

8.6 - Jurisdictional Annex, Village of East Nassau

This section presents the jurisdictional annex for the Village of East Nassau. The jurisdiction's governing body passed a formal resolution to participate in this multi-jurisdictional hazard mitigation plan update. A copy of their resolution is maintained at the local government offices and at the Rensselaer County Bureau of Public Safety.

8.6.1 Contact Information

The jurisdiction's resolution to participate identified a Primary Point of Contact and an Alternate for this hazard mitigation plan update. These individuals represented the jurisdiction on the county-wide Core Planning Group and led a local team of Jurisdictional Assessment Team Members who undertook various local activities related to the plan update.

HAZARD MITIGATION PLAN POINTS OF CONTACT						
Primary Point of Contact			Alternate Point of Contact			
Name: Adam M. Acquario Title: Village Mayor Address: PO Box 268, East Nassau, NY 12062 Phone Number: 518-712-9635 E-mail Address: mayor@villageofeastnassau.org			Name: Greta White Title: Chair, East Nassau Zoning Board of Appeals Address: PO Box 268, East Nassau, NY 12062 Phone Number: 518-712-9635 E-mail Address: zba@villageofeastnassau.org			
Jurisdictional Assessment Team Members						
Local Jurisdiction Role/Position	Name	Email	Phone	Date of Invitation	Method of Invitation	Agreed to participate?
Land Use/Community Planner	Adam Acquario, Mayor	mayor@villageofeastnassau.org	518-712-9635	Mar-18	email	yes
Emergency Manager	Mitchell Levinn	venemerg@villageofeastnassau.org	518-712-9635	Jan. 2019	email	yes
Floodplain Manager/Administrator	Code Enforcement Officer	ceo@villageofeastnassau.org	518-836-5010	Jan. 2019	email	yes
Public Works Director / City Engineer	Michael Dorr	dpw@villageofeastnassau.org	518-478-6075	Jan. 2019	email	yes
Building Code Official	Code Enforcement Officer	ceo@villageofeastnassau.org	518-836-5010	Jan. 2019	email	yes
Fiscal/Budget Officer	Doris McCarthy*	treasurer@villageofeastnassau.org	518-712-9023	Jan. 2019	email	yes
	Jeanine McCarthy	treasurer@villageofeastnassau.org	518-712-9023	Oct. 2019	email	yes
Manager/Administrator	Adam Acquario, Mayor	mayor@villageofeastnassau.org	518-712-9635	Jan. 2019	email	yes
Elected Officials	Michael Lever	board@villageofeastnassau.org	518-794-0095	Jan. 2019	email	yes
Local Hospital	N/A					
Major University	N/A					
Significant Business	N/A					
Neighboring County 1	N/A					
Neighboring County 2	N/A					
Neighboring County 3	N/A					
Neighboring County 4	N/A					
Tribal Group/Nation	N/A					

* Note: Regretfully, Doris McCarthy passed away in October 2019. Beginning at that time, Jeanine McCarthy began serving as Acting Treasurer for the Village.

8.6.2 JURISDICTION PROFILE

8.6.2.1 Location and Land Area

The Village of East Nassau is located in southern Rensselaer County, in the eastern part of New York State. It is located within the Town of Nassau and shares a border with Stephentown to the east.

According to the 2010 U.S. Census Bureau, Rensselaer County has a total area of 665 square miles (1,720 km²), of which 652 square miles (1,690 km²) is land and 13 square miles (34 km²) (1.9%) is water. Of that, the Village of East Nassau has a total area of 58.09 square miles (150.44 km²), of which 57.89 square miles (149.93 km²) is land and 0.20 square miles (0.51 km²) is water.

8.6.2.2 Population

According to the 2010 U.S. Census Bureau's American Community Survey 5-Year Estimates, the population of the Village of East Nassau is estimated to be 2,903 persons.

8.6.2.3 Demographics

Of a total area of 0.62 square miles (2010 Census data), the land area is 0.62 square miles and population per square mile is 1,765.2 persons.

Of the total population, there are 105.2 males per 100 females (all ages). Persons under 18 years represent 25.2% of the population, and 13.1% are persons 65 years and over (2010 Census). Young and old subsets of the population may have unique needs as far as care requirements and potential cognitive and/or mobility limitations before, during, and after a disaster.

The number of persons who speak a language other than English is 18, or 3.3%, of which 0.0% speak English less than "very well". Persons not speaking English well may have trouble understanding instructions regarding disaster preparation, response, and recovery.

Regarding education, of persons age 25 years and older, 86.6% are high school graduates or higher, and 32.4% have received their bachelor's degree or higher (2000 Census data). Higher education can help enhance skills associated with cognition and evaluation of risk. Higher education can, therefore, foster an overall improved perception of risk, particularly where individuals may not have prior direct experience preparing for, responding to, or recovering from a particular hazard in their daily lives.

Regarding families and living arrangements, from 2013 to 2017 there were 227 total households and 2.59 persons per household. Persons living alone sometimes have less of a direct social circle for support before, during, and after a disaster.

The Census Bureau classifies all people not living in housing units (house, apartment, mobile home, rented rooms) as living in group quarters. The two types of group quarters are Institutional (correctional facilities, nursing homes, mental hospitals) and Non-Institutional (college dormitories, military barracks, group homes, missions, shelters). The Census Bureau maintains no group quarters information for this municipality. The needs of persons living in group quarters are unique, and residents are likely to have access and functional needs and unique care requirements before, during, and after a disaster.

According to 2017 ACS, the median household income was \$66,875; the per capita income in past 12 months (2017) was \$29,836; and the percentage of persons in poverty was 5.4%. Lower income persons have limited financial resources to draw from in both a pre- and post-disaster scenario and are likely to require support as they prepare for, and recover from, hazard events.

The total of noninstitutionalized civilians with a disability is 7.3%, and percentage of people with a disability over age 65 years is 35.0%. The total percentage of persons (civilian, noninstitutionalized) without health insurance is 5.7%. Persons with disabilities have access and functional needs such as cognitive or mobility limitations that may put them at greater risk before, during, and after a hazard event.

8.6.2.4 Brief History

The area that is now Rensselaer County was inhabited by the Algonquian-speaking Mohican Indian tribe at the time of European encounter. Kiliaen van Rensselaer, a Dutch jeweler and merchant, purchased the area in 1630, as part of the Dutch colony New Netherland. The land passed from English rule (1664) to Dutch control (1673), then back to English rule (1674), until American independence in 1776. Rensselaer County was created in 1790s from an area that was originally part of the very large Albany County. In 1807 the county reorganized.

The Village of East Nassau was incorporated as a village in 1998. The community was first known as "Schermerhorn's" after an early inhabitant.

8.6.2.5 Governing Body Format

The governing body of the municipality consists of a Mayor-Council form of government. This council serves as the county's municipal/local government, performing executive functions of different natures. Members of this governing body are elected by the people.

8.6.2.6 Growth/Development Trends

Performing an assessment of growth and development trends is one step of a hazard mitigation plan update. This look into the future is important because development in hazard areas could put more people and property in harm's way and, in turn, could work to increase potential disaster-related damages and losses at a time when the mitigation plan's purpose is to reduce the potential for damages emanating from natural disasters.

An evaluation of growth and development trends was undertaken by each participating jurisdiction as part of the development of the initial plan in 2011. As part of this plan update, the Village of East Nassau reviewed and updated its prior feedback to reflect current conditions in the community as of early 2019.

The Village of East Nassau did not note any major residential or commercial development taking place, or any major infrastructure development planned for the next five years in the municipality. Development in the Village is generally simple additions, decks, and other home improvements.

New Development/Potential Development in the Municipality						
Property Name	Type (Residential or Commercial)	No. of Structures	Address	Block and Lot	Known Hazard Zone	Description /Status
Not reported	Not reported	Not reported	Not reported	Not reported	Not reported	Not reported

To protect new development from the effects of natural hazards, all new development in the Village of East Nassau must abide by village land use regulations and be approved by the planning board. The Village participates in the NFIP. It also has adopted driveway standards. The Village enforces the NYS Building Code. The Village has a comprehensive plan in effect. Its current land use regulations and the revised law can be accessed on the Village website at www.villageofeastnassau.org.

8.6.3 HAZARD IDENTIFICATION

The following hazards represent those that were deemed to be significant hazards of concern for the Village of East Nassau:

Profiled Hazards in the Village of East Nassau													
Jurisdiction	Atmospheric Hazards						Hydrologic Hazards			Geologic Hazards		Other Hazards	
	Extreme Temperatures (Coldwave/Heat Wave)	Hurricane/Tropical Storm	Lightning	Tornado	Wind	Winter Storm	Drought	Flood			Earthquake	Landslide ⁴	Wildfire ⁵
								Flooding ²	Dam Failure ¹	Ice Jam ³			
East Nassau, Village of	■	■	■	■	■	■	■	■			■		■

Notes: (1) Based on presence of a High hazard dam (NYSDEC classification) either in the municipality or close upstream on a watercourse flowing through that municipality and feedback from the County Planning Department. (2) Based on identification of improved property in mapped FEMA flood hazard zones. (3) Based on historical records, Flood Insurance Studies, and local information as well as feedback from the County Planning Department. (4) Based on identification of improved property in mapped high incidence or high susceptibility landslide risk zones, plus those municipalities in which details of individual landslide events are available. (5) Based on identification of improved property in mapped wildfire hazard zones.

8.6.4 NOTABLE HAZARD EVENT OCCURRENCES SINCE 2011

Rensselaer County has a long history of natural hazard events occurring, as detailed in Section 3 of this plan. A summary of historical events is provided in each of the hazard profiles of Section 3 and includes a chronology of events that have affected the County and its municipalities.

NOAAs NCEM records 1,141 hazard event occurrences from 1950 to 2018 causing 1 fatality, 116 injuries, \$27,679,000 in property damage, and \$305,800 in crop damage. The table below

presents a summary of 415 events that are included in NOAA's NCDC records for Rensselaer County since the prior 2011 HMP was prepared to summarize the recent range and impact of natural hazard events potentially affecting the County and its municipalities. For details of events prior to 2011, refer to Section 3 of this plan.

Natural Hazard Event History (January 2011 through December 2018)					
Event Type	Count	Fatalities	Injuries	Property Damage	Crop Damage
Blizzard	2	0	0	\$0	\$0
Cold/Wind Chill	28	0	0	\$0	\$0
Excessive Heat	3	0	0	\$0	\$0
Extreme Cold/Wind Chill	8	0	0	\$0	\$0
Flash Flood	20	0	0	\$320,000	\$0
Flood	16	0	0	\$10,000	\$0
Frost/Freeze	6	0	0	\$0	\$0
Hail	29	0	0	\$0	\$0
Heat	17	0	0	\$0	\$0
Heavy Rain	1	0	0	\$0	\$0
Heavy Snow	13	0	0	\$0	\$0
High Wind	17	0	0	\$0	\$0
Lightning	1	0	0	\$50,000	\$0
Storm Surge/Tide	1	0	0	\$0	\$0
Strong Wind	22	0	0	\$48,000	\$4,000
Thunderstorm Wind	141	0	7	\$0	\$0
Tropical Storm	2	0	0	\$0	\$0
Winter Storm	28	0	0	\$0	\$0
Winter Weather	60	0	0	\$0	\$0
Total	415	0	7	\$428,000	\$4,000

Since 1954, Rensselaer County has been designated as eligible for at least one form of FEMA assistance in 16 Federally-declared major disasters and eight Federally-declared emergencies. Since the adoption of the 2011 HMP, Rensselaer County has been designated as eligible for at least one form of FEMA assistance in three of the state's 12 Federally-declared major disasters (2011 through 2018).

Rensselaer County Disaster Declarations, 2011-2018					
Declaration Year	Event Incident Period	Declaration Type	Disaster Type	Disaster Number	Rensselaer County Designation
2017	March 14-15, 2017	Major Disaster Declaration	Severe Winter Storm and Snowstorm	DR-4322	Declared for PA only
2011	September 7-11, 2011	Emergency Declaration	Tropical Storm Lee	EM-3341	Declared for PA Category B
2011	August 26, 2011 through September 5, 2011	Major Disaster Declaration	Hurricane Irene	DR-4020	Declared for PA and IA
2011	December 26-27, 2010	Major Disaster Declaration	Severe Winter Storm and Snowstorm	DR-1957	Declared for PA Category B

Source: FEMA, online at <https://www.fema.gov/disasters>, queried on July 11, 2019
 PA= FEMA's Public Assistance Program
 IA= FEMA's Individual Assistance Program
 Category B= FEMA's Public Assistance Program Category B (Emergency Protective Measures)

Some more recent notable events in the Village of East Nassau since 2011 include:

August 28, 2011 - Irene

The remnants of Hurricane Irene brought heavy to extreme rainfall and throughout Rensselaer County.

October 29-30, 2012 – Sandy

Rainfall in Rensselaer County was not excessively heavy and did not cause any flooding, thanks to dry antecedent conditions. Wind gusts of 40 to 60 mph were common from the afternoon of the 29th until the early morning hours of the 30th

June 30, 2017 to July 1, 2017 - Severe Storms and Flooding

Numerous strong to severe thunderstorms occurred across Rensselaer County. Thunderstorm winds caused damages throughout the county, downing trees and power lines, and heavy rains caused flooding in many areas of the county. Route 20 was closed between Bliss School House Road and Route 66 due to downed trees and wires as a result of thunderstorm winds.

Date Unspecified – Landslide

NRCS identified 52 Bliss School House Road as an area that would benefit from landslide mitigation.

8.6.5 NATIONAL FLOOD INSURANCE PROGRAM SUMMARY

The Village of East Nassau has participated in FEMA’s National Flood Insurance program (NFIP) since 2007.

- Total number of policies¹: 0
- Insurance in force²: \$0
- Total number of losses: 0
- Total claims paid: \$0
- Repetitive Loss Properties: 0
- Severe Repetitive Loss Properties: 0

The Village of East Nassau provided the following NFIP Administrator Input in 2019, for inclusion in the 2019 HMP.

¹ Policies in Force from www.fema.gov on 02/21/19, data current as of 09/30/18.

² Insurance in Force from www.fema.gov on 02/21/19, data current as of 09/30/18.

Name: Code Enforcement Officer Title: Floodplain Manager/Floodplain Administrator/NFIP Coordinator
 Community: Village of East Nassau Email and Phone: ceo@villageofeastnassau.org 518-712-9635



Worksheet 2 - NFIP

Note: This form should be filled out by your floodplain administrator. Submittals should be returned via email to Jay Wilson at jwilson@renco.com. Feel free to contact Anna Foley of AECOM if you have questions, at anna.foley@aecom.com. All communities participating in the National Flood Insurance Program (NFIP) provided FEMA with a floodplain management ordinance and a designated floodplain administrator as a prerequisite to enter the program. All participating communities must provide the information below. Please return a copy of your floodplain management ordinance to us with this submittal.

Adoption Date of your Current Floodplain Management Ordinance	Date of Entry into NFIP ¹	Position or Title of Your Jurisdiction's Designated Floodplain Manager/Administrator (may also be called NFIP Coordinator)		Is this person a Certified Floodplain Manager?	Is floodplain management an auxiliary function?	Is your community in good standing with the NFIP?	
2007	2007	Code Enforcement Officer		[] Yes [x] No	[x] Yes [] No	[x] Yes [] No	
Provide an explanation of NFIP administration services (i.e., permit review, GIS, education or outreach, inspections, engineering capability, etc.):							
Permit review / inspections							
Describe barriers to running an effective NFIP program in the community (if applicable):							
Money / time							
When was most recent FEMA Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?*	Is a CAV or CAC scheduled or needed?	Does the current floodplain management ordinance exceed FEMA or State minimum requirements? If so, describe how.	Is training of staff regarding NFIP issues planned?	Does your community intend to continue to enforce the floodplain management requirements including regulating new construction in Special Flood Hazard Areas (SFHAs)?	Does your community participate in the CRS? If so, state your Class.	Does your community intend to continue its participation in the CRS program?	If your community is not currently participating in the CRS program, are you intending to initiate the process during the next planning cycle?
[] Yes [x] No	[] Yes [x] No	[x] Yes [] No	[] Yes [] No	[x] Yes [] No	[] Yes* [X] No* * Class _____	[] Yes [X] No	[] Yes [X] No
*Describe any outstanding compliance issues (i.e., current violations):							
There are currently no outstanding compliance issues							

¹ Your date of entry into the NFIP can be found at: <http://www.fema.gov/cis/NY.html> (column "Reg-Emer Date").

Rensselaer County Multi-Jurisdictional Hazard Mitigation Plan Update – NFIP Worksheet NFIP-1

Name: Code Enforcement Officer Title: Floodplain Manager/Floodplain Administrator/NFIP Coordinator
 Community: Village of East Nassau Email and Phone: ceo@villageofeastnassau.org 518-712-9635



Worksheet 2 - NFIP

Note: This form should be filled out by your floodplain administrator. Submittals should be returned via email to Jay Wilson at jwilson@renco.com. Feel free to contact Anna Foley of AECOM if you have questions, at anna.foley@aecom.com. All communities participating in the National Flood Insurance Program (NFIP) provided FEMA with a floodplain management ordinance and a designated floodplain administrator as a prerequisite to enter the program. All participating communities must provide the information below. Please return a copy of your floodplain management ordinance to us with this submittal.

Adoption Date of your Current Floodplain Management Ordinance	Date of Entry into NFIP ¹	Position or Title of Your Jurisdiction's Designated Floodplain Manager/Administrator (may also be called NFIP Coordinator)		Is this person a Certified Floodplain Manager?	Is floodplain management an auxiliary function?	Is your community in good standing with the NFIP?	
2007	2007	Code Enforcement Officer		[] Yes [x] No	[x] Yes [] No	[x] Yes [] No	
Provide an explanation of NFIP administration services (i.e., permit review, GIS, education or outreach, inspections, engineering capability, etc.):							
Permit review / inspections							
Describe barriers to running an effective NFIP program in the community (if applicable):							
Money / time							
When was most recent FEMA Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?*	Is a CAV or CAC scheduled or needed?	Does the current floodplain management ordinance exceed FEMA or State minimum requirements? If so, describe how.	Is training of staff regarding NFIP issues planned?	Does your community intend to continue to enforce the floodplain management requirements including regulating new construction in Special Flood Hazard Areas (SFHAs)?	Does your community participate in the CRS? If so, state your Class.	Does your community intend to continue its participation in the CRS program?	If your community is not currently participating in the CRS program, are you intending to initiate the process during the next planning cycle?
[] Yes [x] No	[] Yes [x] No	[] Yes [x] No	[x] Yes [] No	[x] Yes [] No	[] Yes* [X] No* * Class _____	[] Yes [X] No	[] Yes [X] No
*Describe any outstanding compliance issues (i.e., current violations):							
There are currently no outstanding compliance issues							

¹ Your date of entry into the NFIP can be found at: <http://www.fema.gov/cis/NY.html> (column "Reg-Emer Date").

Rensselaer County Multi-Jurisdictional Hazard Mitigation Plan Update – NFIP Worksheet NFIP-1

8.6.6 ASSET IDENTIFICATION AND CHARACTERIZATION

An inventory of geo-referenced assets in Rensselaer County has been created in order to identify and characterize property and persons potentially exposed to the identified hazards. Section 3b of the plan presents the asset identification and characterization process in great detail. The following table presents an overview of assets in Rensselaer County³ and the subset of those assets that fall within the Village of East Nassau.

³ The County totals are included here for readers to understand the proportion of countywide assets that lie within this municipality.

Asset Inventory																			
Jurisdiction	Improved Property (RCV ⁴)	Emergency Facilities					Critical Infrastructure and Utilities										Other Key Facilities		Historic and Cultural Resources
		Fire Stations	Police Stations	EMS / Ambulance Stations	Hospitals	Shelters ⁵	Wastewater Facilities	Water Treatment Facilities	Airports	Railroads (Passenger/ Freight Station)	Electric Power Facilities	Communications Facilities	Oil Facilities	Hazardous Materials Sites	Natural Gas Facilities	Ports	Schools	Residential Senior Care Facilities ⁶	
Rensselaer County	\$33,333,947,000	44	9	19	2	33	8	1	0	13	1	6	5	60	1	12	64	3	84
Village of East Nassau	\$94,148,000	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Rensselaer County	Population, Census 2010:	159,429																	
Village of East Nassau	Population, Census 2010:	587																	
Rensselaer County	Vulnerable Population, Census 2010 (under 5 years, and over 64 years)	30,429																	
Village of East Nassau	Vulnerable Population, Census 2010 (under 5 years, and over 64 years)	103																	

⁴ Replacement Cost Value

⁵ Specific shelter data is protected information and is not released to the public unless and until necessary during a disaster.

⁶ * As per the County Department of Economic Development and Planning, these figures only encompass the senior centers which are not residential facilities.

Exposure – Assets in the Floodplain

Land. Approximately six percent of the Village of East Nassau’s land area is located in the 100-year floodplain.

Land in the 100-year Floodplain			
Municipality	Land Area of Municipality (Acres)	Land in the 100-year Floodplain (Acres)	Percent of Land in the 100-Year Floodplain (%)
East Nassau, Village of	3,029	178	6%

Improved Property. Approximately ten percent of the Village of East Nassau’s improved property is located in the 100-year floodplain.

Improved Property in the 100-year Floodplain			
Municipality	Replacement Cost Value (RCV) Structure and Contents (\$)	RCV in the 100-year Floodplain (\$)	Percent of RCV in the 100-Year Floodplain (%)
East Nassau, Village of	\$94,148,000	\$9,186,976	10%

Population. Approximately nine percent of the population in the Village of East Nassau resides in the 100-year floodplain.

Population in the 100-Year Floodplain			
Municipality	Total Population (Census 2010)	Estimated Population in the 100 year Floodplain	Percent of Population in the 100 year Floodplain
East Nassau, Village of	587	51	9%

Critical Facilities. No critical facilities (emergency facilities, critical infrastructure and utilities, and other key facilities, as presented in Section 3b) are located in the floodplain in the Village of East Nassau.

Historic and Cultural Resources. No listed historic or cultural resources are located in the floodplain in the Village of East Nassau.

8.6.7 POTENTIAL FUTURE DAMAGES

Estimated annual losses provided in this section are based on best available data, and the methodologies applied result in an approximation of risk. Loss estimates should be used to understand relative risk from hazards.

Uncertainties are inherent in any loss estimation methodology, arising in part from incomplete scientific knowledge concerning natural hazards and their effects on the built environment. Uncertainties also result from approximations and simplifications that are necessary for a comprehensive analysis (i.e., incomplete inventories, demographics or economic parameters

The following table provides estimated average annual losses from HAZUS-MH 4.0 runs, where available. For hazards for which HAZUS modules are not available, historic damages have been distributed across municipalities based on their proportion of improved property. It is important to note that this table reflects estimates of average annual damages. For any hazard, individual event damages could be substantially (orders of magnitude) higher.

For the Village of East Nassau, the hazard with the highest estimated average annual losses is flooding.

Summary of Annual Loss Estimates – Town of Berlin ⁷													
Municipality	Replacement Cost Value of Improvements (\$)	Extreme Temperatures	Hurricane/ Tropical Storm - Wind	Hurricane/ Tropical Storm – Wind + Flood	Lightning	Tornado	Wind	Winter Storm (Ice Storm/ Snow Storm)	Drought	Flood	Earthquake	Landslide	Wildfire
		NOAA NCEI, 1996-2018	HAZUS	NOAA NCEI, 1996-2018	NOAA NCEI, 1996-2018	NOAA NCEI, 1996-2018	NOAA NCEI, 1996-2018	NOAA NCEI, 1996-2018	NOAA NCEI, 1996-2018	NOAA NCEI, 1996-2018	HAZUS	HAZUS	NOAA NCEI, 1996-2018
East Nassau, Village of	\$94,148,000	\$4	\$37	\$244	\$30	\$1,338	\$339	\$95	\$0	\$38,080	\$161	\$0	\$0

⁷ * **It is important to note that this table reflects estimates of average annualized damages. For any hazard, individual event damages could be substantially higher.**

8.6.8 HAZARD RANKINGS AND KEY RISK FINDINGS

Hazard rankings for the Village of East Nassau are provided in the table below. Hazard priorities are based on each hazard's likelihood of occurrence, potential consequences, relative risk and average annualized losses. Rows are shaded red for High Hazard Priority; yellow for Moderate Hazard Priority; and green for Low Hazard Priority.

Flooding is the highest priority hazard for the Village of East Nassau.

Hazard Rankings – Village of East Nassau					
Hazard	Future Probability	Potential Consequence	Relative Risk	Hazard Priority	Average Annualized Losses ⁸
Extreme Temperatures (Coldwave/ Heat Wave)	Low	Low	Low	Low	\$4
Hurricane/ Tropical Storm	Low	High	Moderate	Moderate	\$37 Wind; \$244 Wind + Flood
Lightning	High	Low	Low	Low	\$30
Tornado	Low	High	High	High	\$1,338
Wind	High	Low	High	High	\$339
Winter Storm (Ice Storm/Snow Storm)	High	Moderate	Moderate	Moderate	\$95
Drought	Low	High	Low	Low	\$0
Flood	High	High	High	High	\$38,080
Earthquake	Low	High	Moderate	Moderate	\$161
Landslide	Low	Moderate	Low	Low	\$0
Wildfire	Low	Low	Low	Low	\$0

Key risk findings identified by the Village of East Nassau JAT as representing the highest local priorities for mitigation are:

- Lack of public awareness on hazard mitigation strategies. Uneducated public. Residents could benefit from additional information on hazards, risks, and hazard mitigation measures they can take on their own properties to reduce damages and improve resident safety before, during and after a hazard event.
- Lack of hazard mitigation plan as part of the village comprehensive plan. A long term vision for the community that doesn't take into account hazard areas can put lives and property at risk. Taking into account natural hazards and hazard mitigation measures can make the community more resilient.

⁸ Source: NOAA NCEI, except as noted. \$0 in average annualized losses had no damages recorded for events between 1996 and 2018. Actual annual damages are unquantifiable but higher.

- The Village’s floodplain management ordinance was last updated in 2007. Outdated ordinances mean that a community may not be regulating to the latest codes and standards or hazard information, and that does not foster community resiliency.
- Flooding, pooling water, potholes, bad drainage, and icing on Webster Hill Road.

Mitigation projects to address these key risks are included as part of the Village’s overall hazard mitigation strategy.

8.6.9 OUTREACH TO THE PUBLIC AND OTHER STAKEHOLDERS

As part of this 2019 Plan Update, the Village of East Nassau undertook various activities to: (a) alert the public and other stakeholders to the fact that the HMP Planning Committee was working to develop the update; and (b) provide the public and other stakeholders with a forum to ask questions and submit comments and suggestions on the process. Outreach activities undertaken by the Village included:

DATE OF ACTIVITY	TYPE OF ACTIVITY	ACTIVITY DETAILS	LEAD DEPARTMENT AND/OR STAFF TITLE WHO UNDERTOOK ACTIVITY
[December 12, 2018]	[Village Board Meeting]	[Discussed the hazard mitigation plan update at an open public meeting of the Village Board and passed a resolution to participate]	[Mayor, Village Board]
[March 13, 2019]	[Village Board Meeting]	[Presented mitigation activities and invited public to participate]	[Mayor, Village Board]
[April 15, 2019]	[Neighboring communities outreach]	[Discussed mitigation activities with Town of Nassau highway supervisor]	[mayor]
[May 23, 2019]	[Non-profit outreach /Environmental outreach]	[Discussed and provided opportunity for Rensselaer Plateau Alliance to become aware of process and comment.]	[Mayor]
[June 13, 2019]	[Utility provider outreach]	[Discussed and provided opportunity for Charter Communications to become aware of process and provide feedback and comment]	[Mayor]

The Village has received no public comments to-date as a result of its outreach activities.

8.6.10 CAPABILITY ASSESSMENT

This section describes the following capabilities of the local jurisdiction:

- Legal and regulatory capability;
- Administrative and technical capability;
- Fiscal capability;
- Community resiliency;
- Community political capability; and
- Community classification.

8.6.10.1 Legal and Regulatory Capability

The table below summarizes the regulatory tools that are available to the Village of East Nassau. The Village reviewed its responses from the 2011 HMP and has updated its prior feedback to reflect present-day conditions.

Legal and Regulatory Capability			
Regulatory Tools (Codes, Ordinances, Plans)	Do you have this? (Y or N)	Enforcement Authority	Code Citation (Section, Paragraph, Page Number, Date of Adoption)
a. Building code	Y	Building Department	NYS Building Code
b. Zoning ordinance	Y	ZBA	Land Use and Development Regulations (9/15/2010)
c. Subdivision ordinance or regulations	Y	Village BDs, Planning function	LUDR Article 4, Page 8 (9/15/2010)
d. Special purpose ordinances (floodplain management, stormwater management, hillside or steep slope ordinances, wildfire ordinances, hazard setback requirements)	Y	Driveway standards, zoning	LUDR Article 2, Section 5 (9/15/2010)
e. Growth management ordinances (also called "smart growth" or anti-sprawl programs)	Y	Cluster housing permitted	LUDR Article 2, Section 3 (9/15/2010)
f. Site plan review requirements	Y	ZBA	LUDR Article 7 (9/15/2010)
g. General, comprehensive or master plan	Y	Village BD	LUDR Article 1, Section 3 (9/15/2010)
h. A capital improvements plan	Y	Road improvements	Budget June 1, 2018
i. An economic development plan	N		
j. An emergency response plan	Y	LSSQ miles, Mayor, DPW, contractor have extensive experience	Informal Plan adopted April 1, 2012
k. A post-disaster recovery plan	N		
l. A post-disaster recovery ordinance	N		
m. Real estate disclosure requirements	N		
n. Other			

8.6.10.2 Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Village of East Nassau. The Village reviewed its responses from the 2011 HMP and has updated its prior feedback to reflect present-day conditions.

Administrative and Technical Capability		
Staff / Personnel Resources	Available (Y or N)	Department / Agency / Position
a. Planner(s) or engineer(s) with knowledge of land development and land management practices	Y	Mayor, DPW, Village BD, Hwy Contractor/Code Enforcement Officer
b. Engineer(s) or professional(s) trained in construction practices related to buildings and/or infrastructure	Y	CEO, Mayor, DPW
c. Planners or Engineer(s) with an understanding of natural and/or human-caused hazards	Y	DPW, Hwy Contractor
d. Floodplain manager	Y*	Code Enforcement Officer, ZBA Chair
e. Surveyors	N	
f. Staff with education or expertise to assess the community's vulnerability to hazards	Y	DPW, Hwy Contractor
g. Personnel skilled in GIS and/or HAZUS	N	
h. Scientists familiar with the hazards of the community	N	
i. Emergency manager	Y	Currently working on appointing
j. Grant writers	N	
k. Staff with expertise or training in benefit/cost analysis	N	
*All communities participate in the National Flood Insurance Program; as such, they are required by the regulations to have an appointed floodplain manager.		

8.6.10.3 Fiscal Capability

The table below summarizes financial resources available to the Village of East Nassau. The Village reviewed its responses from the 2011 HMP and has updated its prior feedback to reflect present-day conditions.

Fiscal Capability	
Financial Resources	Accessible or Eligible to use (Yes/No/Don't know)
a. Community Development Block Grants (CDBG)	N
b. Capital improvements project funding	Y, Village BD
c. Authority to levy taxes for specific purposes	Y
d. Fees for water, sewer, gas, or electric service	Y
e. Impact fees for homebuyers or developers for new developments/homes	Y
f. Incur debt through general obligation bonds	Y
g. Incur debt through special tax and revenue bonds	Y
h. Incur debt through private activity bonds	N
i. Withhold spending in hazard-prone areas	Y
j. State mitigation grant programs	NP
k. Other	NP

8.6.10.4 Overall Capabilities

The Village of East Nassau’s 2019 assessment of its overall capabilities to implement hazard mitigation strategies in each of the above categories, in addition to their local assessment of how these capabilities could be expanded and/or improved to reduce risk, is presented in the table below.

Overall Capabilities				
Overall legal and regulatory capability to implement hazard mitigation strategies	Overall technical capability to implement hazard mitigation strategies	Overall fiscal capability to implement hazard mitigation strategies	Overall administrative capability to implement hazard mitigation strategies	Community’s willingness to enact policies and programs that reduce hazard vulnerabilities
Moderate	Low	Low	Low	Moderate
How these capabilities can be expanded and/or improved to reduce risk”				
Money				

8.6.10.5 Community Classifications

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

Community Classifications		
Program	Classification	Date Classified
Community Rating System (CRS) *	NP	
Building Code Effectiveness Grading Schedule (BCEGS)	N/A	
Public Protection	N/A	
Storm Ready	N/A	
FireWise	N/A	

Notes:

- = Unavailable

N/A = Not applicable

NP = Not participating.

* CRS Ranking as of April 2019

The classifications listed above relate to the Village of East Nassau’s ability to provide effective services to lessen its vulnerability to the natural 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 1,000 feet of a creditable fire hydrant and is within five road miles of a recognized fire station.

Criteria for classification credits are outlined in the following documents:

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

8.6.11 PLAN FOR DISPLACED RESIDENTS

New York State requires that intermediate and long-term housing options must be available for relocating displaced residents to maintain post-disaster social and economic stability. Intermediate and long-term housing options for displaced residents was evaluated as part of the 2019 HMP Update. Additional information can be found in Appendix C.

8.6.12 PLAN FOR EVACUATION NEEDS AND SHELTERING

The Village of East Nassau has an emergency response plan⁹. It does not have a post-disaster recovery plan or a post-disaster recovery ordinance¹⁰. Rensselaer County has an existing Comprehensive Emergency Management Plan (CEMP) documenting the County's plan for evacuation and sheltering measures during hazard events. The Plan is posted online at: <http://www.rensco.com/wp-content/uploads/2019/07/Rensselaer-County-CEMP.pdf>. As part of this hazard mitigation plan update, the Rensselaer County reviewed their existing CEMP and determined that updates were necessary at this time. Updates to the CEMP are being completed at this time. Once finalized and approved, the County will post the updated CEMP at the same address and will follow procedures in its updated CEMP in all future disasters. The County BPS indicated that there are no designated evacuation routes.

Appendix B contains updated shelter data provided by the Red Cross in 2018. Shelter locations are not made public until facilities are actually opened for an event and therefore, pages of Appendix B that include shelter information are nonpublic. Since every possible shelter is not opened during every event, the data is not made public in order to ensure that individuals in need of shelter do not seek it at facilities which may remain closed during a particular event. The Village of East Nassau has access to shelter data and will coordinate with the Red Cross as part of their standard operating procedures if and when a need is identified for local shelters to be opened in the community.

⁹ Source: Local Capability Assessment

¹⁰ Source: Local Capability Assessment

8.6.13 FUTURE NEEDS - RISK/VULNERABILITY

The Village of East Nassau has identified no future needs to better understand risk/vulnerability in the community.

8.6.14 PLAN INTEGRATION

For a community to succeed in reducing risk in the long term, the information and recommendations of the hazard mitigation plan must be integrated into day-to-day local government operations. Throughout the planning process, partnerships are formed between departments and agencies, and sustained actions between these partners will increase the community's resilience to disasters. "Plan integration" can be thought of as the process whereby a local government incorporates the mitigation plan findings and projects into other planning mechanisms (governance structures that are used to manage local land use development and community decision making).

It is the intention of the Village of East Nassau to incorporate mitigation planning as an integral component of daily municipal operations. The balance of this subsection describes local accomplishments over the last planning cycle (2011-2019), and targeted activities for the next planning cycle (2019-2024).

Demonstration of Progress over the Last Planning Cycle (2011-2019) – The Village of East Nassau undertook the following plan integration mechanisms over the last planning cycle:

- Worked with the Planning Department to educate them on the Hazard Mitigation Plan and encourage that on the next update of the master plan, general or comprehensive plan, hazard mitigation for natural hazards is addressed. In the process of updating land use regulations, expected to be completed by March 2019. Future plans to address wetland regulations.
- Coordinated with the building department (via meeting with the code enforcement officer) to ensure that they have adopted and are enforcing the minimum standards established in the current State-adopted IBC. Conversation with newly appointed building department personnel.
- Having participated in the NFIP and only enforcing minimum requirements at the time of the first plan's adoption, coordinated with your Floodplain Administrator to determine if enforcement beyond FEMA minimum requirements would be prudent for the community. Predecessor had conversations with DPW and code enforcement officer
- Community currently has a local zoning ordinance.
- Worked with the local zoning board to educate them on the Hazard Mitigation Plan and encourage consideration of low occupancy, low-density zoning in hazard areas, when practicable. [Chair of zoning board named as an alternate for village]
- Revised job descriptions to include mitigation-related duties to further institutionalize mitigation. CEO was granted with authority to grant or deny permits for building in flood plains

- Capital or operating budgets were already included this when the plan was first adopted
- Worked with the Department of Public Works to adopt more rigorous procedures for inspecting and cleaning debris from streams and ditches (i.e., more frequently). Newly appointed DWP superintendent routinely monitors ditches and streams

Targeted Plan Integration Activities for the Next Planning Cycle (2019-2024) – The Village of East Nassau plans to implement the following plan integration mechanisms into local government operations from this point forward through the next planning cycle:

- Issue a letter to each department head to solicit their support and explore opportunities for further integration of hazard mitigation into the daily activities of the community as a whole.
- Incorporate hazard mitigation for natural hazards in the next update of the master, general or comprehensive plan.
- Add a specific hazard mitigation element to the next update of the master, general or comprehensive plan.
- Adopt and enforce the minimum building standards established in the current State-adopted IBC (NY edition).
- Maintain community participation in FEMA's National Flood Insurance Program.
- Join (or continue to maintain participation in) the NFIP's Community Rating System.
- Steer growth and development away from high risk locations by using the risk assessment from the hazard mitigation plan as a tool to monitor future updates of community land use plans, zoning and subdivision codes and the development review process.
- Modify work plans, policies or procedures to include hazard mitigation concepts/activities.
- Issue directives to require departments/agencies in the community to carry out certain hazard mitigation activities.
- Add hazard vulnerability to subdivision and site plan review criteria.
- Perform inventories of historic sites in hazard areas in your community to identify where special treatment may be needed to protect them from specific natural hazards.
- Require the Department of Public Works to inspect and clean debris from streams and ditches more frequently.
- Protect life and property in high hazard areas by limiting densities of new development.
- Increase resilience by limiting the extension of public infrastructure in high hazard areas.
- Reduce the vulnerability of future development in high hazard areas by reviewing development regulations and modifying where needed.
- Use the risk assessment to inform future updates of the community emergency operations plan, evacuation plan, and/or post disaster recovery plan.

8.6.15 MITIGATION STRATEGY

This subsection sets forth the mitigation strategy for the Village of East Nassau. It describes:

- Progress on 2011 HMP Initiatives
- Past Mitigation Accomplishments
- Proposed 2019 HMP Mitigation Initiatives
- Action Worksheets

8.6.15.1 Progress on 2011 HMP Initiatives

The following table was completed by the Village of East Nassau HMP Committee Members. It summarizes the progress that was made on the local hazard mitigation initiatives that were set forth in the community's mitigation strategy from the initial HMP in 2011.

The Village has identified no major changes in local priorities regarding natural hazards since the last version of the HMP.

PROGRESS ON 2011 HAZARD MITIGATION PLAN INITIATIVES												
2011 HMP Initiative Number	Mitigation Initiative Description	2011 HMP Priority	Hazard(s) Mitigated	Lead and Support Agencies	Status				Status Details	Relevance		Relevance Details
					Completed	Initiated but Not Completed	Ongoing Type of Activity	Not Initiated		Still Relevant - Carry Forward to Updated Mitigation Strategy	No Longer Relevant - Omit from Updated Mitigation Strategy	
EN-1	Gardner Hill Road Stormwater Diversion	High	Erosion, potholing, icing on roads	DPW	x						x	Completed
EN-2	Murdock Road Stormwater Control	High-Medium	Erosion, icing on roads	DPW			x		Murdock Road bridge replacement being done by the town		x	Not being carried forward to the Village's updated mitigation strategy because the project is being done by the town.
EN-3	Woodward Road Stormwater	Medium	Erosion, potholing on road	DPW	x						x	Completed
EN-4	TsaTsaCoassa Road and Town Garage Road Stormwater Control	High	Ponding of water on road, resulting damage, icing	DPW	x						x	Completed
EN-CL-1	Public awareness program on Hazards, Prevention, and Mitigation: County will maintain a hazard mitigation and mitigation planning web presence (local municipal web sites to link up to this site, if they haven't already done so); all participating jurisdictions to support preparation of a joint annual hazard mitigation and mitigation planning fact sheet and its distribution; periodic discussion of hazard mitigation and the mitigation plan at other regular local meetings; use of annual flyers, newsletters, advertisements, or radio/tv announcements, etc. at the discretion of each jurisdiction (incorporating as much free information as possible from the FEMA Publications Warehouse and other appropriate sources). (public education)	High	All hazards	County-led action item. CPG Member, Village Trustee			x		The village recently completed a review of local codes and ordinances that included hazard mitigation plans. Through that effort two public hearings on the changes took place, one in December 2018 and one in March of 2019.	x		County is carrying forward this County-led activity with no changes; our municipality will carry it forward as well.

EN-CL-2	Code update: Review existing local codes and ordinances against the identified hazards to determine whether there need to be any amendments to address identified hazards and, where a need is identified, modify/ amend the codes/ordinances as applicable. (prevention)	Medium	All hazards	County-led action item. CPG Member, Village Trustee			x		Complete review of existing local codes and ordinances was done over the course of 2016, 2017, and 2018. Added definition of natural drainage and surface waters to Article 1, Section 3. Added "Best management practices" to Article 5, Section 6 - Lakes, Ponds, Streams and Wetlands	x		County is carrying forward this County-led activity with no changes; our municipality will carry it forward as well.
EN-CL-3	Code enforcement: Enforcement of NYS and Local Building Codes with Continual CEO training. (prevention)	Medium	All hazards	County-led action item. CPG Member, Village Code Enforcement Officer			x		Locally administered on an ongoing basis; our community did not have a need to go to the county for support/training.	x		County is carrying forward this County-led activity with no changes; our municipality will carry it forward as well.
EN-CL-4	Ensure that local comprehensive plans incorporate natural disaster mitigation techniques through a courtesy review of draft plans by the County Planning Department (prevention)	High	All hazards	County-led action item. CPG Member, Village Trustee			x		The Village has a comprehensive plan that has not incorporated natural disaster mitigation techniques.	x		County is carrying forward this County-led activity with no changes; our municipality will carry it forward as well.
EN-CL-5	Hold periodic workshops for municipalities regarding zoning and planning issues that arise regarding natural hazards and hazard mitigation. (prevention)	Low	All hazards	County-led action item. CPG Member, Village Trustee			x		County- led activity. Municipality attends meetings/workshops as offered by the County whenever municipal staff members have schedule availability.	x		County is carrying forward this County-led activity with no changes; our municipality will carry it forward as well.
EN-NFIP-4	Update/revise floodplain management ordinance to be consistent with potential future new FIRMs	Low	Flooding	Building; Trustees			x		FEMA has not issued new FIRMs since the last hazard mitigation plan was prepared.	x		Ongoing type of activity; will be carried forward with no changes.
EN-NFIP-5	Require staff involved in floodplain management and ordinance enforcement to become Certified Floodplain Managers (CFMs)	Low	Flooding	Building and Planning; Trustees				x	Not agency required; municipality opted not to require CFM certification.		x	Not agency required; municipality opted not to require CFM certification.
EN-NFIP-6	Join the Community Rating System (CRS)	Medium	Flooding	Trustees				x	Municipality opted not to enter CRS.		x	East Nassau has no flood insurance policies in force

8.6.15.2 Past Mitigation Accomplishments

NYS DHSES requires the documentation of local mitigation efforts and accomplishments since the previous hazard mitigation plan was prepared, regardless of funding source and regardless of whether the project was included in the prior plan. They note that the goal of this requirement is to provide a context for each jurisdiction's projects, act as a source of ideas for mitigation projects, and evaluate the accuracy of assumptions and engineering solutions to inform future projects, and to support future mitigation planning and its coordination with other planning, zoning, and environmental procedures within the jurisdiction.

The following table summarizes past mitigation accomplishments for the Village of East Nassau, from the time the 2011 HMP was approved through its first update in 2019.

Past Mitigation Accomplishments					
Project Number	Project Name	Hazard(s) Addressed	Brief Summary of the Original Problem and the Solution (Project)	Evaluation of Success	
1	Chip sealing of Gardner Hill Road	Excessive storm runoff, pooling and icing.	Excessive storm run-off, pooling and icing - Chip sealed road and ditch work	Cost	\$19,500
				Level of Protection	High
				Damages Avoided; Evidence of Success	All runoff properly draining, no pooling or icing. If roads are flooded or damaged, a manageable event can quickly turn into a disaster because people are unable to go in and out of the affected area. Because of the need to keep the roadway network open and passable, these measures provide a high level of protection.
2	Chip sealing of Town Garage Road	ponding of water on road, resulting damage, icing	ponding of water on road, resulting damage, icing - chip sealed road and ditch work	Cost	\$16,050
				Level of Protection	High
				Damages Avoided; Evidence of Success	All runoff properly draining, no pooling or icing. If roads are flooded or damaged, a manageable event can quickly turn into a disaster because people are unable to go in and out of the affected area. Because of the need to keep the roadway network open and passable, these measures provide a high level of protection.
3	Chip sealing Woodard Road and Bath Township Road	erosion, potholing on road	erosion, potholing on road - chip sealing and ditch work	Cost	\$19,600 and \$10,000 respectively
				Level of Protection	High
				Damages Avoided; Evidence of Success	If roads are flooded or damaged, a manageable event can quickly turn into a disaster because people are unable to go in and out of the affected area. Because of the need to keep the roadway network open and passable, these measures provide a high level of protection.

8.6.15.3 Proposed 2019 HMP Mitigation Initiatives

The process for selection and prioritization of mitigation actions is described in greater detail in Section 5 of the main text. The outcomes of that overall process are summarized here.

This plan proposes the actions determined to be the most appropriate for the resources and capabilities of the community based on the experience of local officials, with input from the public and other stakeholders. The relatively large number of flood mitigation actions reflects the fact that flooding is the hazard of greatest concern. Actions determined to be appropriate for the plan were reviewed during public and committee meetings and there was consensus that those intended to mitigate the effects of flooding should be the highest priorities for most communities. As with the 2011 Plan, this 2019 Plan Update includes a series of County-led initiatives with municipal participation to address a wider range of hazards. In addition, each local mitigation strategy proposes actions reflecting the commitment of the County and local jurisdictions to compliance with requirements of the NFIP. Potential actions were reviewed relative to potential financial as well as administrative and legal costs and the degree to which they would be endorsed by the public. Potential actions were reviewed during the meetings relative to their potential benefit of effectiveness in saving lives, protecting the natural environment, and reducing disruption and damage. Actions selected by each jurisdiction include activities to protect existing and future structures and infrastructure and enhance community resilience.

Part of enhancing community resilience involves adapting to a changing climate. In accordance with NYS Mitigation Planning Standard 9, plans developed with NYS DHSES-administered funds must include information on climate change as part of the hazard vulnerability analysis and contain strategies/projects to address increased vulnerability that may result from climate change. This requirement was established to encourage jurisdictions to plan for and accommodate climate change and sea level rise. By developing mitigating strategies and/or projects for hazards that are exacerbated by climate change, jurisdictions will better protect residents, avoid, or reduce damage to property and public infrastructure, and reduce personal hardship. In accordance with this State Standard, previous sections of this plan have presented information on how climate change may affect jurisdictional vulnerability or increased frequency of occurrence and/or severity in exposure to flooding, wildfire, drought, and extreme temperatures. Climate change is addressed by mitigating the various hazards that it exacerbates. Rensselaer County and its communities have proposed a range of hazard mitigation initiatives to address their highest hazards including those hazards that are exacerbated by a changing climate. Additionally, as discussed further in the main text of this plan in Section 5, under New York State's Climate Smart Communities (CSC) program, the Village of East Nassau is a Registered CSC and has passed a resolution adopting the CSC pledge which acknowledges climate change and documents the City's commitment to take steps to reduce its impacts

Proposed 2019 HMP Mitigation Initiatives for Village of East Nassau are shown in the following table. These include both new initiatives and initiatives that were carried forward from the 2011 HMP.

PROPOSED 2019 HMP MITIGATION INITIATIVES														
Initiative Number	Initiative Name	HMP Goal(s)/ Objective(s) Being Met	Hazard(s) to be Mitigated	Description of the Problem	Description of the Solution	CF ¹¹ ?	EHP ¹² Issues?	Estimated Timeline	Project Lead (include relevant Department and Position Title)	Estimated Costs	Estimated Benefits	Potential Funding Sources ¹³	Priority ¹⁴	Action Worksheet Provided? ¹⁵
* NOTE: Projects related to Critical Facilities (CF) must protect the facility to the 500-year event or worst damage scenario, whichever is greater.														
1	Webster Hill Road *NEW*	2,3	Flooding	Pooling water, potholes, bad drainage, icing	Chip seal roadway and ditch work	Y	N	2 years	Village of East Nassau DPW, DPW Superintendent	\$15,000	Storm water control, safe, accessible, passable roadway,	FEMA PDM, FEMA HMGP	Medium	
2	Public Awareness Program (2011 EN-CL-1)	1	All hazards	Uneducated public. Residents could benefit from additional information on hazards, risks, and hazard mitigation measures they can take on their own properties to reduce damages and improve resident safety before, during and after a hazard event.	Series of public meetings to discuss hazard mitigation planning. Public awareness program on Hazards, Prevention, and Mitigation: County will maintain a hazard mitigation and mitigation planning web presence (local municipal web sites to link up to this site, if they haven't already done so); all participating jurisdictions to support preparation of a joint annual hazard mitigation and mitigation planning fact sheet and its distribution; periodic discussion of hazard mitigation and the mitigation plan at other regular local meetings; use of annual flyers, newsletters, advertisements, or radio/tv announcements, etc. at the discretion of each jurisdiction (incorporating as much free information as possible from the FEMA Publications Warehouse and other appropriate sources). (public education)	N	N	2020 and ongoing over next 5 years	County-led action item. CPG Member, Village Trustees	Est. \$500 for printing; other costs are staff time only	Educated public; Enhance readiness, response and recovery efforts	Village participation in County-led effort; staff time only funded through local budget	High	Yes
3	Land Use Regulation Update (2011 EN-CL-2)	2	All Hazards	Communities are safer and more resilient when new construction and substantial improvements take into account the latest information on hazard vulnerabilities and measures to reduce risk.	On-going land use regulations to foster better hazard mitigation planning. Land use regulation amendments to continue proper land use hazard mitigation practices. Code update: Review existing local codes and ordinances against the identified hazards to determine whether there need to be any amendments to address identified hazards and, where a need is identified, modify/ amend the codes/ordinances as applicable. (prevention)	N	N	Ongoing over next 5 years	County-led action item. CPG Member, Village Trustees	N/A – staff time only	Enhance readiness, response and recovery	Village participation in County-led effort; staff time only funded through local budget	Medium	

¹¹ CF – Critical Facility. Please respond “Y” (yes) if the project’s purpose is to protect a critical facility, or “N” (no) if not.

¹² EHP – Environmental or Historic Preservation. Please respond “Y” (yes) if the project is expected to have environmental and/or historic preservation issues, or “N” (no) if not.

¹³ Potential Funding Sources – A list of Federal and State sources of funding for hazard mitigation projects can be found in the latest NYS Hazard Mitigation Plan online at <https://mitigateny.availabs.org/capabilities/administerfunding>. Jurisdictions should identify additional funding opportunities you may be aware of that are not on the state list.

¹⁴ Priority – See “Prioritization Methodology” on the next page.

¹⁵ Action Worksheet Provided. Please respond “Y” (yes) if you have filled out a detailed Action Worksheet, or “N” (no) if not. NYS DHSES State Standard 7 recommends that further consideration be given to all proposed actions by completing a NYS DHSES Action Worksheet, the State requires completion of a minimum of two NYS DHSES Action Worksheets for the jurisdiction’s highest priority projects. For jurisdictions containing a Special Flood Hazard Area, at least one of these Action Worksheets must be for a project that addresses flooding. Action Worksheets have been prepared for a minimum of two proposed mitigation initiatives. Action Worksheets are included at the end of this section, following the prioritization methodology.

PROPOSED 2019 HMP MITIGATION INITIATIVES														
Initiative Number	Initiative Name	HMP Goal(s)/ Objective(s) Being Met	Hazard(s) to be Mitigated	Description of the Problem	Description of the Solution	CF ¹¹ ?	EHP ¹² Issues?	Estimated Timeline	Project Lead (include relevant Department and Position Title)	Estimated Costs	Estimated Benefits	Potential Funding Sources ¹³	Priority ¹⁴	Action Worksheet Provided? ¹⁵
* NOTE: Projects related to Critical Facilities (CF) must protect the facility to the 500-year event or worst damage scenario, whichever is greater.														
4	Code Enforcement Training (2011 EN-CL-3)	2	All Hazards	There can be a loss of institutional knowledge with staff changes. Even when staff is the same, continual training improves local capabilities and allows officials to better regulate activities in hazard areas to protect lives and property.	Training. Enforcement of NYS and Local Building Codes with Continual CEO training. (prevention)	N	N	One year and ongoing over next 5 years	County-led action item. CPG Member, Village Code Enforcement Officer	N/A – staff time only max est. \$1000	Remain current on issue and solution; proper construction in the hazard areas fosters resiliency	Village participation in County-led effort; staff time only funded through local budget	Medium	
5	HMP incorporated in Village Comprehensive Plan (2011 EN-CL-4)	2	All hazards	Lack of hazard mitigation plan as part of the village comprehensive plan. A long term vision for the community that doesn't take into account hazard areas can put lives and property at risk. Taking into account natural hazards and hazard mitigation measures can make the community more resilient.	Review hazard mitigation plans and incorporate into village comprehensive plan. Ensure that local comprehensive plans incorporate natural disaster mitigation techniques through a courtesy review of draft plans by the County Planning Department (prevention)	N	N	2 years	County-led action item. CPG Member, Village Trustees	N/A-staff time only	Reduce property flooding and related damages; smart plans for development in hazard areas enhances resiliency	Village participation in County-led effort; staff time only funded through local budget	High	Yes
6	Attend County-led Mitigation Planning and Zoning Workshops (2011 EN-CL-5)	2	All hazards	When municipal staff aren't armed with information on zoning and planning issues that sometimes arise regarding natural hazards and hazard mitigation, they may make decisions that don't foster community resiliency.	Attend County-led periodic workshops for municipalities regarding zoning and planning issues that arise regarding natural hazards and hazard mitigation. (prevention)	N	N	Ongoing over next 5 years	County-led action item. CPG Member, Village Trustees	N/A-staff time only	Reduce property flooding and related damages	Village participation in County-led effort; staff time only funded through local budget	Low	
7	Update Floodplain Management Ordinance when new FIRMs are released (2011 EN-NFIP-4)	3,4	Flooding	Outdated ordinances mean that a community is not regulating to the latest codes and standards or hazard information, and that does not foster community resiliency.	Update/revise floodplain management ordinance to be consistent with potential future new FIRMs	N	N	For future (likely to be pre-2024 as new FIRMs were just released in 2016 for the northern part of the County and the County's southern areas is currently being restudied)	Village Mayor and Board of Trustees, and Floodplain Manager	None- staff time only	This is a program requirement of the NFIP; noncompliance can mean no more NFIP program eligibility or flood insurance for residents	staff time only funded through local budget	High	

Prioritization Methodology for Proposed 2019 HMP Mitigation Initiatives

To prioritize its mitigation initiatives, the community established a methodology to take into account several key factors. Priorities were determined by a qualitative prioritization process established by the community. A higher priority was assigned to projects where: the life/safety risk of taking no action was deemed to be unacceptably high; the project addresses one of the community's highest hazards and/or key risks; benefits were projected to equal or exceed project costs; critical facilities or key local assets were being protected; funding and staff resources were deemed to be sufficient and/or accessible for project implementation; negative impacts were not anticipated on environmental and/or historic resources or any segment of the population; and/or where there was overall support for the project from the local community (government officials, public, and stakeholders).

PRIORITIZATION METHODOLOGY FOR PROPOSED 2019 HMP MITIGATION INITIATIVES														Priority
Initiative Number	Initiative Name	Hazard(s) Addressed	Is the life/safety risk of taking no action deemed to be unacceptably high?	Does the project address one of the community's highest hazards and/or key risks?	Benefits	Costs	Are the project's benefits estimated to equal or exceed its costs?	Are critical facilities or key local assets being protected by the project?	Are funding resources sufficient and/or accessible for project implementation?	Are staff resources sufficient or available for project implementation?	Are negative impacts anticipated on environmental resources?	Are negative impacts anticipated on historic resources?	Are negative impacts anticipated on any segment of the population?	
1	Webster Hill Road *NEW*	Flooding	No	Yes	Safe passible road access	\$15,000	Exceed	No	Yes	Yes	No	No	No	Moderate
2	Public Awareness Program (2011 EN-CL-1)	All Hazards	No	yes	Educated public	Est. \$500 for printing; other costs are staff time only	Exceed	Yes - educated public (asset) is begin protected	Yes	Yes	No	No	No	High
3	Land Use Regulation Update (2011 EN-CL-2)	All Hazards	No	Yes	preparedness	none	Exceed	No	N/A	Yes	No	No	No	Moderate
4	Code Enforcement Training (2011 EN-CL-3)	All Hazards	No	Yes	Better enforcement	(est.)\$1000	Exceed	Better trained staff	Yes	Yes	No	No	No	Moderate
5	HMP incorporated in Village Comprehensive Plan (2011 EN-CL-4)	All Hazards	No	Yes	preparedness	none	Exceed	Yes	N/A	Yes	No	No	No	High
6	Attend County-led Mitigation Planning and Zoning Workshops (2011 EN-CL-5)	All Hazards	No	yes	Educated municipal officers and staff	none	Exceed	Yes (municipality being the asset)	Yes	No	No	No	No	Low
7	Update Floodplain Management Ordinance when new FIRMs are released (2011 EN-NFIP-4)	Flooding	No	Yes	Prevent flooding	none	Exceed	Yes	Yes	Yes	No	No	No	High

Action Worksheets

NYS DHSES State Standard 7 recommends that further consideration be given to all proposed actions by completing a NYS DHSES Action Worksheet, the State requires completion of a minimum of two NYS DHSES Action Worksheets for the jurisdiction's highest priority projects. Furthermore, for jurisdictions containing a Special Flood Hazard Area, at least one of these Action Worksheets must be for a project that addresses flooding.

Action Worksheets prepared by the Village of East Nassau are included on the following pages.

Section 8.6 - Jurisdictional Annex, Village of East Nassau

NYS DHSES Action Worksheet			
Project Name:	Public Awareness Program		
Project Number:	2		
Risk / Vulnerability			
Hazard of Concern:	All Hazards		
Description of the Problem:	Lack of public awareness on hazard mitigation strategies. Uneducated public. Residents could benefit from additional information on hazards, risks, and hazard mitigation measures they can take on their own properties to reduce damages and improve resident safety before, during and after a hazard event.		
Action or Project Intended for Implementation			
Description of the Solution:	Series of public meetings to discuss hazard mitigation planning. Public awareness program on Hazards, Prevention, and Mitigation: County will maintain a hazard mitigation and mitigation planning web presence (local municipal web sites to link up to this site, if they haven't already done so); all participating jurisdictions to support preparation of a joint annual hazard mitigation and mitigation planning fact sheet and its distribution; periodic discussion of hazard mitigation and the mitigation plan at other regular local meetings; use of annual flyers, newsletters, advertisements, or radio/tv announcements, etc. at the discretion of each jurisdiction (incorporating as much free information as possible from the FEMA Publications Warehouse and other appropriate sources). (public education)		
Is this project related to a Critical Facility?	Yes * <input type="checkbox"/>	No X <input checked="" type="checkbox"/>	
* Projects related to critical facilities must intend to protect to the 500-year flood event or the actual worst damage scenario, whichever is greater.			
Level of Protection:	(n/a- public outreach action)	Estimated Benefits (losses avoided):	Educated public and Enhance readiness, response and recovery efforts
Useful Life:	(n/a- public outreach action)		
Estimated Cost:	\$500		
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	2020 and ongoing over the next five years
Estimated Time Required for Project Implementation:	ongoing public outreach initiative over the five year plan maintenance cycle	Potential Funding Sources:	Village budget (only cost is staff time)
Responsible Party: (Department/ Organization)	Village DPW, mayor, village board	Local Planning Mechanisms to be Used in Implementation, if any:	Public hearings
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Not advised; the general public would benefit greatly from a better understanding of hazards and risks to which they are exposed
	Alt. 1 - Contract Out	\$5,000	Too expensive
	Alt. 2 - Participate in County-led outreach	Est. \$500 for printing; other costs are staff time only	Advisable. Accomplishes the desired outcome at a manageable cost to the community given our limited funding resources
Progress Report (this section to be completed at next plan update-do not fill in now)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

Section 8.6 - Jurisdictional Annex, Village of East Nassau

NYS DHSES Action Worksheet			
Project Name:	Ensure that local comprehensive plans incorporate natural disaster mitigation technique		
Project Number:	5		
Risk / Vulnerability			
Hazard of Concern:	All Hazards		
Description of the Problem:	Lack of hazard mitigation plan as part of the village comprehensive plan. A long term vision for the community that doesn't take into account hazard areas can put lives and property at risk. Taking into account natural hazards and hazard mitigation measures can make the community more resilient.		
Action or Project Intended for Implementation			
Description of the Solution:	Review hazard mitigation plans and incorporate into village comprehensive plan. Ensure that local comprehensive plans incorporate natural disaster mitigation techniques through a courtesy review of draft plans by the County Planning Department (prevention)		
Is this project related to a Critical Facility?	Yes * <input type="checkbox"/>	No <input type="checkbox"/>	
* Projects related to critical facilities must intend to protect to the 500-year flood event or the actual worst damage scenario, whichever is greater.			
Level of Protection:	n/a- this is a planning initiative	Estimated Benefits (losses avoided):	This will allow future development to be in compliance. Reduce property flooding and related damages; smart plans for development in hazard areas enhances resiliency
Useful Life:	n/a - this is a planning initiative		
Estimated Cost:	\$0		
Plan for Implementation			
Prioritization:	moderate	Desired Timeframe for Implementation:	2 years
Estimated Time Required for Project Implementation:	2 years	Potential Funding Sources:	Village budget
Responsible Party: (Department/ Organization)	Village Mayor and Village Board of Trustees	Local Planning Mechanisms to be Used in Implementation, if any:	Village board, public input
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Not viable- A long term vision for the community that doesn't take into account hazard areas can put lives and property at risk.
	Alt. 1 – Fix by ensuring that the next update of the village comprehensive plan incorporates hazard mitigation and coordinating with County Planning	\$0	Best option. Very beneficial for planning purposes and a resilient community
	Alt 2 - ensuring that the next update of the village comprehensive plan incorporates hazard mitigation but do not coordinate with County Planning	\$0	Not viable- Coordination with County Planning staff can help ensure that the latest information is incorporated into the document and should be a part of this endeavor.
Progress Report (this section to be completed at next plan update-do not fill in now)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			