

9.21 TOWN OF STONY POINT

This section presents the jurisdictional annex for the Town of Stony Point.

9.21.1 Hazard Mitigation Plan Point of Contact

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

Primary Point of Contact	Alternate Point of Contact
Jim Monaghan, Supervisor (845) 786-2716 ext.: 111 supervisor@townofstonypoint.org	William Sheehan, Building Inspector, Floodplain Administrator (845) 786-2716 ext.: 103 wsheehan@townofstonypoint.org
NFIP Floodplain Administrator (FPA)	
William Sheehan, Building Inspector, Floodplain Administrator (845) 786-2716 ext.: 103 wsheehan@townofstonypoint.org	

9.21.2 Municipal Profile

The Town of Stony Point is located in the northeastern triangle of Rockland County, approximately 30 miles north of New York City. Stony Point has a total area of 31.6 square miles, approximately 4 of which are water, and had a 2010 population of 15,059. The Town sits at the southernmost edge of the Hudson Highlands, on the west shore of the Hudson River. Stony Point is bordered to the south by the Town of Haverstraw and the Village of West Haverstraw; to the north and west by the Orange County towns of Highlands, Woodbury, and Tuxedo; and to the east by the Hudson River. Waterways of significance include the Hudson River, Cedar Pond Brook, and a Tributary to Cedar Pond Brook.

Growth/Development Trends

The Town of Stony Point is largely rural, and is generally regarded as a “bedroom” community consisting largely of single family residences. Almost all sites suitable for building have already been utilized and new home construction is limited to minor subdividing of existing properties. One area of approximately 20-25 acres, obtained by the town when New York State sold Letchworth Village, could be made available. Use would probably consist of a mix of some retail development along a highway corridor, and medium density housing, possibly for senior citizens. Any construction would of necessity replace existing stone buildings that were for many years a hospital.

Waterfront development along the Hudson River shoreline is another prospect that must be considered. Several industrial sites, some private individual use, and existing Marinas are spread out now, but could be consolidated if the need for medium or high density housing is demonstrated.

Stony Point is in need of an expanded tax base, and to provide growth it is probable that there will be expansion of the use of the Route 9W corridor which passes north-south through the town and where small businesses now predominate.

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 9.21.8 of this annex which illustrates the hazard areas along with the location of potential new development.

Table 9.21-1. 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					
Virgin Mary	Commercial	1 structure	14.02-1-30	Landslide: High	Under construction
Algonquin Gas	Commercial	1 structure	14.02-1-7.1	Landslide: High	Under construction
Jessup's Ridge	Residential	15 structures	19.01-2-45	Landslide: High	Under construction
Known or Anticipated Development in the Next Five (5) Years					
The Breakers	Residential	206 units	15.04-6-3	Flood: 1% Chance; Landslide: High; WUI: Interface	Planning Board review
New Planet Energy	Commercial	10 structures	20.04-11-3 20-.02-11-27 20.02-11-28	Flood: 1% Chance; Landslide: High; NEHRP: E	Planning Board review

* Only location-specific hazard zones or vulnerabilities identified.

9.21.3 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 9.21-2. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	Rockland County Designated?	Summary of Damages/Losses
August 10, 2009	Thunderstorms	N/A	<p>Local public safety officials and emergency responders responded to 15 calls for loss of service throughout the town.</p> <p>A large tree took down wires and blocked the roadway as it fell over a private residential driveway at Schassler Place. The tree also damaged two parked vehicles. Another tree fell on a vehicle on Rose St., causing minor damage. A tree fell on Bontecou Rd., damaging a swing set and back deck of a residence.</p> <p>Several trees were down at Filor's Ln, making the roadway impassable. A large tree blocked the roadway and brought down live wires on W. Main St just east of Crickettown Rd. and also at Orchard St. Fire and police assisted in diverting traffic. Trees also blocked the roadway at Washburn's Ln and Lewis Dr., Valley View Rd. Beach Rd., Gurnee Dr., River Rd., Hastings Rd., Rosetown, Franck Rd., John St.,</p> <p>A driver on Willow Grove Rd. lost control of his vehicle due to heavy rain and veered off the roadway and hit a pole.</p> <p>Overall, town Police Department incurred \$563.60 in overtime costs. There</p>

Dates of Event	Event Type (Disaster Declaration if applicable)	Rockland County Designated?	Summary of Damages/Losses
			were \$25,000 in damages reported throughout Rockland County.
January 25, 2010	High Wind	N/A	<p>A downed tree on Park Road near Rifflands in Town of Stony Point blocked traffic. Town Police Department secured the roadway until the Highway department arrived to clear the debris. A fallen tree limb took down telephone/cable wires on Highview Ave., and struck the awning of the private structure at 3 Highview Ave., causing minor structural damage.</p> <p>\$100,000 in damages reported throughout Rockland County.</p>
March 13-31, 2010	Severe Storms and Flooding DR-1899	Yes	<p>Debris deposited from the high tide on the morning of 3/13 created hazardous conditions on Beach Rd. The same roadway was later made impassible due to flooding, and an unsteady utility pole. The roadway was closed to traffic as both lanes were covered by water.</p> <p>Other road closures occurred on Ranch Rd., Grassy Point Rd., and Westshore Rd.</p> <p>Structural damage was reported at Lilburn Dr. and Ethan Allen Dr. Clogged storm drains on Lilburn Rd. caused roadway flooding that backed up the street and into the basement of a residence at 11 Lilburn Dr. Town highways crews dispatched to clear the drains and pump out the basement.</p> <p>The Town Police and Fire Departments responded to calls from private residences impacted by the storm and associated flooding at Willow Grove Rd., Bragaglia, 5th St., Ethan Allen Dr., and Brewster Ave. Most callers reported basement flooding and requested pump out support.</p>
June 6, 2010	Thunderstorms	N/A	<p>Numerous thunderstorms moved across the Lower Hudson Valley. In the Town of Stony Point, a tree fell onto a car at Exit 16 of the Palisades Parkway. A downed tree was also reported on US 9 near Buckberg Mountain Road in the Town and US 9 was closed for two hours. Wires were also reported down in the Town of Stony Point. The County had approximately \$12,000 in damages from this event.</p>
December 26-27, 2010	Severe Winter Storm and Snowstorm DR-1957	Yes	<p>The Town Police and Fire Departments responded to calls from private residences impacted by the storm at W. Main St.</p> <p>A driver on W. Main St. slid in the snow and drove into a private residence's chain link fence. Other auto accidents were reported on Willow Grove Rd. and Gurrin Dr. A large tree fell on Hastings Ln., bringing down wires causing damage to a house and interrupting electrical service.</p>
August 25 – September 5, 2011	Hurricane Irene DR-4020	Yes	<p>On August 27-28, 2011, Hurricane Irene struck the Hudson Valley, bringing with it heavy rains and significant storm surge to Stony Point. A County emergency was declared in advance of the storm, and evacuations were recommended for low-lying areas including Grassy Point, Beach Road, the Ba Mar mobile home park, West Shore Drive in Tomkins Cove, and Jones Point. As the storm moved closer, the evacuation was made mandatory and was enforced by local police. The North Rockland High School and Rockland Community Field House were designated as storm shelters.</p> <p>The storm surge inundated nearly the full length of Beach and River Roads, as well as all but the very center of Grassy Point and approximately half of the Ba Mar mobile home park. Homes and businesses were flooded by the Hudson</p>

Dates of Event	Event Type (Disaster Declaration if applicable)	Rockland County Designated?	Summary of Damages/Losses
			<p>River as the storm pushed water shoreward, filling basements and destroying possessions as well as the mechanical equipment typically located below grade. One resident, who was tending to an issue in his basement, had to be pulled to safety when the foundation of his home collapsed.</p> <p>In the upland areas of the Town, soils that were already saturated in advance of the storm could hold no more water, and heavy rains led Cedar Pond Brook and its tributaries to overflow their banks and flood roads near the Palisades Interstate Parkway, blocking access to all, including emergency vehicles. Many of the recreational amenities of the Charles S. Eccher Lowland Park were washed away. Stream bank erosion on the Cedar Pond Brook exposed an eight-inch gas line, flooded many of the homes in the Cedar Flats Mobile Home Park and washed away a portion of Cedar Flats Road. Residents north of the washed-out road had to travel many miles out of their way to get to and from their homes.</p> <p>Other roads across the Town were flooded or washed out, especially in areas where they ran parallel to an existing stream, where a culvert conveyed a stream under the pavement, or where they were located in low-lying areas. At the intersection of Sullivan and Lewis Drives, the water filled yards, covered the roads and seeped into homes resulting in the need to rescue a pregnant woman trapped on her porch.</p> <p>The NOAA station at nearby Yorktown Heights, NY recorded 6.65 inches of rainfall from Hurricane Irene. The Town Police and Fire Departments in Stony Point responded to five life safety calls, 29 calls for roadway blockages/loss of service and utility outages, six calls for infrastructure damage, one call for public facility damage, 26 calls for private structural damage, and 37 calls for other types of public assistance. In total, the Town Police Department incurred \$14,471.35 in overtime costs.</p>
October 2011	Halloween Storm	N/A	<p>Downed wires and power outages were reported throughout the County. The Town of Stony Point incurred overtime costs related to snow plowing. Town residents reported sporadic power outages. \$1.5 Million in County damages (Public Assistance)</p>
October 27 – November 8, 2012	Hurricane Sandy DR-4085	Yes	<p>As Superstorm Sandy approached the Hudson Valley on October 29, 2012, states of emergency were again declared by the County and Town, and notices were sent to Stony Point residents urging prudence and caution during the storm. Areas of the Town adjacent to the Hudson River waterfront were evacuated, including all of Grassy Point and the Ba Mar mobile home park. The evacuation order affected approximately 35 people along Beach Road and many more in the other sections of the evacuation zone. A shelter for the evacuees was set up in the Stony Point Ambulance Building nearby.</p> <p>Damages sustained during the storm, the result of flooding from storm surge (over 4 feet) and substantial wave action, were especially significant due to a concurrence of the high tide and full moon. Unlike Hurricane Irene, when water was pushed up on land due to tidal fluctuations in the Hudson River and the tributary streams, the floodwaters caused by Superstorm Sandy were fueled by a combination of unusually high tides resulting from lunar cycles and hurricane force winds that pushed water up the Hudson River.</p> <p>Extreme winds churned up the waters and sent huge waves rolling up towards</p>

Dates of Event	Event Type (Disaster Declaration if applicable)	Rockland County Designated?	Summary of Damages/Losses
			<p>Stony Point’s shoreline. Superstorm Sandy’s winds roaring out of the southeast slammed massive waves up to 12 feet in height against the shoreline, decimating buildings and damaging infrastructure located in these areas. The waves turned boats, docks, tree limbs, timber and other debris into battering rams, driving them into homes, outbuildings, and businesses on the shorefront. A fishing shanty and a gazebo, both along the river, were ripped from their foundations, never to be seen again. Due to the inundation, mandatory evacuations were ordered in the Grassy Point section of the Town of Stony Point. Approximately 400 people were evacuated from their homes.</p> <p>Many older properties along the waterfront, which had not been raised to the FEMA-recommended flood elevation of eight feet above the river, experienced serious damage. Nine homes and one garage along Beach Road were damaged. The same was the fate for a total of thirteen homes along River Road as well as all of the residences located on First, Fourth and Fifth Streets in Grassy Point and a majority of those sited on Grassy Point Road. Damage sustained included flooding of basements and first floors; in some cases, porches, decks and even the fronts of houses were ripped away, exposing kitchens and living rooms to the fury of the storm. Where the structure of the houses withstood the punishment, doors and windows facing the river were blown out, inviting the rushing waters in.</p> <p>In a waterfront home on Beach Road, several people who decided to wait out the storm had to be evacuated after waves crashed through the front of the house, leaving them no means of escape. One resident lost his life helping to secure a marina facility. The Ba Mar mobile home park experienced flooding and wave damage similar to what was seen in other areas of the waterfront. This neighborhood is very vulnerable due to its location in a low-lying waterfront area, and as a result of the nature of the homes and their construction. Many of the homes in Ba Mar were lifted off their footings, flooded, or otherwise damaged. Possessions were destroyed and automobiles, outdoor furnishings, and unsecured structures were washed away or lost due to water damage. Approximately 70 homes in this community were heavily damaged (loss of 50% of their value or greater).</p> <p>Numerous marinas and boating service businesses were severely impacted. Buildings were damaged or destroyed; docks, some with boats still attached, were torn from their pilings and set afloat while pilings and moorings were pulled from the bed of the Hudson.</p> <p>At the wastewater treatment facility, as storm surge advanced toward the plant, the worker who was attempting to keep the plant operational received instructions to shut off power and disable the emergency generators so that they would not start up when the building was flooded. After securing the building, he had to be plucked from its roof by two Town employees, at risk of their own lives, in the Highway Department’s front-end bucket loader. The plant itself experienced flooding in the basement of the main control building and several pump motors and other miscellaneous electrical items were lost, although the sewage tanks narrowly avoided being inundated.</p>
November 7-8, 2012	Nor’Easter Athena	N/A	Trees and wires were downed due to strong winds. Numerous automobile accidents and hazardous roadway conditions were reported, requiring heightened emergency crew and law enforcement deployment. Town of Stony

Dates of Event	Event Type (Disaster Declaration if applicable)	Rockland County Designated?	Summary of Damages/Losses
			Point Police Department overtime costs for the event totaled \$1,253.64.

Notes:

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

9.21.4 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 Stony Point. 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 Stony Point.

Table 9.21-3. Hazard Risk/Vulnerability Risk Ranking

Hazard type	Estimate of Potential Dollar Losses to Structures Vulnerable to the Hazard ^{a, c}		Probability of Occurrence	Risk Ranking Score (Probability x Impact)	Hazard Ranking ^b
Drought	Damage estimate not available		Frequent	39	High
Earthquake	100-Year GBS:	\$0	Occasional	28	Medium
	500-Year GBS:	\$1,772,929			
	2,500-Year GBS:	\$30,712,150			
Extreme Temperature	Damage estimate not available		Frequent	30	Medium
Flood	1% Annual Chance:	\$83,982,000	Frequent	36	High
Landslide	RCV Exposed:	\$3,147,734,000	Occasional	36	High
Severe Storm	100-Year MRP:	\$1,255,721	Frequent	48	High
	500-year MRP:	\$6,252,962			
	Annualized:	\$67,592			
Winter Storm	1% GBS:	\$19,708,430	Frequent	51	High
	5% GBS:	\$98,542,150			
Wildfire	Estimated Value in the WUI:	\$2,653,618,000	Frequent	54	High

Notes:

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

National Flood Insurance Program (NFIP) Summary

The following table summarizes the NFIP statistics for the Town of Stony Point.

Table 9.21-4. 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 Stony Point	89	70	\$2,883,613	2	0	45

Source: FEMA Region 2, 2016

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

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

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

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

Critical Facilities

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

Table 9.21-5. 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
Cedar Brook Homes Well	Well	X	X	-	-
Marvello Country Club Well #1	Well	X	X	40	-

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:

- According to the FEMA Flood Insurance Study (FIS) for Rockland County, the Town of Stony Point is presently subject to flooding from the Hudson River, Cedar Pond Brook and Tributary to Cedar Pond Brook. The area southwest of Stony Point State Park has existing development and flooding problems from the Hudson River. Cedar Pond Brook has no serious flooding problems because it has very steep side slopes, except in the areas east of U. S. Route 9W, where Cedar Pond Brook has a wide flood plain.

Flooding occurs along the entire length of Tributary to Cedar Pond Brook due to the high runoff caused by the considerable development of the surrounding areas. The primary areas in which flooding occurs are in the vicinity of Sullivan, Lewis, and Sengstacken Drives (FEMA FIS).

- According to the Town’s December, 2014 *Report on Coastal Vulnerability and Sea Level Rise*, “the problem of sea-level rise, storm surge and flooding in the waterfront area of Stony Point has an impact

on the homes and personal finances of its residents; the economic stability of current businesses; the environment; Town infrastructure including roads, sewer and water utilities; parkland; and potential future economic development of the area. In recent years, the Town of Stony Point has experienced an increase in damage caused by flooding along the riverfront and associated areas along tributary waterways.”

- The following are flood prone areas within the Town of Stony Point:
 - Waste water treatment facility on North St.
 - Beach Rd. along the Hudson River
 - River Rd. along the Hudson River
 - Cedar Flats Rd. and Route 210
 - The Ba Mar mobile home park neighborhood is very vulnerable due to its location in a low-lying waterfront area, and as a result of the nature of the homes and their construction.
- The Stony Point Town Hall at 74 E. Main St. lacks backup power.
- The following dams are located within the Town.

Dam Name	Municipality	River/Stream	Owner	Storage (Acre-Feet)	Hazard Potential USACE / NYSDEC
Lake Welch Dam* (Beaver Pond)	Stony Point	Minisceongo Creek	NYS Parks and Recreation	4,750	H/H
Lake Boyce Dam	Stony Point	Tr-Hudson River	Camp Bullowa BSA	85	S/I
Doodletown Dam	Stony Point	Doodletown Brook	NYS Parks and Recreation	36	S/I
Tomkins Lake Dam	Stony Point	Tr-Hudson River	Charles T. Fowler	20	S/L
Tomkins Cove Dam	Stony Point	Tr-Hudson River	Tomkins Cove Stone Company	16	S/I
Stony Point Dam	Stony Point	Cedar Pond Brook	United Water New York	9	S/I

*EAP on file at NYSDEC

9.21.5 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 Stony Point.



Table 9.21-6. Planning and Regulatory Tools

Tool / Program (code, ordinance, plan)	Do you have this? (Yes/No) If Yes, date of adoption or update	Authority (local, county, state, federal)	Dept. /Agency Responsible	Code Citation and Comments (Code Chapter, name of plan, explanation of authority, etc.)
Planning Capability				
Master Plan	Yes	Local	Building Department	Updated 9/2013
Capital Improvements Plan	No	-	-	-
Floodplain Management / Basin Plan	Yes	Local	Building Department	Adopted 1/2014
Stormwater Management Plan	Yes	Local	Building Department	Adopted 1/2014
Open Space Plan	No	-	-	-
Stream Corridor Management Plan	Yes	County	County	Updated 5/2016
Watershed Management or Protection Plan	Yes	Local	Building Department	Creation of Ambrey Pond Reservoir Protection District (APRP) adopted 1/13/98 LL#1 1998 amended 3/13/01 and 7/12/05 #LL#4 2005
Economic Development Plan	No	-	-	-
Comprehensive Emergency Management Plan	Yes	County	EOC	8/2010
Emergency Operation Plan	Yes	Local	EOC	Town's Emergency Operation Plan Adopted 11/13,2007 , updated 10/2008 and 8/25/11
Post-Disaster Recovery Plan	No	-	-	-
Transportation Plan	Yes	County	County	County Transportation Plan
Strategic Recovery Planning Report	No	-	-	-
Other Plans:	Yes	Local		NYRCR, 2015 Road/Stream Crossing Inventory, 2016 Report n Coastal Vulnerability and Sea Level Rise, 2014
Regulatory Capability				
Building Code	Yes	State & Local	Building Department	Chapter 177, 2007
Zoning Ordinance	Yes	Local	Planning Board and Zoning Board of Appeals	Chapter 215, 1985
Subdivision Ordinance	Yes	Local	Building Department	Chapter 191, 1968
NFIP Flood Damage Prevention Ordinance	Yes	Federal, State, Local	Building Department	Chapter 112 adopted 10/8/13- LL#1-2013
NFIP: Cumulative Substantial Damages	No	-	-	-
NFIP: Freeboard	Yes	State, Local	Building Department	State mandated BFE+2 for single and two-family residential construction, BFE+1 for all other construction types

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.)
Growth Management Ordinances	No	-	-	-
Site Plan Review Requirements	Yes	Local	Building Department	Current
Stormwater Management Ordinance	Yes	Local	Highway Superintendent	Town of Stony Point Code-Chapter 185 "Stormwater Management", adopted 1/9/07 LL#1 -2007 amended 11/13/07-LL#9-2007 and 12-18-2009-LL#4 2009
Municipal Separate Storm Sewer System (MS4)	Yes	Local	Highway Superintendent; Stormwater Consortium of Rockland County	Current
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])	No	-	-	-

Administrative and Technical Capability

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

Table 9.21-7. Administrative and Technical Capabilities

Resources	Is this in place? (Yes or No)	Department/ Agency/Position
Administrative Capability		
Planning Board	Yes	Planning Department
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Maintenance programs to reduce risk	No	-
Mutual aid agreements	Yes	Police Dept., Fire Dept., Ambulance
Technical/Staffing Capability		
Planner(s) or engineer(s) with knowledge of land development and land management practices	Yes	Engineering Dept.
Engineer(s) or professional(s) trained in construction practices related to buildings and/or infrastructure	Yes	Engineering Dept.
Planners or engineers with an understanding of natural hazards	Yes	Engineering Dept.; Lawrence Brissing, Highway Superintendent, performs stormwater management

Resources	Is this in place? (Yes or No)	Department/ Agency/Position
		functions.
NFIP Floodplain Administrator (FPA)	Yes	William J. Sheehan, Building Inspector/ Floodplain Administrator and Town Engineer
Surveyor(s)	Yes	Engineering Dept.
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Scientist familiar with natural hazards	No	-
Emergency Manager	Yes	Office of Emergency Management
Grant writer(s)	Yes	Contractual
Staff with expertise or training in benefit/cost analysis	Yes	Finance Dept. and contract with engineering firm
Professionals trained in conducting damage assessments	No	Contractual

Fiscal Capability

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

Table 9.21-8. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Director of Finance
Capital improvements project funding	Director of Finance
Authority to levy taxes for specific purposes	Town Board
User fees for water, sewer, gas or electric service	Town Board
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	Town Board
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	No
Open Space Acquisition funding programs	No
Other	No

Community Classifications

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

Table 9.21-9. 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	-	-

Program	Do you have this? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Public Protection (ISO Fire Protection Classes 1 to 10)	Yes	4	8/2011
NYSDEC Climate Smart Community	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Natural disaster/safety programs in/for schools	No	-	-
Organizations with mitigation focus (advocacy group, non-government)	No	-	-
Public education program/outreach (through website, social media)	Yes	-	Current (web/Facebook)
Public-private partnership initiatives addressing disaster-related issues			

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 Stony Point’s capability to work in a hazard-mitigation capacity and/or effectively implement hazard mitigation strategies to reduce hazard vulnerabilities.

Table 9.21-10. 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	

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

National Flood Insurance Program

NFIP Floodplain Administrator (FPA)

William J. Sheehan, Floodplain Administrator

Flood Vulnerability Summary

The Town of Stony Point maintains lists and inventories of properties that have been flood damaged. When applicable, the inventories identify where property owners have expressed interest in mitigation.

There were roughly 80 structures in the Town damaged by Superstorm Sandy in 2012 – 75 residential and 5 commercial. The town made approximately 110 substantial damage estimates after that event. Of those damaged, roughly 75 property owners expressed interest in mitigation or are in the process of mitigation using funding from the NY Rising program through the NY Governor’s Office of Storm Recovery.

Resources

The FPA is the sole person assuming the responsibilities of floodplain administration. The FPA conducts permit review, inspections, damage assessments, and record-keeping. The FPA does not conduct outreach or education to the community regarding flood hazards and risk, flood risk reduction through NFIP insurance, mitigation, or other programs.

Barriers to running an effective floodplain management program in the Town include budget restrictions. The FPA feels adequately supported and trained to fulfill his/her responsibilities as the local floodplain administrator. The FPA would consider attending continuing education or certificate training on floodplain management if it were offered in the County.

Compliance History

The town is in good standing with the NFIP, with the most recent compliance audit (CAV) completed in July 2015. As of June 30, 2016, there are 89 policies in force in the Town of Stony Point, 45 of which are in the 100-yr flood boundary. There are two repetitive loss properties and no severe repetitive loss properties in the Town. Since 1978, 70 claims have been paid totaling \$2,883,613. According to the NFIP Policy Statistics report, the policies in the Town insure approximately \$ 20,273,100 of property with total annual insurance premiums of \$99,869.

Regulatory

The Town of Stony Point’s floodplain management regulations/ordinances exceed the FEMA and State minimum requirements by. The Town recently replaced its original “Flood Damage Prevention” code (Chapter 112 3/24/87 –LL## 1987) with the new “Flood Damage Prevention” Code (Chapter 112 adopted 10/8/13-LL#1-2013.) Part of this code update included the adoption of FEMA’s advisory Firm maps dated 6/20/13,



which established higher base flood elevations than FEMA's Firm maps dated 3/03/14 and also changed some A Zones to V Zones. The town also has other local ordinances, plans, and programs that support floodplain management and meeting NFIP requirements, including the zoning law, site plan review ordinance, stormwater management ordinance, and the New York Rising Community Resilience Plan.

The town has considered joining the Community Rating System to reduce flood insurance premiums for their insured, and would attend an informational seminar if one were 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

Land Use Planning: The Town of Stony Point 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. The Planning Board and Zoning Board of Appeals review plans for new development, and ensures compliance with applicable codes and risk reduction standards.

Comprehensive Master Plan: Town's Comprehensive Master Plan, approved in 2013, is a policy document that outlines a vision for the future of the municipality. It focuses on protection of the Town's natural resources, current and long-range growth and development that is compatible with the Town's quality of life, and provides guidance to decision makers, residents and organizations.

The Town also has a watershed or stream corridor management plan to reduce impacts to stream flow and flooding and a local waterfront revitalization plan which provides direction for future development.

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.

Report on Coastal Vulnerability and Sea Level Rise, 2014: The purpose of this effort to assess coastal vulnerability based on sea level rise is to develop and implement a process to engage stakeholders, government

representatives and consultants in open communication to identify specific waterfront problems and to find feasible solutions. Specific objectives accomplished through the CV-SLR investigation included:

1. To organize a taskforce that includes local, county and state government representatives, the town engineer and planners, waterfront residents and business owners, and ecological and economic consultants;
2. Obtain input from taskforce members and consultants regarding the natural resources, assets and infrastructure at risk, and the priorities and possible solutions to the increasing problem of flooding along the shore of the Hudson River;
3. Assess the feasibility and cost-benefit ratio of potential solutions to SLR;
4. Evaluate the recommendations of the Final NYRCR Plan for Stony Point with regard to SLR;
5. Disseminate the results of the analysis and set up strategies for implementation.

The report included results of a Coastal Vulnerability Index (CVI) model prepared for the Town, which showed the following:

“The CVI model indicated the areas more vulnerable to sea level rise are the eastern half of Grassy Point, waterfront as around the BaMar residential area, and Vincent Clark Park. CVI scores in the eastern portion of Grassy Point ranged from 36-45, some of the highest scores registered in the model. These areas scored higher than other neighboring areas due to their low elevation and unprotected shorelines. The areas around the US Gypsum Plant were typically less vulnerable as they were farther away from the exposed beach front along River Road. The BaMar area received scores between 30 and 36, with some areas scoring as high as 38, especially the most southerly area with southeasterly exposures.

Areas north of Grassy Point and Beach Road typically scored much lower than the southern portion of the study area. Much of the shoreline in the northern half of the study area are reinforced with riprap or consist of a rocky shoreline, making them much more resilient to storm events and less affected by sea level rise. While some of the small enclaves of residential property north of the Stony Point Battlefield show some vulnerability, these are generally, very small areas effecting a small number of properties.”

Finally, the report expanded upon a project that the NYRCR Plan had recommended to insulate the Grassy Point area from future storm impacts by constructing seawalls and groins (jetties) in order to dissipate wave energy east of River Road. The report generated three proposed alternatives, the installation of which was modeled in the CVI to measure the decrease in coastal vulnerability as a result of each method. The report finishes by offering 19 recommendations, or recommended actions, to make Stony Point more resilient to sea level rise. Now three years after the report’s publication, many of its recommended projects have been sidelined due to issues of feasibility, lack of funding, political support, or community will.

Town of Stony Point Road/Stream Crossing Inventory, 2016: This inventory is part of an effort by the Lower Hudson Coalition of Conservation Districts and the Rockland County Soil and Water Conservation District, working with the Hudson River Estuary Program and other partners, to develop a template for town-scale Road-Stream Crossing Management Plans to address both flood risk and habitat restoration. The document contains the following:

- A comprehensive town-wide inventory of bridges and culverts, including information on flood risk and fish and wildlife barrier status;

- A town-wide ranking of replacement projects based on flood risk and habitat restoration value, developed cooperatively with the Town;
- Conceptual designs and implementation strategies for top-ranked replacement projects;
- Supporting information including Best Management Practices, relevant regulations and permit-timing requirements, important resources available to municipalities for management, and a description of the plan development process.

The document contains an inventory of roughly 250 known road/stream crossings in the Town of Stony Point that have been field assessed, and the results of flood risk modeling for roughly 250 culverts within the Cedar Pond Brook and Minisceongo Creek subwatersheds.

This Inventory represents the first step towards developing a comprehensive Road/Stream Crossing Management Plan for the Town of Stony Point. The Town will be involved in a Prioritization Workshop to rank potential replacement projects at town-managed crossings, and identify 1-2 projects to bring into the design phase. Ultimately, this inventory will be combined with the results of the town-wide prioritization, the conceptual designs and implementation strategies, and supporting information as the Town of Stony Point Road/Stream Crossing Management Plan. The Management Plan will be a tool the Town can use to take advantage of every opportunity to reduce flood risk and improve stream habitat connectivity at road/stream crossings, including capital planning and regular maintenance, grant programs, and recovery operations in the wake of the next flood.

Regulatory and Enforcement (Ordinances)

The Building Department, Town of Stony Point, is responsible for the enforcement of all ordinances that affect construction in the town. FEMA floodplain guidelines are strictly followed where applicable and the New York State Building Code controls other aspects of construction. In addition, sections of the Code of the Town of Stony Point cover flood control management and damage control extensively. Town zoning and subdivision regulations and site review processes consider natural hazard risk in considering the presence of floodplains and steep slopes.

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 185 of the Town Code deals with ‘Stormwater Management.’ This ordinance aims to protect the health, well-being, and property of residents in the Town through the regulation of nonstormwater discharges to the municipal separate storm sewer system (MS4) to the maximum extent practicable as required by federal and New York State law.

Zoning: The Town’s comprehensive Zoning Law, Chapter 215 of the Town Code, was adopted in 1985. The law implements the policies for land use in the Town of Stony Point Development Plan, which include:

- A. The Town's environmental resources are limited; the protection and enhancement of environmental, human and community resources must be fully respected.
- B. The impacts of growth must be controlled to maintain the rural, semirural and suburban character of the Town, consistent with the ability of the Town to provide facilities and services.

- C. Commercial development must not be permitted to cause adverse impacts on the circulation facilities and on community appearance and should meet locally generated needs.
- D. Public facilities and services, including roads, drainage and recreation, must be planned and implemented consistent with the ability of the community to fund such facilities and with the need to provide for an expanded population and not as a response to incremental and disjointed growth.
- E. Commercial development should generally conform to the existing pattern of development

Operational and Administration

The town reports having ongoing, operational hazard mitigation programs in place such as vegetation management, storm water management (Chapter 112), and freshwater regulations (Chapter 116). The job descriptions for Town Building Officials and the Town Engineer specifically include identifying and/or implementing mitigation activities and other efforts to reduce natural hazard risks. These staff also participate in the New York State Building Officials Conference, Rockland County Planning Federation, and Associations of Towns that support natural hazard risk reduction and build hazard management capabilities. Town staff do get training or continuing professional education in support of the town's natural hazard risk reduction goals, however they would benefit from ongoing review of their natural hazard risk management-related skills and continuing education.

Funding

The town does not have a capital improvements budget, and its municipal budget does not include line items for mitigation projects or activities. The town has pursued funding through a local waterfront revitalization program for a \$65,000 matching grant, but the grant has not been awarded to date (December, 2016).

Education and Outreach

The Town has public outreach mechanisms and programs in place, including a Facebook page, to inform citizens on natural hazards. The Town maintains a website has links to the municipal newsletter, local laws and planning documents, the annual budget, county websites, and emergency services. The town would benefit by engaging schools and colleges in order to promote further public outreach and education in the community with respect to natural hazard risk management.

Disaster Land is a web-based emergency management software system used by Rockland County. The Towns are granted access to Disaster Land where flood inundation zones are incorporated. All municipal Emergency Coordinators have access to this 24/7 on smart phone/laptop/desktop. Rockland County also utilizes NY-Alert (<https://www.nyalert.gov/>) and CodeRed (Community Notification System; the backup to NY-Alert) for emergency notifications; all Towns and Villages have access to it. There is a mailbox for known flood inundation areas to target outreach as needed; and have license for FEMA's Integrated Public Alert & Warning System (IPAWS) to send out notifications.

9.21.6 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 9.21-11. Status of Previous Mitigation Actions

2010 Mitigation Action	Responsible Party	Status (In progress, No progress, Complete)	Describe Status	Next Step (Include in 2018 HMP or Discontinue)	Describe Next Step
Improvements of existing storm sewer system in Pierce Drive and Zachary Tailor Street; construction of an outlet control structure and enlargement of an existing detention basin.	Engineering Department	Complete	N/A	Discontinue	N/A
Construction of new storm drain sewer system and underground detention system	Engineering Department	Complete	N/A	Discontinue	N/A
Reconstruction of damaged outfall pipe and headwall	Engineering Department	Complete	N/A	Discontinue	N/A
Replacement of existing culvert system and construction of new headwalls/abutments	Engineering Department	No progress	Financial restrictions/ private	Discontinue	Secure funding
Lining of the existing storm sewer to change its hydraulic capacity; installation of additional drainage inlets; rearrangement of downstream box culvert to Hudson River; new overflow ditch; Boyce Lake emergency drainage plan	Engineering Department	No progress	Financial restrictions	Discontinue	Secure funding
Diversion of upland runoff to alternate branch of the Cedar Pond Brook; detention basin modification to central upland peak flow rate	Engineering Department	No progress	Financial restrictions	Discontinue	Secure funding
1.B Ensure that local comprehensive plans incorporate natural disaster mitigation techniques through a courtesy review or draft plans by the County Planning Department.	CPG member; Town Supervisor	In progress	Rockland County Planning Department reviews all Comprehensive Plans; would like to integrate mitigation into future comprehensive plan updates. Town has no plan to update its Comprehensive Plan.	Discontinue	N/A
2.A Expand and disseminate GIS and other hazard information on the internet.	CPG member; Town Supervisor	Complete	Rockland County has expanded its GIS services; flood inundation zones are on the map web portal and the Towns have access to the portal and this data. The County anticipates continual updates of data being collected and accessed by the Towns (e.g.,	Discontinue	N/A

2010 Mitigation Action	Responsible Party	Status (In progress, No progress, Complete)	Describe Status	Next Step (Include in 2018 HMP or Discontinue)	Describe Next Step
			dam inundation areas).		
<p>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.</p>	<p>CPG member; Town Supervisor</p>	<p>Complete</p>	<p>Rockland County has mapping services available to municipalities through their on-line web map portal.</p> <p>Disaster Land is a web-based emergency management software system; Towns are granted access to it; flood inundation zones are incorporated into it so Emergency Coordinator from the municipality has access to it 24/7 on smart phone/laptop/desktop.</p> <p>The County utilizes NY-Alert and CodeRed (the backup to NY-Alert) for emergency notifications (all Towns and Villages have access to it; New Hempstead not using CodeRed). There is a mailbox for known inundation areas to target outreach as needed; and have license for FEMA's IPAWS to issue notifications.</p> <p>The Town can't access CodeRed directly but can contact the County Warning Center; NY Alert Towns/Villages have access.</p>	<p>Discontinue</p>	<p>N/A</p>
<p>Hold periodic workshops regarding zoning and planning issues that arise regarding natural hazards and hazard mitigation.</p>	<p>CPG member; Town Supervisor</p>	<p>In progress</p>	<p>Ongoing, 50%</p>	<p>Discontinue</p>	<p>Planning board and other boards do regular training, including Rockland municipal federation /planning federation training.</p>

2010 Mitigation Action	Responsible Party	Status (In progress, No progress, Complete)	Describe Status	Next Step (Include in 2018 HMP or Discontinue)	Describe Next Step
4.F Continue to implement best management practices for floodplain areas.	CPG member; Town Supervisor	In progress	Ongoing, working with the Town's NY Risking group. 30%	Discontinue	Include as ongoing operational capability.
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; Town Supervisor	In progress	Ongoing, 100%. Adopted flood prevention ordinance exceeding FEMA minimum standards.	Discontinue	Include as ongoing operational capability.
4.J Develop specific mitigation solutions for floodprone road systems (roads, bridges, intersections, drainage, etc.) under the leadership of County Highway Dept.	CPG member; Town Supervisor	In progress	Ongoing, NY Rising/AKRF engineering, 50%	Include in 2018 HMP	Develop specific mitigation solutions for flood prone road systems (roads, bridges, intersections, drainage, etc.) under the leadership of County Highway Dept.
13.A Determine the year built and level of protection for critical emergency facilities and shelters to highlight structures built before codes and standards were put in place to provide some degree of protection from natural hazards, and pursue potential mitigation opportunities to protect these sites as funding becomes available.	CPG member; Town Supervisor	Complete	Police facility/shelter. Built in 1981 above base flood elevation. Municipalities in the County have worked with Orange & Rockland utility company to identify critical facilities.	Discontinue	N/A
11.B Review existing emergency response plans for enhancement opportunities: work with social support agencies, homeowners associations and general public to develop and implement monitoring and warning systems focused on vulnerable populations and provision of adequate shelter facilities.	CPG member; Town Supervisor	Complete	Ongoing review with police department. Rockland County has developed an access and functional-needs registry since 2010; facilities and residents can go on-line and notify of their existence. The Town of Stony Point has access to this data (on-line or hardcopy); 5 Towns, and Villages of Suffern and Spring Valley have on-line access to this system.	Discontinue	N/A
Public awareness program on hazards, prevention and mitigation: assist CPG Chairperson in maintenance of mitigation planning web presence; assist CPG Chairperson in preparation of annual hazards and mitigation planning fact sheet and its distribution; assist CPG chairperson in preparation of hazards survey; periodic discussion of hazard mitigation and the mitigation plan at other regular local meetings; use of annual flyers, newsletters,	RCOFES lead with direct participation and involvement from each jurisdiction's	In progress	Ongoing programs Rockland County provides Towns and Villages palm-cards on winter storms; information regarding flooding; hurricane; high-winds, tornadoes via email and social media (Twitter and Facebook).	Discontinue	Include as ongoing operational capability of Rockland County Office of Fire and Emergency Service.

2010 Mitigation Action	Responsible Party	Status (In progress, No progress, Complete)	Describe Status	Next Step (Include in 2018 HMP or Discontinue)	Describe Next Step
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).	CPG member		Rockland County also has a pamphlet organizer hanging in Town Hall with safety tips on various hazards. At the Town's request the County will speak to an organization/school/non-profit on emergency preparedness and mitigation.		
Code update: review existing local codes and ordinances against the identified hazards to determine whether there needs to be any amendments to address identified hazards and, where a need is identified; modify/amend the codes/ordinances as applicable.	Each jurisdictional CPG member	In progress	Ongoing, 75%. Passed a local law adopting FEMA flood plain elevations. SEQRA review is conducted for specific-projects which takes into account hazards/problems. Rockland County Planning Department provides recommendations.	Continue	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.
Code enforcement: enforcement of NYS and local building codes	Each jurisdictional CPG member	Complete	N/A	Discontinue	N/A
Update/revise floodplain management ordinance to comply with latest FEMA regulations	Building Dept.	Complete	Updated 10/3/16. 100%	Discontinue	N/A
Update/review floodplain management ordinances to be consistent with potential future new FIRMS	Building Dept.	Complete	Ordinance exceeds minimum compliance based on new FIRMS. 100%	Discontinue	N/A
Join the Community Rating System (CRS)	Building Dept.	No progress	Town is not looking to join CRS	Discontinue	N/A
Replace bulkhead in Town park.	Building Department	In progress	Project has been approved and bid received. Will be completed 2017.	Discontinue	N/A

Completed Mitigation Initiatives not Identified in the Previous Mitigation Strategy

The Town of Stony Point 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:

- The town Building Department is in the process of replacing the bulkhead in Town Park. The project has been approved, the bid received, and completion is estimated in 2017.
- The Ba Mar section of Stony Point is receiving funding through the State for a buy-out program (NY Rising Housing Recovery Program). The town is supporting NY Rising's Manufactured Home Community Resiliency Program (the Program) to assist all eligible households currently residing in Ba Mar and owners of mobile/manufactured homes currently in Ba Mar who choose to move out of the community. Eligible applicants may agree to participate in one of the three new home options offered by the program.
- Man hole covers have begun to be replaced as part of the Rehabilitation of Wastewater Interceptors along Beach Road and the Ba Mar Sewer Line (from NYRCR Plan) - Replacement of 20 manhole covers and installation of 20 vents to prevent storm and tidal water intrusion into the sewer lines will eliminate sewerage overflow along Beach Road, in the Ba Mar Mobile Home Park and into the environment.

Proposed Hazard Mitigation Initiatives for the Plan Update

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

Table 9.21-12 summarizes the comprehensive-range of specific mitigation initiatives the Town of Stony Point 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 9.21-13 provides a summary of the prioritization of all proposed mitigation initiatives for the Plan update.

Table 9.21-12. 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
SP-1	Develop specific mitigation solutions for flood prone road systems (roads, bridges, intersections, drainage, etc.) under the leadership of County Highway Dept. Projects should include the recommendations made in the 2014 Report on Coastal Vulnerability and Sea Level Rise (CV SLR Report), focusing on the following areas/infrastructure elements: <ul style="list-style-type: none"> • Penny Bridge • Grassy Point Area • Cedar Pond Brook Interceptor (located west of the CSX rail line) (See action worksheet) 											
	See above	Existing	Flood, severe storm	2	County Highway Dept, AKRF engineering	High	Medium-High	NY Rising, FEMA (HMGP, FMA, PDM), CDBG, NYS DHSES, Operating Budget	Short Term	High	SIP	SP
SP-2	Staff training and capability enhancements - Require staff involved in floodplain management and ordinance enforcement to become Certified Floodplain Managers (CFMs). Also, assign a Town staff member involved in an emergency management role to further facilitate and continuously update the Climate Smart Resiliency Planning Evaluation Tool.	N/A	Flood, severe storm	3, 5	DPW, Town Supervisor	Medium	Low	Town Operating Budget	Short 1-5 years	High	EAP	PI
SP-3	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. Reference Recommendation 2, 8, 10, and 17 from the 2014 Report on Coastal Vulnerability and Sea Level Rise	N/A	All hazards	7	Building Department, County Planning	Medium	Low-Medium	Town Operating Budget	Short-term	High	LPR	PR

Table 9.21-12. 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
	(CV SLR).											
	Letchworth Village Disaster Recovery and Communications Center - Set up a short-term emergency/disaster recovery center, a cooling center, and an Emergency Operations Command Center (EOCC). The RHO* Building would serve as the emergency/disaster recovery center and be a central processing location for all residents in need of assistance during and after disaster events. The Police Station would serve as a flexible communications command center to accommodate a variety of emergencies, and to coordinate the activities of all emergency responders in real time, mainly through radio communications and internet connections (See action worksheet)											
SP-4	See above	N/A	All hazards	1, 2, 5	Building Dept., County Emergency Management	High	\$805,000	FEMA (HMGP, FMA, PDM), CDBG, NYS DHSES, Town Operating Budget	DOF	Medium	SIP	ES
	Hardening of Wastewater Treatment Plant – Project should account for flood elevations of 14 feet given the remaining usable life of the treatment plant and protected to the 500-year event or worst-case scenario. (Portion of action from the 2014 CV SLR Report) (See action worksheet)											
SP-5	See above	Existing	Flood	2	Town DPW	Medium	\$1.6 million	NYRCR, FEMA (HMGP, FMA, PDM), CDBG, NYS DHSES, Town Operating Budget	6-12 Months	High	SIP	SP
	Rehabilitation of Wastewater Interceptors along Beach Road and the Ba Mar Sewer Line (from NYRCR Plan) - Replacement of 20 manhole covers and installation of 20 vents to prevent storm and tidal water intrusion into the sewer lines will eliminate sewerage overflow along Beach Road, in the Ba Mar Mobile Home Park and into the environment. (See action worksheet)											
SP-6	See above	Existing	Flood	2	Town DPW	Medium	\$1.6 million	NY Rising, FEMA (HMGP, FMA, PDM), CDBG, NYS DHSES, Town Operating Budget	4-8 Months	High	SIP	SP NR

Table 9.21-12. 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
SP-7	Implement project recommendations of the Stony Point Culvert Prioritization (See action worksheet)	Existing	Flood, severe storm	2	Town, Rockland County Soil and Water Conservation District	Property & infrastructure	Medium - High	FEMA (HMGP, FMA, PDM), CDBG, NYS DHSES, Town Operating Budget	Short-term	Medium	SIP	PP SP
SP-8	Update the Local Waterfront Revitalization Plan (1994) and ensure it addresses sea level rise and coastal storms. The current Plan is dated both from a goal and from a resiliency standpoint. Updating the plan could make the Town eligible for additional public funding of resiliency infrastructure projects. (From 2014 CV SLR Report)	N/A	All hazards	6, 7	CPG member; Town Planning, County Planning	High	Low	Operating Budget, Grants	DOF	High	LPR	PR
SP-9	Plan for storm preparedness and recovery including becoming a NOAA Storm-ready community; developing a storm emergency response and short-term recovery plan; and developing a storm evacuation plan. (From 2014 CV SLR Report)	N/A	All hazards	5, 7	Town, Rockland County	Medium	Low	Town Operating Budget, County OES, NYS DHSES	Short 1-5 years	High	EAP	ES
SP-10	Engage local schools and colleges in order to promote further public outreach and education in the community with respect to natural hazard risk management.	N/A	All hazards	3	Town of Stony Point, Rockland County	Medium	Low	Town Operating Budget	Short 1-5 years	High	EAP	PI
SP-11	The Town will notify the facility managers/operators of the Cedar Brook Homes Well and the Marvello Country Club Well #1 they are potentially vulnerable to flooding as identified during the Rockland County HMP update	Existing	Flood	2	Private owners with Town of Stony Point, Rockland County support	Low	Low	Town Staff Time	Short 1-5 years	Medium	EAP	PR

Table 9.21-12. 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>and advise of potential mitigation actions for consideration and funding sources for implementation. The Village does not have jurisdiction over these facilities to mitigate. Potential mitigation actions may include:</p> <ul style="list-style-type: none"> - Dry floodproof and install a backup power supply/generator - 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 <p>The Town will also inform the owners that NYS requires critical facilities be mitigated to protect to the 500-year flood event or ""worst damage scenario"". The property owners will need to determine the feasible and cost-effective mitigation actions.</p>											

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

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



OEM Office of Emergency Management

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 9.21-13. 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
SP-1	Develop specific mitigation solutions for flood prone road systems (roads, bridges, intersections, drainage, etc.) under the leadership of County Highway Dept. Projects should include the recommendations made in the 2014 Report on Coastal Vulnerability and Sea Level Rise (CV SLR Report) (See action worksheet)	0	1	1	1	1	1	-1	0	0	1	1	1	1	0	8	High
SP-2	Staff training and capability enhancements - Require staff involved in floodplain management and ordinance enforcement to become Certified Floodplain Managers (CFMs). Also, assign a Town staff member involved in an emergency management role to further facilitate and continuously update the Climate Smart Resiliency Planning Evaluation Tool.	0	1	1	1	0	0	1	1	0	1	1	1	0	0	8	High
SP-3	Code update: review existing local codes	0	0	1	1	0	1	1	0	0	1	1	1	0	0	7	Medium



Table 9.21-13. Summary of Prioritization of Actions

Mitigation Action/Project Number	Mitigation Action/Initiative	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
	and 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. Reference Recommendation 2, 8, 10, and 17 from the 2014 Report on Coastal Vulnerability and Sea Level Rise (CV SLR).																
SP-4	Letchworth Village Disaster Recovery and Communications Center - Set up a short-term emergency/disaster recovery center, a cooling center, and an Emergency Operations Command Center (EOCC). (See action worksheet)	1	0	0	1	0	1	-1	0	1	1	1	0	1	0	6	Medium
SP-5	Hardening of Wastewater Treatment Plant (See action worksheet)	0	1	1	1	1	1	-1	1	1	1	1	1	0	0	9	High
SP-6	Rehabilitation of Wastewater Interceptors along Beach Road and the Ba Mar Sewer Line (from NYRCR Plan) (See	0	1	1	1	0	1	-1	1	1	1	1	1	0	0	8	High



Table 9.21-13. 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
	action worksheet)																
SP-7	Implement project recommendations of the Stony Point Culvert Prioritization(See action worksheet)	0	1	1	1	0	1	-1	1	1	1	1	1	0	0	8	High
SP-8	Update the Local Waterfront Revitalization Plan (1994) and ensure it addresses sea level rise and coastal storms.	0	1	1	1	0	1	1	1	0	1	1	1	0	0	9	High
SP-9	Plan for storm preparedness and recovery including becoming a NOAA Storm-ready community; developing a storm emergency response and short-term recovery plan; and developing a storm evacuation plan.	1	1	1	1	0	0	1	0	1	1	1	1	1	0	10	High
SP-10	Engage local schools and colleges in order to promote further public outreach and education in the community with respect to natural hazard risk management.	1	1	1	1	0	0	1	0	1	1	1	1	1	0	10	High
SP-11	Notify and provide needed support to the facility managers/operators of the Cedar Brook Homes Well and the Marvello Country Club	0	1	1	1	0	1	1	0	0	1	0	1	0	0	7	Medium

Table 9.21-13. 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
	Well #1 to evaluate those facilities' flood vulnerability and determine what mitigation options are needed, if any. Assure that any mitigation addresses the 500-year flood event or "worst damage scenario".																

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

9.21.7 Future Needs To Better Understand Risk/Vulnerability

None at this time.

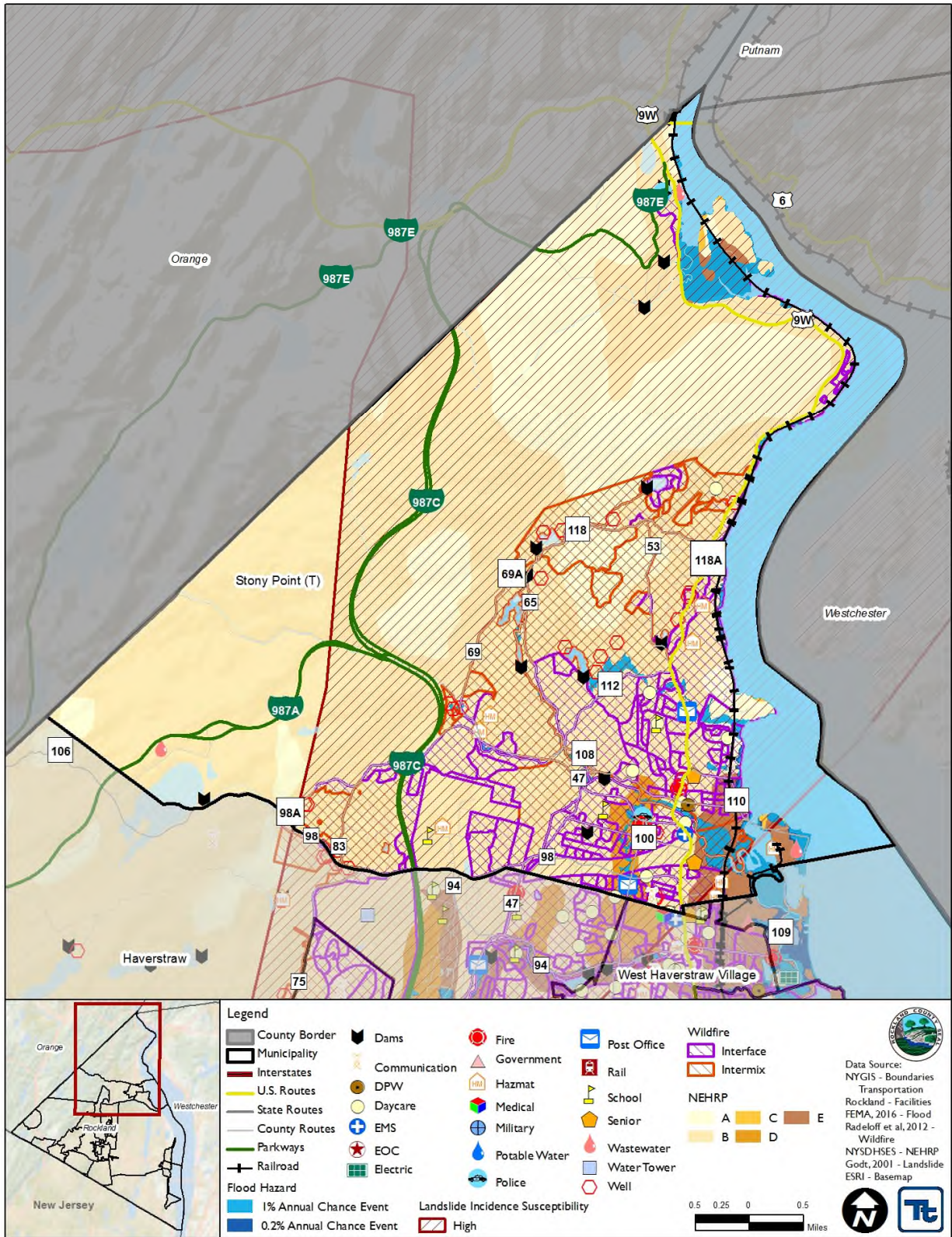
9.21.8 Hazard Area Extent and Location

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

9.21.9 Additional Comments

None at this time.

Figure 9.21-1. Town of Stony Point Hazard Area Extent and Location Map



Name of Jurisdiction:	Town of Stony Point
Name and Title Completing Worksheet:	
Action Number:	SP-1
Mitigation Action Name:	Develop specific mitigation solutions for floodprone road systems (roads, bridges, intersections, drainage, etc.)

Assessing the Risk	
Hazard(s) addressed:	Flood, severe storm
Specific problem being mitigated:	Flood damage to infrastructure
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	Do nothing – risk continues Remove all critical systems from flood prone areas – not feasible
Action/Project Intended for Implementation	
Description of Selected Action/Project	<p>Develop specific mitigation solutions for flood prone road systems (roads, bridges, intersections, drainage, etc.) under the leadership of County Highway Dept. Projects should include the recommendations made in the 2014 Report on Coastal Vulnerability and Sea Level Rise (CV SLR Report), focusing on the following areas/infrastructure elements:</p> <ul style="list-style-type: none"> • Penny Bridge • Grassy Point Area • Cedar Pond Brook Interceptor (located west of the CSX rail line) - Any design of improvements or relocation of the Cedar Pond Brook Interceptor should consider future flood elevations of up to 14 feet given the usable life of the interceptor. It is suggested that further study is required, but that this is a high priority given the potential impacts that a breakage could have on the Cedar Pond Brook estuary and Hudson River. (From 2014 CV SLR Report)
Mitigation Action Type	SIP
Goals Met	Protect property, facilities and infrastructure
Applies to existing and or new development, or not applicable	Existing
Benefits (losses avoided)	Property & Infrastructure
Estimated Cost	Medium – High (\$15 million for Cedar Pond Brook Interceptor)
Priority*	High
Plan for Implementation	

Responsible Organization	County Highway Dept, AKRF engineering
Local Planning Mechanism	
Potential Funding Sources	NY Rising, FEMA (HMGP, FMA, PDM), CDBG, NYS DHSES, Town Operating Budget
Timeline for Completion	Short-term (12-24 Months for Cedar Pond Brook Interceptor dependent upon permitting and mitigation review process)
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: Progress on Action/Project:

Action Number: SP-1

Mitigation Action Name: Develop specific mitigation solutions for floodprone road systems (roads, bridges, intersections, drainage, etc.)

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	0	
Property Protection	1	
Cost-Effectiveness	1	Cost of repairs is less than repeated future damages
Technical	1	Technically feasible
Political	1	
Legal	1	Town has jurisdiction over project locations
Fiscal	-1	May require outside funding
Environmental	0	
Social	0	
Administrative	1	Town has administrative capability to implement
Multi-Hazard	1	Flood, severe storm
Timeline	1	Short-term
Agency Champion	1	
Other Community Objectives	0	
Total	8	
Priority (H/M/L)	High	

Name of Jurisdiction: Town of Stony Point
 Name and Title Completing Worksheet: _____
 Action Number: SP-2
 Mitigation Action Name: Staff training and capability enhancements

Assessing the Risk	
Hazard(s) addressed:	All hazards
Specific problem being mitigated:	Staff is inadequately trained
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	Do nothing – vulnerability continues Have staff attend courses on floodplain management but not become CFM’s – lack of recognition from national organization. CRS awards points for CFM’s
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). Also, assign a Town staff member involved in an emergency management role to further facilitate and continuously update the Climate Smart Resiliency Planning Evaluation Tool.
Mitigation Action Type	EAP
Goals Met	3, 5
Applies to existing and or new development, or not applicable	N/A
Benefits (losses avoided)	Medium
Estimated Cost	Low
Priority*	High
Plan for Implementation	
Responsible Organization	DPW, Town Supervisor
Local Planning Mechanism	
Potential Funding Sources	Town Operating Budget
Timeline for Completion	Short 1-5 years
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: Progress on Action/Project:

Action Number: SP-2

Mitigation Action Name: Staff training and capability enhancements

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	0	
Property Protection	1	Trained staff will more effectively implement policies supporting mitigation
Cost-Effectiveness	1	Training is low cost with potential high benefit
Technical	1	Technically feasible
Political	0	
Legal	1	Town has legal authority to implement
Fiscal	1	Operating budget, in-kind support from county and state partners
Environmental	0	
Social	1	Chance to benefits all residents
Administrative	1	Town has administrative capability to implement
Multi-Hazard	1	All hazards
Timeline	1	Short-term
Agency Champion	0	
Other Community Objectives	0	
Total	9	
Priority (H/M/L)	High	

Name of Jurisdiction: Town of Stony Point

Name and Title Completing Worksheet:

Action Number: SP-3

Mitigation Action Name: Code update: review existing local codes and ordinances against the identified hazards

Assessing the Risk	
Hazard(s) addressed:	All hazards
Specific problem being mitigated:	Current codes and ordinances may not thoroughly incorporate natural disaster mitigation considerations.
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	Do not update local codes and ordinances – not preferred Update local codes and ordinances without integrating hazard mitigation – not preferred
Action/Project Intended for Implementation	
Description of Selected Action/Project	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. Reference Recommendation 2, 8, 10, and 17 from the 2014 Report on Coastal Vulnerability and Sea Level Rise (CV SLR).
Mitigation Action Type	LPR
Goals Met	7
Applies to existing and or new development, or not applicable	N/A
Benefits (losses avoided)	Medium
Estimated Cost	Low-Medium
Priority*	High
Plan for Implementation	
Responsible Organization	Building Department, County Planning
Local Planning Mechanism	
Potential Funding Sources	Town Operating Budget
Timeline for Completion	Short-term
Reporting on Progress	

Date of Status Report/ Report of Progress	Date: Progress on Action/Project:
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Action Number: SP-3

Mitigation Action Name: Code update: review existing local codes and ordinances against the identified hazards

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	0	
Property Protection	1	Integrating hazards and vulnerabilities into local codes and ordinances will ensure development occurs in safer areas
Cost-Effectiveness	1	Planning is a low cost, proactive solution
Technical	1	Technically feasible
Political	0	
Legal	1	
Fiscal	0	May require grant funding to support local budget
Environmental	1	Many local codes and ordinances consider environmental quality
Social	1	Local codes and ordinances apply to and serve all residents
Administrative	1	Town has administrative capability to implement
Multi-Hazard	1	All hazards
Timeline	1	Short-term
Agency Champion	0	
Other Community Objectives	1	Meets goals in multiple planning areas, outside of hazard mitigation
Total	11	
Priority (H/M/L)	High	

Name of Jurisdiction:	Town of Stony Point
Name and Title Completing Worksheet:	
Action Number:	SP-4
Mitigation Action Name:	Letchworth Village Disaster Recovery and Communications Center

Assessing the Risk	
Hazard(s) addressed:	All hazards
Specific problem being mitigated:	Need for emergency/disaster recovery center
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	Do nothing – Puts residents at risk and hardship on emergency personnel. Establish a mobile EOC – cost, can’t serve as shelter
Action/Project Intended for Implementation	
Description of Selected Action/Project	Set up a short-term emergency/disaster recovery center, a cooling center, and an Emergency Operations Command Center (EOCC). The RHO* Building would serve as the emergency/disaster recovery center and be a central processing location for all residents in need of assistance during and after disaster events. The Police Station would serve as a flexible communications command center to accommodate a variety of emergencies, and to coordinate the activities of all emergency responders in real time, mainly through radio communications and internet connections
Mitigation Action Type	SIP
Goals Met	1, 2, 5
Applies to existing and or new development, or not applicable	N/A
Benefits (losses avoided)	Property & Infrastructure
Estimated Cost	High (\$805,000)
Priority*	High
Plan for Implementation	
Responsible Organization	Building Dept., County Emergency Management
Local Planning Mechanism	
Potential Funding Sources	FEMA (HMGP, FMA, PDM), CDBG, NYS DHSES, Town Operating Budget

Timeline for Completion	DOF
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: Progress on Action/Project:

Action Number: SP-4

Mitigation Action Name: Letchworth Village Disaster Recovery and Communications Center

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Shelter residents during evacuation event
Property Protection	0	
Cost-Effectiveness	0	TBD
Technical	1	Technically feasible
Political	0	Unknown
Legal	1	Town has jurisdiction over project location
Fiscal	-1	May require outside funding
Environmental	0	
Social	1	Serves vulnerable populations
Administrative	1	Town has administrative capability to implement
Multi-Hazard	1	All hazards
Timeline	0	DOF
Agency Champion	1	
Other Community Objectives	0	
Total	6	
Priority (H/M/L)	Medium	

Name of Jurisdiction: Town of Stony Point
Name and Title Completing Worksheet: _____
Action Number: SP-5
Mitigation Action Name: Hardening of Wastewater Treatment Plant

Assessing the Risk	
Hazard(s) addressed:	Flood
Specific problem being mitigated:	Flood damage to infrastructure and continuity of critical health and safety infrastructure operations
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	Do nothing – risk continues Remove WWTP from flood prone areas – not feasible
Action/Project Intended for Implementation	
Description of Selected Action/Project	Hardening of Wastewater Treatment Plant – Project should account for flood elevations of 14 feet given the remaining usable life of the treatment plant and protected to the 500-year event or worst-case scenario. (From 2014 CV SLR Report)
Mitigation Action Type	SIP
Goals Met	2
Applies to existing and or new development, or not applicable	Existing
Benefits (losses avoided)	Property & Infrastructure, Public Health
Estimated Cost	High (\$1.6 million)
Priority*	High
Plan for Implementation	
Responsible Organization	Town DPW
Local Planning Mechanism	
Potential Funding Sources	NY Rising, FEMA (HMGP, FMA, PDM), CDBG, NYS DHSES, Town Operating Budget
Timeline for Completion	Short-term (6-12 Months)
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: Progress on Action/Project:

Action Number: SP-5

Mitigation Action Name: Hardening of Wastewater Treatment Plant

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	0	
Property Protection	1	
Cost-Effectiveness	1	Cost of repairs is less than repeated future damages
Technical	1	Technically feasible
Political	1	
Legal	1	Town has jurisdiction over project location
Fiscal	-1	May require outside funding
Environmental	1	Reduces risk of sewage backup and overflow
Social	1	
Administrative	1	Town has administrative capability to implement
Multi-Hazard	1	Flood
Timeline	1	Short-term
Agency Champion	0	
Other Community Objectives	0	
Total	9	
Priority (H/M/L)	High	

Name of Jurisdiction:	Town of Stony Point
Name and Title Completing Worksheet:	
Action Number:	SP-6
Mitigation Action Name:	Rehabilitation of Wastewater Interceptors along Beach Road and the Ba Mar Sewer Line

Assessing the Risk	
Hazard(s) addressed:	Flood
Specific problem being mitigated:	Flood damage to infrastructure and continuity of critical health and safety infrastructure operations
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	Do nothing – risk continues Relocate stormwater infrastructure from flood area – not feasible
Action/Project Intended for Implementation	
Description of Selected Action/Project	Complete replacement of 20 manhole covers and installation of 20 vents to prevent storm and tidal water intrusion into the sewer lines will eliminate sewerage overflow along Beach Road, in the Ba Mar Mobile Home Park and into the environment.
Mitigation Action Type	SIP
Goals Met	2
Applies to existing and or new development, or not applicable	Existing
Benefits (losses avoided)	Property & Infrastructure, Public Health
Estimated Cost	High (\$1.6 million)
Priority*	High
Plan for Implementation	
Responsible Organization	Town DPW
Local Planning Mechanism	
Potential Funding Sources	NY Rising, FEMA (HMGP, FMA, PDM), CDBG, NYS DHSES, Town Operating Budget
Timeline for Completion	Short-term (4-8 Months)
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: Progress on Action/Project:

Action Number: SP-6
Mitigation Action Name: Rehabilitation of Wastewater Interceptors along Beach Road and the Ba Mar Sewer Line

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	0	
Property Protection	1	
Cost-Effectiveness	1	Cost of repairs is less than repeated potential damages
Technical	1	Technically feasible
Political	0	Unknown
Legal	1	Town has jurisdiction over project locations
Fiscal	-1	May require outside funding
Environmental	1	Reduces risk of stormwater backup, roadway washouts, and roadway flooding
Social	1	
Administrative	1	Town has administrative capability to implement
Multi-Hazard	1	Flood
Timeline	1	Short-term
Agency Champion	0	
Other Community Objectives	0	
Total	8	
Priority (H/M/L)	High	

Action Number:	SP-7
Mitigation Action Name:	Implement project recommendations of the Stony Point Culvert Prioritization

Assessing the Risk	
Hazard(s) addressed:	Flood, severe storm
Specific problem being mitigated:	Flood damage to infrastructure and continuity of critical health and safety infrastructure operations
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	Do nothing – damage continues Conduct study to determine alternatives to Stony Point Culvert Prioritization – costly, likely same recommendations
Action/Project Intended for Implementation	
Description of Selected Action/Project	Implement project recommendations of the Stony Point Culvert Prioritization. According to Rockland County Soil and Water Conservation District, there are 10 highly ranked crossings in the Town to right-size. The District and other partners would like to see 2 crossings and a dam right-sized/ will continue to apply for implementation funding for this in the future.
Mitigation Action Type	SIP
Goals Met	2
Applies to existing and or new development, or not applicable	Existing
Benefits (losses avoided)	Property & Infrastructure
Estimated Cost	Medium - High
Priority*	Medium
Plan for Implementation	
Responsible Organization	Town, Rockland County Soil and Water Conservation District
Local Planning Mechanism	
Potential Funding Sources	NY Rising, FEMA (HMGP, FMA, PDM), CDBG, NYS DHSES, Town Operating Budget
Timeline for Completion	Short-term (4-8 Months)
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: Progress on Action/Project:

Action Number: SP-7
Mitigation Action Name: Implement project recommendations of the Stony Point Culvert Prioritization

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	0	
Property Protection	1	
Cost-Effectiveness	1	Cost of repairs is less than repeated potential damages
Technical	1	Technically feasible
Political	0	Unknown
Legal	1	Town has jurisdiction over project locations
Fiscal	-1	May require outside funding
Environmental	1	Reduces risk of stormwater backup, roadway washouts, and roadway flooding
Social	1	
Administrative	1	Town has administrative capability to implement
Multi-Hazard	1	Flood, severe storm
Timeline	1	Short-term
Agency Champion	0	
Other Community Objectives	0	
Total	8	
Priority (H/M/L)	Medium	

Name of Jurisdiction: Town of Stony Point
 Name and Title Completing Worksheet: _____
 Action Number: SP-8
 Mitigation Action Name: Update the Local Waterfront Revitalization Plan

Assessing the Risk	
Hazard(s) addressed:	All hazards
Specific problem being mitigated:	Current LWRP does not thoroughly incorporate natural disaster mitigation considerations.
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	Do not update local plans – not preferred Update local plans without integrating hazard mitigation – not preferred
Action/Project Intended for Implementation	
Description of Selected Action/Project	Update the Local Waterfront Revitalization Plan (1994) and ensure it addresses sea level rise and coastal storms. The current Plan is dated both from a goal and from a resiliency standpoint. Updating the plan could make the Town eligible for additional public funding of resiliency infrastructure projects. (From 2014 CV SLR Report)
Mitigation Action Type	LPR
Goals Met	6, 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	CPG member; Town Planning, County Planning
Local Planning Mechanism	
Potential Funding Sources	Operating Budget, Grants
Timeline for Completion	DOF
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: Progress on Action/Project:

Action Number:

SP-8

Mitigation Action Name:

Update the Local Waterfront Revitalization Plan

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	0	
Property Protection	1	Integrating sea level rise and coastal storms into LWRP will ensure development occurs in safer areas
Cost-Effectiveness	1	Planning is a low cost, proactive solution. Updating the plan could make the Town eligible for additional public funding of resiliency infrastructure projects.
Technical	1	Technically feasible
Political	0	
Legal	1	
Fiscal	0	May require grant funding to support local budget
Environmental	1	Many local codes and ordinances consider environmental quality
Social	1	Local codes and ordinances apply to and serve all residents
Administrative	1	Town has administrative capability to implement
Multi-Hazard	1	All hazards
Timeline	0	DOF
Agency Champion	0	
Other Community Objectives	1	Meets goals in multiple planning areas, outside of hazard mitigation
Total	10	
Priority (H/M/L)	High	

Name of Jurisdiction:	Town of Stony Point
Name and Title Completing Worksheet:	
Action Number:	SP-9
Mitigation Action Name:	Conduct emergency planning and become a NOAA Storm-ready community

Assessing the Risk	
Hazard(s) addressed:	All hazards
Specific problem being mitigated:	Town currently does not have storm an emergency response and short-term recovery plan or a storm evacuation plan, and is not a Storm-ready community.
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	Do nothing – does not reduce risk or vulnerability Achieve Storm-ready requirements but do not apply – no recognition, less effective outreach
Action/Project Intended for Implementation	
Description of Selected Action/Project	Plan for storm preparedness and recovery including becoming a NOAA Storm-ready community; developing a storm emergency response and short-term recovery plan; and developing a storm evacuation plan. (From 2014 CV SLR Report)
Mitigation Action Type	EAP
Goals Met	5, 7
Applies to existing and or new development, or not applicable	N/A
Benefits (losses avoided)	Medium
Estimated Cost	Low
Priority*	High
Plan for Implementation	
Responsible Organization	Town, Rockland County
Local Planning Mechanism	
Potential Funding Sources	Town Operating Budget, County OES, NYS DHSES
Timeline for Completion	Short 1-5 years
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: Progress on Action/Project:

Action Number: SP-9

Mitigation Action Name: Conduct emergency planning and become a NOAA Storm-ready community

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Plan for emergency rescue operations
Property Protection	1	Plan for emergency response operations
Cost-Effectiveness	1	Planning is low cost
Technical	1	Technically feasible
Political	0	
Legal	1	Town has legal authority to implement planning and apply to Storm-ready program
Fiscal	1	Operating budget, in-kind support from county and state partners
Environmental	0	
Social	1	Benefits all populations
Administrative	1	Town has administrative capability to implement
Multi-Hazard	1	All hazards
Timeline	1	Short-term
Agency Champion	0	
Other Community Objectives	0	
Total	9	
Priority (H/M/L)	High	

Name of Jurisdiction: Town of Stony Point

Name and Title Completing Worksheet:

Action Number: SP-10

Mitigation Action Name: Engage local schools and colleges in order to promote further public outreach and education in the community with respect to natural hazard risk management.

Assessing the Risk	
Hazard(s) addressed:	All hazards
Specific problem being mitigated:	Need for more public understanding of natural hazards and associated risks
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	Do not conduct outreach – not preferred Rely on outside groups to conduct public outreach – may not be sustainable or at high enough standards
Action/Project Intended for Implementation	
Description of Selected Action/Project	No nothing – not preferred, public education needed
Mitigation Action Type	EAP
Goals Met	3
Applies to existing and or new development, or not applicable	N/A
Benefits (losses avoided)	Medium
Estimated Cost	Low
Priority*	High
Plan for Implementation	
Responsible Organization	Town, Rockland County
Local Planning Mechanism	
Potential Funding Sources	Operating Budget
Timeline for Completion	Short 1-5 years
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: Progress on Action/Project:

Action Number: SP-10

Mitigation Action Name: Engage local schools and colleges in order to promote further public outreach and education in the community with respect to natural hazard risk management.

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Make residents better informed on how to protect themselves, their families, and their property from natural hazards.
Property Protection	0	
Cost-Effectiveness	1	Outreach is a low cost action
Technical	1	Technically feasible
Political	0	
Legal	1	Town has legal authority to conduct outreach, and to use FEMA and County materials
Fiscal	1	Staff-time
Environmental	0	
Social	1	Will reach a large segment of the population, including vulnerable populations
Administrative	1	Town has administrative capability to implement
Multi-Hazard	1	All hazards
Timeline	1	Short-term
Agency Champion	0	
Other Community Objectives	0	
Total	9	
Priority (H/M/L)	High	

Name of Jurisdiction:	Town of Stony Point
Name and Title Completing Worksheet:	
Action Number:	SP-11
Mitigation Action Name:	Notify and provide needed support to the facility managers/operators of the Cedar Brook Homes Well and the Marvello Country Club Well #1

Assessing the Risk	
Hazard(s) addressed:	All hazards
Specific problem being mitigated:	Privately owned critical facilities in floodplain
Evaluation of Potential Actions/Projects	
Actions/Projects Considered (name of project and reason for not selecting):	No action – continue vulnerability Mitigate to 1% annual chance flood event – not preferred, doesn't meet NYS guidelines
Action/Project Intended for Implementation	
Description of Selected Action/Project	<p>The Town will notify the facility managers/operators of the Cedar Brook Homes Well and the Marvello Country Club Well #1 they are potentially vulnerable to flooding as identified during the Rockland County HMP update and advise of potential mitigation actions for consideration and funding sources for implementation. The Village does not have jurisdiction over these facilities to mitigate. Potential mitigation actions may include:</p> <ul style="list-style-type: none"> - Dry floodproof and install a backup power supply/generator - 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 <p>The Town will also inform the owners that NYS requires critical facilities be mitigated to protect to the 500-year flood event or ""worst damage scenario"". The property owners will need to determine the feasible and cost-effective mitigation actions.</p>
Mitigation Action Type	EAP
Goals Met	2
Applies to existing and or new development, or not applicable	Existing
Benefits (losses avoided)	Low
Estimated Cost	Low
Priority*	Medium

Plan for Implementation	
Responsible Organization	Private owners with Town of Stony Point support
Local Planning Mechanism	
Potential Funding Sources	Town Staff Time
Timeline for Completion	Short 1-5 years
Reporting on Progress	
Date of Status Report/ Report of Progress	Date: Progress on Action/Project:

Action Number:

SP-11

Mitigation Action Name:

Notify and provide needed support to the facility managers/operators of the Cedar Brook Homes Well and the Marvello Country Club Well #1

Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	Make critical facility owners better informed on how to ensure continued operation of their facility, which serves the health and safety of the public
Property Protection	1	Protect critical facilities
Cost-Effectiveness	1	Cost of outreach is low – cost of critical facility mitigation is less than potential future damages
Technical	1	Technically feasible
Political	0	
Legal	0	
Fiscal	1	Staff time
Environmental	0	
Social	0	
Administrative	1	Town has administrative capability to implement
Multi-Hazard	0	Flood
Timeline	1	Short-term
Agency Champion	0	
Other Community Objectives	0	
Total	7	
Priority (H/M/L)	Medium	