SECTION 9. JURISDICTIONAL ANNEXES

9.15 VILLAGE OF PIERMONT

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

9.15.1 Hazard Mitigation Planning Team

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

Table 9.15-1 summarizes Village officials who participated in the development of the annex and in what capacity. Additional documentation of the Village's planning activities through Planning Partnership meetings is included in Volume I.

Table 9.15-1. Hazard Mitigation Planning Team

Primary Point of Contact	Alternate Point of Contact
Name/Title: Nathan Mitchell, Trustee and Committee Member	Name/Title: Jennifer DeYorgi, Village Clerk and Treasurer
Address: 478 Piermont Ave. Piermont NY 10968	Address: 478 Piermont Ave. Piermont NY 10968
Phone Number: 845-359-1258	Phone Number: 845-359-1258 x303
Email: nmitchell@piermont-ny.gov	Email: clerk@piermont-ny.gov
National Flood Insurance Program Floodplain Administrator	
Name/Title: Ken DeGennaro, Village Engineer	
Address: 478 Piermont Ave. Piermont NY 10968	
Phone Number:845-357-4411 x118	
Email: 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 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. The Village is governed by the Village Board, which consists of the Mayor and four Trustees.



Research has shown that some populations are at greater risk from hazard events because of decreased resources or physical abilities. These populations can be more susceptible to hazard events based on a number of factors including their physical and financial ability to react or respond during a hazard, and the location and construction quality of their housing. Data from the 2017-2021 American Community Survey indicates that 5.6 percent of the population is 5 years of age or younger, 21.3 percent is 65 years of age or older, 5.6 percent is non-English speaking, 1.9 percent is below the poverty threshold, and 7.2 percent is considered disabled.

9.15.3 Jurisdictional Capability Assessment and Integration

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

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

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

Planning, Legal, and Regulatory Capability and Integration

Table 9.15-2 summarizes the regulatory tools that are available to Piermont.

Table 9.15-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	Citation and Date (code chapter or name of plan, date of enactment or plan adoption)	Authority (local, county, state, federal)	•
Codes, Ordinances, & Regulation	S			
Building Code	Yes	NYS Building Code	State and Local	Building Department

How has or will this be integrated with the HMP and how does this reduce risk?

The NYS Building Code is intended to establish provisions that adequately protect public health, safety, and welfare through the minimum requirements for building systems using prescriptive and performance-related provisions. It is founded on broad-based principles that make possible the use of new materials and new building designs. The 2020 edition is an update to the 2018 edition published by the ICC. It is part of the Uniform Fire Prevention and Building Code.





	Jurisdiction has this? (Yes/No)	Citation and Date (code chapter or name of plan, date of enactment or plan adoption)	Authority (local, county, state, federal)	Responsible Person, Department or Agency
Zoning/Land Use Code	Yes	Chapter 210 – Zoning (12/15/1998)	Local	Building Department and Planning Board
	promote the health,	ow does this reduce risk? cafety, morals, and general welfare of th use of land throughout the Village of Pi		conserving land and
Subdivision Code	Yes	Chapter 174 – Subdivision of Land (7/15/2003)	Local	Planning Board
and to approve the developmen	ving lots, blocks, or sit t of plats, entirely or p age Planning Board mu	es, with or without streets or highways, artially undeveloped and which have be ast consider land subdivision regulations	en filed in the of	ffice of the County Clerk of
Site Plan Code	Yes	Chapter 210 – Zoning (6/20/1977)	Local	Planning Board, Building Department and Village Engineer
	promote the health,	ow does this reduce risk? cafety, morals, and general welfare of th use of land throughout the Village of Pi		conserving land and
Stormwater Management Code	Yes	Chapter 169 (9/25/2007)-170 – Stormwater Control, Stormwater Management (9/21/2010)	State and Local	Planning Board and Villag Engineer
safety, and welfare of the public	um stormwater manag residing within the Vi on of non-stormwater	gement requirements and controls to pr llage. discharges to the municipal separate st		
Post-Disaster Recovery/ Reconstruction Code	No	-	-	-
How has or will this be integrated N/A	d with the HMP and h	ow does this reduce risk?		
Real Estate Disclosure	Yes	New York State (NYS) mandate, Property Condition Disclosure Act, NY Code – Article 14 §460-467	State and Local	NYS Department of State
disclosures under the law or pay	bility for failing to disc a credit of \$500 to the it to the buyer before	close under the exceptions to "caveat er e buyer at closing. While the PCDA requ e the buyer signs the final purchase cont	ires a seller to co	mplete a standardized
Growth Management	No	-	-	-
How has or will this be integrate N/A	d with the HMP and h	ow does this reduce risk?		
Environmental Protection	Yes	Chapter 210, Article XIX – Environmentally Sensitive Sites or Features (10/21/2008)	Local	Village Board
appropriate land use controls to	d with the HMP and hones special protection ensure that said featu	Features (10/21/2008)	mpacts through t	the imposition of ce protects watercours

and waterfront areas within the Village, as well as floodways, the Clauseland Mountain ridgeline, steep slope areas, and more.





	Jurisdiction has this? (Yes/No)	Citation and Date (code chapter or name of plan, date of enactment or plan adoption)	Authority (local, county, state, federal)	Responsible Person, Department or Agency
Flood Damage Prevention Ordinance	Yes	Chapter 112 – Flood Damage Prevention, CFR60 (12/17/2013)	Federal, State, Local	Floodplain Administrator
	promote the public hea of the Village. The FDP	w does this reduce risk? alth, safety, and general welfare, and t O regulates alteration of natural flood		
Wellhead Protection	No	-	-	-
How has or will this be integrated N/A	l with the HMP and how	w does this reduce risk?		
Emergency Management Ordinance	No	-	-	-
How has or will this be integrated N/A	d with the HMP and hov	w does this reduce risk?		
Climate Change Ordinance	No	-	-	-
How has or will this be integrated N/A	with the HMP and how	w does this reduce risk?		
Other: Freeboard	Yes	State mandated BFE+2 for single and two-family residential construction, BFE+1 for all other construction types	State and Local	Floodplain Administrator
How has or will this be integrated				
	ed BFE+2 for single and	two-family residential construction, B	FE+1 for all othe	r construction types
Planning Documents	1			
	Yes	Master Plan (2023)	FE+1 for all othe	r construction types Village Board
Planning Documents General/Comprehensive Plan How has or will this be integrated. The master plan outlines the Village and be and next steps include drafting a feedback. As of writing this plan, the Village and sustainability in the era of cli	Yes If with the HMP and how age's goals for safe com uilds on themes identif series of goals and imp If has completed a first of mate change. The Villa	Master Plan (2023)	Local evelopment. This on Plan (LWRP). e Village based or an that focuses of	Village Board s plan was recommended This plan is still underway, n public and stakeholder on resiliency, mitigation, ents from NSY DOC and
Planning Documents General/Comprehensive Plan How has or will this be integrated. The master plan outlines the Village and be and next steps include drafting a feedback. As of writing this plan, the Village and sustainability in the era of cli	Yes If with the HMP and how age's goals for safe com uilds on themes identif series of goals and imp If has completed a first of mate change. The Villa	Master Plan (2023) w does this reduce risk? munity development and economic de ied in the Local Waterfront Revitalizati elementation recommendations for the draft of an updated Comprehensive Pla ge received funding from FEMA's BRIC	Local evelopment. This on Plan (LWRP). e Village based or an that focuses of	Village Board s plan was recommended This plan is still underway, n public and stakeholder on resiliency, mitigation, ents from NSY DOC and
Planning Documents General/Comprehensive Plan How has or will this be integrated. The master plan outlines the Village and be and next steps include drafting a feedback. As of writing this plan, the Village and sustainability in the era of cli NYS DEC to complete this work. T Capital Improvement Plan How has or will this be integrated.	Yes If with the HMP and how age's goals for safe com- uilds on themes identification series of goals and import the has completed a first of mate change. The Villa The updated plan integrity Yes If with the HMP and how	Master Plan (2023) w does this reduce risk? Immunity development and economic delied in the Local Waterfront Revitalization recommendations for the draft of an updated Comprehensive Plage received funding from FEMA'S BRIC rates many aspects of mitigation review. Informal List	evelopment. This on Plan (LWRP). e Village based on an that focuses of Program and grawed in this HMP	village Board plan was recommended This plan is still underway, public and stakeholder resiliency, mitigation, ents from NSY DOC and update. Department of Public Work and Engineering
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Planning Documents General/Comprehensive Plan How has or will this be integrated. The master plan outlines the Village and be and next steps include drafting a feedback. As of writing this plan, the Village and sustainability in the era of cli NYS DEC to complete this work. T Capital Improvement Plan How has or will this be integrated.	Yes If with the HMP and how age's goals for safe com- uilds on themes identifications are has completed a first of the updated plan integral Yes If with the HMP and how mal list of projects whice	Master Plan (2023) w does this reduce risk? Immunity development and economic desired in the Local Waterfront Revitalization recommendations for the draft of an updated Comprehensive Plage received funding from FEMA's BRIC rates many aspects of mitigation review. Informal List w does this reduce risk? the are overseen by the Department of	evelopment. This on Plan (LWRP). e Village based on an that focuses of Program and grawed in this HMP	village Board plan was recommended This plan is still underway, public and stakeholder resiliency, mitigation, ents from NSY DOC and update. Department of Public Work and Engineering
Planning Documents General/Comprehensive Plan How has or will this be integrated. The master plan outlines the Village and be and next steps include drafting a feedback. As of writing this plan, the Village and sustainability in the era of cli NYS DEC to complete this work. T Capital Improvement Plan How has or will this be integrated. The CIP for the Village is an informal plan How has or will this be integrated. The CIP for the Village is an informal plan How has or will this be integrated.	Yes If with the HMP and how age's goals for safe com- uilds on themes identifications are has completed a first of the updated plan integral Yes If with the HMP and how mal list of projects whice	Master Plan (2023) w does this reduce risk? Immunity development and economic desired in the Local Waterfront Revitalization recommendations for the draft of an updated Comprehensive Plage received funding from FEMA's BRIC rates many aspects of mitigation review. Informal List w does this reduce risk? the are overseen by the Department of	evelopment. This on Plan (LWRP). e Village based on an that focuses of Program and grawed in this HMP	village Board plan was recommended This plan is still underway, public and stakeholder resiliency, mitigation, ents from NSY DOC and update. Department of Public Work and Engineering





	Jurisdiction has	Citation and Date (code chapter or name of plan, date	Authority (local, county,	Responsible Person,
	this? (Yes/No)	of enactment or plan adoption)	state, federal)	Department or Agency
Stormwater Management Plan	No	-	-	-
How has or will this be integrated N/A	d with the HMP and hov	v does this reduce risk?		
Open Space Plan	No	-	-	-
How has or will this be integrated N/A	d with the HMP and hov	v does this reduce risk?		
Urban Water Management Plan	Yes	Local Waterfront Revitalization Plan (LWRP) (2018)	Local	Village Board
	the Resiliency Task Forc unity outreach. This pla	e that was formed immediately after s n provides recommended legislative a		
Habitat Conservation Plan	No	-	-	-
How has or will this be integrated N/A	d with the HMP and hov	v does this reduce risk?		
Economic Development Plan	No	-	-	-
How has or will this be integrated N/A	d with the HMP and hov	v does this reduce risk?		
Community Wildfire Protection Plan	No	-	-	-
How has or will this be integrated N/A	d with the HMP and hov	v does this reduce risk?		
Community Forest Management Plan	No	-	-	-
How has or will this be integrated How has or will this be integrated N/A				
Transportation Plan	No	-	_	-
How has or will this be integrated N/A	d with the HMP and hov	v does this reduce risk?		
Agriculture Plan	No	-	-	-
How has or will this be integrated N/A	d with the HMP and hov	v does this reduce risk?		
Climate Action/ Resiliency/Sustainability Plan	No	-	-	-
How has or will this be integrated N/A	d with the HMP and hov	v does this reduce risk?		
Tourism Plan	No	-	-	-
How has or will this be integrated N/A	d with the HMP and hov	v does this reduce risk?		
Business/ Downtown Development Plan	No	-	-	-
How has or will this be integrated N/A	d with the HMP and hov	v does this reduce risk?		





	Jurisdiction has this? (Yes/No)	Citation and Date (code chapter or name of plan, date of enactment or plan adoption)	Authority (local, county, state, federal)	Responsible Person, Department or Agency
Other (for example NYRCR, etc.)	No	-	-	-
How has or will this be integrated N/A	d with the HMP and ho	w does this reduce risk?		
Response/Recovery Planning				
Comprehensive Emergency Management Plan	No	-	-	-
How has or will this be integrated N/A	d with the HMP and ho	w does this reduce risk?		
Continuity of Operations Plan	No	-	-	-
How has or will this be integrated N/A	l with the HMP and ho	w does this reduce risk?		
Substantial Damage Response Plan	No	-	-	-
How has or will this be integrated N/A	d with the HMP and ho	w does this reduce risk?		
Threat & Hazard Identification & Risk Assessment	No	-	-	-
How has or will this be integrated N/A	with the HMP and ho	w does this reduce risk?		
Post-Disaster Recovery Plan	No	-	-	-
How has or will this be integrated N/A	l with the HMP and ho	w does this reduce risk?		
Public Health Plan	No	-	-	-
How has or will this be integrated N/A	with the HMP and ho	w does this reduce risk?		
Other	No	_	-	-
How has or will this be integrated N/A	with the HMP and ho	w does this reduce risk?		

Development and Permitting Capability

Table 9.15-3 summarizes the capabilities of Piermont to oversee and track development.

Table 9.15-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
If you issue development permits? If you issue development permits, what department is responsible? If you do not issue development permits, what is your process for tracking new development?	Yes	The Building Department is responsible for issuing development permits and tracking new development.
Are permits tracked by hazard area? (For example, floodplain development permits.)	No	



Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you have a buildable land inventory? • If you have a buildable land inventory, please describe	No	
Describe the level of build-out in your jurisdiction.	N/A	The Village practices sustainable build-out to ensure safe growth and development of lands within the Village.

Administrative and Technical Capability

Table 9.15-4 summarizes potential staff and personnel resources available to Piermont and their current responsibilities that contribute to hazard mitigation.

Table 9.15-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Administrative Capability		
Planning Board	Yes	The Planning Board meets on the second Monday of each month at 7:00 p.m. in the meeting room at Village Hall. The Planning Board reviews and approves applications for subdivisions and site plans.
Zoning Board of Adjustment	Yes	The Zoning Board of Appeals (ZBA) meets on a third or fourth Thursday (depending on Holidays) of each month at 7:00pm in the Meeting Room in the Village Hall. The Zoning Board of Appeal (ZBA) is an administrative body designed to interpret and to ensure the validity of Piermont Zoning Code and to make determinations on applications for variances from the Code. Piermont zoning code is the community's guide to its future development and affords the residents and property owners within the community protection from undesirable development. In reviewing the applications for variances, the goal is to avoid incompatibility and to regulate land use, density, and placement of structures, among other issues in a manner consistent with the Code.
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	The Department of Public Works of the Village of Piermont has a wide range of responsibilities which are all directed towards the maintenance of the Village infrastructure and the delivery of Village services. The Department of Public Works consists of seven full-time employees whose duties include maintenance of vehicles, general street and road repairs, maintenance of sidewalks, garbage and trash collection, leaf removal, street sweeping, park maintenance, storm drain maintenance, building maintenance and snow plowing.
Construction/Building/Code Enforcement Department	Yes	The Building Department reviews plans and conducts field inspections to ensure compliance with various codes and regulations pertaining to land use and construction on private property. Before beginning any project, consult the building department to determine what permits may be needed.

	Available?	Comments
Resources	(Yes/No)	(available staff, responsibilities, support of hazard mitigation)
Emergency Management/Public Safety Department		Piermont Fire Department offers fire and EMS services to the Village; the department is also trained in hazardous materials.
	Yes	The Piermont Police Department seeks to provide the highest level of public service and safety to ensure the quality of life for all Village residents and everyone who passes through the Village by protecting life and property, preventing crime, enforcing laws, and maintaining order for all citizens.
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	Yes	The Department of Public Works of the Village of Piermont has a wide range of responsibilities which are all directed towards the maintenance of the Village infrastructure and the delivery of Village services. The Department of Public Works consists of seven full-time employees whose duties include maintenance of vehicles, general street and road repairs, maintenance of sidewalks, garbage and trash collection, leaf removal, street sweeping, park maintenance, storm drain maintenance, building maintenance and snow plowing.
Mutual aid agreements	No	-
Human Resources Manual - Do any job descriptions specifically include identifying or implementing mitigation projects or other efforts to reduce natural hazard risk?	No	-
Other: Piermont Waterfront Resiliency Commission	Yes	The Piermont Waterfront Resilience Task Force (PWRTF) was launched after Superstorm Sandy in November 2013 to begin the work of creating a more resilient waterfront. Based on the resilience roadmap outlined by the Task Force, in 2014 the Village created a permanent Village Commission (Piermont Waterfront Resiliency Commission) with the goal of continuing to inform residents and plan for, fund, and build a more resilient future for Piermont.
Other: Sustainable Piermont	Yes	Sustainable Piermont is a community initiative to protect and improve our environment, mitigate the effects of climate change, and lower the Village's greenhouse gas emissions.
Other: Parks Commission	Yes	The Village of Piermont parks provide both residents and visitors alike a valuable resource for everyone's enjoyment. The Village prides itself on having one of the most beautiful scenic areas along the mountains and the mighty Hudson River. Outdoor recreation plays a significant role in residents' lives and, as such, the Village strives to protect and beautify our natural resources and parks. All parks are free and open to the public.
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	Yes	Brooker Engineering - Consultant
Engineers or professionals trained in building or infrastructure construction practices	Yes	Department of Public Works and Brooker Engineering – Consultant
Planners or engineers with an understanding of natural hazards	Yes	Brooker Engineering –Consultant
Staff with expertise or training in benefit/cost analysis	Yes	Brooker Engineering - Consultant
Professionals trained in conducting damage assessments	Yes	Brooker Engineering - Consultant



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	Yes	Brooker Engineering - Consultant
Environmental scientist familiar with natural hazards	No	-
Surveyor(s)	Yes	Brooker Engineering - Consultant
Emergency Manager	No	-
Grant writer(s)	Yes	Sylvia Welch – Consultant
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Fiscal Capability

Table 9.15-5 summarizes financial resources available to Piermont.

Table 9.15-5. 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
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	Yes
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	No

Education and Outreach Capability

Table 9.15-6 summarizes the education and outreach resources available to Piermont.

Table 9.15-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	No	-
Personnel skilled or trained in website development	Yes	Contracted
Hazard mitigation information available on your website		Information can be found throughout the Village's website.



Outreach Resources	Available? (Yes/No)	Comment:
Social media for hazard mitigation education and outreach	Yes	The Village has Facebook and Instagram available to se for hazard mitigation education and outreach.
Citizen boards or commissions that address issues related to hazard mitigation	Yes	Piermont Waterfront Resiliency Commission, Sustainable Piermont, Parks Commission
Warning systems for hazard events	Yes	The County utilizes NY-Alert and CodeRed (the backup to NY-Alert) for emergency notifications (all Towns and Villages have access to it).
Natural disaster/safety programs in place for schools	No	-
Organizations that conduct outreach to socially vulnerable populations and underserved populations	No	-
Public outreach mechanisms / programs to inform citizens on natural hazards, risk, and ways to protect themselves during such events	Yes	-
If yes, please describe.	N/A	The Village performs educational outreach through the MS4 program.

Community Classifications

Table 9.15-7 summarizes classifications for community programs available to Piermont.

Table 9.15-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
New York State Department of Environmental Conservation (NYSDEC) Climate Smart Community	Yes	Bronze	September 26, 2019
National Weather Service Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other: Organizations with mitigation focus (advocacy group, non-government)	No	-	-

N/A = Not applicable

— = Unavailable

Adaptive Capacity

Adaptive capacity is defined as "the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences" (IPCC, 2022). Each jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. Table 9.15-8 summarizes the adaptive capacity for each identified hazard of concern and the Village's capability to address related actions using the following classifications:

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



Table 9.15-8. Adaptive Capacity

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

9.15.4 National Flood Insurance Program Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the National Flood Insurance Program (NFIP). The floodplain administrator listed in Table 9.15-1 is responsible for maintaining this information.

NFIP Summary

Table 9.15-9 summarizes the NFIP statistics for Piermont.

Table 9.15-9. Village of Piermont NFIP Summary of Policy and Claim Statistics

# Policies	97
# Claims (Losses)	131
Total Loss Payments	\$4,725,881
# Repetitive Loss Properties (NFIP definition)	2
# Repetitive Loss Properties (FMA definition)	15
# Severe Repetitive Loss Properties	3
# Policies Within the 1 percent Annual Chance Flood Boundary	3

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

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

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

Source: FEMA, December 2023

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

Flood Vulnerability Summary

Table 9.15-10 provides a summary of the NFIP program in Piermont.



Table 9.15-10. NFIP Summary

NFIP Topic	Comments
Flood Vulnerability Summary	
Describe areas prone to flooding in your jurisdiction.	52.5 percent of Piermont is mapped by FEMA as being in the 100- or 500-year flood plain (ABFE FEMA Maps adopted in 2014). The Village has adopted the same maps "Special Flood Hazard Area."
Do you maintain a list of properties that have been damaged by flooding?	The Village does not currently keep a list of properties damaged by flooding.
Do you maintain a list of property owners interested in flood mitigation?	The Village has a Neighbor-to-Neighbor list.
How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)?	Approximately 70 people listed.
Are any RiskMAP projects currently underway in your jurisdiction? If so, state what projects are underway.	The Village of Piermont is working on a Comprehensive Plan and has MS4 yearly reports.
How do you make Substantial Damage determinations?	The Building Department in compliance with the New York State Building Code adopted in 2020.
How many Substantial Damage determinations were declared for recent flood events in your jurisdiction?	Unknown, at this time.
How many properties have been mitigated (elevation or acquisition) in your jurisdiction? If there are mitigation properties, how were the projects funded?	12 properties mitigated, zero acquired. Funded privately by homeowners.
Do your flood hazard maps adequately address the flood risk within your jurisdiction? If not, state why.	Yes, the flood hazard maps address the flood risk within the Village.
NFIP Compliance	
What local department is responsible for floodplain management?	The Village Building Department.
Are any certified floodplain managers on staff in your jurisdiction?	Yes, the Village has certified floodplain managers on staff.
Do you have access to resources to determine possible future flooding conditions from climate change?	Yes, but they can use improvement.
Does your floodplain management staff need any assistance or training to support its floodplain management program? • If so, what type of assistance/training is needed?	Yes, the Village needs additional training that is available for floodplain management.
Provide an explanation of NFIP administration services you provide (e.g., permit review, GIS, education/outreach, inspections, engineering capability)	The Village has permit and engineering review and requires elevation certificate for any work done in a flood plain. The Village also do community outreach.
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	This is codified in the Village Flood Damage Prevention chapter as 50 percent or more of the assessed value of the home.
What are the barriers to running an effective NFIP program in the community, if any?	Budget is a challenge.
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? • If so, state the violations.	None, at this time.
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?	November 8, 2018



NFIP Topic	Comments
What is the local law number or municipal code of your flood damage prevention ordinance?	Chapter 120, 2014. The Village currently has a pending amendment.
What is the date that your flood damage prevention ordinance was last amended?	2014
Does your floodplain management program meet or exceed minimum requirements? • If exceeds, in what ways?	Yes, the floodplain management programs meet the minimum requirements at this time.
Are there other local ordinances, plans or programs (e.g., site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions?	Yes, the Village Planning Board does this in the site-review process
Does your community plan to join the CRS program or is your community interested in improving your CRS classification?	Yes, the Village would like to join the CRS program but is insufficiently staffed to meet the compliance requirements

9.15.5Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction's overall risk to its hazards of concern. Recent and expected future development trends, including major residential/commercial development and major infrastructure development, are summarized in Table 9.15-11 through Table 9.15-13.

Table 9.15-11. Number of Building Permits for New Construction Issued Since the Previous HMP

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

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

Table 9.15-12. Recent Major Development and Infrastructure from 2018 to Present

Property or Development Name	Type of Development	# of Units / Structures	Location (address and/or block and lot)	Known Hazard Zone(s)*	Description / Status of Development
No major development and infrastructure reported.					

^{*} Only location-specific hazard zones or vulnerabilities identified.



Table 9.15-13. Known or Anticipated Major Development and Infrastructure in the Next Five Years

Property or Development Name	Type of Development	# of Units / Structures	Location (address and/or block and lot)	Known Hazard Zone(s)*	Description / Status of Development
No major development or infrastructure anticipated.					
		No maior developi	ment or intrastructure	e anticipated.	

^{*} Only location-specific hazard zones or vulnerabilities identified.

9.15.6 Jurisdictional Risk Assessment

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

Hazard Area

Hazard area maps provided below illustrate the probable hazard areas impacted within the Village are shown in Figure 9.15-1 and Figure 9.15-2. These maps are based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps are provided only for hazards that can be identified clearly using mapping techniques and technologies and for which Piermont has significant exposure. The maps show the location of potential new development, where available.

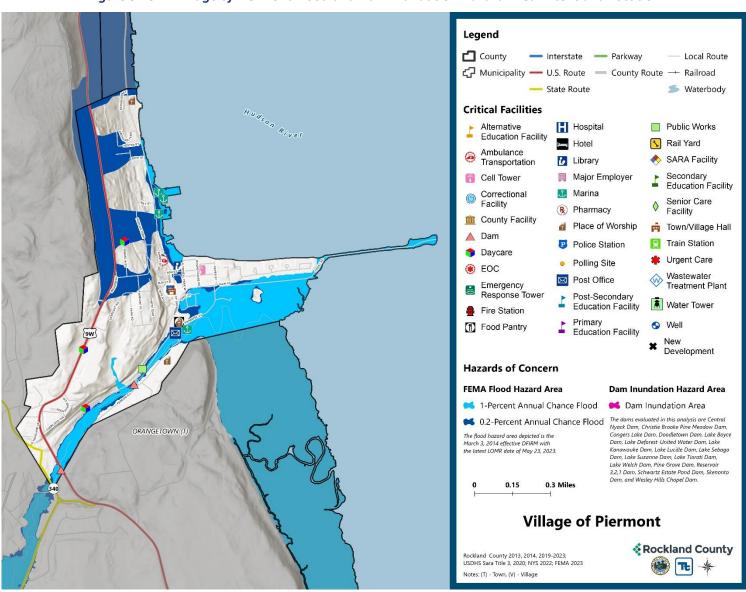


Figure 9.15-1. Village of Piermont Flood and Dam Inundation Hazard Area Extent and Location

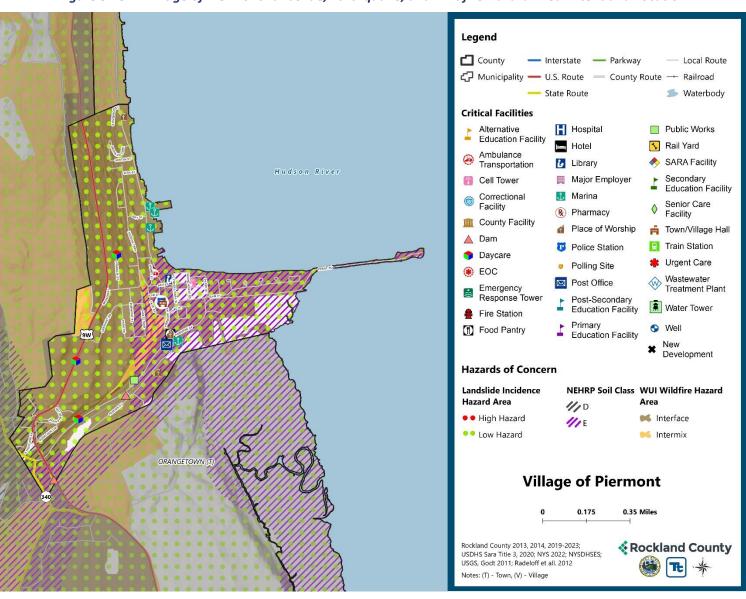


Figure 9.15-2. Village of Piermont Landslide, Earthquake, and Wildfire Hazard Area Extent and Location

Hazard Event History

The history of natural and non-natural hazard events in the Village of Piermont is detailed in Volume I, where each hazard profile includes a chronology of historical events that have affected the County and its municipalities. Table 9.15-14 provides details on loss and damage in the Village during hazard events since the last hazard mitigation plan update.

Table 9.15-14. Hazard Event History in the Village of Piermont

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Summary of Damage and Losses in the Village
Jan 20, 2020 - May 11, 2023	New York Covid-19 (3434-EM-NY, 4480- DR-NY)	Yes	The Covid-19 pandemic resulted in nationwide shutdowns, social distancing and masking requirements, and immunization efforts. Since the start of the pandemic, roughly 950 deaths have been reported in Rockland County. The federal Public Health Emergency expired in May 2023, but illness continues to occur as the virus shifts to becoming endemic.	Piermont experienced Covid positive cases and deaths during this time.
April 13, 2020	Extreme Wind	N/A	High winds across the county led to downed trees power outages, closed roads, and approximately \$200,000 in property damage.	Piermont was affected by this storm.
August 4, 2020	New York Tropical Storm Isaias (4567- DR-NY)	Yes	The center of Isaias passed about 65 miles west of New York City at 3 pm on August 4, 2020. Tropical storm force winds extended well east of the center of circulation. In addition, 1 to 3 inches of rainfall, highest west, were recorded across the county. These types of winds and rainfall across the area resulted in numerous trees and tree limbs being downed, power outages, damages to homes and automobiles, and disruption to transit.	The Village of Piermont experienced damage and flooding.
August 21-24, 2021	New York Hurricane Henri (3565-EM-NY)	Yes	Rainfall from Tropical Storm Henri resulted in widespread flash flooding across southeastern New York, particularly portions of the Lower Hudson Valley. Rainfall totals generally ranged from two to five inches, with this rain coming in addition to the two to five inches that fell during the predecessor rainfall event the night before.	The Village of Piermont experienced damage and flooding.
September 1-3, 2021	New York Remnants of Hurricane Ida (3572-EM-NY, 4615- DR-NY)	Yes	Extremely heavy rainfall associated with the remnants of Hurricane Ida overspread southeast New York during the evening of September 1 and continued through the early morning hours of September 2. Rainfall totals ranged from five to eight inches across much of the region, with much of that rain falling in just a few hours. This resulted in widespread catastrophic flash flooding.	The Village of Piermont experienced damage and flooding.

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Summary of Damage and Losses in the Village
July 9 – 10, 2023	Severe Storm	N/A		The Village of Piermont experienced damage and flooding.

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

Hazard Ranking and Vulnerabilities

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

Hazard Ranking

The participating jurisdictions have differing degrees of vulnerability to the hazards of concern, so each jurisdiction ranked its own degree of risk to each hazard. The community-specific hazard ranking is based on problems and impacts identified by the risk assessment presented in Volume I. The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; community capabilities to address the hazard; and changing future climate conditions. Piermont reviewed the County hazard ranking and individual results to assess the relative risk of the hazards of concern to the community. During the review of the hazard ranking, the Village agreed with the following hazard rankings included in Table 9.15-15.

Table 9.15-15 shows Piermont's final hazard rankings for identified hazards of concern. Mitigation action development uses the ranking to target hazards with the highest risk.

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

Table 9.15-15. Hazard Ranking

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

No

No

No

Critical Facilities

Table 9.15-16 identifies critical facilities in the community located in the 1 percent and 0.2 percent annual chance floodplains.

Exposure 0.2 Already Protected to 0.2 1 percent percent **Addressed by Proposed** percent Flood Level (describe protections) Name **Type Event Event** Action **Boss Pond Dam** Dam Yes Yes 2024-PiermontV-12 No Piermont Paper Company Dam Dam Yes Yes 2024-PiermontV-12 No

Yes

Yes

Yes

Yes

Yes

Yes

2024-PiermontV-12

2024-PiermontV-12

2024-PiermontV-12

Table 9.15-16. Critical Facilities Flood Vulnerability

Source: Rockland County 2023, FEMA

Piermont Post Office

T and R Marina, Inc.

Paradise Boats

There are no High Hazard Potential dams in the Village of Piermont, and none of the dam inundation areas intersect with the Village's boundaries.

Identified Issues

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

- Old drainage system cannot adequately manage stormwater flows and increases risk of flooding to residential area.
- Drainage issues occur every year needs to be cleaned constantly, if not cleared then the area will flood.
- The current comprehensive plan does not incorporate natural disaster mitigation techniques.
- Flood prone roads can inhibit emergency response and evacuation during a flood.
- The Village is not in the CRS program.
- The Village does not have a comprehensive emergency management plan.

Post Office

Marina

Marina

- 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.
- Sea level rise flooding of low-lying residential areas.
- Diminished capacity and structural integrity of T dock limits expansion of commercial and recreational river access and creates potential public safety issues. Future sea level rise and storm events threaten to damage current dock beyond repair.
- Waterfront Flooding along Hudson and Sparkill increasing in frequency.
- 52.5 percent of Piermont is in the 100- or 500-year floodplain.

9.15.7 Mitigation Strategy and Prioritization

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



Past Mitigation Initiative Status

Table 9.15-17 indicates progress on the Village's mitigation strategy identified in the 2019 HMP. Actions that are still recommended but not completed or that are in progress are carried forward and combined with new actions as part of the mitigation strategy for this plan update. Previous actions that are now ongoing programs and capabilities are indicated as such and are presented in the capability assessment earlier in this annex.

Additional Mitigation Efforts

In addition to the mitigation initiatives completed in Table 9.15-17, Piermont identified the following mitigation efforts completed since the last HMP:

- Constructed check valve on outfall by Bridge Street to prevent tidal backflow.
- Piermont Waterfront Resiliency Commission established in 2018.
- Installed backup generator for firehouse and created EOC communications center at firehouse, upgraded radio system.
 - Installed check valve for Paradise stormwater outflow.
- Continuing ongoing discussions with local utilities regarding resilience and recovery.
- Pursued relocation options for critical emergency services.
- Created topographic map with structures and ABFE, SLR scenarios.
- Publicized Stevens institute tide prediction site and Scenic Hudson SLR mapper.
- Sent notifications about hazards to residents via email and SMS.
- Created and curated PWRC social media presence with research and case studies of resilience building.
- Doors replaced at boathouse.
- Evaluated risks for village owned properties and suggested relocation options, pending funding.
- Informed residents and property owners of current flood risk and SLR estimates.
- Adopted 2020 NYS building code updates including ABFE.
- Amended building code to use updated ABFE maps and NY state freeboard +1-foot requirements for all new construction and substantial improvements.
- Drainage improvements made to north parking lot and upgraded outfall system.
- Planned for CRS qualification, updating codes and zoning regulations for enhanced resiliency. Met with consultants to determine plan of action.

Since the adoption of the County's first HMP, Piermont has made significant mitigation progress in the following areas:

- Public outreach and engagement.
- Nature-based solutions to hazard mitigation.
- Community Rating System qualification.
- Critical infrastructure upgrades.





Table 9.15-17. Status of Previous Mitigation Actions

Project Number	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the	Action Review 1. Status (In Progress, Ongoing Capability, No Progress, Complete) 2. Provide a narrative to describe progress or obstacles that have prevented implementation	Next Steps 1. Project to be included in the 2024 HMP or Discontinue 2. If including action in the 2024 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
Piermont-1	North Parking Lot Drainage Improvements	Flooding, Severe Storm	Engineering	Poor drainage and an inadequate outfall have increased the flood risk to the area. Upgrade or replace the inadequate drainage system and outfall to manage current stormwater runoff amounts.	Completed Check valve installed on outflow vault.	1. Discontinue 2. N/A 3. Completed
Piermont-2	Paradise Avenue Outfall Modifications	Flooding, Severe Storm	Engineering	Tidal backflow is entering the outfall and causing flooding in the surrounding residential area. Check valve and berm will be constructed to prevent the backflow of water during high tide.	Completed Check valve for Paradise stormwater outflow installed	Discontinue N/A Completed
Piermont-3	Drainage Improvements to Erie Path	Flooding, Severe Storm	Engineering	Old drainage system cannot adequately manage stormwater flows and increases risk of flooding to residential area. Upgrade or replace the out-of-date drainage system to manage current stormwater runoff amounts.		I. Include Pending BRIC funding award - Upgrade or replace the out-of-date drainage system to manage current stormwater runoff amounts. N/A





Project Number	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the	Action Review 1. Status (In Progress, Ongoing Capability, No Progress, Complete) 2. Provide a narrative to describe progress or obstacles that have prevented implementation	Next Steps 1. Project to be included in the 2024 HMP or Discontinue 2. If including action in the 2024 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
Piermont-4	Bridge Street Outfall Modifications	Flooding, Severe Storm	Engineering	Tidal backflow is entering the outfall and causing flooding in the surrounding residential area. Check valve and berm will be constructed to prevent the backflow of water during high tide.	Completed Check valve installed on outflow vault	Discontinue N/A Completed
Piermont-5	Drainage Improvements to Tweed Blvd. to Route 9W	Flooding, Severe Storm	Engineering	Drainage issues occur every year - needs to be cleaned constantly, if not cleared then the area will flood. Improvements will be made to ensure debris cannot block stormwater flows.	In Progress Seeking funding for engineering study	Include Pending funding award for engineering study to conduct improvements to drainage areas on Tweed Blvd. to Route 9W to ensure debris cannot block stormwater flows. N/A
Piermont-6	Comprehensive Plan Update	All Hazards	CPG member; Village Trustee	The current comprehensive plan does not incorporate natural disaster mitigation techniques. Ensure that local comprehensive plans incorporate natural disaster mitigation techniques through a courtesy review or draft plans by the County Planning Department.	In Progress Seeking funding to develop a comprehensive master plan incorporating SLR and climate change related fluvial and riverine flood. DOS and FEMA BRIC funding secured; RFP issued	Include Pending additional funding for comprehensive master plan to incorporate sea level rise and climate change related fluvial and riverine flood. DOS and FEMA BRIC funding secured; RFP issued. N/A





Project Number	Project Name	Hazard(s) Addressed	Responsible Party		Action Review 1. Status (In Progress, Ongoing Capability, No Progress, Complete) 2. Provide a narrative to describe progress or obstacles that have prevented implementation	Next Steps 1. Project to be included in the 2024 HMP or Discontinue 2. If including action in the 2024 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.					
Piermont-7	GIS Online Mapping	All Hazards	CPG member; Village Trustee	Lack of public knowledge on the spatial extent of hazards. Provide GIS hazard information online for residents and others in the community to view the Village's hazard vulnerabilities.	Completed Create topographic map with structures and ABFE, SLR scenarios. Publicize Stevens institute tide prediction site and Scenic Hudson SLR mapper. Send notifications about hazards to residents via email and SMS. Create and curate PWRC social media presence with research and case studies of resilience building	1. Discontinued 2. N/A 3. Completed					
Piermont-8	Maintain List of Repetitive Flood Property	Flooding, Severe Storm	CPG member; Village Trustee	Repetitively flooded properties place an undue stress on the property owner and village and efforts should be made to mitigate them. Identify and document repetitively flooded properties. Work with owners to explore mitigation opportunities for repetitively flooded properties, and if appropriate and feasible, carry out acquisition, relocation, elevation and floodproofing measures to protect these properties.	1. Ongoing 2. Identified NFIP rep loss properties and rep loss properties not insured by NFIP. Created program to train residents to facilitate adaptation conversations with neighbors in impacted areas. Administered programs to disseminate information about adaptation, mitigation, and relocation to residents. Create mailing list for X zone residents and sent out mailing advising to consider flood insurance. Published article in local newsletter	1. Discontinue 2. N/A 3. Ongoing capability					



Project Number	Project Name	Hazard(s) Addressed	Responsible Party	Original Problem and the	Action Review 1. Status (In Progress, Ongoing Capability, No Progress, Complete) 2. Provide a narrative to describe progress or obstacles that have prevented implementation	Next Steps 1. Project to be included in the 2024 HMP or Discontinue 2. If including action in the 2024 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
Piermont-9	Flood Prone Road Mitigation Measures	Flooding, Severe Storm	CPG member; Village Trustee	Flood prone roads can inhibit emergency response and evacuation during a flood. Develop specific mitigation solutions for flood prone road systems (roads, bridges, intersections, drainage, etc.) under the leadership of County DPW.	In Progress 2. 2018 Ferry Road elevation 2021 interagency meeting - County, DOT, Orangetown - requested specific and general stormwater management improvements on Tweed Blvd. (County), 9w(DOT), and River Road (County) 2022 shoreline stabilization and erosion mitigation on south side of pier 2023 salt tolerant tree and shrub plantings on north and south side of pier to reduce erosion and establish buffer	Include A mitigation solution meeting was held (2018 Ferry Road elevation 2021 inter-agency meeting - County, DOT, Orangetown). Several mitigation actions were implemented on Tweed Blvd., 9W, and River Road in 2022. Other mitigation actions were implemented in 2023 on south side of pier. Further projects and discussions needed. 3. N/A
Piermont- 10	Critical Facilities Protection	Flooding, Severe Storm	CPG member; Village Trustee	If facilities were built before a certain date, they could be more susceptible to damage from a hazard event. 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.	Completed Pursuing relocation options for critical emergency services.	1. Discontinued 2. N/A 3. Completed



Project Number	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the	Action Review 1. Status (In Progress, Ongoing Capability, No Progress, Complete) 2. Provide a narrative to describe progress or obstacles that have prevented implementation	Next Steps 1. Project to be included in the 2024 HMP or Discontinue 2. If including action in the 2024 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
Piermont- 11	Review Village Codes	All	Jurisdictional CPG member	New vulnerabilities could have emerged, or existing vulnerabilities could have worsened, which could warrant a code update. 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.	Completed Amended building code to use updated ABFE maps and NY state freeboard +1-foot requirements for all new construction and substantial improvements - adopted 202 NYS building code updates including ABFE	1. Discontinued 2. N/A 3. Completed
Piermont- 12	Community Rating System	Flooding	Village Board; Building Department	The Village is not in the CRS program. Join the Community Rating System (CRS).	1. In Progress 2. CAV completed, CAV issues addressed, application review submitted. Consultant hired; initial meeting completed. Consultant report prepared, reviewed. Internal Building department improvements needed, staff training needs floodplain management, recordkeeping improvements, coordination with village engineer	Include CAV has been completed and steps have been taken to receive CRS credit. Internal Building department improvements will be conducted; staff training will obtain floodplain managements recordkeeping improvements; increased coordination with village engineer.





Project Number	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the	Action Review 1. Status (In Progress, Ongoing Capability, No Progress, Complete) 2. Provide a narrative to describe progress or obstacles that have prevented implementation	Next Steps 1. Project to be included in the 2024 HMP or Discontinue 2. If including action in the 2024 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
Piermont- 13	Improve Emergency Communication in the Village	All Hazards	Village Board	Poor communication can cause issues to the preparation and response to an emergency event. This action will contain the following: Inform residents of nixle.com Organize neighborhood networks for emergency communications, and preparedness training and planning. Implement a more robust alert/ communication system, including capacity for communications during emergencies with power outages.	1. Completed 2. Installed backup generator for firehouse and created EOC communications center at firehouse, upgraded radio system	1. Discontinued 2. N/A 3. Completed





Project Number	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the	Action Review 1. Status (In Progress, Ongoing Capability, No Progress, Complete) 2. Provide a narrative to describe progress or obstacles that have prevented implementation	Next Steps 1. Project to be included in the 2024 HMP or Discontinue 2. If including action in the 2024 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
14 Man	1 0 /	All Hazards	Planning Board	The Village does not have a comprehensive emergency management plan. 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.	In Progress Draft created, waiting on HAZNY review	1. Include 2. Waiting on HAZNY review, to fully adopt CEMP. 3. N/A



Project Number	Project Name	Hazard(s) Addressed	Responsible Party	•	Action Review 1. Status (In Progress, Ongoing Capability, No Progress, Complete) 2. Provide a narrative to describe progress or obstacles that have prevented implementation	Next Steps 1. Project to be included in the 2024 HMP or Discontinue 2. If including action in the 2024 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
Piermont- 15	Utility Resilience	All Hazards	Village Board		Completed Ongoing discussions with local utilities regarding resilience and recovery	1. Discontinued 2. N/A 3. Completed
Piermont- 16	Flooding and Storm Resilience Committee Development	All Hazards	Village Board	The Village does not have a Flooding and Storm Resilience Committee. 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.	Completed Piermont Waterfront Resiliency Commission established 2018	1. Discontinued 2. N/A 3. Completed





Project Number	Project Name	Hazard(s) Addressed	Responsible Party	Original Problem and the	Action Review 1. Status (In Progress, Ongoing Capability, No Progress, Complete) 2. Provide a narrative to describe progress or obstacles that have prevented implementation	Next Steps 1. Project to be included in the 2024 HMP or Discontinue 2. If including action in the 2024 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
Piermont- 17	Critical Facility Located in Floodplain	Flooding	Post Office with support from the Village Board	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.	1. Completed 2. Evaluated risks for village owned properties and suggested relocation options, pending funding. Informed residents and property owners of current flood risk and SLR estimates. Updated code to reflect new ABFE elevations and NY state recommendations for elevation in flood zones, added 1 foot freeboard. Adopted 2020 NYS building code updates including ABFE.	1. Discontinued 2. N/A 3. Completed





Project Number	Project Name	Hazard(s) Addressed	Responsible Party	Brief Summary of the Original Problem and the	2. Provide a narrative to describe	Next Steps 1. Project to be included in the 2024 HMP or Discontinue 2. If including action in the 2024 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.
	Fire Department Boathouse Mitigation Measures	All Hazards	Village Board	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. Installation of breakwaters (stones) to help dissipate velocity of the waves; Replacing doors would help to prevent floodwaters from entering the facility.	Completed Doors replaced at boathouse - breakwaters challenging to get permitted	1. Discontinued 2. N/A 3. Completed
Piermont- 19	Elevation of Electrical Components at DPW	All Hazards	Village Board	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. Determine the 500-year flood elevation at the DPW and elevate the electrical components to protect against damage from flood waters.	No Progress reviewing options and costs	Include Determine the 500-year flood elevation at the DPW and elevate the electrical components to protect against damage from flood waters. 3. N/A
Piermont- 20	Displaced Residents	Flood	PWRC	Sea level rise flooding of low-lying residential areas. Secure land suitable for relocation of displaced residences outside of ABFE.	In Progress Explore sale options with school district for SOSCD TZE campus	Include Secure land suitable for relocation of displaced residences outside of ABFE. Explore sale options with school district for SOSCD TZE campus. N/A





Project Number	Project Name	Hazard(s) Addressed	Responsible Party		Action Review 1. Status (In Progress, Ongoing Capability, No Progress, Complete) 2. Provide a narrative to describe progress or obstacles that have prevented implementation	Next Steps 1. Project to be included in the 2024 HMP or Discontinue 2. If including action in the 2024 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.				
Piermont- 21	Emergency Response Relocation	Flood	PWRC	Unable to respond due to flooded roads. Explore options for relocating emergency services to Hudson Terrace Community Center location to improve response capability in flood events.	Discontinued FEMA x zone - 2021 extensive flooding and damage in proposed project area, not suitable location for emergency services with increasing pluvial hillside rainfall flooding events	Discontinued N/A Relocation not a feasible option.				
Piermont- 22	CRS Qualification	Flood	Village	Increased costs of NFIP insurance related to Risk Rating 2.0 Planning for CRS qualification, updating codes and zoning regulations for enhanced resiliency.	Completed Seeking consultant to finalize CRS application, recommend additional code updates >Tetra Tech produced a report outlining things we could do to qualify for the CRS program in 2020 >Implementing the actions currently unfunded	1. Discontinued 2. N/A 3. Completed				
Piermont- 23	T Dock Structural Integrity	Flood, Severe Storm	Village Board	Diminished capacity and structural integrity of T dock limits expansion of commercial and recreational river access and creates potential public safety issues. Future sea level rise and storm events threaten to damage current dock beyond repair. Secure funding for design and construction of replacement pier dock to address structural integrity issues identified in 2018 blue shore engineering assessment, and plan for future sea level rise and storm surge events.		1. Include 2. Secure funding for design and construction of replacement pier dock to address structural integrity issues identified in 2018 blue shore engineering assessment, and plan for future sea level rise and storm surge events. 3. N/A				



Proposed Hazard Mitigation Initiatives for the HMP Update

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

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

The action worksheets included at the end of this annex list the mitigation actions that Piermont would like to pursue in the future to reduce the effects of hazards. The actions are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in the Village's priorities.

Table 9.15-18 indicates the range of proposed mitigation action categories. The four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table to further demonstrate the wide range of activities and mitigation measures selected.

Volume I identifies 14 evaluation criteria for prioritizing the mitigation actions. To assist with rating each mitigation action as high, medium, or low priority, a numeric rank is assigned (-1, 0, or 1) for each of the evaluation criteria. Table 9.15-19 provides a summary of the prioritization of all proposed mitigation actions for the HMP update.

Table 9.15-18. Analysis of Mitigation Actions by Hazard and Category

	Actions That Address the Hazard, by Action Category										
		FE		CRS							
Hazard	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES	
Dam Failure	2	-	-	-	2	-	-	-	-	-	
Disease Outbreak	2	-	-	-	2	-	-	-	-	-	
Drought	2	-	-	-	2	-	-	-	-	-	
Earthquake	2	-	-	-	2	-	-	-	-	-	
Extreme Temperature	2	-	-	-	2	-	-	-	-	-	
Flood	2	8	-	2	7	1	2	-	2	-	
Landslide	2	-	-	-	2	-	-	-	-	-	
Severe Weather	2	6	-	1	5	1	1	-	2	-	
Severe Winter Weather	2	-	-	-	2	-	-	-	-	-	
Wildfire	2	-	-	-	2	-	-	-	-	-	

Local Plans and Regulations (LPR)—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.

Structure and Infrastructure Project (SIP)—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct structures to reduce the impact of hazards.

Natural Systems Protection (NSP)—These are actions that minimize damage and losses and preserve or restore the functions of natural systems.

Education and Awareness Programs (EAP)—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities

Preventative Measures (PR)—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.

Property Protection (PP)—These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.

Public Information (PI)—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.

Natural Resource Protection (NR)—Actions that minimize hazard loss and preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.

Structural Flood Control Projects (SP)—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.

Emergency Services (ES)—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities

Table 9.15-19. Summary of Prioritization of Actions

			ion	SS		ı			ity	ı	Ë	ı		nes	^		
Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Political	Legal	Fiscal	Environmental	Social Vulnerability	Administrative	Hazards of Concern	Climate Change	Timeline	Community Lifelines	Other Community Objectives	Total	High / Medium / Low
2024-PiermontV- 01	Drainage Improvements to Erie Path	1	1	1	0	0	0	1	1	0	1	1	1	1	1	10	Medium
2024-PiermontV- 02	Drainage Improvements to Tweed Blvd. to Route 9W	1	1	1	0	0	0	1	1	0	1	1	1	1	1	10	Medium
2024-PiermontV- 03	Comprehensive Plan Update	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High
2024-PiermontV- 04	Flood Prone Road Mitigation Measures	1	1	1	0	0	0	0	1	1	1	1	1	1	1	10	Medium
2024-PiermontV- 05	Community Rating System	1	1	1	0	0	1	0	1	1	1	1	1	1	1	11	High
2024-PiermontV- 06	Comprehensive Emergency Management Plan Development	1	1	1	0	1	1	0	1	1	1	1	1	1	1	13	High
2024-PiermontV- 07	Elevation of Electrical Components at DPW	1	1	1	0	0	1	0	1	1	1	1	1	1	1	12	High
2024-PiermontV- 08	Displaced Residents	1	1	1	0	1	0	0	1	1	1	1	1	1	1	11	High
2024-PiermontV- 09	T Dock Structural Integrity	1	1	1	0	0	0	0	0	0	1	1	1	1	1	8	Medium
2024-PiermontV- 10	Elevate Roadways	1	1	1	1	1	0	1	0	1	1	1	1	1	1	12	High
2024-PiermontV- 11	Drainage and Culvert Upgrades	1	1	0	1	0	0	0	0	0	1	1	1	0	1	7	Medium
2024-PiermontV- 12	Critical Facilities in the Floodplain	1	1	1	0	0	1	0	0	0	1	0	1	1	0	7	Medium

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





Action 2024-PiermontV-01. Drainage Improvements to Erie Path

Action Name:	2024-PiermontV-01. Drainage Improvements to Erie Path					
Description of the Problem:	Old drainage system cannot adequately manage stormwater flows and increases risk of flooding to residential area.					
Hazard(s) of Concern:	□Dam/Levee Failure	⊠FI	ood			
Check all that apply	□Disease Outbreak	□La	ındslide			
	□Drought	⊠Se	evere Storm			
	□Earthquake	□Se	evere Winter St	orm		
	☐Extreme Temperature		ildfire	····		
Description of the Solution:	·			o drainago system to manago		
Description of the Solution:	Pending BRIC funding award - Upgrade or replace the out-of-date drainage system to manage current stormwater runoff amounts.					
Lead Agency:	DPW					
Supporting Agencies:	N/A					
Estimated Cost:	High (> \$100,000)					
Potential Funding Sources:	Municipal budget; Grant funding					
Implementation Timeline:	Short Term (<5 years)					
Goals Met:	1, 2, 4					
Benefits:	High (> \$100,000)					
Mitigation Action Type:	□Local Plans and Regulations (LPR)		□Natural Syster	ns Protection (NSP)		
Check all that apply	⊠Structure and Infrastructure Project (\$	SIP)	☐ Education and Awareness Programs (EAP)			
CRS Category:	□Preventative Measures (PR)	rce Protection (NR)				
Check all that apply	□Property Protection (PP)		⊠Structural Flood Control Projects (SP)			
	□Public Information (PI)		□Emergency Services (ES)			
Impact on Socially Vulnerable Populations:	This action will protect socially vulnerable populations by lessening stormwater impacts in this residential area.					
Impact on Critical Facilities/Lifelines:	Increased resiliency for drainage systems will ensure roadways and infrastructure in this area are protected from flooding impacts.					
Impact on Capabilities	This action will ensure stormwater management capabilities within the Village remain operational.					
Impact on Future Development:	N/A					
Climate Change Considerations:	Climate change is expected to exacerbate flooding and severe storm events which will impacts stormwater systems. This action will mitigate those impacts to these systems to ensure operations continue.					
Priority: Check one	□High	⊠Medium		□Low		



Alternatives	Action	Evaluation			
	Do nothing.	Problem persists or worsens.			
	Relocate residential buildings.	Costly, time consuming, not feasible.			
	Add additional stormwater drainage systems.	Costly, old systems still not functional.			

Action 2024-PiermontV-02. Drainage Improvements to Tweed Blvd. to Route 9W

Action Name:	2024-PiermontV-02. Drainage Improvements to Tweed Blvd. to Route 9W					
Description of the Problem:	Drainage issues occur every year - needs to be cleaned constantly, if not cleared then the area will flood.					
Hazard(s) of Concern:	□Dam/Levee Failure	⊠Flood				
Check all that apply	□Disease Outbreak	□Landslide				
	□Drought	⊠Severe Storm				
	□Earthquake	□Severe Winter Storm				
	□Extreme Temperature	□Wildfire				
Description of the Solution:	Pending funding award for engineering study to conduct improvements to drainage areas on Tweed Blvd. to Route 9W to ensure debris cannot block stormwater flows.					
Lead Agency:	Engineering					
Supporting Agencies:	N/A					
Estimated Cost:	High (> \$100,000)					
Potential Funding Sources:	Municipal budget; Grant funding					
Implementation Timeline:	Short Term (<5 years)					
Goals Met:	1, 2, 4					
Benefits:	High (> \$100,000)					
Mitigation Action Type: Check all that apply	□Local Plans and Regulations (LPR) ☑Structure and Infrastructure Project (SIP)	□Natural Systems Protection (NSP) □Education and Awareness Programs (EAP)				
CRS Category:	□Preventative Measures (PR)	□Natural Resource Protection (NR)				
Check all that apply	☑Property Protection (PP)	□Structural Flood Control Projects (SP)				
	□Public Information (PI)	☐Emergency Services (ES)				
Impact on Socially Vulnerable Populations:	This action will protect socially vulnerable populations by lessening stormwater impacts in this residential area.					
Impact on Critical Facilities/Lifelines:	Increased resiliency for drainage systems will ensure roadways and infrastructure in this area are protected from flooding impacts.					
Impact on Capabilities	This action will ensure stormwater management capabilities within the Village remain operational.					
Impact on Future Development:	N/A					





Climate Change Considerations:	Climate change is expected to exacerbate flooding and severe storm events which will impacts stormwater systems. This action will mitigate those impacts to these systems to ensure operations continue.				
Priority: Check one	☐ High ☐ Low ☐ Low			□Low	
Alternatives	Action		Evaluation		
	Do nothing.		Problem persists or worsens.		
	Relocate residential buildings. Cos		Costly, time	Costly, time consuming, not feasible.	
	Clean out existing drainage sy	stems.	Short-term solution.		

Action 2024-PiermontV-03. Comprehensive Plan Update

Action Name:	2024-PiermontV-03. Comprehensive Plan Update		
Description of the Problem:	The current comprehensive plan does not incorporate hazard mitigation principles and does not have a strategy to streamline the consideration of the following hazards into its future development and growth: dam/levee failure, disease outbreak, drought, earthquake, extreme temperature, flood, landslide, severe storm, severe winter storm, or wildfire.		
Hazard(s) of Concern: Check all that apply	☑ Dam/Levee Failure☑ Disease Outbreak☑ Drought☑ Earthquake☑ Extreme Temperature		
Description of the Solution:	Pending additional funding for comprehensive master plan to incorporate sea level rise and climate change related fluvial and riverine flood. DOS and FEMA BRIC funding secured; RFP issued.		
Lead Agency:	PWRC		
Supporting Agencies:	CPG member		
Estimated Cost:	High (> \$100,000)		
Potential Funding Sources:	Municipal Budget		
Implementation Timeline:	Short Term (<5 years)		
Goals Met:	1, 2, 3, 5, 7		
Benefits:	High (> \$100,000)		
Mitigation Action Type: Check all that apply	⊠Local Plans and Regulations (LPR) □Structure and Infrastructure Project (SIP)	□Natural Systems Protection (NSP) □Education and Awareness Programs (EAP)	
CRS Category: Check all that apply	☑ Preventative Measures (PR) ☐ Property Protection (PP) ☐ Public Information (PI)	□Natural Resource Protection (NR) □Structural Flood Control Projects (SP) □Emergency Services (ES)	
Impact on Socially Vulnerable Populations:	Natural disasters affect everyone in the community, and an outdated comprehensive plan would leave socially vulnerable populations at risk to natural disaster events,		





Impact on Critical Facilities/Lifelines:	Updating the comprehensive plan to include natural disasters will help critical facilities and lifelines be more resilient to impacts and can continue to function properly for the wellbeing of the community.			
Impact on Capabilities	The comprehensive plan update v response departments and staff to	•	•	' '
Impact on Future Development:	An updated comprehensive plan winatural disaster events.	ll help plan fo	or future developn	nent in being more resilient to
Climate Change Considerations:	The updated comprehensive plan will consider climate change impacts when looking at ways to mitigate natural disaster events. This will limit climate change impacts on the community.			
Priority: Check one	⊠High	□Medium □Low		□Low
Alternatives	Action	Action Evaluation		Evaluation
	Do nothing. Comprehensive plan will be outdate community will not be prepared for disasters.		not be prepared for natural	
	Update the Comprehensive Plan without adding natural disasters.		cout Costly, community will not be prepared fo natural disasters.	
	Start over for the entire Comprehensive Plan. Costly, long tin		ly, long timeline.	

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

Action Name:	2024-PiermontV-04. Flood Prone R	2024-PiermontV-04. Flood Prone Road Mitigation Measures		
Description of the Problem:	Flood prone roads can inhibit emer	Flood prone roads can inhibit emergency response and evacuation during a flood.		
Hazard(s) of Concern: Check all that apply	□Dam/Levee Failure □Disease Outbreak □Drought □Earthquake □Extreme Temperature	☑ Flood☐ Landslide☑ Severe Storm☐ Severe Winter Storm☐ Wildfire		
Description of the Solution:	County, DOT, Orangetown). Severa and River Road in 2022. Other mit	A mitigation solution meeting was held (2018 Ferry Road elevation 2021 inter-agency meeting - County, DOT, Orangetown). Several mitigation actions were implemented on Tweed Blvd., 9W, and River Road in 2022. Other mitigation actions were implemented in 2023 on south side of pier. Further projects and discussions are needed to mitigate all flood prone roads in the Village.		
Lead Agency:	Village Trustee			
Supporting Agencies:	CPG member	CPG member		
Estimated Cost:	High (> \$100,000)	High (> \$100,000)		
Potential Funding Sources:	Municipal budget; County funding; Grant funding			
Implementation Timeline:	Short Term (<5 years)			
Goals Met:	1, 2, 4			
Benefits:	High (> \$100,000)			





Mitigation Action Type: Check all that apply	□Local Plans and Regulations (LPR) Structure and Infrastructure Project (SIP)	□Natural Systems Protection (NSP) □Education and Awareness Programs	
CRS Category: Check all that apply	□Property Protection (PP)			rce Protection (NR) od Control Projects (SP) rvices (ES)
Impact on Socially Vulnerable Populations:	Vulnerable communities that wo potable water will be less likely t			
Impact on Critical Facilities/Lifelines:	Transportation routes are more like	ely to remain f	functional during	heavy rain or flooding events.
Impact on Capabilities	Emergency vehicles and first responders will have sufficient access to communities to render aid when needed.			s to communities to render aid
Impact on Future Development:	Areas with resilient infrastructure encourage residential and commercial development and improve economic resiliency.			ommercial development and
Climate Change Considerations:	Consideration should be taken for an increase in heavy rain and flood events as a result of climate change.			d flood events as a result of
Priority: Check one	⊠High	□Medium	□Low	
Alternatives	Action		Evaluation	
	Do nothing.		Problem continues. Not feasible, unable to access public areas.	
	Remove roads.			
	Implement sandbags during severe flood event.	e storm and	Short-term solution, does not solve problem.	

Action 2024-PiermontV-05. Community Rating System

Action Name:	2024-PiermontV-05. Community Rating System		
Description of the Problem:	The Village is not in the CRS program. The CRS Program would incentivize the Village to implement activities and initiatives that reduce its risk to flood damage, while making residents eligible for flood insurance discounts.		
Hazard(s) of Concern: Check all that apply	□Dam/Levee Failure □Disease Outbreak □Drought □Earthquake □Extreme Temperature		
Description of the Solution:	CAV has been completed and steps have been taken to receive CRS credit. Internal Building department improvements will be conducted; staff training will obtain floodplain managements recordkeeping improvements; increased coordination with village engineer.		
Lead Agency:	PWRC		
Supporting Agencies:	Building Department		
Estimated Cost:	Medium (\$10,000 to \$100,000)		
Potential Funding Sources:	Municipal budget; Grant funding		





Implementation Timeline:	Short Term (<5 years)			
Goals Met:	1, 2, 3, 7	1, 2, 3, 7		
Benefits:	High (> \$100,000)			
Mitigation Action Type: Check all that apply	□Local Plans and Regulations (LPR) □Structure and Infrastructure Project (SIP)		ns Protection (NSP) d Awareness Programs (EAP)
CRS Category: Check all that apply	□Preventative Measures (PR) □Property Protection (PP) ☑Public Information (PI)			rce Protection (NR) od Control Projects (SP) rvices (ES)
Impact on Socially Vulnerable Populations:	The CRS program contains actions and elements that include outreach to socially vulnerable populations. Participating as a CRS community will allow flood insurance discounts and premiums for residents.			
Impact on Critical Facilities/Lifelines:	The CRS program requires flood mapping and other elements which take include locations of critical facilities and lifelines.			
Impact on Capabilities	Participating as a CRS community allows for the Village to receive funding, assistance, and resources from FEMA.			
Impact on Future Development:	The CRS program has actions and elements which can assist with planning for sustainable future development.			
Climate Change Considerations:	The CRS program incorporates participating the Village will be mo		-	
Priority: Check one	⊠High	□Medium		□Low
Alternatives	Action Evaluation		Evaluation	
	Do nothing.		· ·	ify for discounts on flood and FEMA resources.
	Rely on state resources. Will not be a par		ticipating community in CRS.	
	Participate as a class 10 community. Will not be considered a process of the community in CR			

Action 2024-PiermontV-06. Comprehensive Emergency Management Plan Development

Action Name:	2024-PiermontV-06. Comprehensive Emerge	2024-PiermontV-06. Comprehensive Emergency Management Plan Development		
Description of the Problem:	The Village does not have a comprehensive emergency management plan that outlines what the Village will do during any of the following events: dam failure, disease outbreak, drought, earthquake, extreme temperature, flood, landslide, severe storm, severe winter storm, and wildfire.			
Hazard(s) of Concern: Check all that apply	☐ Dam/Levee Failure ☐ Disease Outbreak ☐ Drought ☐ Earthquake	☑ Flood☑ Landslide☑ Severe Storm☑ Severe Winter Storm		
Description of the Solution:	⊠Extreme Temperature			
Lead Agency:	PWRC			





Supporting Agencies:	N/A			
Estimated Cost:	Medium (\$10,000 to \$100,000)			
Potential Funding Sources:	Municipal Budget			
Implementation Timeline:	Short Term (<5 years)			
Goals Met:	1, 2, 3, 4, 5, 6, 7			
Benefits:	High (> \$100,000)			
Mitigation Action Type: Check all that apply	☑Local Plans and Regulations (LPR)☐Structure and Infrastructure Project (SIP)		ms Protection (NSP) d Awareness Programs (EAP)
CRS Category: Check all that apply	☑ Preventative Measures (PR)☐ Property Protection (PP)☐ Public Information (PI)		□Natural Resource Protection (NR) □Structural Flood Control Projects (SP) □Emergency Services (ES)	
Impact on Socially Vulnerable Populations:	The CEMP will include emergen populations during emergency ever		ment planning t	hat will protect vulnerable
Impact on Critical Facilities/Lifelines:	This action will strengthen and protect critical lifelines to ensure they stay operational especially during an emergency events.			
Impact on Capabilities	This action will improve emergency response capabilities within the Village.			
Impact on Future Development:	N/A			
Climate Change Considerations:	The CEMP incorporates climate management for the Village.	change co	nsiderations who	en planning for emergency
Priority: Check one	⊠High	□Medium		□Low
Alternatives	Action Evaluation		Evaluation	
	Not adopt the CEMP. Problem persists.		oblem persists.	
	Utilize state resources for emergency Costly, no management.		, not localized data.	
	Utilize federal resources for emergency management.		Costly	, not localized data.

Action 2024-PiermontV-07. Elevation of Electrical Components at DPW

Action Name:	2024-PiermontV-07. Elevation of Electrical Components at DPW		
Description of the Problem:	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.		
Hazard(s) of Concern:	□Dam/Levee Failure	⊠Flood	
Check all that apply	□Disease Outbreak	□Landslide	
	□Drought	□Severe Storm	
	□Earthquake	□Severe Winter Storm	
	☐Extreme Temperature	□Wildfire	





Description of the Solution:	Determine the 500-year flood elevation at the DPW and elevate the electrical components to protect against damage from flood waters.			
Lead Agency:	DPW			
Supporting Agencies:	N/A			
Estimated Cost:	High (> \$100,000)			
Potential Funding Sources:	Municipal Budget			
Implementation Timeline:	Short Term (<5 years)			
Goals Met:	1, 2, 4, 6			
Benefits:	High (> \$100,000)			
Mitigation Action Type: Check all that apply	□Local Plans and Regulations (LPR) ☑Structure and Infrastructure Project	(SIP)	1	ns Protection (NSP) I Awareness Programs (EAP)
CRS Category: Check all that apply	☑ Preventative Measures (PR) ☐ Natural Resource Protection (NR) ☐ Property Protection (PP) ☐ Structural Flood Control Projects (SP) ☐ Public Information (PI) ☐ Emergency Services (ES)		od Control Projects (SP)	
Impact on Socially Vulnerable Populations:	N/A			
Impact on Critical Facilities/Lifelines:	This action will ensure the functionality and protect against power outages of a critical facility in the Village.			
Impact on Capabilities	Elevation of electrical utilities will ensure that DPW can remain fully operational during a storm event.			
Impact on Future Development:	N/A			
Climate Change Considerations:	N/A			
Priority: Check one	⊠High □Medium □Low		□Low	
Alternatives	Action Evaluation		Evaluation	
	Do nothing. Problem persists.		oblem persists.	
	Relocated electrical utilities.			Not feasible.
	Design other flood mitigation elements. Costly, long time span, will need fundesign and study.		• •	

Action 2024-PiermontV-08. Displaced Residents

Action Name:	2024-PiermontV-08. Displaced Residents
Description of the Problem:	Sea level rise flooding of low-lying residential areas could eventually lead to homes becoming inhabitable.





Hazard(s) of Concern: Check all that apply	□Dam/Levee Failure □Disease Outbreak □Drought □Earthquake □Extreme Temperature		☑Flood □Landslide □Severe Storm □Severe Winter Sto □Wildfire	orm	
Description of the Solution:	Secure land suitable for relocation o with school district for SOSCD TZE ca	•	residences outside	of ABFE. Explore sale options	
Lead Agency:	PWRC				
Supporting Agencies:	N/A				
Estimated Cost:	High (> \$100,000)				
Potential Funding Sources:	Grant funding; Village				
Implementation Timeline:	Long Term (5+ years)				
Goals Met:	1, 2, 4, 6				
Benefits:	High (> \$100,000)				
Mitigation Action Type: Check all that apply	□Local Plans and Regulations (LPR) ⊠Structure and Infrastructure Project (S	SIP)	-	ns Protection (NSP) I Awareness Programs (EAP)	
CRS Category: Check all that apply	☑ Preventative Measures (PR) ☐ Property Protection (PP) ☐ Public Information (PI)		□Structural Floo	□Natural Resource Protection (NR) □Structural Flood Control Projects (SP) □Emergency Services (ES)	
Impact on Socially Vulnerable Populations:	This action protect socially vulnerable populations located in the ABFE.				
Impact on Critical Facilities/Lifelines:	Relocation of a critical facility out of the ABFE allows for full operations during a flood event.			tions during a flood event.	
Impact on Capabilities	N/A				
Impact on Future Development:	N/A				
Climate Change Considerations:	Climate change will exacerbate flo impacts.	ood scenario	os and this action	will help to mitigate these	
Priority: Check one	·		□Low		
Alternatives	Action	Action Evalu		Evaluation	
	Do nothing. Elevate all structures.		Problems continue.		
			Costly, long timeline.		
	Implement flood mitigation me	asures.	. Costly, short term solution.		



Action 2024-PiermontV-09. Dock Structural Integrity

Action Name:	2024-PiermontV-09. Dock Structural Integrity			
Description of the Problem:	Diminished capacity and structural integrity of T Dock limits expansion of commercial and recreational river access and creates potential public safety issues. Future sea level rise and storm events threaten to damage current dock beyond repair.			
Hazard(s) of Concern: Check all that apply	□Dam/Levee Failure □Disease Outbreak □Drought □Earthquake □Extreme Temperature	⊠Se	ood ndslide evere Storm vere Winter St ildfire	orm
Description of the Solution:	Secure funding for design and construction of replacement pier dock to address structural integrity issues identified in 2018 blue shore engineering assessment, and plan for future sea level rise and storm surge events.			
Lead Agency:	Village Board			
Supporting Agencies:	N/A			
Estimated Cost:	High (> \$100,000)			
Potential Funding Sources:	multiple, federal, state, private			
Implementation Timeline:	Long Term (5+ years)			
Goals Met:	1, 2, 4, 6			
Benefits:	High (> \$100,000)			
Mitigation Action Type: Check all that apply	□Local Plans and Regulations (LPR) Structure and Infrastructure Project (SIP)		ns Protection (NSP) I Awareness Programs (EAP)
CRS Category: Check all that apply	☑ Preventative Measures (PR) ☐ Natural Resource Protection (NR) ☐ Property Protection (PP) ☐ Structural Flood Control Projects ☐ Public Information (PI) ☐ Emergency Services (ES)		od Control Projects (SP)	
Impact on Socially Vulnerable Populations:	N/A			
Impact on Critical Facilities/Lifelines:	This action protects a critical facility which promotes expansion of commercial and recreational river access.			
Impact on Capabilities	N/A			
Impact on Future Development:	N/A			
Climate Change Considerations:	This action takes into account clim new dock structure.	ate consideration	ons such as sea	a level rise, when designing a
Priority: Check one	⊠High	□Medium		□Low





Alternatives	Action	Evaluation
	Do nothing.	Problem continues.
	Implement upgrades.	Short term solution.
	Remove T Dock	Not an option.

Action 2024-PiermontV-10. Elevate Roadways

Action Name:	2024-PiermontV-10. Elevate Roadways			
Description of the Problem:	Waterfront Flooding along Hudson and Sparkill increasing in frequency.			
Hazard(s) of Concern: Check all that apply	□Dam/Levee Failure □Disease Outbreak □Drought □Earthquake □Extreme Temperature	☑ Flood☐ Landslide☑ Severe Storm☐ Severe Winter Storm☐ Wildfire		
Description of the Solution:	Elevate Roadways in key locations: Ferdon, South Piermont Ave, Paradise Ave, and Piermont Ave near marinas			
Lead Agency:	Village			
Supporting Agencies:	County, State, Federal			
Estimated Cost:	High (> \$100,000)			
Potential Funding Sources:	CRRA bond, DOT, County			
Implementation Timeline:	Short Term (<5 years)			
Goals Met:	1, 2, 3, 5, 7			
Benefits:	High (> \$100,000)			
Mitigation Action Type: Check all that apply	⊠Local Plans and Regulations (LPR) ☐ Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)		
CRS Category: Check all that apply	☑Preventative Measures (PR) □Property Protection (PP) □Public Information (PI)	□Natural Resource Protection (NR) □Structural Flood Control Projects (SP) □Emergency Services (ES)		
Impact on Socially Vulnerable Populations:	Elevating the road will provide a safe path of ingress and egress for residents of flood prone areas.			
Impact on Critical Facilities/Lifelines:	Maintain ability to evacuate and improve emergency response capabilities.			
Impact on Capabilities	Protection of life, maintain ability to provide emergency services.			
Impact on Future Development:	Ensuring safe travel encourages businesses and residents to remain in or move to the area.			
Climate Change Considerations:	NOAA estimates 36 events in 2025 that will flood Ferdon, South Piermont Ave, Paradise Ave, and Piermont Ave near marinas			





Priority: Check one	⊠High	□Medium		□Low	
Alternatives	Action			Evaluation	
	Remove flood prone roadway Loss of access		blem continues.		
			Loss of access to neighborhoods, increased emergency risk		
	Buyout properties that exist along roadways	Buyout properties that exist along flood prone roadways		arge portion of community	

Action 2024-PiermontV-11. Drainage and Culvert Upgrades

Action Name:	2024-PiermontV-11. Drainage and Culvert Upgrades			
Description of the Problem:	52.5 percent of Piermont is in the 100- or 500-year floodplain, and existing drainage and culverts cannot handle existing stormwater amounts.			
Hazard(s) of Concern: Check all that apply	□Dam/Levee Failure □Disease Outbreak □Drought □Earthquake □Extreme Temperature	☑ Flood☐ Landslide☑ Severe Storm☐ Severe Winter Storm☐ Wildfire		
Description of the Solution:	Right sizing drainage and culverts to handle accumulation in a 48-hour period.	3inches/hour rainfall rates and 8+ inches total		
Lead Agency:	Village			
Supporting Agencies:	DOT, County			
Estimated Cost:	High (> \$100,000)			
Potential Funding Sources:	BRIC, State CRRA bond			
Implementation Timeline:	Long Term (5+ years)			
Goals Met:	1, 2, 3, 5, 7			
Benefits:	Protection of life and property, infrastructure.			
Mitigation Action Type: Check all that apply	□Local Plans and Regulations (LPR) Structure and Infrastructure Project (SIP)	☐Natural Systems Protection (NSP) ☐Education and Awareness Programs (EAP)		
CRS Category: Check all that apply	□Preventative Measures (PR) □Property Protection (PP) □Public Information (PI)	□Natural Resource Protection (NR) □Structural Flood Control Projects (SP) □Emergency Services (ES)		
Impact on Socially Vulnerable Populations:	Areas that were previously vulnerable to frequency or severe flooding events will be less likely to be impacted by flooding events.			
Impact on Critical Facilities/Lifelines:	Access to health and medical facilities will be maintained, both for healthcare workers and the population who requires treatment for injuries and illness.			
Impact on Capabilities	Improved stormwater management capabilities. Identifying the culverts that are at greatest risk of damage or failure can allow for resource staging to take place where the need is greatest ahead of a flood event.			





Impact on Future Development:	Future development in the impacted area will be less likely to be flooded.			
Climate Change Considerations:	Increasing intensity, duration, and frequency of heavy rainfall events due to climate change. This action upsizes culvert sizes to meet changing stormwater needs as the result of climate change.			
Priority: Check one	□High	⊠Medium □Low		□Low
Alternatives	Action			Evaluation
	No action.		Problem continues.	
	Elevate roadway.		May not solve this particular flooding concern, Costly.	
	Relocated roadway		Not possible.	

Action 2024-PiermontV-12. Critical Facilities in the Floodplain

Action Name:	2024- PiermontV-12. Critical Facilities in the Floodplain		
Description of the Problem:	There are two dams (Boss Pond Dam and Piermont Paper Company Dam), a post office (Piermont Post Office), and two marinas (T and R Marina, Inc. and Paradise Boats) in the floodplain in the Village. The Village does not have jurisdiction of all of these structures to mitigate.		
Hazard(s) of Concern: Check all that apply	□Dam/Levee Failure □Disease Outbreak □Drought □Earthquake □Extreme Temperature	☑ Flood☐ Landslide☑ Severe Storm☐ Severe Winter Storm☐ Wildfire	
Description of the Solution:	The Village will notify the private owners regarding these critical facilities' flood vulnerability identified during the Rockland County HMP update and NYS' requirement to protect to the 500-year flood or worst-case scenario. The Village will provide the owners information regarding grant options for funding to implement their mitigation. The private owners will need to determine the most cost effective and feasible mitigation action for these facilities. The Village will determine the feasibility of potential mitigation projects for the facilities within their jurisdiction.		
Lead Agency:	Village, Property Owners		
Supporting Agencies:	Building Department		
Estimated Cost:	Low (< \$10,000)		
Potential Funding Sources:	FEMA HMA, FMA, BRIC		
Implementation Timeline:	Short-term (< 5 years)		
Goals Met:	1, 2		
Benefits:	High (> \$100,000)		





Mitigation Action Type: Check all that apply	□Local Plans and Regulations (LPR) □Structure and Infrastructure Project (□Natural Systems Protection (NSP) □Education and Awareness Programs (E		• •
CRS Category: Check all that apply	□Preventative Measures (PR) □Property Protection (PP) ☑Public Information (PI)	□Natural Resource Protection (NR) □Structural Flood Control Projects (SP) □Emergency Services (ES)		od Control Projects (SP)
Impact on Socially Vulnerable Populations:	N/A			
Impact on Critical Facilities/Lifelines:	This project aims to ensure the accessibility of roadways during flooding events and ensures access to emergency routes and critical facilities.			
Impact on Capabilities:	N/A			
Impact on Future Development:	This project can help mitigate potential damage along any affected roadways.			
Climate Change Considerations:	N/A			
Priority: Check one	□High	⊠Medium	☑Medium □Low	
Alternatives Action Name:	Action Alternatives			Alternatives
	No action Problem cor		blem continues	
	Village completes mitigation actions in inundation area		Does not eliminate vulnerability or risk	