$414,719.20

Project Area: West River Watershed, New Haven, CT

The New Haven Urban Resources Initiative will install bioretention swales and rain garden green infrastructure (GI) in New Haven, CT. Project will engage students, ex-offenders and community members to maintain and monitor GI for water quality benefits; and conduct community education workshops focused on increasing “green” practices at home.

The project will install 8 bioretention swales and a 1,000 sq. ft. rain garden treating 2,810,000 gallons of stormwater; and providing 5 acres of habitat for birds, pollinators, and other wildlife in a subwatershed of the West River, New Haven, CT. Long Island Sound’s environment is degraded by pollution delivered from its watersheds. Large areas of impervious surface and compacted soils lead to flow of contaminated stormwater and combined sewer overflows (CSOs)

into waterways from urban neighborhoods. The project will create a model to decrease the CSO impact of storms, and increase community resilience to storms by testing green infrastructure (GI). The GI will detain and infiltrate 70% of runoff from local annual rainfall event; capture 100% of the first flush of 1" of rainfall in all storms; and reduce the flow amount and concentration of contaminants into the Sound. Major activities include: engaging 60 high school students, ex-offenders and community members to install and monitor the GI; conducting community education with 6 workshops about green yard maintenance and using rain barrels, and to recruit 220 volunteers to maintain projects; installing interpretative signs; and seeking community input into project design reaching 15,252 people. Partners include: New Haven Urban Resources Initiative, New Haven Ecology Project, Yale School of Forestry and Environmental Studies, City of New Haven, Greater New Haven Water Pollution Control Authority, Audubon CT and the West River Watershed Coalition.

Demonstrating Green Infrastructure to Manage Stormwater at Two Connecticut Colleges (CT) (#45362)

Recipient: Northeast Organic Farming Association of Connecticut, Inc.

Grant Amount: \$51,307.10

Recipient Match Contribution: \$16,000

Total Project Funds: \$67,307.10

Project Area: Three Rivers Community College, Norwich, CT and Naugatuck Valley Community College, Waterbury, CT

The Northeast Organic Farming Association will install green infrastructure (GI) projects at two community colleges in Norwich and Waterbury, CT. The project will train students about GI and then engage student volunteers in installing rain gardens, a treatment meadow and rain barrels; and inform the public with signs and educational outreach.

The project will install green infrastructure (GI) projects to capture, store and treat 181,518 gallons of stormwater annually and increase biodiversity at Naugatuck Valley Community College (NVCC) in Waterbury, CT and Three Rivers Community College (TRCC) in Norwich, CT. Storm water from NVCC is managed by the college and piped into a waterway. Major activities at NVCC include installation of: a 400 sq. ft. rain garden; a 400 sq. ft. meadow; and 3 rain barrels with all practices designed to add to current capacity to capture and infiltrate stormwater. The TRCC site has many sustainable landscape features, yet a low area of parking lot adjacent to a wetland continually floods, with water flowing into storm drains and a wetland. Once the stormwater enters the sewers, it is diverted to a treatment plant where it goes through expensive processes to remove trash, heavy solids etc. After treatment, the water is deemed clean and released into a waterway. Major activities at TRCC include installation of a: 900 sq. foot rain garden in the parking to collect storm water before it flows into the sewer system. The schools will offer workshops about GI to 100 students in their Horticulture and Sustainable Landscaping programs, and engage 50 students in projects. Project information will reach 9,600 people through newsletters, Facebook and three educational signs installed at the sites. Project partners: the colleges, Center for Land Use Education and Research, University of CT, and CT Sea Grant.

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WATER QUALITY PROJECTS - NY
ON-THE-GROUND

Conservation Practices to Improve Farm Soil and Water Quality (NY)
(#45311)

Recipient: American Farmland Trust

Grant Amount: \$86,892.20

Recipient Match Contribution: \$211,293

Total Project Funds: \$298,185.20

Project Area: Long Island Sound Watershed, Suffolk County, NY

American Farmland Trust will work with farmers to adopt soil health and nutrient management practices to reduce nitrogen input into the Long Island Sound, Suffolk County, NY. Project will conduct outreach, design financial risk management, demonstrate on-farm best practices, monitor soil health and crop yield, and engage soil health leaders.

The project will work with 10 operators to adopt soil health and advanced nutrient management practices on 15 acres of vegetable farms to reduce nitrogen fertilizer use by 20% in the Long Island Sound Watershed, Suffolk County, NY. Suffolk County's sandy soils are susceptible to nitrogen leaching from nitrogen fertilizer impacting ground and surface water. Farmers producing specialty crops like sweet corn and potatoes often use substantial amounts of nitrogen fertilizer. Reducing nitrogen use presents major challenges for farmers as it is needed for plant growth. Adoption of practices to reduce nitrogen loss may have high installation or maintenance costs, and risk (or perceived risk) of losses in crop yield/quality. This project will promote use of practices that reduce nitrogen use while enhancing farm economic viability. Major activities include: educating 80 sweet and field corn and cucurbits farmers about the practices and the financial benefits of adopting them in on-farm workshops, grower meetings, newsletters and media outreach; tailoring guidelines to reduce financial risk from adoption; conducting on-farm demonstration projects; monitoring soil health and crop yields to confirm environmental and economic impact; and creating a regional "soil health hub" in Suffolk County as part of a larger network in NY. Partners include: Agflex, Inc., Cornell Cooperative Extension of Suffolk County, Natural Resources Conservation Service, and Suffolk County Soil and Water Conservation District.

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WATER QUALITY PROJECTS - NY
Planning

Developing Innovative Residential Sewage Treatment Alternatives to Improve Water Quality (NY) (#45321)

Recipient: Peconic Green Growth, Inc.

Grant Amount: \$60,000

Recipient Match Contribution: \$46,640
Total Project Funds: \$96,640.00
Project Area: Orient, Town of Southold, NY

Peconic Green Growth will analyze and plan for innovative clustered decentralized wastewater treatment in Orient, NY. Project will assess alternative treatment types, prepare engineering designs and costs, and research management, financial and organizational options for site-based decentralized wastewater treatment.

The project will analyze clustered decentralized on-site wastewater treatment to advance the use of this strategy to reduce nitrogen loading into the aquifer and surface waters of Long Island Sound in Orient, NY by 50% to 90 % . Orient has a 10% target reduction for nonpoint source inputs as found in *A Total Maximum Daily Load Analysis to Achieve Water Quality Standards for Dissolved Oxygen in Long Island Sound*. Nitrogen levels in groundwater are relatively high in Orient, and in some cases even exceed drinking water standards. One of the major contributors to nitrogen loading is onsite wastewater treatment (i.e., cesspools). Currently, decentralized treatment solutions are only used for new development. The project will recommend processes for implementation of such treatment at existing sites, using Orient as a test case. Major project activities include: outreach to target properties/property owners; developing an engineering report with schematic designs and costs for 5 clusters (~354 homes); assessing alternative treatment types, package units, Septic Tank Effluent Pump systems, natural treatment systems (i.e., reconstructed wetlands) and reuse of treated wastewater; integrating input from the community and regulatory agencies; working with local government to obtain approvals; researching management options, funding/fee structures, reporting, and monitoring and maintenance of these systems. Project partners include: Clark Engineering, H2M, and Eric Murdoch, PE.

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WATER QUALITY PROJECTS – NY & CT **Planning**

Building the Long Island Sound Report Card (CT/NY) (#45540)

Recipient: The University of Maryland Center for Environmental Science

Grant Amount: \$99,156

Recipient Match Contribution: \$34,809

Total Project Funds: \$133,965

Project Area: Long Island Sound Watershed, CT and NY

The University of Maryland Center for Environmental Science will build capacity to sustain ecosystem health report cards in the Long Island Sound Watershed, NY and CT. Project will expand capacity of local groups in science communication, data integration, and report card development, and create a template for and execute a strategic communications strategy.

The project will expand the capacity of local organizations to sustain ecosystem health report cards currently in development, and develop a template for, and execute, a comprehensive dissemination strategy for report card dissemination and community engagement in the Long Island Sound Watershed, NY and CT. The ability of LIS to support numerous anthropogenic activities is dependent on the quality of its waters, living resources, and habitats. Ecosystem report cards are an important tool to foster critical conservation and restoration activities because they are designed to clearly communicate the status of ecosystem health in a way that is immediately accessible by non-specialists such as the general public and public officials. This project will address key components of report card development and delivery to assure its future in terms of sustainability and desired impact. Major activities include: intensive training for two local organizations in science communication, report card concepts, and data integration; engaging groups currently producing report cards to assist similar efforts in other areas sharing common data protocols and communication; and develop a comprehensive dissemination campaign template, with regular messaging identified by a local committee. The campaign will include print, social media, and dissemination through mailings, events, and the internet. Project partners are: University of CT, Harbor Watch/Bay Watch and Coalition to Save Hempstead Harbor/Hempstead Harbor.

###

EDUCATE AND INVOLVE THE PUBLIC - CT

Creating Schoolyard Habitat for Native Birds (CT) (#45087)

Recipient: National Audubon Society, Inc. (Audubon Connecticut)

Grant Amount: \$34,999

Recipient Match Contribution: \$62,474

Total Project Funds: \$97,473

Project Area: Stamford, New Haven, and Greenwich, CT

National Audubon Society (Audubon Connecticut) will create Schoolyard Habitats to enhance upland habitat and serve as outdoor classrooms to raise awareness about Long Island Sound in Fairfield and New Haven Counties, CT. Project will create habitats, train teachers, design and implement master plans, and establish an expanded network of Schoolyard Habitats.

The project will create 3 new and 8 enhanced Schoolyard Habitats at public schools to serve as outdoor classrooms to increase awareness in 1,250 students about watershed health of Long Island Sound in Stamford, Greenwich and New Haven, CT. As urban areas expand, urban forests and other green spaces are critical to protecting the Long Island Sound. However, barriers exist for many residents to connect with the Sound including limited access for nonresidents to shorelines and inaccessible urban waterfronts. In many communities residents are also unaware of the history and ecology of the Sound. This project will engage schools in sustainable management of these lands and educate the public about the importance of healthy habitat for the Sound by developing a network of habitat in parks and schools. Major activities include: create schoolyard habitat; provide professional development to 50 teachers to deliver curriculum; conduct field trips with 2,780 students to a flagship schoolyard habitat; develop a

Schoolyard Habitat Community Leadership workshop for 11 participants; engage 80 adult volunteers to serve on Stewardship Teams to develop Schoolyard Habitat master plans and 600 volunteers in stewardship activities; secure pledges from 625 students to take conservation actions; conduct 2 Schoolyard Habitat Summits with 33 participants to form a network of practitioners. Project partners include: 9 public schools, Common Ground High School, and US Fish and Wildlife Service.

Long Island Sound Environmental Leaders in Training (CT) (#45298)

Recipient: Solar Youth, Inc.

Grant Amount: \$35,000

Recipient Match Contribution: \$37,500

Total Project Funds: 72,500

Project Area: Westville Manor, West Hills and Newhallville neighborhoods, New Haven, CT

Solar Youth will deliver a Long Island Sound-themed program called Leaders-in-Training for 7th and 8th graders focused on preserving and protecting the Sound in New Haven, CT. Project will teach science concepts and environmental issues, provide leadership training and implement service learning projects.

The project will deliver a Long Island Sound-themed program for 10 7th and 8th graders about science concepts and environmental issues, skills associated with leadership and how to train younger students, and to design four service projects that promote the health and well-being of the Sound in New Haven, CT. A 2012 report by the *Journal of Personality and Social Psychology* found today's youth are less interested in the environment and in conserving resources—and often less civic-minded overall—than prior generations. According to ConnCAN, just 17.7% of high school students, 34.3% of middle school students and 28.7% of elementary school students in New Haven met state goals for science learning in 2013. The low income, minority, underserved communities in which Solar Youth works are underrepresented in virtually all environmental initiatives. The project seeks to address these problems and develop a pipeline of young people to assume roles as leaders and educators for the next generation. Major activities include: recruit LITs from identified communities; train participants in leadership skills and competencies; deliver youth-led Community Service Action projects; conduct 20 local neighborhood explorations, and 30 teaching sessions, and public education sessions; and measure increases in student knowledge of issues in pre/post surveys. Partners include: public and private entities around the Sound associated with neighborhood explorations and community service projects.

Invaders: They come by Land, Sea and Air (CT) (#45322)

Recipient: Connecticut River Museum

Grant Amount: \$34,993.89

Recipient Match Contribution: \$43,351.87

Total Project Funds: \$78,345.76

Project Area: Essex, CT and Long Island Sound Coastal Communities, CT

The Connecticut River Museum will deliver education about invasive species degrading the Long Island Sound Watershed, CT. Project will develop exhibit and discovery lab, prepare a special feature newsletter and videos, conduct hikes and paddles exploring native and invasive species, and hold an invasive species eradication day.

The project will deliver a comprehensive education program in an exhibit that contains scientific information packaged in a fun, 1950s – “scifi” theme (think Godzilla) to inform 14,000 people about the threat of invasive species from air, land and water that degrade the Long Island Sound Watershed, CT. Invasive species are numerous and visible threats to the health and living resources of the Sound. Because the Connecticut River reaches 410 miles north to the Canadian border and supplies approximately 70% of all fresh water that enters the Sound it is a major artery of biological invasion. These invaders degrade habitats and water quality as they alter ecosystems, and limit biodiversity by pushing out native species. Major project activities include: development of a transportable exhibit about invasive species and discovery exploration lab providing an opportunity for children and adults to do their own investigation about the issue; a call-to-action space summarizing the exhibit and asking visitors to take a stand against invasive species by changing their habits and getting involved with eradication; 30 educational programs at the museum and schools; professional videos produced by the local NBC affiliate; a special interest newsletter focused on the issue; two hikes and paddles that take people by land and water to explore native species, and an invasive species day and environmental forum. Project partners include: NBC Connecticut (NBC 30).

Long Island Sound Stormwater/Environmental Outdoor Classroom (CT) (#45224)

Recipient: Town of East Lyme

Grant Amount: \$4,546

Recipient Match Contribution: \$10,063

Total Project Funds: \$14,609

Project Area: Town of East Lyme

The Town of East Lyme will offer educational field trips for third graders about methods to treat and reduce stormwater into Long Island Sound. Project will rotate students through 5 stations about Stormwater, Plants/Soils, Shoreline Species/Habitat, Coastal Stormwater Model, and Recycling, complementing school science units.

The project will provide an Outdoor/Environmental Education Classroom field trip for 10 3rd grade classes reaching 200 students at three schools showcasing green infrastructure techniques. When it rains, pollutants (i.e., fertilizers, pesticides etc.) are carried to Long Island Sound after stormwater passes over impervious surfaces such as rooftops and pavement. This project will discuss the impact of water pollution and feature ways to reduce stormwater pollution before discharge into the Sound. Major activities include: providing educational materials to teachers and students in advance of the event; rotating students through five different stations including: a Stormwater Classroom, the Envirocape, a three-dimensional landscaped model illustrating residential, recreational, agricultural, industrial, and transportation activities that represent possible sources of water pollution, a Recycling Program; a Plants/Soils focus, and Shoreline

Species/Habitat presenting information about the difficulties fish and wildlife face when living in polluted environments. Approximately 40 parent and high school volunteers will help manage the educational day and serve as presenters. Project partners include: Save the River-Save the Hills, CT Department of Energy and Environmental Protection, Mystic Aquarium, East Lyme High and Middle School, Southeastern CT Regional Resources Recovery Authority, Niantic River Watershed Committee, and the East Lyme Public Works Department.

Don't Flush your Drugs in the Sound (CT) (#45373)

Recipient: Citizens Campaign for the Environment

Grant Amount: \$10,000.02

Recipient Match Contribution: \$7,590

Total Project Funds: \$17,590.02

Project Area: Bridgeport, CT

Citizens Campaign for the Environment will educate residents about the negative environmental impact of flushing unused medications in Bridgeport, CT. Project will distribute 5,000 educational brochures, host a half-day educational conference, give presentations at high schools, and develop a social media campaign.

The project will educate residents about the negative environmental impact on Long Island Sound of flushing unused medications in Bridgeport, CT. Trace amounts of pharmaceutical drugs have been found in waterways throughout the nation, and pose a threat to water quality and fish. Despite potential environmental and public health impacts, people are still flushing unused medications. To combat this problem, Connecticut has passed legislation requiring police precincts to install permanent lock-boxes where residents can safely dispose of unused medication at any time. When the state program goes into effect on October 1, 2014, major project activities will include: promoting the new drop-boxes in police precincts, distribution of 5,000 educational brochures, hosting an educational conference, making presentations at three public high schools, and developing a social media campaign about the issue including radio and video PSAs. Project partners include: Mayor of Bridgeport and the Conservation Corps.

Eco Splash Event! Celebrating Long Island Sound (CT) (#45287)

Recipient: Sea Research Foundation, Inc.

Grant Amount: \$8,982.20

Recipient Match Contribution: \$9,023.03

Total Project Funds: 17,905.23

Project Area: Mystic, CT

Sea Research Foundation, Inc. will conduct Eco Splash, a weeklong environmental awareness event in Mystic, CT, focused on Long Island Sound and its natural resources. Project will organize and host the event, provide exhibit stations about Long Island Sound, and promote hands-on engagement in on-the-ground stewardship activities.

The project will conduct Eco Splash,, a weeklong environmental awareness event to reach 30,000 people about Long Island Sound and how they can protect it in Mystic, CT. Findings of a

2006 comprehensive survey of over 1,200 Connecticut and New York residents living in the Long Island Sound Watershed found low environmental knowledge about the Sound, with limited knowledge of watershed facts and local problems, a lack of awareness about the impact of individual behavior, but with high levels of environmental concern and the belief that they could change something about their everyday behavior to improve the environment of the Sound! This project seeks to increase public awareness and knowledge about issues affecting the Sound and to provide participants with tools to make informed environmental decisions. Major activities will involve providing information about the Sound at stations including: an Aquatic Invertebrate Meet and Greet, Enviroscape, a 3D table top watershed model focused on sources of non-point pollution, Marine Mammal and Sea Turtle Stranding, Marine Debris, and Sustainable Seafood. Other activities taking place during the week include making an electronic pledge to protect the Sound and estuary facts posted throughout the facility. During Eco Splash and afterward the project will publicize opportunities for the public participation in on-the-ground conservation projects. Project partners include: Sacred Heart University, Connecticut Sea Grant etc.

###

EDUCATE AND INVOLVE THE PUBLIC - NY

Promoting Toxin Free Lawns to Improve Water Quality (NY) (#45209)

Recipient: Azuero Earth Project DBA Perfect Earth Project

Grant Amount: \$32,788.75

Recipient Match Contribution: \$33,269

Total Project Funds: \$66,057.75

Project Area: Towns of Riverhead and Southold, NY

Azuero Earth Project DBA Perfect Earth Project will design and deliver a toxin-free lawn care program with education for homeowners and landscapers in the Long Island Sound Watershed, Suffolk County, NY. The project will evaluate participant attitudes and motivations about lawn care, deliver toxin-free lawn care and measure chemical reductions.

The project will deliver a toxin-free lawn care educational program evaluating homeowner motivations and assessing net chemical inputs to lawns from a toxin-free approach as compared to a traditional lawn care program in the Long Island Sound Watershed, Suffolk County, NY. The project addresses problems of conventional turf maintenance that rely upon quick-release nitrogen fertilization and heavy doses of toxic pesticides that degrade habitat, groundwater and surface water. By engaging homeowners and landscapers the project will create a model for the community and individuals. Major project activities include: a mailing and distribution of program brochures at local lawn maintenance supply stores and by partner organizations to recruit participants; three meetings to plan for the growing season; conducting an internet evaluation to measure motivations for going toxin free, willingness to pay for toxin free lawn care, and concerns with the toxin free approach; two educational sessions about toxin-free lawn care; delivering four toxin-free lawn care practices addressing fertilization, pest control, culture and irrigation on 75 acres of lawn; calculating net chemical reductions and monetary benefit to the watershed; and producing and disseminating a report of the findings. Project partners

include: Nassau Suffolk Landscape Gardeners Association, Cornell Cooperative Extension of Suffolk County, Peconic Institute, Peconic Land Trust, Group for the East End, and

Bronx River Floatable Pollution Cleanup and Education (NY) (#45220)

Recipient: Bronx River Alliance, Inc.

Grant Amount: \$9,999.62

Recipient Match Contribution: \$16,820

Total Project Funds: \$26819.62

Project Area: Bronx River, Bronx, NY

The Bronx River Alliance will conduct a project to address the issue of floatable pollution entering Long Island Sound, Bronx River, NY. Project will have paddle & pick-ups to remove floatables along the river and at the City floatables collection boom, and a shore pick-up on National Estuary Day at Soundview Park.

The project will conduct a three-part project to address the issue of floatable pollution entering Long Island Sound, Bronx River, NY. The Bronx River annually delivers 16-billion gallons of water—and more than 1,200 cubic yards of floatable debris—into Long Island Sound. Stormwater runoff from hardscaped surfaces washes debris into the river, combined sewer overflows carry even more trash, and passersby throw litter into the river. To stem the flow of floatables, major project activities will include: paddle & pick-ups engaging 20 volunteers per trip in removing 9,600 lbs. floatables along the river; a boom cleanup engaging 20 volunteers per trip to clear 3,200 lbs. of floatables from the shore ends of the NYC Department of Environmental Protection (NYC DEP) floatables boom that are inaccessible to the trash skimmer; conducting a clean-up engaging 75 volunteers to collect 1,400 lbs. of floatables and other trash from the shoreline of Soundview Park on National Estuary Day; and development of flyers, web, and social media communications for the project. Project partners include: NYC DEP, NYC Department of Parks and Recreation.

National Estuary Day Celebration at Alley Pond Park (NY) (#45029)

Recipient: Alley Pond Environmental Center

Grant Amount: \$9,052.31

Recipient Match Contribution: \$5,000

Total Project Funds: \$14,052.31

Project Area: Alley Pond Watershed and Park, Queens, NY

Alley Pond Environmental Center will conduct a National Estuary Day event and educational programs about Long Island Sound in Queens, NY. Project will conduct the event, conduct a community clean-up and present educational programs at local schools.

The project will conduct a National Estuary Day event for 250 people with exhibits and on-water activities, a cleanup to reduce litter into Long Island Sound, and present educational programs at five schools in Queens, NY. Almost two million people residing in Queens are not aware of the Long Island Sound estuary, its natural and recreational value or the threats to it including

pollutants and litter carried by rain into its waters. This project will celebrate and raise the visibility of the Sound at the Festival of Little Neck Bay- the Western End of Long Island Sound. Major activities will all involve a focus on this part of the Sound and include: inviting and engaging the participation of environmental, historical, civic, governmental, political, and musical organizations and the public at the event; disseminating fact sheets about estuaries, coastal areas and human impacts; cleaning up Northern Boulevard from Cross Island Parkway to Douglaston Parkway; seeking pledges from event participants to take environmental actions that protect the Sound; developing a powerpoint about the estuary to be presented to five local schools; and conducting a pre/post-test at schools to determine increases in knowledge about the Sound. Project partners may include: Bayside Historical Society, Douglas Manor Environmental Association, Queens Botanical Gardens, Queens Civic Congress, Bayside Marina, NYC Department of Parks and Recreation, and Queens Economic Development Corporation.

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CITIZEN SCIENCE - WATER QUALITY MONITORING- CT

Hands-on Student Water Quality Monitoring to Solve Pollution Problems (CT) (#45003)

Recipient: Earthplace – The Nature Discovery Center, Inc.

Grant Amount: \$34,149

Recipient Match Contribution: \$19,460

Total Project Funds: \$53,609

Project Area: Waterbodies in the geography of Monroe to Darien to Ridgefield, CT

Earthplace –The Nature Discovery Center will deliver three hands-on environmental quality monitoring and education programs on rivers in the geography of Monroe, Darien and Ridgefield, CT. Project will teach high school students to conduct river, estuary, storm drain system, and fisheries monitoring programs with EPA-approved protocols.

The project will engage high school students to conduct three hands-on river, estuary, storm drain system, and fisheries monitoring and education programs on rivers to track down pollution sources and work with municipalities to remediate the problems in the geography of Monroe, Darien and Ridgefield, CT. It identifies pollution sources such as compromised septic systems and failed infrastructure etc. and taking steps in partnership with municipalities to remediate problems. High school science students traditionally do not have the chance to practice science in class. The project provides them with opportunities to participate in detection work and to deliver practical, applied scientific monitoring. Major activities include: train 35 students from 10 schools to monitor eight waterbodies for five water quality parameters; identify one pollution hot spot for each waterbody and address with municipal partners; prepare a monitoring report for each waterbody and disseminate to government and the public; present monitoring data at annual Water Quality Symposium; deliver an internship program with nine students working at a job site on activities like laboratory maintenance, research on impaired waterways etc.; and deliver

summer volunteer program with 15 college and high school student scientists to assist with the monitoring. Project partners include: 10 high schools, and six coastline towns.

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CITIZEN SCIENCE - WATER QUALITY MONITORING- NY

Hempstead Harbor 2014 Water Quality Monitoring Program (NY) (#45085)

Recipient: Incorporated Village of Sea Cliff, New York

Grant Amount: \$55,000

Recipient Match Contribution: \$75,843

Total Project Funds: \$130,843

Project Area: Hempstead Harbor, NY

The Incorporated Village of Sea Cliff, New York will conduct water quality monitoring of different indicators of pollution in outer and inner Hempstead Harbor, NY. The project will collect water quality data, track improving and declining water quality, and produce and disseminate a report.

The project will conduct water quality monitoring of 14 indicators of pollution, collect post-construction data about watershed improvements at Scudder's Pond, and conduct bacteria monitoring in Hempstead Harbor, NY. Monitoring in the *outer* portion of the Harbor demonstrated sufficient improvement to allow the reopening of 2,500 acres to shellfish harvesting for the first time in forty years, a real success story about water quality improvement on Long Island Sound, validated by monitoring. Monitoring in the inner harbor has shown that sampling stations exceeded shellfish standards 37% of the time due to high bacteria levels with the result that beds will only be opened when changes occur that result in lower bacteria levels. The Harbor remains on the state list of "pathogen-impaired waterbodies," and is subject to a *Shellfish Pathogen Total Maximum Daily Load (TMDL)* that requires a 95% reduction in pathogen levels. The data from this project will be used to help local governments detect illicit discharges and develop pathogen TMDL retrofits. Major project activities include: monitoring of parameters i.e., fecal coliform bacteria etc.; tracking water quality trends; and analyzing and publishing an annual report and posting results on a website. Project partners include: the Town of Oyster Bay, the Town of North Hempstead, the City of Glen Cove, the Village of Sea Cliff, the Village of Roslyn Harbor, the Village of Roslyn, the Village of Flower Hill, and the Village of Sands Point.

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