

## 9.13 VILLAGE OF NYACK

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

### 9.13.1 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
James Politi – Village Administrator Email: <a href="mailto:jamespoliti@nyack-ny.gov">jamespoliti@nyack-ny.gov</a> Phone: 845-358-0548	Jonathan Abrams – DPW Foreman Email: <a href="mailto:dpw@nyack.ny.gov">dpw@nyack.ny.gov</a> Phone: 845-358-3552
NFIP Floodplain Administrator (FPA)	
Robert Galvin, Village Planner 845-358-0548 <a href="mailto:marketstat@aol.com">marketstat@aol.com</a>	

### 9.13.2 Municipal Profile

The Village of Nyack is located within the Town of Orangetown, with a small portion located within the Town of Clarkstown, along the western border of Rockland County. The Village is bordered to the north by the Village of Upper Nyack, to the south by the Village of South Nyack, to the east by the Town of Clarkstown, and to the west by the Hudson River. The Hudson River is a major body of water found within the Town.

The Town has a total area of 1.6 square miles, of which, 0.8 square miles is land and 0.8 square miles is water. According to the 2010 Census, the community’s population was 6,765. The Town is governed by Council Manager Format with a Mayor and four Trustees.

### Growth/Development Trends

The following table summarizes recent residential/commercial development since 2010 to present and any known or anticipated major residential/commercial development and major infrastructure development that has been identified in the next five years within the municipality. Refer to the map in 9.13.8 of this annex which illustrates the hazard areas along with the location of potential new development.

**Table 9.13-1. Growth and Development**

Property or Development Name	Type (e.g. Res., Comm.)	# of Units / Structures	Location (address and/or Parcel ID)	Known Hazard Zone(s)	Description/Status of Development
Recent Development from 2010 to present					
The Glenmare	Res/Commercial office	18/ 1 Bldg	220 Main Street	WUI: Interface	Approved 2/4/13; Built in 2014 Rental Apts — 12 -1 bedrooms, 6- 2 bedrooms (includes 3 affordable units)
Nyack Pavion	Res/Retail (mixed use with community center)	135 /3 apt. Bldgs /14 townhouses	60 Cedar Hill Avenue	WUI: Interface	Approved in 2015 — Construction to begin at end of 2016 — Rental units - 14 townhouses, 121 apartment units — 18 — 1 bedroom, 87 — 2 bedroom, 16 — 3 bedroom (includes 13 affordable units)
Nyack Point	Res	33/ 1 Bldg	263 Main Street	WUI: Interface	Under construction — special needs housing/ veterans housing—

Property or Development Name	Type (e.g. Res., Comm.)	# of Units / Structures	Location (address and/or Parcel ID)	Known Hazard Zone(s)	Description/Status of Development
					Rockland Housing Action Coalition — 9 efficiencies, 12 — 1 bedroom, 12 — 2 bedroom — all 33 units are affordable
TIME Hotel	Comm (Boutique Hotel)	130 rooms	400 High Street	WUI: Interface	Built and opened in 2016
Nyack Hospital	Institutional	22,000 sq. ft expansion	160 Midland Avenue	None Identified.	Approved 11/7/16 - — begin construction in December 2016/January 2017 — expansion of emergency department and a new Medical Village under NYS DSRIP Program — designed to better manage visits to the ED through improved facilities and the provision of alternative treatment options via the Medical Village. No additional beds are included and ED staffing will remain unchanged.
Nyack Marina	Comm/Public (redevelop Restaurant)	Redevelopment of Nyack Marina post Sandy	Court/Burd Streets	Flood: 0.2% Chance; WUI: Interface	\$2.6 million Redevelopment of Nyack Public Marina — completed and reopened marina- dredging project has started — renovations for new restaurant (BarTaco) will begin before end of 2016 — parking lot, lighting and other site improvements are being planned — bridge from Memorial Park inlet to Nyack Marina has been funded and will begin in 2017
Montclare	Res	48/1 Bldg	1-6 Main Street	None Identified.	Under construction — rental units- 18 — 1 bedroom, 30 — 2 bedroom (4 affordable units)
<b>Known or Anticipated Development in the Next Five (5) Years</b>					
Gateway Lofts	Res	33/1 Bldg	273 Main Street	WUI: Interface	In PB review — 16 — 1 bedroom, 17 — 2 bedroom (3 affordable units)
TZ Vista	Res/Comm (Restaurant)	130 units	Gedney/Main Streets	WUI: Interface	Application is being submitted for review in beginning of 2017 for PB site plan review and VB special permit in Waterfront District (WF). Includes waterfront improvements and 200 car underground parking. New waterfront restaurant, expanded public access and water dependent uses.
No Project Name	Res	50 units/1 bldg	149 Burd Street	WUI: Interface	Planned — no application submitted
No Project Name	Res	23/1 bldg	262 Main Street	WUI: Interface	Application being submitted in early 2017 — 23 units modular construction

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

### 9.13.3 Natural Hazard Event History Specific to the Municipality

Rockland 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. For the purpose of this plan update, events that have occurred in the County from 2008 to present were summarized to indicate the range and impact of hazard events in the community. Information regarding specific damages is included, if available, based on reference material or local sources. This information is presented in the table below. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

**Table 9.13-2. Hazard Event History**

Dates of Event	Event Type (Disaster Declaration if applicable)	Rockland County Designated?	Summary of Damages/Losses
March 13-31, 2010	Severe Storms and Flooding DR-1899	Yes	<p>Nyack Marina – Wall destroyed by wave action, parking lot experienced flood damage, 120 ft of fencing destroyed, propane canisters displaced, electronic feeds to boat slips damaged.</p> <p>47 tons of debris removed from Village property and along the public right of way</p> <ul style="list-style-type: none"> <li>- Labor costs \$2904.83</li> <li>- Equipment cost \$12,551.00</li> <li>- Material cost \$1,665.92</li> <li>- Direct Administrative Costs \$683.60</li> </ul>
December 26-27, 2010	Severe Winter Storm and Snowstorm DR-1957	Yes	<p>Multiple roads and transportation routes were closed or severely compromised; limiting access to emergency services</p> <ul style="list-style-type: none"> <li>- Labor \$3,145.05</li> <li>- Equipment \$15,212.50</li> <li>- Material \$5,148.31</li> <li>- Contract Costs \$3,600.00</li> <li>- Direct Administrative Costs \$892.86</li> </ul>
August 25 – September 5, 2011	Hurricane Irene DR-4020	Yes	<p>Nyack Creek Culvert – Collapse at 55 Catherine St, 25 Catherine St, and 31 Mill Street; Storm drain collapse at S. Midland Ave and Cedar Hill Ave; Nyack Marina damaged; Flood damage at DPW – fuel tanks relocated due to instability of Nyack Creek; Village Parking lot at Main Street and Catherine Street – blackout damage</p> <ul style="list-style-type: none"> <li>- Nyack Creek - 31 Mill Street \$29,039.75</li> <li>- South Midland Ave &amp; Cedar Hill Ave \$5,498.47</li> <li>- Village Parking Lot at Main St. \$27,676.00</li> <li>- Fuel Tank Relocation - denied</li> <li>- 25 Catherine Street - \$25,443.90</li> <li>- 55 Catherine Street - \$90,588.62</li> <li>- DPW Parking Lot - \$11,535.27</li> </ul>
October 27 – November 8, 2012	Hurricane Sandy DR-4085	Yes	<p>Multiple roads in Village closed and power outages extended for 8 days; commercial closures for 4 days on Main Street</p> <p>Marina severely damaged; Nyack Creek Outfall in Memorial Park; Village Hall roof - \$5,000 in damage</p> <p>Debris Removal:</p> <ul style="list-style-type: none"> <li>- Labor OT \$25,773.03</li> <li>- Straight time \$40,213.71</li> <li>- Equipment \$33,135.75</li> <li>- Contract \$8,935.00</li> <li>- Direct Administrative Cost \$1,321.12</li> </ul>

Dates of Event	Event Type (Disaster Declaration if applicable)	Rockland County Designated?	Summary of Damages/Losses
			Emergency Protective Measures: - Labor \$16,910.38 - Contract \$19,251.96 - Material \$2,387.84 - Hotel Stay \$220.52 - Direct Administrative Cost \$1,321.12

Notes:

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

### 9.13.4 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 Nyack. For additional vulnerability information relevant to this jurisdiction, refer to Section 5.0.

#### Natural Hazard Risk/Vulnerability Risk Ranking

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

Table 9.13-3. Hazard Risk/Vulnerability Risk Ranking

Hazard type	Estimate of Potential Dollar Losses to Structures Vulnerable to the Hazard <sup>a, c</sup>	Probability of Occurrence	Risk Ranking Score (Probability x Impact)	Hazard Ranking <sup>b</sup>
Drought	Damage estimate not available	Frequent	39	High
Earthquake	100-Year GBS: \$0 500-Year GBS: \$1,421,696 2,500-Year GBS: \$29,253,896	Occasional	24	Medium
Extreme Temperature	Damage estimate not available	Frequent	27	Medium
Flood	1% Annual Chance: \$0	Frequent	36	High
Landslide	RCV Exposed: \$0	Rare	6	Low
Severe Storm	100-Year MRP: \$359,523 500-year MRP: \$9,804,322 Annualized: \$42,220	Frequent	48	High
Winter Storm	1% GBS: \$11,958,040 5% GBS: \$59,790,200	Frequent	51	High
Wildfire	Estimated Value in the WUI: \$1,660,936,000	Frequent	54	High

Notes:

- 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 custom inventory for the municipality.  
 High = Total hazard priority risk ranking score of 31 and above  
 Medium = Total hazard priority risk ranking of 20-30+

- c. *Low = Total hazard risk ranking below 20*
- c. *Loss estimates for the severe storm and severe winter storm hazards are structural values only and do not include the value of contents.*
- d. *Loss estimates for the flood and earthquake hazards represent both structure and contents.*
- e. *The HAZUS-MH earthquake model results are reported by Census Tract.*

### National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Village of Nyack.

**Table 9.13-4. 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)
Village of Nyack	43	73	\$2,620,449	4	1	10

Source: FEMA Region 2, 2016

(1) Policies, claims, repetitive loss and severe repetitive loss statistics provided by FEMA Region 2, and are current as of 06/30/2016. The total number of repetitive loss properties does not include the severe repetitive loss properties. The number of claims represents claims closed by 06/30/16.

(2) Total building and content losses from the claims file provided by FEMA Region 2.

(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.

Notes: 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. A zero percentage denotes less than 1/100th percentage and not zero damages or vulnerability as may be the case. Number of policies and claims and claims total exclude properties located outside county boundary, based on provided latitude and longitude.

### Critical Facilities

The table below presents the critical facilities identified in the HMP that are located in the FEMA-delineated 1- and/or 0.2-percent annual chance floodplain. The table also summarizes the Hazards United States (HAZUS) – Multi-Hazards (MH) damage estimates (if any) to each critical facility as a result of the 1-percent annual chance flood event.

**Table 9.13-5. Potential Flood Losses to Critical Facilities**

Name	Type	Exposure		Potential Loss from 1% Flood Event	
		1% Event	0.2% Event	Percent Structure Damage	Percent Content Damage
Nyack’s Little Schoolhouse Daycare, Inc.	Daycare		X	-	-

Source: Hazus-MH 3.2, Rockland County

### Other Vulnerabilities Identified

The municipality has identified the following vulnerabilities within their community:

- Stormwater and drainage issues along the Nyack Creek causing flooding outside of floodplain

### 9.13.5 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 Village of Nyack.

**Table 9.13-6. Planning and Regulatory Tools**

Tool / Program (code, ordinance, plan)	Do you have this? (Yes/No) If Yes, date of adoption or update	Authority (local, county, state, federal)	Dept. /Agency Responsible	Code Citation and Comments (Code Chapter, name of plan, explanation of authority, etc.)
<b>Planning Capability</b>				
Master Plan	Yes 10/13/16	Local	VB	Comprehensive Plan Update (CMP)
Capital Improvements Plan	No			
Floodplain Management / Basin Plan	Yes	Federal& Local	Building	Chapter 205
Stormwater Management Plan	Yes	State & local	Building & Brooker Engineering	Chapter 295, 360 4.12
Open Space Plan	Yes	Local	VB	Included in CMP
Stream Corridor Management Plan	Yes	Local	Building	Chapter 360 4.4
Watershed Management or Protection Plan	No			
Economic Development Plan	Yes 10/13/16	Local	VB	Included in CMP
Comprehensive Emergency Management Plan	Yes	Local, County	VU, DPW	Information at Village Hall
Emergency Operation Plan	Yes.	Local, County	VB, DPW	Information packet at Village Hall
Post-Disaster Recovery Plan	No			
Transportation Plan	Yes 10/13/16	Local	V13	Included in CMP, TAP Plan (Broadway)
Strategic Recovery Planning Report	No			
Other Plans:	Yes 1/23/92	Local	VB	LWRP , Chapter 342 (LWRP Update in progress)
<b>Regulatory Capability</b>				
Building Code	Yes	State & Local	Building	NYS Building Code & Chapter 140, 176, 196
Zoning Ordinance	Yes	Local	Building	Section 360
Subdivision Ordinance	Yes	Local	Building	Chapter 360 5.8
NFIP Flood Damage Prevention Ordinance	Yes	Federal, State, Local	Building	FEMA Regulations
NFIP: Cumulative Substantial Damages	Yes	State & Local	Building	FEMA Regulations

Tool / Program (code, ordinance, plan)	Do you have this? (Yes/No) If Yes, date of adoption or update	Authority (local, county, state, federal)	Dept. /Agency Responsible	Code Citation and Comments (Code Chapter, name of plan, explanation of authority, etc.)
NFIP: Freeboard	Yes	State, Local	Building	State mandated BFE+2 for single and two-family residential construction, BFE+1 for all other construction types
Growth Management Ordinances	No			
Site Plan Review Requirements	Yes	Local	Building, Planning Board	Chapter 360 5.7
Stormwater Management Ordinance	Yes	Local	Building & Brooker Engineering	Chapter 295, 360 4.12
Municipal Separate Storm Sewer System (MS4)	Yes	State & Local	Brooker Engineering, Building	Chapter 294, 295, 360 4.12
Natural Hazard Ordinance	No			
Post-Disaster Recovery Ordinance	No			
Real Estate Disclosure Requirement	Yes	State		NYS mandate, Property Condition Disclosure Act, NY Code - Article 14 §460-467
Other (Special Purpose Ordinances [i.e., sensitive areas, steep slope])	Yes	Local	Building, Sustainability Coordinator, Planner	Chapter 360 — 4.4 Natural and Scenic Resource Protection (steep slopes, wetlands); chapter 360 - 4.14 - Sustainability

**Administrative and Technical Capability**

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

**Table 9.13-7. Administrative and Technical Capabilities**

Resources	Is this in place? (Yes or No)	Department/ Agency/Position
<b>Administrative Capability</b>		
Planning Board	Yes	Planning Board, Building Inspector, Village Planner
Mitigation Planning Committee	No	
Environmental Board/Commission	No	
Open Space Board/Committee	No	
Economic Development Commission/Committee	No	
Maintenance programs to reduce risk	No	
Mutual aid agreements	Yes	Village of Nyack Fire Dept, Orangetown & Clarkstown Police Dept
<b>Technical/Staffing Capability</b>		
Planner(s) or engineer(s) with knowledge of land development and land management practices	Yes	Planning Department - Village planner
Engineer(s) or professional(s) trained in construction practices related to buildings and/or infrastructure	Yes	Eve Mancuso, PE Brooker Engineering

Resources	Is this in place? (Yes or No)	Department/ Agency/Position
Planners or engineers with an understanding of natural hazards	Yes	Village Planner
NFIP Floodplain Administrator (FPA)	Yes*	Building Inspector
Surveyor(s)	No	
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	Yes	Village Planner - GIS
Scientist familiar with natural hazards	No	
Emergency Manager	Yes	Village Administrator
Grant writer(s)	Yes	Contract grant Writer Sylvia Welch Ph.D.
Staff with expertise or training in benefit/cost analysis	Yes	Village Administrator, Treasurer, Village Planner
Professionals trained in conducting damage assessments	Yes	Brooker Engineering & Blue Shore Engineering

### Fiscal Capability

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

**Table 9.13-8. Fiscal Capabilities**

Financial Resources	Accessible or Eligible to Use (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	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	No
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	No
Other	No

### Community Classifications

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

**Table 9.13-9. Community Classifications**

Program	Do you have this? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No		
Building Code Effectiveness Grading Schedule (BCEGS)	No		



Program	Do you have this? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Public Protection (ISO Fire Protection Classes 1 to 10)	No		
NYSDEC Climate Smart Community	Yes		
Storm Ready Certification	No		
Firewise Communities classification	No		
Natural disaster/safety programs in/for schools	No		
Organizations with mitigation focus (advocacy group, non-government)	No		
Public education program/outreach (through website, social media)	Yes		
Public-private partnership initiatives addressing disaster-related issues	No		

Note:

- N/A Not applicable
- NP Not participating
- Unavailable

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 <https://www.isomitigation.com/ppc/>
- The National Weather Service Storm Ready website at <http://www.stormready.noaa.gov/index.html>
- The National Firewise Communities website at <http://firewise.org/>

### Self-Assessment of Capability

The table below provides an approximate measure of the Village of Nyack’s capability to work in a hazard-mitigation capacity and/or effectively implement hazard mitigation strategies to reduce hazard vulnerabilities.

**Table 9.13-10. Self-Assessment Capability for the Municipality**

Area	Degree of Hazard Mitigation Capability		
	Limited (If limited, what are your obstacles?)*	Moderate	High
Planning and regulatory capability		X	
Administrative and technical capability		X	

Area	Degree of Hazard Mitigation Capability		
	Limited (If limited, what are your obstacles?)*	Moderate	High
Fiscal capability		X	
Community political capability		X	
Community resiliency capability		X	
Capability to integrate mitigation into municipal processes and activities		X	

**National Flood Insurance Program**

**NFIP Floodplain Administrator (FPA)**

Donald Yacopino – Chief Building Inspector

**Flood Vulnerability Summary**

Currently, the municipality does not maintain a list or inventory of properties that have been flood damaged. During recent storms, including Floyrd, irene, and Sandy, the Village has had five structures damaged; this includes four residential and one commercial structure. The Village makes Substantial Damage estimates, but none were declared for Hurricane Sandy.

**Resources**

The Chief Building Inspector for the Village is the floodplain administrator, but the Village Engineer also provides support as a consultant to aid the responsibilities of floodplain administration. The NFIP administration services and functions provided by the department include permit review and inspections. The FPA does not provide any education or outreach to the community regarding flood hazards/risk, and flood risk reduction through NFIP insurance and mitigation. The FPA identified workload of every day operation of department as a barrier to effectively running the floodplain management program in the Village. He also stated that he does not feel adequately supported and trained to fulfill the responsibilities as a municipal floodplain manager and would attend continuing education and/or certification training on floodplain management if offered in the County.

**Compliance History**

The community is in good-standing in the NFIP, but it is unknown when the last compliance audit was conducted.

**Regulatory**

The community’s floodplain management regulations and ordinances meet the minimum FEMA and state requirements. Other local planning and zoning ordinances, plans, or programs that support floodplain management and meeting the NFIP requirements include site plan review; the boards take into account efforts to reduce flood risk during review. The community is not a part of the Community Rating System program and has not considered joining.

**Integration of Hazard Mitigation into Existing and Future Planning Mechanisms**

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, each community was surveyed to obtain a better understanding of their community’s progress in plan integration. A summary is provided below. In



addition, the community identified specific integration activities that will be incorporated into municipal procedures.

### Planning

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**Comprehensive Plan (2016):** The Town's Comprehensive Plan details the planning goals and objectives regarding land-use, environmental resources, economic development, etc. Sustainability is a major point of focus for the plan, which aims to expand upon the goals of the Sustainable Nyack Action Plan in 2015 and support the Climate Smart Community pledge. The plan addresses a steep watershed and increasing impervious surfaces as a major problem to the water resources and stormwater management of the Village. The Village has commissioned multiple mitigation projects and incorporated assess flood risk into the site plan review process. Projects include improvements to culverts, specifically additions to an existing culvert on Franklin Street that will connect to a system between Mill Street and Burd Street as well, incorporating green infrastructure features along transportation routes, and the Pavillion, an approved residential development, will include green infrastructure practices, such as pervious pavements.

**Land Use Planning:** The Village of Nyack has a Planning Board and Zoning Board of Appeals which review all applications for development and consider natural hazard risk areas in their review. Many development activities require additional levels of environmental review, specifically NYS SEQR requirements.

**Stormwater Management:** Developments are required to follow New York Phase II stormwater regulations for sites exceeding 1 acre; however, the Village requires developments of at least 10,000 square feet to develop a Stormwater Pollution Prevention Plan.

### Regulatory and Enforcement (Ordinances)

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**Flood Damage Prevention:** This ordinance promotes the public health, safety, and general welfare of residents and seeks to minimize destruction or loss of private and public housing, damage to public facilities, both publicly and privately owned, and injury to and loss of human life. It regulates development to promote flood resistant structures and controls the alteration of floodplains to prevent increased vulnerability.

**Stormwater Management:** Chapter 295 of the Village Code deals with 'Stormwater Management.' This ordinance aims to protect the health, well-being, and property of residents in the Village. The ordinance establishes requirements in accordance with NYSDEC SPDES permitting, as well as additional requirements for reducing stormwater runoff from land developments.

**Building Construction Administration:** In accordance to Title 19 NYCRR 1203.2(a), the Town complies with New York State Uniform Fire Prevention and Building Code (the Uniform Code) and the State Energy Conservation Construction Code (the Energy Code). The Building Department, headed by the Building Inspector, administers and enforces all of the provisions and laws applicable to the Uniform and Energy Code.

### Funding

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**Operating Budget:** Capital Improvements Budget includings funding for tree plantings programs, storm sewer improvements and maintenance, culvert improvements and maintenance, and permeable surface applicaitions

**Grants:** The Village actively pursues grant funding from the DOS and FEMA for various mitigation projects. The Village obtained grant funding from FEMA for the March 2010 storm and Hurricane Sandy.

### Education and Outreach

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The Village of Nyack hosts a variety of information on its website for its residents. The Village's website hosts multiple resources include planning documents, zoning codes, feasibility studies, etc. for residents to review. Residents also have the ability to register for alerts regarding health and safety, weather alerts, etc.

Rockland County provides the following services to its municipalities:

- County provides Towns and Villages palm-cards on winter storms; information regarding flooding; hurricane; high-winds, tornadoes via email and social media (Twitter and Facebook).
- Emergency Notification Systems: Rockland County has mapping services available to municipalities through their on-line web map portal. Disaster Land is a web-based emergency management software system; municipalities are granted access to it; flood inundation zones are incorporated into it so Emergency Coordinator from the municipality has access to it 24/7 on smart phone/laptop/desktop. The County utilizes NY-Alert and CodeRed (the backup to NY-Alert) for emergency notifications (all Towns and Villages have access to it). There is a mailbox for known inundation areas to target outreach as needed; and have license for FEMA's IPAWS to issue notifications.

### 9.13.6 Mitigation Strategy and Prioritization

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

#### Past Mitigation Initiative Status

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The following table indicates progress on the community's mitigation strategy identified in the 2010 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 9.13-11. Status of Previous Mitigation Actions

<u>Action Number</u>	<u>2010 Mitigation Action</u>	<u>Responsible Party</u>	<u>Status</u> (In progress, No progress, Complete)	<u>Describe Status</u> 1. Please describe what was accomplished and indicate % complete. 2. If there was no progress, indicate what obstacles/delays encountered? 3. If there was progress, how is/was the action being funded (e.g., FEMA HMGP grant, local budget)?	<u>Next Step</u> (Include in 2018 HMP or Discontinue)	<u>Describe Next Step</u> 1. If including action in the 2016 HMP, revise/reword to be more specific (as appropriate). 2. If discontinue, explain why.
Old NV-1	Replacement of bulkhead at marina	Engineering	Complete	1. 100% Complete 2. Bulkhead replaced 3. Municipal budget, grant funding	Discontinue	Complete
Old NV-2	Replacement/upgrade of culvert at DPW facility	Engineering	In progress	1. 0% complete 2. Unable to secure funding 3. No funding secured	Include in 2018 HMP	Continue to try and secure funding
Old NV-3	Replacement/upgrade of culvert on Mill Street	Engineering	Complete	1. 100% Complete 2. Culvert upgraded/replaced 3. Municipal budget, grant funding	Discontinue	Complete
Old NV-4	Improvements to Nyack Creek	Engineering	In progress	1. 50% 2. Improvements are limited in sections controlled by the Village 3. Municipal budget, grant funding	Include in 2018 HMP	Try to expand improvements to privately owned sections
Old NV-5	Review floodplain ordinance and update current standards	Engineering	In progress	1. 10% complete 2. The item was discussed. 3. Municipal budget	Include in 2018 HMP	Obtain most up-to-date FEMA data and compare with existing ordinances
1.B	Ensure that local comprehensive plans incorporate natural disaster mitigation techniques through a courtesy review or draft plans by the County Planning Department.	CPG member; Village Trustee	Complete	1. 100% Complete 2. Zoning Amendments Adopted in November 2016 3. NYSERDA Grant Funding	Include in 2018 HMP	Complete
2.A	Expand and disseminate GIS and other hazard information on the internet.	CPG member; Village Trustee	No progress	1. 0% Complete 2. Funding allocation has delayed progress 3. No funding secured	Include in 2018 HMP	Continue to try and secure funding

Action Number	2010 Mitigation Action	Responsible Party	Status (In progress, No progress, Complete)	Describe Status 1. Please describe what was accomplished and indicate % complete. 2. If there was no progress, indicate what obstacles/delays encountered? 3. If there was progress, how is/was the action being funded (e.g., FEMA HMGP grant, local budget)?	Next Step (Include in 2018 HMP or Discontinue)	Describe Next Step 1. If including action in the 2016 HMP, revise/reword to be more specific (as appropriate). 2. If discontinue, explain why.
Old NV-6	Work with local municipalities to pursue the development of an Emergency Notification System call perimeter for high risk locations of natural hazards with delineable hazard areas. Rockland County staff will make aerial mapping available, along with GIS mapping for natural hazards that was completed as part of the hazard mitigation planning project. The County will also facilitate the utilization of the Emergency Notification System by municipalities.	CPG member; Village Trustee	Complete	<p>Rockland County has mapping services available to municipalities through their on-line web map portal.</p> <p>Disaster Land is a web-based emergency management software system; municipalities are granted access to it; flood inundation zones are incorporated into it so Emergency Coordinator from the municipality has access to it 24/7 on smart phone/laptop/desktop.</p> <p>The County utilizes NY-Alert and CodeRed (the backup to NY-Alert) for emergency notifications (all Towns and Villages have access to it; New Hempstead not using CodeRed). There is a mailbox for known inundation areas to target outreach as needed; and have license for FEMA's IPAWS to issue notifications.</p>	Discontinue	Complete
Old NV-7	Hold periodic workshops regarding zoning and planning issues that arise regarding natural hazards and hazard mitigation.	CPG member; Village Trustee	No progress	<ol style="list-style-type: none"> <li>0% complete</li> <li>The item is being discussed.</li> <li>No funding secured</li> </ol>	Include in 2018 HMP	Work to plan workshops to educate the public on these issues
4.F	Continue to implement best management practices for floodplain areas.	CPG member; Village Trustee	Complete	<ol style="list-style-type: none"> <li>100%</li> <li>Continually looking for best management practices during new development and redevelopment</li> <li>Municipal budget</li> </ol>	Discontinue	Action no longer required – standard practice

<u>Action Number</u>	<u>2010 Mitigation Action</u>	<u>Responsible Party</u>	<u>Status</u> (In progress, No progress, Complete)	<u>Describe Status</u> 1. Please describe what was accomplished and indicate % complete. 2. If there was no progress, indicate what obstacles/delays encountered? 3. If there was progress, how is/was the action being funded (e.g., FEMA HMGP grant, local budget)?	<u>Next Step</u> (Include in 2018 HMP or Discontinue)	<u>Describe Next Step</u> 1. If including action in the 2016 HMP, revise/reword to be more specific (as appropriate). 2. If discontinue, explain why.
4.G	Identify and document repetitively flooded properties. Work with owners to explore mitigation opportunities for repetitively flooded properties, and if appropriate and feasible, carry out acquisition, relocation, elevation and floodproofing measures to protect these properties.	CPG member; Village Trustee	In progress	1. 10% complete 2. The item is being discussed. 3. No funding secured	Include in 2018 HMP	Initiate outreach to property owners to discuss potential mitigation actions; secure funding
4.J	Develop specific mitigation solutions for floodprone road systems (roads, bridges, intersections, drainage, etc.) under the leadership of County DPW.	CPG member; Village Trustee	In Progress	1. 0% Complete 2. Applications made for CFA funding. 3. No funding secured	Include in 2018 HMP	Continuing applications for funding as projects are in preliminary design phase.
13.A	Determine the year built and level of protection for critical emergency facilities and shelters to highlight structures built before codes and standards were put in place to provide some degree of protection from natural hazards, and pursue potential mitigation opportunities to protect these sites as funding becomes available.	CPG member; Village Trustee	No Progress	1. 0% complete 2. The item was not discussed. 3. No funding secured	Include in 2018 HMP	Determine for additional hazards, not including flood. No critical facility are located within the floodplain
11.B	Review existing emergency response plans for enhancement opportunities: work with social support agencies, homeowners associations and general public to develop and implement monitoring and warning systems focused on vulnerable populations and provision of adequate shelter facilities.	CPG member; Village Trustee	Complete	1. 100% 2. This is an ongoing capability of the Village 3. Municipal budget	Discontinue	Action no longer required – standard practice

Action Number	2010 Mitigation Action	Responsible Party	Status (In progress, No progress, Complete)	Describe Status 1. Please describe what was accomplished and indicate % complete. 2. If there was no progress, indicate what obstacles/delays encountered? 3. If there was progress, how is/was the action being funded (e.g., FEMA HMGP grant, local budget)?	Next Step (Include in 2018 HMP or Discontinue)	Describe Next Step 1. If including action in the 2016 HMP, revise/reword to be more specific (as appropriate). 2. If discontinue, explain why.
Old NV-8	Public awareness program on hazards, prevention and mitigation: assist CPG Chairperson in maintenance of mitigation planning web presence; assist CPG Chairperson in preparation of annual hazards and mitigation planning fact sheet and its distribution; assist CPG chairperson in preparation of hazards survey; periodic discussion of hazard mitigation and the mitigation plan at other regular local meetings; use of annual flyers, newsletters, advertisements, or radio/TV announcements, etc. at the discretion of the jurisdiction (incorporating as much free information as possible from the FEMA publications warehouse and other appropriate sources).	RCOFES lead with direct participation and involvement from each jurisdiction's CPG member	Complete	1. 100% 2. County provided materials for display within the Village 3. Municipal budget, County budget	Discontinue	Complete
Old NV-9	Code update: review existing local codes and ordinances against the identified hazards to determine whether there needs to be any amendments to address identified hazards and, where a need is identified; modify/amend the codes/ordinances as applicable.	Each jurisdictional CPG member	No progress	1. 0% complete 2. The item was not discussed. 3. No funding secured	Include in 2018 HMP	Actively review existing codes and ordinances against the newly identified hazard areas
Old NV-10	Code enforcement: enforcement of NYS and local building codes	Each jurisdictional CPG member	Complete	1. Complete 2. Building codes enforced 3. Municipal budget	Discontinue	Action no longer required – standard practice
Old NV-11	Update/revise floodplain management ordinance to comply with latest FEMA regulations	Village Board, Attorney	In progress	1. 10% complete 2. LWRP study in progress. 3. Funding by NYSDOS	Include in 2018 HMP	LWRP update in progress with attention to Floodplain Management.



<u>Action Number</u>	<u>2010 Mitigation Action</u>	<u>Responsible Party</u>	<u>Status</u> (In progress, No progress, Complete)	<u>Describe Status</u> 1. Please describe what was accomplished and indicate % complete. 2. If there was no progress, indicate what obstacles/delays encountered? 3. If there was progress, how is/was the action being funded (e.g., FEMA HMGP grant, local budget)?	<u>Next Step</u> (Include in 2018 HMP or Discontinue)	<u>Describe Next Step</u> 1. If including action in the 2016 HMP, revise/reword to be more specific (as appropriate). 2. If discontinue, explain why.
Old NV-12	Update/review floodplain management ordinances to be consistent with potential future new FIRMs	Village Board	In progress	1. 10% Complete 2. FIRM mapping being updated 3. No funding	Include in 2018 HMP	1. On hold until FEMA map updating completed. 2. In progress
Old NV-13	Require staff involved in floodplain management and ordinance enforcement to become Certified Floodplain Managers (CFMs)	Building Department	Complete	1. 100% Completed 2. Complete 3. Complete	Include in 2018 HMP	1. Additional Staff Training 2. In progress
Old NV-14	Join the Community Rating System (CRS)	Village Board	No progress	1. 0% Complete 2. Funding for consultant services 3. No progress	Include in 2018 HMP	Researching Shared Services with neighboring community.

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

The Village of Nyack has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2010 Plan:

- Removal of marina bulkhead and breakwater
- Rebuild Nyack Creek Culvert (Village owned sections)
- Franklin Avenue Access way at Nyack Creek – In design
- Nyack Creek Diversion Project – In design; funding research continuing
- Nyack Creek Outfall at Memorial Park – In design; FEMA appropriations

### Proposed Hazard Mitigation Initiatives for the Plan Update

The Village of Nyack participated in a mitigation action workshop on February 16, 2017 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 9.13-12 summarizes the comprehensive-range of specific mitigation initiatives the Village of Nyack 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, 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 your actions as ‘High’, ‘Medium’, or ‘Low.’ The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.13-13 provides a summary of the prioritization of all proposed mitigation initiatives for the Plan update.

Table 9.13-12. 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	CRS Category
NV-1 Old NV-2	Replacement/upgrade of culvert at DPW facility	Existing	Flooding, Severe Storm	1, 2, 4	Engineering	High	High	Municipal budget; Grant funding	DOF	High	SIP	SP
NV-2 Old NV-4	Improvements to Nyack Creek	Existing	Flooding, Severe Storm	1, 2, 4	Engineering	High	High	Municipal budget; Grant funding	DOF	High	NSP	NR
NV-3 Old NV-5	Review floodplain ordinance and update current standards	N/A	Flood	1, 2, 3, 7	Engineering	Medium	Low	Municipal budget	Short	Medium	EAP	PI
NV-4 Old 1.B	Ensure that local comprehensive plans incorporate natural disaster mitigation techniques through a courtesy review or draft plans by the County Planning Department.	N/A	All Hazards	1, 2, 3, 5, 7	CPG member; <u>Village Trustee</u>	Medium	Low	Municipal budget	DOF	Medium	LPR, EAP	PI, PR
NV-5 Old 2.A	Expand and disseminate GIS and other hazard information on the internet.	N/A	All Hazards	All	CPG member; <u>Village Trustee</u>	Medium	Medium	Municipal budget; Grant funding	DOF	Low	EAP	PI
NV-6 Old NV-7	Hold periodic workshops regarding zoning and planning issues that arise regarding natural hazards and hazard mitigation.	N/A	All Hazards	1, 2, 3, 5, 7	CPG member; <u>Village Supervisor</u>	High	Low	Municipal Budget	Ongoing	Medium	EAP	PI
NV-7 4.G	Identify and document repetitively flooded properties. Work with owners to explore mitigation opportunities for repetitively flooded properties, and if appropriate and feasible,	Existing	Flooding, Severe Storm	1, 2, 3, 5, 7	CPG member; <u>Village Trustee</u>	High	Low	Municipal Budget	Ongoing	High	LPR, EAP	PR, PI



Table 9.13-12. 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	CRS Category
	carry out acquisition, relocation, elevation and floodproofing measures to protect these properties.											
NV-8 Old 4.J	Develop specific mitigation solutions for floodprone road systems.	Existing	Flooding, Severe Storm	1, 2, 4	CPG member; <u>Village Trustee</u>	High	High	Municipal budget; County funding; Grant funding	DOF	High	SIP	SP
NV-9 Old 13.A	Determine the year built and level of protection for critical emergency facilities and shelters to highlight structures built before codes and standards were put in place to provide some degree of protection from natural hazards, and pursue potential mitigation opportunities to protect these sites as funding becomes available.	Existing	All Hazards	1, 2, 5, 7	CPG member; <u>Village Trustee</u>	Medium	Low	Municipal budget	Short	Medium	LPR	PR
NV-10 Old NV-9	Code update: review existing local codes and ordinances against the identified hazards to determine whether there needs to be any amendments to address identified hazards and, where a need is identified; modify/amend the codes/ordinances as applicable.	N/A	All	1, 2, 3, 5, 7	Jurisdictional CPG member	Medium	Low	Municipal budget	Short	Medium	LPR	PR



Table 9.13-12. 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	CRS Category
NV-11 Old NV-11	Update/revise floodplain management ordinance to comply with latest FEMA regulations	N/A	Flood	1, 2, 3, 7	Village Board; Attorney	Medium	Low	Municipal budget	Short	Low	EAP	PI
NV-12 Old NV-12	Update/review floodplain management ordinances to be consistent with potential future new FIRMs	N/A	Flood	1, 2, 3, 7	Village Board	Medium	Low	Municipal budget	Short	Low	EAP	PI
NV-13 Old NV-13	Require staff involved in floodplain management and ordinance enforcement to become Certified Floodplain Managers (CFMs)	N/A	Flood	1, 2, 3, 7	Building Department	Medium	Low	Municipal budget	DOF	Low	LPR	PR
NV-14 Old NV-14	Join the Community Rating System (CRS)	N/A	Flood	1, 2, 3, 7	Village Board	Medium	Medium	Municipal budget	DOF	Medium	EAP	PI
NV-15	Apply for funding for Local Hazard Mitigation Plan	N/A	All Hazard	All	Village Board	High	Medium	Grant funding; Municipal Budget	DOF	High	LPR	PR
NV-16	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)	New/Existing	All Hazard	1, 2, 3, 4, 6	Village Board	Medium	Low	Municipal Budget	DOF	Medium	EAP	PI
NV-17	The Little Schoolhouse Daycare, Inc. is a critical facility and located in the floodplain and identified as potentially vulnerable to future flood events as part of the Rockland County	Existing	Flood	1, 2, 4, 6	Village Board	High	Low	Municipal budget	Short	High	SIP	PP

Table 9.13-12. 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	CRS Category
	HMP update. The Village does not have jurisdiction over this facility to mitigate. The Village will notify facility manager/operator regarding available mitigation funding sources and mitigation options such as elevating and relocation to reduce future flood events to consider. The Village will also inform the property owner that NYS requires mitigation address the 500-year flood event or “worst damage scenario” for critical facilities.											
NV-18	Investigate mitigation options, including flood-proofing, elevation, etc., to protect the Nyack Village Water Co Intake up to the 500-year flood elevation and implement the most effective strategy. The Nyack Water Department, which is a department of the Nyack Village government owns and has control over the intake even though it is located in the Town of Clarkstown.	Existing	Flood	1, 2, 4, 6	Nyack Water Department	High	High	Municipal budget; Grant funding	DOF	High	SIP	PP

Notes:

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



*\*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:

CAV	Community Assistance Visit
CRS	Community Rating System
DPW	Department of Public Works
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
RFC	Repetitive Flood Claims Grant Program (discontinued in 2015)
SRL	Severe Repetitive Loss Grant Program (discontinued in 2015)

Timeline:

Short	1 to 5 years
Long Term	5 years or greater
OG	On-going program
DOF	Depending on funding

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.

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 9.13-13. 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
NV-1	Replacement/upgrade of culvert at DPW facility	1	1	1	1	0	0	0	1	0	1	1	0	1	1	9	High
NV-2	Improvements to Nyack Creek	1	1	1	1	0	0	0	1	0	1	1	0	1	1	9	High
NV-3	Review floodplain ordinance and update current standards	1	1	1	1	0	0	1	0	1	1	0	1	0	0	8	Medium
NV-4	Ensure that local comprehensive plans incorporate natural disaster mitigation techniques through a courtesy review or draft plans by the County Planning Department.	1	1	1	1	1	0	1	0	0	1	1	0	0	0	8	Medium
NV-5	Expand and disseminate GIS and other hazard information on the internet.	1	1	1	1	0	0	1	0	0	1	1	0	0	0	7	Low
NV-6	Hold periodic workshops regarding zoning and planning issues that arise regarding natural hazards and hazard mitigation.	1	1	1	1	0	0	1	0	1	1	1	0	0	0	8	Medium
NV-7	Identify and document repetitively flooded properties. Work with owners to explore mitigation opportunities for repetitively flooded properties, and if appropriate and feasible, carry out acquisition, relocation, elevation and floodproofing measures to protect these properties.	1	1	1	1	0	0	1	0	1	1	1	1	1	0	10	High
NV-8	Develop specific mitigation solutions for floodprone road	1	1	1	1	0	0	0	0	1	1	1	0	1	1	9	High

Table 9.13-13. 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
	systems (roads, bridges, intersections, drainage, etc.) under the leadership of County DPW.																
NV-9	Determine the year built and level of protection for critical emergency facilities and shelters to highlight structures built before codes and standards were put in place to provide some degree of protection from natural hazards, and pursue potential mitigation opportunities to protect these sites as funding becomes available.	1	1	1	1	0	0	0	0	1	1	1	1	0	0	8	Medium
NV-10	Code update: review existing local codes and ordinances against the identified hazards to determine whether there needs to be any amendments to address identified hazards and, where a need is identified; modify/amend the codes/ordinances as applicable.	1	1	1	1	0	0	0	0	1	1	1	0	1	0	8	Medium
NV-11	Update/revise floodplain management ordinance to comply with latest FEMA regulations	1	1	1	1	0	0	0	0	1	1	0	0	1	0	7	Low
NV-12	Update/review floodplain management ordinances to be consistent with potential future new FIRMs	1	1	1	1	0	0	0	0	1	1	0	0	1	0	7	Low

Table 9.13-13. 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
NV-13	Require staff involved in floodplain management and ordinance enforcement to become Certified Floodplain Managers (CFMs)	1	1	1	1	0	0	0	0	0	1	0	0	1	0	6	Low
NV-14	Join the Community Rating System (CRS)	1	1	1	1	1	0	1	0	1	1	0	0	0	0	8	Medium
NV-15	Apply for funding for Local Hazard Mitigation Plan	1	1	1	1	0	1	0	0	1	1	1	0	1	1	10	High
NV-16	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)	1	1	1	1	0	1	1	0	0	1	1	0	0	0	8	Medium
NV-17	The Little Schoolhouse Daycare, Inc. is a critical facility and located in the floodplain and identified as potentially vulnerable to future flood events as part of the Rockland County HMP update. The Village does not have jurisdiction over this facility to mitigate. The Village will notify facility manager/operator regarding available mitigation funding sources and mitigation options such as elevating and relocation to reduce future flood events to consider.	1	1	1	1	0	1	1	0	1	1	0	1	1	0	10	High

Table 9.13-13. 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
	The Village will also inform the property owner that NYS requires mitigation address the 500-year flood event or “worst damage scenario” for critical facilities.																
NV-18	Investigate mitigation options, including flood-proofing, elevation, etc., to protect the Nyack Village Water Co Intake up to the 500-year flood elevation and implement the most effective strategy. The Nyack Water Department, which is a department of the Nyack Village government owns and has control over the intake even though it is located in the Town of Clarkstown.	1	1	1	1	0	1	-1	0	0	1	0	0	0	0	5	High

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions.

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### 9.13.7 Future Needs To Better Understand Risk/Vulnerability

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None at this time.

### 9.13.8 Hazard Area Extent and Location

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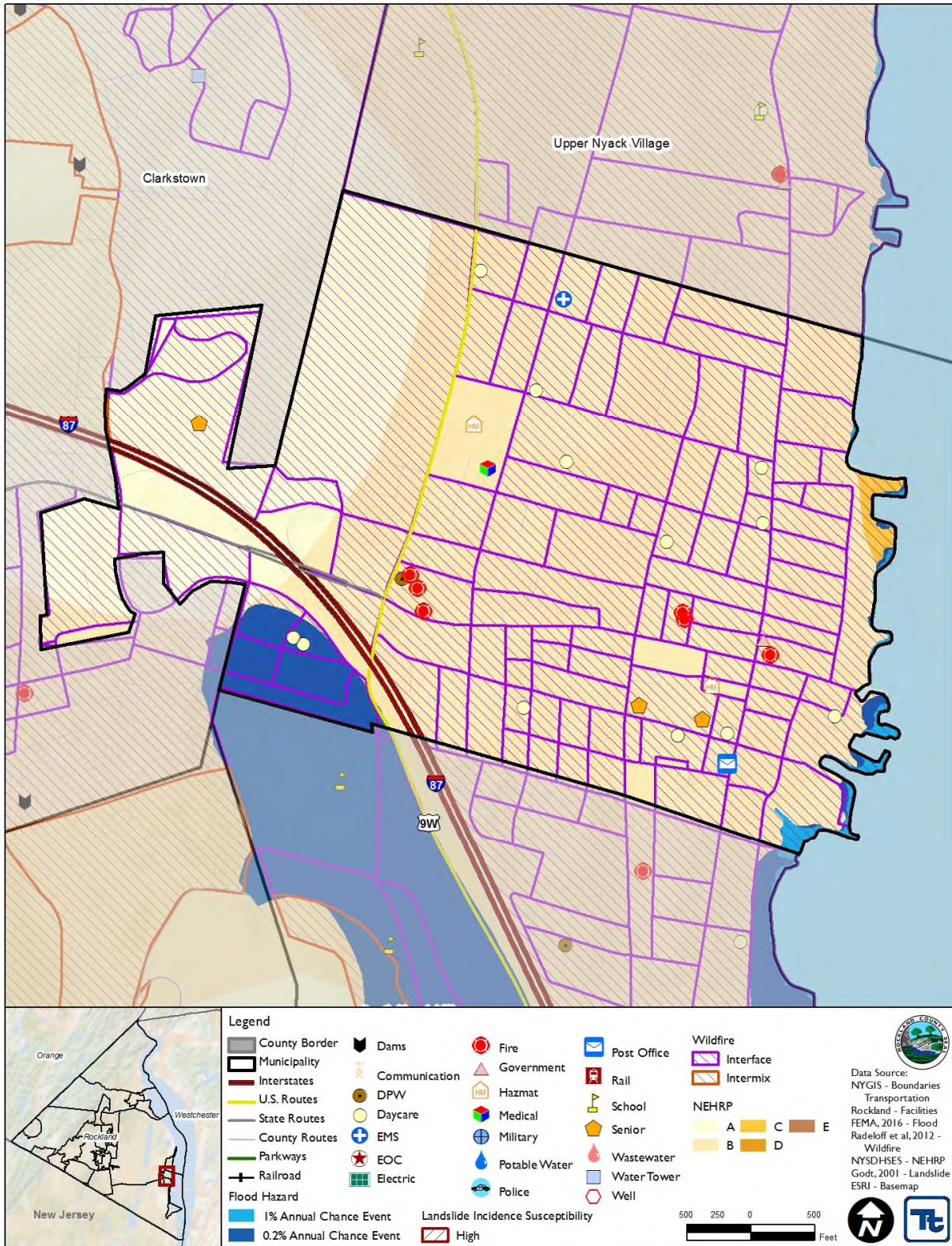
Hazard area extent and location maps have been generated for the Village of Nyack that illustrate the probable areas impacted within the municipality. These maps are based on the best available data at the time of the preparation of this plan, and are considered to be adequate for planning purposes. Maps have only been generated for those hazards that can be clearly identified using mapping techniques and technologies, and for which the Village of Nyack has significant exposure. These maps are illustrated in the hazard profiles within Section 5.4, Volume I of this Plan.

### 9.13.9 Additional Comments

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None at this time.

Figure 9.13-1. Village of Nyack Hazard Area Extent and Location Map



Action Number:

NV-1

Mitigation Action Name:

Replacement/upgrade of culvert at DPW facility

Assessing the Risk	
<b>Hazard(s) addressed:</b>	Flooding, Severe Storm
<b>Specific problem being mitigated:</b>	Undersize culvert at DPW facility, which leads to flooding issues along the roadway.
Evaluation of Potential Actions/Projects	
<b>Actions/Projects Considered (name of project and reason for not selecting):</b>	No Action - current problem continues Remove culvert and move roadway – not feasible
Action/Project Intended for Implementation	
<b>Description of Selected Action/Project</b>	The proposed project will upgrade or replace the existing culvert and allow for improved stormwater drainage. Functionality of the DPW is critical during a storm event.
<b>Mitigation Action Type</b>	SIP
<b>Goals Met</b>	1, 2, 4
<b>Applies to existing and or new development, or not applicable</b>	Existing
<b>Benefits (losses avoided)</b>	High
<b>Estimated Cost</b>	High
<b>Priority*</b>	High
Plan for Implementation	
<b>Responsible Organization</b>	Engineering
<b>Local Planning Mechanism</b>	Hazard Mitigation, Engineering
<b>Potential Funding Sources</b>	Municipal budget; Grant funding
<b>Timeline for Completion</b>	DOF
Reporting on Progress	
<b>Date of Status Report/ Report of Progress</b>	Date: 6/01/2017 Progress on Action/Project: Unable to secure funding

**Action Number:** NV-1  
**Mitigation Action Name:** Replacement/upgrade of culvert at DPW facility

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	
Property Protection	1	
Cost-Effectiveness	1	
Technical	1	
Political	0	
Legal	0	
Fiscal	0	Need to seek grant funding or use municipal budget
Environmental	1	
Social	0	
Administrative	1	
Multi-Hazard	1	Flooding, Severe Storm
Timeline	0	DOF – may not be completed in five years
Agency Champion	1	
Other Community Objectives	1	
<b>Total</b>	9	
<b>Priority (H/M/L)</b>	High	



Action Number:

NV-2

Mitigation Action Name:

Improvements to Nyack Creek

Assessing the Risk	
<b>Hazard(s) addressed:</b>	Flooding, Severe Storm
<b>Specific problem being mitigated:</b>	Development around the Nyack Creek has altered its natural functioning, which has increased the risk to flooding around the creek.
Evaluation of Potential Actions/Projects	
<b>Actions/Projects Considered (name of project and reason for not selecting):</b>	No Action - current problem continues Remove development around Nyack Creek to return to natural floodplain function – not feasible
Action/Project Intended for Implementation	
<b>Description of Selected Action/Project</b>	The Village has been able to finish improvements to Villaged owned segments of the creek, but must determine how to conduct these improvements for segments on private property.
<b>Mitigation Action Type</b>	NSP
<b>Goals Met</b>	1, 2, 4
<b>Applies to existing and or new development, or not applicable</b>	Existing
<b>Benefits (losses avoided)</b>	High
<b>Estimated Cost</b>	High
<b>Priority*</b>	High
Plan for Implementation	
<b>Responsible Organization</b>	Engineering
<b>Local Planning Mechanism</b>	Hazard Mitigation, Engineering
<b>Potential Funding Sources</b>	Municipal budget; Grant funding
<b>Timeline for Completion</b>	DOF
Reporting on Progress	
<b>Date of Status Report/ Report of Progress</b>	Date: 6/01/2017 Progress on Action/Project: Improvements limited to only Village owned segments

Action Number: NV-2  
 Mitigation Action Name: Improvements to Nyack Creek

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	
Property Protection	1	
Cost-Effectiveness	1	
Technical	1	
Political	0	
Legal	0	
Fiscal	0	Need to seek grant funding or use municipal budget
Environmental	1	
Social	0	
Administrative	1	
Multi-Hazard	1	Flooding, Severe Storm
Timeline	0	DOF – may not be completed in five years
Agency Champion	1	
Other Community Objectives	1	
<b>Total</b>	9	
<b>Priority (H/M/L)</b>	High	

**Action Number:** NV-3  
**Mitigation Action Name:** Review floodplain ordinance and update current standards

Assessing the Risk	
<b>Hazard(s) addressed:</b>	Flood
<b>Specific problem being mitigated:</b>	Floodplain ordinance could be out of date and not effective.
Evaluation of Potential Actions/Projects	
<b>Actions/Projects Considered (name of project and reason for not selecting):</b>	No Action - current problem continues Exceed current state and FEMA requirements – not interested in exceeding at this time
Action/Project Intended for Implementation	
<b>Description of Selected Action/Project</b>	Review current ordinance to determine if it meets current State and FEMA requirements and will effectively help mitigate loss.
<b>Mitigation Action Type</b>	EAP
<b>Goals Met</b>	1, 2, 3, 7
<b>Applies to existing and or new development, or not applicable</b>	N/A
<b>Benefits (losses avoided)</b>	Medium
<b>Estimated Cost</b>	Low
<b>Priority*</b>	Medium
Plan for Implementation	
<b>Responsible Organization</b>	Engineering
<b>Local Planning Mechanism</b>	Hazard Mitigation
<b>Potential Funding Sources</b>	Municipal budget
<b>Timeline for Completion</b>	Short
Reporting on Progress	
<b>Date of Status Report/ Report of Progress</b>	Date: 6/01/2017 Progress on Action/Project: Must obtain up-to-date FEMA data

Action Number:

NV-3

Mitigation Action Name:

Review floodplain ordinance and update current standards

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	
Property Protection	1	
Cost-Effectiveness	1	
Technical	1	
Political	0	
Legal	0	
Fiscal	1	Municipal Budget
Environmental	0	
Social	1	
Administrative	1	
Multi-Hazard	0	Flood
Timeline	1	Short Term
Agency Champion	0	
Other Community Objectives	0	
<b>Total</b>	8	
<b>Priority (H/M/L)</b>	Medium	

Action Number:

NV-4

Mitigation Action Name:

Ensure that local comprehensive plans incorporate natural disaster mitigation techniques through a courtesy review or draft plans by the County Planning Department.

Assessing the Risk	
Hazard(s) addressed:	All Hazards
Specific problem being mitigated:	The current comprehensive plan does not incorporate natural disaster mitigation techniques
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	No Action - current problem continues Use local colleges and universities to have plans reviewed – may not be feasible
Action/Project Intended for Implementation	
Description of Selected Action/Project	Ensure that local comprehensive plans incorporate natural disaster mitigation techniques through a courtesy review or draft plans by the County Planning Department.
Mitigation Action Type	LPR, EAP
Goals Met	1, 2, 3, 5, 7
Applies to existing and or new development, or not applicable	N/A
Benefits (losses avoided)	Medium
Estimated Cost	Low
Priority*	Medium
Plan for Implementation	
Responsible Organization	CPG member; Village Trustee
Local Planning Mechanism	Planning Board Review
Potential Funding Sources	Municipal budget
Timeline for Completion	DOF
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: 6/01/2017 Progress on Action/Project: Zoning Amendments Adopted in November 2016; reviewing additional codes

**Action Number:**

NV-4

**Mitigation Action Name:**

Ensure that local comprehensive plans incorporate natural disaster mitigation techniques through a courtesy review or draft plans by the County Planning Department.

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	
Property Protection	1	
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	0	
Fiscal	1	Municipal Budget
Environmental	0	
Social	0	
Administrative	1	
Multi-Hazard	1	All hazards
Timeline	0	DOF – may not be completed in five years
Agency Champion	0	
Other Community Objectives	0	
<b>Total</b>	8	
<b>Priority (H/M/L)</b>	Medium	

Action Number:

NV-5

Mitigation Action Name:

Expand and disseminate GIS and other hazard information on the internet.

Assessing the Risk	
Hazard(s) addressed:	All Hazards
Specific problem being mitigated:	Lack of public knowledge on the spatial extent of hazards.
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	No Action - current problem continues Request assistance from local colleges and universities in developing mapping – may not be feasible, sustainable
Action/Project Intended for Implementation	
Description of Selected Action/Project	Provide GIS hazard information online for residents and others in the community to view the Village's hazard vulnerabilities.
Mitigation Action Type	EAP
Goals Met	All
Applies to existing and or new development, or not applicable	N/A
Benefits (losses avoided)	Medium
Estimated Cost	Medium
Priority*	Low
Plan for Implementation	
Responsible Organization	CPG member; Village Trustee
Local Planning Mechanism	Hazard Mitigation, Public Education
Potential Funding Sources	Municipal budget; Grant funding
Timeline for Completion	DOF
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: 6/01/2017 Progress on Action/Project: Funding allocation has delayed progress.

Action Number:

NV-5

Mitigation Action Name:

Expand and disseminate GIS and other hazard information on the internet.

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	
Property Protection	1	
Cost-Effectiveness	1	
Technical	1	
Political	0	
Legal	0	
Fiscal	1	Municipal Budget or Grant Funding
Environmental	0	
Social	0	
Administrative	1	
Multi-Hazard	1	All hazards
Timeline	0	DOF – may not be completed in five years
Agency Champion	0	
Other Community Objectives	0	
<b>Total</b>	7	
<b>Priority (H/M/L)</b>	Low	



**Action Number:**

NV-6

**Mitigation Action Name:**

Hold periodic workshops regarding zoning and planning issues that arise regarding natural hazards and hazard mitigation.

Assessing the Risk	
<b>Hazard(s) addressed:</b>	All Hazards
<b>Specific problem being mitigated:</b>	The public may not be aware of the Village's hazard vulnerabilities and planning/zoning decisions.
Evaluation of Potential Actions/Projects	
<b>Actions/Projects Considered (name of project and reason for not selecting):</b>	No Action - current problem continues Rely on outside groups to conduct public outreach – may not be sustainable or at high enough standards
Action/Project Intended for Implementation	
<b>Description of Selected Action/Project</b>	Hold periodic workshops regarding zoning and planning issues that arise regarding natural hazards and hazard mitigation.
<b>Mitigation Action Type</b>	EAP
<b>Goals Met</b>	1, 2, 3, 5, 7
<b>Applies to existing and or new development, or not applicable</b>	N/A
<b>Benefits (losses avoided)</b>	High
<b>Estimated Cost</b>	Low
<b>Priority*</b>	Medium
Plan for Implementation	
<b>Responsible Organization</b>	CPG member; Town Supervisor
<b>Local Planning Mechanism</b>	Hazard Mitigation, Public Education
<b>Potential Funding Sources</b>	Municipal Budget
<b>Timeline for Completion</b>	Ongoing
Reporting on Progress	
<b>Date of Status Report/ Report of Progress</b>	Date: 6/01/2017 Progress on Action/Project: No funding secured

**Action Number:**

NV-6

**Mitigation Action Name:**

Hold periodic workshops regarding zoning and planning issues that arise regarding natural hazards and hazard mitigation.

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	
Property Protection	1	
Cost-Effectiveness	1	
Technical	1	
Political	0	
Legal	0	
Fiscal	1	Municipal Budget
Environmental	0	
Social	1	
Administrative	1	
Multi-Hazard	1	All hazards
Timeline	0	Ongoing
Agency Champion	0	
Other Community Objectives	0	
<b>Total</b>	8	
<b>Priority (H/M/L)</b>	Medium	

**Action Number:**

NV-7

**Mitigation Action Name:**

Identify and document repetitively flooded properties. Work with owners to explore mitigation opportunities for repetitively flooded properties, and if appropriate and feasible, carry out acquisition, relocation, elevation and floodproofing measures to protect these properties.

Assessing the Risk	
<b>Hazard(s) addressed:</b>	Flooding, Severe Storm
<b>Specific problem being mitigated:</b>	Repetitively flooded properties place an undue stress on the property owner and village and efforts should be made to mitigate them.
Evaluation of Potential Actions/Projects	
<b>Actions/Projects Considered (name of project and reason for not selecting):</b>	No Action - current problem continues Identify areas where repetitive loss is likely and work with owners – approach not as focused, may be more costly
Action/Project Intended for Implementation	
<b>Description of Selected Action/Project</b>	Identify and document repetitively flooded properties. Work with owners to explore mitigation opportunities for repetitively flooded properties, and if appropriate and feasible, carry out acquisition, relocation, elevation and floodproofing measures to protect these properties.
<b>Mitigation Action Type</b>	LPR, EAP
<b>Goals Met</b>	1, 2, 3, 5, 7
<b>Applies to existing and or new development, or not applicable</b>	Existing
<b>Benefits (losses avoided)</b>	High
<b>Estimated Cost</b>	Low
<b>Priority*</b>	High
Plan for Implementation	
<b>Responsible Organization</b>	CPG member; Village Trustee
<b>Local Planning Mechanism</b>	Hazard Mitigation, Public Education
<b>Potential Funding Sources</b>	Municipal Budget
<b>Timeline for Completion</b>	Ongoing
Reporting on Progress	
<b>Date of Status Report/ Report of Progress</b>	Date: 6/01/2017 Progress on Action/Project: No funding secured

**Action Number:**

NV-7

**Mitigation Action Name:**

Identify and document repetitively flooded properties. Work with owners to explore mitigation opportunities for repetitively flooded properties, and if appropriate and feasible, carry out acquisition, relocation, elevation and floodproofing measures to protect these properties.

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	
Property Protection	1	
Cost-Effectiveness	1	
Technical	1	
Political	0	
Legal	0	
Fiscal	1	Municipal Budget
Environmental	0	
Social	1	
Administrative	1	
Multi-Hazard	1	Flood, Severe Storm
Timeline	1	Ongoing
Agency Champion	1	
Other Community Objectives	0	
<b>Total</b>	10	
<b>Priority (H/M/L)</b>	High	

Action Number:

NV-8

Mitigation Action Name:

Develop specific mitigation solutions for floodprone road systems

Assessing the Risk	
Hazard(s) addressed:	Flooding, Severe Storm
Specific problem being mitigated:	Floodprone roads can inhibit emergency response and evacuation during a flood.
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	No Action - current problem continues Relocate all floodprone road systems – not feasible
Action/Project Intended for Implementation	
Description of Selected Action/Project	Develop specific mitigation solutions for floodprone road systems (roads, bridges, intersections, drainage, etc.) under the leadership of County DPW.
Mitigation Action Type	SIP
Goals Met	1, 2, 4
Applies to existing and or new development, or not applicable	Existing
Benefits (losses avoided)	High
Estimated Cost	High
Priority*	High
Plan for Implementation	
Responsible Organization	CPG member; Village Trustee
Local Planning Mechanism	Hazard Mitigation
Potential Funding Sources	Municipal budget; County funding; Grant funding
Timeline for Completion	DOF
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: 6/01/2017 Progress on Action/Project: Applications made for CFA funding

**Action Number:** NV-8  
**Mitigation Action Name:** Develop specific mitigation solutions for floodprone road systems

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	
Property Protection	1	
Cost-Effectiveness	1	
Technical	1	
Political	0	
Legal	0	
Fiscal	0	Municipal Budget; County-funded or Grant Funding
Environmental	0	
Social	1	
Administrative	1	
Multi-Hazard	1	Flood, Severe Storm
Timeline	0	DOF – may not be completed in five years
Agency Champion	1	
Other Community Objectives	1	
<b>Total</b>	9	
<b>Priority (H/M/L)</b>	High	

**Action Number:**

NV-9

**Mitigation Action Name:**

Determine the year built and level of protection for critical emergency facilities and shelters to highlight structures built before codes and standards were put in place to provide some degree of protection from natural hazards, and pursue potential mitigation opportunities to protect these sites as funding becomes available.

Assessing the Risk	
<b>Hazard(s) addressed:</b>	All Hazards
<b>Specific problem being mitigated:</b>	If facilities were built before a certain date, they could be more susceptible to damage from a hazard event.
Evaluation of Potential Actions/Projects	
<b>Actions/Projects Considered (name of project and reason for not selecting):</b>	No Action - current problem continues Rebuild all critical facilities and shelters to higher standards - cost
Action/Project Intended for Implementation	
<b>Description of Selected Action/Project</b>	Determine the year built and level of protection for critical emergency facilities and shelters to highlight structures built before codes and standards were put in place to provide some degree of protection from natural hazards, and pursue potential mitigation opportunities to protect these sites as funding becomes available.
<b>Mitigation Action Type</b>	LPR
<b>Goals Met</b>	1, 2, 5, 7
<b>Applies to existing and or new development, or not applicable</b>	Existing
<b>Benefits (losses avoided)</b>	Medium
<b>Estimated Cost</b>	Low
<b>Priority*</b>	Medium
Plan for Implementation	
<b>Responsible Organization</b>	CPG member; Village Trustee
<b>Local Planning Mechanism</b>	Hazard Mitigation
<b>Potential Funding Sources</b>	Municipal budget
<b>Timeline for Completion</b>	Short
Reporting on Progress	
<b>Date of Status Report/ Report of Progress</b>	Date: 6/01/2017 Progress on Action/Project: No funding secured

**Action Number:**

NV-9

**Mitigation Action Name:**

Determine the year built and level of protection for critical emergency facilities and shelters to highlight structures built before codes and standards were put in place to provide some degree of protection from natural hazards, and pursue potential mitigation opportunities to protect these sites as funding becomes available.

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	
Property Protection	1	
Cost-Effectiveness	1	
Technical	1	
Political	0	
Legal	0	
Fiscal	0	Municipal Budget
Environmental	0	
Social	1	
Administrative	1	
Multi-Hazard	1	All hazards
Timeline	1	Short Term
Agency Champion	0	
Other Community Objectives	0	
<b>Total</b>	<b>8</b>	
<b>Priority (H/M/L)</b>	<b>Medium</b>	



**Action Number:**

NV-10

**Mitigation Action Name:**

Code update: review existing local codes and ordinances against the identified hazards to determine whether there needs to be any amendments to address identified hazards and, where a need is identified; modify/amend the codes/ordinances as applicable.

Assessing the Risk	
<b>Hazard(s) addressed:</b>	All
<b>Specific problem being mitigated:</b>	New vulnerabilities could have emerge or existing vulnerabilities could have worsen, which could warrant a code update.
Evaluation of Potential Actions/Projects	
<b>Actions/Projects Considered (name of project and reason for not selecting):</b>	No Action - current problem continues Rewrite all code – costly, may not be necessary
Action/Project Intended for Implementation	
<b>Description of Selected Action/Project</b>	The Village would like to review and potentially update their existing local codes/ordinances against the identified hazards to determine whether there needs to be any amendments to address identified hazards and, where a need is identified; modify/amend the codes/ordinances as applicable.
<b>Mitigation Action Type</b>	LPR
<b>Goals Met</b>	1, 2, 3, 5, 7
<b>Applies to existing and or new development, or not applicable</b>	N/A
<b>Benefits (losses avoided)</b>	Medium
<b>Estimated Cost</b>	Low
<b>Priority*</b>	Medium
Plan for Implementation	
<b>Responsible Organization</b>	Jurisdictional CPG member
<b>Local Planning Mechanism</b>	Hazard Mitigation
<b>Potential Funding Sources</b>	Municipal budget
<b>Timeline for Completion</b>	Short
Reporting on Progress	
<b>Date of Status Report/ Report of Progress</b>	Date: 6/01/2017 Progress on Action/Project: No funding secured

**Action Number:**

NV-10

**Mitigation Action Name:**

Code update: review existing local codes and ordinances against the identified hazards to determine whether there needs to be any amendments to address identified hazards and, where a need is identified; modify/amend the codes/ordinances as applicable.

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	
Property Protection	1	
Cost-Effectiveness	1	
Technical	1	
Political	0	
Legal	0	
Fiscal	0	Municipal Budget
Environmental	0	
Social	1	
Administrative	1	
Multi-Hazard	1	All hazards
Timeline	0	Short Term
Agency Champion	1	
Other Community Objectives	0	
<b>Total</b>	8	
<b>Priority (H/M/L)</b>	Medium	

**Action Number:**

NV-11

**Mitigation Action Name:**

Update/revise floodplain management ordinance to comply with latest FEMA regulations

Assessing the Risk	
<b>Hazard(s) addressed:</b>	Flood
<b>Specific problem being mitigated:</b>	Current floodplain management ordinance could be out of date and less effective than current regulations require.
Evaluation of Potential Actions/Projects	
<b>Actions/Projects Considered (name of project and reason for not selecting):</b>	No Action - current problem continues Exceed FEMA regulations – not interested in exceeding at this time
Action/Project Intended for Implementation	
<b>Description of Selected Action/Project</b>	Update/revise floodplain management ordinance to comply with latest FEMA regulations
<b>Mitigation Action Type</b>	EAP
<b>Goals Met</b>	1, 2, 3, 7
<b>Applies to existing and or new development, or not applicable</b>	N/A
<b>Benefits (losses avoided)</b>	Medium
<b>Estimated Cost</b>	Low
<b>Priority*</b>	Low
Plan for Implementation	
<b>Responsible Organization</b>	Village Board; Attorney
<b>Local Planning Mechanism</b>	Village Board/Zoning Board
<b>Potential Funding Sources</b>	Municipal budget
<b>Timeline for Completion</b>	Short
Reporting on Progress	
<b>Date of Status Report/ Report of Progress</b>	Date: 6/01/2017 Progress on Action/Project: LWRP study in progress

Action Number:

NV-11

Mitigation Action Name:

Update/revise floodplain management ordinance to comply with latest FEMA regulations

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	
Property Protection	1	
Cost-Effectiveness	1	
Technical	1	
Political	0	
Legal	0	
Fiscal	0	Municipal Budget
Environmental	0	
Social	1	
Administrative	1	
Multi-Hazard	0	Flood
Timeline	0	Short Term
Agency Champion	1	
Other Community Objectives	0	
<b>Total</b>	7	
<b>Priority (H/M/L)</b>	Low	

**Action Number:**

NV-12

**Mitigation Action Name:**

Update/review floodplain management ordinances to be consistent with potential future new FIRMs

Assessing the Risk	
<b>Hazard(s) addressed:</b>	Flood
<b>Specific problem being mitigated:</b>	Future FIRMS could show the need for a more stringent flood ordinance if risk has increased.
Evaluation of Potential Actions/Projects	
<b>Actions/Projects Considered (name of project and reason for not selecting):</b>	No Action - current problem continues Update ordinance every time new FIRM is developed – time consuming, repetitive
Action/Project Intended for Implementation	
<b>Description of Selected Action/Project</b>	Update/review floodplain management ordinances to be consistent with potential future new FIRMs
<b>Mitigation Action Type</b>	EAP
<b>Goals Met</b>	1, 2, 3, 7
<b>Applies to existing and or new development, or not applicable</b>	N/A
<b>Benefits (losses avoided)</b>	Medium
<b>Estimated Cost</b>	Low
<b>Priority*</b>	Low
Plan for Implementation	
<b>Responsible Organization</b>	Village Board
<b>Local Planning Mechanism</b>	Hazard Mitigation
<b>Potential Funding Sources</b>	Municipal budget
<b>Timeline for Completion</b>	Short
Reporting on Progress	
<b>Date of Status Report/ Report of Progress</b>	Date: 6/01/2017 Progress on Action/Project:

**Action Number:**

NV-12

**Mitigation Action Name:**

Update/review floodplain management ordinances to be consistent with potential future new FIRMs

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	
Property Protection	1	
Cost-Effectiveness	1	
Technical	1	
Political	0	
Legal	0	
Fiscal	0	Municipal Budget
Environmental	0	
Social	1	
Administrative	1	
Multi-Hazard	0	Flood
Timeline	0	Short Term
Agency Champion	1	
Other Community Objectives	0	
<b>Total</b>	7	
<b>Priority (H/M/L)</b>	Low	

**Action Number:** NV-13  
**Mitigation Action Name:** Require staff involved in floodplain management and ordinance enforcement to become Certified Floodplain Managers (CFMs)

Assessing the Risk	
<b>Hazard(s) addressed:</b>	Flood
<b>Specific problem being mitigated:</b>	Floodplain management and ordinance enforcement staff are not Certified Floodplain Managers
Evaluation of Potential Actions/Projects	
<b>Actions/Projects Considered (name of project and reason for not selecting):</b>	No Action - current problem continues Have staff attend courses on floodplain management but not become CFM's – lack of recognition from national organization. CRS awards points for CFM's
Action/Project Intended for Implementation	
<b>Description of Selected Action/Project</b>	Require staff involved in floodplain management and ordinance enforcement to become Certified Floodplain Managers (CFMs)
<b>Mitigation Action Type</b>	LPR
<b>Goals Met</b>	1, 2, 3, 7
<b>Applies to existing and or new development, or not applicable</b>	N/A
<b>Benefits (losses avoided)</b>	Medium
<b>Estimated Cost</b>	Low
<b>Priority*</b>	Low
Plan for Implementation	
<b>Responsible Organization</b>	Building Department
<b>Local Planning Mechanism</b>	Hazard Mitigation
<b>Potential Funding Sources</b>	Municipal budget
<b>Timeline for Completion</b>	DOF
Reporting on Progress	
<b>Date of Status Report/ Report of Progress</b>	Date: 6/01/2017 Progress on Action/Project: On hold while FIRM mapping is being updated

**Action Number:**

NV-13

**Mitigation Action Name:**

Require staff involved in floodplain management and ordinance enforcement to become Certified Floodplain Managers (CFMs)

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	
Property Protection	1	
Cost-Effectiveness	1	
Technical	1	
Political	0	
Legal	0	
Fiscal	0	Municipal Budget
Environmental	0	
Social	0	
Administrative	1	
Multi-Hazard	0	Flood
Timeline	0	Depends on funding – may take more than five years to complete
Agency Champion	1	
Other Community Objectives	0	
<b>Total</b>	6	
<b>Priority (H/M/L)</b>	Low	



Action Number:

NV-14

Mitigation Action Name:

Join the Community Rating System (CRS)

Assessing the Risk	
Hazard(s) addressed:	Flood
Specific problem being mitigated:	The Village is not in the CRS program
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	No Action - current problem continues Create municipal program to go above and beyond the requirements of NFIP – no flood insurance premium discounts
Action/Project Intended for Implementation	
Description of Selected Action/Project	Join the Community Rating System (CRS)
Mitigation Action Type	EAP
Goals Met	1, 2, 3, 7
Applies to existing and or new development, or not applicable	N/A
Benefits (losses avoided)	Medium
Estimated Cost	Medium
Priority*	Medium
Plan for Implementation	
Responsible Organization	Village Board
Local Planning Mechanism	Hazard Mitigation
Potential Funding Sources	Municipal budget
Timeline for Completion	DOF
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: 6/01/2017 Progress on Action/Project: Need funding for consultant services

Action Number: NV-14

Mitigation Action Name: Join the Community Rating System (CRS)

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	
Property Protection	1	
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	0	
Fiscal	1	Municipal Budget
Environmental	0	
Social	1	
Administrative	1	
Multi-Hazard	0	Flood
Timeline	0	Depends on funding – may take more than five years to complete
Agency Champion	0	
Other Community Objectives	0	
<b>Total</b>	8	
<b>Priority (H/M/L)</b>	Medium	

Action Number:

NV-15

Mitigation Action Name:

Apply for funding for Local Hazard Mitigation Plan

Assessing the Risk	
Hazard(s) addressed:	All Hazard
Specific problem being mitigated:	Village does not currently have a Local Hazard Mitigation Plan
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	No Action - current problem continues Use operating budget to supply funding – not feasible
Action/Project Intended for Implementation	
Description of Selected Action/Project	Apply for funding for the development of a local, single-jurisdiction hazard mitigation plan.
Mitigation Action Type	LPR
Goals Met	All
Applies to existing and or new development, or not applicable	N/A
Benefits (losses avoided)	High
Estimated Cost	Medium
Priority*	High
Plan for Implementation	
Responsible Organization	Village Board
Local Planning Mechanism	Hazard Mitigation
Potential Funding Sources	Grant funding; Municipal Budget
Timeline for Completion	DOF
Reporting on Progress	
Date of Status Report/ Report of Progress	No progress, new action

Action Number: NV-15

Mitigation Action Name: Apply for funding for Local Hazard Mitigation Plan

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	
Property Protection	1	
Cost-Effectiveness	1	
Technical	1	
Political	0	
Legal	1	
Fiscal	0	Municipal Budget or Grant Funding
Environmental	0	
Social	1	
Administrative	1	
Multi-Hazard	1	All hazards
Timeline	0	Depends on funding – may take more than five years to complete
Agency Champion	1	
Other Community Objectives	1	
<b>Total</b>	10	
<b>Priority (H/M/L)</b>	High	

**Action Number:** NV-16  
**Mitigation Action Name:** 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)

Assessing the Risk	
<b>Hazard(s) addressed:</b>	All Hazard
<b>Specific problem being mitigated:</b>	Development in hazard areas can lead to avoidable casualties and property damage.
Evaluation of Potential Actions/Projects	
<b>Actions/Projects Considered (name of project and reason for not selecting):</b>	No Action - current problem continues Request assistance from local colleges and universities in developing mapping – may not be feasible, sustainable
Action/Project Intended for Implementation	
<b>Description of Selected Action/Project</b>	Spatial database of all natural hazard risk areas in the Village will allow land use decision makers to plan safe and resilient communities and developments.
<b>Mitigation Action Type</b>	EAP
<b>Goals Met</b>	1, 2, 3, 4, 6
<b>Applies to existing and or new development, or not applicable</b>	New/Existing
<b>Benefits (losses avoided)</b>	Medium
<b>Estimated Cost</b>	Low
<b>Priority*</b>	Medium
Plan for Implementation	
<b>Responsible Organization</b>	Village Board
<b>Local Planning Mechanism</b>	Hazard Mitigation
<b>Potential Funding Sources</b>	Municipal Budget
<b>Timeline for Completion</b>	DOF
Reporting on Progress	
<b>Date of Status Report/ Report of Progress</b>	No progress, new action

**Action Number:**

NV-16

**Mitigation Action Name:**

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)

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	
Property Protection	1	
Cost-Effectiveness	1	
Technical	1	
Political	0	
Legal	1	
Fiscal	1	Municipal Budget
Environmental	0	
Social	0	
Administrative	1	
Multi-Hazard	1	All hazards
Timeline	0	Depends on funding – may take more than five years to complete
Agency Champion	0	
Other Community Objectives	0	
<b>Total</b>	8	
<b>Priority (H/M/L)</b>	Medium	

Action Number:

NV-17

Mitigation Action Name:

The Little Schoolhouse Daycare, Inc. is a critical facility and located in the floodplain and identified as potentially vulnerable to future flood events.

Assessing the Risk	
<b>Hazard(s) addressed:</b>	Flood
<b>Specific problem being mitigated:</b>	The Little Schoolhouse Daycare, Inc. is a critical facility and located in the floodplain and identified as potentially vulnerable to future flood events. Critical facilities located in the floodplain are not only susceptible to flood damage but also create unnecessary complications for the municipality during an emergency event and post-disaster recovery.
Evaluation of Potential Actions/Projects	
<b>Actions/Projects Considered (name of project and reason for not selecting):</b>	No Action - current problem continues Village to hire an outside contractor to conduct outreach and work with private property owner – cost
Action/Project Intended for Implementation	
<b>Description of Selected Action/Project</b>	The Little Schoolhouse Daycare, Inc. is a critical facility and located in the floodplain and identified as potentially vulnerable to future flood events as part of the Rockland County HMP update. The Village does not have jurisdiction over this facility to mitigate. The Village will notify facility manager/operator regarding available mitigation funding sources and mitigation options such as elevating and relocation to reduce future flood events to consider. The Village will also inform the property owner that NYS requires mitigation address the 500-year flood event or “worst damage scenario” for critical facilities.
<b>Mitigation Action Type</b>	SIP
<b>Goals Met</b>	1, 2, 4, 6
<b>Applies to existing and or new development, or not applicable</b>	Existing
<b>Benefits (losses avoided)</b>	High
<b>Estimated Cost</b>	Low
<b>Priority*</b>	High
Plan for Implementation	
<b>Responsible Organization</b>	‘Private Property Owners’ with Village support
<b>Local Planning Mechanism</b>	Hazard Mitigation, Public Education
<b>Potential Funding Sources</b>	Municipal budget
<b>Timeline for Completion</b>	Short
Reporting on Progress	
<b>Date of Status Report/ Report of Progress</b>	No progress, new action

**Action Number:** NV-17

**Mitigation Action Name:** The Little Schoolhouse Daycare, Inc. is a critical facility and located in the floodplain and identified as potentially vulnerable to future flood events.

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	
Property Protection	1	
Cost-Effectiveness	1	
Technical	1	
Political	0	
Legal	1	
Fiscal	1	Municipal Budget
Environmental	0	
Social	1	
Administrative	1	
Multi-Hazard	0	Flood
Timeline	1	
Agency Champion	1	
Other Community Objectives	0	
<b>Total</b>	10	
<b>Priority (H/M/L)</b>	High	



**Action Number:**

NV-18

**Mitigation Action Name:**

Investigate mitigation options, including flood-proofing, elevation, etc., to protect the Nyack Village Water Co Intake up to the 500-year flood elevation and implement the most effective strategy.

Assessing the Risk	
<b>Hazard(s) addressed:</b>	Flood
<b>Specific problem being mitigated:</b>	Facility is located within the 500-year floodplain.
Evaluation of Potential Actions/Projects	
<b>Actions/Projects Considered (name of project and reason for not selecting):</b>	No Action - current problem continues Investigate options to protect Intake up to 100 year flood event – does not meet standards
Action/Project Intended for Implementation	
<b>Description of Selected Action/Project</b>	Investigate mitigation options, including flood-proofing, elevation, etc., to protect the Nyack Village Water Co Intake up to the 500-year flood elevation and implement the most effective strategy. The Nyack Water Department, which is a department of the Nyack Village government owns and has control over the intake even though it is located in the Town of Clarkstown.
<b>Mitigation Action Type</b>	SIP
<b>Goals Met</b>	1, 2, 4, 6
<b>Applies to existing and or new development, or not applicable</b>	Existing
<b>Benefits (losses avoided)</b>	High
<b>Estimated Cost</b>	High
<b>Priority*</b>	High
Plan for Implementation	
<b>Responsible Organization</b>	Nyack Water Department
<b>Local Planning Mechanism</b>	Hazard Mitigation
<b>Potential Funding Sources</b>	Municipal budget; Grant funding
<b>Timeline for Completion</b>	DOF
Reporting on Progress	
<b>Date of Status Report/ Report of Progress</b>	No progress, new action

**Action Number:**

NV-18

**Mitigation Action Name:**

Investigate mitigation options, including flood-proofing, elevation, etc., to protect the Nyack Village Water Co Intake (located in Clarkstown) up to the 500-year flood elevation and implement the most effective strategy.

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	
Property Protection	1	
Cost-Effectiveness	1	
Technical	1	
Political	0	
Legal	1	
Fiscal	-1	
Environmental	0	
Social	0	
Administrative	1	
Multi-Hazard	0	
Timeline	0	
Agency Champion	0	
Other Community Objectives	0	
<b>Total</b>	5	
<b>Priority (H/M/L)</b>	High	