



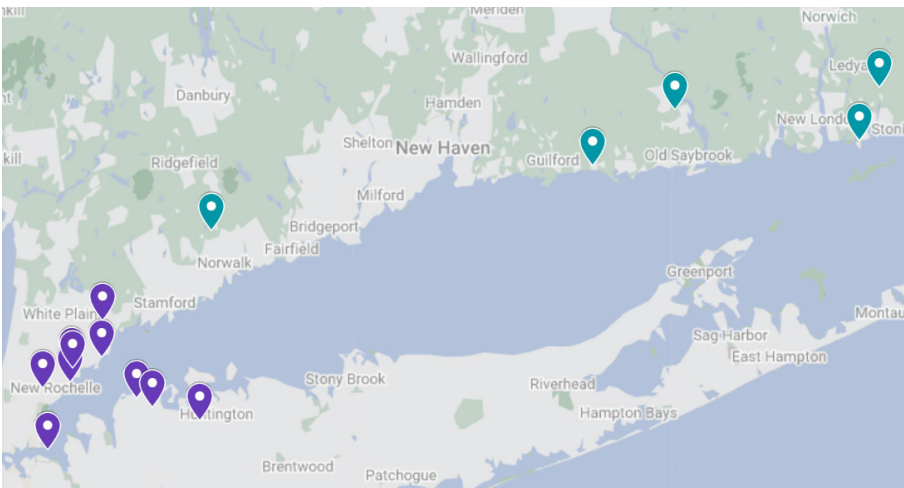
Long Island Sound Resilience Planning Support Program – 2024 Award Slate

OVERVIEW

Since 2021, a team of New York Sea Grant (NYSG) and Connecticut Sea Grant (CTSG) Sustainable and Resilient Communities (SRC) Extension Professionals has been working to develop resources and tools to help Long Island Sound communities achieve their sustainability and resilience goals. A major barrier for many communities is a lack of capacity and resources to identify, conceptualize, and develop climate resilience projects.

In response, the SRC team launched the Long Island Sound Resilience Planning Support Program in October 2023 with funding from the U.S. Environmental Protection Agency through Long Island Sound Study. The Program provides planning support for climate resilience-focused projects by matching communities with qualified contractors to assist with their planning needs. By helping communities assess local climate risks, conceptualize project ideas, and conduct preliminary planning steps, the goal is that communities will then be well-positioned to access other funding sources for further project design and implementation.

This year, in the first round of the Program, NYSG and CTSG awarded nearly \$1.1 million in planning support to advance climate resilience projects in 15 coastal communities in the Long Island Sound region. The fifteen projects—five in CT and 10 in NY—described below include climate vulnerability assessments and resilience plans, conceptual designs for flood mitigation opportunities, landscape design plans, and watershed-based conservation plans.



Map showing the locations of the 15 projects awarded support through the first round of the LIS Resilience Planning Support Program. Ten New York projects are shown with purple markers and five Connecticut projects with teal markers.

About Long Island Sound Study

The Long Island Sound Study, established in 1985, is a partnership of federal and state agencies working with local governments, communities, universities and industry to protect and care for the Sound's health.

About Connecticut Sea Grant

Connecticut Sea Grant, based at UConn's Avery Point campus in Groton, is one of 34 Sea Grant programs supported by the National Oceanic and Atmospheric Administration that encourage the wise stewardship of our marine resources through research, education, outreach and technology transfer.

About New York Sea Grant

New York Sea Grant (NYSG) is a cooperative program of Cornell University and the State University of New York, under the National Oceanic and Atmospheric Administration's National Sea Grant College Program. Since 1971, NYSG has represented a statewide network of integrated research, education and extension services promoting coastal community economic vitality, environmental sustainability and citizen awareness and understanding about the State's marine and Great Lakes resources.

Contact: LISResilience@gmail.com

Learn more at: lisresilience.org/assistance-programs

CONNECTICUT AWARDEES**Alliance for the Mystic River Watershed****Project:** Conduct a Climate Vulnerability Assessment for the Mystic River Watershed**Contractor:** Fuss & O'Neill**Award Amount:** \$115,000

The Alliance for the Mystic River Watershed sought support to develop a climate vulnerability assessment of the main watershed waterway corridors (streams, rivers, wetlands, etc.) from I-95 north to Lantern Hill Pond, including Towns of Stonington, Groton, North Stonington, Ledyard, and the Mashantucket Pequot Tribal Nation and Eastern Pequot Tribal Nation in CT. Groton and Stonington are independently working on the Mystic Drawbridge area and the Route 1 corridor, and the resulting documentation from this project



work will add to their Watershed Resilience Action Plan. The assessment would focus primarily on the area around Old Mystic and the area around and including the lakes at the headwaters called Lantern Hill Pond, Long Pond, and Bush Pond, including some critical road-stream crossings along Whitford Brook. The Alliance is looking to have a holistic approach to the assessment and consider how ecological and climate change concerns will impact the communities within the watershed. Such communities include the Eastern Pequot Tribal Nation, which is entirely encompassed within the Mystic River Watershed, and the Mashantucket Pequot Tribal Nation. Tribal perspectives and laws will be important to consider during the development of the climate vulnerability assessment.

Groton Long Point Association**Project:** Develop conceptual designs for priority projects identified in the Groton Long Point Association Resiliency Plan**Contractor:** GZA GeoEnvironmental, Inc.**Award Amount:** \$63,000

In 2023, the Groton Long Point Association (GLPA) developed a comprehensive resiliency plan ([summarized here](#)) with GZA GeoEnvironmental, Inc. and Coastal Ocean Analytics, which found four adaptation recommendations: (1) Stormwater system Improvement, (2) Relocation of Public Safety (Police & Fire Station) facilities, (3) Construction of additional shoreline protection & wave attenuation, (4) Building Elevation in line with current and future flood-plane projections. GLPA sought assistance with (1) Project prioritization, feasibility and funding guidance, (2) Strategy development and project planning, including the development of conceptual designs for priority projects (3) Reviewing and feedback on potential grant opportunities. Groton Long Point is a ~270-acre peninsula in CT bordered on the west by Mumford Cove, on the south and east by Fishers Island Sound, and on the north by Groton Long Point Road and many of the areas most susceptible to flooding are single-family residential neighborhoods, natural and recreational areas including the Inner Lagoon and Outer Lagoon, and tidal and inland wetlands to the north of Groton Long Point.

Southwest Conservation District

Project: Update the 2011 Norwalk River Watershed-Based Plan

Contractor: Tighe & Bond

Award Amount: \$78,300

Southwest Conservation District sought support to work with the Norwalk River Watershed Initiative (NRWI) to update the [Norwalk River Watershed Based Plan](#) (originally published in 1998 and last updated in 2011). The completed plan will include all components to meet the requirements of an EPA 9-Element Plan. This watershed includes the municipalities of Norwalk, Darien, New Canaan, Wilton, Weston, Redding, and Ridgefield in CT, and Lewisboro in NY. The NRWI meets monthly and includes representatives from relevant organizations and municipalities. Activities stemming from the previous plan have improved water quality to the point that two river segments were removed from the list of impaired waters in 2012. The revised plan will support partners in pursuing funding for the implementation of projects to improve water quality and enhance community resilience. An important component of the plan revision process will be public outreach and engagement, especially with communities with environmental justice concerns in the City of Norwalk.

Towns of Essex, Deep River, and Chester

Project: Conduct a Climate Vulnerability Assessment for the Towns of Essex, Deep River and Chester, and scope three pilot projects

Contractor: Fuss & O'Neill

Award Amount: \$80,000

The Towns of Essex, Deep River, and Chester, CT sought planning support for developing a climate vulnerability assessment, strategizing based on the findings, and preliminary project scoping of a pilot project in at least one area within each of the towns (a total of three pilot projects). During 2019-2020, the three towns participated in a [Multi-Jurisdictional Hazard Mitigation Plan](#), that was followed up on in 2022-2023 ([Chester, Essex, Deep River](#)), all of which highlighted coastal and riverine flooding concerns, especially during severe rain events. Using the findings from the previous efforts, the towns hope that this new assessment will help determine how to prioritize concerns and reduce risks.

Town of Madison

Project: Develop a Climate Resilience Plan for the Town of Madison, building off of the 2016 Town Coastal Resilience Plan

Contractor: FHI Studio

Award Amount: \$49,845

The Town of Madison, CT sought planning support to develop a climate resilience plan that builds on and broadens the small-scale [Resilience Plan](#) that was developed in 2016 using updated climate projections and expanding on previous findings to allow for a fresh approach with new resources. The plan process should include public engagement opportunities in the form of workshops, interviews, or meetings. Some of the items the town would like included in the assessment are sea level rise projections, a climate change vulnerability index, a drinking water vulnerability assessment (especially in low-lying areas where wells may experience saltwater intrusion), stormwater models, tidal wetland preservation, and identification of which historic and culturally significant locations are at risk. The Town is interested in the use of GIS and mapping components for these factors and the potential to link findings back to their Hazard Mitigation Plan. The Town seeks recommendations for adaptation and resilience practices that could be utilized to address the above factors and an update to an implementation table to include actions, timeframes, and potential funding sources.

NEW YORK AWARDEES

Rye Town Park Commission

Project: Conduct a Climate Vulnerability Assessment for Rye Town Park

Contractor: Indigo River

Award Amount: \$69,520

Rye Town Park Commission sought planning support to develop a climate vulnerability assessment for Rye Town Park, NY, a waterfront park on the National Register of Historic Places that serves about 70,000 visitors per year through both passive and active recreational opportunities. The Commission wants to better understand the predicted impacts that rising sea levels, flooding, and increased storm frequency and intensity will have on the Park so that they are able to plan and implement projects that will increase the resilience of the Park and its 17 structures and ensure that it remains usable for generations to come.



Seatuck Environmental Association

Project: Assess climate change impacts on Beaver Brook and Mill Neck Creek marsh complex and produce a conceptual design

Contractor: GZA GeoEnvironmental, Inc.

Award Amount: \$71,468

Seatuck Environmental Association and its partners sought planning support to develop a conceptual design for improving the connectivity, ecological health, sustainability and resiliency of Beaver Brook, a coastal stream that flows for more than two miles through a largely protected corridor through the Village of Mill Neck and the Hamlet of Locust Valley into the Mill Neck Creek Marsh complex in Oyster Bay, NY. Specific issues to be considered include impacts of sea level rise on an earthen dam that impounds the stream at the head of tide (forming the 60-acre Beaver Lake) and carries a public roadway (DeGraff Causeway, a.k.a. Cleft Road) across the waterway, impacts of sea level rise on the tidal marsh habitat north of the Beaver Lake dam, high levels of stormwater runoff and sedimentation that have severely impacted water depths, stormwater storage and ecological health throughout the waterway, especially in Beaver Lake, and upstream impoundments that eliminate connectivity, reduce ecological health and create potential public hazards for downstream property and infrastructure. The contractor will provide technical analysis of these issues and outline the nature, feasibility and costs of potential solutions for addressing them - producing a conceptual plan and strategy for moving forward.

St. John's Episcopal Church (Cold Spring Harbor)

Project: Develop a Conservation and Restoration Plan for St. John's Church marsh and pond

Contractor: GEI

Award Amount: \$72,040

St. John's Church sought planning support to develop a conservation and restoration plan for St. John's marsh and pond located at the southernmost end of the Inner Cold Spring Harbor. St. John's Church, located in the Village of Laurel Hollow, NY on the border of Nassau and Suffolk Counties, has owned several acres of high marsh and a 14-acre pond for nearly a century. The Church would like assistance assessing the health of the existing marsh and pond and the threats to the including but not limited to sea level rise, hardened shorelines, invasive species, degraded water quality, stormwater, and marine debris. The contractor will develop a Marsh and Pond Conservation Plan and the creation of conceptual designs for one or more priority projects. The marsh complex was included as a focal site in the [Marsh Conservation Planning for Oyster Bay and Cold Spring Harbor](#) finalized in December 2023.



State University of New York (SUNY) Maritime College

Project: Assess local climate risks, conceptualize project ideas, and conduct preliminary planning for the SUNY Maritime Campus

Contractor: Indigo River

Award Amount: \$69,520

SUNY Maritime College sought support for a climate vulnerability assessment and to develop a climate adaptation plan for their 55-acre waterfront campus on the Throggs Neck peninsula in the Bronx, NY. The College is interested in identifying and prioritizing projects so they are well positioned to apply for funding to design and implement sustainable and resilience-focused projects. The vulnerability assessment and adaptation plan will contribute to one of their Strategic Actions to develop a College environmental sustainability plan.

Town of Mamaroneck

Project: Conduct a Climate Vulnerability Assessment for three municipal properties

Contractor: L.K. McLean Associates

Award Amount: \$74,000

The Town of Mamaroneck, NY sought planning support to develop a climate vulnerability assessment for three key municipally-owned properties on Hommocks Road, Boston Post Road, and Pryer Manor Road. These three areas of the town are vulnerable to sea level rise, severe flooding (driven by both stormwater and tidal influences), and are crucial access points to neighborhoods. The Town would like to better understand current conditions and potential climate impacts, identify flood mitigation strategies, and develop conceptual designs for priority projects.

Village of Larchmont

Project: Determine causes of recurrent flooding in the Fountain Square area of the Village; identify flood mitigation strategies and priority projects

Contractor: L.K. McLean Associates

Award Amount: \$72,600

The Village of Larchmont, NY sought planning support to develop a study to determine the root causes of recurrent flooding in the Fountain Square area of the village and identify potential solutions, with a preference for green infrastructure and/or nature-based solutions where feasible. The contractor will conduct hydrologic and hydraulic analysis, including model runs to represent future conditions based on projected tidal conditions under different storm event scenarios, and to identify and evaluate potential solutions. Ideally, at least one solution will be advanced to a conceptual design and cost estimate stage to facilitate an application for further grant support for implementation.

Village of Lattingtown

Project: Develop a Conservation and Restoration Plan for the Village of Lattingtown's marsh complex adjacent to Frost Creek

Contractor: Land Use Ecological Services

Award Amount: \$37,360

The Village of Lattingtown, NY sought planning support to develop a conservation and restoration plan for the marsh complex in the Village-owned Kate Trubee Davison Preserve located south of the western portion of Frost Creek. The contractor will assess alternatives for marsh conservation and restoration considering the impacts of climate change, the 100-year old Village owned levee which runs on between the Kate Trubee Davison Preserve and the Lattingtown Harbor Boat Basin, and the adjacent homeowners -producing a conceptual plan and strategy for moving forward that should include preliminary cost estimates, information on necessary permitting and grants to fund this project. The marsh complex was included as a focal site in the [Marsh Conservation Planning for Oyster Bay and Cold Spring Harbor](#) finalized in December 2023.

Village of Mamaroneck

Project: Develop a Landscape Design Plan for a segment of a proposed Village-wide greenway along the Mamaroneck and Sheldrake Rivers

Contractor: Assemblage Landscape Architecture

Award Amount: \$49,925

The Village of Mamaroneck, NY sought landscape architecture planning services and landscape design for the first portion of a proposed Village Greenway along the Mamaroneck and Sheldrake Rivers. The segment they are focusing on first is about 0.6 miles in length and contains approximately 7.5 acres of adjacent floodplain to be restored as natural habitat with native plants, trees, and shrubs. It begins at the Town of Mamaroneck border and stretches northeast along the Sheldrake River to Fenimore Road. It is anticipated that what is developed for this first segment/phase of the Greenway would serve as a template/standard for the following segments and incorporate green infrastructure and resiliency features.



Village of Pelham

Project: Conduct a Natural Resource Inventory for the Village

Contractor: Biohabitats

Award Amount: \$75,240

The Village of Pelham, NY sought planning support to develop a Natural Resources Inventory (NRI). The contractor will work with the Village's Sustainability Advisory Board to help define the scope of the NRI, collect data, input the data into GIS as needed/applicable, and lead organization and writing of the final report. The NRI will help to guide conservation and land use decisions in the Village in a coordinated way to improve resilience to climate change and to conserve natural and cultural resources. The NRI can also help guide implementation of specific recommendations for flood management and natural habitat restoration in the [Hutchinson River Watershed Plan](#) and identify opportunities to partner with neighboring municipalities and agencies to improve land use outcomes.

Village of Rye Brook

Project: Determine causes of recurrent flooding in the Rich Manor Park area of the Village; identify flood mitigation strategies and priority projects

Contractor: SLR

Award Amount: \$110,970

The Village of Rye Brook, NY sought planning support to help identify feasible solutions to recurrent flooding occurring in the Rich Manor Park area of the Village along the east branch of the Blind Brook. The Village has previously implemented a large retention basin and a series of other significant flood mitigation projects in this area that were identified during a 2002 study, but flooding remains an ongoing issue. This area was highlighted as High Risk Area #6 in the [Blind Brook Flood Mitigation and Resilience Report](#) completed in November 2022 by the NYSDEC Resilient New York program. The Village sought support to develop a detailed topographic and utility survey in GIS for the project area, conduct the rigorous hydrologic and hydraulic analysis recommended in the Resilient NY report, including mapping of stormwater and drainage infrastructure, and develop a list of priority projects and conceptual design(s) with budget figures for consideration by Village residents.