

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 Village can consider the capabilities in the table below that the Village 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 Village 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 Wantaugh area | TOH 5 | Wantaugh | Flood | New | | Yes | |
| Road Elevation Project: Road Elevation - South Wantaugh Mermaid & Canal | TOHA | Wantaugh | 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 |
| 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 existing shoreline structures to prevent flooding of critical infrastructure and improved property. |
| 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. |
| 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 | \$26350000 | Total cost of all 38 Projects is 73,790,000 |

| Project Number | TOH_1 | TOH_2 | TOH_3 | TOH_4 |
|----------------------------------|--|---|---|---|
| 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; F EMA 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: | Leave Blank | | |
| 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 <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: | 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: | Leave Blank | 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: | <i>Action</i> | <i>Estimated Cost</i> | <i>Evaluation</i> |
| | 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: | | | |

Nassau County Multi-Jurisdictional Hazard Mitigation Plan

Name of Jurisdiction: Town of Hempstead

NYS DHSES Action Worksheet

Project Name: Shoreline Projects
Project Number: Leave Blank

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 existing shoreline structures to prevent flooding of critical infrastructure and improved property.

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

Plan for Implementation

| | | | |
|--|--|--|---|
| Prioritization: | Leave Blank | Desired Timeframe for Implementation: | 1 to 10 Years |
| Estimated Time Required for Project Implementation: | The projects are completed, in-process or will be in process from now through 2020 and beyond. | 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 Conservation, Engineering, Parks, and Sanitation Departments. | Local Planning Mechanisms to be Used in Implementation, if any: | |

Three Alternatives Considered (including No Action)

| Alternatives: | Action | Estimated Cost | Evaluation |
|---------------|---|----------------------------|--|
| | No Action | \$ 0 | |
| | Complete 20 of these projects. | Approximately \$40 million | 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. |
| | Complete these projects in phases, with approximately 10 projects implemented per year. There are several phases to these projects. | \$73,790,000. | Delaying the implementation of some of these projects would reduce the effectiveness of other projects. |

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:

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