

# Town of North Hempstead Annex

This document presents the Town of North Hempstead’s annex to the *Nassau County Multi-Jurisdictional Hazard Mitigation Plan*.

## Hazard Mitigation Plan Points of Contact

The individuals below have been identified as this jurisdiction’s points of contact for the hazard mitigation plan. These individuals are members of the Planning Committee that met regularly for the update of this plan and will continue to meet in the years ahead to implement it.

Primary Point of Contact	Alternate Point of Contact
Shawn Brown, Commissioner Department of Public Safety 51 Orchard Street Roslyn Heights, NY 11577 516-869-6311	None Provided

## Profile

The Town of North Hempstead covers approximately 53.51 square miles<sup>1</sup> and has a total population of 230,933 according to the American Community Survey 5-year 2018 Estimates. Some of the demographics of the Town of North Hempstead are summarized in Table 1. This information supported the development of mitigation actions that account for the needs of the most vulnerable individuals in the community.

*Table 1: Town of North Hempstead Demographic Information*

Demographic		Demographic	
Below 5 Years Old	5.6%	Black or African American alone	6.1%
Above 65 Years Old	19.4%	American Indian and Alaska Native alone	0.2%
Individuals with Disabilities	3.7%	Asian alone	18.4%
Persons in Poverty	5.2%	Native Hawaiian and other Pacific Islander alone	0.1%
Renters	21.7%	Two or More Races	2.3%
Without a High School Diploma	8.3%	White alone, not Hispanic or Latino, percent	59.5%
Without Access to Broadband Internet	10.5%	Hispanic or Latino	14.3%

<sup>1</sup> This is inclusive of land area only.

North Hempstead has seen the re-utilization and development of local industrial, retail, and office space buildings. Retail centers are emerging along populated commercial roads. While the Town has made efforts to maintain open space, such as harbors and green space, North Hempstead is largely a suburban area. The jurisdiction itself lay near water; therefore, the 100-year floodplain is considered in its development. By understanding these development trends and how they intersect with hazard-prone areas, this allows for current and future vulnerabilities to be planned for and avoided.

Refer to the **County Profile** section of this plan for additional information related to current and future conditions of the County’s vulnerable population and the natural environment. This information provides important context for understanding hazard mitigation planning.

## Hazard Vulnerability

This section summarizes how the natural hazards profiled in Section 4 of this plan impact the Town of North Hempstead. The jurisdiction identified Coastal Hazards, Hurricane, and Severe Winter Weather as natural hazards that impact the community. Table 2 shows the sectors of the community that are most likely to be impacted by each hazard. The categories that were considered included the community, economy, health and social services, housing, infrastructure, natural and cultural resources, or no impact. No impact indicates that the jurisdiction did not identify a noticeable impact from the hazard over the past five years, even if the hazard occurs. This information was used to develop a relevant and effective mitigation strategy for the jurisdiction. Detailed hazard event histories, critical facility exposure, and additional vulnerability information can be found in each hazard profile in Section 4 of this plan.

The hazards that most impact the Town of North Hempstead include:  
**Coastal Hazards, Hurricane, and Severe Winter Weather.**

Table 2: Town of North Hempstead Hazard Impacts

Hazard	Impact Categories
Coastal Hazards	Community, Economy, Health and Social Services, Housing, Infrastructure, Natural and Cultural Resources
Drought	No Impact
Extreme Temperatures	Community, Economy, Health and Social Services, Housing, Infrastructure, Natural and Cultural Resources
Flooding	Community, Economy, Health and Social Services, Housing, Infrastructure, Natural and Cultural Resources
Ground Failure	Community, Economy, Health and Social Services, Housing, Infrastructure, Natural and Cultural Resources
Hurricane and Tropical Storms	Community, Economy, Health and Social Services, Housing, Infrastructure, Natural and Cultural Resources
Hail	No Impact
Lightning	Community, Economy, Housing, Infrastructure, Natural and Cultural Resources

Hazard	Impact Categories
Severe Winter Weather	Community, Economy, Health and Social Services, Housing, Infrastructure, Natural and Cultural Resources
Tornados	No Impact
Wind	Community, Economy, Health and Social Services, Housing, Infrastructure, Natural Cultural Resources

## Capability Assessment

This section summarizes the capabilities that the Town of North Hempstead has in place that can support hazard mitigation. These capabilities include plans, ordinances, staff, financial resources, and program participation. This Capability Assessment was used to help drive the identification and development of the projects presented in the Mitigation Strategy to make sure that they are appropriate in scope and achievable to implement.

## Legal and Regulatory Capability Assessment

Table 3 lists the assessment of existing legal and regulatory tools for the Town of North Hempstead. The Town of North Hempstead maintains several key administrative and technical capabilities to support mitigation, including building codes, capital improvement plans, community development plans, comprehensive/master plan, economic development plans, emergency response plans, floodplain management plans, open space plans, post disaster recovery plans, resilience plans, site plan review requirements, stormwater management plans, subdivision ordinances, and zoning ordinances. These capabilities are critical to consider as tools in developing and implementing mitigation strategies. To further enhance their mitigation capabilities, the Town can consider the capabilities in the table below that the Town currently does not have. These additional capabilities would either support creating a legal framework or strategy for implementing a diversity of mitigation actions.

Table 3: Town of North Hempstead Existing Legal and Regulatory Capabilities

Regulatory Tool	Yes / No	Citation (if applicable)
Access and Functional Needs Plan	No	
Building Code	Yes	NY State Building & Town Code
Capital Improvement Plan	Yes	2020 Capital Plan
Climate Action Plan	No	
Community Development Plan	Yes	Community Development Block Grant / Town of North Hempstead Community Development Agency
Comprehensive Plan / Master Plan	Yes	2019 North Hempstead Cultural Master Plan
Economic Development Plan(s)	Yes	The Supervisor's Chamber of Commerce Roundtable was instituted in 2018 to see how the Town can work together with the Chambers to address the challenges our downtowns are facing.

Regulatory Tool	Yes / No	Citation (if applicable)
Emergency Response Plan(s)	Yes	2019 Comprehensive Emergency Management Plan
Floodplain Management Plan(s)	Yes	Town Code. All construction within flood plans must file a separate flood plain permit.
Growth Management Plan(s)	No	
NFIP Flood Damage Prevention Ordinance(s)	No	
Open Space Plan(s)	Yes	Regulated by Town Code
Post Disaster Recovery Ordinance(s)	No	
Post Disaster Recovery Plan(s)	Yes	Regulated by Town Code
Real Estate Disclosure Requirements	No	
Resilience Plan(s)	Yes	Regulated by Town Code
Site Plan Review Requirement(s)	Yes	Regulated by Town Code
Small Area Development Plan(s)	No	
Special Purpose Ordinance(s)	No	
Stormwater Management Plan(s)	Yes	Regulated by Town Code
Subdivision Ordinance(s)	Yes	Regulated by Town Code
Transportation Plan(s)	No	
Zoning Ordinance(s)	Yes	Regulated by Town Code

## Administrative and Technical Capability Assessment

Table 4 lists the assessment of existing administrative and technical tools for the Town of North Hempstead. The Town of North Hempstead has a high-level of primary administrative and technical capabilities to support mitigation. This includes engineering, grant writing, administration, construction, analysis, and planning. Increasing training capacity and expertise of these individuals will support mitigation practice in the Town.

Table 4: Town of North Hempstead Existing Staff / Personnel Resource

Staff / Personnel Resource	Yes / No	Details
Emergency Manager(s)	No	
Engineer(s) trained in construction practices related to buildings/infrastructure	Yes	Jill Guiney, Donna Plante, Miles Mott
Engineer(s) with an understanding of natural and/or human caused hazards	Yes	Jill Guiney
Engineer(s) with knowledge of land development and land management practices	Yes	Jill Guiney

Staff / Personnel Resource	Yes / No	Details
Grant Writers	Yes	Thomas Devaney
Personnel skilled or trained in Geographic Information Systems	Yes	Michael Levine, Michael Tumbarello
Personnel trained in construction practices related to buildings/infrastructure	Yes	Building Department
Planner(s) with an understanding of natural hazards	Yes	Michael Levine, Kevin Braun
Planner(s) with knowledge of land development and land management practices	Yes	Michael Levine
Scientist(s) familiar with natural hazards	No	
Surveyors	No	

## Fiscal Capability Assessment

Table 5 lists the assessment of existing fiscal tools for the Town of North Hempstead. Funding is often the biggest barrier when implementing mitigation programs. The Town is primarily able to fund mitigation programs by incurring debt through general obligation bonds, levying taxes for specific purposes, capital improvements project funding, CDBG programs, impact fees for home buyers and/or developers, and state mitigation grant programs. The Town of North Hempstead should consider exploring additional fiscal capabilities in order to gain access to additional funding for mitigation.

Table 5: Town of North Hempstead Existing Fiscal Capabilities

Resources	Yes / No	Additional Details
Ability to incur debt through general obligation bonds	Yes	Roads, parks and equipment.
Ability to incur debt through private activity bonds	No	
Ability to incur debt through special tax bonds	No	
Authority to levy taxes for specific purposes	Yes	Special Districts or Authorities.
Authority to utilize user fees for utility services	No	
Authority to withhold public expenditures in hazard prone areas	No	
Capital improvements project funding	Yes	2020 Capital Plan

Resources	Yes / No	Additional Details
Community Development Block Grants (CDBG)	Yes	The Town of North Hempstead Community Development Agency
Impact fees for home buyers and/or developers	Yes	The Town of North Hempstead Community Development Agency The Town of North Hempstead Community Development Agency
State mitigation grant programs	Yes	New storm drains on Crescent Drive in Albertson.

## Community Classification Assessment

Table 6 lists the assessment of existing community classifications for the Town of North Hempstead. Participation in the BCEGS and Climate Smart Community program demonstrates increased capabilities of the Town related to mitigation. Exploring gaining additional community classifications will guide the Town's mitigation programs and support capacity building.

*Table 6: Town of North Hempstead Community Classifications*

Classification	Yes/No (or Status)
Building Code Effectiveness Grading Schedule (BCEGS)	Yes
Public Protection Classification Program	No
Community Rating System (CRS)	No
Other Classifications	Climate Smart Community

## National Flood Insurance Program Summary

This section provides a summary of the floodplain management capabilities for Town of North Hempstead and how the jurisdiction is meeting the requirements of the National Flood Insurance Program (NFIP). There are only 35 properties in the Town's jurisdiction that are located in the flood zone. The majority of these properties are along Main Street and Shore Road in Port Washington.

The Town's Building Commissioner is responsible for floodplain management. The Town administers the NFIP by requiring that all construction within floodplains file a separate floodplain permit. The Town did not note any current barriers to running a successful NFIP program. The flood maps for this jurisdiction accurately portray the current flood risk. There are currently no RiskMAP projects ongoing in this jurisdiction.

After flood events, substantial damage determinations are made through in-person site inspections.

No properties in the jurisdiction have been substantially damaged as a result of recent flood events. The Town of North Hempstead is in good standing with the NFIP. Based on documentation received from NYSDEC, the town had its last Community Assistance Contact on 12/05/2012 and its last Community Assistance Visit on 09/25/2015. There are no NFIP compliance violations that need to be addressed in this jurisdiction.

The Town is installing a new bulkhead at 10 Shore Road, in Greenvale, to help mitigate future erosion. The Flood Damage Prevention Ordinance for the Town of North Hempstead meets minimum requirements. The ordinance was last amended 06/23/2009 and can be referenced in L.L. No. 13-2009.

## Mitigation Strategy

The following section provides an overview of the mitigation strategy for Town of North Hempstead. It provides an overview of the jurisdiction’s previous mitigation actions, proposed actions, and the NYS mitigation worksheets.

### Previous Mitigation Actions

<b>Action</b>	North Hempstead Beach Park — Install bulkhead, remove asphalt & concrete from the waterway and boat ramp	Manhasset Valley Park— Dredge the retention pond to create more room for drainage	Town Hall Generator—Upgrade a permanent generator	Install New Generator at Tully Park—Install a permanent generator
<b>Risk Category</b>	Flooding & Dangers to health and safety	Flooding	Loss of Electrical Power	Loss of Electrical Power
<b>Project Status</b>	In progress	Not Started	Not Started	Not Started
<b>Project Status Description</b>	The Town hired a consultant to complete a visioning project at NHBP, which included all amenities to see how to best utilize this facility. The final vision also included restoring the bulkhead to halt the flooding. The final vision called for shrinking of the asphalt area and restoring wetlands that will accept the tidal surges and stop the flooding.	Funding was not awarded. A second grant was applied for under the Long Island Sound Futures Fund to remove various dams and clean up the waterways.	Town Hall has a partial generator, with minimal redundancy. The HMGP was to fully generate the building.	Tully Park Center was utilized during Sandy as a temporary shelter for electrical workers. There is a partial generator, this request was to fully generate the facility.
<b>Carried Forward to 2020 Plan</b>	Y	Y	Y	Y
<b>Required Changes</b>	Project has changed slightly, but a better mitigation project for the park.	Project may change based upon funding made available.	Funding was not available to upgrade generator. Until funding is made available, this project cannot be completed.	Funding was not available to upgrade generator. Until funding is made available, this project cannot be completed.

<b>Action</b>	Town Sumps—Upgrade the existing recharge basins & protect from future flooding & wear and tear on the roads	Mill Pond—Remove & replace the swell separators which maintain the sand filters	Harbor Hills Park—Repair and mitigate the sea wall	Document Digitizing—Hire an electronic document scanning service that would digitize each document
<b>Risk Category</b>	Flooding & Drainage	Flooding	Flooding	Flooding, Critical Infrastructure, Fire
<b>Project Status</b>	In progress	Not Started	In progress	Not Started
<b>Project Status Description</b>	The Town completed an assessment of each of the outfall pipes. The Town has been making repairs as necessary.	This project was to help stop the flooding of the area around the tidal pond. The major limitation to this project is lack of funding.	This project was fortunate to receive funding under FEMA's 406 program. The seawall is in the process of undergoing permit approvals with the NYS DEC	The Town wanted to go paperless in order to be able to maintain continuity of government. Although many departments have moved in this direction, historical records has not been completed.
<b>Carried Forward to 2020 Plan</b>	Y	Y	Y	Y
<b>Required Changes</b>	FEMA did award the Town funding under the 406 program for evaluation and repair of some pipes, as a restoration to pre-Sandy conditions.	FEMA did award the Town funding under the 406 program for dredging of some materials, as a restoration to pre-Sandy conditions.	FEMA did award the Town funding under 406 to replace the seawall, which was damaged beyond the 50% threshold during Sandy.	The Town applied for multiple sources of funding, including the LGRMIF. However we remain unsuccessful.

<b>Action</b>	Manorhaven park project—remove and replace 582 linear feet corrugated steel bulkhead-phase two proposed mitigation is to remove and replace a boat ramp	Roslyn pond project—Dredge out silt	Improve drainage New Hyde Park—Hinge the neighborhood drainage	Tully park pipe—Remove and replace drainage pipe-add cleanouts
<b>Risk Category</b>	Flooding, Erosion, Wave Action	Flooding	0	Flooding
<b>Project Status</b>	Completed	In progress	Not Started	Not Started

<b>Project Status Description</b>	The Town was fortunate to receive funding from FEMA's 406 program and applied for an improved project in order to complete this project.	The Town hired a contractor to start this project in April 2020. This project is underway.	This project was halted due to the lack of funding available.	This project was halted due to the lack of funding available.
<b>Carried Forward to 2020 Plan</b>	N	Y	Y	Y
<b>Required Changes</b>	The project was completed.	Project is being funded through FEMA 406 funding, in conjunction with other capital improvements to the park, which is a natural filtration system of 3 ponds for runoff into the harbor.	No funding.	No funding.

<b>Action</b>	Crescent drive pump station— Install several essential parts for the pumps	Bayview Ave Manhasset project—Backfill over 1000 ft of shoreline	Fallout pipes—Dredge out each retention pond	Port Washington Flooding project—Rehabilitate the drainage to alleviate future flooding
<b>Risk Category</b>	Flooding	Flooding	Flooding	Flooding
<b>Project Status</b>	Completed	In progress	In progress	Not Started
<b>Project Status Description</b>	This project was awarded funding in 2014 from FEMA 404 program.	This project was awarded funding from FEMA 406 program. This project is undergoing permits from the DEC.	FEMA awarded the Town funding through 406 to dredge most of the ponds due to Sandy. Some ponds are being dredged now, others will follow	Project was halted due to lack of funding
<b>Carried Forward to 2020 Plan</b>	N	Y	Y	Y
<b>Required Changes</b>	Project was awarded HMGP 404 funding, and project was completed as designed.	Project is underway thanks to FEMA 406 funding.	Project is underway thanks to FEMA 406 funding.	0

<b>Action</b>	A dike will be installed around the Pump Station J, doors will be flood proofed and emergency generator will be raised; the sump pump system will be modified to accommodate 2 new submersible pumps.	A dike will be installed around the Pump Station F, doors will be flood proofed and transformer will be raised.	This project is for the construction of new 24-inch outfall sewer buried to the desired depth and new effluent pumping station to pump the treated wastewater during high tides and storm surges. The new outfall sewer will be installed using directional drilling method.	A permanent generator will be installed at Well 6. It will have sufficient capacity to allow the Water Authority to run this Well in the event of a power outage and supply needed water capacity and pressure for the needs of the community.
<b>Risk Category</b>	Frequent flooding	Frequent flooding	Frequent power outages	Frequent power outages
<b>Project Status</b>	0	0	In progress	Completed
<b>Project Status Description</b>	UNABLE TO REACH ANYONE DUE TO PANDEMIC.	UNABLE TO REACH ANYONE DUE TO PANDEMIC.	EFC awarded a \$5-million WQIP grant and gave notice to proceed, however due to the Pandemic, they put the grant project on hold.	Authority went ahead with the generator after not hearing back from the HMGP grant.
<b>Carried Forward to 2020 Plan</b>	0	0	Y	N
<b>Required Changes</b>	0	0	The district was awarded funding from WQIP and WIIA grants.	The district was able to budget and push off other projects in order to complete this project themselves due to lack of cooperation from Federal and State partners.

<b>Action</b>	A permanent generator will be installed at Well 10A. It will have sufficient capacity to allow the Water Authority to run this Well in the event of a power outage and supply needed water capacity and pressure for the needs of the community.	Replace existing bulkhead with a new bulkhead in same footprint.	Relocate mixing system within the adjacent Digester Building. New mixing systems comprising of mixing pumps, ductile iron piping, and mixing nozzles would be located in the lower levels of the digester building where they would be protected by the building superstructure from the elements. The concrete coping hardening would include sounding of exposed concrete, cutting, chipping and removal of all	Replace the existing force main with a 16-inch ductile iron force main which would be better equipped to handle the additional pipe stress that occurs during major storm events.
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			deteriorated unsound concrete and replacing with a polymer modified form and repair mortar. Prior to repair mortar placement the existing steel reinforcement would be coated with a rust inhibitive epoxy-cementitious coating. The entire coping would then be provided with and epoxy type protective coating system.	
<b>Risk Category</b>	Frequent power outages	Frequent flooding	Frequent flooding	0
<b>Project Status</b>	0	0	0	0
<b>Project Status Description</b>	LEFT A VOICEMAIL NEVER HEARD BACK	LEFT A VOICEMAIL NEVER HEARD BACK	LEFT A VOICEMAIL NEVER HEARD BACK	LEFT A VOICEMAIL NEVER HEARD BACK
<b>Carried Forward to 2020 Plan</b>	0	0	0	0
<b>Required Changes</b>	0	0	0	0

<b>Action</b>	Install a new, permanent, emergency generator, that operates on natural gas, at the pump station locations Bayview Avenue Pump Station, the Manhasset Valley Pump Station, and the Blue Bird Court Pump Station.	The installation of a passive flood barrier around this pump station would minimize the risk of flooding the station. Passive flood barriers are deployed by the rising floodwater with the dependency of District personnel or oer. The system would be designed to prevent impact to the pumping station based on the 500-year storm flood elevation.	A permanent generator will be installed at the Port Washington's Fire Stations. It will have sufficient capacity to allow the Fire Station to quickly response to the community's needs.	A permanent natural gas generator will be installed at 30 Brinkerhoff Lane, Manhasset, NY 11030. It will have sufficient capacity to allow the facility to maintain all necessary patient needs.
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<b>Risk Category</b>	Frequent power outages	Storm surge, flooding	Frequent power outages	Loss of Electrical Power
<b>Project Status</b>	0	0	Not Started	0
<b>Project Status Description</b>	LEFT A VOICEMAIL NEVER HEARD BACK	LEFT A VOICEMAIL NEVER HEARD BACK	Port Washington Fire Department has 5 stations throughout the district. In order to apply for the grant, they needed an electrical engineer and architect design each location, at a cost of \$10k, and the FEMA HMGP program was never awarded.	In HMGP Grant Process
<b>Carried Forward to 2020 Plan</b>	0	0	Y	0
<b>Required Changes</b>	0	0	There is no possible way without grant funding that the PWFD can afford to undertake this endeavor due to a state-imposed tax cap.	0

## Proposed Mitigation Actions

Project Table #1 – 9:

Project Number	TNH_1	TNH_2	TNH_3	TNH_4	TNH_5	TNH_6	TNH_7	TNH_8	TNH_9
<b>Project Name</b>	Bayview Ave	Bayview Ave - Manhasset Project	Document Digitizing	Harbor Hills Park	Manhasset Valley Park	Mill Pond	New Hyde Park	Wetland and Open Space Restoration Project	North Hempstead Beach Park
<b>Goal being met</b>	3	3, 4	2	1, 3	1, 3	1, 3	1, 3	2, 3	1, 2, 3
<b>Hazards to be mitigated</b>	Tidal Flooding	Flooding	Flooding, Critical Infrastructure, Etc.	Flooding	Flooding	Flooding	Flooding	Flooding	Flooding & Dangers to health and safety
<b>Priority Ranking</b>	High	High	High	High	High	High	High	High	High

Project Number	TNH_1	TNH_2	TNH_3	TNH_4	TNH_5	TNH_6	TNH_7	TNH_8	TNH_9
Description of the Problem	Tidal Flooding occurs along Bayview Ave	The current shoreline infrastructure does not completely prevent shoreline erosion	The Town wanted to go paperless in order to be able to maintain continuity of government. Although many departments have moved in this direction, historical records have not been completed.	The seawall was damaged beyond 50% the threshold during Hurricane Sandy	The current infrastructure of the retention pond does not allow for adequate drainage	The area around the tidal pond floods during times of heavy rain	The current drainage infrastructure in New Hyde Park is insufficient for typical drainage needs	Currently the parking lots flood at the beach park. This happens even with tidal surges. Numerous vehicles have been damaged as a result of flooding at the beach park.	Flooding occurs at North Hempstead Beach Park during times of heavy rainfall
Description of the Solution	implement a riprap and bulkhead to prevent flooding on Bayview Ave.	Backfill over 1000 Feet of shoreline	Hire an electronic document scanning service that would digitize each document	Repair and mitigate the seawall	Dredge the retention pond to create more room for drainage	Remove and Replace the swell separators	Hinge the neighborhood drainage	Redesigning and reconfiguring the parking lot to reduce flood risk. This project would include restoring wetlands and open space in the areas most susceptible to flooding and installing riprap to allow for the tidal surges to take place without flooding the new parking lot	Shrinking the asphalt area through removal of asphalt & concrete from the waterway and boat ramp; restoring the bulkhead, and restoring the wetlands that will accept the tidal surges and stop the flooding
Critical Facility	No	No	No	No	No	No	No	No	No
EHP Issues	No	No	No	No	No	No	No	No	Unknown
Estimated Timeline	5 Years	Target Date: 2014 - 2015  Status: In Progress and undergoing permits from the DEC	Target Date: 2015 - 2016  Status: Not Started	Target Date: 2014 - 2015  Status: The Seawall is in the process of undergoing permit approvals with the New York State	Target Date: 2014-2015  Status: Not Started	Target Date: 2014 - 2015  Status: Not Started	Target Date: 2014 - 2015  Status: Not Started	1 Year	Target Date: 2014 - 2015  Status: In Progress

Project Number	TNH_1	TNH_2	TNH_3	TNH_4	TNH_5	TNH_6	TNH_7	TNH_8	TNH_9
				Department of Environmental Conservation (NYS DEC)					
Lead Agency	Town of North Hempstead	OEM	OEM	OEM	OEM	OEM	OEM	Town of North Hempstead	OEM
Estimated Costs	\$1,000,000	\$3,000,000	\$2,000,000	\$2,500,000	\$9,000,000	\$2,000,000	\$5,000,000	\$2,000,000	\$7,500,000
Estimated Benefits	This road is an evacuation route on the Peninsula	This will prevent shoreline erosion and flooding	Historical records would be preserved electronically and enhance continuity of operations	Repairing the seawall would decrease the risk of flooding in the Harbor Hills Park area	This action would increase the drainage capacity of the retention pond, decreasing the risk of flooding	This action would decrease flooding in the area surrounding tidal pond	This action would increase the drainage capacity of the Tully Park area	This action is expected to save the Town millions in flood damages	The proposed actions would halt flooding, increase capacity for accepting tidal surges, and decrease risk to resident health and safety
Potential Funding Sources	406 Mitigation Funding	This project was awarded funding from the FEMA 406 program.	Municipal Budget	This project received funding under FEMA's 406 program.	Municipal Budget	Municipal Budget	Municipal Budget	HMPG	Municipal Budget, FEMA GrantD133H137D134:P139D132:P139H137D134:P139D2:P1D131:P139

**Project Table #10 – 18:**

Project Number	TNH_10	TNH_11	TNH_12	TNH_13	TNH_14	TNH_15	TNH_16	TNH_17	TNH_18
Project Name	Outfall Sewer	Port Washington Fire Station Generators	Port Washington Flooding Project	Retention Pond Dredging	Roslyn Pond Project	Town Hall Generator	Town Sumps Upgrade	Tully Park Generator	Tully Park Pipe
Goal being met	3, 4	2, 3	3, 4	3, 4	1, 3	2	1, 3	2	1, 3
Hazards to be mitigated	Power Outages	Loss of Electrical Power	Flooding	Flooding	Flooding	Continuity of Governmental Operations	Flooding & Drainage	Loss of Electrical Power	Flooding
Priority Ranking	High	High	High	High	High	High	High	High	High

Project Number	TNH_10	TNH_11	TNH_12	TNH_13	TNH_14	TNH_15	TNH_16	TNH_17	TNH_18
<b>Description of the Problem</b>	The current pumping station does not adequately pump wastewater during high tides and storm surges	Currently fire stations are not able to handle community demands during frequently experienced power outages	The current drainage infrastructure does not prevent flooding	Hurricane Sandy produced conditions which required ponds to be dredged throughout the Town	Roslyn Pond rains during times of heavy rainfall	Town Hall currently has a partial emergency power generator and not all offices are powered.	The current recharge basin does not effectively prevent flooding	Tully Park Center was used as a temporary shelter for electrical workers during Hurricane Sandy, however only a partial generator was available	The current drainage infrastructure in Tully Park is insufficient for typical drainage needs
<b>Description of the Solution</b>	Construct a new 24 inch outfall sewer buried to the desired depth and new effluent pumping station to pump the treated wastewater during high tides and storm surges. The new outfall sewer will be installed using directional drilling method.	Install a permanent generator at the Port Washington Fire Stations.	Rehabilitate the drainage to alleviate future flooding	Dredge each retention pond and install fallout pipes	Dredge out the silt	A full Natural Gas Generator with an automatic transfer switch will allow for continuity of operations.	Upgrade the existing recharge basins	A permanent generator would be utilized during times when electrical power is lost and increase the capacity to fully generate the facility	Replace drainage pipe, and add cleanouts
<b>Critical Facility</b>	No	Yes	No	No	No	No	No	No	No
<b>EHP Issues</b>	No	No	No	No	No	No	No	No	No
<b>Estimated Timeline</b>	Target Date: 2014 - 2015  Status: In Progress	Target Date: 2014 - 2016  Status: Not Started	Target Date: 2014 - 2015  Status: Not started	Target Date: 2014 - 2015  Status: In Progress, some retention ponds have	Target Date: 2014 - 2015  Status: In progress, the Town hired a contractor to start this project in April 2020	1 Year	Target Date: 2014-2015  Status: In Progress	Target Date: 2014 - 2015  Status: Not Started	Target Date: 2014 - 2015  Status: Not Started

Project Number	TNH_10	TNH_11	TNH_12	TNH_13	TNH_14	TNH_15	TNH_16	TNH_17	TNH_18
				been dredged					
<b>Lead Agency</b>	Belgrave Water Pollution Control	Port Washington Fire Department	OEM	OEM	OEM	Town of North Hempstead	OEM	OEM	OEM
<b>Estimated Costs</b>	10,275,000	\$795,800	\$12,000,000	\$2,500,000	\$4,500,000	\$1,000,000	\$1,500,000	\$700,000	\$10,000,000
<b>Estimated Benefits</b>	This action will provide adequate pumping capability for treated wastewater during high tides and storm surges.	A permanent generator will allow Port Washington Fire Station's to have sufficient capacity to respond to the community's needs	This action will help eliminate area flooding in the future	The proposed action would prevent area flooding	Dredging out the Roslyn Pond Slit would prevent flooding	Actions would ensure governmental continuity of operations and are expected to save the Town millions	This upgrade would protect from future flooding, as well as wear and tear of the roads	A permanent generator will allow Tully Park Center to be utilized as a temporary shelter during emergencies and disasters without the risk of limited electrical power access	This action would increase the drainage capacity of the New Hyde Park area
<b>Potential Funding Sources</b>	EFC awarded a \$5-million WQIP grant and gave notice to proceed, however due to the Pandemic, they put the grant project on hold.	HMPG	Unknown this project was halted due to a lack of funding	This project was awarded funding from the FEMA 406 program.	Funded through FEMA 406 funding, in conjunction with other capital improvements to the park	HMPG	Municipal Budget, FEMA Grant	Municipal Budget, FEMA Grant	Municipal Budget

## **Mitigation Action Worksheets**

The following pages contain mitigation action worksheets that provide additional detail some of the jurisdiction's proposed mitigation actions.

## Nassau County Multi-Jurisdictional Hazard Mitigation Plan

Name of Jurisdiction: Town of North Hempstead

NYS DHSES Action Worksheet			
Project Name:	<u>Town Hall Generator</u>		
Project Number:	<u>TNH_15</u>		
Risk / Vulnerability			
Hazard of Concern:	<u>Continuity of Governmental Operations</u>		
Description of the Problem:	<u>Town Hall currently has a partial emergency power generator and not all offices are powered.</u>		
Action or Project Intended for Implementation			
Description of the Solution:	<u>A full Natural Gas Generator with an automatic transfer switch will allow for continuity of operations.</u>		
Is this project related to a Critical Facility?		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
<small>(If yes, this project must intend to protect to the 500-year flood event or the actual worst damage scenario, whichever is greater.)</small>			
Level of Protection:	<u>Full</u>	Estimated Benefits (losses avoided):	Actions would ensure governmental continuity of operations and are expected to save the Town millions
Useful Life:	<u>20 Years</u>		
Estimated Cost:	<u>\$1,000,000</u>		
Plan for Implementation			
Prioritization:	<u>High</u>	Desired Timeframe for Implementation:	<u>5 years</u>
Estimated Time Required for Project Implementation:	<u>1 Year</u>	Potential Funding Sources:	<u>HMGP</u>
Responsible Organization:	<u>Town of North Hempstead</u>	Local Planning Mechanisms to be Used in Implementation, if any:	<u>N/A</u>
Three Alternatives Considered (including No Action)			
Alternatives:	<i>Action</i>	<i>Estimated Cost</i>	<i>Evaluation</i>
	<u>No action</u>	<u>No Cost</u>	<u></u>
	<u>Close down government operations</u>	<u>No Cost</u>	<u>The cost would be millions for the town. Not feasible for the governmental needs of the Town</u>
	<u>Prepare employees to work remotely</u>	<u>Minimal</u>	<u>Not practical to adequately provide City services.</u>
Progress Report (for plan maintenance)			
Date of Status Report:	<u></u>		
Report of Progress:	<u></u>		
Update Evaluation of the Problem and/or Solution:	<u></u>		

## Instructions

(Name of Jurisdiction) \_\_\_\_\_

NYS DHSES Action Worksheet			
Project Name:	Each action must have a unique project number referenced here and in the Action Tables.		
Project Number:	Each action must have a unique project name referenced here and in the Action Tables.		
Risk / Vulnerability			
Hazard of Concern:	Identify the hazard being addressed with this action.		
Description of the Problem:	Provide a detailed narrative of the problem. Describe the natural hazard you wish to mitigate, its impacts to the jurisdiction, past damages and loss of service, etc. Include the street address of the property/project location (if applicable), adjacent streets, and easily identified landmarks such as water bodies and well-known structures, and end with a brief description of existing conditions (topography, terrain, hydrology) of the site.		
Action or Project Intended for Implementation			
Description of the Solution:	Provide a detailed narrative of the solution. Describe the physical area (project limits) to be affected, both by direct work and by the project's effects; how the action would address the existing conditions previously identified; proposed construction methods, including any excavation and earth-moving activities; where you are in the development process (e.g., are studies and/or drawings complete), etc., the extent of any analyses or studies performed (attach any reports or studies).		
Is this project related to a Critical Facility?		Yes <input type="checkbox"/>	No <input type="checkbox"/>
(If yes, this project must intend to protect to the 500-year flood event or the actual worst damage scenario, whichever is greater.)			
Level of Protection:	Identify the level of protection the proposed project will provide. Ex. 100-year (1%) flood.	Estimated Benefits (losses avoided):	Identify the benefits that implementation of this project will provide. If dollar amounts are known, include them. If dollar amounts are unknown or are unquantifiable, describe the losses that will be avoided.
Useful Life:	Identify the number of years the project will provide protection against the hazard.		
Estimated Cost:	Identify all estimated costs associated with implementation.		
Plan for Implementation			
Prioritization:	Identify the priority based on the prioritization method agreed upon.	Desired Timeframe for Implementation:	Identify the desired start time for this project. Ex. Within 6 months.
Estimated Time Required for Project Implementation:	Provide the estimated time required to complete the project from start to end.	Potential Funding Sources:	Multiple sources of potential funding should be listed when appropriate.
Responsible Organization:	Identify the name of a department or agency responsible for implementation, not the jurisdiction.	Local Planning Mechanisms to be Used in Implementation, if any:	Consider the use of local planning mechanisms that will be used to implement this project.
Three Alternatives Considered (including No Action)			
Alternatives:	<i>Action</i>	<i>Estimated Cost</i>	<i>Evaluation</i>
	No Action	\$0	
	Alternative 1 Brief Description		Include a description of pros/cons of Alternative 1.
	Alternative 2 Brief Description		Include a description of pros/cons of Alternative 2.
Progress Report (for plan maintenance)			
Date of Status Report:	This section should be completed during plan maintenance/evaluation.		
Report of Progress:	Describe what progress, if any, has been made on this project. If it has been determined the jurisdiction no longer wishes to pursue implementation, state that here and indicate why.		
Update Evaluation of the Problem and/or Solution:	Provide an updated description of the problem and solution, and what has happened since initial consideration/development.		

## Nassau County Multi-Jurisdictional Hazard Mitigation Plan

**Name of Jurisdiction:** Town of North Hempstead

NYS DHSES Action Worksheet			
Project Name:	Wetland and Open Space Restoration Project		
Project Number:	TNH_8		
Risk / Vulnerability			
Hazard of Concern:	Prevent Flooding		
Description of the Problem:	Currently the parking lots flood at the beach park. This happens even with tidal surges. Numerous vehicles have been damaged as a result of flooding at the beach park.		
Action or Project Intended for Implementation			
Description of the Solution:	Redesigning and reconfiguring the parking lot to reduce flood risk. This project would include restoring wetlands and open space in the areas most susceptible to flooding and installing riprap to allow for the tidal surges to take place without flooding the new parking lot.		
Is this project related to a Critical Facility?		Yes	No <input checked="" type="checkbox"/>
(If yes, this project must intend to protect to the 500-year flood event or the actual worst damage scenario, whichever is greater.)			
Level of Protection:	Full	Estimated Benefits (losses avoided):	This action is expected to save the Town millions in flood damages
Useful Life:	20 years		
Estimated Cost:	\$2,000,000		
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	5 Years
Estimated Time Required for Project Implementation:	1 Year	Potential Funding Sources:	HMGP
Responsible Organization:	Town of North Hempstead	Local Planning Mechanisms to be Used in Implementation, if any:	N/A
Three Alternatives Considered (including No Action)			
Alternatives:	<i>Action</i>	<i>Estimated Cost</i>	<i>Evaluation</i>
	Seawall	\$5,000,000	This action would push tidal surges elsewhere
	No action	\$0	
	Move parking lots to be further from the coast	Minimal	This action would not provide adequate access to the beach park.
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

## Instructions

(Name of Jurisdiction) \_\_\_\_\_

NYS DHSES Action Worksheet			
Project Name:	Each action must have a unique project number referenced here and in the Action Tables.		
Project Number:	Each action must have a unique project name referenced here and in the Action Tables.		
Risk / Vulnerability			
Hazard of Concern:	Identify the hazard being addressed with this action.		
Description of the Problem:	Provide a detailed narrative of the problem. Describe the natural hazard you wish to mitigate, its impacts to the jurisdiction, past damages and loss of service, etc. Include the street address of the property/project location (if applicable), adjacent streets, and easily identified landmarks such as water bodies and well-known structures, and end with a brief description of existing conditions (topography, terrain, hydrology) of the site.		
Action or Project Intended for Implementation			
Description of the Solution:	Provide a detailed narrative of the solution. Describe the physical area (project limits) to be affected, both by direct work and by the project's effects; how the action would address the existing conditions previously identified; proposed construction methods, including any excavation and earth-moving activities; where you are in the development process (e.g., are studies and/or drawings complete), etc., the extent of any analyses or studies performed (attach any reports or studies).		
Is this project related to a Critical Facility?		Yes <input type="checkbox"/>	No <input type="checkbox"/>
(If yes, this project must intend to protect to the 500-year flood event or the actual worst damage scenario, whichever is greater.)			
Level of Protection:	Identify the level of protection the proposed project will provide. Ex. 100-year (1%) flood.	Estimated Benefits (losses avoided):	Identify the benefits that implementation of this project will provide. If dollar amounts are known, include them. If dollar amounts are unknown or are unquantifiable, describe the losses that will be avoided.
Useful Life:	Identify the number of years the project will provide protection against the hazard.		
Estimated Cost:	Identify all estimated costs associated with implementation.		
Plan for Implementation			
Prioritization:	Identify the priority based on the prioritization method agreed upon.	Desired Timeframe for Implementation:	Identify the desired start time for this project. Ex. Within 6 months.
Estimated Time Required for Project Implementation:	Provide the estimated time required to complete the project from start to end.	Potential Funding Sources:	Multiple sources of potential funding should be listed when appropriate.
Responsible Organization:	Identify the name of a department or agency responsible for implementation, not the jurisdiction.	Local Planning Mechanisms to be Used in Implementation, if any:	Consider the use of local planning mechanisms that will be used to implement this project.
Three Alternatives Considered (including No Action)			
Alternatives:	<i>Action</i>	<i>Estimated Cost</i>	<i>Evaluation</i>
	No Action	\$0	
	Alternative 1 Brief Description		Include a description of pros/cons of Alternative 1.
	Alternative 2 Brief Description		Include a description of pros/cons of Alternative 2.
Progress Report (for plan maintenance)			
Date of Status Report:	This section should be completed during plan maintenance/evaluation.		
Report of Progress:	Describe what progress, if any, has been made on this project. If it has been determined the jurisdiction no longer wishes to pursue implementation, state that here and indicate why.		
Update Evaluation of the Problem and/or Solution:	Provide an updated description of the problem and solution, and what has happened since initial consideration/development.		