

9.4 TOWN OF CLARKSTOWN

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

9.4.1 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
James McCormick – Sergeant Police Department Email: J.McCormick@clarkstown.org Phone:845-222-2336	Vincent Balascio – Director of Finance/Supervisors Office Email: v.balascio@clarkstown.org Phone: 914-848-6483
NFIP Floodplain Administrator (FPA)	
Luke Kalarickal, P.E., Director, Department of Environmental Control 845-639-2111 l.kalarickal@clarkstown.org	

9.4.2 Municipal Profile

The Town of Clarkstown is located along the eastern border of Rockland County. The Town is bordered to the north by the Town of Haverstraw and its inclusive villages, to the south by the Towns of Orangetown and its inclusive villages, to the west by the Town of Ramapo and its inclusive villages, and to the east by the Hudson River. The following hamlets are found in the Town: Bardonia, Central Nyack, Congers, Nanuet, New City, Valley Cottage, and West Nyack. Lake DeForest, Lake Lucille, and the Hudson River are major bodies of water found throughout the Town.

The Town has a total area of 46.9 square miles, of which, 38.5 square miles is land and 8.4 square miles is water. According to the 2010 Census, the community's population was 84,187 (inclusive of the Villages of Nyack, Spring Valley, and Upper Nyack). The Town is governed by the Town Board consisting of the town council and the town supervisor.

Growth/Development Trends

The following table summarizes recent residential/commercial development since 2010 to present and any known or anticipated major residential/commercial development and major infrastructure development that has been identified in the next five years within the municipality. Refer to the map in 9.4.8 of this annex which illustrates the hazard areas along with the location of potential new development.

Table 9.4-1. Growth and Development

Property or Development Name	Type (e.g. Res., Comm.)	# of Units / Structures	Location (address and/or Parcel ID)	Known Hazard Zone(s)	Description/Status of Development
Recent Development from 2010 to present					
Bowman Estates, New City	Residential	3 Lot subdivision	43.14-1-45	None Identified.	3 Built
Davies Farm/Tor Valley, New City	Residential	2 Lot subdivision	51.9-1-30	Location Undetermined	built
Davies Farm/Tor Valley, New City	Residential	2 Lot subdivision	51.9-1-50 +	None Identified.	built
Hyenga Lake, Spring Valley	Residential	Senior Housing Development - 106 units	57.14-3-2	Location Undetermined	built

Property or Development Name	Type (e.g. Res., Comm.)	# of Units / Structures	Location (address and/or Parcel ID)	Known Hazard Zone(s)	Description/Status of Development
AYH Estates, Nanuet	Residential	2 Lot subdivision	57.20-1-32	NEHRP: D	2 Built
Valley Cottage Free Library, VC	Commercial	1,470 SF addition	59.7-3-58	None Identified.	built
Eden Park, West Nyack	Residential	Senior Housing Development - 34 units	64.7-1-8	None Identified.	34 Built
Insera/Shop-rite Super, W. Nyack	Commercial	Relocation of sidewalk and mod. to 14 parking spaces	65.5-2-5	Flood: 1% Chance; NEHRP: E	built
United Structural Works, Congers	Commercial	40,550 SF Commercial Building	35.20-1-5	None Identified.	built
St. Francis of Assisi Church, West Nyack	Commercial	19,450 addition and separate gym, multi-purpose building.	51.16-3-1	None Identified.	built
St. John's Episcopal Church, New City	Commercial	Parking lot alterations/Special Permit to operate nursery school	52.13-1-33	None Identified.	built
Bradlee's Shopping Center Amendment	Commercial	Modifications to prev. approved site plan	43.11-2-38,39,40 & 41	None Identified.	built
Palisades Ctr. Ring Rd. Access Rd. WN	Commercial	Modifications to ring road	59.17-1-4+	Flood: 1% Chance	built
Solomon & Zobali, New City	Residential	Lot line change	43.13-1-61.1 & 61.2	WUI: Interface	n/a
Cheryl Turk, C. Nyack	Residential	Lot line change	59.19-1-20	None Identified.	n/a
Mavis Discount Tire, Nanuet	Commercial	1,562 SF addition to 7,414 SF bldg.	64.10-1-2	None Identified.	built
Landmark Corporate Park, Congers	Commercial	Commercial Subdivision - 6 lots	35.14-1-42	None Identified.	not built
United Hospice of Ro., New City	Commercial	11,000 SF bldg. with 10 patient rooms & associated areas	33.12-2-8	None Identified.	built
Costco, Spring Valley	Commercial	Parking lot alteration	57.15-1-35/57.16-1-1	None Identified.	built
O & R Utilities/Snake Hill Subs. WN	Commercial	New electrical substation	59.13-1-22 & 36	None Identified.	built
Snake Hill Corp., West Nyack	Commercial	9,814 SF Building	59.13-1-31	NEHRP: E; WUI: Interface	built
Sky Ridge, New City	Commercial	165' road for utilities	42.12-2-55	WUI: Interface	built
Normandy Village Co., Nanuet	Residential	Construction of two buildings 38,912 SF	64.09-1-8 & 11	Location Undetermined	built
169 Route 303, Valley Cottage	Commercial	9,100 SF garage & storage bldg.	58.18-1-22 & 23	None Identified.	built
Palisades Audi,	Commercial	23,000 SF metal	65.7-5-3	WUI: Interface	built

Property or Development Name	Type (e.g. Res., Comm.)	# of Units / Structures	Location (address and/or Parcel ID)	Known Hazard Zone(s)	Description/Status of Development
Central Nyack		roof structure			
McDonald's Restaurant, Nanuet	Commercial	5,494 SF Replacement bldg.	64.5-2-26	None Identified.	built
Blue Rock School, West Nyack	Commercial	1	58.15-2-38	None Identified.	built
Valley Cottage Free Library	Commercial	1	59.7-3-58	None Identified.	built
Grand Prize Chevrolet, Nanuet	Commercial	1	58.18-1-22+	None Identified.	built
South Mountain Properties, New City	Residential	1	26.19-1-24	None Identified.	built
Nanuet Mercedes-Benz, Nanuet	Commercial	1	58.18-1-5	None Identified.	built
Banchetto Restaurant, Nanuet	Commercial	Demolition of 3,500 SF and construction of new 5,040 SF one story bldg.	63.08-3-7 & 8	None Identified.	built
The Shops at Nanuet	Commercial	Demolition and rebuild different size and style mall.	57.20-2-59+	None Identified.	built
Linsalato, New City	Commercial	Conversion from Res. to Office with modification of parking.	51.15-1-82	None Identified.	built
The Duke of Oil, New City	Commercial	1,248 SF addition to existing 2,253 single story bldg.	43.15-1-22+	Flood: 0.2% Chance	built
Eklec Co New Co LLC, West Nyack	Commercial	Two stories above Bed, Bath and Beyond	65.06-1-2	NEHRP: E	built
Giordano, Valley Cottage	Commercial	Two story addition for apts. and one story office.	59.07-1-7	None Identified.	not built
Known or Anticipated Development in the Next Five (5) Years					
None identified.					

* Only location-specific hazard zones or vulnerabilities identified.

9.4.3 Natural Hazard Event History Specific to the Municipality

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

Table 9.4-2. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	Rockland County Designated?	Did your community suffer losses/costs from this event?	Notes on damages within County
August 10, 2009	Thunderstorms	N/A		\$25,000 in damages throughout County
January 25, 2010	High Wind	N/A		\$100,000 in damages throughout County
March 13-31, 2010	Severe Storms and Flooding DR-1899	Yes	Debris removed from Town property and along the public right of way.	
July 19, 2010	Thunderstorms, Lightning, Wind	N/A		\$36,000 in damages throughout County
December 26-27, 2010	Severe Winter Storm and Snowstorm DR-1957	Yes	Multiple roads and transportation routes were closed or severely compromised; limiting access to emergency services	
August 25 – September 5, 2011	Hurricane Irene DR-4020	Yes	Multiple roads and transportation routes were closed or severely compromised; limiting access to emergency services	
October 27 – November 8, 2012	Hurricane Sandy DR-4085	Yes	Multiple roads in Town closed and power outages extended for several days; Debris removed from Town property	
February 16, 2016	Strong Winds	N/A		\$50,000 in damages throughout County
Below, please identify other events that caused damage/losses in your community. Use additional rows if necessary.				
March 13, 2017	Snow Storm	No	OT \$14,989.18	

Notes:

EM Emergency Declaration (FEMA)

FEMA Federal Emergency Management Agency

DR Major Disaster Declaration (FEMA)

N/A Not applicable

9.4.4 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 Clarkstown. For additional vulnerability information relevant to this jurisdiction, refer to Section 5.0.

Natural Hazard Risk/Vulnerability Risk Ranking



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

Table 9.4-3. Hazard Risk/Vulnerability Risk Ranking

Hazard type	Estimate of Potential Dollar Losses to Structures Vulnerable to the Hazard ^{a, c}	Probability of Occurrence	Risk Ranking Score (Probability x Impact)	Hazard Ranking ^b
Drought	Damage estimate not available	Frequent	33	High
Earthquake	100-Year GBS: \$0 500-Year GBS: \$6,143,937 2,500-Year GBS: \$121,313,698	Occasional	24	Medium
Extreme Temperature	Damage estimate not available	Frequent	27	Medium
Flood	1% Annual Chance: \$444,309,000	Frequent	36	High
Landslide	RCV Exposed: \$0	Rare	6	Low
Severe Storm	100-Year MRP: \$6,859,263 500-year MRP: \$57,694,554 Annualized: \$424,818	Frequent	48	High
Winter Storm	1% GBS: \$107,905,480 5% GBS: \$539,527,400	Frequent	51	High
Wildfire	Estimated Value in the WUI: \$4,230,893,000	Frequent	45	High

Notes:

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

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Town of Clarkstown.

Table 9.4-4. 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 Clarkstown	550	677	\$7,586,945	24	10	116

Source: FEMA Region 2, 2016

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

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

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

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

Critical Facilities

The table below presents the critical facilities identified in the HMP that are located in the FEMA-delineated 1- and/or 0.2-percent annual chance floodplain. The table also summarizes the Hazards United States (HAZUS) – Multi-Hazards (MH) damage estimates (if any) to each critical facility as a result of the 1-percent annual chance flood event.

Although these critical facilities are located in the floodplain, the Town noted the following:

- Well #1, #2 and #3 are no longer in use and thus no longer vulnerable.
- Klein Avenue Wastewater Pump station controls are all above the 500-year flood plain and would not be affected by any worst-case scenario.
- Forrest Brook Wastewater Pump station has been rebuilt and its new floor elevation is above the 500-year floodplain.

Table 9.4-5. 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
Well #1	Well	X	X	-	-
Jawonio	Daycare	X	X	69.75	71
Klein Avenue	Wastewater Pump	X	X	-	-
Well #2	Well	X	X	-	-
Well #3	Well	X	X	-	-
Pascack	Wastewater Pump	X	X	40	-
St. Anthony School	Daycare		X	-	-
RPS Medic 5	EMS		X	-	-
O & R West Nyack Operating Center	Hazmat		X	-	-
West Nyack P.O.	Post Office		X	-	-
Forrest Brook	Wastewater Pump		X	-	-

Source: Hazus-MH 3.2, Rockland County

Note: Due to the sensitive nature of the location of potable wells, a general listing is provided in the above table.

Other Vulnerabilities Identified

The municipality has identified the following vulnerabilities within their community:

- Cranford Dr
- Klein Ave
- Rt 59/Rt 303
- Jeffrey Ct / Strawtown Rd
- West Nyack Hamlet
- Mountain Shadows Embankment

- South Mountain Rd steep roads

9.4.5 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 Town of Clarkstown.

Table 9.4-6. Planning and Regulatory Tools

Tool / Program (code, ordinance, plan)	Do you have this? (Yes/No) If Yes, date of adoption or update	Authority (local, county, state, federal)	Dept. /Agency Responsible	Code Citation and Comments (Code Chapter, name of plan, explanation of authority, etc.)
Planning Capability				
Master Plan	2009	Local	Planning	2009 Comprehensive Plan
Capital Improvements Plan	2016	Local	All Departments	2016 Capital Improvements Plan
Floodplain Management / Basin Plan	No			
Stormwater Management Plan	Yes	Yes	DEC	
Open Space Plan	2009	Local	Planning	2009 Comprehensive Plan
Stream Corridor Management Plan	Yes – Different name	Local	DEC	Drainage and Water Course ordinance - Town Code 128
Watershed Management or Protection Plan	No			
Economic Development Plan	2009	Local	Planning	2009 Comprehensive Plan
Comprehensive Emergency Management Plan	2017	Local	CPD	2017 Comprehensive Emergency Management Plan
Emergency Operation Plan	2017	Local	CPD	2017 Emergency Operation Plan
Post-Disaster Recovery Plan	No			
Transportation Plan	2009	Local	Planning	2009 Comprehensive Plan
Strategic Recovery Planning Report	No			
Other Plans:				
Regulatory Capability				
Building Code	Yes	State & Local	Building	
Zoning Ordinance	1939	Local	Building	Town Code Chapter 290
Subdivision Ordinance	1987	Local	Building	Town Code Chapter 254
NFIP Flood Damage Prevention Ordinance	Yes	Federal, State, Local		

Tool / Program (code, ordinance, plan)	Do you have this? (Yes/No) If Yes, date of adoption or update	Authority (local, county, state, federal)	Dept. /Agency Responsible	Code Citation and Comments (Code Chapter, name of plan, explanation of authority, etc.)
NFIP: Cumulative Substantial Damages	Yes	Local	DEC	
NFIP: Freeboard	Yes	State, Local		State mandated BFE+2 for single and two-family residential construction, BFE+1 for all other construction types
Growth Management Ordinances	No			
Site Plan Review Requirements	1986	Local	Pl/ Bldg /DEC	Town Code Chapter 246
Stormwater Management Ordinance	No			
Municipal Separate Storm Sewer System (MS4)	Yes	Local	Clarkstown	
Natural Hazard Ordinance	No			
Post-Disaster Recovery Ordinance	No			
Real Estate Disclosure Requirement	Yes	State		NYS mandate, Property Condition Disclosure Act, NY Code - Article 14 §460-467
Other (Special Purpose Ordinances [i.e., sensitive areas, steep slope])	2016	Local	Bldg / DEC	Town Code Section 290- 21d (3)

Administrative and Technical Capability

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

Table 9.4-7. Administrative and Technical Capabilities

Resources	Is this in place? (Yes or No)	Department/ Agency/Position
Administrative Capability		
Planning Board	Yes	Planning
Mitigation Planning Committee	No	
Environmental Board/Commission	No	
Open Space Board/Committee	Yes	Town Attorney
Economic Development Commission/Committee	No	
Maintenance programs to reduce risk	Yes	TDEC / Highway
Mutual aid agreements	Yes	Rockland County OEM
Technical/Staffing Capability		
Planner(s) or engineer(s) with knowledge of land development and land management practices	Yes	Planning / TDEC
Engineer(s) or professional(s) trained in construction practices related to buildings and/or infrastructure	Yes	TDEC
Planners or engineers with an understanding of natural hazards	Yes	Planning / TDEC
NFIP Floodplain Administrator (FPA)	Yes*	TDEC Director

Resources	Is this in place? (Yes or No)	Department/ Agency/Position
Surveyor(s)	Yes	TDEC
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	Yes	Planning / TDEC
Scientist familiar with natural hazards	No	
Emergency Manager	Yes	CPD
Grant writer(s)	Yes	CPD / Supervisors office
Staff with expertise or training in benefit/cost analysis	Yes	TDEC
Professionals trained in conducting damage assessments	Yes	Bldg / TDEC

Fiscal Capability

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

Table 9.4-8. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas or electric service	Yes - Sewer
Impact fees for homebuyers or developers of new development/homes	Yes - Stormwater
Stormwater utility fee	Yes
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	N/A

Community Classifications

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

Table 9.4-9. Community Classifications

Program	Do you have this? (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	Individual Fire Departments have this	

Program	Do you have this? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
NYSDEC Climate Smart Community	Yes		
Storm Ready Certification	No		
Firewise Communities classification	No		
Natural disaster/safety programs in/for schools	Yes	DARE / SRO	
Organizations with mitigation focus (advocacy group, non-government)	No		
Public education program/outreach (through website, social media)	Yes	Facebook / Twitter	
Public-private partnership initiatives addressing disaster-related issues	Yes	Utilities	

Note:

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

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

Criteria for classification credits are outlined in the following documents:

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

Self-Assessment of Capability

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

Table 9.4-10. Self-Assessment Capability for the Municipality

Area	Degree of Hazard Mitigation Capability		
	Limited (If limited, what are your obstacles?)*	Moderate	High
Planning and regulatory capability			X
Administrative and technical capability			X
Fiscal capability			X
Community political capability			X

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

National Flood Insurance Program

NFIP Floodplain Administrator (FPA)

K. Luke Kalarickal, PE, LS – Director, Environmental Control

Flood Vulnerability Summary

Clarkstown uses repetitive loss lists provided through NYSDEC to maintain an inventory of flood damaged properties. Owners interested in mitigation have been identified through mailings to known affected property owners when HMGP or other program funds have been announced. The below table describes the number and types of structures damaged by storms such as Sandy, Irene, and Floyd.

Event	Date	Residential Structures Damaged	Non-Residential Structures Damaged
Hurricane Sandy	Oct-Nov 2012	1	0
Hurricane Irene/TS Lee	Aug-Sept 2011	38	4
Microburst Storms	Jun-Jul 2011	7	1
Severe Storms and Flooding (Various)	2010	6	2
Severe Storms and Flooding	Apr 2007	31	4
Severe Storms and Flooding	Oct-Nov 2006	1	0
Hurricane Katrina	Aug-Oct 2005	1	0
Severe Storms and Flooding	May-Sept 2004	13	0
TS Floyd	Sept 1999	24	2

Substantial damage estimates have not been made for these storms. 15 property owners have expressed interest in mitigation; the Town submitted 2 HMGP grant applications, but neither were successful. 3 properties may be mitigated by the DHSES. Grant funding for the properties would be under the 2013 Mohawk Valley Upstate Flooding Program.

Resources

The FPA works with additional municipal staff as needed to fulfill the responsibilities of floodplain management for the Town. The NFIP administration services and functions provided by the department include permit review, inspections, damage assessments, record-keeping, GIS, education and outreach, and assistance to residents regarding floodplain information and completing FEMA forms. Additionally, flood hazard information is posted on the Town website. The FPA indicated that there are no barriers to running an effective program in the community and has been adequately supported and trained to fulfill the responsibilities as the municipal floodplain administrator. The FPA also indicated that Department personnel have attended continuing education and/or certification training on floodplain management.

Compliance History

The community is in good-standing in the NFIP, and the most recent Community Assistance Visit was done December 10, 2014.

Regulatory

The Town's floodplain management regulations and ordinances exceed the FEMA and State minimum requirements. The Town's planning board and zoning board consider efforts to reduce flood risk when reviewing variances. The Town has considered joining the Community Rating System program and would attend a CRS seminar if offered locally.

Integration of Hazard Mitigation into Existing and Future Planning Mechanisms

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

Planning

Comprehensive Plan (2009): The Town's Comprehensive Plan details the planning goals and objectives regarding land-use, environmental resources, economic development, etc. The water resources section addresses the flooding problem experienced by the Town. Citizens indicated that flooding, flood control, and stormwater control were of some of the most important issues facing the Town and future planning decisions; the Town has implemented a Drainage Task Force, various mitigation projects, and enforces limits on total development coverage in an effort to increase stormwater infiltration.

Land Use Planning: The Town of Clarkstown has a Planning Board and Zoning Board of Appeals which review all applications for development and consider natural hazard risk areas in their review. Many development activities require additional levels of environmental review, specifically NYS SEQR requirements.

Stormwater Management Program Plan (2013): The Town is a regulated MS4 and provisions by the NYSDEC require the municipality to prepare a stormwater management plan that addresses the goals and methods for protecting water quality and quantity as a result of stormwater runoff. In addition to goals to reduce pollutants, sediment runoff, and other discharges, the Town also plans to educate and engage the public about the impacts of stormwater runoff and its' impact on local waterbodies.

NY Rising Community Reconstruction Plan (2014): As a result of Hurricane Irene, Tropical Storm Lee, and Superstorm Sandy, the NYRCR program was implemented to provide rebuilding and resiliency assistance to severely damaged communities in New York. The plan details proposed projects, which are projects proposed for funding through the plan and CDBG-DR, featured projects, which are projects that have not been proposed for funding, but are viewed as important for resiliency, and additional resiliency recommendations. Various projects fall under some of the following strategies:

- Develop initiatives and financial assistance programs to better protect residents, businesses, and commercial centers from future storm damage and to allow them to recover more quickly
- Improve stormwater infrastructure and drainage systems using green infrastructure practices where possible and cost-effective
- Preserve open spaces and restore natural resources to better support flood mitigation

- Provide education, outreach and implementation assistance regarding pre-storm preparedness, storm protection procedures, and post-storm recovery initiatives to protect from future flooding
- Promote resilience and flood management best practices through land-use planning, policy, and regulation.

Regulatory and Enforcement (Ordinances)

Flood Damage Prevention: This ordinance promotes the public health, safety, and general welfare of residents and seeks to minimize public and private losses due to flood conditions. It regulates development to promote flood resistant structures and controls the alteration of floodplains to prevent increased vulnerability.

Stormwater Management: Chapter 128 of the Town Code deals with ‘Drainage and Watercourses.’ This ordinance aims to protect the health, well-being, and property of residents in the Town by regulating the use, obstruction and diversion of streams and watercourses. The Town Board wants to prevent unwise diversion and obstructions of streams and watercourses and correct existing abuses which cause drainage problems.

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

Funding

Operating Budget: The Town has a Capital Improvements Budget, which includes funding for mitigation related projects.

Grants: The Town has received an HMGP 40.85 grant for \$3.5 million for mitigation projects on Klein Ave, as well as a CDBG-DR NY Rising grant for \$3 million.

Education and Outreach

The Town of Clarkstown hosts a variety of information on its website for its residents. The Environmental Department has information regarding stormwater, recycling, and hazard mitigation; it also hosts a flood fact sheet from the NYS Emergency Management Office. The page on hazard mitigation details the reasons for hazard mitigation planning, and provides links to additional County, State, and Federal resources. Additional outreach mechanisms include emails, newsletters, Facebook and Twitter posts, community centers, and senior citizen meetings.

9.4.6 Mitigation Strategy and Prioritization

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

Past Mitigation Initiative Status

The following table indicates progress on the community’s mitigation strategy identified in the 2010 Plan. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under ‘Capability Assessment’ presented previously in this annex.

Table 9.4-11. Status of Previous Mitigation Actions

Action Number	2010 Mitigation Action	Responsible Party	Status (In progress, No progress, Complete)	Describe Status 1. Please describe what was accomplished and indicate % complete. 2. If there was no progress, indicate what obstacles/delays encountered? 3. If there was progress, how is/was the action being funded (e.g., FEMA HMGP grant, local budget)?	Next Step (Include in 2018 HMP or Discontinue)	Describe Next Step 1. If including action in the 2018 HMP, revise/reword to be more specific (as appropriate). 2. If discontinue, explain why.
Old CT-1	Construction of berms and dredging of the Hackensack River from the south side of Route 59 to Western Highway.	TDEC	Complete	1) Construction of berms. 2) 100 % 3) Funded by Palisades Center Mall	Discontinue	Completed
Old CT-2	Dredging, widening, and stabilization of stream banks.	TDEC	No progress	1) 0 % 2) NYS DEC did not want to lose wetland.	Discontinue	NYS DEC will not permit
Old CT-3	Construct berm and upgrade drainage systems. Heraford Dr	TDEC	Complete	2) 100 % 2) Constructed berm and upgrade drainage 3) Municipal funding	Discontinue	Completed
Old CT-4	Raise the height of the existing levee. Klein Ave	TDEC	No progress	1) 5 % 2) In design; Construction to be started and completed in 2018 3) Waiting on funding	Include in 2018 HMP	Secure funding
Old CT-5	Update inundation maps of Lake Lucille, Congers Lake and Lake Deforest dams.	TDEC	Complete	1) Inundation maps updated 2) 100% 3) Municipal funding	Discontinue	Action to be standard operating procedure; Annually update inundation maps
1.B	Ensure that local comprehensive plans incorporate natural disaster mitigation techniques through a courtesy review or draft plans by the County Planning Department.	CPG member; CPD OEM	Complete	1) 100% 2) Plans reviewed and information incorporated 3) Municipal funding	Discontinue	Action to become standard operating procedure; ensure future plans incorporate natural disaster mitigation techniques.
2.A	Expand and disseminate GIS and other hazard information on the internet.	CPG member; Planning	Complete	1) 100% 2) Town has a web based application and a GIS Coordinator on staff. 3) Municipal funding	Discontinue	GIS in place

Action Number	2010 Mitigation Action	Responsible Party	Status (In progress, No progress, Complete)	Describe Status 1. Please describe what was accomplished and indicate % complete. 2. If there was no progress, indicate what obstacles/delays encountered? 3. If there was progress, how is/was the action being funded (e.g., FEMA HMGP grant, local budget)?	Next Step (Include in 2018 HMP or Discontinue)	Describe Next Step 1. If including action in the 2018 HMP, revise/reword to be more specific (as appropriate). 2. If discontinue, explain why.
	Work with local municipalities to pursue the development of an Emergency Notification System call perimeter for high risk locations of natural hazards with delineable hazard areas. Rockland County staff will make aerial mapping available, along with GIS mapping for natural hazards that was completed as part of the hazard mitigation planning project. The County will also facilitate the utilization of the Emergency Notification System by municipalities.	CPG member; CPD OEM	Complete	1) 100% 2) Implement Everbridge Mass Notification System. 3) Municipal funding	Discontinue	Implemented
Old CT-6	Hold periodic workshops regarding zoning and planning issues that arise regarding natural hazards and hazard mitigation.	CPG member; Planning, TDEC	Complete.	1) 100% 2) Rockland County holds meetings and town staff and board members attend. 3) Municipal funding	Discontinue	Complete; Will continue to attend workshops; hold workshops locally.
4.F	Continue to implement best management practices for floodplain areas.	CPG member; FPA	Complete	1) 100% 2) Continue to implement best practices. 3) Municipal funding	Discontinue	Action to be standard operating procedure; Continue to implement best practices.
4.G	Identify and document repetitively flooded properties. Work with owners to explore mitigation opportunities for repetitively flooded properties, and if appropriate and feasible, carry out acquisition, relocation, elevation and floodproofing measures to protect these properties.	CPG member; FPA	In progress	1) 50% 2) Property owners identified and documented 3) Municipal funding	Include in 2018 HMP	Work with property owners to explore what mitigation opportunities may be possible for the property; continue to add properties to list if more become repetitively flooded over time

Action Number	2010 Mitigation Action	Responsible Party	Status (In progress, No progress, Complete)	Describe Status 1. Please describe what was accomplished and indicate % complete. 2. If there was no progress, indicate what obstacles/delays encountered? 3. If there was progress, how is/was the action being funded (e.g., FEMA HMGP grant, local budget)?	Next Step (Include in 2018 HMP or Discontinue)	Describe Next Step 1. If including action in the 2018 HMP, revise/reword to be more specific (as appropriate). 2. If discontinue, explain why.
4.J	Develop specific mitigation solutions for floodprone road systems (roads, bridges, intersections, drainage, etc.)	TDEC	In progress	1) 50% 2) Working with County Highway on mitigation solutions. 3) Municipal funding	Include in 2018 HMP	Continue to work with County Highway on mitigation solutions.
13.A	Determine the year built and level of protection for critical emergency facilities and shelters to highlight structures built before codes and standards were put in place to provide some degree of protection from natural hazards, and pursue potential mitigation opportunities to protect these sites as funding becomes available.	CPP OEM, Building Dept.	In progress.	1) 75% 2) Maintenance contracts and installation of generators in shelters and critical emergency facilities. 3) General funds	Include in 2018 HMP	Continue maintenance and installation of generators.
11.B	Review existing emergency response plans for enhancement opportunities: work with social support agencies, homeowners associations and general public to develop and implement monitoring and warning systems focused on vulnerable populations and provision of adequate shelter facilities.	CPD OEM	Complete	1) 100% 2) Continued to review emergency response plans a Review existing emergency response plans for enhancement opportunities: work with social support agencies, homeowners associations and general public to develop and implement monitoring and warning systems focused on vulnerable populations and provision of adequate shelter facilities. 3) Municipal funding	Discontinue	Continue to review emergency response plans a Review existing emergency response plans for enhancement opportunities: work with social support agencies, homeowners associations and general public to develop and implement monitoring and warning systems focused on vulnerable populations and provision of adequate shelter facilities.
Old CT-7	Public awareness program on hazards, prevention and mitigation: assist CPG Chairperson in maintenance of mitigation planning web presence;	RCOFES lead with direct participation	Complete	1. 100% 2. County provided materials for display within the Village 3. Municipal budget, County budget	Discontinue	Complete; Public awareness programs to be incorporated as Town capability

Action Number	2010 Mitigation Action	Responsible Party	Status (In progress, No progress, Complete)	Describe Status 1. Please describe what was accomplished and indicate % complete. 2. If there was no progress, indicate what obstacles/delays encountered? 3. If there was progress, how is/was the action being funded (e.g., FEMA HMGP grant, local budget)?	Next Step (Include in 2018 HMP or Discontinue)	Describe Next Step 1. If including action in the 2018 HMP, revise/reword to be more specific (as appropriate). 2. If discontinue, explain why.
	assist CPG Chairperson in preparation of annual hazards and mitigation planning fact sheet and its distribution; assist CPG chairperson in preparation of hazards survey; periodic discussion of hazard mitigation and the mitigation plan at other regular local meetings; use of annual flyers, newsletters, advertisements, or radio/TV announcements, etc. at the discretion of the jurisdiction (incorporating as much free information as possible from the FEMA publications warehouse and other appropriate sources).	and involvement from each jurisdiction's CPG member				
Old CT-8	Code update: review existing local codes and ordinances against the identified hazards to determine whether there needs to be any amendments to address identified hazards and, where a need is identified; modify/amend the codes/ordinances as applicable.	Each jurisdictional CPG member	Complete	1) 100% 2) Code reviewed/updated 3) Municipal budget	Discontinue	Complete; Will continue to review and update codes in the future as new hazard information becomes available
Old CT-9	Code enforcement: enforcement of NYS and local building codes	Each jurisdictional CPG member	Complete	1) 100% 2) Codes enforced 3) Municipal budget	Discontinue	Complete; Code enforcement is a Town capability
Old CT-10	Update/review floodplain management ordinances to be consistent with potential future new FIRMs	TDEC	. In progress	1) 50% 2) In the process of review/update 3) Municipal budget	Include in 2018 HMP	Continue to review and finalize ordinance

Action Number	2010 Mitigation Action	Responsible Party	Status (In progress, No progress, Complete)	Describe Status 1. Please describe what was accomplished and indicate % complete. 2. If there was no progress, indicate what obstacles/delays encountered? 3. If there was progress, how is/was the action being funded (e.g., FEMA HMGP grant, local budget)?	Next Step (Include in 2018 HMP or Discontinue)	Describe Next Step 1. If including action in the 2018 HMP, revise/reword to be more specific (as appropriate). 2. If discontinue, explain why.
Old CT-11	Recommend staff involved in floodplain management and ordinance enforcement to become Certified Floodplain Managers (CFMs)	TDEC	In progress	1) 50% 2) Action being discussed 3) Municipal budget	Include in 2018 HMP	Secure funding and resources to help staff become CFMs
Old CT-12	Join the Community Rating System (CRS)	TDEC	In progress	1) 50% 2) Ongoing; discussion on joining the program 3) Municipal budget	Include in 2018 HMP	Continue; begin the application process

Completed Mitigation Initiatives not Identified in the Previous Mitigation Strategy

The Town of Clarkstown has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2010 Plan:

- None identified.

Proposed Hazard Mitigation Initiatives for the Plan Update

The Town of Clarkstown participated in a mitigation action workshop in February 16, 2017 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 ‘Selecting Appropriate Mitigation Measures for Floodprone Structures’ (March 2007) and FEMA ‘Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards’ (January 2013).

Table 9.4-12 summarizes the comprehensive-range of specific mitigation initiatives the Town of Clarkstown would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide-range of activities and mitigation measures selected.

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

Table 9.4-13 provides a summary of the prioritization of all proposed mitigation initiatives for the Plan update.

Table 9.4-12. Proposed Hazard Mitigation Initiatives

Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals and Objectives Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category	CRS Category
CT-1 (Old CT-4)	Raise the height of the existing levee, Klein Ave	Existing	Flooding	1, 2, 4	TDEC	High	High	HMGP	Short	High	SIP	SP
CT-2 (4.J)	Develop specific mitigation solutions for floodprone road systems (roads, bridges, intersections, drainage, etc.) under the leadership of County DPW.	Existing	Flooding	1, 2, 4	TDEC	High	High	HMGP, PDM	OG	Medium	SIP	PR
CT-3 (13.A)	Determine the year built and level of protection for critical emergency facilities and shelters to highlight structures built before codes and standards were put in place to provide some degree of protection from natural hazards, and pursue potential mitigation opportunities to protect these sites as funding becomes available.	Existing	All	1, 2, 5, 7	CPD OEM	High	High	PDM	OG	Medium	EAP	PR, ES
CT-4 (Old CT-10)	Update/review floodplain management ordinances to be consistent with potential future new FIRMs	N/A	Flooding	1, 2, 3, 7	TDEC	High	Low	Municipal budget	OG	High	LPR	LPR
CT-5 (Old CT-11)	Recommend staff involved in floodplain management and ordinance enforcement to become Certified Floodplain Managers (CFMs)	N/A	Flooding	1, 2, 3, 7	TDEC	Medium	Low	Municipal budget	Long	Low	EAP	PI



Table 9.4-12. Proposed Hazard Mitigation Initiatives

Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals and Objectives Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category	CRS Category
CT-6 (Old CT-12)	Join the Community Rating System (CRS)	N/A	Flooding	1, 2, 3, 7	TDEC	Medium	Low	Municipal budget	Long	Low	EAP	PI
CT-7 (4.G)	Identify and document repetitively flooded properties. Work with owners to explore mitigation opportunities for repetitively flooded properties, and if appropriate and feasible, carry out acquisition, relocation, elevation and floodproofing measures to protect these properties.	Existing	Flooding, Severe Storm	1, 2, 3, 5, 7	FPA	High	High	HMGP, PDM, Municipal Budget	Ongoing	High	LPR, EAP	PR, PI
CT-8	Develop and maintain mapping of all natural hazard risk areas in the Town, FEMA delineated or otherwise, to support land use decision making (e.g. Planning Board, site plan review process)	New/Existing	All Hazard	1, 2, 3, 4, 6	Village Board	Medium	Low	Municipal Budget	DOF	Medium	EAP	PI
CT-9	The following critical facilities are located in the floodplain and identified as vulnerable to the flood hazard. <ul style="list-style-type: none"> • St. Anthony School (privately owned) • RPS Medic 5 (privately owned) • O&R West Nyack Operating Center (privately owned) • West Nyack Post Office 	Existing	Flood	1, 2, 4, 6	Private Property Owners with Town support	High	Low	Municipal budget	Short	High	SIP	PP



Table 9.4-12. Proposed Hazard Mitigation Initiatives

Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals and Objectives Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category	CRS Category
	<p>(privately owned)</p> <ul style="list-style-type: none"> • Pascack Wastewater Pump (owned by Rockland County Sewer District #1) <p>The Town does not have jurisdiction over these facilities to mitigate. The Town will notify the facility manager/operator of these critical facilities regarding their flood vulnerability as identified during the Rockland County HMP update and NYS' requirement to protect to the 500-year flood or worst-case scenario. The Town will provide the owners information regarding grant options for funding to implement their mitigation. Potential feasible projects may included the following. The private owners will need to determine the most cost effective and feasible mitigation action for these facilities:</p> <ul style="list-style-type: none"> • Elevate utilities/infrastructure • Dry floodproof and install a backup power 											

Table 9.4-12. Proposed Hazard Mitigation Initiatives

Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals and Objectives Met	Lead and Support Agencies	Estimated Benefits	Estimated Cost	Sources of Funding	Timeline	Priority	Mitigation Category	CRS Category
	supply/generator • Pump stations and wells - Retrofit the structure with a sensor that would seal the well itself off from floodwaters, like a backflow preventer. Add a backup power supply to make sure it works when the power's out. • Drill a new well outside the floodplain • Relocate structure; move operations to a structure outside the floodplain											
CT-10	Coordinate with NYS regarding flooding at the Palisades Mall (Route 303 and 59) – County stream – Norishan runs through there	Existing	Flood, Severe Storm	1, 2, 4, 6	Drainage Agency, NYS DOT, Clarkstown	High	High	FEMA HMA; NYS DOT	Short (DOF)	High	SIP	PP

Notes:

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

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

Acronyms and Abbreviations:

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

Potential FEMA HMA Funding Sources:

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

Timeline:

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



Costs:

Where actual project costs have been reasonably estimated:

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

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

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

Benefits:

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

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

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

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

Mitigation Category:

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

CRS Category:

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

Table 9.4-13. Summary of Prioritization of Actions

Mitigation Action/Project Number	Mitigation Action/Initiative	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
CT-1	Raise the height of the existing levee, Klein Ave	1	1	1	1	1	1	-1	0	0	-1	0	1	1	0	6	High
CT-2	Develop specific mitigation solutions for floodprone road systems (roads, bridges, intersections, drainage, etc.) under the leadership of County DPW.	0	1	0	1	0	1	0	0	0	1	0	1	0	0	5	Medium
CT-3	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.	1	1	1	1	0	0	0	0	1	1	1	0	1	0	8	Medium
CT-4	Update/review floodplain management ordinances to be consistent with potential future new FIRMs	1	1	1	1	1	1	1	0	0	1	0	1	0	0	9	Medium
CT-5	Recommend staff involved in floodplain management and ordinance enforcement to become Certified Floodplain Managers (CFMs)	0	0	0	1	0	1	0	0	0	1	0	0	0	0	3	Low
CT-6	Join the Community Rating System (CRS)	0	0	1	1	0	1	-1	0	0	1	0	1	0	0	4	Low
CT-7	Identify and document repetitively flooded properties. Work with owners to explore	1	1	-1	1	1	1	-1	0	-1	1	0	1	0	0	4	Medium

Table 9.4-13. Summary of Prioritization of Actions

Mitigation Action/ Project Number	Mitigation Action/Initiative	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
	mitigation opportunities for repetitively flooded properties, and if appropriate and feasible, carry out acquisition, relocation, elevation and floodproofing measures to protect these properties.																
CT-8	Develop and maintain mapping of all natural hazard risk areas in the Town, FEMA delineated or otherwise, to support land use decision making (e.g. Planning Board, site plan review process)	1	1	1	1	0	1	1	0	0	1	1	0	0	0	8	Medium
CT-9	<p>The following critical facilities are located in the floodplain and identified as vulnerable to the flood hazard.</p> <ul style="list-style-type: none"> • St. Anthony School (privately owned) • RPS Medic 5 (privately owned) • O&R West Nyack Operating Center (privately owned) • West Nyack Post Office (privately owned) • Pascack Wastewater Pump (owned by Rockland County Sewer District #1) <p>The Town does not have jurisdiction over these facilities to mitigate. The Town will notify the facility</p>	1	1	1	1	0	1	0	0	0	1	0	0	0	0	6	High

Table 9.4-13. Summary of Prioritization of Actions

Mitigation Action/ Project Number	Mitigation Action/Initiative	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low	
	<p>manager/operator of these critical facilities regarding their flood vulnerability as identified during the Rockland County HMP update and NYS' requirement to protect to the 500-year flood or worst-case scenario. The Town will provide the owners information regarding grant options for funding to implement their mitigation. Potential feasible projects may included the following. The private owners will need to determine the most cost effective and feasible mitigation action for these facilities:</p> <ul style="list-style-type: none"> • Elevate utilities/infrastructure • Dry floodproof and install a backup power supply/generator • Pump stations and wells - Retrofit the structure with a sensor that would seal the well itself off from floodwaters, like a backflow preventer. Add a backup power supply to make sure it works when the power's out. • Drill a new well outside the floodplain • Relocate structure; move 																	

Table 9.4-13. Summary of Prioritization of Actions

Mitigation Action/Project Number	Mitigation Action/Initiative	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
	operations to a structure outside the floodplain																
CT-10	Coordinate with NYS regarding flooding at the Palisades Mall (Route 303 and 59) – County stream – Norishan runs through there	1	1	1	1	0	1	0	0	0	1	0	0	0	0	6	High

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

9.4.7 Future Needs To Better Understand Risk/Vulnerability

None at this time.

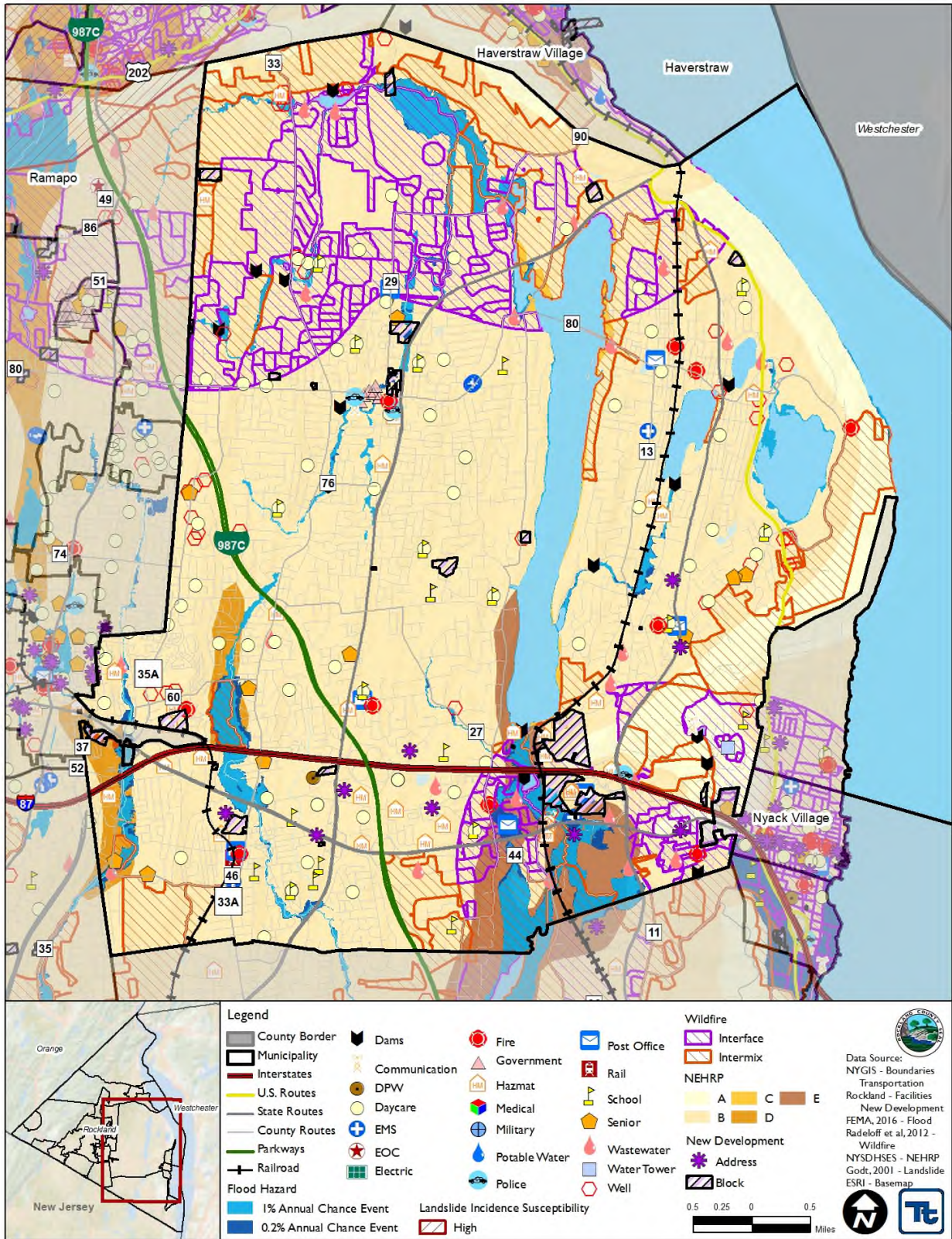
9.4.8 Hazard Area Extent and Location

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

9.4.9 Additional Comments

None at this time.

Figure 9.4-1. Town of Clarkstown Hazard Area Extent and Location Map



Action Number:

CT-1

Mitigation Action Name:

Raise the height of the existing levee, Klein Ave

Assessing the Risk	
Hazard(s) addressed:	Flooding
Specific problem being mitigated:	The height of the existing levee is not high enough to protect the area from increasing flood levels.
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	No Action - current problem continues Reroute source of flooding – not feasible
Action/Project Intended for Implementation	
Description of Selected Action/Project	Upgrade and raise the height of the existing levee on Klein Ave to effectively protect the area from increased flood levels.
Mitigation Action Type	SIP
Goals Met	1, 2, 4
Applies to existing and or new development, or not applicable	Existing
Benefits (losses avoided)	High
Estimated Cost	High
Priority*	High
Plan for Implementation	
Responsible Organization	TDEC
Local Planning Mechanism	Hazard Mitigation, Engineering
Potential Funding Sources	HMGP
Timeline for Completion	Short
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: 6/01/2017 Progress on Action/Project: In design; Construction to be started and completed in 2018; Must secure funding

Action Number:

CT-1

Mitigation Action Name:

Raise the height of the existing levee, Klein Ave

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	
Property Protection	1	Provide protection to area around Klein Ave.
Cost-Effectiveness	1	
Technical	1	
Political	0	
Legal	1	
Fiscal	-1	HMGP – need to obtain grant funding
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	0	Flood
Timeline	0	
Agency Champion	1	
Other Community Objectives	0	
Total	8	
Priority (H/M/L)	High	

Action Number:

CT-2

Mitigation Action Name:

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

Assessing the Risk	
Hazard(s) addressed:	Flooding
Specific problem being mitigated:	Floodprone roads can inhibit emergency response and evacuation during a flood.
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	No Action - current problem continues Reroute source of flooding – not feasible
Action/Project Intended for Implementation	
Description of Selected Action/Project	Develop specific mitigation solutions for floodprone road systems (roads, bridges, intersections, drainage, etc.) under the leadership of County DPW.
Mitigation Action Type	SIP
Goals Met	1, 2, 4
Applies to existing and or new development, or not applicable	Existing
Benefits (losses avoided)	High
Estimated Cost	High
Priority*	Medium
Plan for Implementation	
Responsible Organization	TDEC and DPW with County Highway support
Local Planning Mechanism	Hazard Mitigation
Potential Funding Sources	HMGP, PDM
Timeline for Completion	Ongoing
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: 6/01/2017 Progress on Action/Project: Working with County Highway on mitigation solutions.

Action Number:

CT-2

Mitigation Action Name:

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

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

Action Number:

CT-3

Mitigation Action Name:

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

Assessing the Risk	
Hazard(s) addressed:	All
Specific problem being mitigated:	Critical facilities and shelters may have been built prior to more stringint building codes that protect against natural hazard event damage.
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	No Action - current problem continues Rebuild all critical facilities and shelters to current standards – cost prohibitive
Action/Project Intended for Implementation	
Description of Selected Action/Project	Determine the year built and level of protection for critical emergency facilities and shelters to highlight structures built before codes and standards were put in place to provide some degree of protection from natural hazards, and pursue potential mitigation opportunities to protect these sites as funding becomes available.
Mitigation Action Type	EAP
Goals Met	1, 2, 5, 7
Applies to existing and or new development, or not applicable	Existing
Benefits (losses avoided)	High
Estimated Cost	High
Priority*	Medium
Plan for Implementation	
Responsible Organization	CPD OEM
Local Planning Mechanism	Hazard Mitigation
Potential Funding Sources	PDM
Timeline for Completion	Ongoing
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: 6/01/2017 Progress on Action/Project: Maintenance contracts and installation of generators in shelters and critical emergency facilities.

Action Number:

CT-3

Mitigation Action Name:

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

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

Action Number:

CT-4

Mitigation Action Name:

Update/review floodplain management ordinances to be consistent with potential future new FIRMs

Assessing the Risk	
Hazard(s) addressed:	Flooding
Specific problem being mitigated:	If facilities were built before a certain date, they could be more susceptible to damage from a hazard event.
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	No Action - current problem continues Develop new FIRMs and ordinance at the same time – cost prohibitive
Action/Project Intended for Implementation	
Description of Selected Action/Project	Determine the year built and level of protection for critical emergency facilities and shelters to highlight structures built before codes and standards were put in place to provide some degree of protection from natural hazards, and pursue potential mitigation opportunities to protect these sites as funding becomes available.
Mitigation Action Type	LPR
Goals Met	1, 2, 3, 7
Applies to existing and or new development, or not applicable	N/A
Benefits (losses avoided)	High
Estimated Cost	Low
Priority*	High
Plan for Implementation	
Responsible Organization	TDEC
Local Planning Mechanism	Hazard Mitigation
Potential Funding Sources	Municipal budget
Timeline for Completion	Ongoing
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: 6/01/2017 Progress on Action/Project: In the process of review/update

Action Number:

CT-4

Mitigation Action Name:

Update/review floodplain management ordinances to be consistent with potential future new FIRMs

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

Action Number:

CT-5

Mitigation Action Name:

Recommend staff involved in floodplain management and ordinance enforcement to become Certified Floodplain Managers (CFMs)

Assessing the Risk	
Hazard(s) addressed:	Flooding
Specific problem being mitigated:	Floodplain management and ordinance enforcement staff are not Certified Floodplain Managers
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	No Action - current problem continues Have staff take courses on floodplain management – no certifications from nationally recognized group. CFM’s also can gain credit in CRS program.
Action/Project Intended for Implementation	
Description of Selected Action/Project	Require staff involved in floodplain management and ordinance enforcement to become Certified Floodplain Managers (CFMs)
Mitigation Action Type	EAP
Goals Met	1, 2, 3, 7
Applies to existing and or new development, or not applicable	N/A
Benefits (losses avoided)	Medium
Estimated Cost	Low
Priority*	Low
Plan for Implementation	
Responsible Organization	TDEC
Local Planning Mechanism	Hazard Mitigation
Potential Funding Sources	Municipal budget
Timeline for Completion	Long
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: 6/01/2017 Progress on Action/Project: Action being discussed; Securing funding and resources to help staff become CFMs

Action Number:

CT-5

Mitigation Action Name:

Recommend staff involved in floodplain management and ordinance enforcement to become Certified Floodplain Managers (CFMs)

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	
Property Protection	1	
Cost-Effectiveness	1	
Technical	1	
Political	0	
Legal	0	
Fiscal	0	Municipal budget
Environmental	0	
Social	0	
Administrative	1	
Multi-Hazard	1	Flood
Timeline	0	Long Term – more than five years to complete
Agency Champion	1	
Other Community Objectives	0	
Total	7	
Priority (H/M/L)	Low	

Action Number:

CT-6

Mitigation Action Name:

Join the Community Rating System (CRS)

Assessing the Risk	
Hazard(s) addressed:	Flooding
Specific problem being mitigated:	The Town is not in the CRS program
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	No Action - current problem continues Develop municipal specific program to encourage higher standards than NFIP – no flood insurance discounts
Action/Project Intended for Implementation	
Description of Selected Action/Project	Join the Community Rating System (CRS)
Mitigation Action Type	EAP
Goals Met	1, 2, 3, 7
Applies to existing and or new development, or not applicable	N/A
Benefits (losses avoided)	Medium
Estimated Cost	Low
Priority*	Low
Plan for Implementation	
Responsible Organization	TDEC
Local Planning Mechanism	Hazard Mitigation
Potential Funding Sources	Municipal budget
Timeline for Completion	Long
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: 6/01/2017 Progress on Action/Project: Ongoing; discussion on joining the program

Action Number:

CT-6

Mitigation Action Name:

Join the Community Rating System (CRS)

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	
Property Protection	1	
Cost-Effectiveness	1	
Technical	1	
Political	0	
Legal	0	
Fiscal	1	Municipal budget
Environmental	0	
Social	1	
Administrative	1	
Multi-Hazard	1	Flood
Timeline	0	Long Term – more than five years to complete
Agency Champion	0	
Other Community Objectives	0	
Total	8	
Priority (H/M/L)	Low	

Action Number:

CT-7

Mitigation Action Name:

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

Assessing the Risk	
Hazard(s) addressed:	Flooding, Severe Storm
Specific problem being mitigated:	Repetitively flooded properties place an undue stress on the property owner and village and efforts should be made to mitigate them.
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	No Action - current problem continues Move source of flooding – not feasible
Action/Project Intended for Implementation	
Description of Selected Action/Project	Identify and document repetitively flooded properties. Work with owners to explore mitigation opportunities for repetitively flooded properties, and if appropriate and feasible, carry out acquisition, relocation, elevation and floodproofing measures to protect these properties.
Mitigation Action Type	LPR, EAP
Goals Met	1, 2, 3, 5, 7
Applies to existing and or new development, or not applicable	Existing
Benefits (losses avoided)	High
Estimated Cost	High
Priority*	High
Plan for Implementation	
Responsible Organization	FPA
Local Planning Mechanism	Hazard Mitigation, Public Education
Potential Funding Sources	HMGP, PDM, Municipal Budget
Timeline for Completion	Ongoing
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: 6/01/2017 Progress on Action/Project: Property owners identified and documented; Must begin outreach to owners on mitigation opportunities

Action Number:

CT-7

Mitigation Action Name:

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

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

Action Number:	CT-8
Mitigation Action Name:	Develop and maintain mapping of all natural hazard risk areas in the Town, FEMA delineated or otherwise, to support land use decision making (e.g. Planning Board, site plan review process)

Assessing the Risk	
Hazard(s) addressed:	All Hazard
Specific problem being mitigated:	Development in hazard areas can lead to avoidable casualties and property damage.
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	No Action - current problem continues Determine if local colleges and universities would be willing to develop spatial database – possible lack of commitment
Action/Project Intended for Implementation	
Description of Selected Action/Project	Spatial database of all natural hazard risk areas in the Village will allow land use decision makers to plan safe and resilient communities and developments.
Mitigation Action Type	EAP
Goals Met	1, 2, 3, 4, 6
Applies to existing and or new development, or not applicable	New/Existing
Benefits (losses avoided)	Medium
Estimated Cost	Low
Priority*	Medium
Plan for Implementation	
Responsible Organization	Village Board
Local Planning Mechanism	Hazard Mitigation
Potential Funding Sources	Municipal Budget
Timeline for Completion	DOF
Reporting on Progress	
Date of Status Report/ Report of Progress	No progress; New Action

Action Number:

CT-8

Mitigation Action Name:

Develop and maintain mapping of all natural hazard risk areas in the Town, FEMA delineated or otherwise, to support land use decision making (e.g. Planning Board, site plan review process)

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	
Property Protection	1	
Cost-Effectiveness	1	
Technical	1	
Political	0	
Legal	1	
Fiscal	1	Municipal Budget
Environmental	0	
Social	0	
Administrative	1	
Multi-Hazard	1	All
Timeline	0	DOF – may not be completed in next five years
Agency Champion	0	
Other Community Objectives	0	
Total	8	
Priority (H/M/L)	Medium	

Action Number:

CT-9

Mitigation Action Name:

Critical facilities located in the floodplain

Assessing the Risk	
Hazard(s) addressed:	Flood
Specific problem being mitigated:	<p>The following critical facilities are located in the floodplain and identified as vulnerable to the flood hazard.</p> <ul style="list-style-type: none"> • St. Anthony School (privately owned) • RPS Medic 5 (privately owned) • O&R West Nyack Operating Center (privately owned) • West Nyack Post Office (privately owned) • Pascack Wastewater Pump (owned by Rockland County Sewer District #1)
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	<p>No Action - current problem continues Elevate utilities/infrastructure Dry floodproof and install a backup power supply/generator Pump stations and wells - Retrofit the structure with a sensor that would seal the well itself off from floodwaters, like a backflow preventer. Add a backup power supply to make sure it works when the power's out. Drill a new well outside the floodplain Relocate structure; move operations to a structure outside the floodplain</p>
Action/Project Intended for Implementation	
Description of Selected Action/Project	<p>The Town does not have jurisdiction over these facilities to mitigate. The Town will notify the facility manager/operator of these critical facilities regarding their flood vulnerability as identified during the Rockland County HMP update and NYS' requirement to protect to the 500-year flood or worst-case scenario. The Town will provide the owners information regarding grant options for funding to implement their mitigation. Potential feasible projects may included the following. The private owners will need to determine the most cost effective and feasible mitigation action for these facilities:</p> <ul style="list-style-type: none"> • Elevate utilities/infrastructure • Dry floodproof and install a backup power supply/generator • Pump stations and wells - Retrofit the structure with a sensor that would seal the well itself off from floodwaters, like a backflow preventer. Add a backup power supply to make sure it works when the power's out. • Drill a new well outside the floodplain • Relocate structure; move operations to a structure outside the floodplain
Mitigation Action Type	SIP
Goals Met	1, 2, 4, 6
Applies to existing and or new development, or not applicable	Existing
Benefits (losses avoided)	High
Estimated Cost	Low
Priority*	High
Plan for Implementation	
Responsible Organization	'Private Property Owners' with Village support
Local Planning Mechanism	Hazard Mitigation, Public Education

Potential Funding Sources	Municipal budget
Timeline for Completion	Short
Reporting on Progress	
Date of Status Report/ Report of Progress	No progress; New Action

Action Number: CT-9
Mitigation Action Name: Critical facilities located in the floodplain

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

Action Number:

CT-10

Mitigation Action Name:

Coordinate with NYS regarding flooding at the Palisades Mall (Route 303 and 59) – County stream – Norishan runs through there

Assessing the Risk	
Hazard(s) addressed:	Flood, Severe Storm
Specific problem being mitigated:	Flooding occurs at Palisades Mall (Route 303 and 59) due to stream
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	No action – current problem continues Move stream – not feasible
Action/Project Intended for Implementation	
Description of Selected Action/Project	Coordinate with NYS regarding flooding at the Palisades Mall (Route 303 and 59) – County stream – Norishan runs through there
Mitigation Action Type	SIP
Goals Met	1, 2, 4, 6
Applies to existing and or new development, or not applicable	Existing
Benefits (losses avoided)	High
Estimated Cost	High
Priority*	High
Plan for Implementation	
Responsible Organization	Drainage Agency, NYS DOT, Clarkstown
Local Planning Mechanism	Hazard Mitigation
Potential Funding Sources	FEMA HMA; NYS DOT
Timeline for Completion	Short (DOF)
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: <i>No progress, new action</i>

Action Number:

CT-10

Mitigation Action Name:

Coordinate with NYS regarding flooding at the Palisades Mall (Route 303 and 59) – County stream – Norishan runs through there

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