9.32 Village of Head of the Harbor

This section presents the jurisdictional annex for the Village of Head of the Harbor. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the Village participated in the planning process; an assessment of the Village of Head of the Harbor's risk and vulnerability; the different capabilities utilized in the Village; and an action plan that will be implemented to achieve a more resilient community.

9.32.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Village of Head of the Harbor's hazard mitigation plan primary and alternate points of contact.

Table 9.32-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Douglas Dahlgard, Mayor Address: 500 North County Road Saint James, NY 11780 Phone Number: 631-338-9651 Email: doug34@optonline.net	Name/Title: Daniel W. White, Deputy Mayor Address: 500 North County Road Saint James, NY 11780 Phone Number: 631-774-0609 Email: DWWHotHTrustee@gmail.com
NFIP Floodplain Administrator	
Name/Title: Robert O'Shea, Building Inspector Address: 500 North County Road Saint James, NY 11780 Phone Number: 631-584-5602 Email: hohinspector@optimum.net	

9.32.2 Municipal Profile

The Village of Head of the Harbor, originally settled in the 18th century, becoming an incorporated village in the year of 1928. The Village has remained a simple, residential community which is zoned two acres with limited one acre parcels in the area south of Deepwells Historic Estate. The Village is wholly residential, however, due to past or existing zoning regulations and/or granted variances, some non-residential uses include agricultural pursuits, religious organizations and private educational facilities.

The Village of Head of the Harbor lies within the Town of Smithtown in the western part of Suffolk County approximately 50 miles east of New York City. The Village is bordered on the north by the Long Island Sound, the west by the Village of Nissequogue, the south by the Hamlet of St. James and the east by the Town of Brookhaven.

The Village of Head of the Harbor is governed by a council form of government consisting of 5 elected officials, including four trustees and the Village Mayor. This body will be responsible for the resolution, implementation and update of the All-Hazards Mitigation Plan. The Village provides police services and general administrative services to its residents.

According to the U.S. Census, the 2010 population for the Village of Head of the Harbor was 1,472. The estimated 2017 population was 1,463, a 0.6 percent decrease from the 2010 Census. Data from the 2017 U.S. Census American Community Survey indicate that 3.0 percent of the population is 5 years of age or younger and 19.0 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.32.3 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to understanding a jurisdiction's overall risk to its hazards of concern. Table 9.32-2 summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development. The figures at the end of this annex illustrate the geographically-delineated hazard areas and the location of potential new development, where available. The recent and anticipated development depicted on these figures excludes the Suffolk County wastewater upgrades; refer to Section 4 (County Profile) for additional information on this development.

Table 9.32-2. Recent and Expected Future Development

Type of Development	2014		2015		2016		2017		2018		2019	
Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)												
	Total	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**
Single Family	1	0	1	0	2	0	2	0	1	0	2	0
Multi-Family	0	0	0	0	0	0	0	0	0	0	0	0
Other (commercial, mixed-use, etc.)	0	0	0	0	0	0	0	0	0	0	0	0
Total Permits Issued	1	0	1	0	2	0	2	0	1	0	2	0

Property or Development Name	Type of Development	# of Units / Structures	Location (address and/or block and lot)	Known Hazard Zone(s)*	Description / Status of Development
Recent Major Development and Infrastructure from 2015 to Present					
None identified					
Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years					
None anticipated					

SFHA Special Flood Hazard Area (1% flood event)

** Only location-specific hazard zones or vulnerabilities identified.*

9.32.4 Capability Assessment

The Village of Head of the Harbor performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. This section summarizes the following findings of the assessment:

- An assessment of legal and regulatory capabilities.
- Development and permitting capabilities.
- An assessment of fiscal capabilities.
- An assessment of education and outreach capabilities.
- Information on National Flood Insurance Program (NFIP) compliance.
- Classification under various community mitigation programs.
- The community's adaptive capacity for the impacts of climate change.

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress in plan integration. Areas with current mitigation integration are summarized in Capability Assessment (Section 9.32.4). The Village of Head of the Harbor identified specific integration activities that will be incorporated into municipal procedures are included in the updated mitigation strategy. Appendix G provides the results of the planning/policy document review and the answers to integration survey questions.

Planning, Legal, and Regulatory Capability

The table below summarizes the regulatory tools that are available to the Village of Head of the Harbor and where hazard mitigation has been integrated.

Table 9.32-3. Planning, Legal, and Regulatory Capability

	Do you have this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible	State Mandated	Has this been integrated?	If no - can it be a mitigation action?
Codes, Ordinances, & Requirements							
Building Code	Yes	Building Construction Code, Chapter 65, Village Code	Local, State	Code Enforcement Officer	Yes	Yes	-
Comment: This article provides for the administration and enforcement of the New York State Uniform Fire Prevention and Building Code (the Uniform Code) and the State Energy Conservation Construction Code (the Energy Code). This article is adopted pursuant to § 10 of the Municipal Home Rule Law. Except as otherwise provided in the Uniform Code, other state law, or other section of this article, all buildings, structures, and premises, regardless of use or occupancy, are subject to the provisions of this article.							
Zoning Code	Yes	Zoning & Land Development, Chapter 165, Village Code	Local	Village Zoning & Land Development	No	Yes	-
Comment: The Zoning & Land Development Chapter was adopted in order to: A. Maintain the existing historic residential environment by relying on nearby areas outside the Village to supply shopping and amusement areas for the present and future residents of the Village. B. Establish suitable controls for a density pattern which will not require public water supply and sewers and which will not create a public hazard in the absence of such public facilities. C. Conserve the natural beauty of the terrain, its open space and wetlands and other valuable ecological features by encouraging low-density development in accordance with the Nassau - Suffolk Comprehensive Regional Plan, with the permanent preservation of natural and historic features, including the shoreline and adjacent marshlands. D. Preserve and protect existing community values by preventing inharmonious or deleterious uses and notably those uses which can more appropriately and economically be provided elsewhere in the larger intercommunity area. E. Provide adequate light, air and privacy; secure safety from fire, flood and other danger; and prevent overcrowding of the land, undue congestion of population and air and water pollution. F. Protect and conserve the value of buildings in the several districts established by this Part 1.G. Promote the most beneficial relation between the uses of land and buildings and the circulation of traffic throughout the Village, having particular regard to the avoidance of congestion in the streets and the provision of safe and convenient traffic access appropriate to the various uses of land and buildings throughout the Village.							
Subdivisions	Yes	Subdivision of Land, Chapter 143, Village Code	Local	Planning Board	No	Yes	-
Comment: The Chapter regulates the subdivision of land.							
Stormwater Management	Yes	Minimization of Erosion Risk of Natural Protective Features, Chapter 85, Village Code	Local	Village Engineer and the Board of Architectural Review	Yes	Yes	-
Comment: The Law works to mitigate erosion from stormwater runoff.							
Post-Disaster Recovery	No	-	-		No	-	-

	Do you have this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible	State Mandated	Has this been integrated? If no - can it be a mitigation action?	
Comment:							
Real Estate Disclosure	Yes	Property Condition Disclosure Act, NY Code - Article 14 §460-467	State	NYS Department of State, Real Estate Agent	Yes	Yes	-
Comment:							
Growth Management	No	-	-	-	No	-	-
Comment: Covered through Zoning and Subdivision chapters.							
Site Plan Review	Yes	Village Zoning Code Ch 165, Sec. 165-102 adopted 2006	Local	Village Zoning & Land Development	No	Yes	-
Comment: Discussed in the Zoning Code.							
Environmental Protection	Yes	Environmental Quality Review, Chapter 81, Village Code	Local	Planning Board, Board of Architectural Review, Board of Zoning Appeals, Village Engineer	Yes	Yes	-
Comment: Article 8 of the Environmental Conservation Law, known as the "State Environmental Quality Review Act of 1975" (SEQRA), provides that all agencies shall prepare, or cause to be prepared by contract or otherwise, an environmental impact statement (EIS) on any action they propose or approve which may have a significant effect on the environment. This chapter is adopted pursuant to Subdivision 3 of § 8-0113 of the Environmental Conservation Law, which requires agencies to adopt and publish such additional procedures as may be necessary for the implementation by them of SEQRA, consistent with the statewide rules and regulations, 6 NYCRR 617 (the "Regulations"), adopted by the Commissioner of Environmental Conservation pursuant to Subdivision 1 of § 8-0113 of the Environmental Conservation Law.							
Flood Damage Prevention	Yes	Flood Damage Prevention, Chapter 97, Village Code	Local	Building Inspector	Yes - BFE+2 feet for all construction in the SFHA (residential and non-residential)	Yes	-
Comment: The Chapter was adopted in order to: A. To protect human life and health; B. To minimize expenditure of public money for costly flood control projects; C. To minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public; D. To minimize prolonged business interruptions; E. To minimize damage to public facilities and utilities such as water and gas mains, electric, telephone, sewer lines, streets and bridges located in areas of special flood hazard; F. To help maintain a stable tax base by providing for the sound use and development of areas of special flood hazard so as to minimize future flood blight areas; G. To provide that developers are notified that property is in an area of special flood hazard; and H. To ensure that those who occupy the areas of special flood hazard assume responsibility for their actions.							
Municipal Separate Storm Sewer System (MS4)	Yes	Illicit Discharge to Storm Sewers, Chapter 166, Village Code	Local	Stormwater Management Officer	Yes	Yes	-
Comment: The chapter was adopted in order to: A. To meet the requirements of the SPDES general permit for stormwater discharges from MS4s, Permit No. GP-02-02 or as amended or revised; B. To regulate the contribution of pollutants to the MS4 since such systems are not designed to accept, process or discharge nonstormwater wastes;							

	Do you have this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible	State Mandated	Has this been integrated?	If no - can it be a mitigation action?
C. To prohibit illicit connections, activities and discharges to the MS4; D. To establish legal authority to carry out all inspection, surveillance and monitoring procedures necessary to ensure compliance with this chapter; and E. To promote public awareness of the hazards involved in the improper discharge of trash, yard waste, lawn chemicals, pet waste, wastewater, grease, oil, petroleum products, cleaning products, paint products, hazardous waste, sediment and other pollutants into the MS4.							
Emergency Management	No	-	-	-	Yes	-	-
Comment:							
Climate Change	No	-	-	-	Yes	-	-
Comment:							
Disaster Recovery Ordinance	No	-	-	-	No	-	-
Comment:							
Disaster Reconstruction Ordinance	No	-	-	-	No	-	-
Comment:							
Freshwater Wetlands Code	Yes	Freshwater Wetlands Code, Chapter 101, Village Code	Local	Various Depts.	No	Yes	-
Comment: Pursuant to § 24-0501 of the New York State Freshwater Wetlands Act (Article 24 of the New York Environmental Conservation Law), the Village of Head-of-the-Harbor shall fully undertake and exercise its regulatory authority with regard to activities subject to regulation under the Act in freshwater wetlands, as shown on the Freshwater Wetlands Map, as such map may from time to time be amended, filed by the Department of Environmental Conservation pursuant to the Act, and in all areas adjacent to any such freshwater wetland up to one hundred (100) feet from the boundary of such wetland. Such regulatory authority shall be undertaken and exercised in accordance with all of the procedures, concepts and definitions set forth in Article 24 of the New York Environmental Conservation Law and Title 23 of Article 71 of such law relating to the enforcement of Article 24, as such law may from time to time be amended.							
Trees	Yes	Trees, Chapter 149, Village Code	Local	Board of Architectural Review, and the Environmental Conservation Board	No	Yes	-
Comment: Trees provide a unique and irreplaceable ecological service. Their essential function in the conversion of carbon dioxide to oxygen supports life on this planet. In a local and specific sense, they serve to reduce pollution in the air and water pollution underground; they stabilize soils against water and wind erosion; they provide an indispensable protection against flooding; they create a major wildlife habitat; and they are of inestimable aesthetic value. In any location the extensive removal of trees produces potentially hazardous effects; in any location the retention of trees is not only a beneficial but an essential practice. In the Village of Head-of-the-Harbor, local topography, basic geologic structure and the presence of highly erodible and easily destabilizable soils all combine to accentuate the hazards of unlimited removal of native trees. Here the benefits of retaining good tree cover are more than aesthetic, for they include factors of safety and welfare, protection of property and even of life. The purpose of this chapter is to secure to the maximum practicable extent these benefits and to reduce as far as possible the dangers associated with unlimited destruction of trees.							
Planning Documents							
Comprehensive Plan	No	-	-	-	No	-	-
Comment:							
Capital Improvement Plan	Yes	Capital Improvement Plan	Local	Administration	No	Yes	-
Comment: Review needs annually.							
Disaster Debris Management Plan	Yes	Suffolk County Multi-	County, Local	Suffolk County FRES	No	Yes	-

	Do you have this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible	State Mandated	Has this been integrated? If no - can it be a mitigation action?	
		Jurisdictional Debris Management Plan					
Comment: This NYS and FEMA approved comprehensive Multi-Jurisdictional Debris Management Plan was developed through the cooperative efforts of Suffolk County and each of the ten (10) Towns, working together in conjunction with partners from private, state and federal agencies.							
Floodplain or Watershed Plan	Yes	LWRP	Local	Administration	No	-	-
Comment: Adopted 1990.							
Stormwater Plan	Yes	Stormwater Management Plan Annual Report	Local	Administration	No	Yes	-
Comment: The Village submits annual reports on its stormwater program.							
Open Space Plan	No	-	-	-	Yes	-	-
Comment:							
Urban Water Management Plan	No	-	-	-	No	-	-
Comment:							
Habitat Conservation Plan	No	-	-	-	No	-	-
Comment:							
Economic Development Plan	No	-	-	-	No	-	-
Comment:							
Shoreline Management Plan	Yes	LWRP	Local	Administration	Yes	Yes	-
Comment: The Villages of Nissequogue and Head of the Harbor have formed a Joint Coastal Commission which administers their jointly adopted LWRP Plan. This commission does public outreach and environmental planning to protect the community from natural hazards and preserve the community's natural habitat							
Community Wildfire Protection Plan	No	-	-	-	No	-	-
Comment:							
Forest Management Plan	No	-	-	-	No	-	-
Comment:							
Transportation Plan	No	-	-	-	No	-	-
Comment:							
Agriculture Plan	No	-	-	-	Yes	-	-
Comment:							
Other (this could include a climate action plan, tourism plan, business development plan, etc.)	No	-	-	-	No	-	-

	Do you have this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Department / Agency Responsible	State Mandated	Has this been integrated? If no - can it be a mitigation action?	
Comment:							
Response/Recovery Planning							
Comprehensive Emergency Management Plan	Yes	Suffolk County Comprehensive Emergency Management Plan (2018)	Suffolk County and Associated Jurisdictions	Suffolk FRES	Yes	Yes	-
Comment: The County Comprehensive Emergency Management Plan (CEMP) describes the emergency obligations of County government and its capability and capacity to undertake emergency assignments or acquire those resources necessary to support its emergency mission. The Concept of Operations of the CEMP describes the management of emergencies within the National Incident Management System (NIMS) and details emergency management programmatic efforts to accommodate present standards.							
Strategic Recovery Planning Report	No	-	-	-	No	-	-
Comment:							
Threat & Hazard Identification & Risk Assessment (THIRA)	No	-	-	-	No	-	-
Comment:							
Post-Disaster Recovery Plan	No	-	-	-	No	-	-
Comment:							
Continuity of Operations Plan	No	-	-	-	No	-	-
Comment:							
Public Health Plan	No	-	-	-	No	-	-
Comment:							
Other	Yes	Coastal Erosion Control Districts	Regional	Administration	No	Yes	-
The Villages of Nissequogue and Head of the Harbor have formed a Joint Coastal Commission which administers their jointly adopted LWRP Plan. This commission does public outreach and environmental planning to protect the community from natural hazards and preserve the community's natural habitat.							

Table 9.32-4. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Response Yes/No; Provide further detail
Development Permits. If yes, what department?	Yes. Building department
Permits are tracked by hazard area. For example, floodplain development permits.	No
Buildable land inventory If yes, please describe If no, please quantitatively describe the level of buildout in the jurisdiction.	No. Fully built out

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Village of Head of the Harbor.

Table 9.32-5. Administrative and Technical Capabilities

Resources	Available? (Yes or No)	Department/ Agency/Position
Administrative Capability		
Planning Board	Yes	Village Planning Board
Mitigation Planning Committee	No	-
Environmental Board/Commission	Yes	Joint Coastal Commission with Nissaquogue for LWRP
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Warning Systems / Services (reverse 911, outdoor warning signals)	Yes	Village Alert System – emails and texts for residents who enroll
Maintenance programs to reduce risk	Yes	DPW cleans catch basins
Mutual aid agreements	Yes	Intermunicipal with T. Smithtown
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	Building Department; Engineering Contract
Engineers or professionals trained in building or infrastructure construction practices	Yes	Engineering Contract
Planners or engineers with an understanding of natural hazards	Yes	Planning Contract
Staff with expertise or training in benefit/cost analysis	Yes	Village Treasurer
Professionals trained in conducting damage assessments	Yes	Building Inspector
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Scientist familiar with natural hazards	Yes	Stonybrook University
NFIP Floodplain Administrator (FPA)	Yes	Engineering Contract
Surveyor(s)	Yes	Survey Contract
Emergency Manager	Yes	The Town of Smithtown Department of Public Safety, and the technical resources they can coordinate from the Town, including but not limited to emergency management, and hazard mitigation planning and engineering are available to the Village
Grant writer(s)	Yes	Contract Entity
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Fiscal Capability

The table below summarizes financial resources available to the Village of Head of the Harbor.

Table 9.32-6. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	No
Capital improvements project funding	No

Financial Resources	Accessible or Eligible to Use (Yes/No)
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas or electric service	No
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the Village of Head of the Harbor.

Table 9.32-7. Education and Outreach Capabilities

Indicate if your jurisdiction has the following resources	Yes/No; Please describe
Public information officer or communications office?	No
Personnel skilled or trained in website development?	Yes. Contract. Administrator.
Hazard mitigation information available on your website; if yes, describe	No
Social media for hazard mitigation education and outreach; if yes, briefly describe.	No
Citizen boards or commissions that address issues related to hazard mitigation; if yes, briefly describe.	Joint Coastal Commission, coastal erosion, dune reconstruction
Other programs already in place that could be used to communicate hazard-related information; if yes, briefly describe.	Biannual newsletter, tax bills
Warning systems for hazard events; if yes, briefly describe.	Village Alert
Natural disaster/safety programs in place for schools; if yes, briefly describe.	Yes. Active shooter training and County programs.
Other	No

Community Classifications

The table below summarizes classifications for community programs available to the Village of Head of the Harbor.

Table 9.32-8. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	NP	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	Yes	8/99	1999
Public Protection (ISO Fire Protection Classes 1	Yes	4/9	-

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
to 10)			
NYSDEC Climate Smart Community	NP	-	-
Storm Ready Certification	NP	-	-
Firewise Communities classification	NP	-	-
Other	No	-	-

Note:
N/A *Not applicable*
NP *Not participating*
- *Unavailable*

Adaptive Capacity

Adaptive capacity is defined as "the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences" (IPCC 2014). In other words, it describes a jurisdiction's current ability to adjust to, protect from, or withstand a hazard event. This term is often discussed in reference to climate change; however, adaptive capacity also includes an understanding of local capacity for adapting to current and future risks and changing conditions. The table below summarizes the adaptive capacity for each hazard and the jurisdiction's rating.

Table 9.32-9. Adaptive Capacity

Hazard	Adaptive Capacity (Capabilities) - High/Medium/Low*
Coastal Erosion	Medium
Cyber Security	Medium
Disease Outbreak	Medium
Drought	Medium
Earthquake	Medium
Expansive Soils	Medium
Extreme Temperature	Medium
Flood	Medium
Groundwater Contamination	Medium
Hurricane	Low
Infestation and Invasive Species	Medium
Nor'Easter	Medium
Severe Storm	Low
Severe Winter Storm	Low
Shallow Groundwater	Medium
Wildfire	Medium

**High* *Capacity exists and is in use*
Medium *Capacity may exist; but is not used or could use some improvement*
Low *Capacity does not exist or could use substantial improvement*
Unsure *Not enough information is known to assign a rating*

The Village has access to resources to determine the possible impacts of climate change upon the municipality through Stonybrook University. The administration is supportive of integrating climate change in policies or actions and provides training to staff.

9.32.5 National Flood Insurance Program

This section provides specific information on the management and regulation of the regulatory floodplain.

NFIP Floodplain Administrator (FPA)

Robert O'Shea, Building Inspector

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Village of Head of the Harbor.

Table 9.32-10. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties
Village of Head of the Harbor	8	4	$17,188	0

Source: *FEMA 2020*
Notes: *According to FEMA statistics as of 7/13/2020*
RL *Repetitive Loss*

Flood Vulnerability Summary

Lists are maintained of the properties that are damaged, however no tracking has been necessary for property owners interested in mitigation. For minimal losses, the Village Floodplain Administrator / Building Inspector has the capabilities to perform the damage reports. However, should a significant natural event widely impact the Village, or have other needs beyond current capabilities, the Town of Smithtown Department of Public Safety provide appropriate resources to address the properties of concern.

For minimal losses, the Village Floodplain Administrator and Building Inspector has the capabilities to perform the damage reports. However, should a significant natural event widely impact the Village, or have other needs beyond current capabilities, the Town of Smithtown Department of Public Safety provide appropriate resources to address the properties of concern.

One property was damaged due to flooding during Hurricane Sandy; it was not Substantially Damaged.

Resources

The community FDPO identifies the Building Inspector as the local NFIP Floodplain Administrator for which floodplain administration is an auxiliary duty.

In addition to the NFIP FPA, the community has supplementary staff for which NFIP is an auxiliary duty; personnel include a contracted professionally licensed Village Engineer and professional grant writer for the Village. The Town of Smithtown makes resources available to the Village as necessary to assist with implementation the floodplain management program.

Duties and responsibilities of the Building Inspector/NFIP Administrator are permit review, damage assessments, record-keeping, and inspections. GIS services are provided, as necessary, by the Town of Smithtown or the Village Engineer.

The building inspector has received training in many aspects of floodplain administration, code enforcement and other related training regularly in the past. He is adequately trained to fulfill his responsibilities as the municipal floodplain administrator. Should any local training opportunities arise for further training and/or certification, the Village would participate.

The Villages of Nissequogue and Head of the Harbor have formed a Joint Coastal Commission that administers their jointly adopted Local Waterfront Revitalization Program Plan. This commission does public

outreach and environmental planning to protect the community from natural hazards and preserve the community's' natural habitat.

Duties and responsibilities of the Building Inspector/NFIP Administrator are permit review, damage assessments, record-keeping, and inspections. GIS services are provided, as necessary, by the Town of Smithtown or the Village Engineer.

In order to adequately address flooding concerns within the Village, the floodplain administrator feels additional areas that currently unmapped in the area of Mill Creek and Harbor Hill Road should be studied and mapped by FEMA. The area has limited NFIP policy coverage. Additional training and information regarding floodplain management would be welcomed.

Compliance History

Village of Head of the Harbor joined the NFIP on August 1, 1983, and is currently an active member of the NFIP. The current effective Flood Insurance Rate Maps are dated September 25, 2009. The communities Flood Damage Prevention Ordinance (FDPO), found at Chapter 97 of the local code, was last updated on September 16, 2009.

The community is currently in good standing in the NFIP and has no outstanding compliance issues. The most recent Community Assistance Visit (CAV) took place on September 23, 1992.

Regulatory

The communities Flood Damage Prevention Ordinance (FDPO) was last updated on September 16, 2009, and is found at Chapter 97 of the local code.

Floodplain management regulations and ordinances meet FEMA and New York State minimum requirements.

Community Rating System

The Village of Head of Harbor does not participate in the Community Rating System. The benefit of joining the Community Rating System (CRS) to the Village of Head of the Harbor is low as, from their current knowledge of the program, it appears to cost more money to join than policy holders would see in a reduction of their premiums.

9.32.6 Integration with Other Planning Initiatives

As this HMP update is implemented, the Village of Head of the Harbor will use information from the plan as the best available science and data for natural hazards. The capability assessment presented in this annex identifies codes, plans, and programs that provide opportunities for integration. The Suffolk County and local action plans developed for this HMP update actions related to plan integration, as well as progress on these actions, will be reported through the progress reporting process described in Volume I. New opportunities for integration also will be identified as part of the annual progress report.

Existing Integration

It is the intention of this municipality to incorporate hazard mitigation planning and natural hazard risk reduction as an integral component of ongoing municipal operations. The following textual summary and table identify relevant planning mechanisms and programs that have been/will be incorporated into municipal procedures, which may include former mitigation initiatives that have become continuous/on-going programs and may be considered mitigation "capabilities":

- **Building Department:** The Village Building Inspector is responsible for the issuance of building permits and certificates of occupancy for all structures as defined in the Village Code. The Village Building Inspector also serves as the Village Code Enforcement Officer
- **Highway Department:** The Village Highway Department performs street maintenance and road repairs and maintains village parks.
- **Consulting Engineer:** The Village Engineer provides professional engineering services in the design and construction management of Village projects and technical assistance to the Planning Board and other Village Boards and Departments as needed.
- **Fire Services/EMT Services:** The Village contracts with the St. James Fire District for fire and emergency medical technician services. Fire hydrants are serviced by Suffolk County Water Authority and St. James Water District.
- **Deer Management:** The Deer Management Advisory Committee works to control the deer population through surveying, deer immunocontraception research, etc.
- **Town of Smithtown:** The Village works with the Town of Smithtown on various cooperative efforts such as stormwater cleaning, tree trimming, and various hazard mitigation initiatives.

Opportunities for Future Integration

- **Participation in Regional Development Planning (2020-Head of the Harbor-010):** Development outside of Village boundaries can lead to Village impacts such as increased stormwater flow and groundwater contamination. The Village will work with neighboring jurisdictions to discuss development decisions which can negatively impact the Village.

9.32.7 Evacuation, Sheltering, Temporary Housing, and Permanent Housing

Evacuation routes, sheltering measures, temporary housing, and permanent housing must all be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Evacuation Routes

The Village follows the lead of the Town of Smithtown and Suffolk County for declaration of evacuations and the establishment of evacuation routes during disaster events.

Sheltering

The Village has identified Village Hall as a sheltering location. The Village Hall has a natural gas generator and room for 85 people.

Temporary Housing

The Village has noted that space for temporary housing could be made available at Village Hall, 500 Route 25A, Saint James, NY 11780.

Permanent Housing

The Village is fully built out and does not have space available for the placement of permanent housing.

9.32.8 Hazard Event History Specific to the Village of Head of the Harbor

Suffolk County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5 (Risk Assessment) of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the County and its municipalities. The Village of Head of the Harbor's history of federally-declared (as presented by FEMA) and significant hazard events (as presented

in NOAA-NCEI) is consistent with that of Suffolk County. Table 9.32-11 provides details regarding municipal-specific loss and damages the Village experienced during hazard events. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.32-11. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
February 8 – 9, 2013	Severe Winter Storm and Snowstorm (FEMA DR-4111)	Yes	Low pressure that formed along the northern Gulf coast by the morning of Thursday, February 7, 2013 moved northeast to near Cape Hatteras by the morning of Friday, February 8, 2013 . The low then rapidly intensified while moving northeast to a position east of Cape Cod by the morning of Saturday, February 9, 2013, producing very heavy snowfall and blizzard conditions across central and eastern Long Island on February 8th and 9th, and winter storm conditions across the rest of southeast New York.	Although the County was impacted, the Village of Head of Harbor did not report any damages.
March 14 – 15, 2017	Severe Winter Storm and Snowstorm (FEMA DR-4322)	Yes	On Tuesday, March 14th, rapidly deepening low pressure tracked up the eastern seaboard resulting in damaging winds in Suffolk County.	Costs incurred included overtime costs of $36,000, equipment costs of $13,510, and $65,000 for salt and sand. These costs include the Town of Smithtown and its villages.

Notes:

EM Emergency Declaration (FEMA)
FEMA Federal Emergency Management Agency
DR Major Disaster Declaration (FEMA)
N/A Not applicable

9.32.9 Hazard Ranking and Jurisdiction-Specific Vulnerabilities

The hazard profiles in Section 5 (Risk Assessment) of this plan have detailed information regarding each plan participant's vulnerability to the identified hazards. The following summarizes critical facility and community lifeline flood exposure, and the hazards of greatest concern and risk to the Village of Head of the Harbor. For additional vulnerability information relevant to this jurisdiction, refer to Section 5.

A gradient of certainty was developed to summarize the confidence level regarding the input used to populate the hazard ranking. A certainty factor of high, medium or low was selected and assigned to each hazard to provide a level of transparency and create increased understanding of the data used to support the resulting ranking. The following scale was used to assign a certainty factor to each hazard:

- High—Defined scenario/event to evaluate; probability calculated; evidenced-based/quantitative assessment to estimate potential impacts through hazard modeling.
- Moderate—Defined scenario/event or only a hazard area to evaluate; estimated probability; combination of quantitative (exposure analysis, no hazard modeling) and qualitative data to estimate potential impacts.
- Low—Scenario or hazard area is undefined; there is a degree of uncertainty regarding event probability; majority of potential impacts are qualitative.

Critical Facilities

New York Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2′ above the Base Flood Elevation (BFE). This statute is outlined at http://tinyurl.com/6-CRR-NY-502-4. While all vulnerabilities should be assessed and documented, the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 500-year flood event, or worst damage scenario. For those that do not meet these criteria, the jurisdiction must identify an action to achieve this level of protection (NYS DHSES 2017).

The table below identifies critical facilities and community lifelines located in the 1-percent and 0.2-percent floodplain. It also summarizes if the facility is already mitigated in compliance with NYS standards (i.e., to the 0.2-percent annual chance event or worse-case scenario), or if a new mitigation action is proposed in the plan update.

Table 9.32-12. Potential Flood Losses to Critical Facilities

Name	*Type*	*Exposure*			*Complies with NYS Standards*	*Addressed by Proposed Action*
		1% Event		*0.2% Event*		
		A-Zone	*V-Zone*			
None identified at this time						

Source: Suffolk County 2020; FEMA 2009
Notes: x = Facility is located in the floodplain boundary. *Community Lifeline

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 (Risk Assessment) of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating jurisdiction may have differing degrees of risk exposure and vulnerability compared to Suffolk County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential hazards for the Village of Head of the Harbor. The Village of Head of the Harbor has reviewed the county hazard risk/vulnerability risk ranking table and provided input to its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the Village indicated the following:

- The Village changed the hazard ranking for groundwater contamination from medium to high, noting that development activity surrounding the Village has the potential to lead to groundwater contamination that would impact the Village.
- The Village changed the hazard ranking for severe storm and severe winter storm from medium to high, noting that the steep terrain of the Village makes roadways dangerous due to runoff and snow/ice and these storms can take down trees and power lines. Past storm events have shut down the Village for extended periods of time while cleanup takes place.

Table 9.32-13. Hazard Ranking

Coastal Erosion	Cyber Security	Disease Outbreak	Drought	Earthquake	Expansive Soils
Medium	Medium	Medium	Low	Medium	Low

Extreme Temperature	Flood	Groundwater Contamination	Hurricane	Infestation and Invasive Species	Nor'Easter
Medium	Medium	High	High	Medium	High

Severe Storm	Severe Winter Storm	Shallow Groundwater	Wildfire
High	High	Low	Medium

Identified Issues

In addition to those identified above, the municipality has identified the following vulnerabilities:

- The topography of the Village contains many steep hills and isolated valleys, and the Village is heavily wooded. As such, stormwater and debris management are challenges throughout the Village and are exacerbated by most natural hazards.

9.32.10 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2014 HMP. Actions that are carried forward as part of this plan update are included in the updated mitigation strategy table (Table 9.32-15). Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under 'Capability Assessment' presented previously in this annex.

Table 9.32-14. Status of Previous Mitigation Actions

Project #	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if complete)		Next Steps 1. Project to be included in 2020 HMP or Discontinue 2. If including action in the 2020 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
HOH-1	Establish a Capital Improvement program for the village as a mechanism for funding projects, and process for review and update	All Hazards	Village Mayor/ Trustee's		Ongoing Capability	Cost		1. Discontinue 2. 3. Ongoing Capability
						Level of Protection		
						Damages Avoided; Evidence of Success		
HOH-2 (prev. HOH-3)	Maintain National Incident Management System, State Emergency Management System, and Incident Command System training for Village Trustees and other critical Village personnel	All Hazards	Village Mayor/ Trustee's		No Progress	Cost		1. Discontinue 2. 3. Smithtown Public Safety is responsible for this action.
						Level of Protection		
						Damages Avoided; Evidence of Success		
HOH-3 (prev. HOH-4)	Partner with the Town of Smithtown on their Mitigation projects that impact the Village to	Flood, Nor'Easter, Hurricane, Severe Weather,	Village, Town of Smithtown		Ongoing Capability	Cost		1. Discontinue 2.
						Level of Protection		

Project #	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if complete)		Next Steps 1. Project to be included in 2020 HMP or Discontinue 2. If including action in the 2020 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
	leverage resources, and secure multiple tangible benefits for both entities.	Shallow Groundwater, Coastal Erosion				Damages Avoided; Evidence of Success		3. Ongoing Capability
HOH-5 (prev. HOH-6)	As capabilities permit, support and participate in county led initiatives intended to build local and regional mitigation and risk-reduction capabilities (see Section 9.1), specifically it is acknowledged that opportunities for multi-jurisdictional partnership may be beneficial to enhance the following: • Natural hazard awareness and personal scale risk reduction/mitigation public education and outreach programs • Post-disaster assessment and recovery capabilities	All Hazards	Ten Towns of Suffolk County, in partnership with Suffolk County and Villages		Ongoing Capability	Cost		1. Discontinue 2. 3. Ongoing Capability
						Level of Protection		
						Damages Avoided; Evidence of Success		

Project #	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if complete)		Next Steps 1. Project to be included in 2020 HMP or Discontinue 2. If including action in the 2020 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
	• Debris Management • Outreach to private property owners to improve understanding of damage history and create interest in mitigation activities • Regional, county and local capabilities to manage seismic risk, both pre- and post-disaster Alignment of Mitigation Initiatives through all levels of Government (effort to build State and Federal level recognition and support of the County and local hazard mitigation planning strategies identified in this plan).							

Project #	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if complete)		Next Steps 1. Project to be included in 2020 HMP or Discontinue 2. If including action in the 2020 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
HOH-6 (prev HOH-7)	Support any actions undertaken by the Town of Smithtown concerning post-disaster action plans and debris management plans by continuing to adopt updates to the current emergency management plans.	All Hazards	Village, Town of Smithtown		Ongoing Capability	Cost		1. Discontinue 2. 3. Ongoing Capability
						Level of Protection		
						Damages Avoided; Evidence of Success		
HOH-7 (prev. HOH-8)	Participate in any locally-offered educational training opportunities regarding participation in incentive-based programs such as, CRS and "Storm-Ready".	Flood, Nor'Easter, Hurricane, Severe Weather	Village		Ongoing Capability; The Village considers participation in programs.	Cost		1. Discontinue 2. 3. Ongoing Capability
						Level of Protection		
						Damages Avoided; Evidence of Success		
HOH-8 (prev. HOH-9)	Inventory areas of the Village that are subject to repetitive losses from surface, groundwater and/or tidal flooding. Evaluate potential improvements to stormwater management and/or other municipal	Nor'Easters; Severe Winter Storms; Hurricane; Flooding; Severe Storms; Coastal Erosion; Shallow Groundwater; Expansive Soils	Village		In Progress	Cost		1. Include in 2020 HMP 2. 3.
						Level of Protection		
						Damages Avoided; Evidence of		

Project #	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if complete)		Next Steps 1. Project to be included in 2020 HMP or Discontinue 2. If including action in the 2020 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
	infrastructure that could mitigate said losses. Perform feasibility studies, develop designs and implement projects as funding becomes available.					Success		
HOH -9 (new)	Inventory any private properties which have reported severe repetitive damages from natural hazards, for example coastal erosion, flooding and/or shallow groundwater. Evaluate surrounding existing conditions. Consider the costs and benefits of mitigation measures such as municipal public improvements, acquisition, relocation, and/or structural retrofits. Develop a list of project proposals, prioritized using methods including FEMA Benefit Cost Analysis	All Hazards	Village		Complete	Cost		1. Discontinue 2. 3. Complete
						Level of Protection		
						Damages Avoided; Evidence of Success		

Project #	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if complete)		Next Steps 1. Project to be included in 2020 HMP or Discontinue 2. If including action in the 2020 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
HOH -10 (new) Sandy HMGP LOI #1905	Head of the Harbor Village Hall Critical Services Back Up Power	Power Failure from all natural hazards incl.: Hurricane, Nor'Easters, Severe Storms, Severe Winter Storm, Wildfire	Village of Head of the Harbor, Margaret O'Keefe, Village Clerk		Complete	Cost		
						Level of Protection		
						Damages Avoided; Evidence of Success		
HOH -11 (new)	Continue to assess and identify erosion-prone areas in need of repair, replenishment and/or retro-fit that are critical to mitigate potential future losses within the Village. Implement solutions as funding becomes available.	Nor'Easters; Severe Winter Storms; Hurricane; Flooding; Severe Storms; Coastal Erosion	Village; possible dependencies on Town of Smithtown, Suffolk County and/or New York State		In Progress	Cost		1. Include in 2020 HMP 2. 3.
						Level of Protection		
						Damages Avoided; Evidence of Success		
HOH -12 (new)	Assess and prioritize needed flood prevention projects in the following risk/prone areas: Mills Pond, and Head of the Harbor and implement improvements as funding becomes available.	Nor'Easters Severe Winter Storms, Flood, Hurricane, Severe Weather; Coastal Erosion; Shallow Groundwater	Village, Town of Smithtown		Mill Creek by the Grist Mill, entrance to Avalon Park. Holding pond for stormwater. Spillway under Harbor Road into Mill Creek. Failure of spillway would	Cost		1. Include in 2020 HMP 2. Survey spillway for structure and function. 3.
						Level of Protection		
						Damages Avoided; Evidence of		

Project #	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the Solution (Project)	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if complete)		Next Steps 1. Project to be included in 2020 HMP or Discontinue 2. If including action in the 2020 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
					result.	Success		
HOH -13 (new)	Inventory and evaluate all existing bridges/culverts under Village jurisdiction: develop project concepts to increase structural stability & drainage capacity of culverts significant to storm water conveyance & supporting critical evacuation and response routes.	Nor'Easters; Flooding; Shallow Groundwater	Village, Town of Smithtown, possible dependencies on Suffolk County and/or New York State		In Progress	Cost		1. Include in 2020 HMP 2. 3.
						Level of Protection		
						Damages Avoided; Evidence of Success		

Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Village of Head of the Harbor has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2014 HMP:

- Erosion control and protection of environmental habitats is a priority for the Village, as such they have adopted a Local Waterfront Revitalization Plan and formed a Joint Coastal Commission with a neighboring Village to perform public outreach and environmental planning to protect the shoreline and coastal habitat from natural hazards such as erosion, coastal storms et al.
- PSEG completed a utility infrastructure hardening project in the Village. In addition, PSEG completes tree trimming along power lines on an as needed basis.

Proposed Hazard Mitigation Initiatives for the HMP Update

The Village of Head of the Harbor participated in a mitigation action workshop in June 2020 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 'Selecting Appropriate Mitigation Measures for Floodprone Structures' (March 2007) and FEMA 'Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards' (January 2013).

Table 9.32-15 summarizes the comprehensive-range of specific mitigation initiatives the Village of Head of the Harbor would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide-range of activities and mitigation measures selected.

As discussed in Section 6 (Mitigation Strategy), fourteen criteria are used to evaluate and prioritize each proposed mitigation action. A numeric factor is assigned (-1, 0, or 1) to each criterion to provide a relative indication of the opportunities and constraints of each action. A numerical sum of the input provides the basis of the prioritization of actions wherein each action is assigned a category of Low, Medium, or High to indicate an implementation hierarchy. A High priority action indicates the jurisdiction will prioritize its implementation and apply for funding, if needed, as opportunities become available during the plan period of performance. This does not prevent the jurisdiction from implementing other ranked actions; however, this provides a snapshot of implementation priority at the time of this plan update.

Table 9.32-16 provides a summary of the evaluation and prioritization for each proposed mitigation initiative. Refer to the action worksheets at the end of this annex for more details on the high-ranked hazards identified first for implementation.

Table 9.32-15. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
2020-Head of the Harbor-001	Cordwood Road Stormwater Feasibility Study	1, 2	Flood, Severe Storm	**Problem:** Cordwood Road lacks appropriate drainage. The steepness of the roadway coupled with runoff has led to roadway erosion and lack of stormwater treatment before entering the harbor. In particular, a wood retaining wall which holds back a stormwater pond along the road needs to be addressed to prevent failure. **Solution**: Complete Stormwater feasibility study to reduce runoff and increase groundwater infiltration. Make additional structural upgrades to prevent failure of wood retaining wall.	No	None	2 years	Engineer, Village of Head of the Harbor, Village of Nissequogue, Town of Smithtown	TBD by feasibility study	Increased efficiency of stormwater system	HMGP, BRIC, Town and Village budgets	High	LPR, SIP	SP
2020-Head of the Harbor-002	Hitherbrook Road	2	Severe Storm, Flood	**Problem**: Hitherbrook Road washed out during a 7-inch rainfall event. The roadway was restored and stormwater upgrades were made but additional stormwater upgrades may be needed. **Solution**: The Village will monitor the stormwater improvements to determine if additional upgrades are necessary. If so, the Village will carry out the additional expansion of the stormwater system on the road.	No	None	Within 5 years	Village Administration	TBD	Roadway protected from washout	HMGP, Village budget	High	SIP	SP
2020-Head of the Harbor-003	Coastal Erosion Monitoring	1, 2, 3, 5	Coastal Erosion, Hurricane, Nor'Easter	**Problem**: The Village has shoreline which could be exposed to coastal erosion. **Solution**: The Village will participate in a county led	No	None	Within 1 year	SCWD, Village Administration	Staff time	Identification of coastal erosion	County budget	High	NSP	NR

Table 9.32-15. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
				erosion monitoring program.										
2020-Head of the Harbor-004	Mill Creek Road	2	Flood, Severe Storm,	**Problem**: Mill Creek Roadway is a single lane road is a low-lying roadway that experiences flooding from the Grist Mill north to Stonybrook Harbor. The roadway is privately owned. Roughly 10 homes are reliant on the roadway for access. **Solution**: The Village will work with the roadway's ownership to secure funding to conduct an engineering study to harden the roadway and elevate the roadway.	No	None	Within 5 years	Engineer	$50,000	Reduction in flood risk	HMGP, BRIC, Private funding	High	SIP	PP
2020-Head of the Harbor-005	Street Sweeper	2, 5	Severe Storm, Flood	**Problem**: The Village street sweeper is no longer functional and needs to be replaced. Street sweeping is necessary to prevent clogging of the stormwater system. **Solution**: The Village will purchase a used street sweeper and continue street sweeping maintenance.	No	None	Within 1 year	Administration	$100,000	Stormwater system kept from clogging	HMGP, Village budget	High	LPR	SP
2020-Head of the Harbor-006	Backup Power for Highway Department	1, 2, 7	All Hazards	**Problem:** The Highway Department lacks a backup power source. **Solution:** The Village will purchase and install a backup generator and necessary electrical components for the Highway Department.	Yes	No	1 year	Highway Department, OEM	$50,000	Ensures continuity of operations of Highway Department	FEMA HMGP and PDM, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG)	High	SIP	PP

Table 9.32-15. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
											Program, Municipal Budget			
2020-Head of the Harbor-007	Harbor Road Culvert	2	Severe Storm, Flood	**Problem**: The galvanized metal culvert under Harbor Road services Stoneybrook Harbor and a tidal wetland. The culvert is at the end of its useable life. **Solution**: The Village will replace the culvert and conduct necessary roadway upgrades.	No	None	Within 2 years	Engineer	$50,000	Prevents culvert collapse/flooding	HMGP, BRIC, Village budget	High	SIP	SP
2020-Head of the Harbor-008	St. James Fire Department Retrofit	1, 2, 7	Severe Storm, Severe Winter Storm, Hurricane, Nor'Easter	**Problem:** The St. James Fire Department is located outside of the Village but is responsible for emergency response to the Village. The building is in need of retrofit to meet modern protections. The building is a historical structure. **Solution:** The Village will work with the St. James Fire Department to retrofit the building to meet modern needs including roof repair/replacement, heating/air conditioning, etc.	Yes	None	Within 5 years	St. James Fire Department, Village Administration	$200,000	Critical services protected	Fire Department, HMGP, BRIC, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program,	High	SIP	PP
2020-Head of the Harbor-009	Boom Truck for Tree Trimming	3	Severe Storm, Severe Winter Storm, Hurricane, Nor'Easter	**Problem:** The Village lacks a boom truck for tree trimming and relies on outside contractors for trimming and emergency cleanups. **Solution:** The Village will purchase a boom truck and train available staff for its use.	No	None	Within 2 years	Public Works	$100,00	Increased capability to conduct trimming and emergency cleanup	HMGP, Village budget	High	LPR	PR, ES
2020-Head	Participate in Regional	4, 6	Groundwater Contamination,	**Problem:** Development outside of Village	No	None	Within 6 months	Administration	Staff time	Input on potential	Village budget	High	LPR	PR

Table 9.32-15. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	EHP Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
of the Harbor-010	Development Planning		Severe Storm	boundaries can lead to Village impacts such as increased stormwater flow and groundwater contamination. **Solution:** The Village will work with neighboring jurisdictions to discuss development decisions which can negatively impact the Village.						negative hazard impacts on the Village				

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CAV	*Community Assistance Visit*
CRS	*Community Rating System*
DPW	*Department of Public Works*
EHP	*Environmental Planning and Historic Preservation*
FEMA	*Federal Emergency Management Agency*
FPA	*Floodplain Administrator*
HMA	*Hazard Mitigation Assistance*
N/A	*Not applicable*
NFIP	*National Flood Insurance Program*
OEM	*Office of Emergency Management*

Potential FEMA HMA Funding Sources:

FMA	*Flood Mitigation Assistance Grant Program*
HMGP	*Hazard Mitigation Grant Program*
PDM	*Pre-Disaster Mitigation Grant Program*

Timeline:

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Critical Facility:

Yes *Critical Facility located in 1% floodplain*

Mitigation Category:

- *Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.*
- *Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.*
- *Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.*

- *Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities*

CRS Category:

- *Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.*
- *Property Protection (PP) - These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.*
- *Public Information (PI) - Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.*
- *Natural Resource Protection (NR) - Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP) - Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES) - Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities*

Table 9.32-16. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2020-Head of the Harbor-001	Cordwood Road Stormwater Feasibility Study	1	1	1	1	1	1	0	1	1	1	1	1	1	1	13	High
2020-Head of the Harbor-002	Hitherbrook Road	1	1	1	0	1	1	1	1	1	1	1	1	1	1	13	High
2020-Head of the Harbor-003	Coastal Erosion Monitoring	0	1	1	1	1	1	0	1	1	1	0	1	1	1	11	High
2020-Head of the Harbor-004	Mill Creek Road	1	1	1	1	1	0	1	1	1	1	1	1	1	1	13	High
2020-Head of the Harbor-005	Street Sweeper	0	1	1	1	1	1	0	1	1	1	1	1	1	1	12	High
2020-Head of the Harbor-006	Backup Power for Highway Department	1	1	1	1	1	1	0	1	1	1	1	1	1	1	13	High
2020-Head of the Harbor-007	Harbor Road Culvert	1	1	1	1	1	1	0	1	1	1	1	1	1	1	13	High
2020-Head of the Harbor-008	St. James Fire Department Retrofit	1	1	1	1	1	0	0	1	1	1	1	0	1	1	11	High
2020-Head of the Harbor-009	Boom Truck for Tree Trimming	0	1	1	1	1	1	0	1	1	1	1	1	1	1	12	High
2020-Head of the Harbor-010	Participate in Regional Development Planning	1	1	1	1	1	0	1	1	1	1	1	1	1	1	13	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).

9.32.11 Proposed Mitigation Action Types

The table below indicates the range of proposed mitigation action categories.

Table 9.32-17. Analysis of Mitigation Actions by Hazard and Category

	FEMA				CRS					
Hazard	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion		2020-Head of the Harbor-006	2020-Head of the Harbor-003			2020-Head of the Harbor-006		2020-Head of the Harbor-003		
Cyber Security		2020-Head of the Harbor-006				2020-Head of the Harbor-006				
Disease Outbreak		2020-Head of the Harbor-006				2020-Head of the Harbor-006				
Drought		2020-Head of the Harbor-006				2020-Head of the Harbor-006				
Earthquake		2020-Head of the Harbor-006				2020-Head of the Harbor-006				
Expansive Soils		2020-Head of the Harbor-006				2020-Head of the Harbor-006				
Extreme Temperature		2020-Head of the Harbor-006				2020-Head of the Harbor-006				
Flood	2020-Head of the Harbor-001, 2020-Head of the Harbor-005	2020-Head of the Harbor-001, 2020-Head of the Harbor-002, 2020-Head of the Harbor-004, 2020-Head of the				2020-Head of the Harbor-004, 2020-Head of the Harbor-006			2020-Head of the Harbor-001, 2020-Head of the Harbor-002, 2020-Head of the Harbor-005, 2020-Head of the Harbor-007	

	FEMA				CRS					
Hazard	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
		Harbor-006, 2020-Head of the Harbor-007								
Groundwater Contamination	2020-Head of the Harbor-010	2020-Head of the Harbor-006			2020-Head of the Harbor-010	2020-Head of the Harbor-006				
Hurricane	2020-Head of the Harbor-009	2020-Head of the Harbor-006, 2020-Head of the Harbor-008	2020-Head of the Harbor-003		2020-Head of the Harbor-009	2020-Head of the Harbor-006, 2020-Head of the Harbor-008			2020-Head of the Harbor-003	2020-Head of the Harbor-009
Infestation and Invasive Species		2020-Head of the Harbor-006				2020-Head of the Harbor-006				
Nor'easter	2020-Head of the Harbor-009	2020-Head of the Harbor-006, 2020-Head of the Harbor-008	2020-Head of the Harbor-003		2020-Head of the Harbor-009	2020-Head of the Harbor-006, 2020-Head of the Harbor-008			2020-Head of the Harbor-003	2020-Head of the Harbor-009
Severe Storm	2020-Head of the Harbor-001, 2020-Head of the Harbor-005, 2020-Head of the Harbor-009, 2020-Head of the Harbor-010	2020-Head of the Harbor-001, 2020-Head of the Harbor-002, 2020-Head of the Harbor-004, 2020-Head of the Harbor-006, 2020-Head of the			2020-Head of the Harbor-009, 2020-Head of the Harbor-010	2020-Head of the Harbor-004, 2020-Head of the Harbor-006, 2020-Head of the Harbor-008			2020-Head of the Harbor-001, 2020-Head of the Harbor-002, 2020-Head of the Harbor-005, 2020-Head of the Harbor-007	2020-Head of the Harbor-009

	FEMA				CRS					
Hazard	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
		Harbor-007, 2020-Head of the Harbor-008								
Severe Winter Storm	2020-Head of the Harbor-009	2020-Head of the Harbor-006, 2020-Head of the Harbor-008			2020-Head of the Harbor-009	2020-Head of the Harbor-006, 2020-Head of the Harbor-008				2020-Head of the Harbor-009
Shallow Groundwater		2020-Head of the Harbor-006				2020-Head of the Harbor-006				
Wildfire		2020-Head of the Harbor-006				2020-Head of the Harbor-006				

Note: Section 6 (Mitigation Strategy) provides for an explanation of the mitigation categories.

9.32.12 Staff and Local Stakeholder Involvement in Annex Development

The Village of Head of the Harbor followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many Village departments, including: Mayor. The Mayor represented the community on the Suffolk County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes who participated and in what capacity. Additional documentation on the municipality's planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.32-18. Contributors to the Annex

Name	Title/Entity	Method of Participation
Doug Dahlgard	Mayor	Primary Point of Contact, attended plan participant meetings, provided impact information, contributed to mitigation strategy
Margret O'Keefe	Village Administrator/Clerk	Secondary Point of Contact
Robert O'Shea	Building Inspector	NFIP Floodplain Administrator

9.32.13 Hazard Area Extent and Location

Hazard area extent and location maps have been generated for the Village of Head of the Harbor that illustrate the probable areas that may be impacted within the municipality. These maps are based on the best available data at the time of the preparation of this plan and are considered to be adequate for planning purposes. The maps have only been generated for those hazards that can be clearly identified using mapping techniques and technologies, and for which the Village of Head of the Harbor has significant exposure.

Figure 9.32-1. Village of Head of the Harbor Hazard Area Extent and Location Map 1

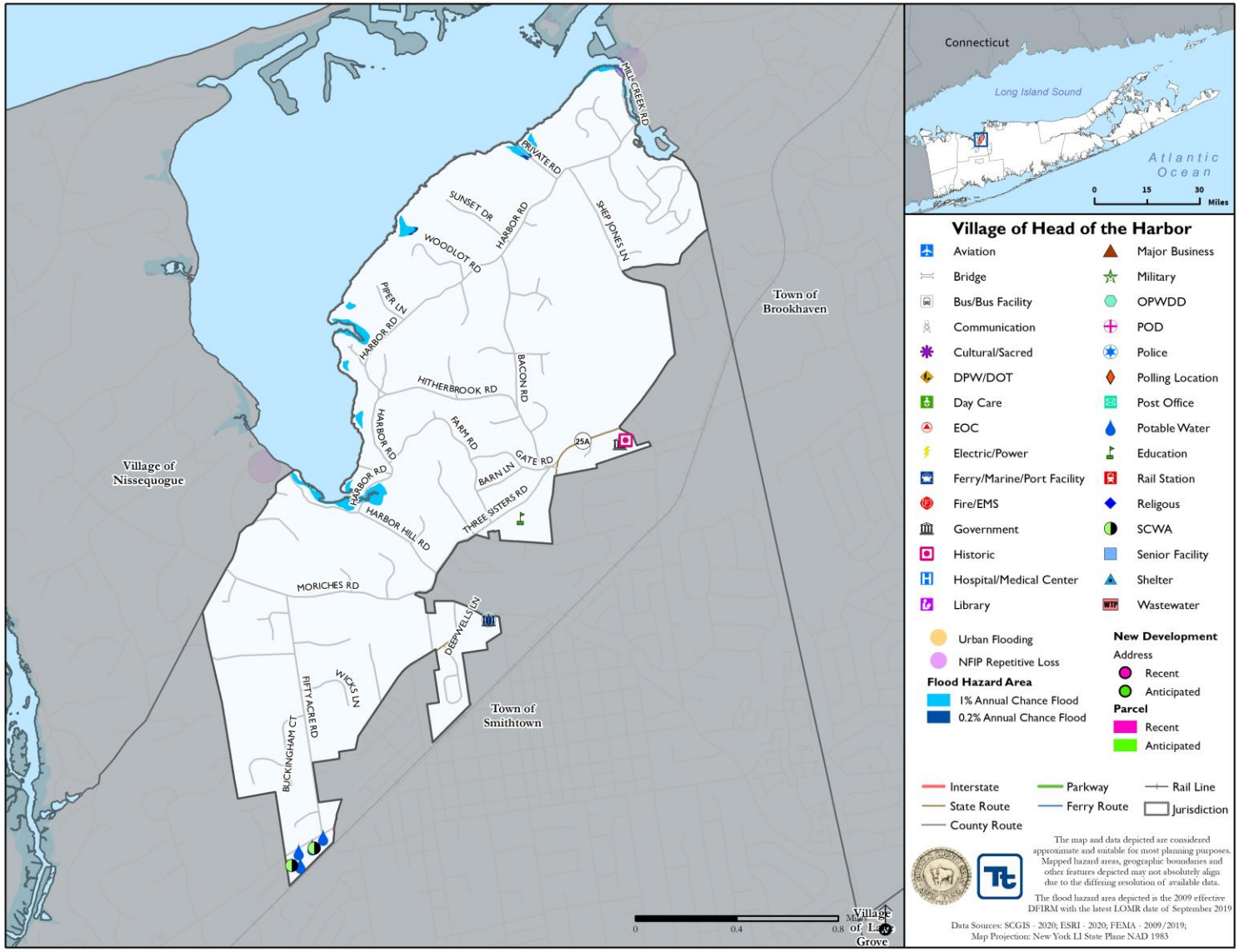


Figure 9.32-2. Village of Head of the Harbor Hazard Area Extent and Location Map 2

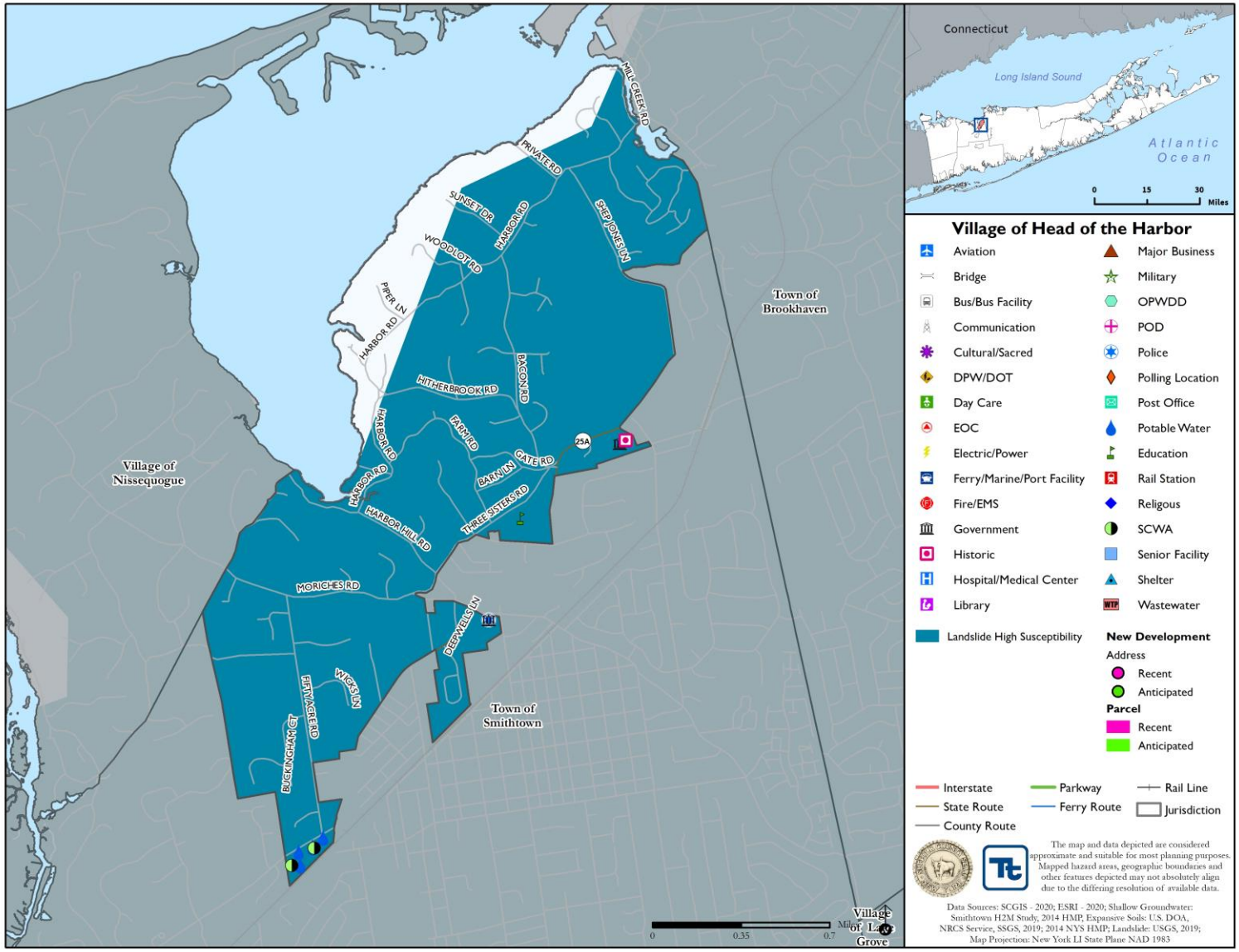


Figure 9.32-3. Village of Head of the Harbor Hazard Area Extent and Location Map 3

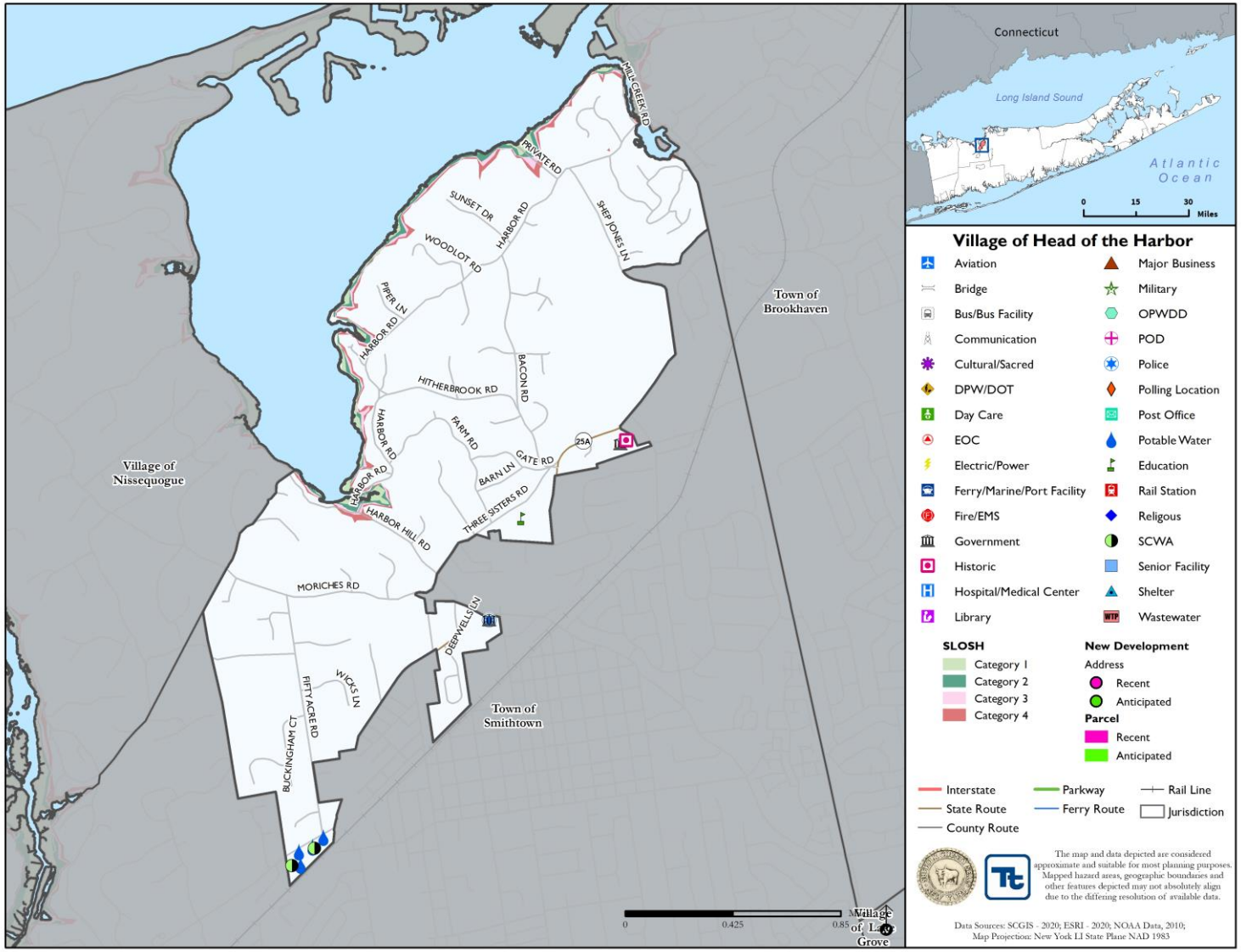


Figure 9.32-4. Village of Head of the Harbor Hazard Area Extent and Location Map 4

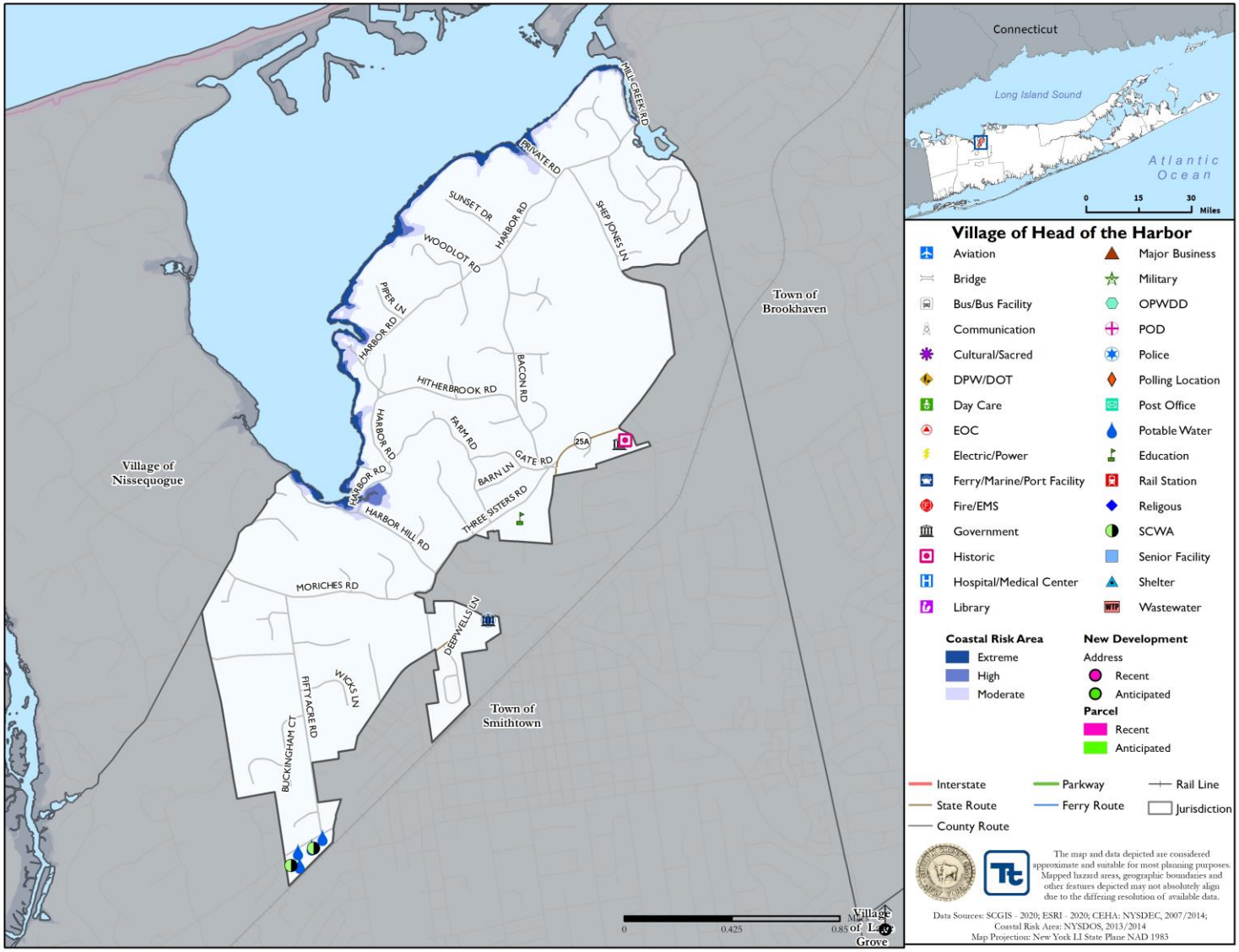


Figure 9.32-5. Village of Head of the Harbor Hazard Area Extent and Location Map 5

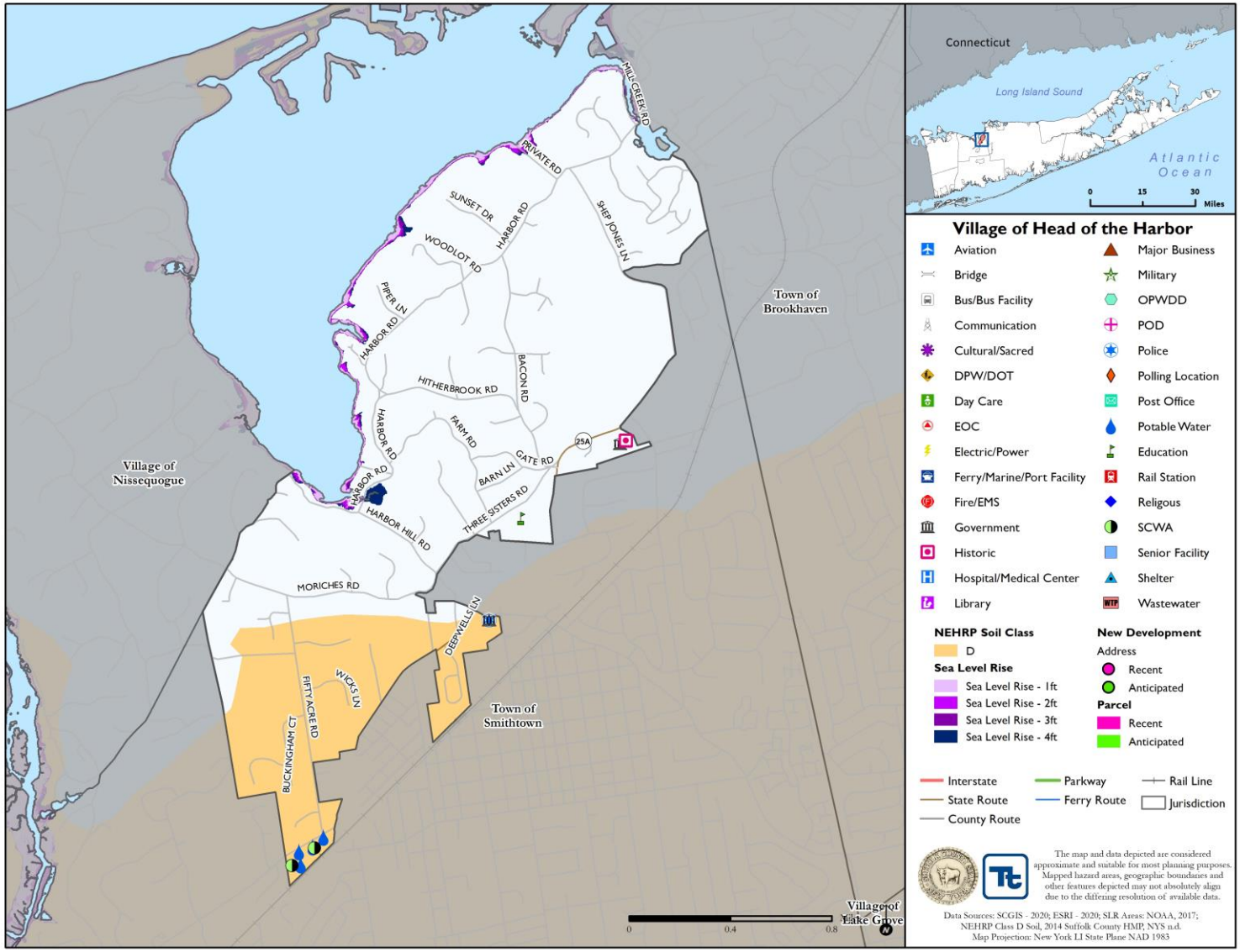
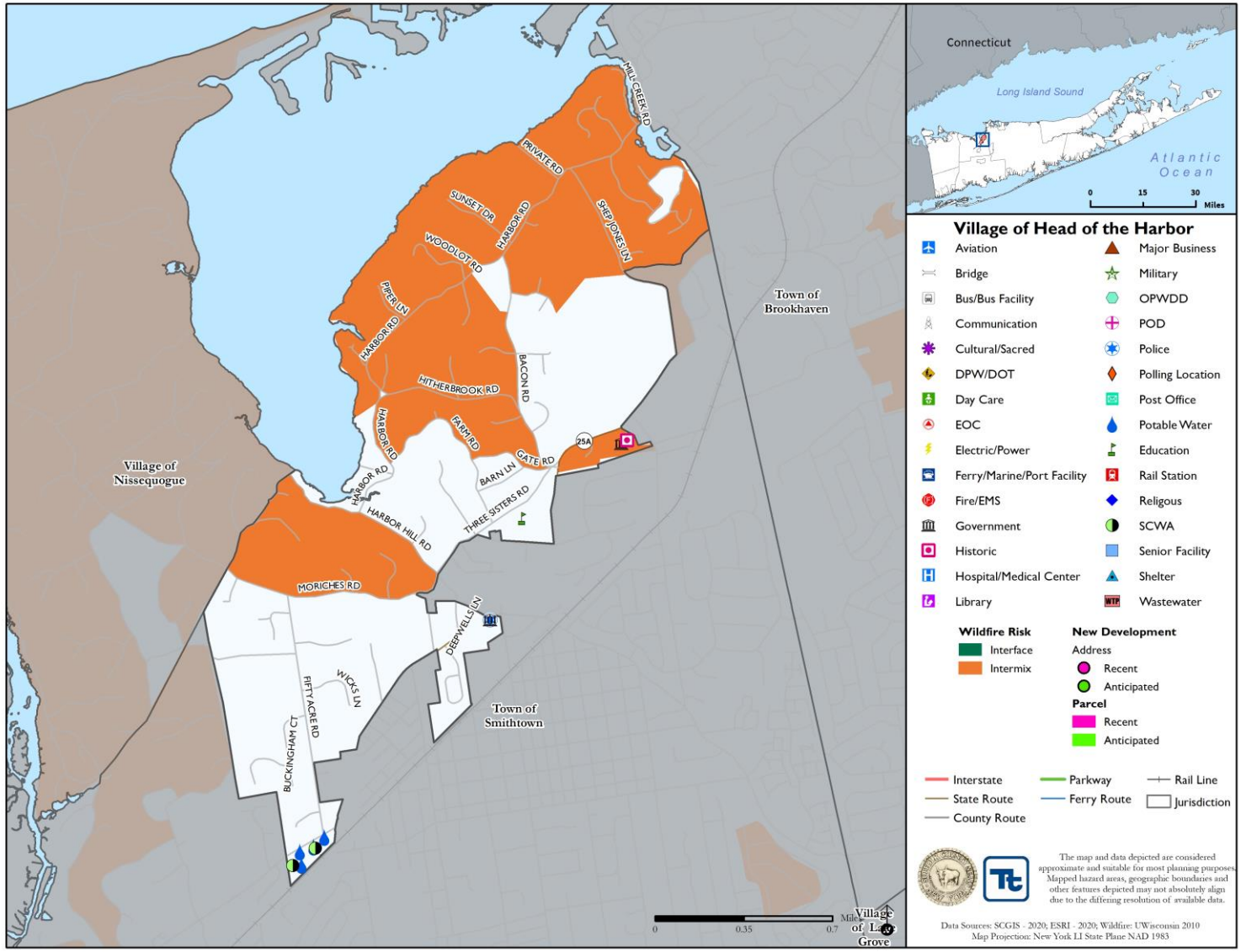


Figure 9.32-6. Village of Head of the Harbor Hazard Area Extent and Location Map 6



Action Worksheet			
Project Name:	Cordwood Road Stormwater Feasibility Study		
Project Number:	2020-Head of the Harbor-001		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm		
Description of the Problem:	Cordwood Road lacks appropriate drainage. The steepness of the roadway coupled with runoff has led to roadway erosion and lack of stormwater treatment before entering the harbor. A wood retaining wall which holds back a stormwater pond which services North Country Road also needs to be addressed.		
Action or Project Intended for Implementation			
Description of the Solution:	The Town of Smithtown, in collaboration with the Villages of Head of the Harbor and Nissequogue, will develop a feasibility study that will provide long term strategies to improve stormwater management and erosion control in the Cordwood Path area. The project area spans the waterfront revitalization boundaries described in the Town and joint village LWRPs. To ensure strategies are realistic and cost-effective, and to support future grant applications, funds are requested to complete the following: 1) field data collection & GIS analysis, including topographic surveys, utility identification, R.O.W. research, tidal information and watershed delineations; 2) develop a process to ensure stakeholder input from various Town and Village personnel/officials, as well as area residents; 3) conduct a plant inventory and develop recommendations for both plantings suitable to support achievements of goals and identify any potential invasive species mitigation measures; 4) develop and model stormwater control concepts using a combination of green and traditional drainage infrastructure; and 5) describe improvements to the park to accommodate new infrastructure and public education signage. Identified solutions will require funding support for implementation.		
Is this project related to a Critical Facility?	Yes ☐	No ☒	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes ☐	No ☒	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	TBD by feasibility study	**Estimated Benefits (losses avoided):**	Increased efficiency of stormwater system
Useful Life:	TBD by feasibility study	**Goals Met:**	1, 2
Estimated Cost:	TBD by feasibility study	**Mitigation Action Type:**	Local Plans and Regulations, Structure and Infrastructure Projects
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	Within 2 years
Estimated Time Required for Project Implementation:	2 years	**Potential Funding Sources:**	HMGP, BRIC, Town and Village budgets
Responsible Organization:	Town of Smithtown, Village of Head of the Harbor, Village of Nissequogue	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard mitigation planning, stormwater planning
Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues.
	Elevate roadways	$500,000	Costly and may not solve problem
	Relocate roadways	N/A	Not possible
Progress Report (for plan maintenance)			
Date of Status Report:			

Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Evaluation and Prioritization		
Project Name:	Cordwood Road Stormwater Feasibility Study	
Project Number:	2020-Head of the Harbor-001	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	
Property Protection	1	Reduction in flooding risk
Cost-Effectiveness	1	
Technical	1	Technically feasible project
Political	1	
Legal	1	The Village has the legal authority to conduct the project.
Fiscal	0	Project will require grant funding.
Environmental	1	
Social	1	Project would reduce flooding impacts.
Administrative	1	
Multi-Hazard	1	Flood, Severe Storm
Timeline	1	
Agency Champion	1	Town of Smithtown, Village of Head of the Harbor, Village of Nissequogue
Other Community Objectives	1	
Total	13	
Priority (High/Med/Low)	High	

Action Worksheet			
Project Name:	Backup Power for Highway Department		
Project Number:	2020-Head of the Harbor-006		
Risk / Vulnerability			
Hazard(s) of Concern:	All hazards		
Description of the Problem:	Backup power sources are necessary to maintain critical services for critical facilities. The Highway Department lacks a backup power source.		
Action or Project Intended for Implementation			
Description of the Solution:	The Village Engineer will research what size generator is necessary to supply backup power to the Village Hall. The Village will then install a backup power generator and necessary electrical components.		
Is this project related to a Critical Facility?	Yes ☒	No ☐	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes ☐	No ☒	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	N/A	**Estimated Benefits (losses avoided):**	Ensures continuity of operations of Highway Department
Useful Life:	20 years	**Goals Met:**	1, 2, 7
Estimated Cost:	$50,000	**Mitigation Action Type:**	Structure and Infrastructure Projects (SIP)
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	Immediately after funding received
Estimated Time Required for Project Implementation:	1 year	**Potential Funding Sources:**	FEMA HMGP and PDM, USDA Community Facilities Grant Program, Emergency Management Performance Grants (EMPG) Program, Municipal Budget
Responsible Organization:	Highway Department, OEM	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard Mitigation, Emergency Management

Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues.
	Install solar panels	$100,000	Weather dependent; need large amount of space for installation; expensive if repairs needed
	Install wind turbine	$100,000	Weather dependent; poses a threat to wildlife; expensive repairs if needed

Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Action Worksheet		
Project Name:	Backup Power for Highway Department	
Project Number:	2020-Head of the Harbor-006	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Project will protect critical services of Highway Department
Property Protection	1	Project will protect Highway Department from power loss.
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	The Village has the legal authority to complete the project.
Fiscal	0	Project requires funding support.
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	All hazards
Timeline	1	1 year
Agency Champion	1	Highway Department , OEM
Other Community Objectives	1	
Total	13	
Priority (High/Med/Low)	High	

Action Worksheet			
Project Name:	Harbor Road Culvert		
Project Number:	2020-Head of the Harbor-007		
Risk / Vulnerability			
Hazard(s) of Concern:	Severe Storm, Flood		
Description of the Problem:	The galvanized metal culvert under Harbor Road services Stoneybrook Harbor and a tidal wetland. The culvert is at the end of its useable life. Continued use without mitigation may result in collapse of the culvert.		
Action or Project Intended for Implementation			
Description of the Solution:	The Village will replace the culvert and conduct necessary roadway upgrades during the replacement.		
Is this project related to a Critical Facility?	Yes ☐	No ☒	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes ☐	No ☒	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	25 year storm	**Estimated Benefits (losses avoided):**	Reduction in flood risk
Useful Life:	30 years	**Goals Met:**	2
Estimated Cost:	$50,000	**Mitigation Action Type:**	Structure and Infrastructure Projects
Plan for Implementation			
Prioritization:	High	**Desired Timeframe for Implementation:**	Within 2 years
Estimated Time Required for Project Implementation:	6 months	**Potential Funding Sources:**	HMGP, BRIC, Village budget
Responsible Organization:	Engineer	**Local Planning Mechanisms to be Used in Implementation if any:**	Hazard mitigation planning

Three Alternatives Considered (including No Action)			
Alternatives:	**Action**	**Estimated Cost**	**Evaluation**
	No Action	$0	Problem continues.
	Elevate roadway	$500,000	Costly and will not solve problem
	Relocate roadway	N/A	Not possible

Progress Report (for plan maintenance)	
Date of Status Report:	
Report of Progress:	
Update Evaluation of the Problem and/or Solution:	

Evaluation and Prioritization		
Project Name:	Harbor Road Culvert	
Project Number:	2020-Head of the Harbor-007	
Criteria	**Numeric Rank (-1, 0, 1)**	**Provide brief rationale for numeric rank when appropriate**
Life Safety	1	Protects life from flooding.
Property Protection	1	Protects culvert from flood damage
Cost-Effectiveness	1	
Technical	1	Technically feasible project
Political	1	
Legal	1	The Village has the legal authority to conduct the project.
Fiscal	0	Project will require grant funding.
Environmental	1	
Social	1	Project would reduce flooding impacts
Administrative	1	
Multi-Hazard	1	Flood, Severe Storm
Timeline	1	Within 2 years
Agency Champion	1	Engineer
Other Community Objectives	1	
Total	13	
Priority (High/Med/Low)	High	