



9.23 Village of Northport

This section presents the jurisdictional annex for the Village of Northport.

9.23.1 Hazard Mitigation Plan Point of Contact

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

Primary Point of Contact	Alternate Point of Contact
Joy Nygren, Emergency Coordinator 224 Main Street, Northport, NY 11768 Phone: 631-261-7502, x322 E-mail:nptjoy@optonline.net	Chief Eric Bruckenthal, Chief of Police 224 Main Street, Northport, NY 11768 Phone: 631.261.7500 E-Mail: northportchief@optonline.net

9.23.2 Municipal Profile

This section provides a summary of the community.

Population

According to the U.S. Census, the 2010 population for the Village of Northport was 7,401.

Location

The Village of Northport is located on the north shore within Huntington Township in Suffolk County. The Village is comprised of 2.5 square miles, and approximately 31 miles of roadway. The southernmost boundary is a major east/west thoroughfare, State Route 25A.

Brief History

The first inhabitants of this area were the Matinecock Indians and they referred to this area as Opcathontyche, meaning Wading Place Creek. In 1656, three Englishmen from Huntington bought this territory for seven quarts of liquor, two coats, four shirts and 11 ounces of powder, and it was renamed Great Cow Harbor. The settlers and Indians got along well as there was plenty of fishing and farming to sustain them both.

After the American Revolution there were only 31 families residing in Great Cow Harbor. They replanted crops and replenished livestock. In 1802, 28 residents petitioned the Town of Huntington for a public dock at Bryant’s Landing - now the Northport Village Dock.

By the end of the 1830s, the name Northport was beginning to replace Great Cow Harbor, and shipbuilding had become a major industry. The famous schooner “Jessie Carl” was built in 1867 and launched in Long Island Sound. Ultimately, Northport turned out more than 200 vessels by the time the industry waned in the late 1880s, when steel hulls, for which the local yards were unsuited, began to replace wood and improved roads diminished the need for coastal trading vessels. A stage coach met the trains at Route 25A and Church Street from 1873 to 1887 and then at the East Northport Station.

The Village of Northport was incorporated in 1896, the first in the Township, and the Northport Electric Company was founded. By the late 19th century, well-to-do visitors from New York City were summering in this charming locale. Northport was the first village to convert to electricity, and in 1902,





the electrically-operated Northport Trolley Line relieved the stage coaches of the duty of meeting the trains. The trolley rails still run down Main Street today.

Northport remains a picture-postcard waterfront village which offers its residents and visitors boutiques and antique shops, historic Victorian and 18th century homesteads, shops and storefronts, a museum, and gourmet dining in a downtown shopping area where Main Street meets the water.

Governing Body Format

The Village of Northport is governed by a five-member Board of Trustees, comprised of a Mayor and four Trustees. This body will assume the responsibility for the adoption and implementation of this Plan. The Village of Northport consists of 8 departments: Building/Code Compliance, Fire, Justice Court, Police, Public Works (Highway, Parks and Sewer), Taxes and Assessment, Treasurer/Accounting, and the Village Clerk’s office.

Growth/Development Trends

No new development has been identified at this time.

9.23.3 Natural Hazard Event History Specific to the Municipality

Suffolk County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5.0 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 table below presents a summary of natural events that have occurred to indicate the range and impact of natural hazard events in the community. Information regarding specific damages is included if available based on reference material or local sources. For details of events prior to 2008, refer to Volume I, Section 5.0 of this plan.

Table 9.23-1. Hazard Event History

Dates of Event	Event Type	FEMA Declaration # (If Applicable)	County Designated?	Summary of Damages/Losses
February 8-9, 2013	Severe Winter Storm and Snowstorm	DR-4111	Yes - PA (Public Assistance)	YES
October 27-November 8, 2012	Hurricane Sandy	DR-4085	Yes – IA (Individual Assistance) and PA	YES
August 26 – September 5, 2011	Hurricane Irene	EM 3328 DR 4020	Yes – IA and PA	YES

9.23.4 Hazard Vulnerabilities and Ranking

The hazard profiles in Section 5.0 of this plan have detailed information regarding each plan participant’s vulnerability to the identified hazards. The following summarizes the hazard vulnerabilities and their ranking in the Village of Northport. For additional vulnerability information relevant to this jurisdiction, refer to Section 5.0.

Hazard Risk/Vulnerability Risk Ranking

The table below summarizes the hazard risk/vulnerability rankings of potential hazards for Village of Northport.



Table 9.23-2. Hazard Risk/Vulnerability Risk Ranking

Hazard Ranking	Hazard type	Estimate of Potential Dollar Losses to Structures Vulnerable to the Hazard ^{a, c, e}	Probability of Occurrence ^b	Risk Ranking Score (Probability x Impact)
3	Coastal Erosion	RCV in CEHA: \$0	Frequent	24
4	Drought	Damage estimate not available	Rare	0
4	Earthquake	500-Year MRP: \$70,139,810 2,500-Year MRP: \$1,240,131,901	Rare	16
4	Expansive Soils	Damage estimate not available	Rare	6
3	Flood	1% Annual Chance: \$10,433,252 0.2% Annual Chance: \$17,424,397	Frequent	24
4	Groundwater Contamination (natural)	Damage estimate not available	Occasional	0
2	Hurricane	Category 1 SLOSH: \$18,769,259 Category 2 SLOSH: \$158,412,706 Category 3 SLOSH: \$294,877,636 Category 4 SLOSH: \$400,718,280	Frequent	30
4	Infestation	No measurable impact to property	Rare	0
3	Nor'Easter	100-Year RCV: \$720,975,178 500-Year RCV: \$62,864,372	Frequent	24
1	Severe Storm	100-Year RCV: \$720,975,178 500-Year RCV: \$62,864,372	Frequent	45
1	Severe Winter Storm	1% of GBS: \$19,031,022 5% of GBS: \$95,155,108	Frequent	45
4	Shallow Groundwater Flooding	Damage estimate not available	Occasional	0
4	Wildfire	Estimated RCV in Interface/Intermix: \$0	Rare	0

- a. Building damage ratio estimates based on FEMA 386-2 (August 2001)
- b. The valuation of general building stock and loss estimates was based on the custom inventory developed for Suffolk County and probabilistic modeling results and exposure analysis as discussed in Section 5.
- c. The earthquake and hurricane wind hazards were evaluated by Census tract. The Census tracts do not exactly align with municipal boundaries; therefore, a total is reported for each Town inclusive of the Villages and the Tribes within the Town boundary.
- d. Frequent = Hazard event that occurs more frequently than once in 10 years; Occasional = Hazard event that occurs from once in 10 years to once in 100 years, Rare = Hazard event that occurs from once in 100 years to once in 1,000 years; None = Hazard event that occurs less frequently than once in 1,000 years
- e. The estimated potential losses for Nor'Easter and Severe Storm are from the HAZUS-MH probabilistic hurricane wind model results. See footnote c.



National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the municipality.

Table 9.23-3. NFIP Summary

Municipality	# Policies (1)	# Claims (Losses) (1)	Total Loss Payments (2)	# Rep. Loss Prop. (1)	# Severe Rep. Loss Prop. (1)	# Policies in 100-year Boundary (3)	# Policies in 500-Boundary (3)	# Policies Outside the 500-year Flood Hazard (3)
Village of Northport	114	92	\$1,268,993	3	1	19	5	90

Source: FEMA Region 2, 2014

Note (1): Policies, claims, repetitive loss and severe repetitive loss statistics provided by FEMA Region 2, and are current as of January 31, 2014. Please note the total number of repetitive loss properties excludes the severe repetitive loss properties. The number of claims represents the number of claims closed by January 31, 2014.

Note (2): Information regarding total building and content losses was gathered from the claims file provided by FEMA Region 2.

Note (3): The policies inside and outside of the flood zones is based on the latitude and longitude provided by FEMA Region 2 in the policy file. FEMA noted that where there is more than one entry for a property, there may be more than one policy in force or more than one GIS possibility.

Critical Facilities

The table below presents HAZUS-MH estimates of the damage and loss of use to critical facilities in the community as a result of a 1- and 0.2-percent annual chance flood events.

Table 9.23-4. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Potential Loss from 1% Flood Event			Potential Loss from 0.2% Flood Event		
		1% Event	0.2% Event	Percent Structure Damage	Percent Content Damage	Days to 100-Percent ⁽²⁾	Percent Structure Damage	Percent Content Damage	Days to 100-Percent ⁽²⁾
Northport Village Park & Dock	Municipal		X						
Cow Harbor Park	Park/Rec	A	X						
Scudder Park	Park/Rec	A	X				16.6	77.9	
Northport Village Stp	Wastewater	A	X						

Source: HAZUS-MH 2.1

Note: x = Facility located within the 0.2-percent annual chance flood boundary.

Please note it is assumed that wells have electrical equipment and openings are three-feet above grade.

(1) HAZUS-MH 2.1 provides a general indication of the maximum restoration time for 100% operations. Clearly, a great deal of effort is needed to quickly restore essential facilities to full functionality; therefore this will be an indication of the maximum downtime (HAZUS-MH 2.1 User Manual).

(2) In some cases, a facility may be located in the DFIRM flood hazard boundary; however HAZUS did not calculate potential loss. This may be because the depth of flooding does not amount to any damages to the structure according to the depth damage function used in HAZUS for that facility type.

Other Vulnerabilities Identified by Municipality

No other vulnerabilities have been identified by the municipality.



9.23.5 Capability Assessment

This section identifies the following capabilities of the local jurisdiction:

- Planning and regulatory capability
- Administrative and technical capability
- Fiscal capability
- Community classification
- National Flood Insurance Program
- Integration of Mitigation Planning into Existing and Future Planning Mechanisms

Planning and Regulatory Capability

The table below summarizes the regulatory tools that are available to the municipality.

Table 9.23-5. Planning and Regulatory Tools

Tool / Program (code, ordinance, plan)	Do you have this? (Y/N)	Authority (local, county, state, federal)	Dept. /Agency Responsible	Code Citation and Comments (Code Chapter, date of adoption, name of plan, explanation of authority, etc.)
Building Code	Y	Local	Village	NYS Code and Northport Village Code Chapter 106 & 114, revised June 2002, historic preservation added 2010
Zoning Ordinance	Y	Local	Village	Northport Village Code Chapter 306, revised August, 2007
Subdivision Ordinance	Y	Local	Village	Northport Village Code Chapter 312, revised January, 2000
Special Purpose Ordinances				
Growth Management				
Floodplain Management / Basin Plan	Y	Local		MS4
Stormwater Management Plan/Ordinance	Y	Local		MS4
Comprehensive Plan / Master Plan				
Capital Improvements Plan				
Site Plan Review Requirements	Y	Local	Village	Northport Village Code Chapter 247, revised April, 2007.
Habitat Conservation Plan				
Economic Development Plan				
Emergency Response Plan				
Shoreline Management Plan	Y	Local		LWRP in development
Post Disaster Recovery Plan				
Post Disaster Recovery Ordinance				
Real Estate Disclosure req.	Y	State mandated		
Other (e.g. steep slope ordinance, local waterfront revitalization plan)				Steep slope is incorporated into Planning Board chapters
NFIP Flood Damage Protection Ordinance				Chapter 159, Amended September 1, 2009
NFIP Freeboard	Y	State Mandated		State mandated BFE+2 for single and two-family residential construction, BFE+1 for all others



Tool / Program (code, ordinance, plan)	Do you have this? (Y/N)	Authority (local, county, state, federal)	Dept. /Agency Responsible	Code Citation and Comments (Code Chapter, date of adoption, name of plan, explanation of authority, etc.)
NFIP - Cumulative Substantial Damages	N			
Coastal Erosion Control Districts				

Administrative and Technical Capability

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

Table 9.23-6. Administrative and Technical Capabilities

Staff/ Personnel Resources	Available (Y or N)	Department/ Agency/Position
Planner(s) or Engineer(s) with knowledge of land development and land management practices	Y	Engineer(s) are paid consultants.
Engineer(s) or Professional(s) trained in construction practices related to buildings and/or infrastructure	Y	Engineer(s) are paid consultants.
Planners or engineers with an understanding of natural hazards	Y	Engineer(s) are paid consultants.
NFIP Floodplain Administrator	Y	Director of Code Compliance
Surveyor(s)	Y	Surveyor(s) are paid consultants.
Personnel skilled or trained in "GIS" applications	N	Superintendent of Public Works will be attending training class.
Scientist familiar with natural hazards in the municipality.	N	
Emergency Manager	Y	Police Chief
Grant Writer(s)	Y	Several departments have obtained grants written by their own personnel.
Staff with expertise or training in benefit/cost analysis	N	

Fiscal Capability

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

Table 9.23-7. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use (Yes/No/Don't Know)
Community Development Block Grants (CDBG)	Yes
Capital Improvements Project Funding	Yes
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
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Mitigation grant programs	Yes
Other	



Community Classifications

The table below summarizes classifications for community program available to the Village of Northport.

Table 9.23-8. Community Classifications

Program	Classification	Date Classified
Community Rating System (CRS)	9	10/1-93
Building Code Effectiveness Grading Schedule (BCEGS)	99/99	1999
Public Protection	3	-
Storm Ready	Not Participating	N/A
Firewise	Not Participating	N/A

N/A = Not applicable. NP = Not participating. - = Unavailable. TBD = To be determined.

Note (1): Higher classification applies to when subject property is located beyond 1000 feet of a creditable fire hydrant and is within 5 road miles of a recognized Fire Station.

The classifications listed above relate to the community’s ability to provide effective services to lessen its vulnerability to the hazards identified. These classifications can be viewed as a gauge of the community’s capabilities in all phases of emergency management (preparedness, response, recovery and mitigation) and are used as an underwriting parameter for determining the costs of various forms of insurance. The CRS class applies to flood insurance while the BCEGS and Public Protection classifications apply to standard property insurance. CRS classifications range on a scale of 1 to 10 with class 1 being the best possible classification, and class 10 representing no classification benefit. Firewise classifications include a higher classification when the subject property is located beyond 1000 feet of a creditable fire hydrant and is within 5 road miles of a recognized Fire Station.

Criteria for classification credits are outlined in the following documents:

- The Community Rating System Coordinators Manual
- The Building Code Effectiveness Grading Schedule
- The ISO Mitigation online ISO’s Public Protection website at <http://www.isomitigation.com/ppc/0000/ppc0001.html>
- The National Weather Service Storm Ready website at <http://www.weather.gov/stormready/howto.htm>
- The National Firewise Communities website at <http://firewise.org/>

National Flood Insurance Program

The following section provides details on the National Flood Insurance Program (NFIP) as implemented within the municipality:

Program and Compliance History

Village of Northport joined the NFIP on April 18, 1983, and is currently an active member of the NFIP. The current effective Flood Insurance Rate Maps are dated September 25, 2009. The community’s Flood Damage Prevention Ordinance (FDPO), found at Chapter 159 of the local code, was last updated on September 1, 2009.

As of January 31, 2014 there are 114 policies in force, insuring \$34,572,900 of property with total annual insurance premiums of \$104,035. Since January 31, 2014, 92 claims have been paid totaling \$1,268,993. As of January 31, 2014 there are 3 Repetitive Loss and 1 Severe Repetitive Loss properties in the community.





Loss History and Mitigation

Since January 31, 2014, 92 claims have been paid totaling \$1,268,993. As of January 31, 2014 there are 3 Repetitive Loss and 1 Severe Repetitive Loss properties in the community.

Planning and Regulatory Capabilities

The community's Flood Damage Prevention Ordinance (FDPO) was last updated on September 1, 2009, and is found at Chapter 159 of the local code.

Integration of Hazard Mitigation into Existing and Future Planning Mechanisms

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":

Land Use Plans – maintain the shoreline management plan to minimize risk in hazard areas. Updates will include a review of the HMP to ensure that hazard areas are identified.

Building Code, Ordinances, and Enforcement – review planned development against the hazard areas identified in the HMP during zoning and subdivision reviews.

Building Code, Ordinances, and Enforcement – maintain stormwater management ordinance to minimize risk from storm impacts.

Emergency Response Plan - consider the development of a post –disaster action plan, including a debris management plan. This to be incorporated into existing emergency management plans. The debris management plan will incorporate estimates of debris generated by different hazards, as discussed in the risk assessment portion of the HMP.

Infrastructure Protection - develop a village-wide tree inventory and management/removal program, and implement as funding becomes available, to decrease the risk of utility failures during storm events

Public Education and Outreach – maintain the Village website as a source for public information on reducing vulnerability to hazards.



9.23.6 Mitigation Strategy and Prioritization

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

Past Mitigation Initiative Status

The following table indicates progress on the community’s mitigation strategy identified in the 2008 Plan. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. 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 9.23-9. Past Mitigation Initiative Status

Description	Status	Review Comments
VNO-1: At the Beach Avenue House, reinforce vulnerable areas.	No Progress	No funding available, continuous.
VNO-2: Expand Public Information/Education by the creation of a Village website.	Completed	Not carried over
VNO-3: Village-wide drainage inventory including GPS location and elevation data.	90% Completed	The majority of drainage structures have been located and layered onto the Arc GIS system that the Village has subscribed to.
VNO-4: Consider the development of a post-disaster action plan, including a debris management plan. This is to be incorporated into existing emergency management/hazard mitigation plans.	Continuous	Post-Irene, the Village removed vegetative debris from Village roadways, dropped it into a Village parking lot, then removed to proper disposal sites. Post-Sandy, the Village opted to touch the debris once, and beyond the emergency situations, removed it to Village trucks, and immediately trucked it to, and, disposed of at proper disposal sites.
VNO-5: Village-wide tree inventory and management/removal program including risk assessment.	No Progress	No funding or staff available.
VNO-6: Continue to support the implementation, monitoring, maintenance and updating of this Plan, as defined in Section 7.0	Ongoing	This initiative is being removed from the updated mitigation strategy as it refers to activities that are an ongoing and normal part of Village operations. The Village has fully participated in the 2014 update to this plan.
VNO-7: Strive to maintain compliance with and good-standing in the National Flood Insurance program.	Ongoing	This initiative is being removed from the updated mitigation strategy, and identified as a mitigation capability as it refers to activities that are an ongoing and normal part of Village operations. Initiatives that enhance local floodplain management capabilities and participation in the NFIP have been identified in the Village’s updated mitigation strategy.
VNO-8: Enforce the seismic design provisions in the International Building Code for all new buildings and infrastructure.	Continuous	The Village has indicated that it will participate in and support the activities of the county-led multi-jurisdictional seismic safety committee.

Completed Mitigation Initiatives not Identified in the Previous Mitigation Strategy

Since the initial Suffolk County Hazard Mitigation Plan was adopted in 2008, the Village of Northport has completed a wastewater treatment plant (WWTP) project. The WWTP underwent a large upgrade



post-Superstorm Sandy. The upgrade included elevating structures and equipment to avoid future inundation. Generators mounted at pump stations were also raised.

Proposed Hazard Mitigation Initiatives for the Plan Update

The Village of Northport identified mitigation initiatives they would like to pursue in the future. 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. Table 9.23-10 identifies the municipality's updated local mitigation strategy.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as 'High', 'Medium', or 'Low.' The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.23-11 provides a summary of the prioritization of all proposed mitigation initiatives for the Plan update.



Table 9.23-10. Proposed Hazard Mitigation Initiatives

Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals and Objectives Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category
VNO-1 (Sandy HMGP LOI #452)	Assess and prioritize options to raise the elevation of the Influent pit barrier wall at the WWTP, and implement as funding is made available..					See Action Worksheet (VNO-1 – LOI 452 – 031814)					
VNO-2 (Sandy HMGP LOI #1107)	Assess and prioritize options to retrofit the understructure of the Village Dock, and implement as funding becomes available.					See Action Worksheet (VNO-2 – LOI 1107 – 031814)					
VNO-3 (Sandy HMGP LOI #1450)	Assess and prioritize options to protect Scudder Park Peninsula from further erosion, and implement as funding becomes available.					See Action Worksheet (VNO-3 – LOI 1450 – 031814)					
VNO-4 (Sandy HMGP LOI #1454)	Assess and prioritize options to install a generator at the Ocean Avenue School., and implement as funding becomes available.					See Action Worksheet (VNO-4 – LOI 1454 – 031814)					
VNO-5 (Sandy HMGP LOI #1461)	Raise low electrical panels at WWTP. One electrical panel at the existing Wastewater Treatment plant was partially submerged and several panels were nearly submerged during Superstorm Sandy. While the panels were not damaged during this storm we are concerned that we may not be so lucky in the future. The panels are lower than the BFE for the Wastewater Treatment Plant and were originally installed at their present					See Action Worksheet (VNO-5 – LOI 1461 – 031814)					



Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals and Objectives Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category
	locations. \$0. The panels would be removed and re-located at a higher elevation at least 1 foot above the BFE to limit or prevent any possibility of being submerged during a storm event. The conduits would have to be extended to the new panel locations along with new wiring pulled to each panel to replace the existing wiring feeding each of the motors, functions or subpanels that they control. By relocating these panels at higher elevations we would eliminate the possibility of any potential water damage to the panels, controls or respective wiring therefore eliminating any compromise or shutdown of the sewer treatment systems at the plant. The possibility of releasing any improperly treated sewage into Northport Harbor would also be minimized.										
VNO-6	Support and participate in county led initiatives intended to build local and regional mitigation and risk-reduction capabilities (see Section 9.1), specifically: <ul style="list-style-type: none"> • Mitigation Education for Natural Disasters (natural hazard awareness and personal scale risk reduction/mitigation public education and outreach program) • Build Local Floodplain Management and Disaster Recovery Capabilities (enhanced floodplain management, and post-disaster assessment and recovery capabilities) • Jurisdictional Knowledge of Mitigation Needs of Property Owners (improved understanding of damages and mitigation interest/activity of private property owners) • 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) • 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). 										
	See above	Both	All Hazards	All Objectives	Suffolk County, as	High (comprehensive)	Low-Medium (locally)	Local (staff resources)	Short	High	All Types





Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals and Objectives Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category
					supported by relevant local department leads,	improvements mitigation and risk-reduction capabilities)					
VNO-7	Assess and prioritize options to replace the bulkhead at the Village owned property on Beach Street, and implement as funding becomes available.	Existing	Hurricane, Nor'Easter, Severe Storm, Severe Winter Storm	2, 16	Village	High	High	Federal HMA Grants	Short term DOF	Medium	SIP
VNO-8	Assess and prioritize options to retrofit the Beach Avenue House, and implement as funding becomes available.	Existing	Hurricane, Nor'Easter, Severe Storm, Severe Winter Storm	2, 16	Village	Medium	Medium	General Fund	Ongoing	Medium	SIP
VNO-9	Maintain the Village website as a source for public information on reducing vulnerability to hazards.	NA	All Hazards	1, 7	Village	High	Low	General Fund	Short term	High	EAP
VNO-10	Develop a GIS inventory of the village-wide drainage system, including elevation data.	NA	Flood, Hurricane, Nor'Easter, Severe Storm	1, 3, 7	Village	High	Low	MS-4	Short term	High	EAP
VNO-11	Develop a village-wide tree inventory and management/removal program, and implement as funding becomes available.	NA	Hurricane, Nor'Easter, Severe Storm, Severe Winter Storm	1, 3, 4	Village	High	Low	Possible General Fun or Potential FEMA HMA	Long Term DOF	High	NRP
VNO-12	Work with County and PSEG (formerly LIPA) to identify roads within the municipality that are considered "critical",	Existing	Severe Storm; Severe Winter Storm; Hurricane;	3, 7, 13, 14, 15, 16	PSEG, County	High	Low-Medium	Local	Short	High	LRP



Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals and Objectives Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category
	and to be the first priority for clearing after an event involving downed power lines.		Nor'Easter								

Notes:

*Does this mitigation initiative reduce the effects of hazards on new and/or existing buildings and/or infrastructure? Not applicable (N/A) is inserted if this does not apply.

Acronyms and Abbreviations:

- DPW Department of Public Works
- FEMA Federal Emergency Management Agency
- FMA Flood Mitigation Assistance grant program
- HMA Hazard Mitigation Assistance grant program (including FMA, HMGP, PDM)
- HMGP Hazard Mitigation Grant Program
- N/A Not applicable
- NFIP National Flood Insurance Program
- NYSOEM New York State Office of Emergency Management
- PDM Pre-Disaster Mitigation grant program
- PSEG Public Service Electric and Gas (formerly LIPA)

Costs:

Where actual project costs have been reasonably estimated:

- Low = < \$10,000
- Medium = \$10,000 to \$100,000
- High = > \$100,000

Where actual project costs cannot reasonably be established at this time:

- Low = Possible to fund under existing budget. Project is part of, or can be part of an existing on-going program.
- Medium = Could budget for under existing work plan, but would require a reapportionment of the budget or a budget amendment, or the cost of the project would have to be spread over multiple years.
- High = Would require an increase in revenue via an alternative source (i.e., bonds, grants, fee increases) to implement. Existing funding levels are not adequate to cover the costs of the proposed project.

Benefits:

Where possible, an estimate of project benefits (per FEMA's benefit calculation methodology) has been evaluated against the project costs, and is presented as:

- Low = < \$10,000
- Medium = \$10,000 to \$100,000
- High = > \$100,000

Where numerical project benefits cannot reasonably be established at this time:

- Low = Long-term benefits of the project are difficult to quantify in the short term.
- Medium = Project will have a long-term impact on the reduction of risk exposure to life and property, or project will provide an immediate reduction in the risk exposure to property.
- High = Project will have an immediate impact on the reduction of risk exposure to life and property.





Timeline:

Short = 1 to 5 years

Long Term = 5 years or greater

OG = On-going program

DOF = Depending on funding

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 (NRP) – 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.*



Table 9.23-13. Summary of Prioritization of Actions

Mitigation Action/Project Number	Mitigation Action/Initiative	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
VNO-6	Support and participate in county led initiatives intended to build local and regional mitigation and risk-reduction capabilities	1	1	1	1	1	0	1	1	0	1	1	1	0	0	10	High
VNO-7	Assess and prioritize options to replace the bulkhead at the Village owned property on Beach Street, and implement as funding becomes available.	1	1	0	0	0	0	0	1	1	1	1	1	1	0	8	Medium
VNO-8	Assess and prioritize options to retrofit the Beach Avenue House, and implement as funding becomes available.	1	1	0	0	0	1	0	0	1	1	1	1	1	0	8	Medium
VNO-9	Maintain the Village website as a source for public information on reducing vulnerability to hazards.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High
VNO-10	Develop a GIS inventory of the village-wide drainage system, including elevation	1	1	1	1	1	0	1	1	1	1	1	0	1	1	12	High





Mitigation Action/Project Number	Mitigation Action/Initiative	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
	data.																
VNO-11	Develop a village-wide tree inventory and management/removal program, and implement as funding becomes available.	1	1	1	1	1	0	0	1	0	1	1	1	1	0	10	High
VNO-12	Work with County and PSEG (formerly LIPA) to identify roads within the municipality that are considered “critical”, and to be the first priority for clearing after an event involving downed power lines.	1	1	0	1	1	0	0	0	1	1	1	1	1	1	10	High

Note: Refer to Section 6 which contains the guidance on conducting the prioritization of mitigation actions.



9.23.7 Future Needs To Better Understand Risk/Vulnerability

- Consider participating in a comprehensive update to the Intra-jurisdictional County-wide Emergency Management Plan.
- Consider participating in a comprehensive update to the Intra-jurisdictional County-wide Debris Management Plan.

9.23.8 Hazard Area Extent and Location

Hazard area extent and location maps have been generated for the Village of Northport that illustrate the probable areas 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. Maps have only been generated for those hazards that can be clearly identified using mapping techniques and technologies, and for which the Village of Northport has significant exposure. These maps are illustrated in the hazard profiles within Section 5.4, Volume I of this Plan.

9.23.9 Additional Comments

None at this time.



Figure 9.23-1. Village of Northport Hazard Area Extent and Location Map 1

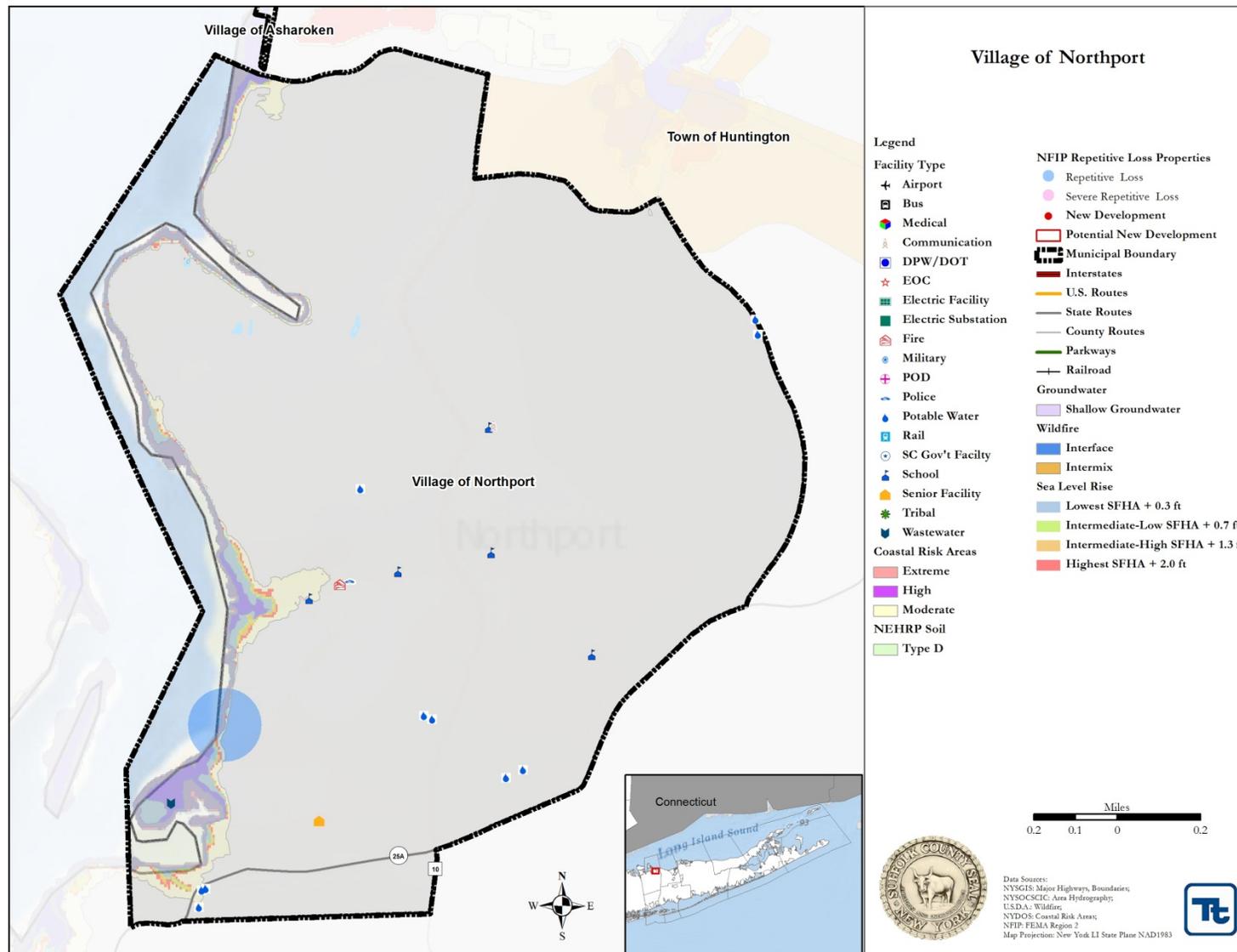
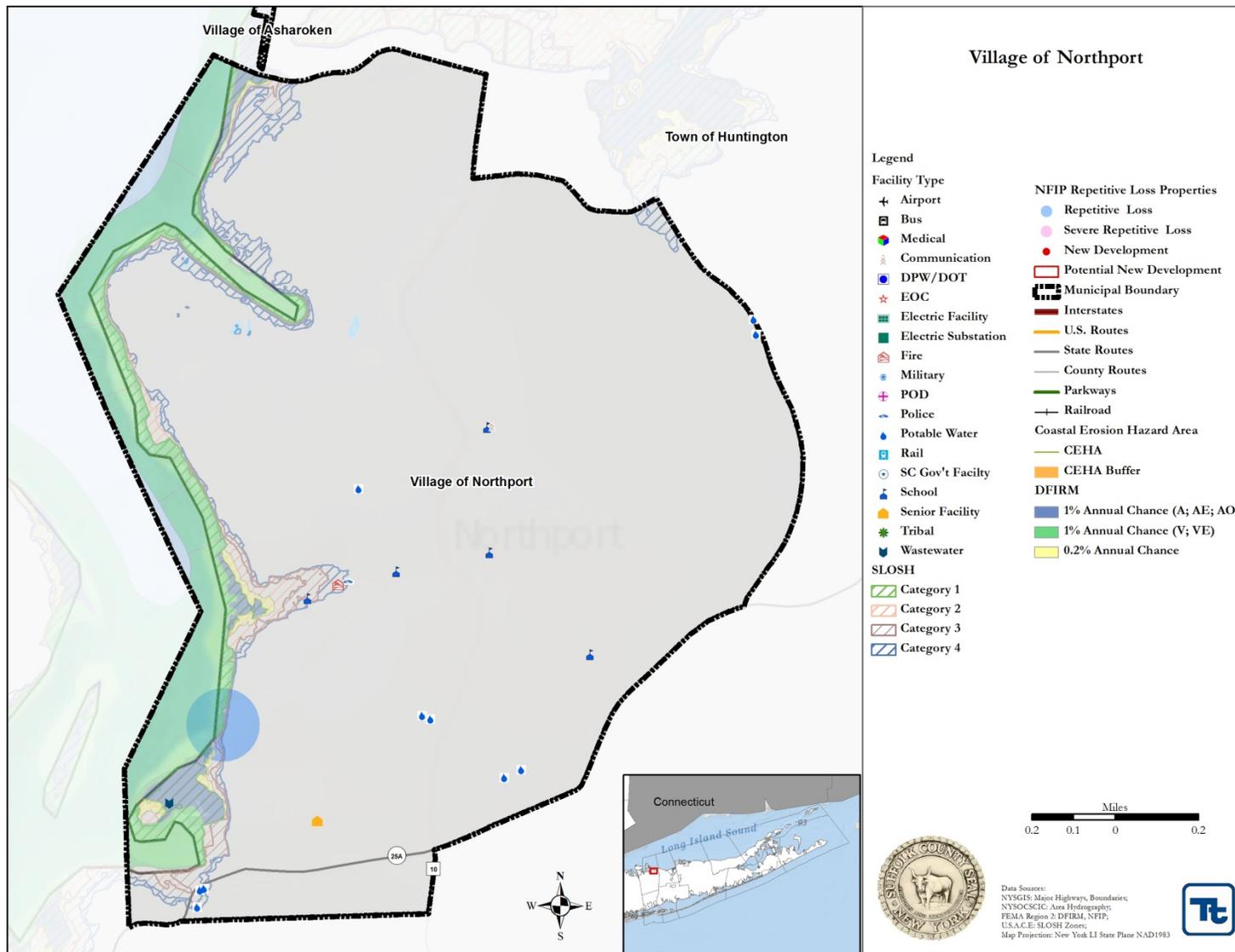




Figure 9.23-2. Village of Northport Hazard Area Extent and Location Map 2





Mitigation Action Worksheet

Please complete one sheet per action/project with as much detail as possible, using the guidance beginning on page 3 and examples provided by FEMA.

Name of Jurisdiction: Village of Northport

Number: Sandy HMGP LOI #: 452

Mitigation Action/Initiative: Raise the elevation of the Influent pit barrier wall at the WWTP.

Assessing the Risk	
Hazard(s) addressed:	
Specific problem being mitigated:	During Sandy, the influent pit was flooded due to the high storm surge. While the Village crews installed a temporary plywood barrier around the pit which held back the tide surge for the most part we need a more permanent solution so as not to experience the intrusion of salt water into the influent tank, submerging the motors, and contaminating the plant by damaging the bacteria levels of the treatment system.
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	1.
	2.
	3.
Action/Project Intended for Implementation	
Description of Selected Action/Project	By raising the barrier walls to a higher elevation, above the current BFE, we will eliminate the flooding potential which will protect motors and eliminate potential destruction of the existing bacteria levels of the plant, which maintain the quality of the effluent and thereby continue to protect the water quality of Northport Harbor.
Mitigation Action/Project Type	
Objectives Met	
Applies to existing structures/infrastructure, future, or not applicable	
Benefits (losses avoided)	Recent Damages: \$9,000
Estimated Cost	\$25,000
Priority*	
Plan for Implementation	
Responsible Organization	Village of Northport: Gene Guido, Village Administrator
Local Planning Mechanism	
Potential Funding Sources	HMGP; _____ for Local Match
Timeline for Completion	
Reporting on Progress	





**Date of Status Report/
Report of Progress**

Date:
Progress on Action/Project:

*** Refer to results of Prioritization (page 2)**





Prioritization

Number: Sandy HMGP LOI #: 452

Mitigation Action/Initiative: Raise the elevation of the Influent pit barrier wall at the WWTP.

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety		
Property Protection		
Cost-Effectiveness		
Technical		
Political		
Legal		
Fiscal		
Environmental		
Social		
Administrative		
Multi-Hazard		
Timeline		
Agency Champion		
Other Community Objectives		
Total		
Priority (High/Med/Low)		





Mitigation Action Worksheet

Please complete one sheet per action/project with as much detail as possible, using the guidance beginning on page 3 and examples provided by FEMA.

Name of Jurisdiction: Village of Northport

Number: Sandy HMGP LOI #: 1107

Mitigation Action/Initiative: Village Dock Upgrade

Assessing the Risk	
Hazard(s) addressed:	
Specific problem being mitigated:	Due to the age of the existing dock and recent storm damage we feel that the understructure of the dock could be a candidate for major structural damage should a future catastrophic storm hit our harbor. The dock has not been surveyed since 2007 and was repaired and upgraded in 2008 based on that last survey.
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	1.
	2.
	3.
Action/Project Intended for Implementation	
Description of Selected Action/Project	Strengthen the understructure of the existing Village Dock against future storms. Because of the age and current condition of the Village Dock we feel the dock needs to be upgraded and strengthened to prevent major structural damage from future catastrophic storms. By having a structural survey performed and incorporating those recommendations into the replacment and upgrading some of the existing dock superstructure it will enable the Village to rest at ease knowing the soundness of the dock is ready to weather anything mother nature can throw at it.
Mitigation Action/Project Type	
Objectives Met	
Applies to existing structures/infrastructure, future, or not applicable	
Benefits (losses avoided)	Recent Damages: \$40,000
Estimated Cost	\$75,000
Priority*	
Plan for Implementation	
Responsible Organization	Village of Northport: Gene Guido, Village Administrator
Local Planning Mechanism	
Potential Funding Sources	HMGP; _____ for Local Match





Timeline for Completion	
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: Progress on Action/Project:

* Refer to results of Prioritization (page 2)





Prioritization

Number: Sandy HMGP LOI #: 1107

Mitigation Action/Initiative: Village Dock Upgrade

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety		
Property Protection		
Cost-Effectiveness		
Technical		
Political		
Legal		
Fiscal		
Environmental		
Social		
Administrative		
Multi-Hazard		
Timeline		
Agency Champion		
Other Community Objectives		
Total		
Priority (High/Med/Low)		





Mitigation Action Worksheet

Please complete one sheet per action/project with as much detail as possible, using the guidance beginning on page 3 and examples provided by FEMA.

Name of Jurisdiction: Village of Northport
Number: Sandy HMGP LOI #: 1450
Mitigation Action/Initiative: Protect Scudder Park Peninsula from further erosion

Assessing the Risk	
Hazard(s) addressed:	
Specific problem being mitigated:	The Scudder Park Peninsula contains Park Facilities and the Waste Water Treatment Plant. The peninsula is experiencing continued beach erosion which has become more substantial during the recent storms. Aside from shrinking the peninsula, the sand from the eroding shoreline is filling in the adjacent channel to the point that soon the channel be not be navigable during low tide. The peninsula would benefit greatly with some kind of short seawall to protect it. The recent storms have excellerated the erosion of the shoreline of the peninsula which has shrunk over the last few years about 18" with trees and sand slipping into the surrounding harbor bed. The recent storms have probably caused somewhere near \$100,000.00 worth of dredging that needs to be done to restore the shoreline. Without the assistance of a bulkhead the erosion will continue to present costs that the village residents cannot afford.
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	1. 2. 3.
Action/Project Intended for Implementation	
Description of Selected Action/Project	Install a short seawall around the 1,500 ft. perimeter of the peninsula. Utilize an extended arm excavator to reclaim the sand from the harbor bed restoring the size of the peninsula and restoring the channel. The adjacent marina to the south of the property would also benefit by eliminating the constant sand and trees slipping into a small portion of their boat slip area making those slips more usable during periods of low tides and eliminating any future potential for friction with the Village that might be caused by the continued erosion. The WWTP is not in immediate danger at this time but protecting the south building exposure which fronts the adjacent marina area would be proactive at this time. The seawall, properly engineered and installed, would prevent the land from continuing to slide into the harbor and by using the reclaimed sand to backfill the seawall and burm the outer boundaries of the peninsula, would also contain the stormwater within some of the parkland area releasing less contaminates into the harbor. The adjacent Marina could co-sponsor the work as they would, to some extent, benefit from the restoration of the Village owned property.
Mitigation Action/Project Type	
Objectives Met	





Applies to existing structures/infrastructure, future, or not applicable	
Benefits (losses avoided)	Recent Damages: \$100,000
Estimated Cost	\$313,320
Priority*	
Plan for Implementation	
Responsible Organization	Village of Northport: Gene Guido, Village Administrator
Local Planning Mechanism	
Potential Funding Sources	HMGP; _____ for Local Match
Timeline for Completion	
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: Progress on Action/Project:

* Refer to results of Prioritization (page 2)





Prioritization

Number: Sandy HMGP LOI #: 1450

Mitigation Action/Initiative: Protect Scudder Park Peninsula from further erosion

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety		
Property Protection		
Cost-Effectiveness		
Technical		
Political		
Legal		
Fiscal		
Environmental		
Social		
Administrative		
Multi-Hazard		
Timeline		
Agency Champion		
Other Community Objectives		
Total		
Priority (High/Med/Low)		





Mitigation Action Worksheet

Please complete one sheet per action/project with as much detail as possible, using the guidance beginning on page 3 and examples provided by FEMA.

Name of Jurisdiction: Village of Northport
Number: Sandy HMGP LOI #: 1454
Mitigation Action/Initiative: Installation of Ocean Avenue School generator

Assessing the Risk	
Hazard(s) addressed:	
Specific problem being mitigated:	During power outages created by storm events or local electric company failures, the Village Police force loses the existing radio communication system. The only antennae's for the Police Department and the repeaters for the Village Police and Fire Departments are installed on one of the local schools that does not have a generator. The Fire Department does have a backup antennae system on the main Firehouse that works but at a percentage of the full system. The storm events recently have caused the frequency of this problem to greatly increase the frequency and as we found out during Superstorm Sandy, the duration of such a problem, over the last few years. While the damage is not monetary it limits the communication of the Village Police force during these events and could compromise their ability to perform duties protecting life and property here in the Village.
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	1. 2. 3.
Action/Project Intended for Implementation	
Description of Selected Action/Project	The Village would like to install an automated generation system for the antennae's and repeaters that are installed on the Ocean Avenue School. We recently procured a surplus standby generator that we would like some assistance with installing at the school along with the associated wiring and accessories to make the system automatic when these interruptions occur. By having an active automated generator system, the interruption of Police communications would be minimized and the Fire Department communication would be maximized at all times.
Mitigation Action/Project Type	
Objectives Met	
Applies to existing structures/infrastructure, future, or not applicable	
Benefits (losses avoided)	Recent Damages: \$0
Estimated Cost	\$20,000
Priority*	





Plan for Implementation	
Responsible Organization	Village of Northport: Gene Guido, Village Administrator
Local Planning Mechanism	
Potential Funding Sources	HMGP; _____ for Local Match
Timeline for Completion	
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: Progress on Action/Project:

* Refer to results of Prioritization (page 2)





Prioritization

Number: Sandy HMGP LOI #: 1454

Mitigation Action/Initiative: Installation of Ocean Avenue School generator

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety		
Property Protection		
Cost-Effectiveness		
Technical		
Political		
Legal		
Fiscal		
Environmental		
Social		
Administrative		
Multi-Hazard		
Timeline		
Agency Champion		
Other Community Objectives		
Total		
Priority (High/Med/Low)		





Mitigation Action Worksheet

Please complete one sheet per action/project with as much detail as possible, using the guidance beginning on page 3 and examples provided by FEMA.

Name of Jurisdiction: Village of Northport
Number: Sandy HMGP LOI #: 1461
Mitigation Action/Initiative: Raise low electrical panels at WWTP

Assessing the Risk	
Hazard(s) addressed:	
Specific problem being mitigated:	One electrical panel at the existing Wastewater Treatment plant was partially submerged and several panels were nearly submerged during Superstorm Sandy. While the panels were not damaged during this storm we are concerned that we may not be so lucky in the future. The panels are lower than the BFE for the Wastewater Treatment Plant and were originally installed at their present locations.
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	1.
	2.
	3.
Action/Project Intended for Implementation	
Description of Selected Action/Project	The panels would be removed and re-located at a higher elevation at least 1 foot above the BFE to limit or prevent any possibility of being submerged during a storm event. The conduits would have to be extended to the new panel locations along with new wiring pulled to each panel to replace the existing wiring feeding each of the motors, functions or subpanels that they control. By relocating these panels at higher elevations we would eliminate the possibility of any potential water damage to the panels, controls or respective wiring therefore eliminating any compromise or shutdown of the sewer treatment systems at the plant. The possibility of releasing any improperly treated sewage into Northport Harbor would also be minimized.
Mitigation Action/Project Type	
Objectives Met	
Applies to existing structures/infrastructure, future, or not applicable	
Benefits (losses avoided)	Recent Damages: \$0
Estimated Cost	\$25,000
Priority*	
Plan for Implementation	
Responsible Organization	Village of Northport: Gene Guido, Village Administrator





Local Planning Mechanism	
Potential Funding Sources	HMGP; _____ for Local Match
Timeline for Completion	
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: Progress on Action/Project:

* Refer to results of Prioritization (page 2)





Prioritization

Number: Sandy HMGP LOI #: 1461
Mitigation Action/Initiative: Raise low electrical panels at WWTP

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety		
Property Protection		
Cost-Effectiveness		
Technical		
Political		
Legal		
Fiscal		
Environmental		
Social		
Administrative		
Multi-Hazard		
Timeline		
Agency Champion		
Other Community Objectives		
Total		
Priority (High/Med/Low)		

