

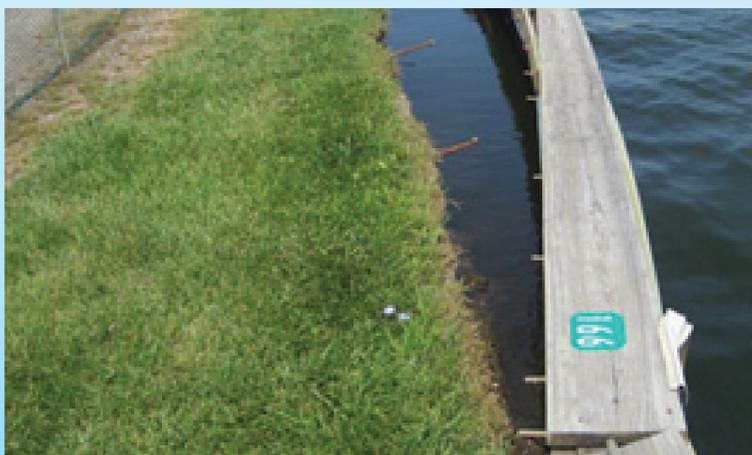
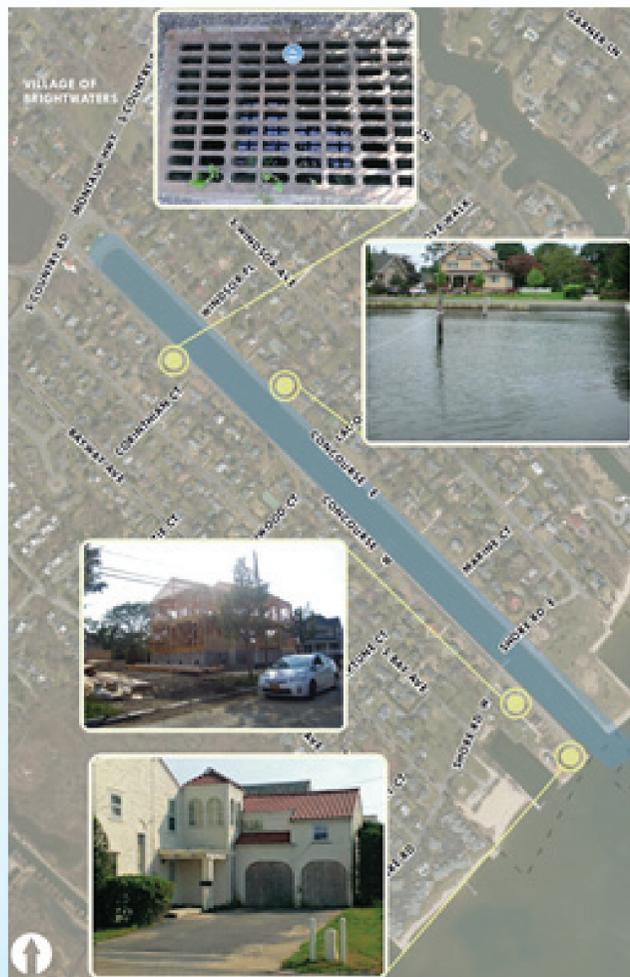


Proposed Project

BRIGHTWATERS CANAL RESILIENCY IMPROVEMENTS - PHASE I

PROJECT DESCRIPTION

This Proposed Project would involve the replacement of deteriorated and/or damaged bulkheading along the northern portions of the Canal. This resiliency project would provide for increased height where appropriate, to match the height of bulkheading closer to the Bay. A total improvement to 1,500 linear feet of bulkhead has been proposed to occur in three (3) 500 linear-foot phases. Phase 1 of this improvement (500 linear feet of bulkhead replacement) is proposed to be implemented under this project. This project could help to ease flooding on Montauk Highway, areas along Concourse East and Concourse West, and also potentially benefit the Southwest Sewer District pump station near Walker Park.



BRIGHTWATERS CANAL RESILIENCY IMPROVEMENTS - PHASE I



Location

- Brightwaters Canal adjacent to Concourse East & West (Village of Brightwaters)

Cost

- \$677,000

Needs

- Minimize local flooding on roadways
- Improved ability to circulate in waterfront area
- Improved resiliency of adjacent housing and waterfront economy

Assets Made More Resilient

- Residential Housing along Concourse East & West
- Montauk Highway
- Sanitary Pump Station
- Moorings in Brightwaters Canal

Risk Reduction & Benefits

- Decreased vulnerability to flooding
- Improved ingress and egress from homes during flood events
- Improved access to adjoining roadways and Montauk Highway
- Continued income to Village from mooring rentals



Proposed Project

COMMUNITY BASED ORGANIZATION (CBO) & VULNERABLE POPULATION EMERGENCY ACTION PLAN

PROJECT DESCRIPTION

The Proposed Project would develop an Emergency Action Plan to address emergency, evacuation, and long-term resiliency needs of vulnerable populations and for those Community Based Organizations (CBOs) that provide services during and after severe weather events and emergency situations (e.g., Bay Shore Fire Department, rescue services, school district, YMCA, etc.). The plan would address an important need in the Community for an overall plan to coordinate the pre-storm and post-storm response and recovery for a large and varied vulnerable population. There is no such plan at present nor was such a plan in place when Superstorm Sandy impacted the Community in 2012. Those most vulnerable to the disruptions caused by severe storms include the elderly, infirm and disabled, homeless, and families and individuals of low and moderate incomes, among others.

The CBO component of this project would touch on how the organizations can most effectively work together and how they can best help the Community in an emergency situation. Responsibilities of the various organizations would be identified to capitalize on their strengths, capacity, and resources. This would reduce opportunities for duplication of services and identify potential gaps that might exist. The plan would also identify needed resources such as equipment and supplies and would also formalize protocols, outline logistics, and understand operational resources.



COMMUNITY BASED ORGANIZATION (CBO) & VULNERABLE POPULATION EMERGENCY ACTION PLAN



Location

- Community Wide

Cost

- \$475,000

Needs

- Support for community organizations to effectively respond to disaster relief
- Improved assistance and outreach to special needs population before, during, and after emergency events

Assets Made More Resilient

- Community facilities and organizations
- All Residences (including those occupied by Vulnerable Populations) and Businesses of Greater Bay Shore

Risk Reduction & Benefits

- Improved emergency preparedness and response capabilities
- Reduction in duplication of services
- Improved and coordinated local emergency protocols
- Lowered risk of long-term mental and physical ailments as a result of acute weather events.



Proposed Project

ENHANCED GIS EMERGENCY MANAGEMENT SYSTEM

PROJECT DESCRIPTION

As part of a regional, shared cost partnership with the Town of Islip and its other Community Reconstruction areas (West Islip, Fire Island, and Oakdale/West Sayville, [this project would enhance a Town-Wide Geographic Information System \(GIS\) that would improve storm preparedness planning, real-time response, and recovery from severe storm events.](#) In addition, this type of system could also assist with damage assessment and other post-storm recovery activities.

This project would involve the design and implementation of an enhanced GIS system. This effort would build off of the Town of Islip’s existing GIS data capabilities and involve the development of a user interface and protocols focused specifically on preparedness, response, and post-disaster evaluation and record keeping. This project is consistent with a similar project identified in the West Islip Fire Island and Oakdale-West Sayville NYRCR Plans.

ENHANCED GIS EMERGENCY MANAGEMENT SYSTEM



Location

- Community Wide

Cost

- \$50,000 (as a partial contribution to a larger regional project)

Needs

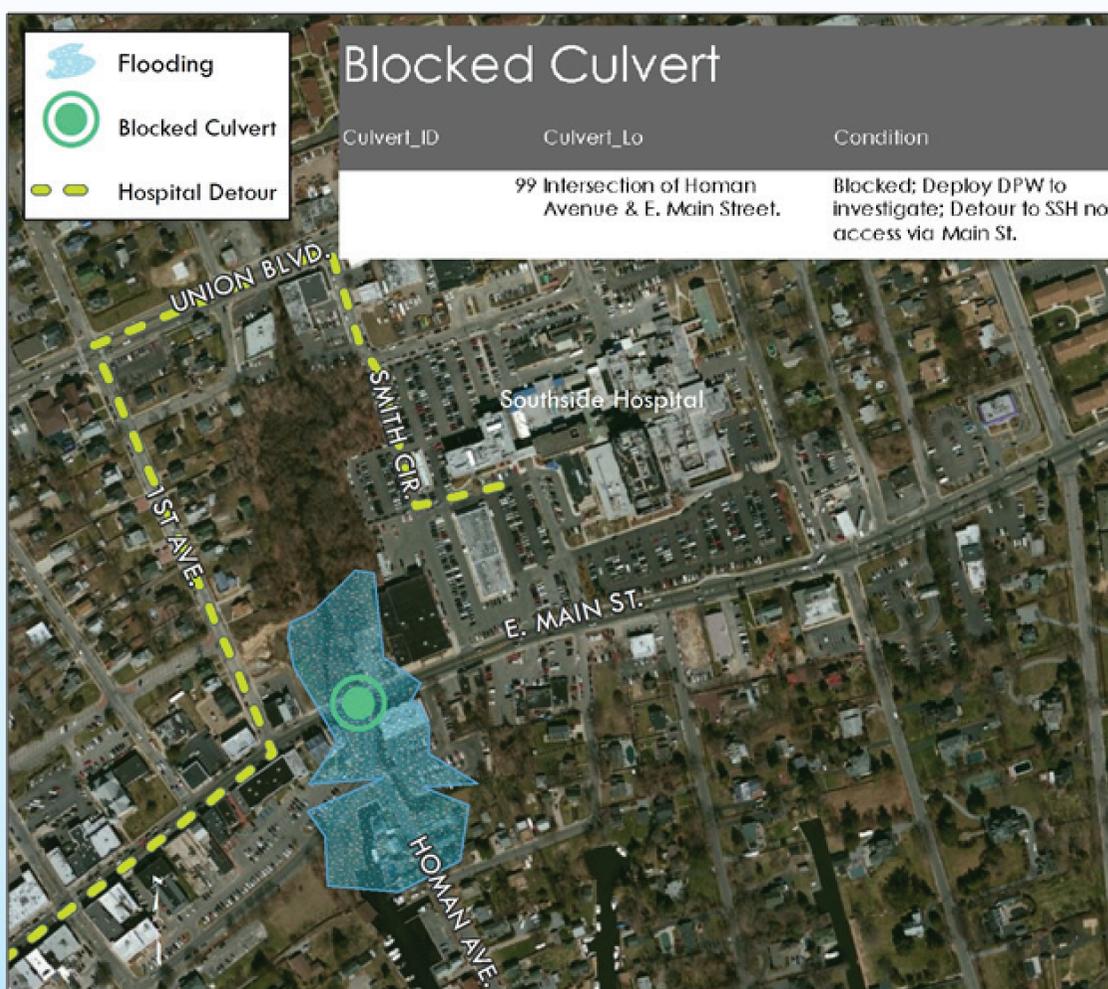
- Improved emergency information, procedures, and response

Assets Made More Resilient

- Public Facilities and Infrastructure within Greater Bay Shore
- Residential Housing in the Residual, Moderate, High and Extreme Risk Areas
- Downtown Bay Shore
- Marina Waterfront District
- Village of Brightwaters & Orinoco Drive Commercial District

Risk Reduction & Benefits

- Increased efficiency of resource mobilization and documentation
- Improved coordination and response pre- and post-storm.



GIS can be used for coordinated disaster response in real-time related to a block culvert and resultant flooding. As an ancillary benefit, GIS also provides the opportunity for asset management and keeping track of related maintenance expenditures.



Proposed Project

FIRE AND RESCUE COMMUNICATIONS

PROJECT DESCRIPTION

This project would upgrade communication equipment to eliminate technical deficiencies and incompatibility of equipment among first response agencies (such as Suffolk County OEM). This project may involve components such as the purchase and installation of a new permanent communications/dispatch system at the Bay Shore Fire Department Headquarters (HQ) as well as the installation of a communications tower at Sub-Station 1 (Union Blvd.) for line of sight to HQ, Sub-Station 2 (Tillie St. & Bedford Ave.) and LIJ Southside Hospital.



This Proposed Project would also include the purchase of up to five P25, Multiband Portable Radios with an optional base station. The P25 radio system is compliant with Telecommunications Industry Association (TIA) standards and is designed to meet the needs of public and life safety professionals. With this technology users on different systems can talk via direct radio contact as P25 radios are programmable to up to several hundred radio frequencies (some models accommodate upwards of 1,000 frequencies). As such, these radios would allow for effective, efficient and reliable interagency communications which would facilitate seamless joint communication between various agencies (i.e., Suffolk County OEM, BSFD, Suffolk County Police Department, etc.) in both routine and emergency circumstances.



FIRE AND RESCUE COMMUNICATIONS



Location

- Community Wide

Cost

- \$640,000

Needs

- Improved emergency information
- Reliable communication

Assets Made More Resilient

- All of Greater Bay Shore
- Bay Shore Fire Department
- Life Safety Service Providers
- Businesses and Residences in High Risk Areas
- Ferry Terminals

Risk Reduction & Benefits

- Improved reliability and emergency communication among first responders including the BSFD, Islip Office Of Public Safety, Suffolk County Office Of Emergency Management
- Improved response times and efficiency in responding to emergencies
- Improved coordination with ambulance providers and local hospitals
- Decreased vulnerability to prolonged recovery from emergencies/weather events
- ability to better serve assisted living facilities and public housing developments



Proposed Project

FIRE AND RESCUE EQUIPMENT

PROJECT DESCRIPTION

Currently, Bay Shore Fire Department (BSFD) personnel lack the appropriate gear to conduct search and rescue operations in a flood condition. The BSFD has no vehicles capable of undertaking rescues in high water during times of flooding or appropriately sized and motorized flat-bottomed rescue boats.

This project would improve the Bay Shore Fire Department’s (BSFD) inventory of Search and Rescue equipment through the purchase of a repurposed emergency high water rescue vehicle as well as flood rescue watercraft, floating pumps, and immersion survival (cold-water exposure) suits.



FIRE AND RESCUE EQUIPMENT



Location

- Community Wide

Cost

- \$168,000

Needs

- Adequately equip first responders

Assets Made More Resilient

- All of Greater Bay Shore
- Bay Shore Fire Department
- Residential Housing and Businesses in the Residual, Moderate, High and Extreme Risk Areas

Risk Reduction & Benefits

- Improved access, response times, and efficiency in responding to emergencies
- Decreased vulnerability to prolonged recovery from emergencies/weather events
- Improved emergency evacuation and response capacity
- Improved ability to rescue seniors and those with limited mobility
- Minimized exposure to hazardous materials common in flood water



Proposed Project

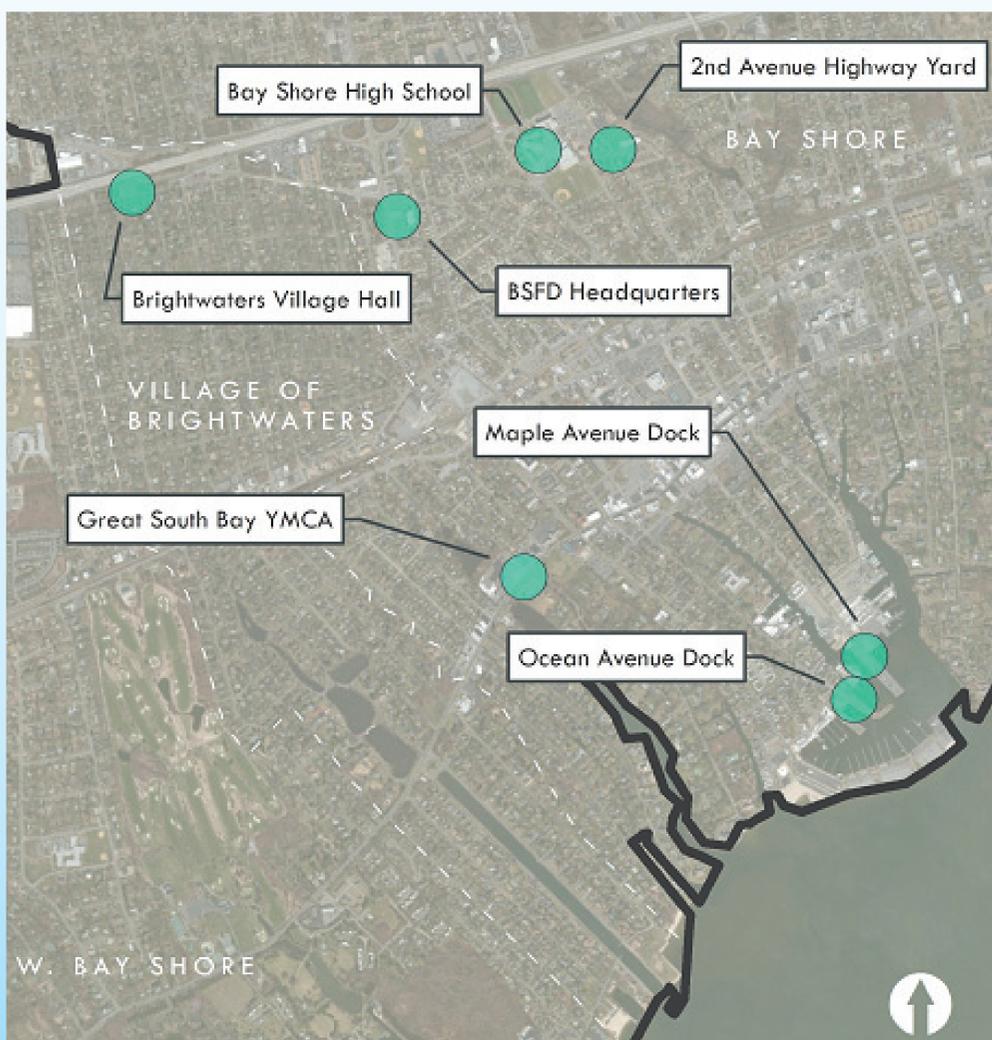
GREATER BAY SHORE RESILIENCY GENERATOR PROJECT

PROJECT DESCRIPTION

During and after periods of extreme weather the provision of a reliable and sufficient supply of electricity is critical to a community's ability to recover. During Superstorm Sandy as well as in its aftermath, Greater Bay Shore was severely impacted by the lack of electrical power. Aside from the loss of power to residents, businesses and other components of the community, locations that had the potential to serve as command and control centers as well as refuges for those in need were impacted by the loss of power.

This Proposed Project would include the permanent placement of fixed generators at several crucial community facilities including:

- o BSFD Headquarters
- o Brightwaters Village Hall
- o YMCA
- o Bay Shore High School
- o Maple and Ocean Avenue Docks
- o 2nd Avenue Highway Yard



GREATER BAY SHORE RESILIENCY GENERATORS PROJECT



Location

- o Community wide

Cost

- o \$1,425,000

Needs

- o Outreach and assistance to community (including vulnerable populations) before, during and after the storm event
- o Support for civic organizations to effectively respond to disaster relief
- o Adequately equip first responders

Assets Made More Resilient

- o Entire Community
- o Community Facilities
- o First Responder Facilities
- o Schools
- o Marinas and Ferry Terminals
- o 2nd Avenue Highway Yard

Risk Reduction & Benefits

- o Reduced flooding
- o Creation of Refuge Areas
- o Food Service to vulnerable populations
- o Improved First-Responder access to Marina areas
- o Uninterrupted fuel supply for first responders, and others
- o Maintenance of access to ferry terminals during flood events
- o Improved evacuation



Proposed Project

PENATAQUIT VILLAGE TOWN HOUSING DEVELOPMENT, PENATAQUIT CREEK

PROJECT DESCRIPTION

This Proposed Project would involve the implementation of drainage improvements on a Town of Islip-owned parcel with existing multi-family residential housing. The project would include the replacement of existing area drains and leaching pools, replacement of the existing lawn adjacent to Penataquit Creek with a vegetated swale. The project would also involve the installation of a storm water quality treatment structure with high flow bypass at the existing catch basin in the northwest portion of the property. This project is identified in the Great Cover Watershed Management Plan.

This project would help to filter pollutants of concern, reduce localized flooding, maintain access to neighborhood roadways as well as Union Boulevard. In addition, the project would improve the resiliency of the Penataquit Village Housing Development itself. As a result, the project would benefit Vulnerable Populations including the elderly, disabled, and low-moderate income (LMI) individuals.



PENATAQUIT VILLAGE TOWN HOUSING DEVELOPMENT, PENATAQUIT CREEK



Location

- East of Lakeview Avenue, Bay Shore.

Cost

- \$235,000

Needs

- Minimize local flooding on roadways
- Improved ability to circulate in area
- Improved resiliency of adjacent housing

Assets Made More Resilient

- Penataquit Village Town Housing Development
- Vulnerable Populations including elderly and LMI
- Union Boulevard
- Penataquit Creek

Risk Reduction & Benefits

- Decreased vulnerability to flooding
- Improved ingress and egress from homes during flood events
- Improved access to adjoining roadways like Union Boulevard



Proposed Project

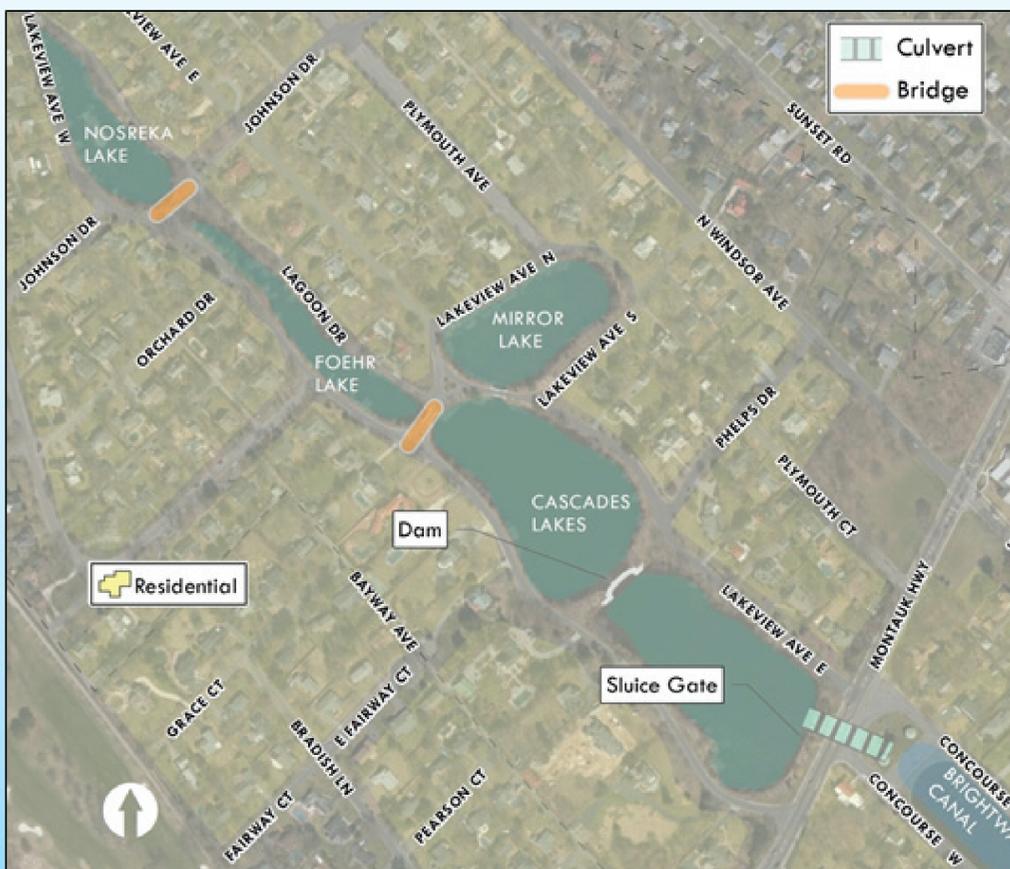
STREAM CORRIDOR & LAKES DRAINAGE CAPACITY IMPROVEMENT INITIATIVE

PROJECT DESCRIPTION

This project involves the undertaking of a comprehensive drainage analysis, concept design, and long-term management recommendations for six (6) north-south natural stream corridors that traverse Greater Bay Shore and the series of artificial lakes that stretch from Montauk Highway to Lawrence Drive in the Village of Brightwaters. These waterbodies include:

- o Trues Creek
- o Lawrence Creek
- o Watchogue Creek
- o Penataquit Creek
- o Awixa Creek
- o Orowoc Creek
- o Cascades Lake
- o Mirror Lake
- o Foehr Lake
- o Nosreka Lake

This Featured Project would complement the Town of Islip’s Great Cove Watershed Management Plan (WMP) in partnership with the New York State Department of State. Whereas the Great Cove WMP primarily focused on best management practices and conceptual projects to improve water quality, this initiative is intended to address stormwater capacity and management.



STREAM CORRIDOR & LAKES DRAINAGE CAPACITY IMPROVEMENT INITIATIVE



Location

- o Trues Creek
- o Lawrence Creek
- o Watchogue Creek
- o Penataquit Creek
- o Awixa Creek
- o Orowoc Creek
- o Brightwaters Artificial Lakes

Cost

- o \$1,917,000

Needs

- o Protect and improve natural systems to improve flood protection, stormwater retention, and water quality

Assets Made More Resilient

- o Residences
- o Businesses
- o Community Facilities
- o LIJ Southside Hospital
- o Montauk Highway

Risk Reduction & Benefits

- o Reduced storm-related expenditures for local businesses, residences, and institutions
- o Reduced personal property damage
- o Improved emergency access