



## 9.37 Village of North Haven

This section presents the jurisdictional annex for the Village of North Haven. 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 North Haven’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.

### 9.37.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Village of North Haven’s hazard mitigation plan primary and alternate points of contact.

**Table 9.37-1. Hazard Mitigation Planning Team**

Primary Point of Contact	Alternate Point of Contact
Name/Title: Eileen Tuohy, Clerk/Treasurer Address: 335 Ferry Road Sag Harbor, New York 11963 Phone Number: 631-725-1378 Email: Etuohy@northhavenvillage.org	Name/Title: George Butts III, Building Inspector Address: 335 Ferry Road Sag Harbor, New York 11963 Phone Number: 631-725-1378 Email: buildinginspector@northhavenvillage.org
<b>NFIP Floodplain Administrator</b>	
Name/Title: George Butts III, Building Inspector Address: 335 Ferry Road Sag Harbor, New York 11963 Phone Number: 631-725-1378 Email: buildinginspector@northhavenvillage.org	

### 9.37.2 Municipal Profile

The settlement of North Haven dates by to 1665. Colonists from Southampton and Shelter Island settled an area known as Hog Neck. Hog Neck was renamed North Haven in 1842. Toward the end of the 19th century, the area became a vacation destination for many actors, celebrities, and wealthy families (East Long Island.Com, 2007). The quiet Village of North Haven was incorporated in 1932, and remains a totally residential with the exception only one boat repair business.

North Haven is a 2.7-square-mile peninsula north of Sag Harbor. State Route 114 runs through North Haven and is the primary route to the South Ferry to Shelter Island to the north. The Village is bordered by the Noyac Bay to the west and the Sag Harbor Bay to the east. The Village is served by the Southampton Town Police, Southampton Town Highway Department and Sag Harbor Fire Department.

The Village Government consists of a Mayor and a Board of Trustees. The Village board meets on the first Tuesday of the month at 5 p.m. at village hall. The zoning board of appeals, planning board and Board of Architectural Review & Historic Preservation also meet at village hall. The Village has a small planning department and a part-time building inspector (Village of North Haven, Date Unknown)

According to the U.S. Census, the 2010 population for the Village of North Haven was 833. The estimated 2017 population was 919, a 10.3 percent increase from the 2010 Census. Data from the 2017 U.S. Census American Community Survey indicate that 3.6 percent of the population is 5 years of age or younger and 24.8 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.



### 9.37.3 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 9.37-2 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 9.37-2. Recent and Expected Future Development**

Type of Development	2014		2015		2016		2017		2018		2019	
<b>Number of Building Permits for New Construction Issued Since the Previous HMP* (within regulatory floodplain/ Outside regulatory floodplain)</b>												
	<b>Total</b>	<b>Within SFHA</b>	<b>Total</b>	<b>Within SFHA</b>	<b>Total</b>	<b>Within SFHA</b>	<b>Total</b>	<b>Within SFHA</b>	<b>Total</b>	<b>Within SFHA</b>	<b>Total</b>	<b>Within SFHA</b>
Single Family	12	1	6	0	7	0	8	0	6	1	4	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
<b>Total Permits Issued</b>	<b>23</b>	<b>2</b>	<b>6</b>	<b>0</b>	<b>7</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>6</b>	<b>1</b>	<b>4</b>	<b>0</b>
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				
<b>Recent Major Development and Infrastructure from 2015 to Present</b>												
None identified												
<b>Known or Anticipated Major Development and Infrastructure in the Next Five (5) Years</b>												
None anticipated												

SFHA Special Flood Hazard Area (1% flood event)

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

### 9.37.4 Capability Assessment

The Village of North Haven 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 9.37.4). The Village of North Haven 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 North Haven and where hazard mitigation has been integrated.

**Table 9.37-3. 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?	
						Yes	If no - can it be a mitigation action?
<b>Codes, Ordinances, &amp; Requirements</b>							
Building Code	Yes	Building Construction and Fire Prevention, Chapter 55, Village Code	Local	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 Code, Chapter 163, Village Code	Local	Zoning Board	No	Yes	-
Comment: Chapter 163 regulates development in the village.							
Subdivisions	Yes	Subdivision of Land, Chapter 146, Village Code	Local	Planning Board	No	Yes	-
Comment: It is declared to be the policy of the Village Planning Board to consider land subdivision plats within the context of an overall plan for the orderly, efficient and economical development of the Village. This means, among other things, that land to be subdivided shall be of such character that it can be used safely for building purposes without danger to health or peril from fire, flood or other menace; that proper provision shall be made for storm drainage, water supply, sewage disposal and other needed improvements; and that all proposed lots shall be so laid out and of such size as to be in harmony with the development pattern of the neighboring properties; that the proposed streets shall compose a convenient system conforming to the Official Map and shall be properly related to the proposals shown on such portions of the Village Plan as may be in existence at any time and shall be of such width, grade and location as to accommodate the prospective traffic, to afford adequate light and air, to facilitate fire protection and to provide access of fire-fighting equipment to buildings; and that, in proper cases, provides open spaces for parks, recreation, watersheds, conservation areas and recharge basins; and, where conditions warrant, easements giving access to water frontage shall be shown on the subdivision plat.							
Stormwater Management	Yes	Erosion and Sediment Control, Chapter 67	Local	Stormwater Management Officer	Yes	Yes	-
Comment: Chapter 67 was adopted in order to: <ul style="list-style-type: none"> <li>A. Meet the requirements of minimum measures 4 and 5 of the SPDES General Permit for Stormwater Discharges from Municipal Separate Stormwater Sewer Systems (MS4s), Permit No. GP-02-02, as amended or revised;</li> <li>B. Require land development activities to conform to the substantive requirements of the New York State Department of Environmental Conservation State Pollutant Discharge Elimination System (SPDES) General Permit for Construction Activities, GP-02-01, as amended or revised;</li> <li>C. Minimize increases in stormwater runoff from land development activities in order to reduce flooding, siltation, increases in stream temperature, and stream bank erosion and maintain the integrity of stream channels;</li> </ul>							



	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?	
D. Minimize increases in pollution caused by stormwater runoff from land development activities which would otherwise degrade local water quality; E. Minimize the total annual volume of stormwater runoff which flows from any specific site during and following development to the maximum extent practicable; and F. Reduce stormwater runoff rates and volumes, soil erosion and nonpoint source pollution, wherever possible, through stormwater management practices and to ensure that these management practices are properly maintained and eliminate threats to public safety.							
Post-Disaster Recovery	No	-	-	-	No	-	-
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:							
Site Plan Review	Yes	Zoning Code, Chapter 163, Village Code	Local	Planning Board	No	Yes	-
Comment: Referenced in Zoning Code.							
Environmental Protection	Yes	Environmental Quality Review, Chapter 66	Local	Board of Trustees	Yes	Yes	-
Comment: All agencies of the village are required to comply with the State Environmental Quality Review Act (SEQRA)[1] and its implementing regulations (6 NYCRR Part 617). The purpose of this chapter is to provide the authority for such additional or modified procedures as may be necessary or appropriate for village agencies to implement SEQRA, consistent with the provisions of said implementing regulations (6 NYCRR Part 617).							
Flood Damage Prevention	Yes	Flood Damage Prevention, Chapter 85, Village Code	Local	Building Inspector	Yes - BFE+2 feet for all construction in the SFHA (residential and non-residential)	Yes	-
Comment: Chapter 85 was adopted in order to: A. Protect human life and health. B. Minimize expenditure of public money for costly flood control projects. C. Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public. D. Minimize prolonged business interruptions. E. 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. 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. Provide that developers are notified that property is in an area of special flood hazard. H. Ensure that those who occupy the areas of special flood hazard assume responsibility for their actions.							
Municipal Separate Storm Sewer System (MS4)	Yes	Storm Sewer System, Chapter 139, Village Code	Local	Stormwater Management Officer	Yes	Yes	-
Comment: Chapter 139 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, as amended or revised;							



	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?	
B. To regulate the contribution of pollutants to the MS4 since such systems are not designed to accept, process or discharge nonstormwater wastes; 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 article; 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:							
Other	Yes	Chapter 67 Erosion and Sediment Control	Local	Board of Trustees	No	Yes	-
Comment:							
<b>Planning Documents</b>							
Comprehensive Plan	No	-	-	-	No	-	-
Comment:							
Capital Improvement Plan	No	-	-	-	No	-	-
Comment:							
Disaster Debris Management Plan	Yes	Suffolk County Multi-Jurisdictional Debris Management Plan	County, Local	Suffolk County FRES	No	Yes	-
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	No	-	-	-	No	-	-
Comment:							
Stormwater Plan	No	-	-	-	No	-	-
Comment:							
Open Space Plan	Yes	SH Town CPF, 2001	Local	Village Trustees	Yes	No	-
Comment:							



Section 9.37: Village of North Haven

	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?	
Urban Water Management Plan	No	-	-	-	No	-	-
Comment:							
Habitat Conservation Plan	No	-	-	-	No	-	-
Comment:							
Economic Development Plan	No	-	-	-	No	-	-
Comment:							
Shoreline Management Plan	In Development	Coastal Erosion Plan	Local	TBD	Yes	Yes	-
Comment: An informal plan is currently in place to deal with erosion issues. The new plan will identify appropriate mitigation strategies to protect from coastal erosion with an emphasis on soft shoreline stabilization strategies.							
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		
Comment:							
<b>Response/Recovery Planning</b>							
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	-	-	-	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?	
Comment:							
Post-Disaster Recovery Plan	No	-	-	-	No	-	-
Comment:							
Continuity of Operations Plan	No	-	-	-	No	-	-
Comment:							
Public Health Plan	No	-	-	-	No	-	-
Comment:							
Other	No	-	-	-	No	-	-
Comment:							

**Table 9.37-4. 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.	Yes
Buildable land inventory If yes, please describe If no, please quantitatively describe the level of buildout in the jurisdiction.	The Village is fully built out.

**Administrative and Technical Capability**

The table below summarizes potential staff and personnel resources available to the Village of North Haven.

**Table 9.37-5. Administrative and Technical Capabilities**

Resources	Available? (Yes or No)	Department/ Agency/Position
<b>Administrative Capability</b>		
Planning Board	Yes	Planning Board, Zoning Board, Architectural Review Board
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	Environmental Consultants are used for the Planning Board
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Warning Systems / Services (reverse 911, outdoor warning signals)	Yes	Website, Constant Contact, Facebook, Sag Harbor Fire Department communications system
Maintenance programs to reduce risk	Yes	Tree trimming, stormwater drain cleaning
Mutual aid agreements	Yes	Emergency Response
<b>Technical/Staffing Capability</b>		



Resources	Available? (Yes or No)	Department/ Agency/Position
Planners or engineers with knowledge of land development and land management practices	Yes	Village has planning and engineering consultants. Planning Board engineer does MS4 compliance.
Engineers or professionals trained in building or infrastructure construction practices	Yes	Village has planning and engineering consultants.
Planners or engineers with an understanding of natural hazards	Yes	Village has planning and engineering consultants. Planning Board engineer does MS4 compliance.
Staff with expertise or training in benefit/cost analysis	Yes	Contracted
Professionals trained in conducting damage assessments	Yes	Building Inspector, Al Daniels
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	Yes	Through planning and engineering consultants.
Scientist familiar with natural hazards	Yes	Through engineering consultants.
NFIP Floodplain Administrator (FPA)	Yes	Building Inspector, Al Daniels
Surveyor(s)	Yes	Contracted
Emergency Manager	Yes	Mayor Jeffrey Sander
Grant writer(s)	Yes	Contracted
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 North Haven.

**Table 9.37-6. Fiscal Capabilities**

Financial Resources	Accessible or Eligible to Use (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	No, income levels generally exceed threshold
Capital improvements project funding	No (no long-term capital plan)
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	Yes, Property Transfer Fee (tax)
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 North Haven.



**Table 9.37-7. 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?	No, but will be converted to in house.
Hazard mitigation information available on your website; if yes, describe	Yes, deer and tick
Social media for hazard mitigation education and outreach; if yes, briefly describe.	Facebook
Citizen boards or commissions that address issues related to hazard mitigation; if yes, briefly describe.	No
Other programs already in place that could be used to communicate hazard-related information; if yes, briefly describe.	No
Warning systems for hazard events; if yes, briefly describe.	Website, Constant Contact, Facebook, Sag Harbor Fire Department communications system
Natural disaster/safety programs in place for schools; if yes, briefly describe.	None within boundaries.
Other	None

**Community Classifications**

The table below summarizes classifications for community programs available to the Village of North Haven.

**Table 9.37-8. Community Classifications**

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	NP	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	NP	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	TBD	Handled by Sag Harbor Fire District	-
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 9.37-9. Adaptive Capacity**

Hazard	Adaptive Capacity (Capabilities) - High/Medium/Low*
Coastal Erosion	Medium





Hazard	Adaptive Capacity (Capabilities) - High/Medium/Low*
Cyber Security	Medium
Disease Outbreak	Medium
Drought	Medium
Earthquake	Medium
Expansive Soils	Medium
Extreme Temperature	Medium
Flood	Medium
Groundwater Contamination	Medium
Hurricane	Medium
Infestation and Invasive Species	Medium
Nor'Easter	Medium
Severe Storm	Medium
Severe Winter Storm	High
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 relies on the County and the Town of Southampton for information related to climate change impacts. This information has been shared by the County and the Town in the past. The Village Board is aware of climate issues and keeps these in mind when developing plans or policies.

### 9.37.5 National Flood Insurance Program

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

#### NFIP Floodplain Administrator (FPA)

George Butts III, Building Inspector

#### National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Village of North Haven.

Table 9.37-10. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties
Village of North Haven	168	55	\$426,743	3

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

#### Flood Vulnerability Summary

The Village characterizes its building stock as having a low vulnerability to flooding. The Village had no damage to structures (public or private) during Sandy that they are aware of. Flood level and associated impacts (minor) for Sandy, Irene and the three recent Nor'Easters were similar. The Village is not aware of any properties that are interested in mitigation, or are any currently in the process of mitigating their property



## Resources

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The community FDPO identifies the Village Building Inspector as the local NFIP Floodplain Administrator, currently George Butts III. Mr. Butts is the sole person assuming the responsibilities of floodplain administration, for which floodplain administration is an auxiliary duty. As noted above floodplain management for new development is supported by the Planning Board through the site plan review process. Further, technical support for floodplain management is also available from the NYSDEC and FEMA. NFIP administration services and functions of the NFIP FPA include permit review, inspections, and record keeping. The Village requires Elevation Certificates for new construction or substantial damage/improvement for properties in the SFHA. The Village does not maintain a formal list or inventory of flood prone properties, as their overall flood risk is considered low.

The current NFIP FPA feels he is adequately supported and trained to fulfill his responsibilities as the municipal floodplain administrator.

Public education and outreach with respect to flooding includes providing literature on flood risk and flood insurance to residents, both hard copy at the Village Hall and through their website. Mr. Daniels makes an effort to inform the public of flood risk from the start of any approval and permitting process, explaining their location within flood hazard zones and their compliance requirements, including the requirement for Elevation Certificates and the availability of NFIP flood insurance.

The NFIP FPA does not cite any barriers to running an effective floodplain management program in the Village.

## Compliance History

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The Village of North Haven joined the NFIP on September 30, 1977 and is currently an active member of the NFIP. The current effective Flood Insurance Rate Maps are dated September 25, 2009.

The community is currently in good standing in the NFIP and has no outstanding compliance issues. The most recent Community Assistance Visit (CAV) was performed on March 2, 2020. The municipality sees no specific need for a CAV at this time.

## Regulatory

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The community's Flood Damage Prevention Ordinance (FDPO) was last updated on August 4, 2009 and is found at Chapter 85 of the local code. The Village strictly enforces the NFIP regulations and NYS's mandated BFE+2 for residential property, however, the Village does not have any floodplain management regulations/ordinances that exceed the FEMA and State minimum requirements. Floodplain management is also supported through an environmental consultant with the Planning Board during the site plan review process for compliance of new development in accordance with all regulations.

## Community Rating System

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Due to the small size of the Village and relatively low overall flood risk, the Village does not feel that participation in the Community Rating System (CRS) program would be practical or cost-effective.

### 9.37.6 Integration with Other Planning Initiatives

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As this HMP update is implemented, the Village of North Haven 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 mitigation planning as an integral component of daily municipal operations. Below is a list of planning mechanisms that have been/will be incorporated into municipal procedures.

- **Village Website:** The Village website (<http://northhavenny.us/index.html>) hosts the Village code, information about upcoming meetings, and some hazard related information such as ticks, tick-borne diseases, and emergency preparedness. The Village will be working to update the website in the future (2020-North Haven-006).
- **Land Use Planning:** The Village has included an initiative to develop and maintain mapping of all natural hazard risk areas in the Village, FEMA delineated or otherwise, to support land use decision making (e.g. Planning Board, site plan review process).
- **Potential Funding Sources:** The Village has a property transfer fund, which is a tax on property transfers \$1MM+. These go into the Village general fund and could be used to support hazard mitigation projects and initiatives (local match for grant funded projects, purchase of high risk property, etc.).

### Opportunities for Future Integration

- **Coastal Erosion Study (2020-North Haven-005):** The west side of the Village has more bluffs and tends to be more erosive. The east side of the Village is more exposed to wave action. The Village will conduct a Coastal Erosion Study. The results of the Study will inform Village policy, mitigation actions, and be shared as outreach.

## 9.37.7 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

State Highway 114 is the main roadway for the Village. The Village follows the guidance of the County and State for evacuation.

### Sheltering

The Fire Department of Sag Harbor would help provide sheltering in the neighboring municipal shelters. Village Hall could be used for sheltering but it does not have any of the necessary supplies for an official shelter. A maximum of 50 people could utilize the space.

### Temporary Housing

In the event where temporary housing is necessary, the Village could utilize Cilli's Field, an open field (2-3 acres) that is a preserved space. Utility poles are nearby for access.

### Permanent Housing

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



### 9.37.8 Hazard Event History Specific to the Village of North Haven

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 North Haven’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 9.37-11 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 9.37-11. 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	An intensifying offshore storm passed close enough on Monday February 8th to bring heavy snow to parts of central and much of eastern Long Island, NY.	Although the County was impacted, no damages were reported.
August 4, 2015	Thunderstorm Wind	No	An approaching cold front triggered a cluster of severe thunderstorms producing multiple macrobursts that impacted the North Shore of Long Island, from Northwest Nassau County onto the North Fork of Long Island.	Although the County was impacted, no damages were reported.
October 22, 2016	Strong Wind	No	Strong winds occurred behind deep low pressure.	Near North Haven, a measured gust up to 53 mph occurred at 9:23 pm. Southeast Suffolk reported \$30K in property damage.
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.	Although the County was impacted, no damages were reported.

**Notes:**

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

### 9.37.9 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 North Haven. 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 9.37-12. 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 North Haven. The Village of North Haven 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 of North Haven indicated the following:





- The Village agreed with the calculated hazard rankings.

**Table 9.37-13. Hazard Ranking**

Coastal Erosion	Cyber Security	Disease Outbreak	Drought	Earthquake	Expansive Soils
Medium	Medium	Medium	Low	Low	Low
Extreme Temperature	Flood	Groundwater Contamination	Hurricane	Infestation and Invasive Species	Nor'Easter
Medium	Medium	Medium	High	Medium	High
Severe Storm	Severe Winter Storm	Shallow Groundwater	Wildfire		
Medium	Medium	Low	Medium		

**Identified Issues**

The municipality has identified the following vulnerabilities within their community:

- Heavy rainfall events have led to groundwater levels rising. This has led to a decrease in the efficiency of the stormwater system. Some standing water is in place for a day or two.
- West side of the Village has more bluffs and tends to be more erosive. East side of the Village is more exposed to wave action. The Village is beginning to work on a Coastal Erosion Plan.
- The South Ferry terminal at the Village and at Shelter Island are low lying and flood vulnerable. Although the residents of the Village of North Haven do not rely on the ferry during emergency events, the residents of Shelter Island do rely on the ferry terminal to evacuate through the Village.
- Tyndall Road experiences stormwater flooding near the Long Beach Traffic Circle.

Specific areas of concern based on resident response to the Suffolk County Hazard Mitigation Citizen survey include:

- Low lying land & roads (particularly on Ferry Rd by Village Hall) could be a block in a severe storm surge. Many Southampton Town roads are flooded during/after rains. This is a hazard in all seasons.

**9.37.10 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.X-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 9.37-14. 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.
						Cost	Level of Protection	
VNH-1	Fresh Pond Road Mitigation	Flood; Hurricane/Coastal Storms	Village Engineering and DPW; working with NYSDEC	Continue to evaluate engineered solutions to address roadway and area flooding; seek funding and implement feasible and cost-effective project(s).	In Progress; new drains installed	Cost	Level of Protection	1. Include in 2020 HMP 2. 3.
VNH-2	Assess and prioritize non-structural flood hazard mitigation alternatives for at risk properties within the floodplain	Flood, Coastal Erosion, Hurricane, Nor'Easter, Severe Storm, Wildfire, Winter Storm	Village via NFIP FPA as lead with NYSOEM, FEMA support	Assess and prioritize non-structural flood hazard mitigation alternatives for at risk properties within the floodplain, including those that have been identified as repetitive loss, such as acquisition/relocation, or elevation depending on feasibility. Implement as funding becomes available. Implementation is further supported by county-led initiatives identified below.  Specifically, the Village will continue to work with the one RL property owner to mitigate that structure.	In Progress	Cost	Level of Protection	1. Include in 2020 HMP 2. 3.
VNH-1	Working directly with emergency management/emergency managers in the Towns of Southampton and East Hampton	All Hazards	Mayor of North Haven to initiate organizing a meeting of the emergency managers of all four jurisdictions	Working directly with emergency management/emergency managers in the Towns of Southampton and East Hampton, and the Village of Sag Harbor to improve emergency procedures and communications, and establish/confirm specific 911 and emergency dispatch protocols. Examine communication systems, and work to correct any interoperability issues. This effort should begin with a meeting with all four jurisdictions to identify issues and establish a program and schedule to correct as applicable. Once 911 and dispatch protocols are established/confirmed, implement a public education program to inform all	Ongoing Capability; includes Village of Sag Harbor	Cost	Level of Protection	1. Discontinue 2. 3. Ongoing Capability



				(including seasonal residents) of the proper procedures for summoning emergency services (police, fire, EMS).				
VNH-3	Support and participate in county led initiatives (see Section 9.1) intended to build local and regional mitigation and risk-reduction capabilities	All Hazards	Suffolk County, as supported by relevant local department leads,	<p>Support and participate in county led initiatives (see Section 9.1) intended to build local and regional mitigation and risk-reduction capabilities (see Section 9.1), specifically:</p> <ul style="list-style-type: none"> <li>Mitigation Education for Natural Disasters (natural hazard awareness and personal scale risk reduction/mitigation public education and outreach program)</li> <li>Build Local Floodplain Management and Disaster Recovery Capabilities (enhanced floodplain management, and post-disaster assessment and recovery capabilities)</li> <li>Jurisdictional Knowledge of Mitigation Needs of Property Owners (improved understanding of damages and mitigation interest/activity of private property owners)</li> <li>Create a Multi-Jurisdictional Seismic Safety Committee in Suffolk County (build regional, county and local capabilities to manage seismic risk, both pre- and post-disaster)</li> <li>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).</li> </ul>	Ongoing Capability	Cost		1. Discontinue
						Level of Protection		2.
						Damages Avoided; Evidence of Success		3. Ongoing Capability



VNH-4	Develop and implement an enhanced all-hazards, public outreach / education / mitigation information program on natural hazard risks and what they can do in the way of mitigation and preparedness, including flood insurance	All Hazards	Village Clerk and Mayor	<p>Develop and implement an enhanced all-hazards, public outreach / education / mitigation information program on natural hazard risks and what they can do in the way of mitigation and preparedness, including flood insurance. This program will include:</p> <ul style="list-style-type: none"> <li>Village will better leverage their village website for public education and outreach</li> <li>Inform residents, both full-time and seasonal, on proper procedures to summon emergency services.</li> <li>Mayor will use his existing social media posts to include hazard awareness, and personal preparedness, mitigation and emergency management procedures/protocols</li> <li>Provide general natural hazard risk, preparedness and mitigation, and related NFIP information in regular newsletter and mailings.</li> <li>Post brochures, flyers and other readily available NFIP informational materials at Village hall or distributing at regular civic meetings.</li> <li>Continue to distribute the public preparedness booklet materials at Village hall or distributing at regular civic meetings.</li> <li>Continue to distribute the public preparedness booklet provided by the Town of Southampton to full- and seasonal residents.</li> <li>Developing/maintaining a natural hazard risk management webpage on the municipal website where information and mapping can be posted.</li> </ul>	In Progress; Coastal Erosion report will be shared with the public, pamphlets, etc.	Cost		<ol style="list-style-type: none"> <li>1. Include in 2020 HMP</li> <li>2. Improve outreach through expansion of website capabilities</li> <li>3.</li> </ol>
						Level of Protection		
		Flood			Complete	Cost		<ol style="list-style-type: none"> <li>1. Discontinue</li> </ol>



VNH-5	Have designated NFIP Floodplain Administrator (FPA)		Town/Village NFIP FPA	Have designated NFIP Floodplain Administrator (FPA), and other local officials who would benefit, become a Certified Floodplain Manager (CFM) through the Association of State Floodplain Managers (ASFPM) and New York State Stormwater and Floodplain Managers Association (NYSSFMA), and pursue relevant continuing education training such as FEMA Benefit-Cost Analysis (BCA) and Substantial Damage Estimation (SDE). Implementation of this will be through the county-led programs identified above.		Level of Protection Damages Avoided; Evidence of Success		2. 3. Complete
VNH-6	Develop and maintain mapping of all natural hazard risk areas in the Village	Flood, Coastal Erosion, Wildfire	Engineering, Planning Board	Develop and maintain mapping of all natural hazard risk areas in the Village, FEMA delineated or otherwise, to support land use decision making (e.g. Planning Board, site plan review process).	In Progress; Coastal Erosion Study	Cost Level of Protection Damages Avoided; Evidence of Success		1. Include in 2020 HMP 2. 3.
VNH-7	Work with County and LIPA/PSEG to identify roads within the Village that are considered "critical"	Severe Storm; Severe Winter Storm; Hurricane; Nor'Easter	PSEG, County	Work with County and LIPA/PSEG to identify roads within the Village that are considered "critical", and to be the first priority for clearing after an event involving downed power lines.	Ongoing Capability	Cost Level of Protection Damages Avoided; Evidence of Success		1. Discontinue 2. 3. Ongoing Capability



### Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Village of North Haven 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:

- The Village has responded to and removed several problem trees. The Village also continues regular maintenance of the stormwater system.
- Village installed additional drainage on Tyndall Road to increase stormwater capabilities.

### Proposed Hazard Mitigation Initiatives for the HMP Update

The Village of North Haven 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 9.37-15 summarizes the comprehensive-range of specific mitigation initiatives the Village of North Haven 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 9.37-16 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 9.37-15. 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-North Haven -001	Long Beach Circle Stormwater Upgrades	1, 2	Flood, Severe Storm, Groundwater Flooding	<p><b>Problem:</b> The traffic circle in the Long Beach area is partially owned by the Village, with the County and State. Tyndall Road is impacted by stormwater runoff from the state section of the circle and experiences stormwater flooding. Rising groundwater has added to drainage issues. The state has accepted responsibility to address the issue and identified solutions but has not implemented these actions due to budget restrictions.</p> <p><b>Solution:</b> The Village will work with the NYS DOT to identify a funding source to complete the state's identified stormwater upgrades and implement the improvements.</p>	No	None	Within 2 years	NYS DOT, Village Administration	High	Reduction in flooding on Tyndall Road	HMGP, BRIC, NYS DOT	High	SIP	SP
2020-North Haven -002	Repetitive Loss and Flood Prone Properties	1, 2	Flood, Severe Storm	<p><b>Problem:</b> Frequent flooding events have resulted in damages to residential properties in the SFHA. One property has been repetitively flooded as documented by paid NFIP claims. Additional properties are likely to have experienced flood damages but may be privately insured or self-insured.</p> <p><b>Solution:</b> Conduct outreach to 30 flood-prone property owners, including RL/SRL property owners and provide information on mitigation alternatives. After preferred mitigation measures are identified, collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition/purchase/moving/elevating residential homes in the flood prone areas that experience frequent flooding (high risk areas).</p>	No	None	3 years	NFIP Floodplain Administrator, supported by homeowners	\$3 Million	Eliminates flood damage to homes and residents, creates open space for the municipality increasing flood storage.	FEMA HMGP and FMA, local cost share by residents	High	SIP	PP





Table 9.37-15. 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-North Haven -003	Fresh Pond Road	1, 2	Flood, Severe Storm, Shallow Groundwater Flooding	<p><b>Problem:</b> Fresh Pond Road is a low lying roadway which is prone to flooding. Past mitigation actions have included the installation of additional storm drains. However, flood risk still exists. The Road is partially privately owned. 20+ homes are located on the private section of the roadway.</p> <p><b>Solution:</b> The Village will conduct a flood study to determine if additional mitigation actions such as roadway elevation could be cost effective. The Village will implement any identified actions.</p>	No	None	Within 5 years	Engineer	\$10,000 for study	Potential mitigation actions identified and implemented to reduce flood risk	HMGP, BRIC, Village budget, Private homeowner funding	High	LPR, SIP	PP, SP
2020-North Haven -004	South Ferry Terminal	1, 2, 8	Flood	<p><b>Problem:</b> The South Ferry terminal at the Village and at Shelter Island are low lying and flood vulnerable. Although the residents of the Village of North Haven do not rely on the ferry during emergency events, the residents of Shelter Island do rely on the ferry terminal to evacuate through the Village.</p> <p><b>Solution:</b> Raise elevation of ferry terminal to prevent flood interruption.</p>	Yes	None	Within 5 years	Shelter Island, South Ferry Company, Village Administration	High	Ferry terminal protected from flooding	HMGP, BRIC, South Ferry Company	High	SIP	PP
2020-North Haven -005	Coastal Erosion Study	4, 5, 6	Coastal Erosion	<p><b>Problem:</b> The west side of the Village has more bluffs and tends to be more erosive. The east side of the Village is more exposed to wave action.</p> <p><b>Solution:</b> The Village will conduct a Coastal Erosion Study. The results of the Study will inform Village policy, mitigation actions, and be shared as outreach.</p>	No	None	Within 2 years	Village Administration	\$32,000	Coastal erosion hot spots identified, potential mitigation identified, public outreach completed	Village budget	High	LPR, EAP	PR, PI
2020-North	Coastal Erosion Monitoring	1, 2, 3, 5	Coastal Erosion,	<p><b>Problem:</b> The Village has shoreline which could be exposed to coastal erosion.</p>	No	None	Within 1 year	SCWD, Village	Staff time	Identification of coastal erosion	County budget	High	NSP	NR





Table 9.37-15. 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
Haven-006			Hurricane, Nor'easter	<b>Solution:</b> The Village will participate in a county led erosion monitoring program.				Administration						
2020-North Haven-007	Village Website Outreach	6	All Hazards	<b>Problem:</b> The Village website is in need of upgrade. <b>Solution:</b> The Village will upgrade the website and use the upgrade as an opportunity to expand outreach offerings.	No	None	Within 1 year	Village Administration	\$5,000	Increased education of public on hazards and personal mitigation actions that can be taken	Village budget	High	EAP	PI

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 9.37-16. 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	Total	High / Medium / Low
2020-North Haven-001	Long Beach Circle Stormwater Upgrades	0	1	1	1	1	1	0	1	1	1	1	1	1	1	12	High
2020-North Haven-002	Repetitive Loss and Flood Prone Properties	1	1	1	1	1	1	0	1	0	0	1	0	1	1	10	High
2020-North Haven-003	Fresh Pond Road	1	1	1	1	1	1	0	1	1	1	1	0	1	1	12	High
2020-North Haven-004	South Ferry Terminal	1	1	1	1	1	0	0	1	1	1	0	0	1	1	10	High
2020-North Haven-005	Coastal Erosion Study	0	1	1	1	1	1	1	1	1	1	0	1	1	1	12	High
2020-North Haven-006	Coastal Erosion Monitoring	0	1	1	1	1	1	0	1	1	1	0	1	1	1	11	High
2020-North Haven-007	Village Website Outreach	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High

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



### 9.37.11 Proposed Mitigation Action Types

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

**Table 9.37-17. Analysis of Mitigation Actions by Hazard and Category**

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Coastal Erosion	2020-North Haven-005			2020-North Haven-005, 2020-North Haven-007	2020-North Haven-005		2020-North Haven-005, 2020-North Haven-007			
Cyber Security				2020-North Haven-007			2020-North Haven-007			
Disease Outbreak				2020-North Haven-007			2020-North Haven-007			
Drought				2020-North Haven-007			2020-North Haven-007			
Earthquake				2020-North Haven-007			2020-North Haven-007			
Expansive Soils				2020-North Haven-007			2020-North Haven-007			
Extreme Temperature				2020-North Haven-007			2020-North Haven-007			
Flood	2020-North Haven-003,	2020-North Haven-001, 2020-North Haven-002, 2020-North Haven-003, 2020-North Haven-004		2020-North Haven-007		2020-North Haven-002, 2020-North Haven-003, 2020-North Haven-004	2020-North Haven-007		2020-North Haven-001, 2020-North Haven-003,	
Groundwater Contamination				2020-North Haven-007				2020-North Haven-007		
Hurricane				2020-North Haven-007				2020-North Haven-007		
Infestation and Invasive Species				2020-North Haven-007				2020-North Haven-007		



Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Nor'easter				2020-North Haven-007				2020-North Haven-007		
Severe Storm	2020-North Haven-003,	2020-North Haven-001, 2020-North Haven-002, 2020-North Haven-003,		2020-North Haven-007		2020-North Haven-002, 2020-North Haven-003,		2020-North Haven-007	2020-North Haven-001, 2020-North Haven-003,	
Severe Winter Storm				2020-North Haven-007				2020-North Haven-007		
Shallow Groundwater	2020-North Haven-003,	2020-North Haven-001, 2020-North Haven-003,		2020-North Haven-007		2020-North Haven-003,		2020-North Haven-007	2020-North Haven-001, 2020-North Haven-003,	
Wildfire				2020-North Haven-007				2020-North Haven-007		

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

### 9.37.12 Staff and Local Stakeholder Involvement in Annex Development

The Village of North Haven 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: the Clerk/Treasurer and the Building Inspector. The Clerk/Treasurer 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 9.37-18. Contributors to the Annex**

Name	Title/Entity	Method of Participation
Eileen Tuohy	Clerk/Treasurer	Primary Point of Contact, attended plan participant meetings, provided impact information, updated mitigation strategy
George Butts	Building Inspector	Secondary Point of Contact, NFIP Floodplain Administrator, attended plan participant meetings, provided impact information, updated mitigation strategy



### **9.37.13 Hazard Area Extent and Location**

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Hazard area extent and location maps have been generated for the Village of North Haven 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 North Haven has significant exposure.



Figure 9.37-1. Village of North Haven Hazard Area Extent and Location Map 1

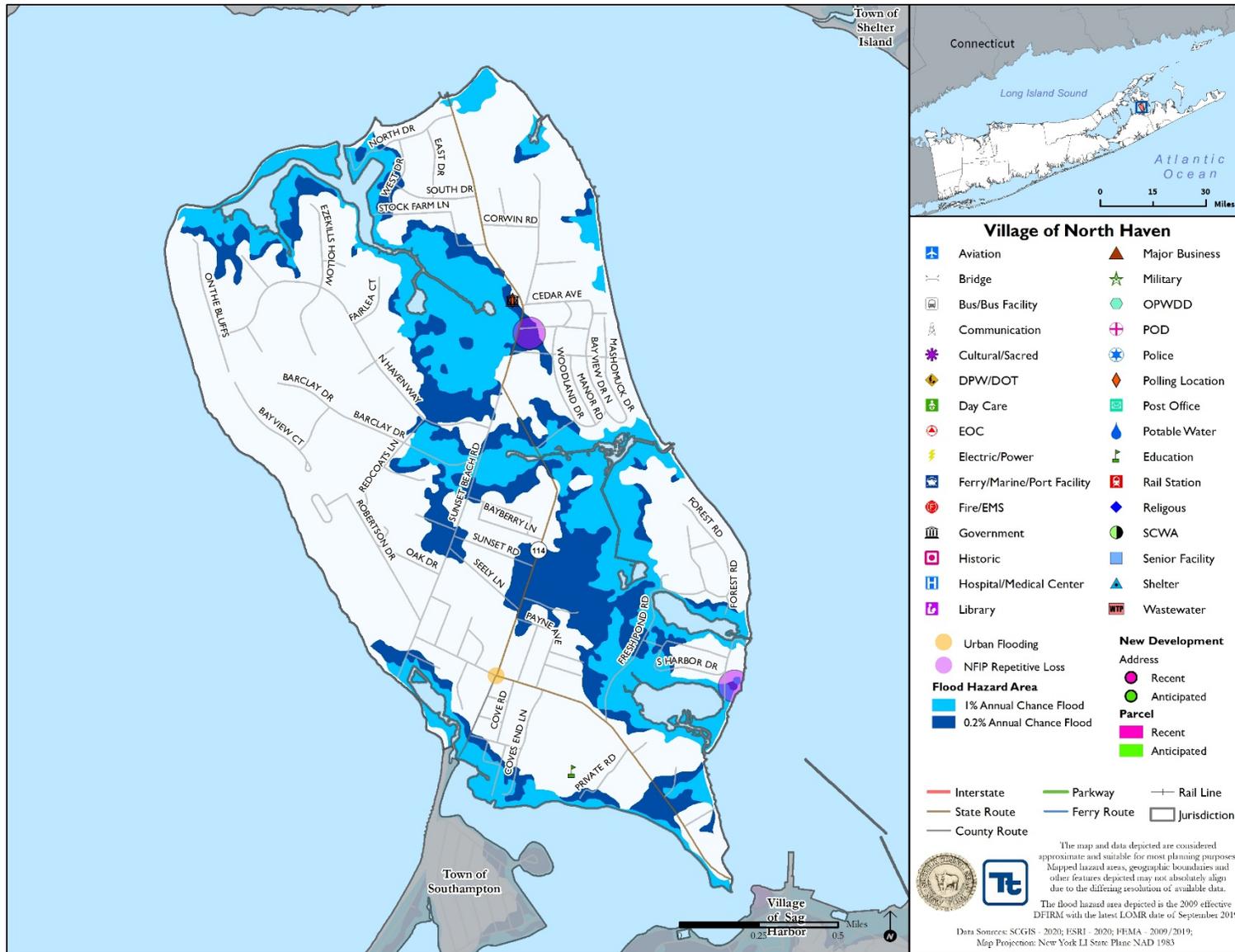




Figure 9.37-2. Village of North Haven Hazard Area Extent and Location Map 2

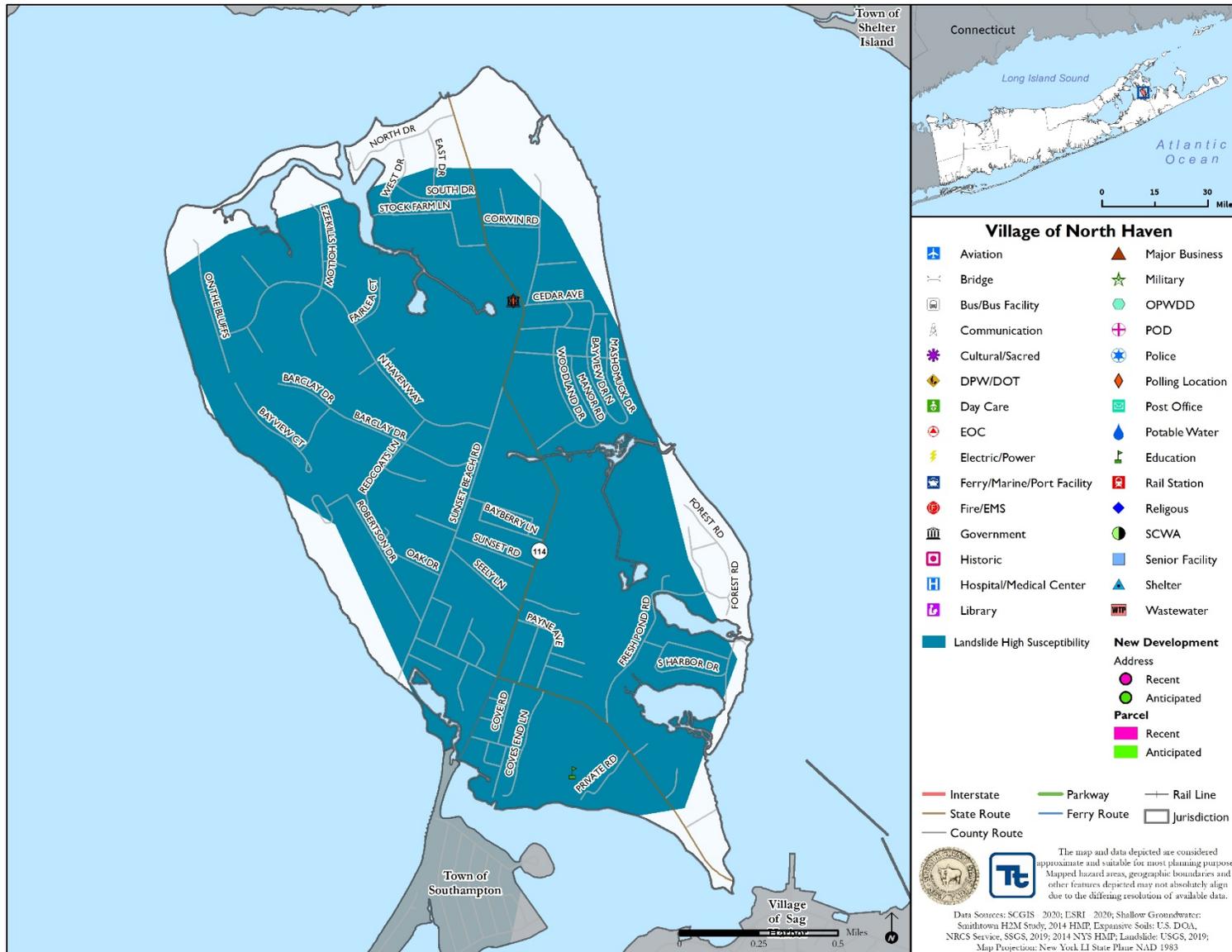




Figure 9.37-3. Village of North Haven Hazard Area Extent and Location Map 3

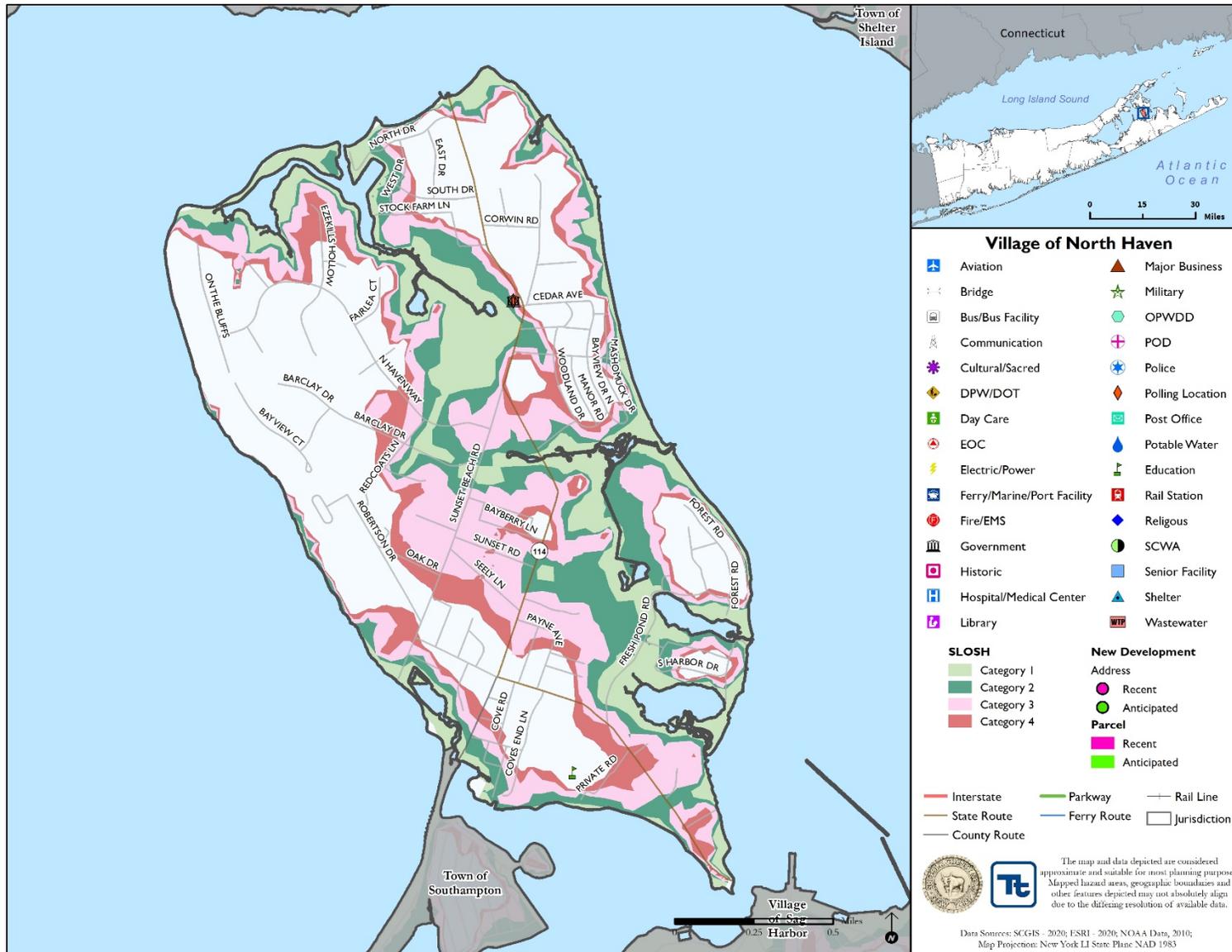




Figure 9.37-4. Village of North Haven Hazard Area Extent and Location Map 4

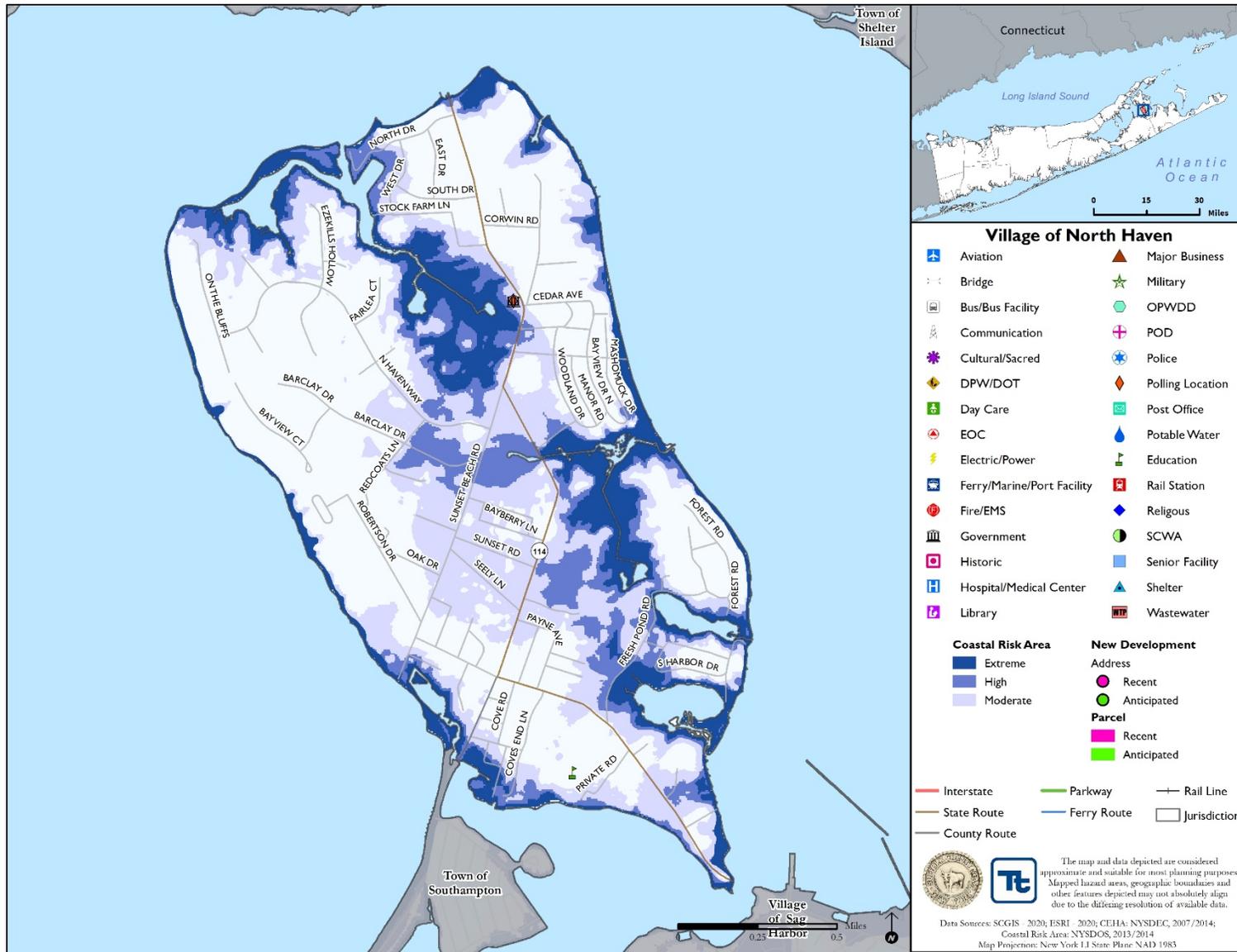




Figure 9.37-5. Village of North Haven Hazard Area Extent and Location Map 5

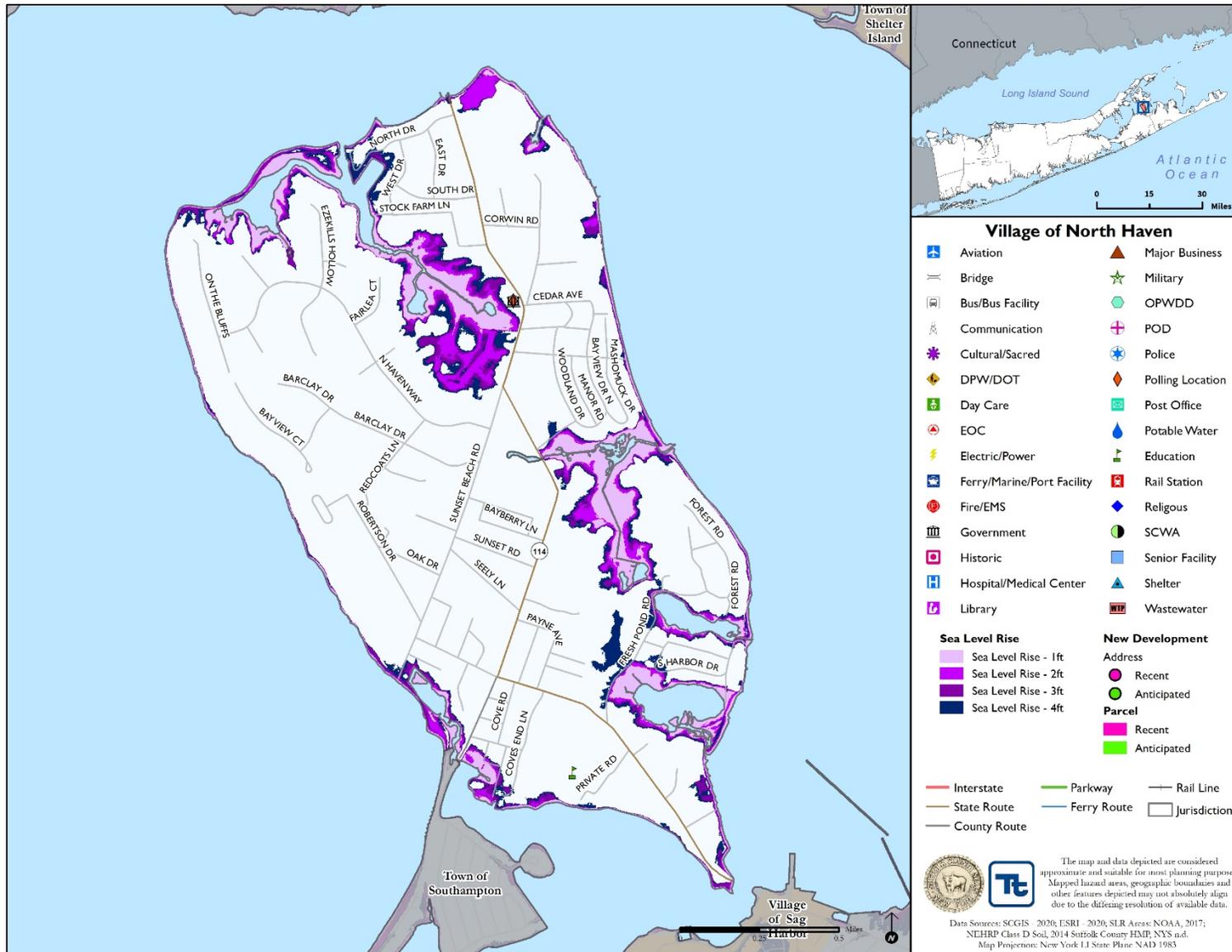
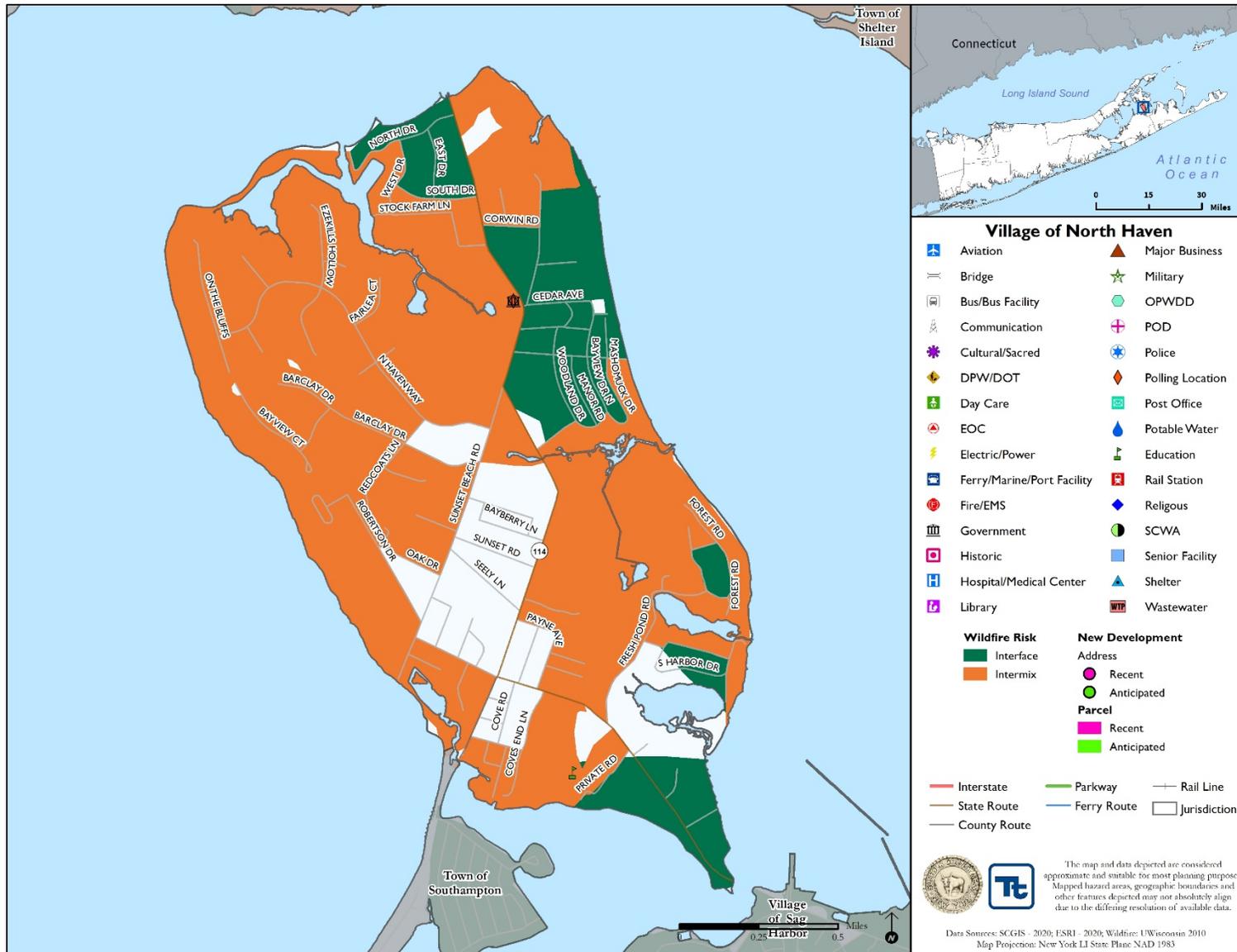




Figure 9.37-6. Village of North Haven Hazard Area Extent and Location Map 6





Action Worksheet			
<b>Project Name:</b>	Long Beach Circle Stormwater Upgrades		
<b>Project Number:</b>	2020-North Haven-001		
Risk / Vulnerability			
<b>Hazard(s) of Concern:</b>	Flood, Severe Storm, Groundwater Flooding		
<b>Description of the Problem:</b>	The traffic circle in the Long Beach area is partially owned by the Village, with the County and State. Tyndall Road is impacted by stormwater runoff from the state section of the circle and experiences stormwater flooding. Rising groundwater has added to drainage issues. The state has accepted responsibility to address the issue and identified solutions but has not implemented these actions due to budget restrictions.		
Action or Project Intended for Implementation			
<b>Description of the Solution:</b>	The Village will work with the NYS DOT to identify a funding source to complete the state's identified stormwater upgrades and implement the improvements.		
<b>Is this project related to a Critical Facility?</b>	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
<b>Is this project related to a Critical Facility located within the 100-year floodplain?</b>	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
<b>Level of Protection:</b>	TBD by selected upgrades	<b>Estimated Benefits (losses avoided):</b>	Reduction in flooding on Tyndall Road
<b>Useful Life:</b>	50 years	<b>Goals Met:</b>	1, 2
<b>Estimated Cost:</b>	High	<b>Mitigation Action Type:</b>	Structure and Infrastructure Project
Plan for Implementation			
<b>Prioritization:</b>	High	<b>Desired Timeframe for Implementation:</b>	Within 2 years
<b>Estimated Time Required for Project Implementation:</b>	2 years	<b>Potential Funding Sources:</b>	HMGP, BRIC, NYS DOT
<b>Responsible Organization:</b>	NYS DOT, Village Administration	<b>Local Planning Mechanisms to be Used in Implementation if any:</b>	Hazard mitigation, Stormwater management
Three Alternatives Considered (including No Action)			
<b>Alternatives:</b>	Action	Estimated Cost	Evaluation
	No Action	\$0	Problem continues.
	Abandon roadway	N/A	Roadway cannot be abandoned
	Buyout houses impacted by flooding	\$5 million	Roadway still floods
Progress Report (for plan maintenance)			
<b>Date of Status Report:</b>			
<b>Report of Progress:</b>			
<b>Update Evaluation of the Problem and/or Solution:</b>			



Evaluation and Prioritization		
<b>Project Name:</b>	Long Beach Circle Stormwater Upgrades	
<b>Project Number:</b>	2020-North Haven-001	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	0	
Property Protection	1	Project protects roadway and properties from flooding
Cost-Effectiveness	1	
Technical	1	The NYS DOT has identified necessary stormwater upgrades
Political	1	There is public support for the project
Legal	1	
Fiscal	0	Project requires funding support
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	Flood, Severe Storm, Groundwater Flooding
Timeline	1	Within 2 years
Agency Champion	1	NYS DOT, Village Administration
Other Community Objectives	1	
<b>Total</b>	12	
<b>Priority (High/Med/Low)</b>	High	



Action Worksheet			
<b>Project Name:</b>	Repetitive Loss and Flood Prone Properties		
<b>Project Number:</b>	2020-North Haven-002		
Risk / Vulnerability			
<b>Hazard(s) of Concern:</b>	Flood, Severe Storm		
<b>Description of the Problem:</b>	Frequent flooding events have resulted in damages to residential properties in the SFHA. One property has been repetitively flooded as documented by paid NFIP claims. Additional properties are likely to have experienced flood damages but may be privately insured or self-insured.		
Action or Project Intended for Implementation			
<b>Description of the Solution:</b>	Conduct outreach to 30 flood-prone property owners, including RL/SRL property owners and provide information on mitigation alternatives. After preferred mitigation measures are identified, collect required property-owner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition/purchase/moving/elevating residential homes in the flood prone areas that experience frequent flooding (high risk areas).		
<b>Is this project related to a Critical Facility or Lifeline?</b>	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
<b>Is this project related to a Critical Facility located within the 100-year floodplain?</b>	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
<b>Level of Protection:</b>	1% annual chance flood event + freeboard ( <i>in accordance with flood ordinance</i> )	<b>Estimated Benefits (losses avoided):</b>	Eliminates flood damage to homes and residents, creates open space for the municipality increasing flood storage.
<b>Useful Life:</b>	Acquisition: Lifetime Elevation: 30 years (residential)	<b>Goals Met:</b>	1, 2
<b>Estimated Cost:</b>	\$3Million	<b>Mitigation Action Type:</b>	Structure and Infrastructure Project
Plan for Implementation			
<b>Prioritization:</b>	High	<b>Desired Timeframe for Implementation:</b>	6-12 months
<b>Estimated Time Required for Project Implementation:</b>	Three years	<b>Potential Funding Sources:</b>	FEMA HMGP and FMA, local cost share by residents
<b>Responsible Organization:</b>	NFIP Floodplain Administrator, supported by homeowners	<b>Local Planning Mechanisms to be Used in Implementation if any:</b>	Hazard Mitigation
Three Alternatives Considered (including No Action)			
<b>Alternatives:</b>	<b>Action</b>	<b>Estimated Cost</b>	<b>Evaluation</b>
	No Action	\$0	Current problem continues
	Elevate homes	\$500,000	When this area floods, the entire area is impacted; elevating homes would not eliminate the problem and still lead to road closures and impassable roads
	Elevate roads	\$500,000	Elevated roadways would not protect the homes from flood damages
Progress Report (for plan maintenance)			
<b>Date of Status Report:</b>			
<b>Report of Progress:</b>			



<b>Update Evaluation of the Problem and/or Solution:</b>		
<b>Action Worksheet</b>		
<b>Project Name:</b>	Repetitive Loss and Flood Prone Properties	
<b>Project Number:</b>	2020-North Haven-002	
<b>Criteria</b>	<b>Numeric Rank (-1, 0, 1)</b>	<b>Provide brief rationale for numeric rank when appropriate</b>
<b>Life Safety</b>	1	Families moved out of high-risk flood areas.
<b>Property Protection</b>	1	Properties removed from high-risk flood areas.
<b>Cost-Effectiveness</b>	1	Cost-effective project
<b>Technical</b>	1	Technically feasible project
<b>Political</b>	1	
<b>Legal</b>	1	The Village has the legal authority to conduct the project.
<b>Fiscal</b>	0	Project will require grant funding.
<b>Environmental</b>	1	
<b>Social</b>	0	Project would remove families from the flood prone areas of the Village.
<b>Administrative</b>	0	
<b>Multi-Hazard</b>	1	Flood, Severe Storm
<b>Timeline</b>	0	
<b>Agency Champion</b>	1	NFIP Floodplain Administrator, supported by homeowners
<b>Other Community Objectives</b>	1	
<b>Total</b>	10	
<b>Priority (High/Med/Low)</b>	High	



Action Worksheet			
<b>Project Name:</b>	Fresh Pond Road		
<b>Project Number:</b>	2020-North Haven-003		
<b>Risk / Vulnerability</b>			
<b>Hazard(s) of Concern:</b>	Flood, Severe Storm, Groundwater Flooding		
<b>Description of the Problem:</b>	Fresh Pond Road is a low lying roadway which is prone to flooding. Past mitigation actions have included the installation of additional storm drains. However, flood risk still exists. The Road is partially privately owned. 20+ homes are located on the private section of the roadway.		
<b>Action or Project Intended for Implementation</b>			
<b>Description of the Solution:</b>	The Village will conduct a flood study to determine if additional mitigation actions such as roadway elevation could be cost effective. The Village will implement any identified actions.		
<b>Is this project related to a Critical Facility?</b>	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
<b>Is this project related to a Critical Facility located within the 100-year floodplain?</b>	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect to the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
<b>Level of Protection:</b>	TBD by selected upgrades	<b>Estimated Benefits (losses avoided):</b>	Potential mitigation actions identified and implemented to reduce flood risk
<b>Useful Life:</b>	50 years	<b>Goals Met:</b>	1, 2
<b>Estimated Cost:</b>	\$10,000 for study	<b>Mitigation Action Type:</b>	Structure and Infrastructure Project
<b>Plan for Implementation</b>			
<b>Prioritization:</b>	High	<b>Desired Timeframe for Implementation:</b>	Within 5 years
<b>Estimated Time Required for Project Implementation:</b>	2 years	<b>Potential Funding Sources:</b>	HMGP, BRIC, Village budget, Private homeowner funding
<b>Responsible Organization:</b>	NYS DOT, Village Administration	<b>Local Planning Mechanisms to be Used in Implementation if any:</b>	Hazard mitigation, Stormwater management
<b>Three Alternatives Considered (including No Action)</b>			
<b>Alternatives:</b>	<b>Action</b>	<b>Estimated Cost</b>	<b>Evaluation</b>
	No Action	\$0	Problem continues.
	Abandon roadway	N/A	Roadway cannot be abandoned or access will be cut off
	Buyout houses impacted by flooding	\$5 million	Roadway still floods
<b>Progress Report (for plan maintenance)</b>			
<b>Date of Status Report:</b>			
<b>Report of Progress:</b>			
<b>Update Evaluation of the Problem and/or Solution:</b>			



Evaluation and Prioritization		
<b>Project Name:</b>	Fresh Pond Road	
<b>Project Number:</b>	2020-North Haven-003	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	
Property Protection	1	Project protects roadway and properties from flooding
Cost-Effectiveness	1	
Technical	1	
Political	1	There is public support for the project
Legal	1	
Fiscal	0	Project requires funding support
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	Flood, Severe Storm, Groundwater Flooding
Timeline	0	Within 5 years
Agency Champion	1	Engineer
Other Community Objectives	1	
<b>Total</b>	12	
<b>Priority (High/Med/Low)</b>	High	