

SECTION 9. JURISDICTIONAL ANNEXES

9.22 VILLAGE OF UPPER NYACK

This jurisdictional annex to the Rockland County Hazard Mitigation Plan (HMP) provides information to assist public and private sectors in the Village of Upper Nyack with reducing losses from future hazard events. This annex is not guidance of what to do when a disaster occurs; its focus is on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. The annex presents a general overview of the Village of Upper Nyack, describes who participated in the planning process, assesses the Village’s risk, vulnerability, and capabilities, and outlines a strategy for achieving a more resilient community.

9.22.1 Hazard Mitigation Planning Team

The Village of Upper Nyack identified primary and alternate HMP points of contact and developed this plan over the course of several months, with input from many Village departments. The Village Clerk represented the community on the Rockland County HMP Planning Partnership and Steering Committee and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

Table 9.22-1 summarizes Village officials who participated in the development of the annex and in what capacity. Additional documentation of the Village’s planning activities through Planning Partnership meetings is included in Volume I.

Table 9.22-1. Hazard Mitigation Planning Team

| Primary Point of Contact | Alternate Point of Contact |
|--|---|
| Name/Title: Georgia Grandstaff, Village Clerk Address: 328 N. Broadway, Upper Nyack, NY 10960 Phone Number: (845) 358-0084 Email: village.clerk@uppernyack-ny.us | Name/Title: Dennis Letson, P.E., Village Engineer Address: 328 N. Broadway, Upper Nyack, NY 10960 Phone Number: (845) 358-0084 Ext: 7 Email: village.engineer@uppernyack-ny.us |
| National Flood Insurance Program Floodplain Administrator | |
| Name/Title: Dennis Letson, P.E., Village Engineer Address: 328 N. Broadway, Upper Nyack, NY 10960 Phone Number: (845) 358-0084 ext. 7 Email: village.engineer @uppernyack-ny.us | |
| Additional Contributors | |
| Name/Title: Dennis Letson, P.E., Village Engineer Method of Participation: Completed mitigation strategies, hazard history, and NFIP surveys; reviewed draft annex | |
| Name/Title: Georgia Grandstaff, Village Clerk Method of Participation: Reviewed draft annex | |

9.22.2 Municipal Profile

The Village of Upper Nyack is located within the Town of Clarkstown, along the eastern border of Rockland County. The Village is bordered to the north and west by the Town of Clarkstown, to the south by the Village of Nyack, and

to the east by the Hudson River (Rockland County 2018). The Village has a total area of 4.2 square miles, of which, 1.3 square miles is land, and 2.9 square miles is water. The Hudson River is a major body of water found within the Village.

Research has shown that some populations are at greater risk from hazard events because of decreased resources or physical abilities. These populations can be more susceptible to hazard events based on a number of factors including their physical and financial ability to react or respond during a hazard, and the location and construction quality of their housing. Data from the 2017-2021 American Community Survey indicates that 3.7 percent of the population is five years of age or younger, 20.3 percent is 65 years of age or older, 0.8 percent is non-English speaking, 7.2 percent is below the poverty threshold, and 6.8 percent is considered disabled.

9.22.3 Jurisdictional Capability Assessment and Integration

The Village of Upper Nyack performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume I describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment for this annex includes analyses of the following:

- Planning and regulatory capabilities
- Development and permitting capabilities
- Administrative and technical capabilities
- Fiscal capabilities
- Education and outreach capabilities
- Classification under various community mitigation programs
- Adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into day-to-day local government operations. As part of the hazard mitigation analysis, planning and policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. Development of an updated mitigation strategy provided an opportunity for the Village of Upper Nyack to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

Table 9.22-2 summarizes the regulatory tools that are available to Village of Upper Nyack.

Table 9.22-2. Planning, Legal, and Regulatory Capability and Integration

| | Jurisdiction has this? (Yes/No) | Citation and Date (code chapter or name of plan, date of enactment or plan adoption) | Authority (local, county, state, federal) | Responsible Person, Department or Agency |
|---|---------------------------------|--|---|--|
| Codes, Ordinances, & Regulations | | | | |
| Building Code | Yes | Chapter 140 Building Construction and Code Enforcement (Uniform Code Enforcement Law (LL 6 of 2022)) | State, Local | Building Inspector |
| <p><i>How has or will this be integrated with the HMP and how does this reduce risk?</i></p> <p>This local law provides for the administration and enforcement of the New York State Uniform Fire Prevention and Building Code and the State Energy Conservation Construction Code in the Village of Upper Nyack. This local law is adopted pursuant to section 10 of the Municipal Home Rule Law. Except as otherwise provided in the Uniform Code, other state law, or other section of this local law, all buildings, structures, and premises, regardless of use or occupancy, are subject to the provisions of this local law. The Chief Building Inspector shall determine the climatic and geographic design criteria for buildings and structures constructed within this Village as required by the Uniform Code. The criteria shall include, but is shall not necessarily be limited to include design criteria for withstanding seismic activity and winter hazards and related to whether it is in flood hazard areas.</p> | | | | |
| Zoning/Land Use Code | Yes | Chapter 360 Zoning (2022 Zoning Law (LL 5 of 2022)) | Local | Planning Board, Zoning Board |
| <p><i>How has or will this be integrated with the HMP and how does this reduce risk?</i></p> <p>This Village has adopted this chapter for the purposes set forth in § 7-700 of the Village Law of the State of New York, which, in the interest of the protection and promotion of the public health, safety and welfare. Among these purposes include encouraging development that accommodates sustainable development techniques, like solar energy systems, and accommodating growth and development. The code establishes a Waterfront Development District to provide for and encourage uses along and near the Hudson River, and this district shall encourage soft or vegetated shorelines and rip rap, instead of vertical sheet pile bulkheads, to provide resilience to sea level rise, storm surge, and flooding. Additionally, this district’s maximum residential units must subtract the land below normal high-water line of the Hudson and within floodways or coastal high-hazard areas from the gross acreage of the site.</p> | | | | |
| Subdivision Code | Yes | Chapter 360 Zoning, Article V Administration (Subdivision Law (LL 2 of 2022)) | Local | Planning Board |
| <p><i>How has or will this be integrated with the HMP and how does this reduce risk?</i></p> <p>It is declared to be the Policy of the Planning Board to consider land subdivision regulations as part of a plan for the orderly, efficient, and economical development of the Village. This means, among other things, that land to be subdivided shall be of such character that it can be used safely for building purposes without danger to health or peril from fire, flood or other menace; that proper provision shall be made for drainage, water supply, sewerage and other needed improvements; that all proposed lots shall be so laid out and of such size as to be in harmony with the development pattern of the neighboring properties; that the proposed street pattern shall conform to the Official Zoning Map and shall be properly related to the proposals shown on the Master Plan and shall be of such width, grade and location as to accommodate the prospective traffic, to facilitate fire protection and to provide access of fire-fighting equipment to buildings; and that proper provision shall be made for parks and playgrounds.</p> | | | | |
| Site Plan Code | Yes | Chapter 360 Zoning, Article V Administration (Section 10, 2022 Zoning Law (LL 5 of 2022)) | Local | Planning Board |
| <p><i>How has or will this be integrated with the HMP and how does this reduce risk?</i></p> <p>The purpose of the site development plan process is to ensure compliance with the development and design standards and provisions of this code, and to encourage quality development reflective of the goals, policies, and objectives of the Village Comprehensive Master Plan.</p> | | | | |

| | Jurisdiction has this? (Yes/No) | Citation and Date (code chapter or name of plan, date of enactment or plan adoption) | Authority (local, county, state, federal) | Responsible Person, Department or Agency |
|--|---------------------------------|---|---|--|
| Stormwater Management Code | Yes | Chapter 295 Stormwater Management (Stormwater Management and Erosion and Sediment Control (LL 4 of 2022)) | Local | Village Engineer, Planning Board |
| <i>How has or will this be integrated with the HMP and how does this reduce risk?</i> The purpose of this chapter and Chapter 360, Zoning, § 360-4.12 is to establish minimum stormwater management requirements and controls to protect and safeguard the general health, safety, and welfare of the public residing within this jurisdiction. Among several stated objectives, the ordinance aims to minimize increases in the rate and volume of stormwater runoff due to land development activities. | | | | |
| Post-Disaster Recovery/ Reconstruction Code | No | - | - | - |
| <i>How has or will this be integrated with the HMP and how does this reduce risk?</i> N/A | | | | |
| Real Estate Disclosure | Yes | New York State (NYS) mandate, Property Condition Disclosure Act, NY Code – Article 14 §460-467 | State, Local | - |
| <i>How has or will this be integrated with the HMP and how does this reduce risk?</i> The NYS mandate requires sellers to disclose to potential buyers whether their property is located in a designated floodplain. | | | | |
| Growth Management | No | - | - | - |
| <i>How has or will this be integrated with the HMP and how does this reduce risk?</i> N/A | | | | |
| Environmental Protection Ordinance(s) | No | - | - | - |
| <i>How has or will this be integrated with the HMP and how does this reduce risk?</i> N/A | | | | |
| Flood Damage Prevention Ordinance | Yes | Chapter 205 Flood Damage Prevention (Ordinance 8.6 Flood Damage Prevention (LL 2 of 2014)) | Federal, State, Local | Village Engineer |
| <i>How has or will this be integrated with the HMP and how does this reduce risk?</i> It is the purpose of this chapter to promote the public health, safety, and general welfare and to minimize public and private losses due to flood conditions in specific areas. The ordinance requires both new residential and non-residential construction and substantial improvements to be built with two feet of freeboard. | | | | |
| Wellhead Protection | No | - | - | - |
| <i>How has or will this be integrated with the HMP and how does this reduce risk?</i> N/A | | | | |
| Emergency Management Ordinance | No | - | - | - |
| <i>How has or will this be integrated with the HMP and how does this reduce risk?</i> N/A | | | | |
| Climate Change Ordinance | No | - | - | - |
| <i>How has or will this be integrated with the HMP and how does this reduce risk?</i> N/A | | | | |

| | Jurisdiction has this? (Yes/No) | Citation and Date (code chapter or name of plan, date of enactment or plan adoption) | Authority (local, county, state, federal) | Responsible Person, Department or Agency |
|---|---------------------------------|---|---|--|
| Other: Freeboard | Yes | Chapter 205 Flood Damage Prevention (Ordinance 8.6 Flood Damage Prevention (LL 2 of 2014) NYS Building & Residential Codes) | State, Local | Village Engineer |
| <i>How has or will this be integrated with the HMP and how does this reduce risk?</i> New York State requires new one- and two-family residences to be built with two feet of freeboard and all other construction types with one foot of freeboard. The Village’s Flood Damage Prevention Ordinance exceeds this standard by requiring both new residential and non-residential construction and substantial improvements to be built with two feet of freeboard. | | | | |
| Other: Cumulative Substantial Damage | No | - | - | - |
| <i>How has or will this be integrated with the HMP and how does this reduce risk?</i> N/A | | | | |
| Planning Documents | | | | |
| General/Comprehensive Plan | Yes | The Village of Upper Nyack Comprehensive Plan (2021) | Local | Village Board, Planning Board, Zoning Board |
| <i>How has or will this be integrated with the HMP and how does this reduce risk?</i> The Village’s Comprehensive Plan identifies 10 topic areas for discussion to be considered the primary land-use, planning, growth and development issues of the Village. One of these topic areas is climate planning and resilience. The Village aims to become a more climate-resilient community by protecting open spaces and undeveloped lands, maintaining and protecting environmentally sensitive areas and natural resources, mitigating the negative impacts of storm water runoff, practice water conservation & re-use e, reduce the Village carbon footprint, encourage alternative energy systems and energy conservation methods. | | | | |
| Capital Improvement Plan | No | - | - | - |
| <i>How has or will this be integrated with the HMP and how does this reduce risk?</i> N/A | | | | |
| Disaster Debris Management Plan | No | - | - | - |
| <i>How has or will this be integrated with the HMP and how does this reduce risk?</i> N/A | | | | |
| Floodplain Management or Watershed Plan | No | - | - | - |
| <i>How has or will this be integrated with the HMP and how does this reduce risk?</i> N/A | | | | |
| Stormwater Management Plan | Yes | Stormwater Management Plan (2021) | Local | Department of Public Works, Village Engineer |
| <i>How has or will this be integrated with the HMP and how does this reduce risk?</i> The purpose of the plan is to ensure the reduction of Pollutants of Concern (POCs), identified herein, from stormwater discharges to the Maximum Extent Practicable (MEP). | | | | |
| Open Space Plan | No | - | - | - |
| <i>How has or will this be integrated with the HMP and how does this reduce risk?</i> N/A | | | | |
| Urban Water Management Plan | No | - | - | - |
| <i>How has or will this be integrated with the HMP and how does this reduce risk?</i> N/A | | | | |
| Habitat Conservation Plan | No | - | - | - |
| <i>How has or will this be integrated with the HMP and how does this reduce risk?</i> N/A | | | | |
| Economic Development Plan | No | - | - | - |

| | Jurisdiction has this? (Yes/No) | Citation and Date (code chapter or name of plan, date of enactment or plan adoption) | Authority (local, county, state, federal) | Responsible Person, Department or Agency |
|---|---------------------------------|--|---|--|
| <i>How has or will this be integrated with the HMP and how does this reduce risk?</i> | | | | |
| N/A | | | | |
| Community Wildfire Protection Plan | No | - | - | - |
| <i>How has or will this be integrated with the HMP and how does this reduce risk?</i> | | | | |
| N/A | | | | |
| Community Forest Management Plan | No | - | - | - |
| <i>How has or will this be integrated with the HMP and how does this reduce risk?</i> | | | | |
| N/A | | | | |
| Transportation Plan | No | - | - | - |
| <i>How has or will this be integrated with the HMP and how does this reduce risk?</i> | | | | |
| N/A | | | | |
| Agriculture Plan | No | - | - | - |
| <i>How has or will this be integrated with the HMP and how does this reduce risk?</i> | | | | |
| N/A | | | | |
| Climate Action/Resiliency/Sustainability Plan | No | - | - | - |
| <i>How has or will this be integrated with the HMP and how does this reduce risk?</i> | | | | |
| N/A | | | | |
| Tourism Plan | No | - | - | - |
| <i>How has or will this be integrated with the HMP and how does this reduce risk?</i> | | | | |
| N/A | | | | |
| Business/ Downtown Development Plan | No | - | - | - |
| <i>How has or will this be integrated with the HMP and how does this reduce risk?</i> | | | | |
| N/A | | | | |
| Other (for example NYRCR, etc.) | No | - | - | - |
| <i>How has or will this be integrated with the HMP and how does this reduce risk?</i> | | | | |
| N/A | | | | |
| Response/Recovery Planning | | | | |
| Comprehensive Emergency Management Plan | No | - | - | - |
| <i>How has or will this be integrated with the HMP and how does this reduce risk?</i> | | | | |
| N/A | | | | |
| Continuity of Operations Plan | No | - | - | - |
| <i>How has or will this be integrated with the HMP and how does this reduce risk?</i> | | | | |
| N/A | | | | |
| Substantial Damage Response Plan | No | - | - | - |
| <i>How has or will this be integrated with the HMP and how does this reduce risk?</i> | | | | |
| N/A | | | | |
| Threat & Hazard Identification & Risk Assessment | No | - | - | - |
| <i>How has or will this be integrated with the HMP and how does this reduce risk?</i> | | | | |
| N/A | | | | |

| | Jurisdiction has this? (Yes/No) | Citation and Date (code chapter or name of plan, date of enactment or plan adoption) | Authority (local, county, state, federal) | Responsible Person, Department or Agency |
|--|---------------------------------|--|---|--|
| Post-Disaster Recovery Plan | No | - | - | - |
| <i>How has or will this be integrated with the HMP and how does this reduce risk?</i> N/A | | | | |
| Public Health Plan | No | - | - | - |
| <i>How has or will this be integrated with the HMP and how does this reduce risk?</i> N/A | | | | |
| Other | No | - | - | - |
| <i>How has or will this be integrated with the HMP and how does this reduce risk?</i> N/A | | | | |

Development and Permitting Capability

Table 9.22-3 summarizes the capabilities of Village of Upper Nyack to oversee and track development.

Table 9.22-3. Development and Permitting Capability

| Indicate if your jurisdiction implements the following | Yes/No | Comment: |
|---|--------|--|
| Do you issue development permits? <ul style="list-style-type: none"> If you issue development permits, what department is responsible? If you do not issue development permits, what is your process for tracking new development? | Yes | Building Department |
| Are permits tracked by hazard area? (For example, floodplain development permits.) | Yes | Floodplain development |
| Do you have a buildable land inventory? <ul style="list-style-type: none"> If you have a buildable land inventory, please describe | No | - |
| Describe the level of build-out in your jurisdiction. | N/A | Any future development in the Village is limited. The potential for future development exists primarily in residentially zoned areas, which do not include areas for conservation. |

Administrative and Technical Capability

Table 9.22-4 summarizes potential staff and personnel resources available to Village of Upper Nyack and their current responsibilities that contribute to hazard mitigation.

Table 9.22-4. Administrative and Technical Capabilities

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|----------------------------------|---------------------|--|
| <i>Administrative Capability</i> | | |
| Planning Board | Yes | Planning Board |
| Zoning Board of Adjustment | Yes | Zoning Board of Appeals |
| Planning Department | No | - |

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|---|------------------------|--|
| Mitigation Planning Committee | Yes | The Upper Nyack Green Committee is an advocacy group of Upper Nyack residents working toward the environmental health of our village through strategies of mitigation, adaptation, and resiliency in the face of climate change. It acts as an independent advisory group to the Upper Nyack Village Board of Trustees and as an educational resource for the citizens of the Village. |
| Environmental Board/Commission | No | - |
| Open Space Board/Committee | No | - |
| Economic Development Commission/Committee | No | - |
| Public Works/Highway Department | Yes | Department of Public Works |
| Construction/Building/Code Enforcement Department | Yes | The Building Department, headed by the Building Inspector, administers and enforces all of the provisions and laws applicable to the Uniform and Energy Code. |
| Emergency Management/Public Safety Department | No | - |
| Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.) | No | - |
| Mutual aid agreements | No | - |
| Human Resources Manual - Do any job descriptions specifically include identifying or implementing mitigation projects or other efforts to reduce natural hazard risk? | No | - |
| Other: Upper Nyack Green Committee | Yes | The Green Committee is an advocacy group of Upper Nyack residents working toward the environmental health of our village through strategies of mitigation, adaptation, and resiliency in the face of climate change. It acts as an independent advisory group to the Upper Nyack Village Board of Trustees and as an educational resource for the citizens of the Village. |
| Technical/Staffing Capability | | |
| Planners or engineers with knowledge of land development and land management practices | Yes | Village Engineer |
| Engineers or professionals trained in building or infrastructure construction practices | Yes | Village Engineer |
| Planners or engineers with an understanding of natural hazards | Yes | Village Engineer |
| Staff with expertise or training in benefit/cost analysis | Yes | Village Engineer |
| Professionals trained in conducting damage assessments | Yes | Village Engineer |
| Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications | Yes | Village Engineer |
| Environmental scientist familiar with natural hazards | No | - |
| Surveyor(s) | No | - |
| Emergency Manager | No | - |
| Grant writer(s) | No | - |
| Resilience Officer | No | - |

| Resources | Available? (Yes/No) | Comments (available staff, responsibilities, support of hazard mitigation) |
|--|---------------------|--|
| Other (this could include stormwater engineer, environmental specialist, etc.) | No | - |

Fiscal Capability

Table 9.22-5 summarizes financial resources available to Village of Upper Nyack.

Table 9.22-5. Fiscal Capabilities

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

Education and Outreach Capability

Table 9.22-6 summarizes the education and outreach resources available to Village of Upper Nyack.

Table 9.22-6. Education and Outreach Capabilities

| Outreach Resources | Available? (Yes/No) | Comment: |
|--|---------------------|--|
| Public information officer or communications office | No | - |
| Personnel skilled or trained in website development | Yes | Contracted |
| Hazard mitigation information available on your website | Yes | The Village posts news updates on its website to provide residents with information regarding the Village; these updates can include information and warnings for upcoming storm events. |
| Social media for hazard mitigation education and outreach | Yes | The Village has a Facebook page which can be used for hazard mitigation education and outreach. |
| Citizen boards or commissions that address issues related to hazard mitigation | Yes | Upper Nyack Green Committee |
| Warning systems for hazard events | Yes | The County utilizes NY-Alert and CodeRed (the backup to NY-Alert) for emergency notifications (all Towns and Villages have access to it). |
| Natural disaster/safety programs in place for schools | No | - |

| Outreach Resources | Available? (Yes/No) | Comment: |
|--|---------------------|--|
| Organizations that conduct outreach to socially vulnerable populations and underserved populations | No | - |
| Public outreach mechanisms / programs to inform citizens on natural hazards, risk, and ways to protect themselves during such events | Yes | See below. |
| If yes, please describe. | N/A | The Village posts news updates on its website to provide residents with information regarding the Village; these updates can include information and warnings for upcoming storm events. The Village provides informational materials for stormwater management, including green infrastructure, pollution control, and hazardous waste disposal at locations throughout the town; these materials came from Village Hall and Cornell Cooperative Extension Offices. Information is also posted upon public bulletin boards. |

Community Classifications

Table 9.22-7 summarizes classifications for community programs available to Village of Upper Nyack.

Table 9.22-7. Community Classifications

| Program | Participating? (Yes/No) | Classification (if applicable) | Date Classified (if applicable) |
|--|-------------------------|--------------------------------|---------------------------------|
| Community Rating System (CRS) | No | - | - |
| Building Code Effectiveness Grading Schedule (BCEGS) | No | - | - |
| Public Protection (ISO Fire Protection Classes 1 to 10) | No | - | - |
| New York State Department of Environmental Conservation (NYSDEC) Climate Smart Community | Yes | None | 8/5/2021 |
| National Weather Service Storm Ready Certification | No | - | - |
| Firewise Communities classification | No | - | - |
| Other: Organizations with mitigation focus (advocacy group, non-government) | Yes | N/A | N/A |

N/A = Not applicable
 — = Unavailable

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2022). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. Table 9.22-8 summarizes the adaptive capacity for each identified hazard of concern and the Village’s capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.22-8. Adaptive Capacity

| Hazard | Adaptive Capacity - Strong/Moderate/Weak |
|-----------------------|--|
| Dam Failure | Moderate |
| Disease Outbreak | Moderate |
| Drought | Moderate |
| Earthquake | Moderate |
| Extreme Temperature | Moderate |
| Flood | Moderate |
| Landslide | Moderate |
| Severe Weather | Moderate |
| Severe Winter Weather | Moderate |
| Wildfire | Moderate |

9.22.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The floodplain administrator listed in Table 9.22-1 is responsible for maintaining this information.

NFIP Summary

Table 9.22-9 summarizes the NFIP statistics for Village of Upper Nyack.

Table 9.22-9. Village of Upper Nyack NFIP Summary of Policy and Claim Statistics

| | |
|--|-----------|
| # Policies | 13 |
| # Claims (Losses) | 13 |
| Total Loss Payments | \$227,317 |
| # Repetitive Loss Properties (NFIP definition) | 1 |
| # Repetitive Loss Properties (FMA definition) | 1 |
| # Severe Repetitive Loss Properties | 1 |
| # Policies Within the 1 percent Annual Chance Flood Boundary | 1 |

NFIP Definition of Repetitive Loss: The NFIP defines a repetitive loss property as any insurable building for which two or more claims of more than \$1,000 were paid by the NFIP within any rolling 10-year period since 1978.

FMA Definition of Repetitive Loss: FEMA’s Flood Mitigation Assistance (FMA) program defines a repetitive loss property as any insurable building that has incurred flood-related damage on two occasions, in which the cost of the repair, on average, equaled or exceeded 25 percent of the market value of the structure at the time of each such flood event.

Definition of Severe Repetitive Loss: A residential property covered under an NFIP flood insurance policy and: (a) That has at least four NFIP claim payments over \$5,000 each, and the cumulative amount of such claims payments exceeds \$20,000; or (b) For which at least two separate claims payments have been made with the cumulative amount of the building portion of such claims exceeding the market value of the building. At least two of the claims must have occurred within any 10-year period, more than 10 days apart.

Source: FEMA, December 2023

Note: RL count may include properties also identified as SRL.

Flood Vulnerability Summary

Table 9.22-10 provides a summary of the NFIP program in Village of Upper Nyack.

Table 9.22-10. NFIP Summary

| NFIP Topic | Comments |
|---|---|
| Flood Vulnerability Summary | |
| Describe areas prone to flooding in your jurisdiction. | Hudson River, Crumby Creek, several roadways. |
| Do you maintain a list of properties that have been damaged by flooding? | Flood damages have been recorded as have happened, generally by institutional memory. |
| Do you maintain a list of property owners interested in flood mitigation? | No |
| How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)? | Unknown at this time |
| Are any RiskMAP projects currently underway in your jurisdiction? <ul style="list-style-type: none"> If so, state what projects are underway. | No |
| How do you make Substantial Damage determinations? <ul style="list-style-type: none"> How many were declared for recent flood events in your jurisdiction? | N/A* |
| How many Substantial Damage determinations were declared for recent flood events in your jurisdiction? | N/A |
| How many properties have been mitigated (elevation or acquisition) in your jurisdiction? <ul style="list-style-type: none"> If there are mitigation properties, how were the projects funded? | None |
| Do your flood hazard maps adequately address the flood risk within your jurisdiction? <ul style="list-style-type: none"> If not, state why. | No, no mapped floodplains except the Hudson River. Additional streams should be modeled in the next map update. |
| NFIP Compliance | |
| What local department is responsible for floodplain management? | Village Engineer |
| Are any certified floodplain managers on staff in your jurisdiction? | No |
| Do you have access to resources to determine possible future flooding conditions from climate change? | No |
| Does your floodplain management staff need any assistance or training to support its floodplain management program? <ul style="list-style-type: none"> If so, what type of assistance/training is needed? | Yes, assistance from Village Engineer on technical issues. |
| Provide an explanation of NFIP administration services you provide (e.g., permit review, GIS, education/outreach, inspections, engineering capability) | Permit review, inspections, engineering analysis, mitigation design |
| How do you determine if proposed development on an existing structure would qualify as a substantial improvement? | Based on FEMA guidelines |
| What are the barriers to running an effective NFIP program in the community, if any? | None |
| Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? <ul style="list-style-type: none"> If so, state the violations. | No |
| When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)? | March 7, 2013 |
| What is the local law number or municipal code of your flood damage prevention ordinance? | Chapter 205 (Ordinance 8.6 Flood Damage Prevention (LL 2 of 2014)) |

| NFIP Topic | Comments |
|--|-----------------------------|
| What is the date that your flood damage prevention ordinance was last amended? | February 20, 2014 |
| Does your floodplain management program meet or exceed minimum requirements? <ul style="list-style-type: none"> If exceeds, in what ways? | Meets minimum requirements. |
| Are there other local ordinances, plans or programs (e.g., site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions? | No |
| Does your community plan to join the CRS program or is your community interested in improving your CRS classification? | No |

Note: *The Village reported it does not have a process to make substantial damage determinations; however, during this planning process, it was confirmed that substantial damage determination provisions are established in both the adopted NFIP ordinance and adopted building code. This response has not been changed to accurately reflect the tools leveraged by the Village to mitigate risks.

9.22.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction’s overall risk to its hazards of concern. Recent and expected future development trends, including major residential/commercial development and major infrastructure development, are summarized in Table 9.22-11 through Table 9.22-13.

Table 9.22-11. Number of Building Permits for New Construction Issued Since the Previous HMP

| | New Construction Permits Issued | | | Total |
|---------------------|---------------------------------|--------------|-------------------------------------|-------|
| | Single Family | Multi-Family | Other (commercial, mixed-use, etc.) | |
| 2019 | | | | |
| Total Permits | 2 | 0 | 0 | 2 |
| Permits within SFHA | 0 | 0 | 0 | 0 |
| 2020 | | | | |
| Total Permits | 0 | 0 | 0 | 0 |
| Permits within SFHA | 0 | 0 | 0 | 0 |
| 2021 | | | | |
| Total Permits | 1 | 0 | 0 | 1 |
| Permits within SFHA | 0 | 0 | 0 | 0 |
| 2022 | | | | |
| Total Permits | 0 | 0 | 0 | 0 |
| Permits within SFHA | 0 | 0 | 0 | 0 |
| 2023 | | | | |
| Total Permits | 0 | 0 | 0 | 0 |
| Permits within SFHA | 0 | 0 | 0 | 0 |

SFHA = Special Flood Hazard Area (1 percent flood event)

Table 9.22-12. Recent Major Development and Infrastructure from 2018 to Present

| Property or Development Name | Type of Development | # of Units / Structures | Location (address and/or block and lot) | Known Hazard Zone(s)* | Description / Status of Development |
|--|---------------------|-------------------------|---|-----------------------|-------------------------------------|
| The Village has had no recent major development or infrastructure between 2018 to present. | | | | | |

* Only location-specific hazard zones or vulnerabilities identified.

Table 9.22-13. Known or Anticipated Major Development and Infrastructure in the Next Five Years

| Property or Development Name | Type of Development | # of Units / Structures | Location (address and/or block and lot) | Known Hazard Zone(s)* | Description / Status of Development |
|--|---------------------|-------------------------|---|-----------------------|-------------------------------------|
| There are no known or anticipated major development of infrastructure in the Village in the next five years. | | | | | |

* Only location-specific hazard zones or vulnerabilities identified.

9.22.6 Jurisdictional Risk Assessment

The hazard profiles in Volume I provide detailed information regarding each planning partner’s vulnerability to the identified hazards, including summaries of the Village of Upper Nyack’s risk assessment results and data used to determine the hazard ranking. Key local risk assessment information is presented below.

Hazard Area

Hazard area maps provided below illustrate the probable hazard areas impacted within the Village are shown in Figure 9.22-1 through Figure 9.22-2. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps are provided only for hazards that can be identified clearly using mapping techniques and technologies and for which Upper Nyack has significant exposure. The maps show the location of potential new development, where available.

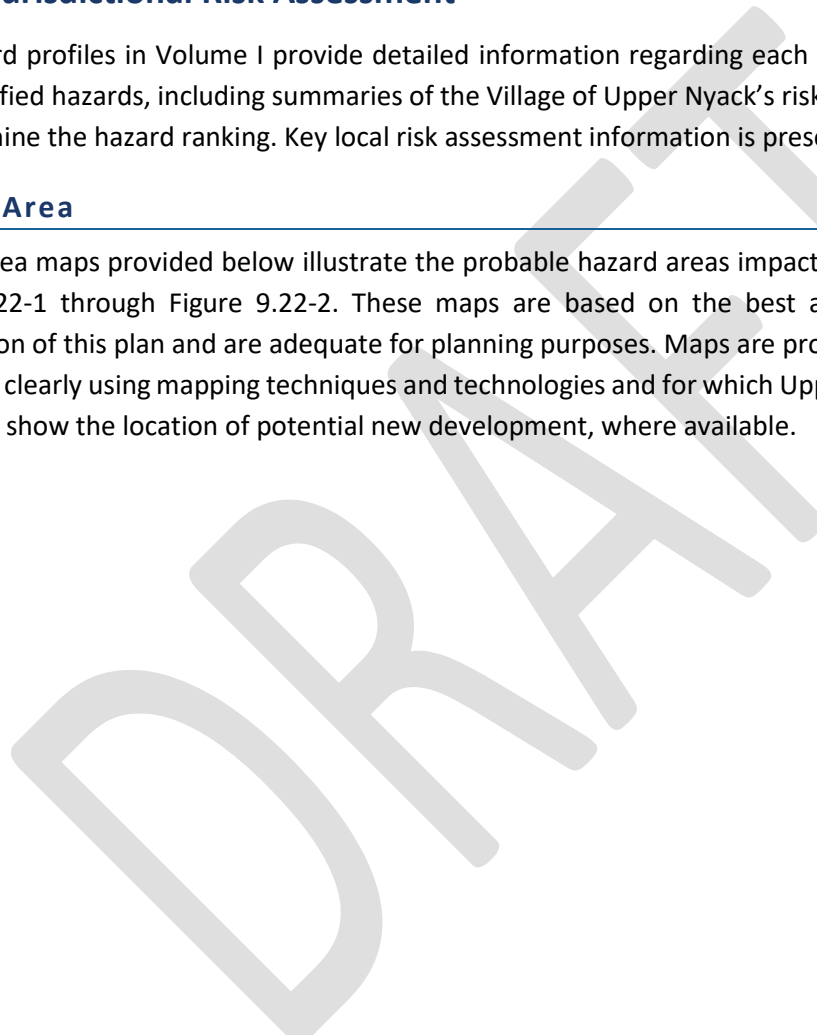


Figure 9.22-1. Village of Upper Nyack Flood and Dam Inundation Hazard Area Extent and Location

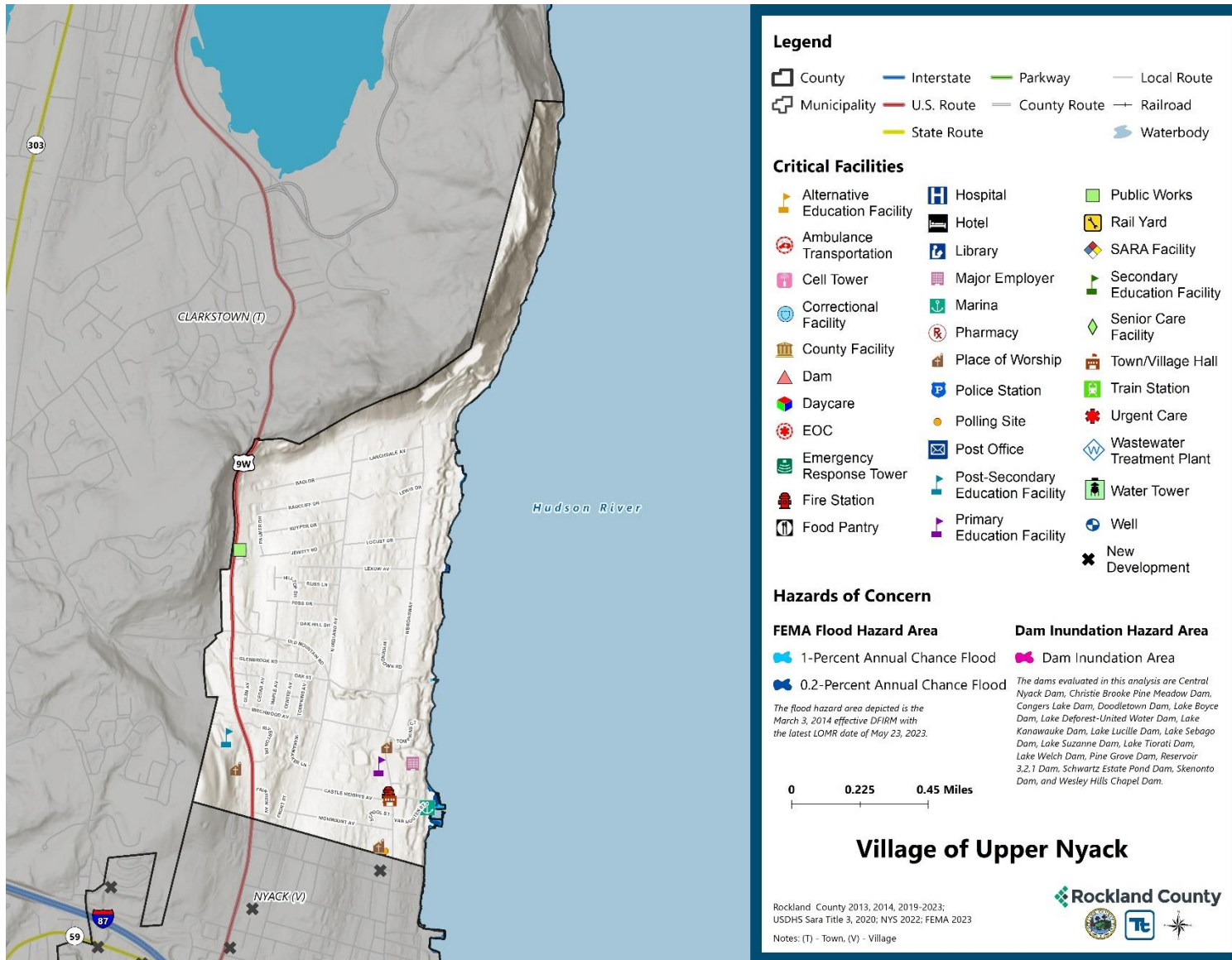
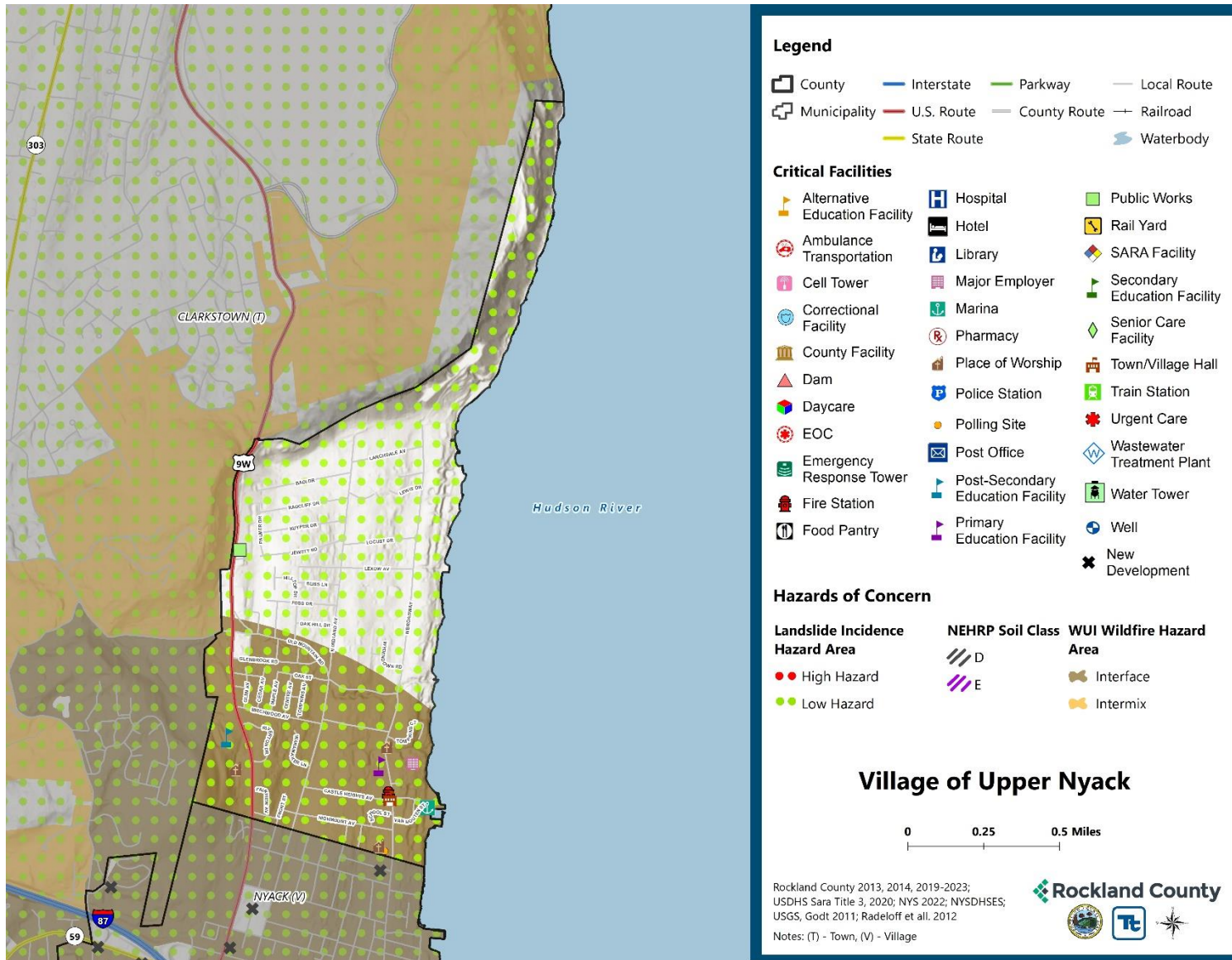


Figure 9.22-2. Village of Upper Nyack Landslide, Earthquake, and Wildfire Hazard Area Extent and Location



Hazard Event History

The history of natural and non-natural hazard events in the Village of Upper Nyack is detailed in Volume I, where each hazard profile includes a chronology of historical events that have affected the County and its municipalities. Table 9.22-14 provides details on loss and damage in the Village during hazard events since the last hazard mitigation plan update.

Table 9.22-14. Hazard Event History in the Village of Upper Nyack

| Dates of Event | Event Type (Disaster Declaration if applicable) | County Designated? | Summary of Event | Summary of Damage and Losses in the Village |
|-----------------------------|---|--------------------|---|---|
| Jan 20, 2020 - May 11, 2023 | New York Covid-19 (3434-EM-NY, 4480-DR-NY) | Yes | The Covid-19 pandemic resulted in nationwide shutdowns, social distancing and masking requirements, and immunization efforts. Since the start of the pandemic, roughly 950 deaths have been reported in Rockland County. The federal Public Health Emergency expired in May 2023, but illness continues to occur as the virus shifts to becoming endemic. | Productivity losses due to mandated staff reductions. Office renovations to maintain mandatory distancing and installation of plastic shields. Purchase and installation of air filtration. |
| September 1-3, 2021 | New York Remnants of Hurricane Ida (3572-EM-NY, 4615-DR-NY) | Yes | Extremely heavy rainfall associated with the remnants of Hurricane Ida overspread southeast New York during the evening of September 1 and continued through the early morning hours of September 2. Rainfall totals ranged from 5-8 inches across much of the region, with much of that rain falling in just a few hours. This resulted in widespread catastrophic flash flooding. | Approx. 150 linear feet of pipe damaged due to excessive storm flow. |

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

Hazard Ranking and Vulnerabilities

The hazard profiles in Volume I have detailed information regarding each planning partner’s vulnerability to the identified hazards. The following summarizes presents key risk assessment results for the Village of Upper Nyack.

Hazard Ranking

The participating jurisdictions have differing degrees of vulnerability to the hazards of concern, so each jurisdiction ranked its own degree of risk to each hazard. The community-specific hazard ranking is based on problems and impacts identified by the risk assessment presented in Volume I. The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard; and changing future climate conditions. Upper Nyack

reviewed the County hazard ranking and individual results to assess the relative risk of the hazards of concern to the community. During the review of the hazard ranking, the Village indicated the following:

- During the review of the hazard/vulnerability risk ranking, the Village indicated the rankings were accurate.

Table 9.22-15 shows Upper Nyack’s final hazard rankings for identified hazards of concern. Mitigation action development uses the ranking to target hazards with the highest risk.

Table 9.22-15. Hazard Ranking

| Hazard | Rank |
|-----------------------|--------|
| Dam Failure | Low |
| Disease Outbreak | Medium |
| Drought | Medium |
| Earthquake | Low |
| Extreme Temperature | Medium |
| Flood | Medium |
| Landslide | Low |
| Severe Weather | High |
| Severe Winter Weather | High |
| Wildfire | Medium |

Note: The scale is based on the hazard rankings established in Volume I, modified as appropriate based on review by the jurisdiction

Critical Facilities

Table 9.22-16 identifies critical facilities in the community located in the 1 percent and 0.2 percent annual chance floodplains.

Table 9.22-16. Potential Flood Losses to Critical Facilities

| Name | Type | Exposure | | Addressed by Proposed Action | Already Protected to 0.2 percent Flood Level (describe protections) |
|---|------|-----------------|-------------------|------------------------------|---|
| | | 1 percent Event | 0.2 percent Event | | |
| The Village of Upper Nyack has no critical facilities located within the 1- or 0.2-percent Annual Chance Flood Hazard Area. | | | | | |

Source: Rockland County 2023, FEMA

Identified Issues

After review of the Village of Upper Nyack’s hazard event history, hazard rankings, hazard location, and current capabilities, the Village of Upper Nyack identified the following vulnerabilities within their community:

- The Village does not have any organizations that conduct outreach to socially vulnerable populations and underserved populations.
- There is one SRL property in the Village. Repetitively flooded properties place an undue stress on the property owner and Village and efforts should be made to mitigate them.
- The Village does not have a formalized list of damaged properties or property owners which may be interested in flood mitigation measures, such as elevation or acquisition.

- There are flood prone roadways in the Village, including at the intersection of Midland Ave and Old Mountain Road.
- Residential properties experience flooding due to drainage issues on Lexow Avenue, between Broadway and the Hudson River.
- The Village currently does not have a comprehensive education and outreach program. There is a need to educate residents and businesses about hazard mitigation, preparation, response, and recovery utilizing a variety of outreach methods.
- If facilities were built before a certain date, they could be more susceptible to damage from a hazard event.
- The current emergency response plans do not implement monitoring or warning systems.
- Floodplain management and ordinance enforcement staff are not Certified Floodplain Managers.
- The Village is not in the CRS program.
- The Village does not have the capability in-house to implement GIS mapping for the Village. Lack of public knowledge on the spatial extent of hazards.
- The Village does not currently maintain a risk area database. Development in hazard areas can lead to avoidable casualties and property damage.
- The municipality does not have a Substantial Damage Management Ordinance, nor do they have a standard process in place when conducting substantial damage determinations. The Village has substantial damage determination provisions in both the adopted NFIP ordinance and adopted building code, but staff are unaware of these provisions and do not leverage them.

9.22.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

Additional Mitigation Efforts

In addition to the mitigation initiatives completed in [Error! Not a valid bookmark self-reference.](#), Village of Upper Nyack did not identify any mitigation efforts completed since the last HMP.

Table 9.22-17 indicates progress on the Village’s mitigation strategy identified in the 2019 HMP. Actions that are still recommended but not completed or that are in progress are carried forward and combined with new actions as part of the mitigation strategy for this plan update. Previous actions that are now ongoing programs and capabilities are indicated as such and are presented in the capability assessment earlier in this annex.

Additional Mitigation Efforts

In addition to the mitigation initiatives completed in [Error! Not a valid bookmark self-reference.](#), Village of Upper Nyack did not identify any mitigation efforts completed since the last HMP.

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Table 9.22-17. Status of Previous Mitigation Actions

| Project Number | Project Name | Hazard(s) Addressed | Responsible Party | Brief Summary of the Original Problem and the Solution (Project) | Action Review 1. Status (In Progress, Ongoing Capability, No Progress, Complete) 2. Provide a narrative to describe progress or obstacles that have prevented implementation | Next Steps 1. Project to be included in the 2024 HMP or Discontinue 2. If including action in the 2024 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why. |
|----------------|--|-----------------------|---|---|--|--|
| UN-1 | Midland Ave and Old Mountain Road Culvert Upgrades | Flooding | Village Board, Village Engr. | Flooding at the intersection of Midland Ave and Old Mountain Road. Upgrade of the culvert at the intersection of Midland Ave and Old Mountain Rd to increase the stormwater capacity and help to mitigate local flooding. | 1. No Progress 2. The Village was not able to make progress on this action due to other priorities and funding limitations. | 1. Include 2. Keep as is 3. N/A |
| UN-2 | Lexow Avenue Drainage Improvements | Flooding | Village Board, Village Engr. | Flooding of residential properties between Broadway and the Hudson River. Upgrade the storm drain complex on Lexow Ave and its outfall on Broadway to allow for increase stormwater capacity and mitigate local flooding. | 1. No Progress 2. The Village was not able to make progress on this action due to other priorities and funding limitations. | 1. Include 2. Keep as is 3. N/A |
| UN-3 | Comprehensive Plan Updates | Flooding, Wind Damage | Village Planning Board, County Planning | The current comprehensive plan does not incorporate natural disaster mitigation techniques. Ensure that local comprehensive plans incorporate natural disaster mitigation techniques through a courtesy review or draft plans by the County Planning Department. | 1. Complete 2. The Village incorporated hazard mitigation principles into the 2021 comprehensive plan update. | 1. Discontinue 2. N/A 3. The Village incorporated hazard mitigation principles into the 2021 comprehensive plan update. |

| Project Number | Project Name | Hazard(s) Addressed | Responsible Party | Brief Summary of the Original Problem and the Solution (Project) | Action Review 1. Status (In Progress, Ongoing Capability, No Progress, Complete) 2. Provide a narrative to describe progress or obstacles that have prevented implementation | Next Steps 1. Project to be included in the 2024 HMP or Discontinue 2. If including action in the 2024 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why. |
|----------------|--------------------|---------------------|-------------------|--|--|--|
| UN-4 | GIS Online Mapping | All Hazards | County GIS | Lack of public knowledge on the spatial extent of hazards. Provide GIS hazard information online for residents and others in the community to view the Village's hazard vulnerabilities. | 1. No Progress 2. The Village does not have in-house GIS capability to implement this project but relies on the County Planning Dept to provide map information. | 1. Discontinue 2. N/A 3. The Village does not have in-house GIS capability to implement this project but relies on the County Planning Dept to provide map information. |
| UN-5 | Public Workshops | All Hazards | TBD | The public may not be aware of the Village's hazard vulnerabilities and planning/zoning decisions. Hold periodic workshops regarding zoning and planning issues that arise regarding natural hazards and hazard mitigation. | 1. Discontinued 2. Planning and zoning requirements are listed on applications. | 1. Discontinue 2. N/A 3. Planning and zoning requirements are listed on applications. |

| Project Number | Project Name | Hazard(s) Addressed | Responsible Party | Brief Summary of the Original Problem and the Solution (Project) | Action Review 1. Status (In Progress, Ongoing Capability, No Progress, Complete) 2. Provide a narrative to describe progress or obstacles that have prevented implementation | Next Steps 1. Project to be included in the 2024 HMP or Discontinue 2. If including action in the 2024 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why. |
|----------------|--|---------------------|--------------------------------------|---|--|--|
| UN-6 | Maintain List of Repetitive Flood Properties | Flooding | Village Board, Village Engr., RC GIS | <p>Repetitively flooded properties place an undue stress on the property owner and village and efforts should be made to mitigate them.</p> <p>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.</p> | <p>1. No Progress</p> <p>2. The Village will maintain a list of properties when advised of flood damage; not all Owners report damage to the Village.</p> | <p>1. Include</p> <p>2. Keep as is</p> <p>3. N/A</p> |
| UN-7 | Flood Prone Road Mitigation Measures | Flooding | Village Board, DPW, Village Engr. | <p>Flood prone roads can inhibit emergency response and evacuation during a flood.</p> <p>Develop specific mitigation solutions for flood prone road systems (roads, bridges, intersections, drainage, etc.) under the leadership of County DPW.</p> | <p>1. No Progress</p> <p>2. The Village was not able to make progress on this action due to other priorities and funding limitations.</p> | <p>1. Include</p> <p>2. Keep as is</p> <p>3. N/A</p> |

| Project Number | Project Name | Hazard(s) Addressed | Responsible Party | Brief Summary of the Original Problem and the Solution (Project) | Action Review 1. Status (In Progress, Ongoing Capability, No Progress, Complete) 2. Provide a narrative to describe progress or obstacles that have prevented implementation | Next Steps 1. Project to be included in the 2024 HMP or Discontinue 2. If including action in the 2024 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why. |
|----------------|---------------------------------|---------------------|-----------------------------------|---|--|--|
| UN-8 | Critical Facilities Protection | All Hazards | Bldg. Insp. | <p>If facilities were built before a certain date, they could be more susceptible to damage from a hazard event.</p> <p>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.</p> | <p>1. No Progress</p> <p>2. The Village was not able to make progress on this action due to other priorities.</p> | <p>1. Include</p> <p>2. Keep as is</p> <p>3. N/A</p> |
| UN-9 | Update Emergency Response Plans | All Hazards | Village Emergency Manager, RCOFES | <p>The current emergency response plans do not implement monitoring or warning systems.</p> <p>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.</p> | <p>1. No Progress</p> <p>2. The Village was not able to make progress on this action due to other priorities.</p> | <p>1. Include</p> <p>2. Keep as is</p> <p>3. N/A</p> |

| Project Number | Project Name | Hazard(s) Addressed | Responsible Party | Brief Summary of the Original Problem and the Solution (Project) | Action Review 1. Status (In Progress, Ongoing Capability, No Progress, Complete) 2. Provide a narrative to describe progress or obstacles that have prevented implementation | Next Steps 1. Project to be included in the 2024 HMP or Discontinue 2. If including action in the 2024 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why. |
|----------------|---|---------------------|-------------------------------|--|--|--|
| UN-10 | Review Village Codes | All Hazards | Village Board, Planning Board | <p>New vulnerabilities could have emerged, or existing vulnerabilities could have worsened, which could warrant a code update.</p> <p>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.</p> | <p>1. Ongoing Capability 2. Codes and ordinances are reviewed continuously to identify room for amendments.</p> | <p>1. Discontinue 2. N/A 3. Ongoing capability. Codes and ordinances are reviewed continuously to identify room for amendments.</p> |
| UN-11 | Flood Damage Prevention Ordinance Update, FIRMs | Flooding | Village Board, FPA | <p>Future FIRMS could show the need for a more stringent flood ordinance if risk has increased.</p> <p>Update/review floodplain management ordinances to be consistent with potential future new FIRMs.</p> | <p>1. Ongoing Capability 2. Codes and ordinances are reviewed continuously to identify room for amendments.</p> | <p>1. Discontinue 2. N/A 3. Ongoing capability. Codes and ordinances are reviewed continuously to identify room for amendments.</p> |
| UN-12 | Certified Floodplain Managers | Flooding | Village Board, FPA | <p>Floodplain management and ordinance enforcement staff are not Certified Floodplain Managers.</p> <p>Encourage staff involved in floodplain management and ordinance enforcement to become Certified Floodplain Managers (CFMs).</p> | <p>1. No Progress 2. The Village was not able to make progress on this action due to other priorities.</p> | <p>1. Include 2. Keep as is 3. N/A</p> |

| Project Number | Project Name | Hazard(s) Addressed | Responsible Party | Brief Summary of the Original Problem and the Solution (Project) | Action Review 1. Status (In Progress, Ongoing Capability, No Progress, Complete) 2. Provide a narrative to describe progress or obstacles that have prevented implementation | Next Steps 1. Project to be included in the 2024 HMP or Discontinue 2. If including action in the 2024 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why. |
|----------------|----------------------------|---------------------|-------------------------------|--|--|--|
| UN-13 | Community Rating System | Flooding | Village Board, FPA | The Village is not in the CRS program. Join the Community Rating System (CRS). | 1. No Progress 2. The Village was not able to make progress on this action due to other priorities. | 1. Include 2. Keep as is 3. N/A |
| UN-14 | Hazard Risk Areas Database | All Hazards | Village Board, Planning Board | Development in hazard areas can lead to avoidable casualties and property damage. 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. | 1. No Progress 2. The Village does not have in-house GIS capability to implement this project but relies on the County Planning Dept to provide map information. | 1. Discontinue 2. N/A 3. The Village does not have in-house GIS capability to implement this project but relies on the County Planning Dept to provide map information. |

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Proposed Hazard Mitigation Initiatives for the HMP Update

Upper Nyack participated in the mitigation strategy workshop for this HMP to identify appropriate actions to include in a local hazard mitigation strategy. Its comprehensive consideration of all possible activities to address hazards of concern included review of the following FEMA documents:

- FEMA 551 “Selecting Appropriate Mitigation Measures for Floodprone Structures” (March 2007)
- FEMA “Mitigation Ideas—A Resource for Reducing Risk to Natural Hazards” (January 2013).

The action worksheets included at the end of this annex list the mitigation actions that Upper Nyack would like to pursue in the future to reduce the effects of hazards. The actions 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 the Village’s priorities.

Table 9.22-18 indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table to further demonstrate the wide range of activities and mitigation measures selected.

Volume I identifies 14 evaluation criteria for prioritizing the mitigation actions. To assist with rating each mitigation action as high, medium, or low priority, a numeric rank is assigned (-1, 0, or 1) for each of the evaluation criteria. Table 9.22-19 provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.22-18. Analysis of Mitigation Actions by Hazard and Category

| Hazard | Actions That Address the Hazard, by Action Category | | | | | | | | | |
|-----------------------|---|-----|-----|-----|-----|----|----|----|----|----|
| | FEMA | | | | CRS | | | | | |
| | LPR | SIP | NSP | EAP | PR | PP | PI | NR | SP | ES |
| Dam Failure | 5 | - | - | 3 | 5 | 2 | 3 | - | - | 1 |
| Disease Outbreak | 1 | - | - | 2 | 1 | 2 | 2 | - | - | - |
| Drought | 5 | - | - | 3 | 5 | 2 | 3 | - | - | 1 |
| Earthquake | 5 | - | - | 3 | 5 | 2 | 3 | - | - | 1 |
| Extreme Temperature | 3 | - | - | 2 | 3 | 2 | 2 | - | - | 1 |
| Flood | 7 | 2 | - | 3 | 7 | 5 | 5 | - | 2 | 1 |
| Landslide | 5 | - | - | 3 | 5 | 2 | 3 | - | - | 1 |
| Severe Weather | 4 | 1 | - | 2 | 4 | 4 | 2 | - | 1 | 1 |
| Severe Winter Weather | 3 | - | - | 2 | 3 | 2 | 2 | - | - | 1 |
| Wildfire | 5 | - | - | 3 | 5 | 2 | 3 | - | - | 1 |

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 structures to reduce the impact of hazards.

Natural Systems Protection (NSP)—These are actions that minimize damage and losses and 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

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 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 9.22-19. Summary of Prioritization of Actions

| Project Number | Project Name | Life Safety | Property Protection | Cost-Effectiveness | Political | Legal | Fiscal | Environmental | Social Vulnerability | Administrative | Hazards of Concern | Climate Change | Timeline | Critical Lifelines | Other Community Objectives | Total | High / Medium / Low |
|---------------------|---|-------------|---------------------|--------------------|-----------|-------|--------|---------------|----------------------|----------------|--------------------|----------------|----------|--------------------|----------------------------|-------|---------------------|
| 2024-UpperNyackV-01 | Socially Vulnerable Populations Outreach | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 | High |
| 2024-UpperNyackV-02 | Repetitive and Severe Repetitive Loss Properties | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 12 | High |
| 2024-UpperNyackV-03 | Flood Mitigation Interest | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 13 | High |
| 2024-UpperNyackV-04 | Flood Prone Road Mitigation Measures | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 9 | Medium |
| 2024-UpperNyackV-05 | Lexow Avenue Drainage Improvements | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 13 | High |
| 2024-UpperNyackV-06 | Public Education and Outreach | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 12 | High |
| 2024-UpperNyackV-07 | Critical Facilities Protection | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 10 | Medium |
| 2024-UpperNyackV-08 | Emergency Response Plan Update | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 11 | High |
| 2024-UpperNyackV-09 | Staff Credentialling | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 12 | High |
| 2024-UpperNyackV-10 | Community Rating System (CRS) Program | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 10 | Medium |
| 2024-UpperNyackV-11 | GIS Online Mapping | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 10 | Medium |
| 2024-UpperNyackV-12 | Hazard Risk Areas Database | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 10 | Medium |
| 2024-UpperNyackV-13 | Substantial Damage Determination Training and Resources | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 11 | High |

Note: Volume I, Section 6 (Mitigation Strategy) conveys guidance on prioritizing mitigation actions. Low (0-6), Medium (7-10), High (11-14).

Action 2024-UpperNyackV-01. Socially Vulnerable Populations Outreach

| | | |
|---|--|---|
| Action Name: | 2024-UpperNyackV-01. Socially Vulnerable Populations Outreach | |
| Description of the Problem: | The Village does not have any organizations that conduct outreach to socially vulnerable populations and underserved populations. During hazard events, the public may need to quickly access information about evacuation routes and shelters, or other steps they can take to protect themselves and their property. Residents may also need information about what services are available or offline due to flooding from intense precipitation, dam failure, severe storms, and snow melt; where to receive a vaccination or other healthcare in the event of a disease outbreak; public cooling or heat centers, such as libraries, during extreme temperatures; and evacuation areas for earthquakes, landslides, and wildfires. Socially vulnerable and underserved populations may rely on these types of services more heavily than other segments on the population. Furthermore, they may be less able to access these resources due to a variety of potential obstacles, such as mobility issues or language barriers. | |
| Hazard(s) of Concern: <i>Check all that apply</i> | <input checked="" type="checkbox"/> Dam/Levee Failure <input checked="" type="checkbox"/> Disease Outbreak <input checked="" type="checkbox"/> Drought <input checked="" type="checkbox"/> Earthquake <input checked="" type="checkbox"/> Extreme Temperature | <input checked="" type="checkbox"/> Flood <input checked="" type="checkbox"/> Landslide <input checked="" type="checkbox"/> Severe Storm <input checked="" type="checkbox"/> Severe Winter Storm <input checked="" type="checkbox"/> Wildfire |
| Description of the Solution: | Create outreach materials, or utilize those from Rockland County, on hazard risks for socially vulnerable populations. Methods of distribution may include Village events, the Village newsletters, social media, the Village website, and having the materials on display for the public at Village libraries and offices. | |
| Lead Agency: | Village Administration | |
| Supporting Agencies: | Rockland County | |
| Estimated Cost: | Low | |
| Potential Funding Sources: | Village Budget, HMGP | |
| Implementation Timeline: | Within 3 years | |
| Goals Met: | 1, 3, 5 | |
| Benefits: | This action will ensure there is an individual working to identify and work with the socially vulnerable populations in the Village. Furthermore, this action will create opportunities to educate and inform populations on hazard risks. | |
| Mitigation Action Type: <i>Check all that apply</i> | <input type="checkbox"/> Local Plans and Regulations (LPR) <input type="checkbox"/> Structure and Infrastructure Project (SIP) | <input type="checkbox"/> Natural Systems Protection (NSP) <input checked="" type="checkbox"/> Education and Awareness Programs (EAP) |
| CRS Category: <i>Check all that apply</i> | <input type="checkbox"/> Preventative Measures (PR) <input type="checkbox"/> Property Protection (PP) <input checked="" type="checkbox"/> Public Information (PI) | <input type="checkbox"/> Natural Resource Protection (NR) <input type="checkbox"/> Structural Flood Control Projects (SP) <input type="checkbox"/> Emergency Services (ES) |
| Impact on Socially Vulnerable Populations: | Socially vulnerable populations in the Village will become educated on hazards risks. The Village will identify an individual to identify and work with these populations to ensure the most up to date information is being shared. | |
| Impact on Critical Facilities/Lifelines: | Educating populations on hazard risk and how to mitigate the risks can decrease the demand on utilities and emergency services including health and medical, law enforcement, and search and rescue. | |
| Impact on Capabilities | This action would build upon the Village’s already existing public education and outreach program. | |
| Impact on Future Development: | Not applicable | |

| | | | |
|---------------------------------------|---|---------------------------------|---|
| Climate Change Considerations: | Climate change is likely to increase the intensity and frequency of many climate related disaster events. This action will inform residents and business owners of how to reduce risk from hazards and how climate change may exacerbate those risks. | | |
| Priority: <i>Check one</i> | <input checked="" type="checkbox"/> High | <input type="checkbox"/> Medium | <input type="checkbox"/> Low |
| Alternatives | Action | | Evaluation |
| | No action | | Current methods remain the only ones used |
| | Rely on state or federal resources | | Resources may be generalized and not specific to the risks in the Village |
| | Use only a few methods for distribution | | Using only a few methods of distribution may hinder socially vulnerable populations from receiving the guidance |

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Action 2024-UpperNyackV-02. Repetitive and Severe Repetitive Loss Properties

| | | | |
|---|---|---|------------------------------|
| Action Name: | 2024-UpperNyackV-02. Repetitive and Severe Repetitive Loss Properties | | |
| Description of the Problem: | There is one SRL property in the Village. These properties exhibit elevated vulnerability and may face increasing risks to flood damage due to changes in precipitation intensity and frequency, raising the possibility for these properties to become Repetitive/Severe Repetitive Loss Properties. These properties may require a disproportionate amount of municipal resources after hazard events if they are damaged. | | |
| Hazard(s) of Concern: <i>Check all that apply</i> | <input type="checkbox"/> Dam/Levee Failure <input type="checkbox"/> Disease Outbreak <input type="checkbox"/> Drought <input type="checkbox"/> Earthquake <input type="checkbox"/> Extreme Temperature | <input checked="" type="checkbox"/> Flood <input type="checkbox"/> Landslide <input type="checkbox"/> Severe Storm <input type="checkbox"/> Severe Winter Storm <input type="checkbox"/> Wildfire | |
| Description of the Solution: | The Village will promote and support non-structural flood hazard mitigation alternatives for at risk properties within the floodplain, including those that have been identified as Repetitive Loss (RL) and Severe Repetitive Loss (SRL), such as acquisition/relocation or elevation depending on feasibility. The parameters for this initiative would be funding, benefits versus cost, and willing participation of property owners. | | |
| Lead Agency: | Floodplain Administrator | | |
| Supporting Agencies: | Rockland County | | |
| Estimated Cost: | Medium | | |
| Potential Funding Sources: | FEMA FMA, FMA SWIFT, Village Budget, County Budget, Property Owners | | |
| Implementation Timeline: | 3 years | | |
| Goals Met: | 1, 2, 3 | | |
| Benefits: | This action would foster comprehensive floodplain management by removing at risk properties from the flood hazard area or elevating properties to reduce the flood risk. | | |
| Mitigation Action Type: <i>Check all that apply</i> | <input type="checkbox"/> Local Plans and Regulations (LPR) <input checked="" type="checkbox"/> Structure and Infrastructure Project (SIP) | <input type="checkbox"/> Natural Systems Protection (NSP) <input type="checkbox"/> Education and Awareness Programs (EAP) | |
| CRS Category: <i>Check all that apply</i> | <input type="checkbox"/> Preventative Measures (PR) <input checked="" type="checkbox"/> Property Protection (PP) <input type="checkbox"/> Public Information (PI) | <input type="checkbox"/> Natural Resource Protection (NR) <input checked="" type="checkbox"/> Structural Flood Control Projects (SP) <input type="checkbox"/> Emergency Services (ES) | |
| Impact on Socially Vulnerable Populations: | Socially vulnerable populations may be able to have houses elevated or acquired when it would otherwise be unaffordable. | | |
| Impact on Critical Facilities/Lifelines: | Removing structures from the floodplain decreases the demand on utilities and emergency services including health and medical, law enforcement, and search and rescue. | | |
| Impact on Capabilities | This action will enhance the Village’s current NFIP capabilities. | | |
| Impact on Future Development: | Increased outreach to homeowners within a flood prone area will limit construction in areas that are prone to hazard events. Homes may be acquired, which will remove those structures from the floodplain and prevent future development on those sites. | | |
| Climate Change Considerations: | A warmer atmosphere means storms have the potential to be more intense and occur more often, including increased periods of intense rain events. | | |
| Priority: <i>Check one</i> | <input checked="" type="checkbox"/> High | <input type="checkbox"/> Medium | <input type="checkbox"/> Low |

| Alternatives | Action | Evaluation |
|--------------|--|--|
| | No action | Current problem continues |
| | Construct flood walls/barriers around vulnerable areas | Costly and can divert floodwaters to other areas |
| | Deployable flood barriers for vulnerable areas | Requires a great deal of work to implement prior to each event |

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Action 2024-UpperNyackV-03. Flood Mitigation Interest

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|---|---|---|
| Action Name: | 2024-UpperNyackV-03. Flood Mitigation Interest | |
| Description of the Problem: | The Village does not have a formalized list of damaged properties or property owners which may be interested in flood mitigation measures, such as elevation or acquisition. Without this information, the Village does not have a streamlined way to assess overall trends in damages/impacts to these properties to determine properties of the highest risk of flood damage. It also does not track communications with property owners or the implementation or interest in potential mitigation efforts. | |
| Hazard(s) of Concern: <i>Check all that apply</i> | <input type="checkbox"/> Dam/Levee Failure <input type="checkbox"/> Disease Outbreak <input type="checkbox"/> Drought <input type="checkbox"/> Earthquake <input type="checkbox"/> Extreme Temperature | <input checked="" type="checkbox"/> Flood <input type="checkbox"/> Landslide <input type="checkbox"/> Severe Storm <input type="checkbox"/> Severe Winter Storm <input type="checkbox"/> Wildfire |
| Description of the Solution: | The Floodplain Administration will develop a list for inventorying system or properties damaged by flood events and property owners who are interested in flood mitigation measures, such as elevation or acquisition. | |
| Lead Agency: | Floodplain Administrator | |
| Supporting Agencies: | Planning Board, Zoning Board, Village Administration | |
| Estimated Cost: | Staff time, Low | |
| Potential Funding Sources: | Village Budget | |
| Implementation Timeline: | Within 2 years | |
| Goals Met: | 1, 2, 3, 5 | |
| Benefits: | Keeping a list of damaged properties and property owners interested in flood mitigation efforts may lead to the elimination of flood damage to homes and residences, which creating an open space for the municipality and increasing flood storage. | |
| Mitigation Action Type: <i>Check all that apply</i> | <input checked="" type="checkbox"/> Local Plans and Regulations (LPR) <input type="checkbox"/> Structure and Infrastructure Project (SIP) | <input type="checkbox"/> Natural Systems Protection (NSP) <input type="checkbox"/> Education and Awareness Programs (EAP) |
| CRS Category: <i>Check all that apply</i> | <input checked="" type="checkbox"/> Preventative Measures (PR) <input type="checkbox"/> Property Protection (PP) <input type="checkbox"/> Public Information (PI) | <input type="checkbox"/> Natural Resource Protection (NR) <input type="checkbox"/> Structural Flood Control Projects (SP) <input type="checkbox"/> Emergency Services (ES) |
| Impact on Socially Vulnerable Populations: | Collecting data regarding homeowners that reside within flood prone areas provides an opportunity to introduce location-specific opportunities for assistance. Removing homes from the floodplain immediately removes the risk to life and property. | |
| Impact on Critical Facilities/Lifelines: | Removing structures from the floodplain decreases the demand on utilities and emergency services including health and medical, law enforcement, and search and rescue. | |
| Impact on Capabilities | This action will create a new Village capability, while enhancing its current NFIP capabilities. | |
| Impact on Future Development: | Increased outreach to homeowners within a flood prone area will limit construction in areas that are prone to hazard events. Homes may be acquired, which will remove those structures from the floodplain and prevent future development on those sites. | |

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|---------------------------------------|---|--|------------------------------|
| Climate Change Considerations: | A warmer atmosphere means storms have the potential to be more intense and occur more often, including increased periods of intense rain events. Areas experiencing flooding conditions may increase. Removing structures from the floodplain will reduce the response and recovery costs as a result of these events and decrease the loss of human life as a result of these events. Elevating structures will reduce the recovery costs as a result of these events. | | |
| Priority: <i>Check one</i> | <input checked="" type="checkbox"/> High | <input type="checkbox"/> Medium | <input type="checkbox"/> Low |
| Alternatives | Action | Evaluation | |
| | No action | Current problem remains | |
| | Only share opportunities when notified of grant funding | May not be enough time to garner interest or write application | |
| | Wait for information from the State on flood-damaged properties | May be a delay in notice | |

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Action 2024-UpperNyackV-04. Flood Prone Road Mitigation Measures

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|---|---|--|------------------------------|
| Action Name: | 2024-UpperNyackV-04. Flood Prone Road Mitigation Measures | | |
| Description of the Problem: | There are flood prone roadways in the Village, including at the intersection of Midland Ave and Old Mountain Road. These roadways may experience damage or become impassable due to flooding and severe storm events. | | |
| Hazard(s) of Concern: <i>Check all that apply</i> | <input type="checkbox"/> Dam/Levee Failure <input type="checkbox"/> Disease Outbreak <input type="checkbox"/> Drought <input type="checkbox"/> Earthquake <input type="checkbox"/> Extreme Temperature | <input checked="" type="checkbox"/> Flood <input type="checkbox"/> Landslide <input checked="" type="checkbox"/> Severe Storm <input type="checkbox"/> Severe Winter Storm <input type="checkbox"/> Wildfire | |
| Description of the Solution: | The Village will identify which roadways are being impacted and develop specific mitigation solutions for flood prone road systems (roads, bridges, intersections, drainage, etc.) under the leadership of County DPW. Upgrade of the culvert at the intersection of Midland Ave and Old Mountain Rd to increase the stormwater capacity and help to mitigate local flooding. | | |
| Lead Agency: | Village Public Works | | |
| Supporting Agencies: | County Public Works | | |
| Estimated Cost: | Medium | | |
| Potential Funding Sources: | FEMA BRIC, HMGP, Village Budget | | |
| Implementation Timeline: | Within 5 years | | |
| Goals Met: | 2 | | |
| Benefits: | This action will identify measures to protect infrastructure in the transportation lifeline, which will lead to the assurance of clear roadways for evacuations, regular travel, and emergency responses. | | |
| Mitigation Action Type: <i>Check all that apply</i> | <input checked="" type="checkbox"/> Local Plans and Regulations (LPR) <input type="checkbox"/> Structure and Infrastructure Project (SIP) | <input type="checkbox"/> Natural Systems Protection (NSP) <input type="checkbox"/> Education and Awareness Programs (EAP) | |
| CRS Category: <i>Check all that apply</i> | <input checked="" type="checkbox"/> Preventative Measures (PR) <input checked="" type="checkbox"/> Property Protection (PP) <input type="checkbox"/> Public Information (PI) | <input type="checkbox"/> Natural Resource Protection (NR) <input type="checkbox"/> Structural Flood Control Projects (SP) <input type="checkbox"/> Emergency Services (ES) | |
| Impact on Socially Vulnerable Populations: | This action will assist socially vulnerable populations whose properties are impacted by flooding at the intersection of Midland Ave and Old Mountain Road. | | |
| Impact on Critical Facilities/Lifelines: | This action will identify measures to protect infrastructure in the transportation lifeline, which will lead to the assurance of clear roadways for evacuations, regular travel, and emergency responses. | | |
| Impact on Capabilities | Not applicable | | |
| Impact on Future Development: | Future development in the impacted area will be less likely to be flooded. | | |
| Climate Change Considerations: | A warmer atmosphere means storms have the potential to be more intense and occur more often, including increased periods of intense rain events. | | |
| Priority: <i>Check one</i> | <input type="checkbox"/> High | <input checked="" type="checkbox"/> Medium | <input type="checkbox"/> Low |
| Alternatives | Action | | Evaluation |
| | No action | | Current problem continues |

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|--|---------------------------------------|------------------|
| | Relocate all flood prone road systems | Not feasible |
| | Raise all flood prone roads | Cost prohibitive |

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Action 2024-UpperNyackV-05. Lexow Avenue Drainage Improvements

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|---|--|--|------------------------------|
| Action Name: | 2024-UpperNyackV-05. Lexow Avenue Drainage Improvements | | |
| Description of the Problem: | Residential properties experience flooding due to drainage issues on Lexow Avenue, between Broadway and the Hudson River. This flooding can cause property and infrastructure damage, as well as affect road access. | | |
| Hazard(s) of Concern: <i>Check all that apply</i> | <input type="checkbox"/> Dam/Levee Failure <input type="checkbox"/> Disease Outbreak <input type="checkbox"/> Drought <input type="checkbox"/> Earthquake <input type="checkbox"/> Extreme Temperature | <input checked="" type="checkbox"/> Flood <input type="checkbox"/> Landslide <input checked="" type="checkbox"/> Severe Storm <input type="checkbox"/> Severe Winter Storm <input type="checkbox"/> Wildfire | |
| Description of the Solution: | Upgrade the storm drain complex on Lexow Ave and its outfall on Broadway to allow for increase stormwater capacity and mitigate local flooding. | | |
| Lead Agency: | Village Board | | |
| Supporting Agencies: | Engineering | | |
| Estimated Cost: | High | | |
| Potential Funding Sources: | FEMA BRIC, HMGP, Village Budget | | |
| Implementation Timeline: | Within 4 years | | |
| Goals Met: | 2, 5 | | |
| Benefits: | Overall flooding will be reduced, which will result in less frequency of road closures and reduced damage occurring to drainage infrastructure and roadways during severe events. | | |
| Mitigation Action Type: <i>Check all that apply</i> | <input type="checkbox"/> Local Plans and Regulations (LPR) <input checked="" type="checkbox"/> Structure and Infrastructure Project (SIP) | <input type="checkbox"/> Natural Systems Protection (NSP) <input type="checkbox"/> Education and Awareness Programs (EAP) | |
| CRS Category: <i>Check all that apply</i> | <input type="checkbox"/> Preventative Measures (PR) <input checked="" type="checkbox"/> Property Protection (PP) <input type="checkbox"/> Public Information (PI) | <input type="checkbox"/> Natural Resource Protection (NR) <input checked="" type="checkbox"/> Structural Flood Control Projects (SP) <input type="checkbox"/> Emergency Services (ES) | |
| Impact on Socially Vulnerable Populations: | This action will assist socially vulnerable populations whose properties are impacted by flooding the drainage infrastructure. | | |
| Impact on Critical Facilities/Lifelines: | This action will identify measures to protect infrastructure in the transportation lifeline, which will lead to the assurance of clear roadways for evacuations, regular travel, and emergency responses. | | |
| Impact on Capabilities | This action will upgrade the stormwater management capabilities of the Village. | | |
| Impact on Future Development: | Future development in the impacted area will be less likely to be flooded. | | |
| Climate Change Considerations: | Climate change is likely to result in more frequent and severe rainfall events. This action upsizes culvert sizes to meet changing stormwater needs as the result of climate change. | | |
| Priority: <i>Check one</i> | <input checked="" type="checkbox"/> High | <input type="checkbox"/> Medium | <input type="checkbox"/> Low |
| Alternatives | Action | | Evaluation |
| | No Action | | - |
| | Remove roadway | | Roadway cannot be removed |

| | | |
|--|----------------------|---|
| | Install rain gardens | Rain gardens are unlikely to be able to absorb enough stormwater to prevent flooding during severe rainfall events. |
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Action 2024-UpperNyackV-06. Public Education and Outreach

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|---|--|---|
| Action Name: | 2024-UpperNyackV-06. Public Education and Outreach | |
| Description of the Problem: | The Village currently does not have a comprehensive education and outreach program. During hazard events, the public may need to quickly access information about evacuation routes and shelters, or other steps they can take to protect themselves and their property. Residents may also need information about what services are available or offline due to flooding from intense precipitation, dam failure, severe storms, and snow melt; where to receive a vaccination or other healthcare in the event of a disease outbreak; public cooling or heat centers, such as libraries, during extreme temperatures; and evacuation areas for earthquakes, landslides, and wildfires. | |
| Hazard(s) of Concern: <i>Check all that apply</i> | <input checked="" type="checkbox"/> Dam/Levee Failure <input checked="" type="checkbox"/> Disease Outbreak <input checked="" type="checkbox"/> Drought <input checked="" type="checkbox"/> Earthquake <input checked="" type="checkbox"/> Extreme Temperature | <input checked="" type="checkbox"/> Flood <input checked="" type="checkbox"/> Landslide <input checked="" type="checkbox"/> Severe Storm <input checked="" type="checkbox"/> Severe Winter Storm <input checked="" type="checkbox"/> Wildfire |
| Description of the Solution: | Develop and enhance the public awareness program on hazards, prevention, and mitigation. Continue to work with Rockland County on their program that provides information to the municipalities. | |
| Lead Agency: | Village Administration | |
| Supporting Agencies: | Rockland County | |
| Estimated Cost: | Low | |
| Potential Funding Sources: | Village Budget | |
| Implementation Timeline: | 2 years | |
| Goals Met: | 1, 2, 3, 5 | |
| Benefits: | This action will improve the current public education and outreach program in the Village by including discussions on disaster preparedness and hazard mitigation to residents and business owners, which will contribute to the resiliency of the Village. | |
| Mitigation Action Type: <i>Check all that apply</i> | <input type="checkbox"/> Local Plans and Regulations (LPR) <input type="checkbox"/> Structure and Infrastructure Project (SIP) | <input type="checkbox"/> Natural Systems Protection (NSP) <input checked="" type="checkbox"/> Education and Awareness Programs (EAP) |
| CRS Category: <i>Check all that apply</i> | <input type="checkbox"/> Preventative Measures (PR) <input checked="" type="checkbox"/> Property Protection (PP) <input checked="" type="checkbox"/> Public Information (PI) | <input type="checkbox"/> Natural Resource Protection (NR) <input type="checkbox"/> Structural Flood Control Projects (SP) <input type="checkbox"/> Emergency Services (ES) |
| Impact on Socially Vulnerable Populations: | Socially vulnerable populations will learn how to prepare for and mitigate the various hazards which may impact them in the Village. | |
| Impact on Critical Facilities/Lifelines: | Businesses, which may be considered critical facilities or lifelines, would be more informed on how to prepare for emergency events and mitigate the risks of potential hazards. With these businesses becoming more resilient, this action would contribute to their continuity of operations. | |
| Impact on Capabilities | This action would build upon the Village’s already existing public education and outreach program. | |
| Impact on Future Development: | Not applicable | |
| Climate Change Considerations: | Climate change is likely to increase the intensity and frequency of many climate related disaster events. This action will inform residents and business owners of how to reduce risk from hazards and how climate change may exacerbate those risks. | |

| | | | |
|-------------------------------|--|---------------------------------|---|
| Priority: <i>Check one</i> | <input checked="" type="checkbox"/> High | <input type="checkbox"/> Medium | <input type="checkbox"/> Low |
| Alternatives | Action | | Evaluation |
| | No action | | Current methods remain the only ones used |
| | Rely on state or federal resources | | Resources may be generalized and not specific to the risks in the Village |
| | Use only a few methods for distribution | | Using only a few methods of distribution may hinder socially vulnerable populations from receiving the guidance |

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Action 2024-UpperNyackV-07. Critical Facilities Protection

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|---|--|---|------------------------------|
| Action Name: | 2024-UpperNyackV-07. Critical Facilities Protection | | |
| Description of the Problem: | If facilities were built before a certain date, they could be more susceptible to damage from a hazard event. These facilities may face elevated vulnerability to damage or service interruption during or following a flood caused by a dam failure, severe storm, or severe winter storm, drought, earthquake, extreme temperatures, landslides, and/or wildfires. | | |
| Hazard(s) of Concern: <i>Check all that apply</i> | <input checked="" type="checkbox"/> Dam/Levee Failure <input type="checkbox"/> Disease Outbreak <input checked="" type="checkbox"/> Drought <input checked="" type="checkbox"/> Earthquake <input checked="" type="checkbox"/> Extreme Temperature | <input checked="" type="checkbox"/> Flood <input checked="" type="checkbox"/> Landslide <input checked="" type="checkbox"/> Severe Storm <input checked="" type="checkbox"/> Severe Winter Storm <input checked="" type="checkbox"/> Wildfire | |
| Description of the Solution: | 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. | | |
| Lead Agency: | Village Building Department | | |
| Supporting Agencies: | Village Administration, Planning Board, Zoning Board | | |
| Estimated Cost: | Staff time, Low | | |
| Potential Funding Sources: | Village Budget | | |
| Implementation Timeline: | Within 3 years | | |
| Goals Met: | 1, 2, 5, 7 | | |
| Benefits: | The Village will have codes and plans that integrate hazard mitigation principles and will be able to identify which facilities may not currently be in aligned with current codes. | | |
| Mitigation Action Type: <i>Check all that apply</i> | <input checked="" type="checkbox"/> Local Plans and Regulations (LPR) <input type="checkbox"/> Structure and Infrastructure Project (SIP) | <input type="checkbox"/> Natural Systems Protection (NSP) <input type="checkbox"/> Education and Awareness Programs (EAP) | |
| CRS Category: <i>Check all that apply</i> | <input checked="" type="checkbox"/> Preventative Measures (PR) <input checked="" type="checkbox"/> Property Protection (PP) <input type="checkbox"/> Public Information (PI) | <input type="checkbox"/> Natural Resource Protection (NR) <input type="checkbox"/> Structural Flood Control Projects (SP) <input type="checkbox"/> Emergency Services (ES) | |
| Impact on Socially Vulnerable Populations: | Not applicable | | |
| Impact on Critical Facilities/Lifelines: | Critical facilities and lifelines will be expected to follow updated plans and codes. | | |
| Impact on Capabilities | The Village’s capability to handle hazard events is greatly improved by integrating hazard mitigation into other plans and codes. | | |
| Impact on Future Development: | Hazard mitigation principles will be integrated into future development via building and zoning codes. | | |
| Climate Change Considerations: | Hazard events are increasing in frequency and severity due to climate change. | | |
| Priority: <i>Check one</i> | <input type="checkbox"/> High | <input checked="" type="checkbox"/> Medium | <input type="checkbox"/> Low |
| Alternatives | Action | | Evaluation |
| | No action | | Current problem continues |

| | | |
|--|---|---|
| | Rely on County Plans/Codes | Plans are not specific to the Village and the relevant mitigation issues that they have apart from the County |
| | Create additional hazard mitigation information | Integrating relevant plans/codes together makes them more useful than creating additional separate documents |

DRAFT

Action 2024-UpperNyackV-08. Emergency Response Plan Update

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|---|---|---|------------------------------|
| Action Name: | 2024-UpperNyackV-08. Emergency Response Plan Update | | |
| Description of the Problem: | The current emergency response plans do not implement monitoring or warning systems during any of the following events: dam failure, disease outbreak, drought, earthquake, extreme temperature, flood, landslide, severe storm, severe winter storm, and wildfire. | | |
| Hazard(s) of Concern: <i>Check all that apply</i> | <input checked="" type="checkbox"/> Dam/Levee Failure <input checked="" type="checkbox"/> Disease Outbreak <input checked="" type="checkbox"/> Drought <input checked="" type="checkbox"/> Earthquake <input checked="" type="checkbox"/> Extreme Temperature | <input checked="" type="checkbox"/> Flood <input checked="" type="checkbox"/> Landslide <input checked="" type="checkbox"/> Severe Storm <input checked="" type="checkbox"/> Severe Winter Storm <input checked="" type="checkbox"/> Wildfire | |
| Description of the Solution: | 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. | | |
| Lead Agency: | Village Administration | | |
| Supporting Agencies: | Rockland County | | |
| Estimated Cost: | Low | | |
| Potential Funding Sources: | Village Budget, EMPG | | |
| Implementation Timeline: | Within 3 years | | |
| Goals Met: | 1, 3, 5 | | |
| Benefits: | The Village’s Emergency Response Plan will be updated to account for new hazard risks, the identification of vulnerable populations, the implementation of monitoring and warning systems, and the identification of available sheltering locations in the Village. | | |
| Mitigation Action Type: <i>Check all that apply</i> | <input checked="" type="checkbox"/> Local Plans and Regulations (LPR) <input type="checkbox"/> Structure and Infrastructure Project (SIP) | <input type="checkbox"/> Natural Systems Protection (NSP) <input type="checkbox"/> Education and Awareness Programs (EAP) | |
| CRS Category: <i>Check all that apply</i> | <input checked="" type="checkbox"/> Preventative Measures (PR) <input type="checkbox"/> Property Protection (PP) <input type="checkbox"/> Public Information (PI) | <input type="checkbox"/> Natural Resource Protection (NR) <input type="checkbox"/> Structural Flood Control Projects (SP) <input type="checkbox"/> Emergency Services (ES) | |
| Impact on Socially Vulnerable Populations: | The Emergency Response Plan covers a discussion of a variety of topics, including population distribution and locations, including any concentrated populations of individuals with disabilities, others with access and functional needs, or individuals with limited English proficiency. | | |
| Impact on Critical Facilities/Lifelines: | The Emergency Response Plan covers a discussion of a variety of topics, including vulnerable critical facilities (e.g. nursing homes, schools, hospitals, infrastructure). | | |
| Impact on Capabilities | This action will update an already existing planning capability of the Village. | | |
| Impact on Future Development: | Future development will be protected by the Emergency Response Plan. | | |
| Climate Change Considerations: | As impacts from climate change are increasingly felt, the contents in an Emergency Response Plan, including in the basic plan and any annexes, may need to be updated. | | |
| Priority: <i>Check one</i> | <input checked="" type="checkbox"/> High | <input type="checkbox"/> Medium | <input type="checkbox"/> Low |
| Alternatives | Action | | Evaluation |

| | No action | Current problem remains |
|--|--|--|
| | Integrate hazard mitigation principles in only hazard appendices | The plan will miss integration opportunities in the basic plan and annexes |
| | Ask County to integrate hazard mitigation into the County ERP | Village ERP still remains unintegrated |

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Action 2024-UpperNyackV-09. Staff Credentialling

| | | | |
|---|--|---|------------------------------|
| Action Name: | 2024-UpperNyackV-09. Staff Credentialling | | |
| Description of the Problem: | Floodplain management and ordinance enforcement staff are not Certified Floodplain Managers. Maintaining CFM certification requires continued education credits to ensure floodplain managers are informed and able to implement practices that reduce the risk of potential damage from flooding. | | |
| Hazard(s) of Concern: <i>Check all that apply</i> | <input type="checkbox"/> Dam/Levee Failure <input type="checkbox"/> Disease Outbreak <input type="checkbox"/> Drought <input type="checkbox"/> Earthquake <input type="checkbox"/> Extreme Temperature | <input checked="" type="checkbox"/> Flood <input type="checkbox"/> Landslide <input type="checkbox"/> Severe Storm <input type="checkbox"/> Severe Winter Storm <input type="checkbox"/> Wildfire | |
| Description of the Solution: | Provide training and/or certification for Village staff with NFIP regulations and floodplain management ordinances. Encourage staff to become Certified Floodplain Managers via the Association of State Floodplain Manager’s CFM Certification Program. | | |
| Lead Agency: | Floodplain Administrator | | |
| Supporting Agencies: | Village Administration, Rockland County | | |
| Estimated Cost: | Low | | |
| Potential Funding Sources: | Village Budget | | |
| Implementation Timeline: | Within 5 years | | |
| Goals Met: | 1, 3, 6 | | |
| Benefits: | This action will increase the NFIP capabilities of the Village and assure the Village’s NFIP program has enough staff to accomplish its goals and reach NFIP compliance. | | |
| Mitigation Action Type: <i>Check all that apply</i> | <input type="checkbox"/> Local Plans and Regulations (LPR) <input type="checkbox"/> Structure and Infrastructure Project (SIP) | <input type="checkbox"/> Natural Systems Protection (NSP) <input checked="" type="checkbox"/> Education and Awareness Programs (EAP) | |
| CRS Category: <i>Check all that apply</i> | <input type="checkbox"/> Preventative Measures (PR) <input type="checkbox"/> Property Protection (PP) <input checked="" type="checkbox"/> Public Information (PI) | <input type="checkbox"/> Natural Resource Protection (NR) <input type="checkbox"/> Structural Flood Control Projects (SP) <input type="checkbox"/> Emergency Services (ES) | |
| Impact on Socially Vulnerable Populations: | Officials that are up to date on flood risk are more likely to encourage development outside areas of high flood risk, which is where socially vulnerable populations have historically resided. Safer dwellings may be developed in a less vulnerable location. | | |
| Impact on Critical Facilities/Lifelines: | The opportunity will exist for leaders and operators of utilities and other essential services to attend training and provide direction on ways the prepare for, plan for, and prevent interruptions in service as a result of a flood. | | |
| Impact on Capabilities | This action will enhance the Village’s current NFIP capabilities. | | |
| Impact on Future Development: | Officials that understand best practices in floodplain management will have the opportunity to influence future development and prevent unsafe building in flood hazard areas. | | |
| Climate Change Considerations: | Climate change is likely to increase the intensity and frequency of many climate related disaster events. This action will educate staff on NFIP regulations to assist with the flood hazard. | | |
| Priority: <i>Check one</i> | <input type="checkbox"/> High | <input type="checkbox"/> Medium | <input type="checkbox"/> Low |
| Alternatives | Action | | Evaluation |

| | | |
|--|---|---|
| | No Action | - |
| | Hire outside contractors for floodplain administration | Costly |
| | Establish shared service agreements for floodplain administration from neighboring municipalities | Neighboring municipalities are unlikely to have the staff capacity to take on this role |

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Action 2024-UpperNyackV-10. Community Rating System (CRS) Program

| | | | |
|---|---|---|------------------------------|
| Action Name: | 2024-UpperNyackV-10. Community Rating System (CRS) Program | | |
| Description of the Problem: | The Village is not in the CRS program. The CRS Program would incentivize the Village to implement activities and initiatives that reduce its risk to flood damage, while making residents eligible for flood insurance discounts. | | |
| Hazard(s) of Concern: <i>Check all that apply</i> | <input type="checkbox"/> Dam/Levee Failure <input type="checkbox"/> Disease Outbreak <input type="checkbox"/> Drought <input type="checkbox"/> Earthquake <input type="checkbox"/> Extreme Temperature | <input checked="" type="checkbox"/> Flood <input type="checkbox"/> Landslide <input type="checkbox"/> Severe Storm <input type="checkbox"/> Severe Winter Storm <input type="checkbox"/> Wildfire | |
| Description of the Solution: | The Village will evaluate the benefits and costs of participating in CRS program. If feasible, the Village will join the program and begin implementing standards that exceed NFIP requirements. | | |
| Lead Agency: | Floodplain Administrator | | |
| Supporting Agencies: | Village Board, Planning | | |
| Estimated Cost: | Low | | |
| Potential Funding Sources: | Village Budget | | |
| Implementation Timeline: | 4 years | | |
| Goals Met: | 2, 3, 5 | | |
| Benefits: | The participation in the CRS benefits communities by offering discounted rates for flood insurance premiums, which addresses the three goals of the program: reduce and avoid flood damage to insurable property, strengthen and support the insurance aspects of the National Flood Insurance Program, and foster comprehensive floodplain management. | | |
| Mitigation Action Type: <i>Check all that apply</i> | <input type="checkbox"/> Local Plans and Regulations (LPR) <input type="checkbox"/> Structure and Infrastructure Project (SIP) | <input type="checkbox"/> Natural Systems Protection (NSP) <input checked="" type="checkbox"/> Education and Awareness Programs (EAP) | |
| CRS Category: <i>Check all that apply</i> | <input type="checkbox"/> Preventative Measures (PR) <input type="checkbox"/> Property Protection (PP) <input checked="" type="checkbox"/> Public Information (PI) | <input type="checkbox"/> Natural Resource Protection (NR) <input type="checkbox"/> Structural Flood Control Projects (SP) <input type="checkbox"/> Emergency Services (ES) | |
| Impact on Socially Vulnerable Populations: | The participation in the Community Rating System (CRS) benefits communities by offering discounted rates for flood insurance premiums, which may be more affordable for some socially vulnerable populations. | | |
| Impact on Critical Facilities/Lifelines: | Not applicable | | |
| Impact on Capabilities | This action would enhance the Village’s floodplain management capabilities. | | |
| Impact on Future Development: | Future development would need to adhere to any increased standards established as part of joining the CRS program such as increased freeboard and elevation certificate requirements. | | |
| Climate Change Considerations: | A warmer atmosphere means storms have the potential to be more intense and occur more often, including increased periods of intense rain events. These changes are likely to increase flood risks. | | |
| Priority: <i>Check one</i> | <input type="checkbox"/> High | <input checked="" type="checkbox"/> Medium | <input type="checkbox"/> Low |
| Alternatives | Action | | Evaluation |

| | | |
|--|---|---|
| | No action | - |
| | Adopt aspects of the CRS program into the floodplain management program | Increased floodplain management capabilities but no reduction in flood insurance premiums |
| | Abandon any floodplain management practices not required by NFIP | Reduction in floodplain management capabilities and increase in risk. |

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Action 2024-UpperNyackV-11. GIS Online Mapping

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|---|---|---|
| Action Name: | 2024-UpperNyackV-11. GIS Online Mapping | |
| Description of the Problem: | The Village does not have the capability in-house to implement GIS mapping for the Village, which contributes to the lack of public knowledge on the spatial extent of hazards. This information could be used to inform residents on areas and assets that could be damaged during dam failures, droughts, earthquakes, floods, landslides, and wildfires. | |
| Hazard(s) of Concern: <i>Check all that apply</i> | <input checked="" type="checkbox"/> Dam/Levee Failure <input type="checkbox"/> Disease Outbreak <input checked="" type="checkbox"/> Drought <input checked="" type="checkbox"/> Earthquake <input type="checkbox"/> Extreme Temperature | <input checked="" type="checkbox"/> Flood <input checked="" type="checkbox"/> Landslide <input type="checkbox"/> Severe Storm <input type="checkbox"/> Severe Winter Storm <input checked="" type="checkbox"/> Wildfire |
| Description of the Solution: | Work with the County {Planning Dept, GIS Division) to provide GIS hazard information online for residents and others in the community to view the Village's hazard vulnerabilities. | |
| Lead Agency: | Village Administration | |
| Supporting Agencies: | County Planning Dept. | |
| Estimated Cost: | Staff time, Low | |
| Potential Funding Sources: | Village Budget | |
| Implementation Timeline: | Within 5 years | |
| Goals Met: | 1, 3, 5 | |
| Benefits: | This action will provide visual GIS mapping of hazard areas. | |
| Mitigation Action Type: <i>Check all that apply</i> | <input checked="" type="checkbox"/> Local Plans and Regulations (LPR) <input type="checkbox"/> Structure and Infrastructure Project (SIP) | <input type="checkbox"/> Natural Systems Protection (NSP) <input checked="" type="checkbox"/> Education and Awareness Programs (EAP) |
| CRS Category: <i>Check all that apply</i> | <input checked="" type="checkbox"/> Preventative Measures (PR) <input type="checkbox"/> Property Protection (PP) <input checked="" type="checkbox"/> Public Information (PI) | <input type="checkbox"/> Natural Resource Protection (NR) <input type="checkbox"/> Structural Flood Control Projects (SP) <input type="checkbox"/> Emergency Services (ES) |
| Impact on Socially Vulnerable Populations: | Socially vulnerable populations in the Village will become educated on hazards risks. | |
| Impact on Critical Facilities/Lifelines: | Educating populations on hazard risk and how to mitigate the risks can decrease the demand on utilities and emergency services including health and medical, law enforcement, and search and rescue. | |
| Impact on Capabilities | This action will create a new capability for the Village and enhance public awareness. | |
| Impact on Future Development: | Not applicable | |
| Climate Change Considerations: | Climate change is likely to increase the intensity and frequency of many climate related disaster events. This action will inform the community of Village areas which may be the most at risk to various hazards. | |
| Priority: <i>Check one</i> | <input type="checkbox"/> High | <input checked="" type="checkbox"/> Medium |
| | | <input type="checkbox"/> Low |
| Alternatives | Action | Evaluation |
| | No action | Current problem remains |

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| | Map only flood hazard areas | Will align with NFIP requirements, but will not consider other hazard areas in the Village |
| | Create the system but do not make it public | Information will benefit Village and County employees, but not inform the public of potential hazards |

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Action 2024-UpperNyackV-12. Hazard Risk Areas Database

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|---|--|---|
| Action Name: | 2024-UpperNyackV-12. Hazard Risk Areas Database | |
| Description of the Problem: | The Village does not currently maintain a risk area database. Development in hazard areas can lead to avoidable casualties and property damage. | |
| Hazard(s) of Concern: <i>Check all that apply</i> | <input checked="" type="checkbox"/> Dam/Levee Failure <input type="checkbox"/> Disease Outbreak <input checked="" type="checkbox"/> Drought <input checked="" type="checkbox"/> Earthquake <input type="checkbox"/> Extreme Temperature | <input checked="" type="checkbox"/> Flood <input checked="" type="checkbox"/> Landslide <input type="checkbox"/> Severe Storm <input type="checkbox"/> Severe Winter Storm <input checked="" type="checkbox"/> Wildfire |
| Description of the Solution: | Work with the County (Planning Dept, GIS Division) to initiate the creation of a 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. | |
| Lead Agency: | Building Department | |
| Supporting Agencies: | Floodplain Administrator, Planning and Zoning Boards | |
| Estimated Cost: | Staff time, Low | |
| Potential Funding Sources: | Village Budget | |
| Implementation Timeline: | Within 4 years | |
| Goals Met: | 2, 4, 5 | |
| Benefits: | This action will allow all permits issued within the Village to be tracked by hazard area. | |
| Mitigation Action Type: <i>Check all that apply</i> | <input checked="" type="checkbox"/> Local Plans and Regulations (LPR) <input type="checkbox"/> Structure and Infrastructure Project (SIP) | <input type="checkbox"/> Natural Systems Protection (NSP) <input type="checkbox"/> Education and Awareness Programs (EAP) |
| CRS Category: <i>Check all that apply</i> | <input checked="" type="checkbox"/> Preventative Measures (PR) <input type="checkbox"/> Property Protection (PP) <input type="checkbox"/> Public Information (PI) | <input type="checkbox"/> Natural Resource Protection (NR) <input type="checkbox"/> Structural Flood Control Projects (SP) <input type="checkbox"/> Emergency Services (ES) |
| Impact on Socially Vulnerable Populations: | Not applicable | |
| Impact on Critical Facilities/Lifelines: | Permits issued for critical facilities in the floodplain or other hazard areas will be tracked. | |
| Impact on Capabilities | This action will create a new capability for the Village and enhance its NFIP compliance. | |
| Impact on Future Development: | This action may lead to permits being restricted within various identified hazard areas in the Village and municipal codes to be updated. | |
| Climate Change Considerations: | Climate change may result in an increase in the frequency and severity of weather-related disaster events. This action will increase the Village’s ability to track structures located in hazard areas which may have conditions exacerbated by the impacts of climate change, such as floods and wildfires. | |
| Priority: <i>Check one</i> | <input type="checkbox"/> High | <input checked="" type="checkbox"/> Medium |
| | | <input type="checkbox"/> Low |
| Alternatives | Action | Evaluation |
| | No action | Current problem remains |
| | Track only flood development permits | Will align with NFIP requirements, but will not consider other hazard areas in the Village |

Action 2024-UpperNyackV-13. Substantial Damage Determination Training and Resources

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|---|---|---|
| Action Name: | Action 2024-UpperNyackV-13. Substantial Damage Determination Training and Resources | |
| Description of the Problem: | The municipality does not have a Substantial Damage Management Ordinance, nor do they have a standard process in place when conducting substantial damage determinations. The Village has substantial damage determination provisions in both the adopted NFIP ordinance and adopted building code, but staff are unaware of these provisions and do not leverage them. If multiple properties experience substantial damage during hazard events (such as a dam failure, drought, earthquake, extreme temperature, flood, landslide, severe storm, severe winter storm, and/or wildfire), the Village may be unable to prioritize staffing, budget, and resources in a cost- and time-effective manner that results in prolonged impacts and recovery. | |
| Hazard(s) of Concern: <i>Check all that apply</i> | <input checked="" type="checkbox"/> Dam/Levee Failure <input type="checkbox"/> Disease Outbreak <input checked="" type="checkbox"/> Drought <input checked="" type="checkbox"/> Earthquake <input checked="" type="checkbox"/> Extreme Temperature | <input checked="" type="checkbox"/> Flood <input checked="" type="checkbox"/> Landslide <input checked="" type="checkbox"/> Severe Storm <input checked="" type="checkbox"/> Severe Winter Storm <input checked="" type="checkbox"/> Wildfire |
| Description of the Solution: | <p>The municipality will develop a Substantial Damage Management Plan, following the six-step planning process in 2021 Developing a Substantial Damage Management Plan (https://crsresources.org/files/500/developing_subst_damage_mgmt_plan.pdf). This plan will outline responsibilities for Substantial Damage determinations, determining market value, and permit approval processes following a disaster event.</p> <p>The municipality will also take part in workshops and training sessions offered by NYSDEC to train staff on the existing provisions in the NFIP ordinance and building code.</p> | |
| Lead Agency: | Floodplain Administrator | |
| Supporting Agencies: | Public Works, Building Department | |
| Estimated Cost: | Low | |
| Potential Funding Sources: | Municipal budget | |
| Implementation Timeline: | Within 5 years to develop the plan; ongoing to maintain and update the plan | |
| Goals Met: | 2, 5, 7 | |
| Benefits: | This plan will provide a process in making Substantial Damage Determinations and allow the municipality to make these determinations and meet NFIP requirements more quickly. | |
| Mitigation Action Type: <i>Check all that apply</i> | <input checked="" type="checkbox"/> Local Plans and Regulations (LPR) <input type="checkbox"/> Structure and Infrastructure Project (SIP) | <input type="checkbox"/> Natural Systems Protection (NSP) <input type="checkbox"/> Education and Awareness Programs (EAP) |
| CRS Category: <i>Check all that apply</i> | <input checked="" type="checkbox"/> Preventative Measures (PR) <input type="checkbox"/> Property Protection (PP) <input type="checkbox"/> Public Information (PI) | <input type="checkbox"/> Natural Resource Protection (NR) <input type="checkbox"/> Structural Flood Control Projects (SP) <input checked="" type="checkbox"/> Emergency Services (ES) |
| Impact on Socially Vulnerable Populations: | Substantially damaged structures are required to be rebuilt to be compliance with current codes. Socially vulnerable populations may not have the financial means to make these improvements. This action may allow for the identification of potential resources to address substantial damages to structures owned by socially vulnerable populations. | |
| Impact on Critical Facilities/Lifelines: | A Substantial Damage Management Plan would include all critical facilities and lifelines in the municipality. | |

| | | | |
|---------------------------------------|---|---------------------------------|--|
| Impact on Capabilities: | This action improves disaster recovery capabilities. | | |
| Impact on Future Development: | A Substantial Damage Management Plan would include all existing, current, and future development in the municipality. | | |
| Climate Change Considerations: | Climate change is likely to increase the intensity and frequency of many climate related disaster events. This action provides additional planning for disaster recovery. | | |
| Priority: <i>Check one</i> | <input checked="" type="checkbox"/> High | <input type="checkbox"/> Medium | <input type="checkbox"/> Low |
| Alternatives | Action | | Evaluation |
| | No Action | | No change |
| | Rely on state or federal resources following disaster events | | Resources may not be available during major widespread events |
| | Establish MOUs with outside agencies to conduct Substantial Damage Determinations | | A plan outlining responsibilities is still necessary to prevent missing important requirements |

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