

Town of Hempstead Annex

This document presents the Town of 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
Edward W. Powers, Director Of Emergency Management Department of Public Safety 200 North Franklin Street Hempstead, NY 11550 epowers@tohmail.org 516-538-1900	Thomas De Maria, Commissioner Of Public Safety, Department of Public Safety 200 North Franklin Street Hempstead, NY 11550 tdemaria@tohmail.org 516-538-1900

Profile

The Town of Hempstead covers approximately 118.59 square miles¹ and has a total population of 766,980 according to the American Community Survey 5-Year 2018 Estimates. Some of the demographics of the Town of 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 Hempstead Demographic Information

Demographic	Demographic
Below 5 Years Old	5.8%
Above 65 Years Old	16.0%
Individuals with Disabilities	4.7%
Persons in Poverty	6.2%
Renters	19.1%
Without a High School Diploma	10.1%
Without Access to Broadband Internet	11.4%
Black or African American alone	17.3%
American Indian and Alaska Native alone	0.3%
Asian alone	6.0%
Native Hawaiian and other Pacific Islander alone	0.0%
Two or More Races	3.7%
White alone, not Hispanic or Latino, percent	63.9%
Hispanic or Latino	20.5%

¹ This is inclusive of land area only.

The Town of Hempstead's robust tax led to positive growth in business and residential development, including multi-family housing and mixed-used developments. The Town has notable development on the Barnum Island and Harbor Isle. A large amount of recent development includes repurposing infrastructure from industrial and or manufacturing uses. 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 Hempstead. The jurisdiction identified coastal hazards, flooding, and severe winter weather as the natural hazards that most 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 Hempstead include:
Coastal Hazards, Flooding, and Severe Winter Weather.

Table 2: Town of 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
Flooding	Community, Economy, Health and Social Services, Housing, Infrastructure, Natural and Cultural Resources
Ground Failure	No Impact
Hurricane and Tropical Storms	Community, Economy, Health and Social Services, Housing, Infrastructure, Natural and Cultural Resources
Hail	Community
Lightning	Community
Severe Winter Weather	Community, Economy, Health and Social Services, Housing, Infrastructure, Natural and Cultural Resources
Tornados	Community, Housing, Infrastructure

Hazard	Impact Categories
Wind	Community, Economy, Health and Social Services, Housing, Infrastructure, Natural Cultural Resources

Capability Assessment

This section summarizes the capabilities that the Town of 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 Hempstead. The Town of Hempstead maintains several key administrative and technical capabilities to support mitigation, including building codes, capital improvement plan, community development plans, emergency response plans, floodplain management plans, NFIP flood damage prevention ordinances, post disaster recovery ordinances, 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 Hempstead Existing Legal and Regulatory Capabilities

Regulatory Tool	Yes / No	Citation (if applicable)
Access and Functional Needs Plan	No	
Building Code	Yes	Town Building Zone Ordinance
Capital Improvement Plan	Yes	Passed by Town Board each year.
Climate Action Plan	No	
Community Development Plan	Yes	Baldwin Overlay District
Comprehensive Plan / Master Plan	No	
Economic Development Plan(s)	No	
Emergency Response Plan(s)	Yes	Town Emergency Preparedness Plan
Floodplain Management Plan(s)	Yes	Part of Building Code
Growth Management Plan(s)	No	
NFIP Flood Damage Prevention Ordinance(s)	Yes	NFIP Compliant Community
Open Space Plan(s)	No	
Post Disaster Recovery Ordinance(s)	Yes	Disaster Rebuilding Fee Waivers
Post Disaster Recovery Plan(s)	No	

Regulatory Tool	Yes / No	Citation (if applicable)
Real Estate Disclosure Requirements	No	
Resilience Plan(s)	No	
Site Plan Review Requirement(s)	Yes	Site Plan for Developments required
Small Area Development Plan(s)	No	
Special Purpose Ordinance(s)	No	
Stormwater Management Plan(s)	Yes	Stormwater Management Plan updated each year.
Subdivision Ordinance(s)	Yes	Subdivision Approval Required
Transportation Plan(s)	No	
Zoning Ordinance(s)	Yes	Tow Building Zone Ordinance

Administrative and Technical Capability Assessment

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

Table 4: Town of Hempstead Existing Staff / Personnel Resource

Staff / Personnel Resource	Yes / No	Details
Emergency Manager(s)	Edward W. Powers	
Engineer(s) trained in construction practices related to buildings/infrastructure	Yes	6 Civil Engineers and Construction Managers
Engineer(s) with an understanding of natural and/or human caused hazards	Yes	6 Civil Engineers and Construction Managers
Engineer(s) with knowledge of land development and land management practices	6 Civil Engineers and Construction Managers	
Grant Writers	Yes	1 Grant Writer
Personnel skilled or trained in Geographic Information Systems	Several	
Personnel trained in construction practices related to buildings/infrastructure	20 Positions in the Building Department	
Planner(s) with an understanding of natural hazards	10 Positions in the Building Department	
Planner(s) with knowledge of land development and land management practices	20 Positions in the Building Department	

Staff / Personnel Resource	Yes / No	Details
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 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 and special tax bonds, levying taxes for specific purposes, utilizing user fees for utility services, capital improvements project funding, CDBG programs, impact fees for home buyers and/or developers, and state mitigation grant programs. Town of Hempstead should consider exploring additional fiscal capabilities in order to gain access to additional funding for mitigation.

Table 5: Town of Hempstead Existing Fiscal Capabilities

Resources	Yes / No	Additional Details
Ability to incur debt through general obligation bonds	Yes	Town Capital Program
Ability to incur debt through private activity bonds	No	
Ability to incur debt through special tax bonds	Yes	Tax Anticipation Notes
Authority to levy taxes for specific purposes	Yes	Park District Taxes
Authority to utilize user fees for utility services	Yes	Town Water Department 39,000 customers
Authority to withhold public expenditures in hazard prone areas	No	
Capital improvements project funding	Yes	Passed by Town Board each year.
Community Development Block Grants (CDBG)	Yes	Town's Planning Department
Impact fees for home buyers and/or developers	Yes	Fee Caps on certain developments. Fee Caps on certain developments.
State mitigation grant programs	Yes	New York Rising program

Community Classification Assessment

Table 6 lists the assessment of existing community classifications for the Town of Hempstead. Participation in the 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 Hempstead Community Classifications

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

National Flood Insurance Program Summary

All of the back bay communities in the Town of Hempstead located on the south shore of Nassau County are prone to flooding. This section provides a summary of the floodplain management capabilities for Town of Hempstead and how the jurisdiction is meeting the requirements of the National Flood Insurance Program (NFIP).

The Town's Floodplain Manager is responsible for floodplain management. They are also a Certified Floodplain Manager. The Town would like to train additional individuals to become Certified Floodplain Managers in the future. NFIP is administered mainly through education and outreach and the building permit process. One barrier to running a successful NFIP program in the Town of Hempstead is accounting for properties that have changed hands within a family over many years without proper documentation changes made. 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. The Town of Hempstead is in good standing with the NFIP. Based on documentation received from NYSDEC, a compliance audit (e.g., Community Assistance Visit or Community Assistance Contacts) has not been conducted for the municipality but the Town will determine if one is needed in the future and schedule it. There are no NFIP compliance violations that need to be addressed in this jurisdiction.

The elevation of homes, businesses, roads, and bulkheads have been the Town's primary mitigation tool in flood-prone areas. The Flood Damage Prevention Ordinance for the Town of Hempstead meets minimum requirements. The ordinance was last amended 01/19/2020 and can be referenced in Town Code Section 144-3.G.

Mitigation Strategy

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

Previous Mitigation Actions

Action	Reference Number	Hamlet	Risk Category	Project Status	Project Status Description	Carried Forward to 2020 Plan	Required Changes
Road Elevation Project: Road Elevation - East and West Blvd. Area	TOH 1	Bay Park	Flood	In progress	Design	Yes	Revised Date: 2022 and Revised Cost: \$5 Million
Road Elevation Project: Road Elevation - Army, Navy, Marine Place area	TOH 2	Bellmore	Flood	In progress	Easement Procurement	Yes	Revised Date: 2021 and Revised Cost: \$3.9 Million
Road Elevation Project: Road Elevation - Harold Street, Moreland Ave.	TOH 3	Oceanside	Flood	In progress	Easement Procurement	Yes	Revised Date: 2021
Road Elevation Project: Road Elevation - Various areas	TOH 4	Seaford	Flood	New		Yes	
Road Elevation Project: Road Elevation - Neptune & Roanoke	TOH4A	Seaford	Flood	In progress	Easement Procurement	Yes	Revised Date: 2021 and Revised Cost: \$400000
Road Elevation Project: Road Elevation - Neptune & Beaver Turn	TOH4B	Seaford	Flood	In progress	Easement Procurement	Yes	Revised Date: 2021 and Revised Cost: \$800000
Road Elevation Project: Road Elevation - South Street	TOH4C	Seaford	Flood	In progress	Easement Procurement	Yes	Revised Date: 2021 and Revised Cost: \$825000
Road Elevation Project: Road Elevation - Miami Street	TOH4D	Seaford	Flood	In progress	Easement Procurement	Yes	Revised Date: 2021 and Revised Cost: \$1.6 Million
Road Elevation Project: Road Elevation - Anglers, Widgeon & Plover	TOH4E	Seaford	Flood	In progress	Construction	Yes	Revised Date: 2020 and Revised Cost: \$528000
Road Elevation Project: Road Elevation - South Wantagh area	TOH 5	Wantagh	Flood	New		Yes	
Road Elevation Project: Road Elevation - South Wantagh Mermaid & Canal	TOHA	Wantagh	Flood	In progress	Easement Procurement	Yes	Revised Date: 2021 and Revised Cost: \$1 Million
Road Elevation Project: Road Elevation - California Place North and South area	TOH 6	Barnum Island	Flood	In progress	Easement Procurement	Yes	Revised Date: 2021 and Revised Cost: \$5.25 Million
Road Elevation Project: Road Elevation - Trafalgar & Broadway	TOH6A	Barnum Island	Flood	In progress	Easement Procurement	Yes	Revised Date: 2021 and Revised Cost: \$1.6 Million

Action	Reference Number	Hamlet	Risk Category	Project Status	Project Status Description	Carried Forward to 2020 Plan	Required Changes
Road Elevation Project: Road Elevation - Island Parkway / Sheridan Pl.	TOH6B	Harbor Isle	Flood	In progress	Easement Procurement	Yes	Revised Date: 2021 and Revised Cost: \$2.5 Million
Road Elevation Project: Roadway improvements and grade raising to VAN BUREN Pl.	TOH 7	Baldwin Harbor	Flood	In progress	Easement Procurement	Yes	Revised Date: 2021 and Revised Cost: \$565000
Road Elevation Project: Roadway improvements and grade raising to JACKSON Pl.	TOH7A	Baldwin Harbor	Flood	Completed		No	Revised Date: 2018 and Revised Cost: \$840000
Road Elevation Project: Road Elevation - Helen and George	TOH 76	Merrick	Flood	In progress	Easement Procurement	Yes	Revised Date: 2021 and Revised Cost: \$1.45 Million
Road Elevation Project: Road Elevation - Carrel Blvd. Area	TOH 77	Oceanside	Flood	In progress	Easement Procurement	Yes	Revised Date: 2021 and Revised Cost: \$2.1 Million
Road Elevation Project: Road Elevation -Royal Ave.	TOH 78	Oceanside	Flood	In progress	Easement Procurement	Yes	Revised Date: 2021
Road Elevation Project: Road Elevation - Inwood (Bayswater Area)	TOH 79	Inwood	Flood	In progress	Easement Procurement	Yes	Revised Date: 2021
Road Elevation Project: Road Elevation - Jedwood Place	TOH 80	S. Valley Stream	Flood	In progress	Construction	Yes	Revised Date: 2020 and Revised Cost: \$1.135 Million
Infrastructure Project: East Marina - Bulkhead, Breakwater, raise 2 buildings, generator, raise power, raise piles, decking, sanitary system	TOH 9	Point Lookout	Flood	In Progress		Yes	
Infrastructure Project: West Marina - Bulkhead, Breakwater, raise 2 buildings, new building, primary electric, micro grid, 2 generators, raise power, sheet piles, raise piles, decking, fishing pier	TOH 10	Point Lookout	Flood	In Progress		Yes	
Infrastructure Project: Guy Lombardo Marina - Bulkheads, generator, primary electric, raise piles, fire alarm	TOH 11	Freeport	Flood	In Progress		Yes	
Infrastructure Project: Inwood Marina - bulkheads, raise building, raise piles	TOH 12	Inwood	Flood	In Progress		Yes	
Infrastructure Project: Hanse Ave. Facility - Raise building, bulkhead, debris facility, truck canopy	TOH 13	Freeport	Flood	In Progress		Yes	
Infrastructure Project: Sanitation Dept. Admin Building - demolition of existing building & rebuild to proper elevation to eliminate repetitive loss	TOH 14	Merrick	Flood	In Progress		Yes	
Infrastructure Project: Repair damage to Lido-Point Lookout water meter infrastructure	TOH 16	TOH	Various	In Progress		Yes	
Infrastructure Project: Replacement of Lido-Point Lookout admin building	TOH 17	TOH	Various	In Progress		Yes	

Action	Reference Number	Hamlet	Risk Category	Project Status	Project Status Description	Carried Forward to 2020 Plan	Required Changes
Infrastructure Project: Elevation of sanitary seals at Lido-Point Lookout wells 1A, 2A, and 3A	TOH 18	TOH	Various	In Progress		Yes	
Infrastructure Project: Expansion of SCADA system for full control of Lido-Point Lookout District	TOH 19	TOH	Various	In Progress		Yes	
Infrastructure Project: Improve Lido-Point lookout district booster system	TOH 21	TOH	Various	In Progress		Yes	
Infrastructure Project: Check Valve Replacement, Installation & Testing	TOH 80	TOH	Various	In Progress	Construction	Yes	
Infrastructure Project: GOSR Check Valve Replacement, Installation & Testing	TOH 81	TOH	Various	In Progress	Nearing Bidding	Yes	
Infrastructure Project: "Oceanside Detention"	TOH 82	TOH	Oceanside Various			Yes	
Infrastructure Project: "Oceanside Pipes"	TOH 83	TOH	Oceanside Various	In Progress	Easement Procurement	Yes	
Infrastructure Project: Woodmere Drainage Improvements	TOH 84	TOH	Woodmere Various	In Progress	Design	Yes	
Infrastructure Project: Meadowbrook Green Infrastructure	TOH 85	TOH	Merrick Various	In Progress	Design	Yes	
Infrastructure Project: Meadowmere Park Footbridge	TOH 86	TOH	Meadowmere Park	In Progress	Design	Yes	
Infrastructure Project: Street Lighting Resiliency Program	TOH 87	TOH	Various	In Progress	Construction	Yes	
Shoreline Project: Point Lookout East Shoreline - Revetment rehabilitation and improvement	TOH 88	Point Lookout	Flood	In progress	Permit Review		Revised Date: 2021
Shoreline Project: Oceanside Park - Revetement & riprap restoration and improvement at Garrett's Lead	TOH 24	Oceanside	Flood	New			
Shoreline Project: Baldwin Park - Revetement & riprap restoration and improvement at Middle Bay	TOH 25	Baldwin	Flood	In progress	Design		Revised Date: 2021
Shoreline Project: Merrick Rd. Park Golf Course - Revetement & riprap restoration and improvement at Merrick Bay	TOH 26	Merrick	Flood	New			
Shoreline Project: Newbridge Rd. Park - Revetement & riprap restoration and improvement at Cedar Swamp Creek	TOH 27	Bellmore	Flood	New			
Shoreline Project: Seamans Neck Park - Revetement & riprap restoration and improvement at Seamans Creek	TOH 28	Seaford	Flood	New			

Action	Reference Number	Hamlet	Risk Category	Project Status	Project Status Description	Carried Forward to 2020 Plan	Required Changes
Shoreline Project: Sanitation Dept. Norman Levy Park and Preserve - revetement and riprap rehabilitation and improvements to shoreline	TOH 29	Merrick	Flood	New			
Shoreline Project: Sanitation Dept. Oceanside transfer station - rehabilitation and improvements to eroded shoreline	TOH 30	Oceanside	Flood	New			
Shoreline Project: Court Street W. Bulkhead	TOH 31	Bay Park	Flood	Completed			
Shoreline Project: Dewey Street W. masonry seawall W/sluceway	TOH 32	Bay Park	Flood	New			
Shoreline Project: Sampson Street W. masonry seawall w/sluceway	TOH 33	Bay Park	Flood	New			
Shoreline Project: Sperry Street W. masonry seawall w/sluceway	TOH 34	Bay Park	Flood	Completed			
Shoreline Project: Hudson Street W. masonry seawall w/sluceway	TOH 35	Bay Park	Flood	Completed			
Shoreline Project: Williamson Street masonry seawall with basin	TOH 36	Bay Park	Flood	New			
Shoreline Project: Evans Street W. masonry seawall w/sluceway	TOH 37	Bay Park	Flood	New			
Shoreline Project: Evans Street W. bulkhead	TOH 38	Bay Park	Flood	Completed			
Shoreline Project: Washington Place bulkhead with outfall	TOH 39	Baldwin	Flood	Completed			
Shoreline Project: Hayes Place bulkhead with outfall	TOH 40	Baldwin	Flood	New			
Shoreline Project: Van Buren Place bulkhead with outfall	TOH 41	Baldwin	Flood	New	Part of GOSR		
Shoreline Project: Jackson Place bulkhead with outfall	TOH 42	Baldwin	Flood	Completed			
Shoreline Project: Northern Blvd. bulkhead with outfall	TOH 43	Baldwin	Flood	New			
Shoreline Project: Centre Ave. masonry seawall with basin	TOH 44	Bellmore	Flood	New			
Shoreline Project: Barnum Island California Pl. North at NY Ave. - Bulkhead with outfall	TOH 45	Island Park	Flood	New			
Shoreline Project: Barnum island at Brennan Place - bulkhead with outfall	TOH 46	Island Park	Flood	New			

Action	Reference Number	Hamlet	Risk Category	Project Status	Project Status Description	Carried Forward to 2020 Plan	Required Changes
Shoreline Project: Barnum Island California Pl. South at NY Ave. - Bulkhead with outfall	TOH 47	Island Park	Flood	New			
Shoreline Project: Harbor Isle President Pl. - Bulkhead with sluiceway	TOH 48	Island Park	Flood	New			
Shoreline Project: Elliot Street bulkhead with sluiceway	TOH 49	Merrick	Flood	New			
Shoreline Project: Royal Ave. bulkhead with outfall	TOH 50	Oceanside	Flood	New			
Shoreline Project: Golf Drive bulkhead with outfall	TOH 51	Oceanside	Flood	New			
Shoreline Project: West Waukena Ave. bulkhead with 2 outfalls	TOH 52	Oceanside	Flood	New			
Shoreline Project: Murdoch Ave. bulkhead	TOH 53	Oceanside	Flood	New			
Shoreline Project: Oceanlea Drive bulkhead with 2 outfalls	TOH 54	Oceanside	Flood	New			
Shoreline Project: Almo Place bulkhead with outfall	TOH 55	Seaford	Flood	Completed			
Shoreline Project: Bayview St. @ Treasure Lagoon bulkhead with outfall	TOH 56	Seaford	Flood	Completed			
Shoreline Project: Bayview St. @ Silver Lagoon partial bulkhead with outfall	TOH 57	Seaford	Flood	New			
Shoreline Project: Bayview St. @ Sunset Lagoon bulkhead and masonry with outfall	TOH 58	Seaford	Flood	New			
Shoreline Project: Naomi Street bulkhead with sluiceways	TOH 59	Seaford	Flood	New			
Shoreline Project: Shore Place rubble with outfall	TOH 60	Seaford	Flood	New			
Shoreline Project: S.V.S. Path and Park	TOH 61	S. Valley Stream	Flood	Completed			
Emergency Power Generation Project: New Town Hall - Generator	TOH 61	Hempstead	Various	In Progress			
Emergency Power Generation Project: Old Town Hall - Generator	TOH 62	Hempstead	Various	In Progress			
Emergency Power Generation Project: Town Main Highway Yard - Generator	TOH 64	Roosevelt	Various	In Progress			

Action	Reference Number	Hamlet	Risk Category	Project Status	Project Status Description	Carried Forward to 2020 Plan	Required Changes
Emergency Power Generation Project: Town Franklin Square Highway Yard - Generator	TOH 65	Franklin Square	Various	In Progress			
Emergency Power Generation Project: Town Levittown Hall POD / Shelter - Generator	TOH 66	Levittown	Various	In Progress			
Emergency Power Generation Project: Town Animal Shelter - Generator	TOH 67	Wantaugh	Various	In Progress			
Emergency Power Generation Project: Back-up generator for Lido-Point Lookout well 3	TOH 68	TOH	Various	In Progress			
Emergency Power Generation Project: Replacement of back-up generator Uniondale wells 1-4	TOH 69	TOH	Various	In Progress			
Emergency Power Generation Project: Install back-up generator at Levittown well 13	TOH 70	TOH	Various	In Progress			
Emergency Power Generation Project: Installation of auto back-up generator for Levittown Wells 7A-8A	TOH 71	TOH	Various	In Progress			
Emergency Power Generation Project: Replacement of back-up generator at East Meadow operation center for water district	TOH 72	TOH	Various	In Progress			
Emergency Power Generation Project: Replacement of back-up generator Bowling Green Water district wells 1 and 2	TOH 73	TOH	Various	In Progress			
Emergency Power Generation Project: Install auto back-up generator at Roosevelt Field Well 7	TOH 74	TOH	Various	In Progress			
Emergency Power Generation Project: Improvements to Carmen Ave. Booster station (SCADA, generator)	TOH 75	TOH	Various	In Progress			
Emergency Power Generation Project: Atlantic Beach Fire Department	TOH 89	E. Atlantic Beach		In progress	Construction		
Emergency Power Generation Project: Meadowmere Park Fire Department	TOH 90	Meadowmere Park		In progress	Punch-List		

Proposed Mitigation Actions

Project Number	TOH_1	TOH_2	TOH_3	TOH_4
Project Name	Emergency Power Generator Projects	Infrastructure Projects	Road Elevation Projects	Shoreline Projects
Goal being met	1, 3	1, 3	1, 2, 3	1, 5
Hazards to be mitigated	Flooding High Wind Events, Loss of Electrical Power	Flooding, storm surge	Flooding	Flooding
Priority Ranking	High	High	High	High
Description of the Problem	High wind events and flood events caused the widespread loss of electrical power, including power to Town Hall, Old Town Hall, Highway Yards, Animal Shelter and Water Department Operations Center and Water Wells. These critical town facilities must have power during power outages to operate properly.	Recurring losses to Hempstead Town infrastructure and facilities from flooding and storm surge events in the unincorporated hamlets of Point Lookout, Lido, Freeport, Inwood and Merrick.	Flooding of homes, businesses, and municipal structures, as well as disruption of surface transportation and impediment of emergency services during flood events. The area averages property damage of about \$500,000 per year and business interruptions of 25 days per year.	Shorelines identified throughout Hempstead Town back bay and barrier island communities are susceptible to flooding as a result of degraded revetments, riprap, berms, and bulkheads due to past storm impacts.
Description of the Solution	A permanent generator will be installed in at various locations with sufficient capacity to power spaces and equipment required for emergency response, disaster recovery and critical administrative operations during power outages and other disruptive events.	Install and upgrade bulkheads and breakwaters, elevate buildings, install back-up generators, elevate utilities, raise piling and decking system, and raise sanitary system	Raise roadways in the unincorporated hamlets of Bay Park, Bellmore, Oceanside, Seaford, Wantagh, Barnum Island, and Baldwin Harbor.	Repair and upgrade existing shoreline structures to prevent flooding of critical infrastructure and improved property. This project would include elevating bulkheads higher to meet current floodplain standard and upgrading the bulkhead material to the current Tyvek synthetic to provide greater effectiveness and a longer expected useful life for new bulkheads.
Critical Facility	No	No	No	Yes
EHP Issues	No	No	No	No
Estimated Timeline	Next several years	Next several years	Its continuous and ongoing: Anywhere from 1 year to 10 years.	The projects are completed, in-process or will be in process from now through 2020 and beyond.

Project Number	TOH_1	TOH_2	TOH_3	TOH_4
Lead Agency	Town of Hempstead Engineering, General Services, Highway and Water Departments	Town of Hempstead Engineering, Conservation, Sanitation and Water Departments	Town of Hempstead Engineering and Highway Departments.	Town of Hempstead Conservation, Engineering, Parks, and Sanitation Departments.
Estimated Costs	The estimated cost for installations is \$16,602,500	Total cost of the 11 projects is \$38,097,522	\$26,350,000	Total cost of all 38 Projects is \$73,790,000
Estimated Benefits	Emergency Operations for the Town of Hempstead and partner agencies can be supported from these critical facilities. This will provide for more rapid and efficient response to be properly supported and executed by requisite officials and emergency managers than if these components were to be deployed elsewhere, potentially savings lives, reducing property damage and facilitating recovery operations.	Keep critical town infrastructure operational during flooding events.	Reduction of flooding and economic losses.	Repetitive flooding of critical infrastructure and improved property.
Potential Funding Sources	Capital Budget; FEMA grant	Capital Budget; FEMA grant	Capital Budget - funds will be requested during a subsequent budget cycle for either the full cost of the project or matching funds for a FEMA grant.	Capital Budget - funds will be requested during a subsequent budget cycle for either the full cost of the project or matching funds for a FEMA grant.

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 Hempstead

NYS DHSES Action Worksheet

Project Name: Road Elevation Projects
 Project Number: TOH_3

Risk / Vulnerability

Hazard of Concern: Flooding
 Description of the Problem: Flooding of homes, businesses, and municipal structures, as well as disruption of surface transportation and impediment of emergency services during flood events. The area averages property damage of about \$500,000 per year and business interruptions of 25 days per year.

Action or Project Intended for Implementation

Description of the Solution: Raise roadways in the unincorporated hamlets of Bay Park, Bellmore, Oceanside, Seaford, Wantagh, Barnum Island, and Baldwin Harbor.

Is this project related to a Critical Facility? Yes No

(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:	100 Years	Estimated Benefits (losses avoided):	Reduction of flooding and economic losses
Useful Life:	50 Years		
Estimated Cost:	\$26,350,000		

Plan for Implementation

Prioritization:	High	Desired Timeframe for Implementation:	25 to 30 Years
Estimated Time Required for Project Implementation:	Its continuous and ongoing: Anywhere from 1 year to 10 years.	Potential Funding Sources:	Capital Budget - funds will be requested during a subsequent budget cycle for either the full cost of the project or matching funds for a FEMA grant.
Responsible Organization:	Town of Hempstead Engineering and Highway Departments.	Local Planning Mechanisms to be Used in Implementation, if any:	Town of Hempstead Planning Department.

Three Alternatives Considered (including No Action)

Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	
	Evaluate the possibility of building an alternate or bypass route.	The feasibility study cost could be over \$100,000.	We know the area and don't believe there are any viable bypass routes.
	Increase the capacity of the storm water infrastructure and enhance the Green infrastructure marsh lands in the town's back bays.	The feasibility study cost could be over \$500,000.	Previous studies have indicated this sort of action would not relieve flood impacts

Progress Report (for plan maintenance)

Date of Status Report: August 11, 2020

Report of Progress: As listed in the project spreadsheet, many projects were in progress or completed through the Governor's Office of Storm Recovery and the town's capital plan.

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.		

Nassau County Multi-Jurisdictional Hazard Mitigation Plan

Name of Jurisdiction: Town of Hempstead

NYS DHSES Action Worksheet

Project Name: Shoreline Projects
 Project Number: TOH_4

Risk / Vulnerability

Hazard of Concern: Flooding
 Description of the Problem: Shorelines identified throughout Hempstead Town back bay and barrier island communities are susceptible to flooding as a result of degraded revetments, riprap, berms, and bulkheads due to past storm impacts.

Action or Project Intended for Implementation

Description of the Solution: Repair and upgrade existing shoreline structures to prevent flooding of critical infrastructure and improved property. This project would include elevating bulkheads higher to meet current floodplain standard and upgrading the bulkhead material to the current Tyvek synthetic to provide greater effectiveness and a longer expected useful life for new bulkheads.

Is this project related to a Critical Facility? Yes No

(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:	<u>500-Year flood event</u>	Estimated Benefits (losses avoided):	<u>Repetitive flooding of critical infrastructure and improved property.</u>
Useful Life:	<u>50 Years</u>		
Estimated Cost:	<u>Cost of all 38 Projects is \$73,790,000</u>		

Plan for Implementation

Prioritization:	<u>High</u>	Desired Timeframe for Implementation:	<u>1 to 10 Years</u>
Estimated Time Required for Project Implementation:	<u>The projects are completed, in-process or will be in process from now through 2020 and beyond.</u>	Potential Funding Sources:	<u>Capital Budget - funds will be requested during a subsequent budget cycle for either the full cost of the project or matching funds for a FEMA grant.</u>
Responsible Organization:	<u>Town of Hempstead Conservation, Engineering, Parks, and Sanitation Departments.</u>	Local Planning Mechanisms to be Used in Implementation, if any:	

Three Alternatives Considered (including No Action)

Alternatives:	Action	Estimated Cost	Evaluation
	<u>No Action</u>	<u>\$0</u>	
	<u>Complete 20 of these projects.</u>	<u>Approximately \$40 million</u>	<u>These projects would help reduce flooding in certain areas, but the overall impact is hard to gauge and would not be as comprehensive in protecting our community.</u>
	<u>Complete these projects in phases, with approximately 10 projects implemented per year. There are several phases to these projects.</u>	<u>\$73,790,000.</u>	<u>Delaying the implementation of some of these projects would reduce the effectiveness of other projects.</u>

Progress Report (for plan maintenance)

Date of Status Report: August 11, 2020
 Report of Progress: As listed in the project spreadsheet, many projects were in progress or completed through the Governor's Office of Storm Recovery and the town's capital plan.

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.		
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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:	Provided 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.		