Home Heating Upgrades

Conduct a study to identify options for homeowners to reduce damage from compromised fuel oil tanks

Cost Estimate: $200,000

Project Information

During Superstorm Sandy, home heating oil tanks were torn from their bases and became floating hazards. In addition, the spilling of heating oil led to environmental damage and permanent damage to homes and businesses.

This project will develop policy recommendations and an incentive program to convert home heating oil to natural gas in extreme and high risk areas. It would also include temporary regulations for proper anchoring of tanks in risk areas until natural gas service is installed. A deadline for all structures in extreme, high and moderate risk areas to convert to Natural Gas or an alternative heat and hot water supply would be established to ensure that homeowners are in compliance.

Key Facts

- Project Type: Utilities
- Recovery Function: Infrastructure
- Project Location/Municipality: Residential properties south of Merrick Road
- Primary Target Area Affected: Residential Properties south of Merrick Road
- Consistency with NYRCR: Increase resiliency of key assets
- Potential Beneficiaries: Baldwin residents

Lifeline Network: Priority Local Road Streetlight Retrofit

Install LED streetlights with solar PV and battery backup on existing utility poles

Cost Estimate: $2,500,000

Project Information

Lack of light on streets following Superstorm Sandy was reported to be a safety hazard by community members and negatively impacted first responders. This project includes installation of LED street lights with photovoltaics and battery backup on existing utility poles. Installation would be limited to State and County roads, plus local routes likely to be included in a future “Lifeline Network” or evacuation network. If future undergrounding of utility lines occurs and new separate street lights are installed, the LED/PV street lights could be used in other parts of the community.

Key Facts

- Project Type: Roads & Bridges
- Recovery Function: Infrastructure
- Project Location/Municipality: Priority local roads in Baldwin and Baldwin Harbor
- Primary Target Area Affected: Baldwin and Baldwin Harbor
- Consistency with NYRCR: Increase resiliency of key assets
- Potential Beneficiaries: Baldwin and Baldwin Harbor residents and businesses
Green Infrastructure: Steele Elementary School Pilot Installation

Construct an infiltration basin and bioswales at the school to manage stormwater and highlight the benefits of green infrastructure

Cost Estimate: $240,000

Project Information

Steele Elementary serves as an ideal demonstration location due to its location in Baldwin Harbor, situated between Atlantic Avenue, Grand Blvd, Church St, and Verity Ln. Because this is an education center, it offers capacity building potential for students.

This project proposes the study, design and construction of a 0.4 acre-ft infiltration basin at the school, in combination with bioswales located where feasible on the site.

Key Facts

- Project Type: Water Control Facilities
- Recovery Function: Infrastructure
- Project Location/Municipality: Steele Elementary School, 860 Church Street
- Primary Target Area Affected: Baldwin and Baldwin Harbor
- Consistency with NYRCR: Increase resiliency of key assets
- Potential Beneficiaries: Baldwin and Baldwin Harbor residents

Green Infrastructure: Mumby Pond Pilot Installation

Determine the upgrades needed to transform Mumby Pond into a detention basin to manage stormwater runoff

Cost Estimate: $1,500,000

Project Information

Mumby Pond is an ideal demonstration due to its location and history. It is located between Seaman Ave East, Teehan Ln, Laurel Ct, and Grand Ave and has potential to serve as a beautiful green space for the local neighborhood. Historically, the pond was used as a reservoir for Brooklyn Waterworks. It’s adjacent neighbor, Baldwin Historical Museum, will be used as an education center which can offer students and visitors. Additionally, work with Nassau County in implementing/integrating a community garden within the site.

This project entails constructing/repurposing a historical reservoir (approximately 400’x150’ area) into a bioretention/infiltration detention basin. The project includes a study, soil property testing (including nutrients, chemical, infiltration), design engineering and construction.

Key Facts

- Project Type: Water Control Facilities
- Recovery Function: Infrastructure
- Project Location/Municipality: Mumby Pond
- Primary Target Area Affected: Baldwin and Baldwin Harbor
- Consistency with NYRCR: Increase resiliency of key assets
- Potential Beneficiaries: Baldwin and Baldwin Harbor residents
Tidal Check Valve Installation and/or Replacement

There are about 240 outfalls along the coast of Baldwin that discharge stormwater that has been collected from streets and roofs. Unprotected, open or damaged outfalls allow a path for floodwaters to back up into the drainage system and flood roadways upstream of the outfall.

This project includes the inspection of outfalls along the Baldwin coastline to determine the condition and appropriateness of installation of tidal check valves.

After inspection, this project will include the installation of 25 tidal check valves, of either the inline pipe type or slip-on duckbill type, on outfalls where they would be most effective in addressing flooding.

Key Facts
- Project Type: Water Control Facilities
- Recovery Function: Infrastructure
- Project Location/Municipality: Baldwin and Baldwin Harbor shoreline
- Primary Target Area Affected: Baldwin and Baldwin Harbor
- Consistency with NYCR: Address short, medium, and long-term risks
- Potential Beneficiaries: Baldwin and Baldwin Harbor residents and businesses

Cost Estimate: $750,000

Improve Resilience of Community Marinas

During Superstorm Sandy, some boats broke free from their moorings and caused damage to neighboring properties. This project would include the development of new guidelines on the siting and design of new marinas, as well as the reconstruction of existing marinas. This would include the development of emergency preparedness and evacuation procedures for marinas, including uniform procedures for securing vessels.

Guidelines should also be established for managing stormwater, adapting to sea level rise and climate change and monitoring and responding to erosion.

An additional outreach and education module for marina operators and boat owners would help with implementation.

Key Facts
- Project Type: Protective Measures
- Recovery Function: Infrastructure
- Project Location/Municipality: Properties south of Atlantic Avenue
- Primary Target Area Affected: Baldwin and Baldwin Harbor waterfront properties
- Consistency with NYCR: Address short, medium, and long-term risks
- Potential Beneficiaries: Marina and boat owners, property owners adjacent to marinas

Cost Estimate: $75,000