

9.15 VILLAGE OF PIERMONT

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

9.15.1 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
Lisa DeFeciani – Trustee, Committee Member Email: ldefeciani@piermont-ny.gov Phone: 845-359-1250 x329	Jennifer DeYorgi - Village Clerk – Treasurer Email: clerk@piermont-ny.gov Phone: 845-359-1258 x303
NFIP Floodplain Administrator (FPA)	
Ken DeGennaro, Village Engineer 845-357-4411 ext. 118 kdegennaro@brookerengineering.com	

9.15.2 Municipal Profile

The Village of Piermont is located within the Town of Orangetown, along the western border of Rockland County. The Village is bordered to the north by the Village of Grand View-on-Hudson, to the south and east by the Town of Orangetown, and to the west by the Hudson River. The Hudson River is a major body of water found within the Village. The Sparkill Creek is another major body of water in the

The Village has a total area of 1.2 square miles, of which, 0.7 square miles is land and 0.5 square miles is water. According to the 2010 Census, the community’s population was 2,510. The Village is governed by the Village Board, which consists of the Mayor and four Trustees.

Growth/Development Trends

The Village of Piermont did not note any recent residential/commercial development since 2010 or any major residential or commercial development, or major infrastructure development planned for the next five years in the municipality. Minor subdivisions were approved and some new homes were constructed.

Table 9.15-1. Growth and Development

Property or Development Name	Type (e.g. Res., Comm.)	# of Units / Structures	Location (address and/or Parcel ID)	Known Hazard Zone(s)	Description/Status of Development
Recent Development from 2010 to present					
Burck Subdivision	Res.	2		Location Undetermined.	One unit built
Adamthwaite Subdivision	Res.	2	Tweed Boulevard	Location Undetermined.	No units built
Graff Subdivision	Res.	1	Bauer Lane	Location Undetermined.	No units built
Known or Anticipated Development in the Next Five (5) Years					
None identified.					

* Only location-specific hazard zones or vulnerabilities identified.

9.15.3 Natural Hazard Event History Specific to the Municipality

Rockland County has a history of natural and non-natural hazard events as detailed in Volume I, Section 5.0 of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the County and its municipalities. For the purpose of this plan update, events that have occurred in the County from 2008 to present were summarized to indicate the range and impact of hazard events in the community. Information regarding specific damages is included, if available, based on reference material or local sources. This information is presented in the table below. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.15-2. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	Rockland County Designated?	Summary of Damages/Losses
March 13-31, 2010	Severe Storms and Flooding DR-1899	Yes	Debris removed from Village property and along the public right of way Estimated overall cost = \$14,000
December 26-27, 2010	Severe Winter Storm and Snowstorm DR-1957	Yes	Multiple roads and transportation routes were closed or severely compromised; limiting access to emergency services Estimated overall cost = \$24,000
August 25 – September 5, 2011	Hurricane Irene DR-4020	Yes	Multiple roads in Village closed and power outages extended for several days; Debris removed from Village property. Estimated overall cost = less \$1 million
October 27 – November 8, 2012	Hurricane Sandy DR-4085	Yes	Multiple roads in Village closed and power outages extended for several days; Debris removed from Village property. Estimated overall cost = less \$1 million

Notes:

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

9.15.4 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 Piermont. For additional vulnerability information relevant to this jurisdiction, refer to Section 5.0.

Natural Hazard Risk/Vulnerability Risk Ranking

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

Table 9.15-3. 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
Drought	Damage estimate not available	Frequent	39	High
Earthquake	100-Year GBS: \$0 500-Year GBS: \$760,345 2,500-Year GBS: \$11,500,891	Occasional	32	High
Extreme Temperature	Damage estimate not available	Frequent	27	Medium
Flood	1% Annual Chance: \$196,328,000	Frequent	54	High
Landslide	RCV Exposed: \$0	Rare	6	Low
Severe Storm	100-Year MRP: \$193,357 500-year MRP: \$1,578,556 Annualized: \$22,383	Frequent	48	High
Winter Storm	1% GBS: \$3,750,580 5% GBS: \$18,752,900	Frequent	51	High
Wildfire	Estimated Value in the WUI: \$409,446,000	Frequent	54	High

Notes:

- a. Building damage ratio estimates based on FEMA 386-2 (August 2001)
- b. The valuation of general building stock and loss estimates was based on custom inventory for the municipality.
High = Total hazard priority risk ranking score of 31 and above
Medium = Total hazard priority risk ranking of 20-30+
Low = Total hazard risk ranking below 20
- c. Loss estimates for the severe storm and severe winter storm hazards are structural values only and do not include the value of contents.
- d. Loss estimates for the flood and earthquake hazards represent both structure and contents.
- e. The HAZUS-MH earthquake model results are reported by Census Tract.

National Flood Insurance Program (NFIP) Summary

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

Table 9.15-4. 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 Piermont	129	97	\$4,521,489	12	1	39

Source: FEMA Region 2, 2016

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

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

(3) The policies inside and outside of the flood zones is based on the latitude and longitude provided by FEMA Region 2 in the policy file.

Notes: FEMA noted that where there is more than one entry for a property, there may be more than one policy in force or more than one GIS possibility. A zero percentage denotes less than 1/100th percentage and not zero damages or vulnerability as may be the case. Number of policies and claims and claims total exclude properties located outside county boundary, based on provided latitude and longitude.

Critical Facilities

The table below presents the critical facilities identified in the HMP that are located in the FEMA-delineated 1- and/or 0.2-percent annual chance floodplain. The table also summarizes the Hazards United States (HAZUS)



– Multi-Hazards (MH) damage estimates (if any) to each critical facility as a result of the 1-percent annual chance flood event.

Table 9.15-5. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Potential Loss from 1% Flood Event	
		1% Event	0.2% Event	Percent Structure Damage	Percent Content Damage
Piermont P.O.	Post Office	X	X	0	0
Fire Department Boathouse	Fire	X	X	-	-
Library	Library		X	-	-
Piermont DPW	DPW		X	-	-

Source: Hazus-MH 3.2, Rockland County

Other Vulnerabilities Identified

The municipality has identified the following vulnerabilities within their community:

- The entire Village of Piermont has been designated a Critical Environmental Area (Section 96-10) due to steep slopes and floodplains.

9.15.5 Capability Assessment

This section identifies the following capabilities of the local jurisdiction:

- Planning and regulatory capability
- Administrative and technical capability
- Fiscal capability
- Community classification
- National Flood Insurance Program
- Integration of mitigation planning into existing and future planning mechanisms

Planning and Regulatory Capability

The table below summarizes the regulatory tools that are available to the Village of Piermont.

Table 9.15-6. Planning and Regulatory Tools

Tool / Program (code, ordinance, plan)	Do you have this? (Yes/No) If Yes, date of adoption or update	Authority (local, county, state, federal)	Dept. /Agency Responsible	Code Citation and Comments (Code Chapter, name of plan, explanation of authority, etc.)
Planning Capability				
Master Plan	Yes	Local	VB	Master Plan
Capital Improvements Plan	No	Local	DPW/Village Engineer	Informal list
Floodplain Management / Basin Plan	Yes	Local	Floodplain Manager	Chapter 112
Stormwater Management Plan	Yes	Local, State	PB/Village Engineer	Chapter 170

Tool / Program (code, ordinance, plan)	Do you have this? (Yes/No) If Yes, date of adoption or update	Authority (local, county, state, federal)	Dept. /Agency Responsible	Code Citation and Comments (Code Chapter, name of plan, explanation of authority, etc.)
Open Space Plan	No			
Stream Corridor Management Plan	No			
Watershed Management or Protection Plan	No			
Economic Development Plan	No			
Comprehensive Emergency Management Plan	No			
Emergency Operation Plan	No			
Post-Disaster Recovery Plan	No			
Transportation Plan	No			
Strategic Recovery Planning Report	No			
Other Plans:	Yes	local	VB	LWRP, update in progress
Regulatory Capability				
Building Code	Yes	State & Local	BD	NYS Building Code
Zoning Ordinance	Yes	Local	BD/PB	Chapter 210
Subdivision Ordinance	Yes	Local	PB	Chapter 174
NFIP Flood Damage Prevention Ordinance	Yes	Federal, State, Local	Floodplain Administrator	Chapter 112, CFR60
NFIP: Cumulative Substantial Damages	No			
NFIP: Freeboard	Yes	State, Local	Floodplain Administrator	State mandated BFE+2 for single and two-family residential construction, BFE+1 for all other construction types
Growth Management Ordinances	No			
Site Plan Review Requirements	Yes	Local	PB/BD/Village Engineer	Chapter 210
Stormwater Management Ordinance	Yes	Local/State	PB/Village Engineer	Chapters 169 & 170
Municipal Separate Storm Sewer System (MS4)	Yes	Local/State	Village Engineer/DPW/Village Clerk	Chapter 170
Natural Hazard Ordinance	No			
Post-Disaster Recovery Ordinance	No			
Real Estate Disclosure Requirement	Yes	State		NYS mandate, Property Condition Disclosure Act, NY Code - Article 14 §460-467
Other (Special Purpose Ordinances [i.e., sensitive areas, steep slope])	Yes			LWRP, update in progress

LWRP = Local Waterfront Revitalization Plan; PB = Planning Board; VB = Village Board

Administrative and Technical Capability

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

Table 9.15-7. Administrative and Technical Capabilities

Resources	Is this in place? (Yes or No)	Department/ Agency/Position
Administrative Capability		
Planning Board	Yes	
Mitigation Planning Committee	No	
Environmental Board/Commission	No	
Open Space Board/Committee	No	
Economic Development Commission/Committee	No	
Maintenance programs to reduce risk	No	
Mutual aid agreements	No	
Technical/Staffing Capability		
Planner(s) or engineer(s) with knowledge of land development and land management practices	Yes	Brooker Engineering - Consultant
Engineer(s) or professional(s) trained in construction practices related to buildings and/or infrastructure	Yes	DPW/ Brooker Engineering – Consultant
Planners or engineers with an understanding of natural hazards	Yes	Brooker Engineering –Consultant
NFIP Floodplain Administrator (FPA)	Yes	Brooker Engineering – Consultant
Surveyor(s)	Yes	Brooker Engineering – Consultant
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	Yes	Brooker Engineering – Consultant
Scientist familiar with natural hazards	No	
Emergency Manager	No	Fire Department
Grant writer(s)	Yes	Sylvia Welch - Consultant
Staff with expertise or training in benefit/cost analysis	Yes	Brooker Engineering, Village Clerk, Sylvia Welch
Professionals trained in conducting damage assessments	Yes	Brooker Engineering - Consultant

Fiscal Capability

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

Table 9.15-8. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	Yes (Money in lieu of land fee for new subdivisions)
Stormwater utility fee	No
Incur debt through general obligation bonds	Yes

Financial Resources	Accessible or Eligible to Use (Yes/No)
Incur debt through special tax bonds	
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	Yes
Other	

Community Classifications

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

Table 9.15-9. Community Classifications

Program	Do you have this? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	Application pending	8	October 2018
Building Code Effectiveness Grading Schedule (BCEGS)	No		
Public Protection (ISO Fire Protection Classes 1 to 10)	No		
NYSDEC Climate Smart Community	Yes		
Storm Ready Certification	No		
Firewise Communities classification	No		
Natural disaster/safety programs in/for schools	No		
Organizations with mitigation focus (advocacy group, non-government)	No		
Public education program/outreach (through website, social media)	No		
Public-private partnership initiatives addressing disaster-related issues	No		

Note:

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

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

Criteria for classification credits are outlined in the following documents:

- The Community Rating System Coordinators Manual

- The Building Code Effectiveness Grading Schedule
- The ISO Mitigation online ISO’s Public Protection website at <https://www.isomitigation.com/ppc/>
- The National Weather Service Storm Ready website at <http://www.stormready.noaa.gov/index.html>
- The National Firewise Communities website at <http://firewise.org/>

Self-Assessment of Capability

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

Table 9.15-10. Self-Assessment Capability for the Municipality

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

National Flood Insurance Program

NFIP Floodplain Administrator (FPA)

Ken DeGennaro, PE, CFM, Local Floodplain Administrator

Flood Vulnerability Summary

The Village of Piermont does not maintain lists or inventories of properties that have been damaged by floods. The FPA indicated that is done privately by the homeowner and insurance company. During recent flooding events, approximately 100 structures were damaged in the Village. However, substantial damage estimates were not made for those properties as the Village does not conduct them. Currently, there is not interest in home acquisitions within the Village; however, there are several homeowners who are interested in elevation but have pursued it independently. Funding sources for homeowners who wish to mitigate their properties would be from the property owner, ICC and grants.

Resources

The Village FPA is the sole person assuming the responsibilities of floodplain administration but he does have support from the building inspector. NFIP administration services and functions provided to residents of the Village includes permit review, issuing floodplain development permits for any land use activity or substantial improvement to an existing structure. The Village requires the homeowner to have substantial damage estimates prepared if they are applying for a building permit for a home in the floodplain to determine if the home needs to meet current NFIP standards. Additionally, the Village provides education and outreach regarding flood hazards/risk to the community through planning board applications and brochures at the Village Clerk’s office.

The FPA indicated that there are no barriers to running an effective floodplain management program and he feels adequately supported and trained to fulfill his role as the municipal FPA. The FPA is a Certified Floodplain Manager and maintains that certification by obtaining continuing education credits. He would consider attending additional education and/or training if offered locally.

Compliance History

The Village is currently in good standing with the NFIP. A compliance audit has not been completed for the Village in the past 10 years.

Regulatory

The Village has adopted the FEMA ABFE mapping. Additionally, the Village requires that almost all land disturbance activities go before the Planning Board for site plan approval. During this time, the engineering office reviews the application for local and NFIP compliance. The Village has made the initial application for CRS by sending the “intent to join” letter. They are waiting for follow up from FEMA as to scheduling the CAV and audit for floodplain regulations.

Integration of Hazard Mitigation into Existing and Future Planning Mechanisms

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, each community was surveyed to obtain a better understanding of their community’s progress in plan integration. A summary is provided below. In addition, the community identified specific integration activities that will be incorporated into municipal procedures.

Planning

Resilience Roadmap (2014): The Piermont Waterfront Resilience Task Force worked to synthesize a list of recommendations for the Village to adopt in order to use as a flood and sea level rise resilience action plan. The main goal was to help the Village prepare for future storm events to protect life, infrastructure, and businesses and recover after an event. Many recommendations involve adding hazard mitigation planning into future planning and development decisions. These include creating a comprehensive emergency management plan, establishing a permanent Flooding and Storm Resilience committee, create a Master Plan that incorporates flood resilience, adaptation planning, and other land use issues, create and implement a Flood Mitigation Plan, and joining the CRS program. The report also provides recommendations for individual neighborhoods, for example the Village’s Commercial Core or at-risk residential areas.

Regulatory and Enforcement (Ordinances)

Flood Damage Prevention (Chapter 112): This ordinance promotes the public health, safety, and general welfare of residents and seeks to minimize destruction or loss of private and public housing, damage to public facilities, both publicly and privately owned, and injury to and loss of human life. It regulates development to promote flood resistant structures and controls the alteration of floodplains to prevent increased vulnerability.

Stormwater Management (Chapters 169 & 170): Chapters 169 & 170 of the Village Code deal with ‘Stormwater Management.’ This ordinance aims to protect the health, well-being, and property of residents in the Village. The ordinance establishes requirements in accordance with NYSDEC SPDES permitting, as well as additional requirements for reducing stormwater runoff from land developments. The Village of Piermont exceeds the minimum requirements of the NYSDEC SPDES requirements by defining a land disturbance activity as 10,000 SF as opposed to one acre.

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

Land Use Planning (Chapter 210): Details the land use zones for the Village and permitted types of development in each. Guidelines for land use include flood protection and damage minimization in zonal requirements.

Funding

Operating Budget: Funding is available for capital improvement projects to address resiliency on a community or county wide.

Grants: The Village has received funding from the New York State Department of Environmental Conservation Hudson River Estuary Program to address coastal flooding risks related to sea level rise; funding in turn used for the Resilience Roadmap report.

Education and Outreach

The Village performs educational outreach through the MS4 program.

Rockland County provides the following services to its municipalities:

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

9.15.6 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 2010 HMP. 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 9.15-11. Status of Previous Mitigation Actions

Action Number	2010 Mitigation Action	Responsible Party	Status (In progress, No progress, Complete)	Describe Status 1. Please describe what was accomplished and indicate % complete. 2. If there was no progress, indicate what obstacles/delays encountered? 3. If there was progress, how is/was the action being funded (e.g., FEMA HMGP grant, local budget)?	Next Step (Include in 2018 HMP or Discontinue)	Describe Next Step 1. If including action in the 2018 HMP, revise/reword to be more specific (as appropriate). 2. If discontinue, explain why.
Old PV-1	Drainage improvements to north parking lot and upgrade outfall	Engineering	In progress	1. 10% complete 2. Developed schematic plans for grant actions (locally funded). 3. Further action pending additional funding.	Include in 2018 HMP	Secure funding
Old PV-2	Construct check valve and berm near Paradise Ave. outfall to prevent tidal backflow into residential areas.	Engineering	In progress	1. 10% complete 2. Developed schematic plans for grant actions (locally funded). 3. Further action pending additional funding.	Include in 2018 HMP	Secure funding
Old PV-3	Drainage improvements to Erie Path down to Hudson Terrace	Engineering	In progress	1. 10% complete 2. Developed schematic plans for grant actions (locally funded). 3. Further action pending additional funding.	Include in 2018 HMP	Secure funding
Old PV-4	Construct check valve on outfall by Bridge Street to prevent tidal backflow	Engineering	In progress	1. 10% complete 2. Developed schematic plans for grant actions (locally funded). 3. Further action pending additional funding.	Include in 2018 HMP	Secure funding
Old PV-5	Drainage improvements to Tweed Blvd. to Route 9W	Engineering	In progress	1. 10% complete 2. Developed schematic plans for grant actions (locally funded). 3. Further action pending additional funding.	Include in 2018 HMP	Secure funding
1.B	Ensure that local comprehensive plans incorporate natural disaster mitigation techniques through a courtesy review or draft plans by the County Planning Department.	CPG member; Village Trustee	In progress	1. 10% complete 2. The item is being discussed. 3. No funding secured	Include in 2018 HMP	Actively work to complete/update comprehensive plans; secure funding
2.A	Expand and disseminate GIS and other hazard information on the internet.	CPG member; Village Trustee	No Progress	1. 0% complete 2. The item is being discussed. 3. No funding secured	Include in 2018 HMP	Seek funding and resources

<u>Action Number</u>	<u>2010 Mitigation Action</u>	<u>Responsible Party</u>	<u>Status</u> (In progress, No progress, Complete)	<u>Describe Status</u> 1. Please describe what was accomplished and indicate % complete. 2. If there was no progress, indicate what obstacles/delays encountered? 3. If there was progress, how is/was the action being funded (e.g., FEMA HMGP grant, local budget)?	<u>Next Step</u> (Include in 2018 HMP or Discontinue)	<u>Describe Next Step</u> 1. If including action in the 2018 HMP, revise/reword to be more specific (as appropriate). 2. If discontinue, explain why.
Old PV-6	Work with local municipalities to pursue the development of an Emergency Notification System call perimeter for high risk locations of natural hazards with delineable hazard areas. Rockland County staff will make aerial mapping available, along with GIS mapping for natural hazards that was completed as part of the hazard mitigation planning project. The County will also facilitate the utilization of the Emergency Notification System by municipalities.	CPG member; Town Supervisor	Complete	Rockland County has mapping services available to municipalities through their on-line web map portal. Disaster Land is a web-based emergency management software system; municipalities are granted access to it; flood inundation zones are incorporated into it so Emergency Coordinator from the municipality has access to it 24/7 on smart phone/laptop/desktop. The County utilizes NY-Alert and CodeRed (the backup to NY-Alert) for emergency notifications (all Towns and Villages have access to it; New Hempstead not using CodeRed). There is a mailbox for known inundation areas to target outreach as needed; and have license for FEMA's IPAWS to issue notifications.	Discontinue	Complete
Old PV-7	Hold periodic workshops regarding zoning and planning issues that arise regarding natural hazards and hazard mitigation.	CPG member; Village Trustee	Complete	1. 100% complete 2. LWRP and PWRC holds workshops throughout the year 3. Local budget	Discontinue	Complete
4.F	Continue to implement best management practices for floodplain areas.	CPG member; Village Trustee	Complete	1. 100% complete 2. Continually looking for best management practices during new development and redevelopment 3. Local budget	Discontinue	Action no longer required – standard practice

<u>Action Number</u>	<u>2010 Mitigation Action</u>	<u>Responsible Party</u>	<u>Status</u> (In progress, No progress, Complete)	<u>Describe Status</u> 1. Please describe what was accomplished and indicate % complete. 2. If there was no progress, indicate what obstacles/delays encountered? 3. If there was progress, how is/was the action being funded (e.g., FEMA HMGP grant, local budget)?	<u>Next Step</u> (Include in 2018 HMP or Discontinue)	<u>Describe Next Step</u> 1. If including action in the 2018 HMP, revise/reword to be more specific (as appropriate). 2. If discontinue, explain why.
4.G	Identify and document repetitively flooded properties. Work with owners to explore mitigation opportunities for repetitively flooded properties, and if appropriate and feasible, carry out acquisition, relocation, elevation and floodproofing measures to protect these properties.	CPG member; Village Trustee	In progress	<ol style="list-style-type: none"> 1. 10% complete 2. The item is being discussed. 3. No funding secured 	Include in 2018 HMP	Initiate outreach to property owners to discuss potential mitigation actions; secure funding



<u>Action Number</u>	<u>2010 Mitigation Action</u>	<u>Responsible Party</u>	<u>Status</u> (In progress, No progress, Complete)	<u>Describe Status</u> 1. Please describe what was accomplished and indicate % complete. 2. If there was no progress, indicate what obstacles/delays encountered? 3. If there was progress, how is/was the action being funded (e.g., FEMA HMGP grant, local budget)?	<u>Next Step</u> (Include in 2018 HMP or Discontinue)	<u>Describe Next Step</u> 1. If including action in the 2018 HMP, revise/reword to be more specific (as appropriate). 2. If discontinue, explain why.
4.J	Develop specific mitigation solutions for floodprone road systems (roads, bridges, intersections, drainage, etc.) under the leadership of County DPW.	CPG member; Village Trustee	In progress	1. 10% complete 2. Some discussion with RC Highway Department regarding improvements along Tweed Boulevard to reduce flooding along Route 9W. No substantial progress made 3. Local budget	Include in 2018 HMP	Continue to reach out to RC Highway Department to discuss further actions

<u>Action Number</u>	<u>2010 Mitigation Action</u>	<u>Responsible Party</u>	<u>Status</u> (In progress, No progress, Complete)	<u>Describe Status</u> 1. Please describe what was accomplished and indicate % complete. 2. If there was no progress, indicate what obstacles/delays encountered? 3. If there was progress, how is/was the action being funded (e.g., FEMA HMGP grant, local budget)?	<u>Next Step</u> (Include in 2018 HMP or Discontinue)	<u>Describe Next Step</u> 1. If including action in the 2018 HMP, revise/reword to be more specific (as appropriate). 2. If discontinue, explain why.
13.A	Determine the year built and level of protection for critical emergency facilities and shelters to highlight structures built before codes and standards were put in place to provide some degree of protection from natural hazards, and pursue potential mitigation opportunities to protect these sites as funding becomes available.	CPG member; Village Trustee	No Progress	1. 0% complete 2. The item was not discussed. 3. No funding secured	Include in 2018 HMP	Updated critical facility specific actions for flooding added for 2018 Update; secure funding
11.B	Review existing emergency response plans for enhancement opportunities: work with social support agencies, homeowners associations and general public to develop and implement monitoring and warning systems focused on vulnerable populations and provision of adequate shelter facilities.	CPG member; Village Trustee	Complete	1. 100% complete 2. CERT Team and Fire Dept. review and enhance plans for response and recovery 3. Local budget	Discontinue	Complete

<u>Action Number</u>	<u>2010 Mitigation Action</u>	<u>Responsible Party</u>	<u>Status</u> (In progress, No progress, Complete)	<u>Describe Status</u> 1. Please describe what was accomplished and indicate % complete. 2. If there was no progress, indicate what obstacles/delays encountered? 3. If there was progress, how is/was the action being funded (e.g., FEMA HMGP grant, local budget)?	<u>Next Step</u> (Include in 2018 HMP or Discontinue)	<u>Describe Next Step</u> 1. If including action in the 2018 HMP, revise/reword to be more specific (as appropriate). 2. If discontinue, explain why.
Old PV-8	Public awareness program on hazards, prevention and mitigation: assist CPG Chairperson in maintenance of mitigation planning web presence; assist CPG Chairperson in preparation of annual hazards and mitigation planning fact sheet and its distribution; assist CPG chairperson in preparation of hazard mitigation and the mitigation plan at other regular local meetings; use of annual flyers, newsletters, advertisements, or radio/TV announcements, etc. at the discretion of the jurisdiction (incorporating as much free information as possible from the FEMA publications warehouse and other appropriate sources0.	RCOFES lead with direct participation and involvement from each jurisdiction’s CPG member	Complete	1. 100% complete 2. Fire Dept. and Police Dept. provide posters at City Hall for Village residents ref. hazard prevention and mitigation 3. Local budget	Discontinue	Complete
Old PV-9	Code update: review existing local codes and ordinances against the identified hazards to determine whether there needs to be any amendments to address identified hazards and, where a need is identified; modify/amend the codes/ordinances as applicable.	Each jurisdictional CPG member	In progress	1. 50% complete 2. Code review performed after Hurricane Sandy. Adopted ABFE elevations. Height restrictions revisited based on need to balance building higher versus limitation on building height. 3. Local budget	Include in 2018 HMP	Look into new codes to strengthen CRS application (i.e. cumulative improvement thresholds)
Old PV-10	Code enforcement: enforcement of NYS and local building codes	Each jurisdictional CPG member	Complete	1. 100% complete 2. Building codes enforced 3. Local budget	Discontinue	Action no longer required – standard practice

<u>Action Number</u>	<u>2010 Mitigation Action</u>	<u>Responsible Party</u>	<u>Status</u> (In progress, No progress, Complete)	<u>Describe Status</u> 1. Please describe what was accomplished and indicate % complete. 2. If there was no progress, indicate what obstacles/delays encountered? 3. If there was progress, how is/was the action being funded (e.g., FEMA HMGP grant, local budget)?	<u>Next Step</u> (Include in 2018 HMP or Discontinue)	<u>Describe Next Step</u> 1. If including action in the 2018 HMP, revise/reword to be more specific (as appropriate). 2. If discontinue, explain why.
Old PV-11	Update/revise floodplain management ordinance to comply with latest FEMA regulations	Village Board, Village Attorney	Complete	1. 100% complete 2. Ordinance updated/revised 3. Local budget	Discontinue	Completed
Old PV-12	Update/review floodplain management ordinances to be consistent with potential future new FIRMs	Village Board, Village Attorney	Complete	1. 100% complete 2. Ordinance updated/revised 3. Local budget	Discontinue	Completed
Old PV-13	Require staff involved in floodplain management and ordinance enforcement to become Certified Floodplain Managers (CFMs)	Building Department/Village Engineer	Complete	1. 100% complete 2. Village Engineer is CFM 3. Local budget	Discontinue	Completed
Old PV-14	Join the Community Rating System (CRS)	Village Board	In progress	1. 50% 2. Notification to FEMA for intent to join was made. 3. Local budget	Include in 2018 HMP	Waiting to hear from FEMA regarding good standing as a NFIP community and loss claims.

Completed Mitigation Initiatives not Identified in the Previous Mitigation Strategy

The Village of Piermont has not identified additional mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2010 HMP.

Proposed Hazard Mitigation Initiatives for the Plan Update

The Village of Piermont participated in a mitigation action workshop in February 2017 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 'Selecting Appropriate Mitigation Measures for Floodprone Structures' (March 2007) and FEMA 'Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards' (January 2013).

Table 9.15-12 summarizes the comprehensive-range of specific mitigation initiatives the Village of Piermont would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide-range of activities and mitigation measures selected.

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

Table 9.15-13 provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.

Table 9.15-12. Proposed Hazard Mitigation Initiatives

Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category	CRS Category
Piermont-1 (Old PV-1)	Drainage improvements to north parking lot and upgrade outfall	Existing	Flooding, Severe Storm	1, 2, 4	Engineering	High	High	Municipal budget; Grant funding	DOF	Low	SIP	SP
Piermont-2 (Old PV-2)	Construct check valve and berm near Paradise Ave. outfall to prevent tidal backflow into residential areas.	Existing	Flooding, Severe Storm	1, 2, 4	Engineering	High	High	Municipal budget; Grant funding	DOF	Medium	SIP	SP
Piermont-3 (Old PV-3)	Drainage improvements to Erie Path down to Hudson Terrace	Existing	Flooding, Severe Storm	1, 2, 4	Engineering	High	High	Municipal budget; Grant funding	DOF	Medium to High	SIP	SP
Piermont-4 (Old PV-4)	Construct check valve on outfall by Bridge Street to prevent tidal backflow	Existing	Flooding, Severe Storm	1, 2, 4	Engineering	High	High	Municipal budget; Grant funding	DOF	Medium	SIP	SP
Piermont-5 (Old PV-5)	Drainage improvements to Tweed Blvd. to Route 9W	Existing	Flooding, Severe Storm	1, 2, 4	Engineering	High	High	Municipal budget; Grant funding	DOF	High	SIP	SP
Piermont-6 (old 1.B)	Ensure that local comprehensive plans incorporate natural disaster mitigation techniques through a courtesy review or draft plans by the County Planning Department.	N/A	All Hazards	1, 2, 3, 5, 7	CPG member; Village Trustee	Medium	Low	Municipal budget	Ongoing	Low to Medium	LPR, EAP	PI, PR
Piermont-7 (old 2.A)	Expand and disseminate GIS and other hazard information on the internet.	N/A	All Hazards	All	CPG member; Village Trustee	Medium	Medium	Municipal budget; Grant funding	DOF	Low to Medium	EAP	PI
Piermont-8 (old 4.G)	Identify and document repetitively flooded properties. Work with owners to explore mitigation opportunities for repetitively flooded properties, and if appropriate and feasible, carry out acquisition, relocation, elevation and floodproofing measures to protect these properties.	Existing	Flooding, Severe Storm	1, 2, 3, 5, 7	CPG member; Village Trustee	High	Low	Municipal Budget	Ongoing	High	LPR, EAP	PR, PI
Piermont-9 (old 4.J)	Develop specific mitigation solutions for floodprone road systems (roads, bridges,	Existing	Flooding, Severe Storm	1, 2, 4	CPG member; Village	High	High	Municipal budget; County	DOF	High	SIP	SP

Table 9.15-12. Proposed Hazard Mitigation Initiatives

Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category	CRS Category
	intersections, drainage, etc.) under the leadership of County DPW.				Trustee			funding; Grant funding				
Piermont-10 (old 13.A)	Determine the year built and level of protection for critical emergency facilities and shelters to highlight structures built before codes and standards were put in place to provide some degree of protection from natural hazards, and pursue potential mitigation opportunities to protect these sites as funding becomes available.	Existing	All Hazards	1, 2, 5, 7	CPG member; Village Trustee	Medium	Low	Municipal budget	Short	High	LPR	PR
Piermont-11 (Old PV-9)	Code update: review existing local codes and ordinances against the identified hazards to determine whether there needs to be any amendments to address identified hazards and, where a need is identified; modify/amend the codes/ordinances as applicable.	N/A	All	1, 2, 3, 5, 7	Jurisdictional CPG member	Medium	Low	Municipal budget	Ongoing	Low	LPR	PR
Piermont-12 (Old PV-14)	Join the Community Rating System (CRS)	New/Existing	Flood	1, 2, 3, 7	Village Board; Building Department	High	Medium	Municipal budget; Grant funding	Short	High	EAP	PI
Piermont-13	Improve emergency communication in the Village (Resiliency Roadmap recommendation)	N/A	All Hazard	All	Village Board	High	Medium	Municipal budget	Short	High	LPR	PR
Piermont-14	Development a comprehensive emergency management plan (Resiliency Roadmap recommendation)	N/A	All Hazard	All	Planning Board	High	Medium	Municipal budget	DOF	High	LPR	PR
Piermont-15	Initiate an introduction meeting with local utilities to improve resilience (Resiliency Roadmap recommendation)	N/A	All Hazard	1, 2, 4, 6	Village Board	High	Low	Municipal budget	Short	High	SIP	PP
Piermont-16	Establish a permanent Flooding and Storm Resilience Committee (Resiliency Roadmap recommendation)	N/A	All Hazard	1, 2, 3, 4, 6	Village Board	High	Low	Municipal budget	Short	High	LPR	PR
Piermont-17	Critical facilities in the Village are	Existing	Flood	1, 2,	Post Office	High	Low	Municipal	Short	High	SIP	PP



Table 9.15-12. Proposed Hazard Mitigation Initiatives

Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category	CRS Category
	<p>vulnerable to the flood hazard as per the Rockland County HMP risk assessment.</p> <ul style="list-style-type: none"> - Piermont Post Office - Fire Department Boathouse - Public Library - Piermont DPW <p>For the facilities that the Village has jurisdiction, the Village will evaluate and determine next actions in terms of a feasible and cost-effective mitigation action. For the facilities that the Village does not have jurisdiction over this facility to mitigate, the Village will notify the facility manager/operator regarding the flood vulnerability, potential mitigation actions to reduce flood losses and potential funding sources for implementation. The owners/operators will need to evaluate and determine next actions in terms of a feasible and cost-effective mitigation action. The Village will inform the owners/operators that NYS requires mitigation address the 500-year flood event or “worst damage scenario”.</p> <p>Potential mitigation actions may include elevation of structure or critical mechanics, relocate critical records to higher ground within building or relocate facility outside of the floodplain.</p>			4, 6	with support from the Village Board			budget				
Piermont-18	Install breakwaters at Fire Department Boathouse; Investigate replacing existing boathouse doors with heavy duty doors.	Existing	Flood	1, 2, 4, 6	Village Board	High	High	Municipal budget	Short (DOF)	High	SIP	PP

Table 9.15-12. Proposed Hazard Mitigation Initiatives

Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category	CRS Category
Piermont-19	Elevate the electrical components of the DPW to protect up to the 500-year flood elevation.	Existing	Flood	1, 2, 4, 6	Village Board	High	High	Municipal budget	Short (DOF)	High	SIP	PP

Notes:

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

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

Acronyms and Abbreviations:

CAV	Community Assistance Visit
CRS	Community Rating System
DPW	Department of Public Works
FEMA	Federal Emergency Management Agency
FPA	Floodplain Administrator
HMA	Hazard Mitigation Assistance
N/A	Not applicable
NFIP	National Flood Insurance Program
OEM	Office of Emergency Management

Potential FEMA HMA Funding Sources:

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

Timeline:

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

Costs:

Where actual project costs have been reasonably estimated:

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

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

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

Benefits:

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

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

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

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

Mitigation Category:



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

CRS Category:

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

Table 9.15-13. Summary of Prioritization of Actions

Mitigation Action/Project Number	Mitigation Action/Initiative	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
Piermont-1 (Old PV-1)	Drainage improvements to north parking lot and upgrade outfall	1	1	1	1	0	1	-1	1	1	1	0	0	1	0	8	Low
Piermont-2 (Old PV-2)	Construct check valve and berm near Paradise Ave. outfall to prevent tidal backflow into residential areas.	1	1	1	1	0	1	-1	1	1	1	0	0	1	0	8	Medium
Piermont-3 (Old PV-3)	Drainage improvements to Erie Path down to Hudson Terrace – <i>old system, residential area, risk of flooding to the homes</i>	1	1	1	1	0	1	-1	1	1	1	0	0	1	0	8	Medium – High
Piermont-4 (Old PV-4)	Construct check valve on outfall by Bridge Street to prevent tidal backflow	1	1	1	1	0	1	-1	1	1	1	0	0	1	0	8	Medium
Piermont-5 (Old PV-5)	Drainage improvements to Tweed Blvd. to Route 9W <i>issues occur every year, needs to be cleaned constantly, if not cleared then area floods</i>	1	1	1	1	0	1	-1	1	1	1	0	0	1	0	8	High
Piermont-6 (old 1.B)	Ensure that local comprehensive plans incorporate natural disaster mitigation techniques through a courtesy review or draft plans by the County Planning Department.	1	1	1	1	1	0	1	0	0	1	1	0	0	0	8	Low to Medium
Piermont-7 (old 2.A)	Expand and disseminate GIS and other hazard information on the	1	1	1	1	0	0	1	0	0	1	1	0	0	0	7	Low to Medium



Table 9.15-13. Summary of Prioritization of Actions

Mitigation Action/Project Number	Mitigation Action/Initiative	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
Piermont-8 (old 4.G)	internet. 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. – <i>doing this already for the CRS program</i>	1	1	1	1	0	0	1	0	1	1	1	0	1	0	9	High
Piermont-9 (old 4.J)	Develop specific mitigation solutions for floodprone road systems (roads, bridges, intersections, drainage, etc.) under the leadership of County DPW.	1	1	1	1	0	0	0	0	1	1	1	0	1	0	8	High
Piermont-10 (old 13.A)	Determine the year built and level of protection for critical emergency facilities and shelters to highlight structures built before codes and standards were put in place to provide some degree of protection from natural hazards, and pursue potential mitigation opportunities to protect	1	1	1	1	0	0	0	0	1	1	1	0	1	0	8	High

Table 9.15-13. Summary of Prioritization of Actions

Mitigation Action/Project Number	Mitigation Action/Initiative	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
	these sites as funding becomes available.																
Piermont-11 (Old PV-9)	Code update: review existing local codes and ordinances against the identified hazards to determine whether there needs to be any amendments to address identified hazards and, where a need is identified; modify/amend the codes/ordinances as applicable.	1	1	1	1	0	0	0	0	1	1	1	0	1	0	8	Low
Piermont-12 (Old PV-14)	Join the Community Rating System (CRS) <i>intend to join and waiting to hear back from CRS</i>	1	1	1	1	0	0	1	0	1	1	1	0	0	0	8	High
Piermont-13	Improve emergency communication in the Village (Resiliency Roadmap recommendation)	1	1	1	1	0	1	0	0	1	1	1	1	1	0	10	High
Piermont-14	Development a comprehensive emergency management plan (Resiliency Roadmap recommendation)	1	1	1	1	0	1	0	0	1	1	1	0	1	0	9	High
Piermont-15	Initiate an introduction meeting with local utilities to improve resilience (Resiliency Roadmap recommendation)	1	1	0	0	1	0	0	0	0	1	1	1	1	0	7	High
Piermont-16	Establish a permanent Flooding and Storm Resilience Committee	1	1	0	1	1	0	0	0	0	1	1	1	1	0	8	High



Table 9.15-13. Summary of Prioritization of Actions

Mitigation Action/Project Number	Mitigation Action/Initiative	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
	(Resiliency Roadmap recommendation)																
Piermont-17	<p>Critical facilities in the Village are vulnerable to the flood hazard as per the Rockland County HMP risk assessment.</p> <ul style="list-style-type: none"> - Piermont Post Office - Fire Department Boathouse - Public Library - Piermont DPW <p>For the facilities that the Village has jurisdiction, the Village will evaluate and determine next actions in terms of a feasible and cost-effective mitigation action. For the facilities that the Village does not have jurisdiction over this facility to mitigate, the Village will notify the facility manager/operator regarding the flood vulnerability, potential mitigation actions to reduce flood losses and potential funding sources for implementation. The owners/operators will need to evaluate and determine next actions in terms of a feasible</p>	1	1	1	1	0	1	0	0	0	1	0	0	0	0	6	High

Table 9.15-13. Summary of Prioritization of Actions

Mitigation Action/Project Number	Mitigation Action/Initiative	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
	and cost-effective mitigation action. The Village will inform the owners/operators that NYS requires mitigation address the 500-year flood event or “worst damage scenario”. Potential mitigation actions may include elevation of structure or critical mechanics, relocate critical records to higher ground within building or relocate facility outside of the floodplain.																
Piermont-18	Install breakwaters at Fire Department Boathouse; Investigate replacing existing boathouse doors with heavy duty doors.	1	1	1	1	0	1	0	0	0	1	0	1	1	0	8	High
Piermont-19	Elevate the electrical components of the DPW to protect up to the 500-year flood elevation.	1	1	1	1	0	1	0	0	0	1	0	1	1	0	8	High

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



9.15.7 Future Needs To Better Understand Risk/Vulnerability

None at this time.

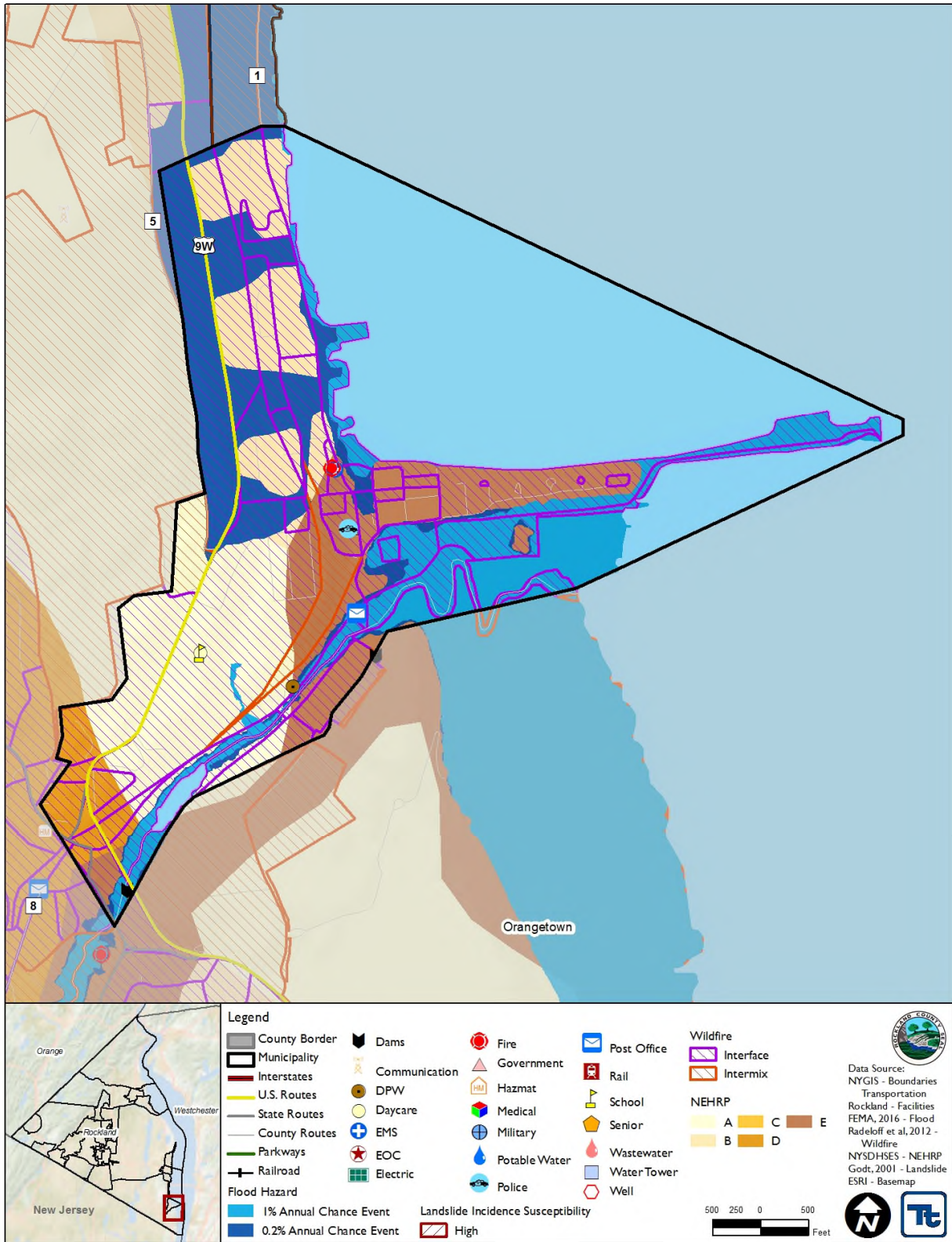
9.15.8 Hazard Area Extent and Location

Hazard area extent and location maps have been generated for the Village of Piermont 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 Piermont has significant exposure. These maps are illustrated in the hazard profiles within Section 5.4, Volume I of this Plan.

9.15.9 Additional Comments

None at this time.

Figure 9.15-1. Village of Piermont Hazard Area Extent and Location Map



Action Number:

V. Piermont -1

Mitigation Action Name:

Drainage improvements to north parking lot and upgrade outfall

Assessing the Risk	
Hazard(s) addressed:	Flooding, Severe Storm
Specific problem being mitigated:	Poor drainage and an inadequate outfall have increased the flood risk to the area
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	No Action - current problem continues Convert north parking lot to permeable pavement – cost
Action/Project Intended for Implementation	
Description of Selected Action/Project	Upgrade or replace the inadequate drainage system and outfall to manage current stormwater runoff amounts.
Mitigation Action Type	SIP
Goals Met	1, 2, 4
Applies to existing and or new development, or not applicable	Existing
Benefits (losses avoided)	High
Estimated Cost	High
Priority*	Low
Plan for Implementation	
Responsible Organization	Engineering
Local Planning Mechanism	Hazard Mitigation, Engineering
Potential Funding Sources	Municipal budget; Grant funding
Timeline for Completion	DOF
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: 6/01/2017 Progress on Action/Project: Developed schematic plans for grant actions (locally funded).

Action Number:

V. Piermont -1

Mitigation Action Name:

Drainage improvements to north parking lot and upgrade outfall

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

Action Number:

V. Piermont -2

Mitigation Action Name:

Construct check valve and berm near Paradise Ave. outfall to prevent tidal backflow into residential areas.

Assessing the Risk	
Hazard(s) addressed:	Flooding, Severe Storm
Specific problem being mitigated:	Tidal backflow is entering the outfall and causing flooding in the surrounding residential area.
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	No Action - current problem continues Buyout properties impacted by tidal flooding - cost
Action/Project Intended for Implementation	
Description of Selected Action/Project	Check valve and berm will be constructed to prevent the backflow of water during high tide.
Mitigation Action Type	SIP
Goals Met	1, 2, 4
Applies to existing and or new development, or not applicable	Existing
Benefits (losses avoided)	High
Estimated Cost	High
Priority*	Medium
Plan for Implementation	
Responsible Organization	Engineering
Local Planning Mechanism	Hazard Mitigation, Engineering
Potential Funding Sources	Municipal budget; Grant funding
Timeline for Completion	DOF
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: 6/01/2017 Progress on Action/Project: Developed schematic plans for grant actions (locally funded).

Action Number:

V. Piermont -2

Mitigation Action Name:

Construct check valve and berm near Paradise Ave. outfall to prevent tidal backflow into residential areas.

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

Action Number:

V. Piermont -3

Mitigation Action Name:

Drainage improvements to Erie Path down to Hudson Terrace

Assessing the Risk	
Hazard(s) addressed:	Flooding, Severe Storm
Specific problem being mitigated:	Old drainage system cannot adequately manage stormwater flows and increases risk of flooding to residential area.
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	No Action - current problem continues Add raingardens to sides of roadways – space issues, not enough impact
Action/Project Intended for Implementation	
Description of Selected Action/Project	Upgrade or replace the out-of-date drainage system to manage current stormwater runoff amounts.
Mitigation Action Type	SIP
Goals Met	1, 2, 4
Applies to existing and or new development, or not applicable	Existing
Benefits (losses avoided)	High
Estimated Cost	High
Priority*	Medium to High
Plan for Implementation	
Responsible Organization	Engineering
Local Planning Mechanism	Hazard Mitigation, Engineering
Potential Funding Sources	Municipal budget; Grant funding
Timeline for Completion	DOF
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: 6/01/2017 Progress on Action/Project: Developed schematic plans for grant actions (locally funded).

Action Number:

V. Piermont -3

Mitigation Action Name:

Drainage improvements to Erie Path down to Hudson Terrace

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

Action Number:

V. Piermont -4

Mitigation Action Name:

Construct check valve on outfall by Bridge Street to prevent tidal backflow

Assessing the Risk	
Hazard(s) addressed:	Flooding, Severe Storm
Specific problem being mitigated:	Tidal backflow is entering the outfall and causing flooding in the surrounding residential area.
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	No Action - current problem continues Buyout areas impacted by tidal flooding - cost
Action/Project Intended for Implementation	
Description of Selected Action/Project	Check valve to be constructed on the existing outfall to prevent backflow of water during high tide.
Mitigation Action Type	SIP
Goals Met	1, 2, 4
Applies to existing and or new development, or not applicable	Existing
Benefits (losses avoided)	High
Estimated Cost	High
Priority*	Medium
Plan for Implementation	
Responsible Organization	Engineering
Local Planning Mechanism	Hazard Mitigation, Engineering
Potential Funding Sources	Municipal budget; Grant funding
Timeline for Completion	DOF
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: 6/01/2017 Progress on Action/Project: Developed schematic plans for grant actions (locally funded).

Action Number:

V. Piermont -4

Mitigation Action Name:

Construct check valve on outfall by Bridge Street to prevent tidal backflow

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

Action Number:

V. Piermont -5

Mitigation Action Name:

Drainage improvements to Tweed Blvd. to Route 9W

Assessing the Risk	
Hazard(s) addressed:	Flooding, Severe Storm
Specific problem being mitigated:	Drainage issues occur every year - needs to be cleaned constantly, if not cleared then the area will flood.
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	No Action - current problem continues Rely on volunteer groups to clear debris – may not be feasible/sustainable
Action/Project Intended for Implementation	
Description of Selected Action/Project	Improvements will be made to ensure debris cannot block stormwater flows.
Mitigation Action Type	SIP
Goals Met	1, 2, 4
Applies to existing and or new development, or not applicable	Existing
Benefits (losses avoided)	High
Estimated Cost	High
Priority*	High
Plan for Implementation	
Responsible Organization	Engineering
Local Planning Mechanism	Hazard Mitigation, Engineering
Potential Funding Sources	Municipal budget; Grant funding
Timeline for Completion	DOF
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: 6/01/2017 Progress on Action/Project: Developed schematic plans for grant actions (locally funded).

Action Number:

V. Piermont -5

Mitigation Action Name:

Drainage improvements to Tweed Blvd. to Route 9W

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

Action Number:

V. Piermont -6

Mitigation Action Name:

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

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

Action Number:

V. Piermont -6

Mitigation Action Name:

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

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

Action Number:

V. Piermont -7

Mitigation Action Name:

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

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

Action Number:

V. Piermont -7

Mitigation Action Name:

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

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

Action Number:

V. Piermont -8

Mitigation Action Name:

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

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

Action Number:

V. Piermont -8

Mitigation Action Name:

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

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	
Property Protection	1	
Cost-Effectiveness	1	
Technical	1	
Political	0	
Legal	0	
Fiscal	1	
Environmental	0	
Social	1	
Administrative	1	
Multi-Hazard	1	
Timeline	0	
Agency Champion	1	
Other Community Objectives	0	
Total	9	
Priority (H/M/L)	High	

Action Number:

V. Piermont -9

Mitigation Action Name:

Develop specific mitigation solutions for floodprone road systems (roads, bridges, intersections, drainage, etc.) under the leadership of County DPW.

Assessing the Risk	
Hazard(s) addressed:	Flooding, Severe Storm
Specific problem being mitigated:	Floodprone roads can inhibit emergency response and evacuation during a flood.
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	No Action - current problem continues Relocate floodprone road systems – not feasible
Action/Project Intended for Implementation	
Description of Selected Action/Project	Develop specific mitigation solutions for floodprone road systems (roads, bridges, intersections, drainage, etc.) under the leadership of County DPW.
Mitigation Action Type	SIP
Goals Met	1, 2, 4
Applies to existing and or new development, or not applicable	Existing
Benefits (losses avoided)	High
Estimated Cost	High
Priority*	High
Plan for Implementation	
Responsible Organization	CPG member; Village Trustee
Local Planning Mechanism	Hazard Mitigation
Potential Funding Sources	Municipal budget; County funding; Grant funding
Timeline for Completion	DOF
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: 6/01/2017 Progress on Action/Project: Some discussion with RC Highway Department regarding improvements along Tweed Boulevard to reduce flooding along Route 9W. No substantial progress made

Action Number:

V. Piermont -9

Mitigation Action Name:

Develop specific mitigation solutions for floodprone road systems (roads, bridges, intersections, drainage, etc.) under the leadership of County DPW.

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

Action Number:

V. Piermont -10

Mitigation Action Name:

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

Assessing the Risk	
Hazard(s) addressed:	All Hazards
Specific problem being mitigated:	If facilities were built before a certain date, they could be more susceptible to damage from a hazard event.
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	No Action - current problem continues Rebuild all critical facilities and shelters - cost
Action/Project Intended for Implementation	
Description of Selected Action/Project	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.
Mitigation Action Type	LPR
Goals Met	1, 2, 5, 7
Applies to existing and or new development, or not applicable	Existing
Benefits (losses avoided)	Medium
Estimated Cost	Low
Priority*	High
Plan for Implementation	
Responsible Organization	CPG member; Village Trustee
Local Planning Mechanism	Hazard Mitigation
Potential Funding Sources	Municipal budget
Timeline for Completion	Short
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: 6/01/2017 Progress on Action/Project: Work has not been completed on this action.

Action Number:

V. Piermont -10

Mitigation Action Name:

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

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

Action Number:

V. Piermont -11

Mitigation Action Name:

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

Assessing the Risk	
Hazard(s) addressed:	All
Specific problem being mitigated:	New vulnerabilities could have emerge or existing vulnerabilities could have worsen, which could warrant a code update.
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	No Action - current problem continues Encourage residents to use higher standards for hazards but do not add to code – sporadic impact
Action/Project Intended for Implementation	
Description of Selected Action/Project	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.
Mitigation Action Type	LPR
Goals Met	1, 2, 3, 5, 7
Applies to existing and or new development, or not applicable	N/A
Benefits (losses avoided)	Medium
Estimated Cost	Low
Priority*	Low
Plan for Implementation	
Responsible Organization	Jurisdictional CPG member
Local Planning Mechanism	Hazard Mitigation
Potential Funding Sources	Municipal budget
Timeline for Completion	Ongoing
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: 6/01/2017 Progress on Action/Project: Code review performed after Hurricane Sandy. Adopted ABFE elevations. Height restrictions revisited based on need to balance building higher versus limitation on building height

Action Number:
Mitigation Action Name:

V. Piermont -11

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

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

Action Number:

V. Piermont -12

Mitigation Action Name:

Join the Community Rating System (CRS)

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

Action Number:

V. Piermont -12

Mitigation Action Name:

Join the Community Rating System (CRS)

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

Action Number:

V. Piermont -13

Mitigation Action Name:

Improve emergency communication in the Village

Assessing the Risk	
Hazard(s) addressed:	All Hazard
Specific problem being mitigated:	Poor communication can cause issues to the preparation and response to an emergency event
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	No Action - current problem continues Develop email notification system –not all residents have email, less effective than other alert systems
Action/Project Intended for Implementation	
Description of Selected Action/Project	This action will contain the following: <ul style="list-style-type: none"> · Inform residents of nixle.com · Organize neighborhood networks for emergency communications, and preparedness training and planning. · Implement a more robust alert/communication system, including capability for communications during emergencies with power outages.
Mitigation Action Type	LPR
Goals Met	All
Applies to existing and or new development, or not applicable	N/A
Benefits (losses avoided)	High
Estimated Cost	Medium
Priority*	High
Plan for Implementation	
Responsible Organization	Village Board
Local Planning Mechanism	Hazard Mitigation, Public Education
Potential Funding Sources	Municipal budget
Timeline for Completion	Short
Reporting on Progress	
Date of Status Report/ Report of Progress	No progress, new action

Action Number:

V. Piermont -13

Mitigation Action Name:

Improve emergency communication in the Village

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

Action Number:

V. Piermont -14

Mitigation Action Name:

Development a comprehensive emergency management plan

Assessing the Risk	
Hazard(s) addressed:	All Hazard
Specific problem being mitigated:	The Village does not have a comprehensive emergency management plan
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	No Action - current problem continues Rely on County emergency management planning – not Village specific
Action/Project Intended for Implementation	
Description of Selected Action/Project	This plan should include an evacuation plan, designated upland parking areas, procedures for securing loose floating assets, procedures for debris removal, procedures for providing human services, procedures for shutoff and restoration of gas service, emergency communication systems, emergency backup power, framework for staff and volunteer training and drilling exercises, regular notification to owners and residents in current and projected future floodplains regarding risks to their properties and the availability of preparedness resources.
Mitigation Action Type	LPR
Goals Met	All
Applies to existing and or new development, or not applicable	N/A
Benefits (losses avoided)	High
Estimated Cost	Medium
Priority*	High
Plan for Implementation	
Responsible Organization	Planning Board
Local Planning Mechanism	Hazard Mitigation, Public Education
Potential Funding Sources	Municipal budget
Timeline for Completion	DOF
Reporting on Progress	
Date of Status Report/ Report of Progress	No progress, new action

Action Number:

V. Piermont -14

Mitigation Action Name:

Development a comprehensive emergency management plan

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	
Property Protection	1	
Cost-Effectiveness	1	
Technical	1	
Political	0	
Legal	1	
Fiscal	0	
Environmental	0	
Social	1	
Administrative	1	
Multi-Hazard	1	
Timeline	0	
Agency Champion	1	
Other Community Objectives	0	
Total	9	
Priority (H/M/L)	High	

Action Number:

V. Piermont -15

Mitigation Action Name:

Initiate an introduction meeting with local utilities to improve resilience

Assessing the Risk	
Hazard(s) addressed:	All Hazard
Specific problem being mitigated:	Utilities can be susceptible to various hazards and can cause complications during and after an event if damaged.
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	No Action - current problem continues Ask local universities and colleges to work with utilities – may not be feasible/willing
Action/Project Intended for Implementation	
Description of Selected Action/Project	The Village needs to understand/inform the utilities' plans in relation to communication protocols and infrastructure's operational and physical resilience to future storms and floods. Items to discuss: utility shutoff and turn-on protocols, timing upgrades to subsurface infrastructure, and relocating overhead utilities to underground.
Mitigation Action Type	SIP
Goals Met	1, 2, 4, 6
Applies to existing and or new development, or not applicable	N/A
Benefits (losses avoided)	High
Estimated Cost	Low
Priority*	High
Plan for Implementation	
Responsible Organization	Village Board
Local Planning Mechanism	Hazard Mitigation, Public Education
Potential Funding Sources	Municipal budget
Timeline for Completion	Short
Reporting on Progress	
Date of Status Report/ Report of Progress	No progress, new action

Action Number:

V. Piermont -15

Mitigation Action Name:

Initiate an introduction meeting with local utilities to improve resilience

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

Action Number:

V. Piermont -16

Mitigation Action Name:

Establish a permanent Flooding and Storm Resilience Committee

Assessing the Risk	
Hazard(s) addressed:	All Hazard
Specific problem being mitigated:	The Village does not have a Flooding and Storm Resilience Committee
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	No Action - current problem continues Establish a temporary Committee – does not support longterm goals
Action/Project Intended for Implementation	
Description of Selected Action/Project	This committee will work to ensure implementation of Task Force recommendations, support long-range planning, and track and publicize the village's progress toward meeting the goals of the recommendations of the Resilience Roadmap: Planning for Piermont's Future.
Mitigation Action Type	LPR
Goals Met	1, 2, 3, 4, 6
Applies to existing and or new development, or not applicable	N/A
Benefits (losses avoided)	High
Estimated Cost	Low
Priority*	High
Plan for Implementation	
Responsible Organization	Village Board
Local Planning Mechanism	Hazard Mitigation
Potential Funding Sources	Municipal budget
Timeline for Completion	Short
Reporting on Progress	
Date of Status Report/ Report of Progress	No progress, new action

Action Number:

V. Piermont -16

Mitigation Action Name:

Establish a permanent Flooding and Storm Resilience Committee

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

Action Number:

V. Piermont -17

Mitigation Action Name:

The Postoffice in Piermont is identified as a critical facility and vulnerable to the flood hazard as per the Rockland County HMP risk assessment.

Assessing the Risk	
Hazard(s) addressed:	Flood
Specific problem being mitigated:	Critical facilities located in the floodplain are not only susceptible to flood damage but also create unnecessary complications for the municipality during an emergency event and post-disaster recovery.
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	No Action - current problem continues Village to hire an outside contractor to conduct outreach to the Post Office and evaluate mitigation options - cost
Action/Project Intended for Implementation	
Description of Selected Action/Project	<p>Critical facilities in the Village are vulnerable to the flood hazard as per the Rockland County HMP risk assessment.</p> <ul style="list-style-type: none"> - Piermont Post Office - Fire Department Boathouse - Public Library - Piermont DPW <p>For the facilities that the Village has jurisdiction, the Village will evaluate and determine next actions in terms of a feasible and cost-effective mitigation action. For the facilities that the Village does not have jurisdiction over this facility to mitigate, the Village will notify the facility manager/operator regarding the flood vulnerability, potential mitigation actions to reduce flood losses and potential funding sources for implementation. The owners/operators will need to evaluate and determine next actions in terms of a feasible and cost-effective mitigation action. The Village will inform the owners/operators that NYS requires mitigation address the 500-year flood event or “worst damage scenario”.</p> <p>Potential mitigation actions may include elevation of structure or critical mechanics, relocate critical records to higher ground within building or relocate facility outside of the floodplain.</p>
Mitigation Action Type	SIP
Goals Met	1, 2, 4, 6
Applies to existing and or new development, or not applicable	Existing
Benefits (losses avoided)	High
Estimated Cost	Low
Priority*	High
Plan for Implementation	
Responsible Organization	Village Board

Local Planning Mechanism	Hazard Mitigation, Public Education
Potential Funding Sources	Municipal budget
Timeline for Completion	Short
Reporting on Progress	
Date of Status Report/ Report of Progress	No progress, new action

Action Number:

V. Piermont -17

Mitigation Action Name:

The Postoffice in Piermont is identified as a critical facility and vulnerable to the flood hazard as per the Rockland County HMP risk assessment.

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	
Property Protection	1	
Cost-Effectiveness	1	
Technical	1	
Political	0	
Legal	1	
Fiscal	0	
Environmental	0	
Social	0	
Administrative	1	
Multi-Hazard	0	
Timeline	0	
Agency Champion	0	
Other Community Objectives	0	
Total	6	
Priority (H/M/L)	High	

Action Number:

V. Piermont-18

Mitigation Action Name:

Install breakwaters at Fire Department Boathouse; Investigate replacing existing bouthouse doors with heavy duty doors

Assessing the Risk	
Hazard(s) addressed:	Flood
Specific problem being mitigated:	Critical facilities located in the floodplain are not only susceptible to flood damage but also create unnecessary complications for the municipality during an emergency event and post-disaster recovery.
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	No Action - current problem continues Move Boathouse to new location with less wave exposure – not feasible
Action/Project Intended for Implementation	
Description of Selected Action/Project	Installation of bearkwaters (stones) to help dissipate velocity of the waves; Replacing doors would help to prevent floodwaters from entering the facility.
Mitigation Action Type	SIP
Goals Met	1, 2, 4, 6
Applies to existing and or new development, or not applicable	Existing
Benefits (losses avoided)	High
Estimated Cost	High
Priority*	High
Plan for Implementation	
Responsible Organization	Village Board
Local Planning Mechanism	Hazard Mitigation
Potential Funding Sources	Municipal budget
Timeline for Completion	Short (DOF)
Reporting on Progress	
Date of Status Report/ Report of Progress	No progress, new action

Action Number:

V. Piermont-18

Mitigation Action Name:

Install breakwaters at Fire Department Boathouse; Investigate replacing existing boathouse doors with heavy duty doors

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

Action Number:

V. Piermont-19

Mitigation Action Name:

Elevate the electrical components of the DPW to protect up to the 500-year flood elevation.

Assessing the Risk	
Hazard(s) addressed:	Flood
Specific problem being mitigated:	Critical facilities located in the floodplain are not only susceptible to flood damage but also create unnecessary complications for the municipality during an emergency event and post-disaster recovery.
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	No Action - current problem continues Elevate to 100-year flood elevation – does not meet standards
Action/Project Intended for Implementation	
Description of Selected Action/Project	Determine the 500-year flood elevation at the DPW and elevate the electrical components to protect against damage from flood waters.
Mitigation Action Type	SIP
Goals Met	1, 2, 4, 6
Applies to existing and or new development, or not applicable	Existing
Benefits (losses avoided)	High
Estimated Cost	High
Priority*	High
Plan for Implementation	
Responsible Organization	Village Board
Local Planning Mechanism	Hazard Mitigation
Potential Funding Sources	Municipal budget
Timeline for Completion	Short (DOF)
Reporting on Progress	
Date of Status Report/ Report of Progress	No progress, new action

Action Number:

V. Piermont-19

Mitigation Action Name:

Elevate the electrical components of the DPW to protect up to the 500-year flood elevation.

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