9.8 Town of Philipstown

This section presents the jurisdictional annex for the Town of Philipstown.

9.8.1 Hazard Mitigation Plan Point of Contact

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

Primary Point of Contact	Alternate Point of Contact
Kevin Donohue, CFM; Code Enforcement Officer and NFIP Floodplain Administrator 238 Main Street, Cold Spring, NY (845) 265-3329 kcdonohue@philipstown.com	Richard Shea, Supervisor 238 Main Street, Cold Spring, NY 845-265-5200 supervisor@philipstown.com

9.8.2 Municipal Profile

Philipstown is a Class 2 community with three State Road corridors, Route 9, Route 9D and Route 301. Philipstown was the site for the American Revolution and the encampment of the Continental Army for which the protection the Hudson Highlands and West Point chain and cannonade was made. Many Revolutionary War historical places and ruins are located throughout the town. The ruminants of 18th century industry and mining activities are present throughout the community. The west side of Philipstown has approximately 10 miles of shore line along the Hudson River. The Hudson Highlands bound the southern border and the Breakneck Mountain on the north. The east side is bound by Fahnestock Park. 50% of the town land is NYS Park or open preservation with nonprofit groups. The town has many affluent residential estates, volunteer fire departments and several community social and outreach organizations.

Population

According to the 2010 U.S. Census, the population of the Town of Philipstown was 9,662.

Location

The Town is located in the western part of Putnam County. It was a total area of 51.5 square miles, of which 48.9 square miles is land and 2.7 square miles is water.

Brief History

The town was first settled around 1715. Established in 1788 as one of the three original towns in what is now Putnam County, Philipstown's main population centers are the village of Cold Spring, the hamlet of Garrison, and the village of Nelsonville. In 1806, part of the town was used to form the town of Fishkill. Putnam Valley was part of Philipstown until 1839, and a small portion of the town north of Putnam Valley was transferred to Kent in 1877.

Governing Body Format

The Town is governed by a town supervisor and a five-member town board.

Growth/Development Trends

The following table summarizes major development that occurred in the municipality over the past five years, as well as known or anticipated future development in the next five (5) years. Refer to the map in section 9.8.8 of this annex which illustrates the hazard areas along with the location of potential new development.

Table 9.8-1. Growth and Development

Property Name	Type (Residential or Commercial)	Number of Structures	Address / Parcel ID(s)	Known Hazard Zone*	Description / Status
20 Hudson Highlands Reserve	Residential	25 lot residential subdivision	NYS Rt. 9 & East Mountain Rd. North	Wildfire: Intermix; Landslide: High	Pending Approval, Under Review
ENTERGY	Non-Residential	20,000 sq. ft. Emergency Operations Building with associated access, parking and on-site utilities	Horsemen's Trail 16.-1-5	Landslide: High; Karst: Short 3	Approved
Glassbury Court (aka Quarry Pond)	Residential	54 single-family homes in Adult Active community	NYS Rt. 9 16.-1-38	Wildfire: Interface; NEHRP: D; Landslide: High	Approved, Under Construction
Graymoor - New Friary	Residential	Remove existing 21,750 sq. ft. friary, construct new 29,270 sq. ft. friary & related infrastructure improvements	NYS Rt. 9 82.-2-41	Landslide: High	Approved
Olspan, LLC	Non-Residential	Renovation of existing 10,800 sq. ft. light manufacturing / office building & 8,700 sq. ft. addition for personal property storage	NYS Rt. 9 38.-3-24.2	Wildfire: Intermix; NEHRP: D; Landslide: High	Pending Approval, Under Review

* Only location-specific hazard zones or vulnerabilities identified.
Source: June 2014 "Large Development Projects Report", Putnam County Department of Planning, Development and Transportation; as amended by municipality

9.8.3 Natural Hazard Event History Specific to the Municipality

Putnam County has a history of natural hazard events as detailed in Volume I, Section 5.0 of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the County and its municipalities. The table below presents a summary of natural events that have occurred to indicate the range and impact of natural hazard events in the community. Information

regarding specific damages is included if available based on reference material or local sources. For details of events prior to 2008, refer to Volume I, Section 5.0 of this plan.

Table 9.8-2. Hazard Event History

Dates of Event	Event Type	FEMA Declaration # (If Applicable)	County Designated?	Summary of Damages/Losses
August 1990	Flooding	N/A	N/A	Putnam and Westchester Counties had $5 M in property damage
July 9, 1997	Thunderstorm / Wind	N/A	N/A	$30K in property damage in Lake Carmel
September 16-18, 1999	Hurricane Floyd Major Disaster Declarations	DR-1296	Yes	$1.9 M in property damage Countywide
November 2001 – January 2002	Drought	N/A	N/A	NYC's combined storage in water system reservoir systems was at a low 41% capacity
April - October 2002	Drought	N/A	N/A	Groundwater and water storage facilities were below normal. NYC reservoir system reached a low of 64.5%.
July 9, 2002	Lightning	N/A	N/A	Lightning strike caused several fires in Mahopac Falls; approximately $500 K in property damage.
September 30, 2010	Strong Wind	N/A	N/A	Strong winds downed power lines and trees; power outages; approximately $50 K in property damage
March 6-7, 2011	Severe Winter Storm (Snow)	N/A	N/A	Indian Brook Road, Philipsebrook Road, Old Manitou Road washed out. Flooding at 3 Brookside Lane. See Annex A
August 26 – September 5, 2011	Hurricane Irene	DR-4020	Yes	Dam failure on Trout Brook in State Park that washed out Town road. Walmer Bridge and road washed out. See Annex B
October 27 – October 8, 2012	Hurricane Sandy	DR-4085	Yes	Storm surge building flooding at Hudson River Lane and Garrison Landing. See Annex C

Notes:

EM Emergency Declaration (FEMA)
FEMA Federal Emergency Management Agency
DR Major Disaster Declaration (FEMA)
IA Individual Assistance
N/A Not applicable
PA Public Assistance

9.8.4 Hazard Vulnerabilities and Ranking

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

Hazard Risk/Vulnerability Risk Ranking

The table below summarizes the hazard risk/vulnerability rankings of potential hazards for Town of Philipstown.

Table 9.8-3. Hazard Risk/Vulnerability Risk Ranking

Hazard type	Estimate of Potential Dollar Losses to Structures Vulnerable to the Hazard [a, b, e]	Probability of Occurrence [c]	Risk Ranking Score (Probability x Impact)	Hazard Ranking
Earthquake	100-Year GBS: $0 500-Year GBS: $402,364 2,500-Year GBS: $8,286,973	Occasional	12	Low
Extreme Temperature	Damage estimate not available	Frequent	21	Medium
Flood	1% Annual Chance: $44,746,860	Frequent	18	Medium
Landslide	RCV Exposed: $1,900,133,809	Frequent	54	Medium*
Severe Storm	100-Year MRP: $735,046 500-year MRP: $4,696,162 Annualized: $81,211	Frequent	48	High
Severe Winter Storm	1% GBS: $10,486,149 5% GBS: $52,430,743	Frequent	51	High
Wildfire	Estimated Value in the WUI: $1,483,761,713	Frequent	42	High

** The Town has assigned landslide a Medium hazard ranking.*

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

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

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

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

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

GBS = General building stock
MRP = Mean return period
RCV = Replacement cost value

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the municipality.

Table 9.8-4. NFIP Summary

Municipality	# Policies (1)	# Claims (Losses) (1)	Total Loss Payments (2)	# Rep. Loss Prop. (1)	# Severe Rep. Loss Prop. (1)	# Policies in 100-year Boundary (3)
Town of Philipstown	82	36	$1,119,896.61	2	0	16

Source: FEMA, 2014

Note (1) Policies, claims, repetitive loss and severe repetitive loss statistics provided by FEMA and are current as of February 28, 2014 and are summarized by Community Name. Please note the total number of repetitive loss properties excludes the severe repetitive loss properties. The number of claims represents claims closed by 2/28/2014.

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

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

Critical Facilities

The table below presents HAZUS-MH estimates of the damage and loss of use to critical facilities in the community as a result of a 1- and 0.2-percent annual chance flood events.

There are more than 25 dams. 3 Class C, 10 Class B and 12 Class A dams. Source: NYS DEC.

Table 9.8-5. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Potential Loss from 1% Flood Event		
		1% Event	0.2% Event	Percent Structure Damage	Percent Content Damage	Days to 100-Percent(2)
Lake Surprise Dam	RE CN Dam - B					
Upper Cold Spring Reservoir Dam	CN Dam - C					
Lower Cold Spring Reservoir Dam	CN Dam - C					
Lake Valhalla Dam	RE CN Dam - B					
Foundry Brook Dam	CN Dam - A					
Cargil Dam (City of Beacon)	RE Dam - C					
Sussmeier Pond Dam	RE Dam - A					
East Mountain Lake Dam	CN Dam - B					
Frank & Cooper Pond Dam	RE CN Dam - A					
Trout Brook Lake Dam	RE Dam - A					
Weise Pond Dam	CN Dam - A					
David Ulmar Pond Dam	RE Dam - A					
Evelina Perkins Pond Dam	RE Dam - A					
Perkins East Pond Dam	RE Dam - B					
Jordan Pond Dam	RE CN Dam - B					
Foundry Brook Dam	CN Dam - A					
Lock Lyal Dam	CN Dam - B					
Barrett Pond Dam	RE Dam - ?					
Sloan Dam	MS RE Dam - A					
Colt Estate Dam	MS RE Dam - B					
Continental Village Dam	Dam - B					

Source: *HAZUS-MH 2.1*
Note: *Please note it is assumed the wells and pump stations have electrical equipment and openings are three-feet above grade. If depth of water is less than 3 feet, no estimated damages are calculated.*
NP *Not provided by HAZUS*
x *Facility located within the DFIRM boundary.*
- *No loss calculated by HAZUS*
NA *Not calculated in HAZUS*
NF *HAZUS estimate the facility will not be functional*
(1) *HAZUS-MH 2.1 provides a general indication of the maximum restoration time for 100% operations. Clearly, a great deal of effort is needed to quickly restore essential facilities to full functionality; therefore this will be an indication of the maximum downtime (HAZUS-MH 2.1 User Manual).*
(2) *In some cases, a facility may be located in the DFIRM flood hazard boundary; however HAZUS did not calculate potential loss. This may be because the depth of flooding does not amount to any damages to the structure according to the depth damage function used in HAZUS for that facility type.*

(3) Dams located in the floodplain are not listed in the table above. HAZUS does not calculate potential losses to a dam as a result of a flood event.

Other Vulnerabilities Identified by Municipality

According to the 2013 FEMA Flood Insurance Study (FIS) for Putnam County, in the Town of Philipstown, after a heavy rainfall, Clove Creek rose five to 10 inches. This rise in channel height causes abutments of a bridge to erode significantly. The erosion has also continued along Clove Creek's overbanks. It was also noted that, at another time, the channel level reached the top of the bridge behind a restaurant located near U.S. Route 9 (FEMA FIS 2013).

In addition to those identified above, the municipality has identified the following vulnerabilities:

- Cloud Bank and Old Manitou Road – Old Manitou Station Road is at the base of a steep mountain slope. During a rain event the stormwater will wash out Old Manitou Road at Cloud Bank Road. Existed since developed 100 years ago.
- Brookside Drive and Valley Lane - Are located at the base of a steep mountain next to Sprout Brook Creek. During a rain event stormwater floods the street and homes. Existed since 1940's. Homes are flood damaged. Repetitive Loss through the NFIP.
- Barret Pond and Fishkill Road/Route 9: Barret Pond discharges water under a home. During a rain event the stormwater floods four homes creating repetitive losses. Existed since the 1950's.
- Old Manitou Station Road to Hudson River Lane: Manitou Road is the sole access to 14 homes on Hudson River Lane. Hurricane Sandy storm surge flooded Manitou Station Road preventing access to Hudson River Lane. The condition has existed since Manitou Station and Mystery Point (Metro-North train stop) was developed in the late 1800's. Obstruction of access, prevention fire and rescue equipment from crossing flooded road, potential for loss of life.
- Old Albany Post Road: Drainage/flooding problems particularly affecting one residential property on the east side of Old Albany Post Road.
- Clove Creek: Debris in stream and at Walmer Road Bridge increasing flood risk. Stream bank erosion issues.
- Sprout Brook Road: Debris in stream from Old Albany Post Road storm erosion, increasing flood risk.
- Fishkill Road: Debris in Foundry Brook at the intersection of Fishkill Road and 301 for a distance of approximately 700 linear feet.
- All municipalities and relevant staff need E900/901 training. There are no county wide CERT teams. They would benefit from 2-3 CERT teams, east and west of the Parkway.
- Copperhead Mine Brook – Issue on Old Manitou Road and South Mountain Pass.
- 5 Old Albany Post Road and Upland Drive: Flooding drainage issues.
- Highland Road: Beaver dam issue.
- Philips Road Bridge: During a heavy rain event the Philipse Brook Creek bypasses the bridge on Philipesbrook Road causing severe erosion to the road.
- 183 South Highland Road at Saunders Farm Road: Flooding issue.
- Dangerous trees threatening utilities – need for better coordination with utility companies.
- Steep slopes are a concern, particularly for future development within such areas.
- NFIP Floodplain Mapping issues at Ashley Lane and Route 301 and Route 403 and Route 9.
- Insufficient sheltering to address needs wests of the Parkway.
- Town Highway Garage - Truck wash area required for removing salt/calcium from vehicles.
- Radio Communications Tower at 59 Lane Gate Road lacks backup power (critical facility)
- Unregulated dams.

9.8.5 Capability Assessment

This section identifies the following capabilities of the local jurisdiction:

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

Planning and Regulatory Capability

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

Table 9.8-6. Planning and Regulatory Tools

Tool / Program (code, ordinance, plan)	Do you have this? (Y/N)	Authority (local, county, state, federal)	Dept. /Agency Responsible	Code Citation and Comments (Code Chapter, date of adoption, name of plan, explanation of authority, etc.)
Building Code	Y	NYS	Code Enforcement	Chapter 62
Zoning Ordinance	Y	Local	Code Enforcement	Chapter 175
Subdivision Ordinance	Y	Local	Planning Board	Chapter 112
Site Plan Review Requirements	Y	Local	Planning Board	Chapter 175
National Flood Insurance Program (NFIP) Flood Damage Protection Ordinance	Y	Federal, State, Local	Code Enforcement	Chapter 90
NFIP - Freeboard	Y	State, Local	Code Enforcement	Chapter 90-16 & 90-17 State mandated BFE+2 for single and two-family residential construction, BFE+1 for all other construction types.
NFIP - Cumulative Substantial Damages	N	Local	Code Enforcement	
Comprehensive Plan / Master Plan	Y	Local	Town Board	Adopted March 9, 2006
Capital Improvements Plan	N			
Stormwater Management Plan/Ordinance	N			
Floodplain Management / Basin Plan	N			
Open Space or Greenway Plan	Y	Local	Town Board	March 9, 2006
Emergency Management and/or Response Plan	N			
Economic Development Plan	N			
Local Waterfront Revitalization Plan (for waterfront communities)	N			
Post Disaster Recovery Plan and/or Ordinance	N			
Growth Management	Y	Local	Town Board	October 20, 2006
Real Estate Disclosure req.	N			
Habitat Conservation Plan	Y	Local	Town Board	March 9, 2006
Special Purpose Ordinances (e.g. wetlands, critical or sensitive areas)	Y	Local	Conservation Board	Chapter 93

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

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Town of Philipstown.

Table 9.8-7. Administrative and Technical Capabilities

Staff/ Personnel Resources	Available (Y or N)	Department/ Agency/Position
Planner(s) or Engineer(s) with knowledge of land development and land management practices	N	
Engineer(s) or Professional(s) trained in construction practices related to buildings and/or infrastructure	N	
Planners or engineers with an understanding of natural hazards	N	
NFIP Floodplain Administrator	Y	Code Enforcement
Surveyor(s)	N	
Personnel skilled or trained in "GIS" applications	N	
Scientist familiar with natural hazards in the County.	N	
Emergency Manager	N	
Grant Writer(s)	N	
Staff with expertise or training in benefit/cost analysis	Y	Code Enforcement

Fiscal Capability

The table below summarizes financial resources available to the Town of Philipstown.

Table 9.8-8. Fiscal Capabilities

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

Community Classifications

The table below summarizes classifications for community program available to the Town of Philipstown.

Table 9.8-9. Community Classifications

Program	Classification	Date Classified
Community Rating System (CRS)	NP	N/A
Building Code Effectiveness Grading Schedule (BCEGS)	4	March 11, 2005
Public Protection	TBD	
Storm Ready	NP	N/A

Program	Classification	Date Classified
Firewise	NP	N/A

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

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

Criteria for classification credits are outlined in the following documents:

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

National Flood Insurance Program

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

NFIP Floodplain Administrator:

Kevin Donohue, CFM; Code Enforcement Officer

Program and Compliance History:

Town of Philipstown joined the NFIP on June 1, 1979, and is currently an active member of the NFIP. The current effective Flood Insurance Rate Maps are dated March 4, 2013. The Town is currently in good standing in the NFIP.

As of July 31, 2014 there are 78 policies in force, insuring $22 million of property with total annual insurance premiums of $78,036.

Loss History and Mitigation:

Since 1978, 36 claims have been paid totaling $1,119,897. As of April, 2014 there are 2 Repetitive Loss and no Severe Repetitive Loss properties in the community.

Planning and Regulatory Capabilities:

The Town's floodplain regulations and enforcement meet or exceed minimum requirements.

Administrative and Technical Capabilities:

Mr. Donohue is a Certified Floodplain Administrator (CFM), and maintain this certification with regular continuing education. He is the sole person assuming the responsibilities of floodplain administration in the Town. The NFIP services they provide include permit review, inspections, damage assessments and record-keeping.

The Town has evaluated participation in the Community Rating System (CRS) program, but has chosen not to participate. Recent CRS program changes that do not include discounts for pre-FIRM homes does not provide sufficient benefit for the Town.

Integration of Hazard Mitigation into Existing and Future Planning Mechanisms

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, each community was surveyed to obtain a better understanding of their community's progress in plan integration. A summary is provided below. In addition, the community identified specific integration activities that have been/will be incorporated into municipal procedures which may include former mitigation initiatives that have become continuous/on-going programs and may be considered mitigation 'capabilities'.

Land Use Ordinances – Steep Slopes: The Town adopted a Steep Slopes ordinance to help manage the risk of development in such hazard areas.

Land Use Planning and Site Plan Review: The Town has a Conservation Board that has statutory responsibility for land use planning and site plan review, and considers natural hazard risk areas during the review process.

NFIP and Floodplain Management: The Township Floodplain Administrator is a Certified Floodplain Administrator (CFM), and maintains this certification with regular continuing education.

Climate Change and Sea Level Rise: While considering, planning, engineering and undertaking projects along the Hudson River, the Town will review and incorporate the latest information on climate change and sea level rise projections. Current sea level rise and coastal flooding adaptation information is available from the following sources:

- NYSERDA's ClimAid report and 2014 updated sea level rise projections (http://www.nyserda.ny.gov/Cleantech-and-Innovation/Environment/Environmental-Research-and-Development-Technical-Reports/Response-to-Climate-Change-in-New-York.aspx)
- Scenic Hudson's sea level rise mapper (http://www.scenichudson.org/slr/mapper)
- FEMA's Coastal Construction Manual (https://www.fema.gov/media-library/assets/documents/3293)
- NYS DEC's Climate Smart Communities program (http://www.dec.ny.gov/energy/50845.html)
- NYS Community Risk and Resiliency Act (adopted Sep 2014) (http://assembly.state.ny.us/leg/?default_fld=&bn=A06558&term=2013&Summary=Y&Actions=Y&Memo=Y&Text=Y)

9.8.6 Mitigation Strategy and Prioritization

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

Past Mitigation Activity

The municipality identifies the following mitigation projects and/or initiatives have been completed in the past:

- Private Property – Beale road has private flooding which causes hazardous condition. This hazard has been mitigated- cost approx. $9,000

- 146 Hustis Road same issue. This has been mitigated. This is in a flood zone (Lake Surprise). The mitigation prevents water from entering adjacent property.

Proposed Hazard Mitigation Initiatives for the Plan

The Town of Philipstown identified mitigation initiatives they would like to pursue in the future. Some of these initiatives may be previous actions carried forward for this Plan. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Table 9.8-11 identifies the municipality's updated local mitigation strategy.

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

Table 9.8-12 provides a summary of the prioritization of all proposed mitigation initiatives for the Plan.

Table 9.8-10. Proposed Hazard Mitigation Initiatives

Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals / Objectives Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category
PHI-1 (LOI #152)	Manitou Station Road	Raise a 500 foot section of Monitou Station Road two feet above storm surge. See Action Worksheet									
		Existing	Flood	G-1, G-2	Town of Philipstown Highway Department	High – Life Safety (emergency access)	$250,000	HMGP; Town Budget (25%) for Local Match	Short	High	SIP
PHI-2 (LOI #156	Old Manitou Road and Cloudbank Road	Using best management practices provide retention/detention of stormwater, re-contour slope to dissipate stormwater energy addition culverts under Old Manitou Road. See Action Worksheet									
		Existing	Flood	G-2, G-4	Town of Philipstown, Kevin Donohue, Code Enforcement Officer	High – Reduced flood damages, road closures	$100,000	HMGP; Town Budget (25%) for Local Match	Short, depending on availability of funding	High	SIP
PHI-3 (LOI #160)	Brookside and Valley Lane Mitigation	Using best management practices provide retention/detention of stormwater, re-contour slope, restore seasonal intermittent drainage steams, replace bridge at Sproutbrook Road See Action Worksheet									
		Existing	Flood	G-2, G-4	Town of Philipstown Highway Department	High – Reduced flooding of structures (Repetitive Loss) and infrastructure.	$500,000	HMGP; Town Budget (25%) for Local Match	Long Term	High	SIP
PHI-4 (LOI #161)	Barret Pond and Fishkill Road	Using best management practices provide retention/detention of stormwater, re-contour slope, re-pipe to county basin; or acquisition. See Action Worksheet									
		Existing	Flood	G-2	Town of Philipstown, Kevin Donohue, Code Enforcement Officer	Reduced repetitive flood damage to four residential structures.	$100K ($500K for acquisition)	HMGP; 25% for Local Match	Short, once funding is secured	High	SIP
PHI-5 (LOI #161)	Philips Brook Bridge	Replace bridge. See Action Worksheet									
		Existing	Flood, Severe Storm	G-1, G-2	Town of Philipstown, Kevin Donohue, Code Enforcement	High – Reduced flood damage to infrastructure; possible life	$300,000	HMGP; 25% for Local Match	Long term, depending on funding availability	High	SIP

Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals / Objectives Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category
					Officer	safety risk					
PHI-6 (LOI #167)	Avery Road and Snake Hill Road	Replace the Avery Road Bridge over Philipes Brook Creek, repair stone wall banks of creek approximately 800 feet. remove silt, gravel and debris from retention ponds. See Action Worksheet									
		Existing	Flood, Severe Storm	G-1, G-2	HMGP; 25% for Local Match	High – Reduced damages to road, bridge and residential structure; possible life safety risk	$500,000	HMGP; 25% for Local Match	Long term, dependent on funding availability	High	SIP
PHI-7 (LOI #168)	Indian Brook and Bird/Bottle Inn	Using best management practices replace the bridge on Old Albany Post Road and amour the banks of Indian Brook Creek from Old Albany Post Road up stream 400 feet. See Action Worksheet									
		Existing	Flood, Severe Storm	G-1, G-2	Town of Philipstown, Kevin Donohue, Code Enforcement Officer	High – Reduced damages to road, bridge and commercial structure; stream bank erosion; possible life safety risk	$400,000	HMGP; 25% for Local Match	Long term, dependent on funding availability	High	SIP, NRP
PHI-8 (LOI #170)	147 Hustis Road	Cleaning and restoring the drainage channels for 800 feet. Removing any rock and soil obstacles. See Action Worksheet									
		Existing	Flood, Severe Storm	G-1, G-2	Town of Philipstown, Kevin Donohue, Code Enforcement Officer	Reduced flood risk of residential structure	$20,000	HMGP; 25% for Local Match	Long term, dependent on funding availability	High	NRP
PHI-9 (LOI #172)	1143 Old Albany Post Road	Using best management practices provide stone and grassy swale and pipe to Philipes Brook Creek. See Action Worksheet									
		Existing	Flood, Severe Storm	G-2, G-4	Town of Philipstown, Kevin Donohue, Code Enforcement Officer	Reduced flooding of residential structure; reduced road damage	$20,000	HMGP; 25% for Local Match	Long term, dependent on funding availability	High	SIP, NRP

Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals / Objectives Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category
PHI-10 (LOI #173)	Old Albany Post Rd and Sprout Brook Rd	Using best management practices, clean debris from creek and pond. Restore channel to Sprout Brook Creek. See Action Worksheet									
		Existing	Flood, Severe Storm	G-2, G-4	Town of Philipstown, Kevin Donohue, Code Enforcement Officer	Reduced repetitive flooding of residential structure and property	$20,000	HMGP; 25% for Local Match	Long term, dependent on funding availability	High	SIP, NRP
PHI-11	Back-Up Generator for Radio Tower	Install a permanent generator at Radio Tower at 59 Gate Lane Road. See Action Worksheet									
		Existing	Severe Storm, Severe Winter Storm, Earthquake	G-1, G-2, G-5	Town of Philipstown: Roger Chirico, Highway Department Supervisor	We will be able to continue emergency services and Town Highway communications. Recent Damages: - Loss of Service during 2014 Spring and Summer Storms	TBD	FEMA HMPG, Town budget for local match	8 months (after funds are approved)	High	SIP
PHI-12 (LOI #2187)	Garrison VFD Backup Power	Garrison VFD proposes the installation of Solar Resilience Systems to allow operations during extended electric grid outages for each of the two fire stations. See Action Worksheet									
		Existing	Severe Storm; Severe Winter Storm (Utility Outages)	G-1, G-2, G-5	Garrison Volunteer Fire Co., Inc., Peter von Bergen, Vice President	High: Maintain critical facility and operations during power outages; life safety	$770,000	HMGP; Fire District for Local Match	Short, once funding is secured	High	SIP
PHI-13	Promote and support non-structural flood hazard mitigation alternatives for at risk properties within the floodplain, including those that have been identified as Repetitive Loss (RL), such as acquisition/relocation or elevation depending on feasibility. The parameters for this initiative would be: funding, benefits versus cost and willing participation of property owners. Specifically identified are properties in the following areas: • Valley Lane, Garrison • Sprout Brook Road, Garrison										

Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals / Objectives Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category
	• Brookside Road, Garrison • Fishkill Road										
	See above.	Exiting	Flooding, Severe Storm	G-2, G-3	Town NFIP FPA; support from NYS DHSES and FEMA	High - Reduced or eliminated risk to property damage from flooding	High	FEMA or other mitigation grant funding, NFIP flood insurance and ICC; property owner for local match.	Long-term DOF	High	SIP, EAP
PHI-14	Renew relationships and improve coordination with all utilities for the removal of dangerous trees. The cost to the town is $150 per ton for disposal.	Existing	Severe Storm; Severe Winter Storm	G-1, G-2, G-3, G-5, G-6	Town Public Works; working with utilities	Medium – Reduced power outages and associated life safety issues.	Low - Medium	Local funding	Short	Medium	NRP; EAP
PHI-15	Work with NYSDEC and FEMA to address NFIP Floodplain Mapping issues at Ashley Lane and Route 301	N/A	Flood	G-6	Town NFIP FPA; NYSDEC, FEMA	Medium – Proper identification of flood risk at this location	Low	Local funding	Short	Medium	LPR; EAP
PHI-16	Assist the owner of the Town Recreation Center (former old school) to become a shelter that would address sheltering needs west of the Parkway. This currently serves as a comfort station, and has a 2008 Memorandum of Understanding (MOU) with American Red Cross (ARC). It has a generator and new boilers and can currently accommodate up to 200 people.										
	See above.	Existing	All hazards requiring sheltering	G-1, G-3, G-5	Town Supervisor, supporting facility Recreational Director; ARC	Medium – High; Life safety	Medium - High	Facility Owner; grant funding as available	Short	High	EAP, SIP
PHI-17	Improve emergency management, response and recovery capabilities through the following activities: • Encourage all municipalities and relevant staff to get E900/901 training.										

Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals / Objectives Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category
	• Assist with the establishment of county wide CERT (Community Emergency Response Teams) teams; specifically with 2-3 CERT teams east and west of the Parkway.										
	See Above.	N/A	All Hazards	G-1, G-3, G-5, G-6	Town Emergency Management Coordinator	High – Life-Safety, improved emergency and disaster response and management	Low - Medium	Local Budget	Short	High	EAP
PHI-18	Develop mitigation projects to address the following vulnerabilities: • 5 Old Albany Post Road and Upland Drive: Seasonal Storm water erosion and damage to infrastructure. • Highland Road: Beaver dam issue • 183 South Highland Road at Saunders Farm Road: Flooding issue										
	See above.	Existing	Flood, Severe Storm, Climate Change	G-1, G-2, G-4	Town Engineer	High – Reduced flood vulnerability of structures and infrastructure	Low – Identification of mitigation projects; Medium-High – project implementation	Local Budget for project identification	Short	Medium	LPR, SIP, NRP
PHI-19	Support and participate in county led initiatives intended to build local and regional mitigation and risk-reduction capabilities (see Section 9.1), specifically: • Re-Establish Local Emergency Planning Committees (LEPCs) within the County, with an emphasis on stronger municipal level participation. (PCBES-1). • Workshops and Seminars to build local capabilities in floodplain management and disaster recovery (PCBES-11), potentially to include: o NFIP Community Rating System (CRS) o Benefit-Cost Analysis (BCA) o Substantial Damage Estimating (SDE) o NFIP Elevation Certificates (EC) o Certified Floodplain Manager (CFM) Training and Certification (note: current NFIP FPA is a CFM) • County-Wide Housing Location/Relocation Planning Initiative for Disaster Displaced Residents and Structures (PCBES-12)										
	See above	New and Existing	All Hazards	All Objectives	Putnam County, as supported by relevant local department leads,	High (comprehensive improvements mitigation and risk-reduction capabilities)	Low-Medium (locally)	Local (staff resources)	Short	High	LPR, EAP

Notes:
Not all acronyms and abbreviations defined below are included in the table.
**Does this mitigation initiative reduce the effects of hazards on new and/or existing buildings and/or infrastructure? Not applicable (N/A) is inserted if this does not apply.*

Acronyms and Abbreviations:

CAV *Community Assistance Visit*
CRS *Community Rating System*
DPW *Department of Public Works*
FEMA *Federal Emergency Management Agency*
FPA *Floodplain Administrator*
HMA *Hazard Mitigation Assistance*
N/A *Not applicable*
NFIP *National Flood Insurance Program*
NYCDEP *New York City Department of Environmental Protection*

NYSDEC *New York State Department of Environmental Conservation*
NYS DHSES *New York State Department of Homeland Security and Emergency Services*
OEM *Office of Emergency Management*

Potential FEMA HMA Funding Sources:
FMA *Flood Mitigation Assistance Grant Program*
HMGP *Hazard Mitigation Grant Program*
PDM *Pre-Disaster Mitigation Grant Program*
RFC *Repetitive Flood Claims Grant Program*
SRL *Severe Repetitive Loss Grant Program*

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

Costs:
Where actual project costs have been reasonably estimated:
Low *< $10,000*
Medium *$10,000 to $100,000*
High *> $100,000*

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

Benefits:
Where possible, an estimate of project benefits (per FEMA's benefit calculation methodology) has been evaluated against the project costs, and is presented as:
Low= *< $10,000*
Medium *$10,000 to $100,000*
High *> $100,000*

Where numerical project benefits cannot reasonably be established at this time:
Low *Long-term benefits of the project are difficult to quantify in the short term.*
Medium *Project will have a long-term impact on the reduction of risk exposure to life and property, or project will provide an immediate reduction in the risk exposure to property.*
High *Project will have an immediate impact on the reduction of risk exposure to life and property.*

Mitigation Category:

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

Table 9.8-11. Summary of Prioritization of Actions

Mitigation Action/Project Number	Mitigation Action/Initiative	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
PHI-1	Manitou Station Road	1	1	1	1	0	1	1	1	1	1	1	0	1	0	11	High
PHI-2	Old Manitou Road and Cloudbank Road	1	1	1	1	0	1	0	1	1	1	1	0	1	0	11	High
PHI-3	Brookside and Valley Lane Mitigation	0	1	1	1	1	1	0	0	0	1	1	1	1	0	9	High
PHI-4	Barret Pond and Fishkill Road	1	1	1	1	0	1	0	1	1	1	1	0	1	0	10	High
PHI-5	Philips Brook Bridge	1	1	1	1	0	1	0	1	1	1	1	0	1	0	11	High
PHI-6	Avery Road and Snake Hill Road	1	1	1	1	0	1	0	1	1	1	1	0	1	0	11	High
PHI-7	Indian Brook and Bird/Bottle Inn	1	1	1	1	0	1	0	1	1	1	1	0	1	0	11	High
PHI-8	147 Hustis Road	1	1	1	1	0	1	0	1	1	1	1	0	1	0	11	High
PHI-9	1143 Old Albany Post Road	1	1	1	1	0	1	0	1	1	1	1	0	1	0	11	High
PHI-10	Old Albany Post Rd and Sprout Brook Rd	1	1	1	1	0	1	0	1	1	1	1	0	1	0	11	High
PHI-11	Back-Up Generator for Radio Tower	1	0	1	1	1	1	0	1	1	1	1	1	1	1	13	High
PHI-12	Garrison VFD Backup Power	1	0	1	1	1	1	0	1	1	1	1	1	1	1	13	High
PHI-13	Address flood vulnerable private properties, including RL/SRL	0	1	1	1	0	0	0	1	0	1	1	1	1	1	9	High
PHI-14	Improve coordination of tree management	1	1	0	1	0	0	0	1	1	0	1	1	1	0	8	Medium
PHI-15	Amend NFIP floodplain mapping at Ashley Lane and Rt. 301	0	0	1	1	1	1	0	0	0	1	0	1	1	0	7	Medium
PHI-16	Town Recreation Center retrofits for sheltering	1	1	1	1	1	1	1	0	1	1	1	1	1	1	13	High

Mitigation Action/Project Number	Mitigation Action/Initiative	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
PHI-17	Improve emergency management capabilities	1	0	1	1	0	1	0	0	1	1	1	1	1	1	10	High
PHI-18	Develop mitigation projects to address other identified vulnerabilities	0	1	0	1	0	1	0	0	1	1	1	1	1	1	9	Medium
PHI-19	Support and participate in county led initiatives intended to build local and regional mitigation and risk-reduction capabilities	1	1	1	1	1	1	0 (will require municipality to support staff time)	1	1	0 (will require municipality to support staff time)	1	1	1	1	12	High

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

9.8.7 Future Needs To Better Understand Risk/Vulnerability

None at this time.

9.8.8 Hazard Area Extent and Location

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

9.8.9 Additional Comments

None at this time.

Figure 9.8-1. Town of Philipstown Hazard Area Extent and Location Map

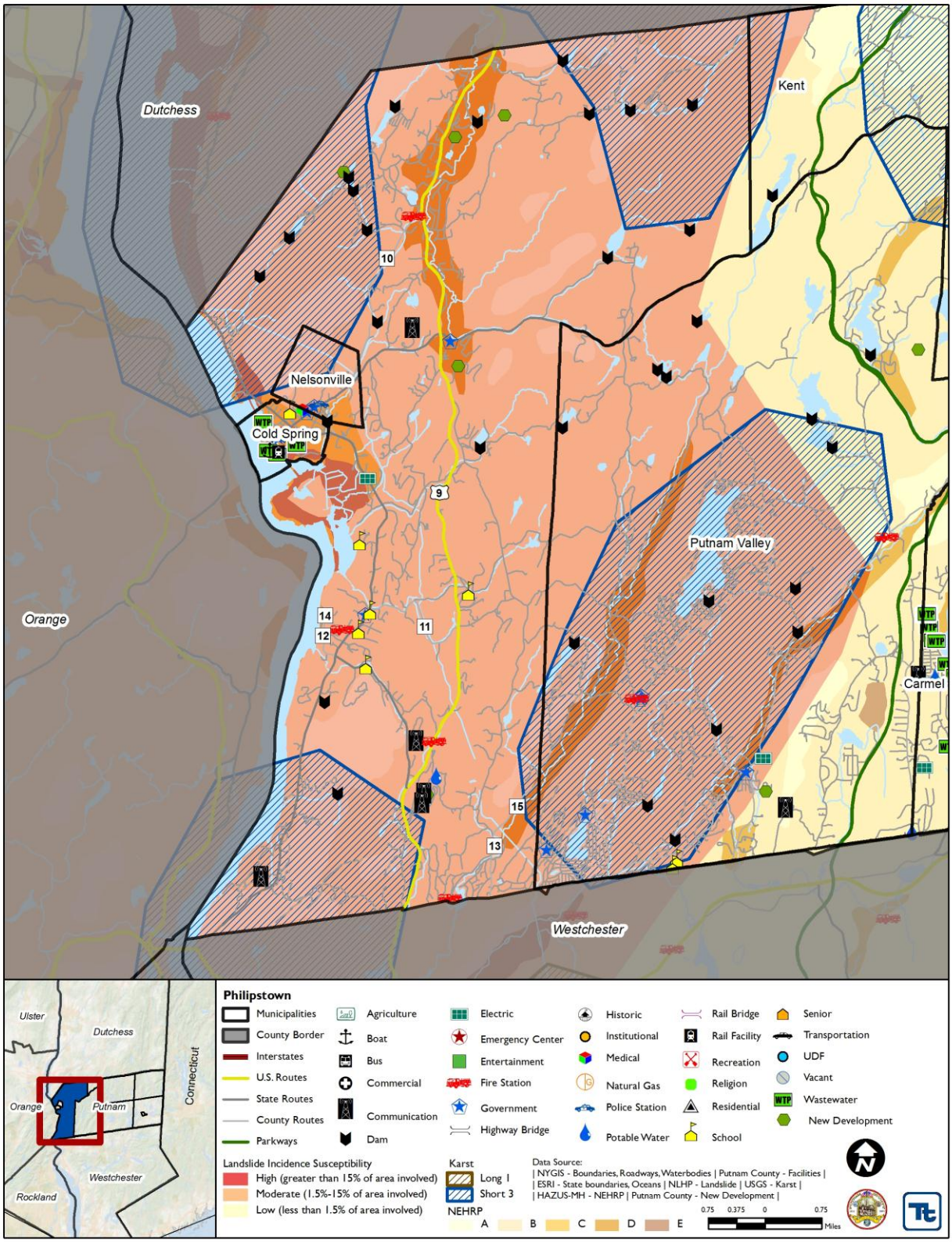
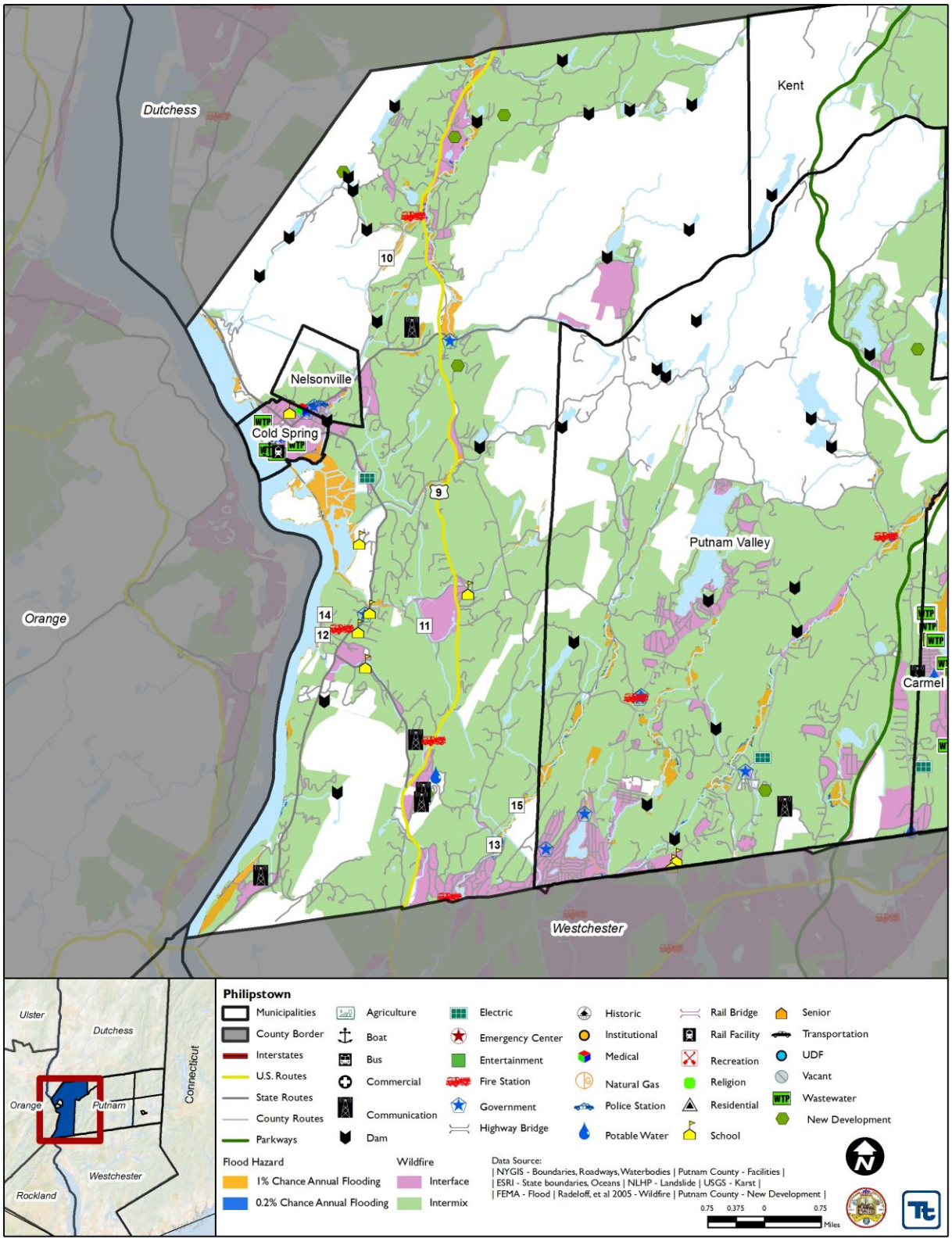


Figure 9.8-2. Town of Philipstown Hazard Area Extent and Location Map



Name of Jurisdiction: Town of Philipstown, Cold Spring
Action Number: PHI-1 (LOI #152)
Action Name: Manitou Station Road

Assessing the Risk	
Hazard(s) addressed:	Flood, Severe Storm, Climate Change
Specific problem being mitigated:	Manitou Station Road is the sole access to 14 homes on Hudson River Lane. Hurricane Sandy storm surge flooded Manitou Station Road preventing access to Hudson River Lane. The condition has existed since Maniotu Station and Mystery Point, (Metro-North train stop) was developed in the late 1800's. Obstruction of access prevents fire and rescue equipment from crossing flooded road; potential for loss of life.
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	1. No Action, problem continues.
	2. Raise road height
	3. Care for wetlands concerns.
Action/Project Intended for Implementation	
Description of Selected Action/Project	Raise a 500 foot section of Monitou Station Road two feet above storm surge.
Mitigation Action/Project Type	SIP
Goals/Objectives Met	G-1, G-2
Applies to existing structures/infrastructure, future, or not applicable	Existing
Benefits (losses avoided)	High – Life Safety (emergency access)
Estimated Cost	$250,000
Priority*	High
Plan for Implementation	
Responsible Organization	Town of Philipstown Highway Department
Local Planning Mechanism	Comprehensive Emergency Management Plan; Capital Plan
Potential Funding Sources	HMGP; Town Budget (25%) for Local Match
Timeline for Completion	Short
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: Progress on Action/Project:

*** Refer to results of Prioritization (page 2)**

Action Number: PHI-1 (LOI #152)
Action Name: Manitou Station Road

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Prevention of Road Flooding will help maintain safety.
Property Protection	1	This Project is expected to protect road way from future washout.
Cost-Effectiveness	1	Long term effects are expected to be highly cost-effective.
Technical	1	Design work is prepared. LOI approved
Political	0	No effect is expected from a Political aspect.
Legal	1	This Project will protect the Municipalities from Legal action.
Fiscal	0	Pending Grant assistance
Environmental	1	The road way improvement will help with water flow between wetlands.
Social	1	Nearby home-owners will be protected by having egress in case of emergency and access to vital services.
Administrative	1	The Town of Philipstown has all necessary Administrative abilities.
Multi-Hazard	1	This will protect croplands from salt damage and homes and roads from flood damage.
Timeline	0	Pending
Agency Champion	1	Town Highway Department is the responsible party.
Other Community Objectives	0	
Total	11	
Priority (High/Med/Low)	High	

Name of Jurisdiction: Town of Philipstown, Cold Spring
Action Number: PHI-2 (LOI #156)
Action Name: Old Manitou Road and Cloudbank Road

Assessing the Risk	
Hazard(s) addressed:	Flood, Severe Storm, Climate Change
Specific problem being mitigated:	Old Manitou Road is at the base of a steep mountain slope during a rain events the stormwater will wash out Old Manitou Road at Cloudbank Road. Existed since developed over 100 years ago. Public and private cost are estimated at $10,000 a year.
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	1. No action. Problem continues.
	2. Retention/detention of stormwater.
	3. Steep slope erosion.
Action/Project Intended for Implementation	
Description of Selected Action/Project	Using best management practices provide retention/detention of stormwater, re-contour slope to dissipate stormwater energy addition culverts under Old Manitou Road.
Mitigation Action/Project Type	SIP
Goals/Objectives Met	G-2, G-4
Applies to existing structures/infrastructure, future, or not applicable	Existing Infrastructure
Benefits (losses avoided)	Reduced flood damages, road closures Recent Damages: $10,000
Estimated Cost	$100,000
Priority*	High
Plan for Implementation	
Responsible Organization	Town of Philipstown, Kevin Donohue, Code Enforcement Officer
Local Planning Mechanism	Comprehensive Emergency Management Plan; Capital Plan
Potential Funding Sources	HMGP; Town Budget (25%) for Local Match
Timeline for Completion	Short, depending on availability of funding
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: Progress on Action/Project:

*** Refer to results of Prioritization (page 2)**

Action Number: PHI-2 (LOI #156)
Action Name: Old Manitou Road and Cloudbank Road

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Prevention of Road Flooding will help maintain safety.
Property Protection	1	This Project is expected to protect road way from future washout.
Cost-Effectiveness	1	Long term effects are expected to be highly cost-effective.
Technical	1	Design work is prepared. LOl approved
Political	0	No effect is expected from a Political aspect.
Legal	1	This Project will protect the Municipalities from Legal action.
Fiscal	0	Pending Grant assistance
Environmental	1	The road way improvement will help with water flow between wetlands.
Social	1	Nearby home-owners will be protected by having egress in case of emergency and access to vital services.
Administrative	1	The Town of Philipstown has all necessary Administrative abilities.
Multi-Hazard	1	This will protect croplands from salt damage and homes and roads from flood damage.
Timeline	0	Pending
Agency Champion	1	Town Highway Department is the responsible party.
Other Community Objectives	0	
Total	11	
Priority (High/Med/Low)	High	

Name of Jurisdiction: Town of Philipstown, Cold Spring
Action Number: PHI-3 (LOI #160)
Action Name: Brookside and Valley Lane Mitigation

Assessing the Risk	
Hazard(s) addressed:	Flood, Severe Storm, Climate Change
Specific problem being mitigated:	Brookside and Valley Lane are located at the base of a steep mountain next to Sprout Brook Creek. During a rain event stormwater floods streets and homes. Existed since 1940's. Homes are flood damaged. Repetitive loss through NFIP.
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	1 Using best management practices provide retention/detention of storm water. re-contour slope, restore intermittent stream
	2 No action – does not resolve the vulnerability
	3 Replace bridge at Sprout Brook Road.
Action/Project Intended for Implementation	
Description of Selected Action/Project	Using best management practices provide retention/detention of stormwater, re-contour slope, restore seasonal intermittent drainage steams, replace bridge at Sproutbrook Road
Mitigation Action/Project Type	SIP
Objectives Met	G-2, G-4
Applies to existing structures/infrastructure, future, or not applicable	Existing
Benefits (losses avoided)	High – Reduced flooding of structures (Repetitive Loss) and infrastructure. Recent Damages: $50,000
Estimated Cost	$500,000
Priority*	High
Plan for Implementation	
Responsible Organization	Town Highway Department
Local Planning Mechanism	To be completed via RFP process. Comprehensive Emergency Management Plan; Capital Plan; NFIP Ordinance
Potential Funding Sources	HMGP; Town Budget (25%) for Local Match
Timeline for Completion	Longterm
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: Progress on Action/Project:

*** Refer to results of Prioritization (page 2)**

Action Number: PHI-3 (LOI #160)
Action Name: Brookside and Valley Lane Mitigation

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	0	
Property Protection	1	Protect Homes. Repetitive losses.
Cost-Effectiveness	1	Cost of project should protect against repetitive damage repairs
Technical	1	Technically feasible and a long term solution
Political	1	40 Year old issue to be cared for.
Legal	1	N/A
Fiscal	0	N/A
Environmental	0	N/A
Social	0	N/A
Administrative	1	Yes, Department can administratively complete project.
Multi-Hazard	1	Yes, protects roadway losses and home losses
Timeline	1	Yes, can be completed within 1 year
Agency Champion	1	Town Highway Department
Other Community Objectives	0	N/A
Total	9	
Priority (High/Med/Low)	High	

Name of Jurisdiction: Town of Philipstown, Cold Spring
Action Number: PHI-4 (LOI #161)
Action Name: Barret Pond and Fishkill Road

Assessing the Risk	
Hazard(s) addressed:	Flood
Specific problem being mitigated:	Barret Pond discharges under a home. During a rain event the stormwater floods four homes creating repetitive losses. Existed since developed 1905's.
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	1. No action – continued Repetitive Loss
	2. Acquisition of property
	3.
Action/Project Intended for Implementation	
Description of Selected Action/Project	Using best management practices provide retention/detention of stormwater, re-contour slope, re-pipe to county basin; or acquisition.
Mitigation Action/Project Type	SIP
Objectives Met	G-2
Applies to existing structures/infrastructure, future, or not applicable	Existing
Benefits (losses avoided)	Reduced repetitive flood damage to four residential structures. Recent Damages: $75,000
Estimated Cost	$100K ($500K for acquisition)
Priority*	High
Plan for Implementation	
Responsible Organization	Town of Philipstown Highway Department Town of Philipstown, Kevin Donohue, Code Enforcement Officer
Local Planning Mechanism	Comprehensive Emergency Management Plan; Capital Plan; NFIP Ordinance
Potential Funding Sources	HMGP; 25% for Local Match
Timeline for Completion	Short, once funding is secured
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: Progress on Action/Project:

*** Refer to results of Prioritization (page 2)**

Action Number: PHI-4 (LOI #161)
Action Name: Barret Pond and Fishkill Road

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Prevention of Road Flooding will help maintain safety.
Property Protection	1	This Project is expected to protect road way from future washout.
Cost-Effectiveness	1	Long term effects are expected to be highly cost-effective.
Technical	1	Design work is prepared. LOI approved
Political	0	No effect is expected from a Political aspect.
Legal	1	This Project will protect the Municipalities from Legal action.
Fiscal	0	Pending Grant assistance
Environmental	1	The road way improvement will help with water flow between wetlands.
Social	1	Nearby home-owners will be protected by having egress in case of emergency and access to vital services.
Administrative	1	The Town of Philipstown has all necessary Administrative abilities.
Multi-Hazard	1	This will protect croplands from salt damage and homes and roads from flood damage.
Timeline	0	Pending
Agency Champion	1	Town Highway Department is the responsible party.
Other Community Objectives	0	
Total	10	
Priority (High/Med/Low)	High	

Name of Jurisdiction: Town of Philipstown, Cold Spring
Action Number: PHI-5 (LOI #162)
Action Name: Philips Brook Bridge

Assessing the Risk	
Hazard(s) addressed:	Flood, Severe Storm, Climate Change
Specific problem being mitigated:	During a heavy rain event the Philipse Brook Creek bypasses the bridge on Philipesbrook Road causing severe erosion to the road.
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	1. No action; damage continues
	2. New bridge
	3. Road wash out
Action/Project Intended for Implementation	
Description of Selected Action/Project	Replace Bridge.
Mitigation Action/Project Type	SIP
Objectives Met	G-1, G-2
Applies to existing structures/infrastructure, future, or not applicable	Existing
Benefits (losses avoided)	High – Reduced flood damage to infrastructure; possible life safety risk Recent Damages: $50,000
Estimated Cost	$300,000
Priority*	High
Plan for Implementation	
Responsible Organization	Town Highway Department Town of Philipstown, Kevin Donohue, Code Enforcement Officer
Local Planning Mechanism	Comprehensive Emergency Management Plan; Capital Plan
Potential Funding Sources	HMGP; 25% for Local Match
Timeline for Completion	Long term, depending on funding availability
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: Progress on Action/Project:

*** Refer to results of Prioritization (page 2)**

Action Number: PHI-5 (LOI #162)
Action Name: Philips Brook Bridge

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Prevention of Road Flooding will help maintain safety.
Property Protection	1	This Project is expected to protect road way from future washout.
Cost-Effectiveness	1	Long term effects are expected to be highly cost-effective.
Technical	1	Design work is prepared. LOI approved
Political	0	No effect is expected from a Political aspect.
Legal	1	This Project will protect the Municipalities from Legal action.
Fiscal	0	Pending Grant assistance
Environmental	1	The road way improvement will help with water flow between wetlands.
Social	1	Nearby home-owners will be protected by having egress in case of emergency and access to vital services.
Administrative	1	The Town of Philipstown has all necessary Administrative abilities.
Multi-Hazard	1	This will protect croplands from salt damage and homes and roads from flood damage.
Timeline	0	Pending
Agency Champion	1	Town Highway Department is the responsible party.
Other Community Objectives	0	
Total	11	
Priority (High/Med/Low)	High	

Name of Jurisdiction: Town of Philipstown, Cold Spring
Action Number: PHI-6 (LOI #167)
Action Name: Avery Road and Snake Hill Road

Assessing the Risk	
Hazard(s) addressed:	Flood, Severe Storm, Climate Chang
Specific problem being mitigated:	During a heavy rain event Philips Brook creek damages the home at 7 Avery Road. The bridge over Philips Brook Road is narrow causing flood water to back up and over Avery Road causing damage to the home at 7 Avery Road and severe erosion along Snake Hill
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	1. No action, continue Repetitive Loss
	2. New bridge
	3. To span flood plain
Action/Project Intended for Implementation	
Description of Selected Action/Project	Replace the Avery Road Bridge over Philipes Brook Creek, repair stone wall banks of creek approximately 800 feet. remove silt, gravel and debris from retention ponds.
Mitigation Action/Project Type	SIP
Goals/Objectives Met	G-1, G-2
Applies to existing structures/infrastructure, future, or not applicable	Existing
Benefits (losses avoided)	High – Reduced damages to road, bridge and residential structure; possible life safety risk. Recent Damages: $75,000
Estimated Cost	$500,000
Priority*	High
Plan for Implementation	
Responsible Organization	Town Highway Department Town of Philipstown, Kevin Donohue, Code Enforcement Officer Possible support from SWCD or NRCS
Local Planning Mechanism	Comprehensive Emergency Management Plan; Capital Plan
Potential Funding Sources	HMGP; 25% for Local Match
Timeline for Completion	Long term, dependent on funding availability
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: Progress on Action/Project:

*** Refer to results of Prioritization (page 2)**

Action Number: PHI-6 (LOI #167)
Action Name: Avery Road and Snake Hill Road

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Prevention of Road Flooding will help maintain safety.
Property Protection	1	This Project is expected to protect road way from future washout.
Cost-Effectiveness	1	Long term effects are expected to be highly cost-effective.
Technical	1	Design work is prepared. LOl approved
Political	0	No effect is expected from a Political aspect.
Legal	1	This Project will protect the Municipalities from Legal action.
Fiscal	0	Pending Grant assistance
Environmental	1	The road way improvement will help with water flow between wetlands.
Social	1	Nearby home-owners will be protected by having egress in case of emergency and access to vital services.
Administrative	1	The Town of Philipstown has all necessary Administrative abilities.
Multi-Hazard	1	This will protect croplands from salt damage and homes and roads from flood damage.
Timeline	0	Pending
Agency Champion	1	Town Highway Department is the responsible party.
Other Community Objectives	0	
Total	11	
Priority (High/Med/Low)	High	

Name of Jurisdiction: Town of Philipstown, Cold Spring
Action Number: PHI-7 (LOI #168)
Action Name: Indian Brook and Bird/Bottle Inn

Assessing the Risk	
Hazard(s) addressed:	Flood, Severe Storm, Climate Change
Specific problem being mitigated:	During a heavy rain events Indian brook creek floods over its banks eroding Indian Brook Road, flooding over the bridge on Old Albany Post Road and damaging the Bird and Bottle Inn. Has existed since the 1700's.
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	1. No action; Repetitive Loss
	2. Replace bridge, re-contour floodplain
	3. Stabilize floodplain
Action/Project Intended for Implementation	
Description of Selected Action/Project	Using best management practices replace the bridge on Old Albany Post Road and amour the banks of Indian Brook Creek from Old Albany Post Road up stream 400 feet.
Mitigation Action/Project Type	SIP, NRP
Goals/Objectives Met	G-1, G-2
Applies to existing structures/infrastructure, future, or not applicable	Existing
Benefits (losses avoided)	High – Reduced damages to road, bridge and commercial structure; stream bank erosion; possible life safety risk Recent Damages: $50,000
Estimated Cost	$400,000
Priority*	High
Plan for Implementation	
Responsible Organization	Town Highway Department Town of Philipstown, Kevin Donohue, Code Enforcement Officer Possible support from SWCD or NRCS
Local Planning Mechanism	Comprehensive Emergency Management Plan; Capital Plan
Potential Funding Sources	HMGP; 25% for Local Match
Timeline for Completion	Long term, dependent on funding availability
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: Progress on Action/Project:

*** Refer to results of Prioritization (page 2)**

Action Number: PHI-7 (LOI #168)
Action Name: Indian Brook and Bird/Bottle Inn

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Prevention of Road Flooding will help maintain safety.
Property Protection	1	This Project is expected to protect road way from future washout.
Cost-Effectiveness	1	Long term effects are expected to be highly cost-effective.
Technical	1	Design work is prepared. LOI approved
Political	0	No effect is expected from a Political aspect.
Legal	1	This Project will protect the Municipalities from Legal action.
Fiscal	0	Pending Grant assistance
Environmental	1	The road way improvement will help with water flow between wetlands.
Social	1	Nearby home-owners will be protected by having egress in case of emergency and access to vital services.
Administrative	1	The Town of Philipstown has all necessary Administrative abilities.
Multi-Hazard	1	This will protect croplands from salt damage and homes and roads from flood damage.
Timeline	0	Pending
Agency Champion	1	Town Highway Department is the responsible party.
Other Community Objectives	0	
Total	11	
Priority (High/Med/Low)	High	

Name of Jurisdiction: Town of Philipstown, Cold Spring
Action Number: PHI-8 (LOI #170)
Action Name: 147 Hustis Road

Assessing the Risk	
Hazard(s) addressed:	Flood, Severe Storm, Climate Change
Specific problem being mitigated:	During a heavy rain event stormwater backups behind 147 Hustis Road redirecting the stormwater away from the existing storm sewer. This has existed for several years and is caused by storm debris from the forest and a berm.
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	1. No action; flooding continues
	2. Engineering study
	3. Protect wetlands
Action/Project Intended for Implementation	
Description of Selected Action/Project	Cleaning and restoring the drainage channels for 800 feet. Removing any rock and soil obstacles.
Mitigation Action/Project Type	NRP
Objectives Met	G-2, G-4
Applies to existing structures/infrastructure, future, or not applicable	Existing
Benefits (losses avoided)	Reduced flood risk of residential structure Recent Damages: $10,000
Estimated Cost	$20,000
Priority*	High
Plan for Implementation	
Responsible Organization	Town Highway Department Town of Philipstown, Kevin Donohue, Code Enforcement Officer Possible support from SWCD or NRCS
Local Planning Mechanism	Comprehensive Emergency Management Plan; Capital Plan
Potential Funding Sources	HMGP; 25% for Local Match
Timeline for Completion	Long term, dependent on funding availability
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: Progress on Action/Project:

*** Refer to results of Prioritization (page 2)**

Action Number: PHI-8 (LOI #170)
Action Name: 147 Hustis Road

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Prevention of Road Flooding will help maintain safety.
Property Protection	**1**	This Project is expected to protect road way from future washout.
Cost-Effectiveness	**1**	Long term effects are expected to be highly cost-effective.
Technical	**1**	Design work is prepared. LOI approved
Political	0	No effect is expected from a Political aspect.
Legal	**1**	This Project will protect the Municipalities from Legal action.
Fiscal	0	Pending Grant assistance
Environmental	1	The road way improvement will help with water flow between wetlands.
Social	**1**	Nearby home-owners will be protected by having egress in case of emergency and access to vital services.
Administrative	1	The Town of Philipstown has all necessary Administrative abilities.
Multi-Hazard	**1**	This will protect croplands from salt damage and homes and roads from flood damage.
Timeline	0	Pending
Agency Champion	1	Town Highway Department is the responsible party.
Other Community Objectives	0	
Total	11	
Priority (High/Med/Low)	High	

Name of Jurisdiction: Town of Philipstown, Cold Spring
Action Number: PHI-9 (LOI #172)
Action Name: 1143 Old Albany Post Road

Assessing the Risk	
Hazard(s) addressed:	Flood, Severe Storm
Specific problem being mitigated:	During a heavy rain event, stormwater emanates from the steep mountain slope to along side Old Albany Post Road crosses the road and inundates 1143 Old Albany Post Road. Existed since the road was constructed 1700's.
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	1. No action, problem continues
	2. Create grassy swale
	3. Protect wetland/water quality
Action/Project Intended for Implementation	
Description of Selected Action/Project	Using best management practices provide stone and grassy swale and pipe to Philipes Brook Creek
Mitigation Action/Project Type	SIP, NRP
Objectives Met	G-2, G-4
Applies to existing structures/infrastructure, future, or not applicable	Existing
Benefits (losses avoided)	Reduced flooding of residential structure; reduced road damage. Recent Damages: $5,000
Estimated Cost	$20,000
Priority*	High
Plan for Implementation	
Responsible Organization	Town Highway Department Town of Philipstown, Kevin Donohue, Code Enforcement Officer
Local Planning Mechanism	Comprehensive Emergency Management Plan; Capital Plan
Potential Funding Sources	HMGP; 25% for Local Match
Timeline for Completion	Long term, dependent on funding availability
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: Progress on Action/Project:

*** Refer to results of Prioritization (page 2)**

Action Number: PHI-9 (LOI #172)
Action Name: 1143 Old Albany Post Road

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Prevention of Road Flooding will help maintain safety.
Property Protection	1	This Project is expected to protect road way from future washout.
Cost-Effectiveness	1	Long term effects are expected to be highly cost-effective.
Technical	1	Design work is prepared. LOI approved
Political	0	No effect is expected from a Political aspect.
Legal	1	This Project will protect the Municipalities from Legal action.
Fiscal	0	Pending Grant assistance
Environmental	1	The road way improvement will help with water flow between wetlands.
Social	1	Nearby home-owners will be protected by having egress in case of emergency and access to vital services.
Administrative	1	The Town of Philipstown has all necessary Administrative abilities.
Multi-Hazard	1	This will protect croplands from salt damage and homes and roads from flood damage.
Timeline	0	Pending
Agency Champion	1	Town Highway Department is the responsible party.
Other Community Objectives	0	
Total	11	
Priority (High/Med/Low)	High	

Name of Jurisdiction: Town of Philipstown, Cold Spring
Action Number: PHI-10 (LOI #173)
Action Name: Old Albany Post Rd and Sprout Brook Rd

Assessing the Risk	
Hazard(s) addressed:	Flood, Severe Storm, Climate Change
Specific problem being mitigated:	During a heavy rain event the creek parallel to Old Albany Post Rd erodes and deposit the soil onto private property filling in a pond and diverting the creek into a private garage. Repetitive loss and loss of rear yard. The flooding has increased each year.
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	1. No action – problem continues
	2. Engineer
	3.
Action/Project Intended for Implementation	
Description of Selected Action/Project	Using best management practices, clean debris from creek and pond. Restore channel to Sprout Brook Creek
Mitigation Action/Project Type	NRP
Objectives Met	G-2, G-4
Applies to existing structures/infrastructure, future, or not applicable	Existing
Benefits (losses avoided)	Reduced repetitive flooding of residential structure and property Recent Damages: $5,000
Estimated Cost	$20,000
Priority*	High
Plan for Implementation	
Responsible Organization	Town Highway Department Town of Philipstown, Kevin Donohue, Code Enforcement Officer Possible suppport from SWCD and/or NRCS
Local Planning Mechanism	Comprehensive Emergency Management Plan; Capital Plan
Potential Funding Sources	HMGP; 25% for Local Match
Timeline for Completion	Long term, dependent on funding availability
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: Progress on Action/Project:

*** Refer to results of Prioritization (page 2)**

Action Number: PHI-10 (LOI #173)
Action Name: Old Albany Post Rd and Sprout Brook Rd

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Prevention of Road Flooding will help maintain safety.
Property Protection	1	This Project is expected to protect road way from future washout.
Cost-Effectiveness	1	Long term effects are expected to be highly cost-effective.
Technical	1	Design work is prepared. LOI approved
Political	0	No effect is expected from a Political aspect.
Legal	1	This Project will protect the Municipalities from Legal action.
Fiscal	0	Pending Grant assistance
Environmental	1	The road way improvement will help with water flow between wetlands.
Social	1	Nearby home-owners will be protected by having egress in case of emergency and access to vital services.
Administrative	1	The Town of Philipstown has all necessary Administrative abilities.
Multi-Hazard	1	This will protect croplands from salt damage and homes and roads from flood damage.
Timeline	0	Pending
Agency Champion	1	Town Highway Department is the responsible party.
Other Community Objectives	0	
Total	11	
Priority (High/Med/Low)	High	

Name of Jurisdiction: Town of Philipstown
Number: PHI-11
Mitigation Action/Initiative: Back-Up Generator for Radio Tower – 59 Lane Gate Road

Assessing the Risk	
Hazard(s) addressed:	Severe Storm, Severe Winter Storm, Earthquake
Specific problem being mitigated:	High wind events and winter storms have caused the widespread loss of electrical power, including power to Radio Tower. Radio Tower is a critical facility in that it provides services for Emergency Operations and Town Personnel. Loss of power forces the Town to transfer operations to other locations while operating at a greatly diminished capacity
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	1. Tree Trimming-remove tree branches that may fall onto power lines causing power outages
	2. Bury Power Lines. This option is not being pursued as it is cost prohibitive due to the Town does not have the legal authority to bury the lines.
Action/Project Intended for Implementation	
Description of Selected Action/Project	Install a permanent generator at Radio Tower. It will have sufficient capacity to allow the Town to quickly respond to the Town's internal and community's needs while allowing the business continuity.
Mitigation Action/Project Type	SIP
Objectives Met	G-1, G-2, G-5
Applies to existing structures/infrastructure, future, or not applicable	Existing
Benefits (losses avoided)	We will be able to continue emergency services and Town Highway communications. Recent Damages: - Loss of Service during 2014 Spring and Summer Storms
Estimated Cost	Unknown
Priority*	High
Plan for Implementation	
Responsible Organization	Town of Philipstown: Roger Chirico, Highway Department Supervisor
Local Planning Mechanism	Municipal Budget-Funds will be requested during the next budget cycle for matching funds for a FEMA grant.
Potential Funding Sources	FEMA HMPG, Town budget for local match
Timeline for Completion	8 months (after funds are approved)
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: Progress on Action/Project:

*** Refer to results of Prioritization (page 2)**

Number: PHI-11
Mitigation Action/Initiative: Back-Up Generator for Radio Tower – 59 Lane Gate Road

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Will allow this critical services to remain operational during power outages.
Property Protection	0	N/A
Cost-Effectiveness	1	This project is considered highly cost-effective
Technical	1	There are no technical issues associated with the project, and with routine maintenance will provide long term protection against power interruptions.
Political	1	This project is supported both publically and politically.
Legal	1	The municipality has full legal authority to implement this project.
Fiscal	0	The town can currently fund the local match if a grant were awarded.
Environmental	1	There are no environmental constraints associated with this project.
Social	1	This project benefits all sectors of the community equally.
Administrative	1	The Town has all administrative and technical resources necessary to implement this project
Multi-Hazard	1	This project provides protection against multiple hazards.
Timeline	1	The project can be implemented within one year once funding is secured.
Agency Champion	1	The Town Engineer and Highway Supervisor are the leads for this critical project.
Other Community Objectives	1	This project supports the Town's commitment to provide uninterrupted critical services to their residents, particularly in times of natural disasters and other emergencies.
Total	13	
Priority (High/Med/Low)	High	

Name of Jurisdiction: Garrison Volunteer Fire Co., Inc., Garrison
Action Number: PHI-12 (LOI #2187)
Action Name: Garrison VFD Backup Power

Assessing the Risk	
Hazard(s) addressed:	Severe Storm; Severe Winter Storm; Climate Change (Utility Outages)
Specific problem being mitigated:	The Garrison Volunteer Fire Co., (aka Garrison Fire Dept - "GFD") is a 100% volunteer not-for-profit NYS Fire Corporation, contracted to the Town of Philipstown to provide fire and rescue services in an area known as the Garrison Fire Protection District.
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	1. No Action – Loss of service of critical facility remains
	2.
	3.
Action/Project Intended for Implementation	
Description of Selected Action/Project	GFD Hazard Mitigation Project – Proposed Mitigation Measures (Total request for both fire stations: $770,000) GFD proposes the installation of Solar Resilience Systems to allow operations during extended electric grid outages for each of the two fire stations
Mitigation Action/Project Type	SIP
Objectives Met	G-1, G-2, G-5
Applies to existing structures/infrastructure, future, or not applicable	Existing
Benefits (losses avoided)	High: Maintain critical facility and operations during power outages; life safety Recent Damages: $50,000
Estimated Cost	$770,000
Priority*	High
Plan for Implementation	
Responsible Organization	Garrison Volunteer Fire Co., Inc., Peter von Bergen, Vice President Town Engineer and Highway Supervisor
Local Planning Mechanism	Comprehensive Emergency Management Plan
Potential Funding Sources	HMGP; Fire District for Local Match
Timeline for Completion	Short, once funding is secured
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: Progress on Action/Project:

*** Refer to results of Prioritization (page 2)**

Action Number: PHI-12 (LOI #2187)
Action Name: Garrison VFD Backup Power

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Will allow this critical services to remain operational during power outages.
Property Protection	0	N/A
Cost-Effectiveness	1	This project is considered highly cost-effective
Technical	1	There are no technical issues associated with the project, and with routine maintenance will provide long term protection against power interruptions.
Political	1	This project is supported both publically and politically.
Legal	1	The municipality has full legal authority to implement this project.
Fiscal	0	The town can currently fund the local match if a grant were awarded.
Environmental	1	There are no environmental constraints associated with this project.
Social	1	This project benefits all sectors of the community equally.
Administrative	1	The Town has all administrative and technical resources necessary to implement this project
Multi-Hazard	1	This project provides protection against multiple hazards.
Timeline	1	The project can be implemented within one year once funding is secured.
Agency Champion	1	The Town Engineer and Highway Supervisor are the leads for this critical project.
Other Community Objectives	1	This project supports the Town's commitment to provide uninterrupted critical services to their residents, particularly in times of natural disasters and other emergencies.
Total	13	
Priority (High/Med/Low)	High	