

## 9.24 Village of Bronxville

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

### 9.24.1 Hazard Mitigation Plan Point of Contact

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

Primary Point of Contact	Alternate Point of Contact
Jim Palmer, Village Administrator 200 Pondfield Road Bronxville, NY 10708 Phone: 914-804-3545 <a href="mailto:jpalmer@vobny.com">jpalmer@vobny.com</a>	Vincent Pici, P.E., Village Engineer 200 Pondfield Road Bronxville, NY 10708 Phone: 914-337-7338 <a href="mailto:vpici@vobny.com">vpici@vobny.com</a>

### 9.24.2 Municipal Profile

The Village of Bronxville is located in southern Westchester County within the Town of Eastchester, a suburb of New York City, roughly 15 miles north of midtown Manhattan. Bronxville is bounded to the north by the Village of Tuckahoe, to the west by the City of Yonkers, and to the south by the City of Mount Vernon. Covering only one square mile, the Village is home to 7,867 people according to the 2010 U.S. Census, and is frequently ranked as one of the wealthiest and most affluent places with more than 1000 households in the United States.

The Village of Bronxville came to life in the early 19<sup>th</sup> century as Millionaire William Van Duzer Lawrence fueled its development as an affluent suburb with magnificent homes in a country-like setting. Lawrence's influence, and name, can be seen throughout the village, as in Lawrence Hospital, one of Westchester County's finest health care facilities and Sarah Lawrence College, established in memory of his wife. Sarah Lawrence is one of the nation's finest liberal arts colleges. Concordia College, established in Bronxville in 1909 by the Lutheran Church, is also renowned for its music and academic programs.

The Bronx River runs alongside the Village of Bronxville creating its western boundary as it runs parallel to State Route 2 (Bronx River Parkway), separating Bronxville from the City of Yonkers. State Route 22 runs through the center of the Village, and the Cross County Parkway cuts across the eastern part of the Village before merging with the Hutchinson River Parkway along the northeastern village boundary. The Bronxville Metro-North Railroad station serves the residents of the village via the Harlem Line and a station in the western extents of the Village.

The Village of Bronxville is governed by a five member Board of Trustees consisting of a Mayor and four Trustees. The Mayor is the Chief Executive of the Village and is responsible for the conduct of public meetings and certain appointments. The Mayor and Trustees all have one equal vote for the adoption of resolutions.

### Growth/Development Trends

The following table summarizes recent residential/commercial development since 2005 and any known or anticipated major development that has been identified in the next five years within the municipality.

Table 9.24-1. Growth and Development

Property or Development Name	Type (e.g. Res., Comm.)	Number of Units / Structures	Location (address and/or Parcel IDs)	Known Hazard Zones*	Description / Status
<b>Recent Development</b>					
None					
<b>Known or Anticipated Development</b>					
The Kensington	Residential (55+ Community) 300 parking spots: 200 Village, 100 residential	50 units, 2 structures	TBD	TBD	Approved, To Begin Construction Late 2014

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

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

Westchester County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5.0 of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the County and its municipalities. For the purpose of this plan update, events that have occurred in the County from 2005 to present were summarized to indicate the range and impact of hazard events in the community. Information regarding specific damages is included, if available, based on reference material or local sources. This information is presented in the table below. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.24-2. Hazard Event History

Dates of Event	Event Type	FEMA Declaration # (If Applicable)	County Designated?	Summary of Damages/Losses
October 27- November 8, 2012	Hurricane Sandy	DR-4085	Yes	Damage throughout the Village totaled \$249,453.73, which were reimbursed by FEMA. Throughout the Village there was a need for debris and tree removal, and police overtime was incurred.
August 26 - September 5, 2011	Hurricane Irene	DR-4020	Yes	Damage throughout the Village totaled \$113,234.01, which were reimbursed by FEMA. Structural damage sustained included manhole collapse, flood control valve broken, and damage to parking meters. There were downed trees requiring removal throughout the Village and emergency operations costs.
March 13-31, 2010	Severe Storms and Flooding	DR-1899	Yes	Damage throughout the Village totaled \$220,086.71, which were reimbursed by FEMA. Structural damage was sustained to the roads and sidewalks Village-wide. There were downed trees and debris requiring removal throughout the Town and Police overtime was incurred.

Notes:

EM Emergency Declaration (FEMA)

FEMA Federal Emergency Management Agency

DR Major Disaster Declaration (FEMA)

IA Individual Assistance

N/A Not applicable

PA Public Assistance

### 9.24.4 Hazard Vulnerabilities and Ranking

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

#### Natural Hazard Risk/Vulnerability Risk Ranking

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

**Table 9.24-3. Natural Hazard Risk/Vulnerability Risk Ranking**

Hazard type	Estimate of Potential Dollar Losses to Structures Vulnerable to the Hazard a, c	Probability of Occurrence	Risk Ranking Score (Probability x Impact)	Hazard Ranking b
Earthquake	100-Year GBS: \$0 500-Year GBS: \$860,932 2,500-Year GBS: \$20,371,242	Occasional	24	Medium
Extreme Temperature	Damage estimate not available	Frequent	21	Medium
Flood	1% Annual Chance: \$39,585,203	Frequent	36	High
Severe Storm	100-Year MRP: \$6,809,865 500-year MRP: \$34,067,285 Annualized: \$384,267	Frequent	48	High
Winter Storm	1% GBS: \$16,946,868 5% GBS: \$84,734,342	Frequent	51	High
Wildfire	Estimated Value in the WUI: \$0	Frequent	24	Medium

a. Building damage ratio estimates based on FEMA 386-2 (August 2001)

b. The valuation of general building stock and loss estimates was based on the custom inventory developed for Westchester County and probabilistic modeling results and exposure analysis as discussed in Section 5.

c. The earthquake and hurricane wind hazards were evaluated by Census tract. The Census tracts do not exactly align with municipal boundaries; therefore, a total is reported for each Town inclusive of the Villages.

d. Frequent = Hazard event that is likely to occur within 25 years;  
Occasional = Hazard event that is likely to occur within 100 years; and  
Rare = Hazard event that is not likely to occur within 100 years

e. The estimated potential losses for Severe Storm are from the HAZUS-MH probabilistic hurricane wind model results. See footnote c.

GBS = General building stock

MRP = Mean return period

RCV = Replacement cost value

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

The following table summarizes the NFIP statistics for the municipality.

**Table 9.24-4. NFIP Summary**

Municipality	# Policies (1)	# Claims (Losses) (1)	Total Loss Payments (2)	# Rep. Loss Prop. (1)	# Severe Rep. Loss Prop. (1)	# Policies in 100-year Boundary (3)
Village of Bronxville	123	183	\$ 5,672,808	14	2	23

Source: FEMA Region 2, 2014

- (1): Policies, claims, repetitive loss and severe repetitive loss statistics provided by FEMA Region 2, and are current as of March 31, 2014. Please note the total number of repetitive loss properties excludes the severe repetitive loss properties. The number of claims represents the number of claims closed by March 31, 2014.
- (2): Information regarding total building and content losses was gathered from the claims file provided by FEMA Region 2.
- (3): The policies inside and outside of the flood zones is based on the latitude and longitude provided by FEMA Region 2 in the policy file. FEMA noted that where there is more than one entry for a property, there may be more than one policy in force or more than one GIS possibility.

### Critical Facilities

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

**Table 9.24-5. Potential Flood Losses to Critical Facilities**

Name	Municipality	Type	Exposure		Potential Loss From 1% Event		
			1% Event	0.2% Event	% Structure Damage	% Content Damage	Days to 100-Percent
Bronxville Elementary School	Bronxville (V)	School		X	-	-	-
Bronxville High School	Bronxville (V)	School		X	-	-	-
Bronxville Middle School	Bronxville (V)	School		X	-	-	-

Source: Westchester County, FEMA 2014

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

- (1) HAZUS-MH 2.1 provides a general indication of the maximum restoration time for 100% operations. Clearly, a great deal of effort is needed to quickly restore essential facilities to full functionality; therefore this will be an indication of the maximum downtime (HAZUS-MH 2.1 User Manual).
- (2) In some cases, a facility may be located in the DFIRM flood hazard boundary; however HAZUS did not calculate potential loss. This may be because the depth of flooding does not amount to any damages to the structure according to the depth damage function used in HAZUS for that facility type.

### Other Vulnerabilities Identified by Municipality

The following flood-prone areas have been identified by the Village of Bronxville through the Westchester County Stormwater Reconnaissance Plan process (see Section 6 – Capability Assessment for a description of the program; see map at the end of this annex for location of these problem areas):

#### Map Area ID: BRX-1

**Municipality:** BRONXVILLE

**General Location:** PAXTON AVENUE and PARKWAY ROAD

**Nearest Watercourse or Water Body:** BRONX RIVER

**Associated Study/Report:** NONE

**Evaluation Score (Low, Medium, High):** High

**General Description of Flooding:** Frequent flooding occurs in a 100-year floodplain of the Bronx River in the vicinity of Paxton Avenue and Parkway Road. Within the last 10 years, the respondent said the area has flooded more than 15 times. The flooding impacts streets, private yards, driveways, garages and building basements as well as public paddle tennis courts. The flooding causes damage to more than 10 residential and 10 commercial properties.

#### Map Area ID: BRX-2

**Municipality:** BRONXVILLE

**General Location:** PONDFIELD ROAD and MIDLAND AVENUE

**Nearest Watercourse or Water Body:** BRONX RIVER

**Associated Study/Report:** MIDLAND/PONDFIELD AREA STORMWATER FLOODING REPORT, JULY 2007 (Final), J. ROBERT FOLCHETTI AND ASSOCIATES; BRONX RIVER FLOOD IMPACT ANALYSIS, JULY 2008 (Draft), J. ROBERT FOLCHETTI AND ASSOCIATES

**Evaluation Score (Low, Medium, High):** High

**General Description of Flooding:** Bronxville School District's campus at the corner of Pondfield Road and Midland Avenue experienced flooding in April 2007 and August and September 2011 from Hurricane Irene and Tropical Storm Lee. An existing stormwater pipe from the campus discharges to the Bronx River Parkway Reservation off Midland Avenue. Much of the school building is within a designated 500-year flood zone.

**Map Area ID:** BRX-3

**Municipality:** BRONXVILLE

**General Location:** BOLTON GARDENS

**Nearest Watercourse or Water Body:** BRONX RIVER

**Associated Study/Report:** NONE

**Evaluation Score (Low, Medium, High):** Medium

**General Description of Flooding:** The Bolton Gardens area floods during "extreme" storm events, approximately five or six events over the past decade, including Hurricane Irene and Tropical Storm Lee, according to the respondent. The respondent said flooding impacts more than 15 residences with approximately two feet of standing water lasting less than 24 hours.

The following additional vulnerabilities are identified by the municipality:

#### Power Outage

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There are several sources of power coming into the Village of Bronxville: Graminton Road Loop, Palmer Loop, and Kensington Loop. The Graminton Road Loop includes overhead lines that come into the Village from Mount Vernon. When these lines are compromised in Mount Vernon, the connections in Bronxville are also cut.

#### Flooding

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The Village of Bronxville is located on the lower end of the Bronx River which places those structures along the river at a greater risk for flooding. The following roads abutting the Bronx River flood frequently: Paxton Road, Parkway Road, and Stone Place. Other areas frequently flooding are: Meadow Road, Garden Avenue, Midland Avenue, Bolton Gardens, Willow Road, and Tanglewild Road. The school is at particular risk for flooding as it is located in an area where the watershed drains. Since the school is level with the river, it is difficult to drain the area of water that builds up.

### 9.24.5 Capability Assessment

This section identifies the following capabilities of the local jurisdiction:

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

#### Planning and Regulatory Capability

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

**Table 9.24-6. Planning and Regulatory Tools**

Tool / Program (code, ordinance, plan)	Do you have this? (Y/N)	Authority (local, county, state, federal)	Dept. /Agency Responsible	Code Citation and Comments (Code Chapter, date of adoption, name of plan, explanation of authority, etc.)
Building Code	Y	State / Local	Building Dept.	NYS Building Code
Zoning Ordinance	Y	Local	Building Dept.	Chapter 310
Subdivision Ordinance	Y	Local	Building Dept.	Chapter 310
NFIP Flood Damage Protection Ordinance	Y	Local	Building Dept.	Chapter 156
Freeboard	Y	State / Local	Building Dept.	NYS mandate of BFE +2ft for residential properties and BFE +1ft for all other construction in the floodplain.
Cumulative Substantial Damages	N			
Special Purpose Ordinances (e.g. wetlands, critical or sensitive areas)	N			
Growth Management	N			
Floodplain Management / Basin Plan	N			
Stormwater Management Plan/Ordinance	Y	Local	Public Works	Chapter 257
Comprehensive Plan / Master Plan	Y	Local	Board of Trustees	Adopted 2003, Updated 2012
Capital Improvements Plan	Y	Local	Board of Trustees	Annually updated
Site Plan Review Requirements	Y	Local	Building Dept.	Chapter 310
Habitat Conservation Plan	N			
Economic Development Plan	N			
Emergency Response Plan	N			
Post Disaster Recovery Plan	N			
Post Disaster Recovery Ordinance	N			
Real Estate Disclosure req.	Y	State		NYS mandate
Other (e.g. steep slope ordinance, local waterfront revitalization plan)	N			

(1) NYS Subdivision laws provide a general framework, but allow room for local ordinances and interpretation.

### Administrative and Technical Capability

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

**Table 9.24-7. Administrative and Technical Capabilities**

Staff/ Personnel Resources	Available (Y or N)	Department/ Agency/Position
Planner(s) or Engineer(s) with knowledge of land development and land management practices	Y	Vincent Pici, P.E., Village Engineer Contracted consulting firm
Engineer(s) or Professional(s) trained in construction practices related to buildings and/or infrastructure	Y	Vincent Pici, P.E., Village Engineer Contracted consulting firm
Planners or engineers with an understanding of natural hazards	Y	Vincent Pici, P.E., Village Engineer Contracted consulting firm
NFIP Floodplain Administrator	Y	Vincent Pici, P.E., Village Engineer
Surveyor(s)	Y	Contracted consulting firm
Personnel skilled or trained in "GIS" applications	Y	County level
Scientist familiar with natural hazards in the County.	N	
Emergency Manager	N	
Grant Writer(s)	Y	All Village staff
Staff with expertise or training in benefit/cost analysis	Y	Vincent Pici, P.E., Village Engineer
Professionals trained in conducting damage assessments	N	

### Fiscal Capability

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

**Table 9.24-8. Fiscal Capabilities**

Financial Resources	Accessible or Eligible to Use (Yes/No/Don't Know)
Community Development Block Grants (CDBG)	Yes
Capital Improvements Project Funding	Yes
Authority to Levy Taxes for specific purposes	No
User fees for water, sewer, gas or electric service	No
Impact Fees for homebuyers or developers of new development/homes	No
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Mitigation grant programs	Yes
Other	No

### Community Classifications

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

**Table 9.24-9. Community Classifications**

Program	Classification	Date Classified
Community Rating System (CRS)	NP	N/A
Building Code Effectiveness Grading Schedule (BCEGS)	TBD	
Public Protection	TBD	
Storm Ready	NP	N/A
Firewise	NP	N/A



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

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

Criteria for classification credits are outlined in the following documents:

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

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### **National Flood Insurance Program**

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

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#### **NFIP Floodplain Administrator:**

Vincent Pici, P.E., Village Engineer

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#### **Program and Compliance History**

Village of Bronxville joined the NFIP on March 1, 1979, and is currently an active member of the NFIP. The current effective Flood Insurance Rate Maps are dated March 28, 2007. The community's Flood Damage Prevention Ordinance (FDPO), found at Chapter 156 of the local code, was last updated in June 2007.

As of December 31, 2014 there are 121 policies in force, insuring \$ 36.4 million of property with total annual insurance premiums of \$ 149,926.

The community is currently in good standing in the NFIP and has no outstanding compliance issues. The current NFIP Floodplain Administrator has no knowledge of when the last CAV was performed. The municipality sees no specific need for a CAV at this time.

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#### **Loss History and Mitigation**

Since 1978, 183 claims have been paid totaling \$ 5.7 million. As of March 31, 2014 there are 14 Repetitive Loss and 2 Severe Repetitive Loss properties in the community.

Following Hurricane Sandy predominate damage sustained was to residential basements. The topography of the Village affords them the ability to have most infrastructures away from flood zones with the exception of very few areas. No flood damage was sustained above the first floor of residential, commercial, or Village



properties. Substantial Damage estimates are done by the Village Engineer. No Substantial Damage estimates were performed after Hurricane Sandy.

### **Planning and Regulatory Capabilities**

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The community's Flood Damage Prevention Ordinance (FDPO) was last updated in June 2007, and is found at Chapter 156 of the local code.

Floodplain management regulations and ordinances meet FEMA and New York State minimum requirements. Though no formal programs further supports the implementation of the floodplain management program, provisions in the site plan review ordinance for floodplain compliance.

### **Administrative and Technical Capabilities**

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The community FDPO identifies the Superintendent of Buildings as the local NFIP Floodplain Administrator, currently Vincent Pici, P.E., for which floodplain administration is an auxiliary duty. In addition to the NFIP FPA, the community contracts consultants to assist with the enforcement of the floodplain management program.

Duties and responsibilities of the Village Engineer/NFIP Administrator are permit review, inspections, damage assessments, and record keeping. All efforts are done in support of the basic Building Department permit. When a permit comes in for the floodplain, ensuring compliance with the floodplain construction is verified before issuing a permit.

Vincent Pici, P.E. feels he is adequately supported and trained to fulfill his responsibilities as the municipal floodplain administrator. Vincent Pici, P.E. is not certified in floodplain management, however attends regular continuing education programs for code enforcement.

### **Public Education and Outreach**

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There is no formal education and outreach program set up in the Village. If residents wish to see the floodplain maps and need anything explained to them regarding the floodplain program, the Village Engineer and staff assist the resident.

Following Hurricane Sandy predominate damage sustained was to residential basements. The topography of the Village affords them the ability to have most infrastructures away from flood zones with the exception of very few areas. No flood damage was sustained above the first floor of residential, commercial, or Village properties. Substantial Damage estimates are done by the Village Engineer. No Substantial Damage estimates were performed after Hurricane Sandy.

### **Actions to Strengthen the Program**

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Current barriers to running an effective floodplain management program include lack of funding and staffing to support the program. Tax caps restrict the ability to hire more skilled personnel to increase the knowledge base of the Village administration. Attending educational seminars on floodplain management and the Community Rating System (CRS) would be welcomed and heavily attended. Though participating in CRS may not be cost effective for the Village, learning more about the program to have a better understanding would be beneficial to the Village.

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

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For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, each community was surveyed to obtain a

better understanding of their community's progress in plan integration. A summary is provided below. In addition, the community identified specific integration activities that will be incorporated into municipal procedures.

### **Planning**

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The Village continues to work with neighboring municipal partners in developing an evacuation plan to transport all of the residents out of Town of Eastchester as quickly and efficiently as possible. As part of the planning process, the Village is in the process of establishing mutual aid agreements with the American Red Cross for places to house large numbers of people. Once the plan is developed, the Village will educate the public on where to go when they would need to leave the area.

### **Regulatory and Enforcement**

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**Building Code, Ordinances, and Enforcement** – The Village continues to enforce the New York State Building Code to its fullest extent. On all new construction, windows must be designed to withstand code-specified wind loads. All new construction and building improvements are required to ensure the structures come into compliance with the most recent seismic standards.

**Floodplain Management** – Construction within the flood zone must not increase stormwater runoff from the property. All stormwater must be recharged into the ground on site. Annually the Village DPW continues to implement its drainage basin cleaning program with funding in the general budget to ensure drainage basins can perform at their highest capacity during storm events. Additionally, schools in the area have established programs to help clean debris from flood-sensitive areas.

### **Operational and Administration**

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**Emergency Management** – Tree trimming program partnerships with utility companies have been forged to ensure Rights of Way are cleared and that utility infrastructure remains free of debris and branches.

**Other Maintenance** – The Village has implemented a tree-trimming program that is responsible for a significant increase in pruning activities to ensure tree branches do not interfere with utility wires. Additionally, the Village continues to work with utility companies to ensure access can be maintained to the utility lines and boxes.

### **Education and Outreach**

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The Village uses social media sources such as Twitter and Facebook to get information out to the community. Links to FEMA and the American Red Cross are on the Village website. Hazard information is also broadcast on the Village's cable channel. With the help of the Bronx River Watershed Committee, the Village also is able to conduct flood-smart outreach to the community.

### 9.24.6 Mitigation Strategy and Prioritization

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

#### Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the current 2009 Plan. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under 'Capability Assessment' presented previously in this annex.

**Table 9.24-10. Past Mitigation Initiative Status**

Description	Status	Review Comments
Develop pamphlets which educate the public on what they can do to minimize their risk. Distribute the literature at all public buildings, public gathering/meeting places, provide to all civic organizations, etc. Public Education is crucial. This includes what items to stockpile in advance such as water, food, batteries, flashlights, extra medication and any other daily items. Sheltering can be done at the various locations. There are pamphlets by the American Red Cross and Con Ed concerning what to do in an emergency. Hazards addressed in public outreach include: dam failure, flood, severe summer and winter storms, ice storms, and earthquake.	Continuous	The Village uses social media sources such as Twitter and Facebook to get information out to the community. Links to FEMA and the American Red Cross are on the Village website. Hazard information is also broadcast on the Village's cable channel. The schools in the area have established programs to help clean debris from flood-sensitive areas. With the help of the Bronx River Watershed Committee, the Village also is able to conduct flood-smart outreach to the community. This is a programmatic and operational action, and will be moved to the Capabilities section, Integration of Hazard Mitigation into Existing and Future Planning Mechanisms.
Routinely clear drainage basins to increase the storage capacity of the storm-water drainage system and request money to add new drainage basins in certain areas prone to flooding.	Continuous	Annually the Village completes this task with funding in the general budget. There are over 500 drainage basins throughout the Village. Annually, DPW clean about one-third. This is a programmatic and operational action, and will be moved to the Capabilities section, Integration of Hazard Mitigation into Existing and Future Planning Mechanisms.
Strictly enforce building codes especially in hazard areas. The recently adopted State Building Codes includes having windows that will last through high winds and other disasters as much as possible.	Continuous	The Village Building Inspector has ensured all new construction is completed with windows that meet wind load requirements set forth by the NYS Building Code. This is a programmatic and operational action, and will be moved to the Capabilities section, Integration of Hazard Mitigation into Existing and Future Planning Mechanisms.
Trim the trees in order to decrease the potential for utility failure.	Continuous	The Village has implemented a program that removes all dead trees. There has been a significant increase in the pruning program to ensure tree branches do not interfere with utility wires. This is a programmatic and operational action, and will be moved to the Capabilities section, Integration of Hazard Mitigation into Existing and Future Planning Mechanisms.
For projects that require a permit, include conditions requiring zero-increase in runoff, constructing structures above the FEMA 100-year base flood elevation and erosion controls.	Continuous	For all new approved construction in the floodplain, stormwater runoff must recharge into the ground. This is a programmatic and operational action, and will be moved to the

Table 9.24-10. Past Mitigation Initiative Status

Description	Status	Review Comments
		Capabilities section, Integration of Hazard Mitigation into Existing and Future Planning Mechanisms.
Investigate the possibility of increasing the number of drainage basins in historical problem areas.	Continuous	Historic problem areas are within the floodplain so there is limited space to increase the number of drainage basins. This initiative will be carried over into the updated mitigation strategy.
There is a potential of building collapse, utility failure, and other problems the community should be ready for. A warning system could be developed for the area in case of dam failure.	Continuous	Failure of the Kensico Dam would be catastrophic for the Village. Only The Village continues to pursue ideas and approaches to address a potential warning system. The City of New York Department of Environmental Protection sends updated information to the Village regarding the status of the dam. This initiative will be carried over into the update mitigation strategy.
The building codes strictly enforced to make new and renovated buildings as prepared as possible. The foundations should be water proof and elevated, if needed. Sandbags can be used to try to divert the water if there is any warning.	Continuous	All new approved construction must meet the New York State Building Code requirements. This initiative will be carried over into the updated mitigation strategy.
Investigate the possibility of zoning restrictions necessary to reduce the effects of a dam failure.	Continuous.	This initiative will be combined with the warning system for dam failure and carried over into the updated mitigation strategy.
An evacuation plan needs to be developed to transport all of the residents out of Town of Eastchester as quickly and efficiently as possible. The plan needs to be developed first and then the public needs to be educated on where to go when they would need to leave the area. Mutual aid agreements for places to house large numbers of people should be put into place with the American Red Cross. The planning committee will work on update with a review and revisions to the evacuation plan.	Continuous	A plan would include directing people uphill into Eastchester and towards a specific, currently unidentified area. This is a programmatic and operational action, and will be moved to the Capabilities section, Integration of Hazard Mitigation into Existing and Future Planning Mechanisms.
Work with utility companies to ensure all precautions are taken and equipment and Right-of-Ways are properly maintained.	Continuous	The Village continues to work with utility companies to ensure access can be maintained to the utility lines and boxes. This is a programmatic and operational action, and will be moved to the Capabilities section, Integration of Hazard Mitigation into Existing and Future Planning Mechanisms.
Work with the schools, childcare and other special needs populations to retrofit their buildings, both structurally whenever possible, as well as the preparation of their contents (bolting shelves to walls, etc.).	Continuous	The school districts continue to work with the Village and Villages to ensure buildings are prepared for seismic activity. This initiative will be carried over into the updated mitigation strategy.
Develop a list of “At Risk” structures and perform annual inspections.	Continuous	At this time, one privately owned property has been identified. The owner has been unwilling to cooperate and remediate the property to become compliant. The Village and owner have been involved for many years in litigation. Where other issues persist, the Village is aware and will work as needed to compile a list. This initiative will be carried over into the updated mitigation strategy.
Investigate the possibility of requiring all improvements to structures include upgrading	Continuous	Seismic activity remains a threat to the Village and as seen appropriate, buildings will come into

**Table 9.24-10. Past Mitigation Initiative Status**

Description	Status	Review Comments
the structures to the most recent seismic standards.		compliance. This is a programmatic and operational action, and will be moved to the Capabilities section, Integration of Hazard Mitigation into Existing and Future Planning Mechanisms.

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

Since the adoption of the 2009 Hazard Mitigation Plan, the following projects have been completed or started:

- Tree pruning and maintenance program
- Systematically clean storm drains and retention ponds
- The school moved electric equipment to higher ground, reducing flood risk and vulnerability
- Drainage improvement along Gardner Avenue through USFW
- A qualitative and quantitative project conducted to use impervious pavers in new development areas.

### **Proposed Hazard Mitigation Initiatives for the Plan Update**

The Village of Bronxville identified mitigation initiatives they would like to pursue in the future. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Table 9.24-11 identifies the municipality's updated local mitigation strategy.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as 'High', 'Medium', or 'Low.' Table 9.24-12 below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.24-11. Proposed Hazard Mitigation Initiatives

Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goal(s) Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category
VBRX-1	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 (14 - RL) and Severe Repetitive Loss (2 - 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. Specifically identified are properties in the following locations: <ul style="list-style-type: none"> <li>• Parkway Road</li> <li>• Palmer Avenue</li> <li>• Millburn Street (commercial)</li> <li>• Paxton Avenue</li> <li>• Pondfield Road</li> <li>• Millard Avenue</li> <li>• Garden Avenue</li> </ul>										
	See above.	Existing	Flooding, Severe Storm	G-2, G-3	Municipal NFIP FPA; support from NYS DHSES and FEMA	High - Reduced or eliminated risk to property damage from flooding	High	FEMA or other mitigation grant funding, NFIP flood insurance and ICC; property owner for local match.	Long-term DOF	High	SIP, EAP
VBRX-2	Develop pamphlets which educate the public on what they can do to minimize their risk. Distribute the literature at all public buildings, public gathering/meeting places, provide to all civic organizations, etc. Public Education is crucial. This includes what items to stockpile in advance such as water, food, batteries, flashlights, extra medication and any other daily items. Sheltering can be done at the various locations. There are pamphlets by the American Red Cross and Con Ed concerning what to do in an emergency. Hazards addressed in public outreach include: dam failure, flood, severe summer and winter storms, ice storms, and earthquake. All Village Departments are involved with education and outreach to the community.										
	See above	Existing	Flood	G-1, G-3	All Village Departments	High - Protect public health and safety, reduce strain on emergency services, increase awareness	Low	General Funds	Ongoing	Medium	EAP
VBRX-3	Investigate the possibility of zoning restrictions necessary to reduce the effects of dam failure while also exploring the installation of a dam system failure warning system. Failure of the Kensico Dam would be catastrophic for the Village. Only The Village continues to pursue ideas and approaches to address a potential warning system. The City of New York Department of Environmental Protection sends updated information to the Village regarding the status of the dam.										
	See above	New and Existing	Flood	G-1, G-2	Village Building	Med - Protect public health and safety, reduce potential losses, road closures, etc. associated	Low	Building Budget, General Funds	Ongoing	High	LPR, SIP

Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goal(s) Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category
						with dam failure					
VBRX-4	Investigate the possibility of increasing the number of drainage basins in historical problem areas. There are complications in identifying new areas as the historic problem areas are within the floodplain.										
	See above	New and Existing	All Hazards	G-2, G-4	Village DPW	Low – However, good potential to reduce future flood damage and road closures once problems are identified	Medium	Capital Improvement	Short-Term	High	SIP
VBRX-5	Assure that building codes strictly enforced to make new and renovated buildings as prepared as possible. The foundations should be water proof and elevated, if needed. Sandbags can be used to try to divert the water if there is any warning.										
	See above	New and Existing	Flood	G-2	Village Building	High - Reduce physical property damage losses	Low	Building Budget, General Funds	Ongoing	Low	LPR, SIP
VBRX-6	Provide information and recommendations to schools, childcare and other special needs populations regarding retrofitting buildings as well as the preparation of their contents (bolting shelves to walls, etc.) for seismic activity on a case by case basis.										
	See above	Existing	All Hazards	G-1, G-2, G-3	Village Building Department	Med - Reduce physical property damage losses	Low	General Funds	Ongoing	Medium	EAP, SIP
VBRX-7	Develop a list of “At Risk” structures and perform annual inspections.	Existing	All Hazards	G-2	Village Building Department and DPW	Med - Reduce physical property damage losses, protect public health and safety, reduce strain on emergency services	Low	Building Department Budget, General Funds	Ongoing	High	LPR, SIP
VBRX-8	Midland Avenue flood Mitigation Project	Existing	Flood	G-2, G-3	Village DPW, Village Engineering	High - Reduced or eliminated risk to property damage from flooding	\$6.8-7 million	FEMA HMGP	Long-Term	Medium	SIP



Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goal(s) Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category
VBRX-9	Assist private property owners along Parkway Road to investigate berming to reduce flooding.	Existing	Flood	2, 3	Village DPW	High - Reduced or eliminated risk to property damage from flooding	Low	FEMA, NYS, additional agencies to fund project.	Long-Term	Medium	SIP
VBRX-10	Joint program with Village of Tuckahoe to address sediment build up	Existing	Flood	4	Village DPW	Medium – Implementation of a sediment management plan would reduce risk to property from flooding	Medium	Grants, County Stormwater Program	Long-Term	High	NSP
VBRX-11	Install new electrical feed to Village Hall	New and Existing	Power Outage	5	Village DPW	High – Ensure continued operation of critical facility and essential functions during power outages	Medium	Capital Improvement Plan, Grants	Long-Term	High	SIP
VBRX-12	High School Flood Mitigation - The project involves the construction of a facility to store a portion of stormwater runoff as it builds up on the high school property and then pump the stormwater via a 30" force main down Midland Avenue, Pondfield Road and Gramatan Avenue and discharge in Laurel Brook, which flows through Scout Field to the Bronx River.										
	See above	New and Existing	Flood, Severe Storm, Severe Winter Storm	2	County Planning and Stormwater Management with support from the Village	Reduced flood damages to property	N/A	FEMA grants and Village	DOF	Medium	SIP

**Notes:**

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

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

Acronyms and Abbreviations:

CAV Community Assistance Visit  
 CRS Community Rating System  
 DPW Department of Public Works  
 FEMA Federal Emergency Management Agency  
 FPA Floodplain Administrator  
 HMA Hazard Mitigation Assistance

Potential FEMA HMA Funding Sources:

FMA Flood Mitigation Assistance Grant Program  
 HMGP Hazard Mitigation Grant Program  
 PDM Pre-Disaster Mitigation Grant Program  
 RFC Repetitive Flood Claims Grant Program (discontinued in 2015)  
 SRL Severe Repetitive Loss Grant Program (discontinued)

Timeline:

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

Acronyms and Abbreviations:

N/A	Not applicable
NFIP	National Flood Insurance Program
OEM	Office of Emergency Management

Potential FEMA HMA Funding Sources:  
in 2015)

Timeline:

Costs:

Where actual project costs have been reasonably estimated:

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

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

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

Benefits:

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

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

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

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

Mitigation Category:

- Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP)- These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities

CRS Category:

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

Table 9.24-12. Summary of Prioritization of Actions

Mitigation Action/Project Number	Mitigation Action/Initiative	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
VBRX-1	Promote and support mitigation of private property, including RL/SRL	0	1	1	1	1	0	-1	1	0	-1	1	0	1	1	7	High
VBRX-2	Develop pamphlets which educate the public on what they can do to minimize their risk.	1	1	0	0	0	0	0	1	1	0	1	0	1	1	7	Medium
VBRX-3	Zoning restrictions and warning system to detect dam failure.	1	1	1	0	-1	0	-1	1	1	1	0	1	1	1	7	Medium
VBRX-4	Investigate the possibility of increasing the number of drainage basins in historical problem areas.	1	1	1	1	1	1	1	1	1	1	1	0	1	1	13	High
VBRX-5	Encouraging infrastructure resiliency through flood-proofing methods.	1	1	0	0	0	0	0	1	1	0	0	0	0	0	4	Low
VBRX-6	Assistance to community groups regarding seismic activity preparation.	1	1	1	0	0	0	0	1	1	0	0	0	0	1	6	Medium
VBRX-7	Develop a list of “At Risk” structures and perform annual inspections.	1	1	1	1	0	1	0	1	1	1	1	0	1	1	11	High
VBRX-8	Midland Avenue Flood Mitigation Project	0	1	1	1	-1	1	1	1	1	-1	0	-1	1	1	7	Medium
VBRX-9	Berming along Parkway Road to protect homes from flooding	0	1	1	0	0	1	0	1	1	0	0	0	1	1	7	Medium
VBRX-10	Sediment build up program with Joint program with Village of Tuckahoe.	1	1	1	1	1	1	1	1	1	1	1	0	1	1	13	High
VBRX-11	Install new electrical feed to Village Hall.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High
VBRX-12	High school flood mitigation	1	1	1	0	0	1	0	0	1	0	1	1	0	0	7	Medium

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

#### **9.24.7 Future Needs To Better Understand Risk/Vulnerability**

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None at this time.

#### **9.24.8 Hazard Area Extent and Location**

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

#### **9.24.9 Additional Comments**

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None at this time.

Figure 9.24-1. Village of Bronxville Hazard Area Extent and Location Map

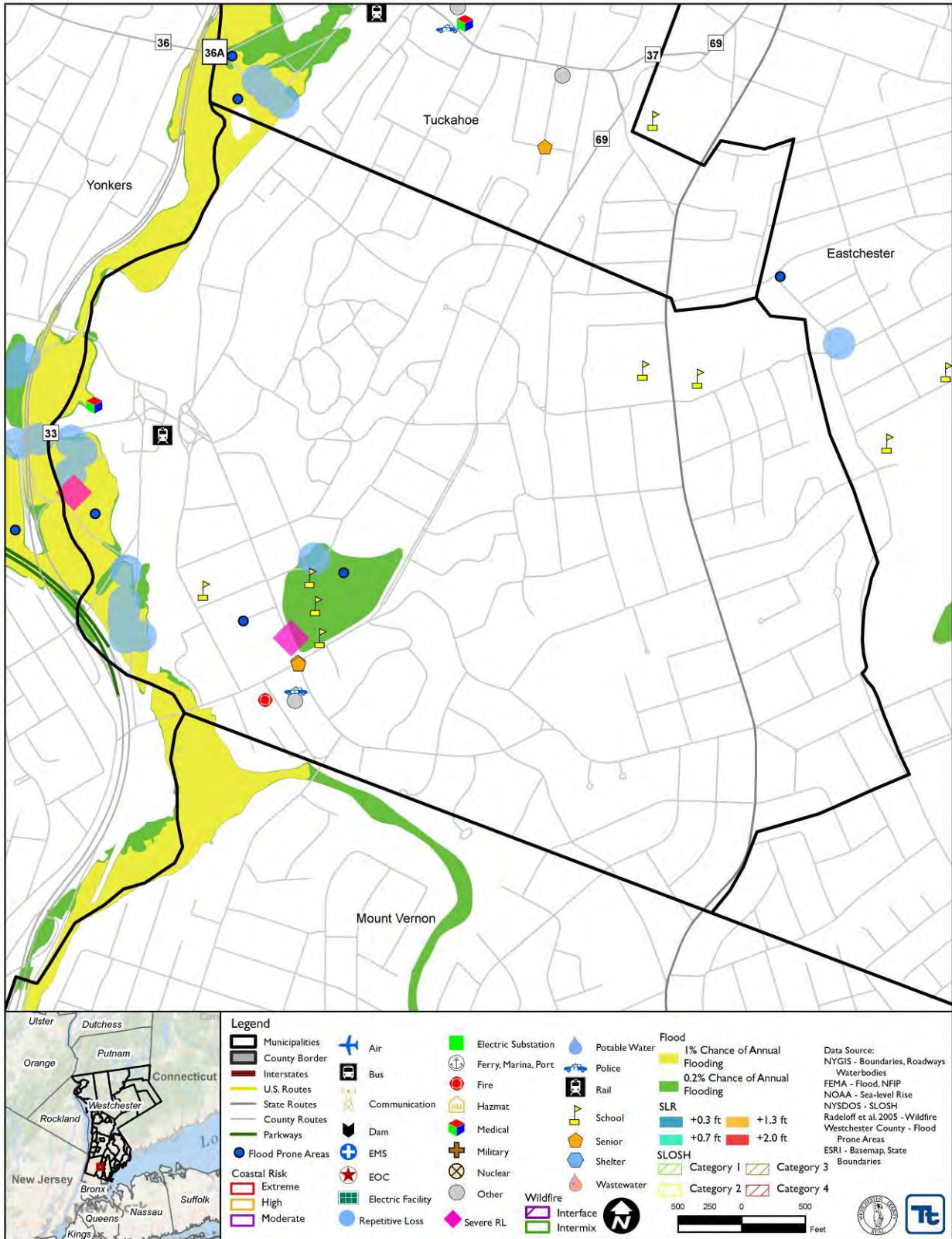
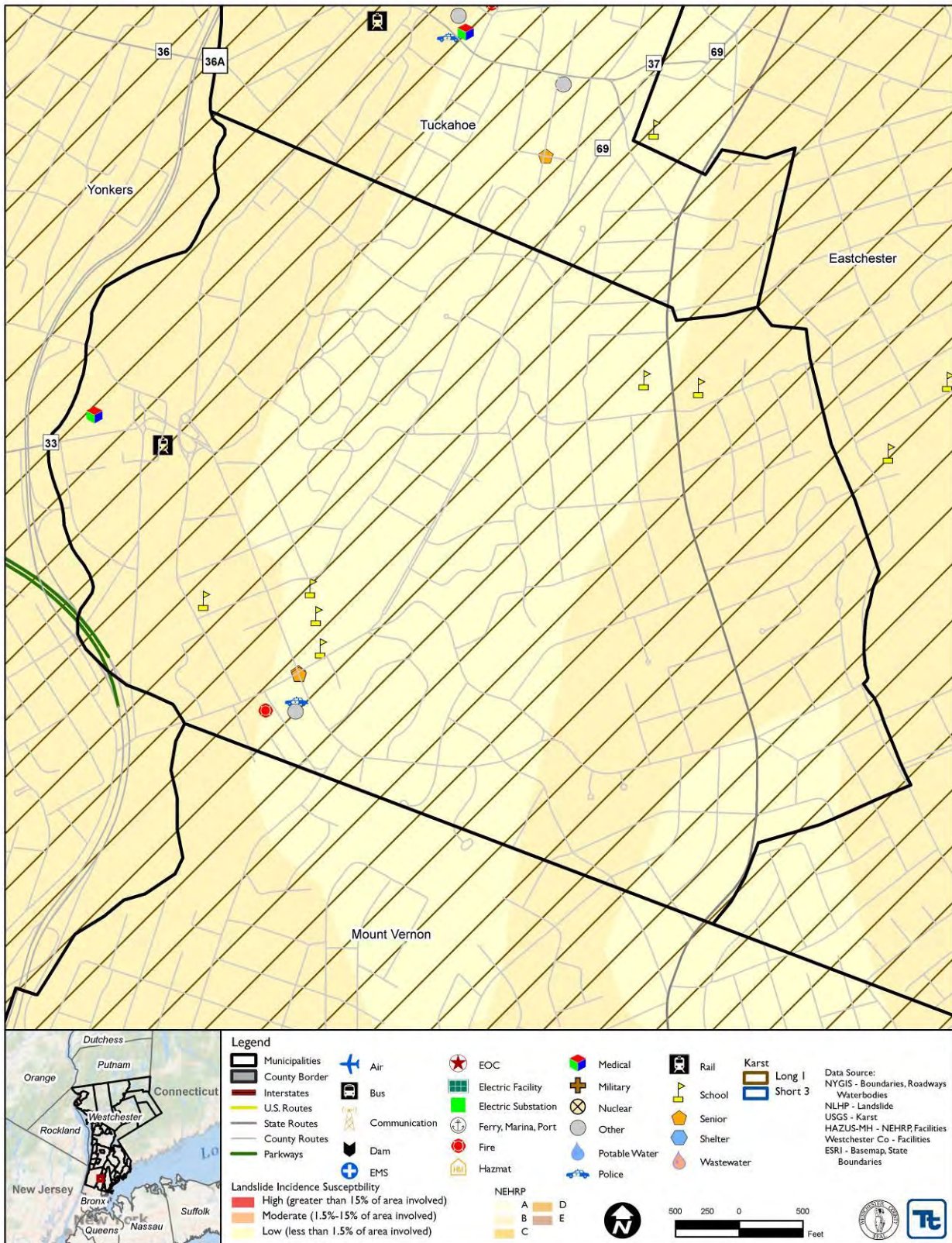




Figure 9.24-2. Village of Bronxville Hazard Area Extent and Location Map



**Name of Jurisdiction:** Village of Bronxville  
**Action Number:** VBRX-8  
**Action Name:** Midland Avenue Flood Mitigation Project

Assessing the Risk	
<b>Hazard(s) addressed:</b>	Flooding, Hurricane, Nor'Easters, Severe Storms, Severe Winter Storms
<b>Specific problem being mitigated:</b>	An existing stormwater pipe from the Bronxville School District's campus discharges to the Bronx River Parkway Reservation off of Midland Avenue. Much of the school building is within a designated 500-year flood zone. The drainage improvements will reduce the flooding surrounding Midland Avenue near Pondfield Road, and improve safety throughout the corridor. In addition, the project will eliminate the need to provide emergency rescue services, flood insurance, and federal disaster assistance in the future. The problem was identified in the Westchester County Stormwater Reconnaissance Plan.
Evaluation of Potential Actions/Projects	
<b>Actions/Projects Considered (name of project and reason for not selecting):</b>	1. No-build/ Unacceptable to maintain current risk level
	2.
	3.
Action/Project Intended for Implementation	
<b>Description of Selected Action/Project</b>	The proposed project will take mitigation measures to improve drainage in this area to ultimately reduce flooding on Midland Avenue. Improvements may include stormwater management improvements on the Bronxville School District campus employing the latest and most appropriate Best Management Practices (BMPs) to reduce overland stormwater discharge runoff prior to entering the culvert and other drainage systems. In addition, the project may include shoulder and swale regrading, curb and gutter installation, and spot drainage improvements at localized flooding areas.
<b>Mitigation Action/Project Type</b>	SIP
<b>Goals Met</b>	2, 3
<b>Applies to existing structures/infrastructure, future, or not applicable</b>	Existing Infrastructure
<b>Benefits (losses avoided)</b>	Recent Damages: Bronxville School District's campus at the corner of Pondfield Road and Midland Avenue experienced flooding in April 2007 and August and September 2011 from Hurricane Irene and Tropical Storm Lee. The project will reduce the flooding surrounding Midland Avenue near Pondfield Road, and improve safety throughout the corridor.
<b>Estimated Cost</b>	\$6.8-7 million
<b>Priority*</b>	Medium
Plan for Implementation	
<b>Responsible Organization</b>	Village DPW, Village Engineering
<b>Local Planning Mechanism</b>	Village DPW
<b>Potential Funding Sources</b>	Building Department Budget, General Funds
<b>Timeline for Completion</b>	Long-Term



Reporting on Progress	
<b>Date of Status Report/ Report of Progress</b>	Date: Progress on Action/Project:

\* Refer to results of Prioritization (page 2)

Action Number:

VBRX-8

Action Name:

Midland Avenue Flood Mitigation Project

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

**Name of Jurisdiction:** Village of Bronxville  
**Action Number:** VBRX-11  
**Action Name:** Install new electrical feed to Village Hall

Assessing the Risk	
<b>Hazard(s) addressed:</b>	Sever Storm, Severe Winter Storm
<b>Specific problem being mitigated:</b>	Power Outage: There are three sources of power coming into the Village of Bronxville: Graminton Road Loop, Palmer Loop, and Kensington Loop. The Graminton Road Loop includes overhead lines that come into the Village from Mount Vernon. When these lines are compromised in Mount Vernon, the connections in Bronxville are also cut, which forces City Hall to rely on generator power during power interruptions.
Evaluation of Potential Actions/Projects	
<b>Actions/Projects Considered (name of project and reason for not selecting):</b>	1. No Action.
	2. Emergency Generators
	3.
Action/Project Intended for Implementation	
<b>Description of Selected Action/Project</b>	Create a second electrical feed from Midland Avenue to Village Hall to reduce reliance on generators during power interruptions.
<b>Mitigation Action/Project Type</b>	SIP
<b>Goals and/or Objectives Met</b>	5
<b>Applies to existing structures/infrastructure, future, or not applicable</b>	New and Existing
<b>Benefits (losses avoided)</b>	Ensure continued operation of critical facility and essential functions during power outages
<b>Estimated Cost</b>	Medium
<b>Priority*</b>	High
Plan for Implementation	
<b>Responsible Organization</b>	Village DPW
<b>Local Planning Mechanism</b>	Comprehensive Emergency Management Plan; COOP/COG
<b>Potential Funding Sources</b>	Grants, County Stormwater Program
<b>Timeline for Completion</b>	Long-Term
Reporting on Progress	
<b>Date of Status Report/ Report of Progress</b>	Date: Progress on Action/Project:

\* Refer to results of Prioritization (page 2)

Action Number:

VBRX-11

Action Name:

Install new electrical feed to Village Hall

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Provide continuity of operations of village hall to assist residents when needed
Property Protection	1	Provide continuity of operations of village hall
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	
Fiscal	1	
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	
Timeline	0	
Agency Champion	1	
Other Community Objectives	1	
<b>Total</b>	13	
<b>Priority (High/Med/Low)</b>	High	

**Name of Jurisdiction:** Village of Bronxville  
**Action Number:** VBRX-12  
**Action Name:** High School flood mitigation

Assessing the Risk	
<b>Hazard(s) addressed:</b>	Flood, Severe Storm
<b>Specific problem being mitigated:</b>	Flooding at High School
Evaluation of Potential Actions/Projects	
<b>Actions/Projects Considered (name of project and reason for not selecting):</b>	1. Construct a facility to store a portion of stormwater runoff
	2. Do nothing – current problem continues
	3. No other feasible options were identified
Action/Project Intended for Implementation	
<b>Description of Selected Action/Project</b>	The project involves the construction of a facility to store a portion of stormwater runoff as it builds up on the high school property and then pump the stormwater via a 30" force main down Midland Avenue, Pondfield Road and Gramatan Avenue and discharge in Laurel Brook, which flows through Scout Field to the Bronx River.
<b>Mitigation Action/Project Type</b>	SIP
<b>Goals Met</b>	2
<b>Applies to existing structures/infrastructure, future, or not applicable</b>	New and Existing
<b>Benefits (losses avoided)</b>	Reduced flood damages to property
<b>Estimated Cost</b>	Medium - High
<b>Priority*</b>	Medium
Plan for Implementation	
<b>Responsible Organization</b>	County Planning and Stormwater Management with support from the Village
<b>Local Planning Mechanism</b>	Stormwater Management Plan; Capital Plans
<b>Potential Funding Sources</b>	FEMA grants and Village
<b>Timeline for Completion</b>	DOF
Reporting on Progress	
<b>Date of Status Report/ Report of Progress</b>	Date: Progress on Action/Project:

\* Refer to results of Prioritization (page 2)

Action Number:

VBRX-12

Action Name:

High School flood mitigation

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Protect students and employees from flooding of high school
Property Protection	1	Protect school from flood and damages
Cost-Effectiveness	1	
Technical	0	
Political	0	
Legal	1	
Fiscal	0	
Environmental	0	
Social	1	
Administrative	0	
Multi-Hazard	1	
Timeline	1	
Agency Champion	0	
Other Community Objectives	0	
<b>Total</b>	7	
<b>Priority (High/Med/Low)</b>	Medium	