

8.9 - Jurisdictional Annex, Town of Hoosick

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

8.9.1 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: Mark Surdam Title: Supervisor Address: 80 Church Street, Hoosick Falls, NY 12090 Phone Number: 518-527-9057 E-mail Address: hoosicksupervisor@gmail.com			Name: William Shiland, III Title: Superintendent of Highways Address: 80 Church Street, Hoosick Falls, NY 12090 Phone Number: 518-859-1767 E-mail Address: billshiland@gmail.com			
Jurisdictional Assessment Team Members						
Local Jurisdiction Role/Position	Name	Email	Phone	Date of Invitation	Method of Invitation	Agreed to participate?
Land Use/Community Planner	Jerry McAuliffe Sr.	jerrymcauliffe@ymail.com	518-285-1033	2/3/2019	phone call	Yes
Emergency Manager	Alan Bornt	nhfire1@aol.com	518-378-4538	2/3/2019	phone call	
Floodplain Manager/Administrator	Fran Rogers	franrogers33@gmail.com	518-227-6983	1/28/2019	phone call	Yes
Public Works Director / City Engineer	Bill Shiland	billshiland@gmail.com	518-859-1767	1/3/2019	in person	Yes
Building Code Official	Fran Rogers	franrogers33@gmail.com	518-227-6983	1/28/2019	phone call	Yes
Fiscal/Budget Officer	Mark Surdam	Hoosicksupervisor@gmail.com	518-527-9057	1/3/2019	in person	Yes
Manager/Administrator	Mark Surdam	Hoosicksupervisor@gmail.com	518-527-9057	1/3/2019	in person	Yes
Elected Officials	Eric Sheffer	Ericsheffer74@gmail.com	518-859-6034	1/3/2019	in person	Yes
Local Hospital	Southwestern Vt Medical Center	james.trimarchi@svhealthcare.org	802-442-6361	2/8/2019	email	
Major University	None					
Significant Business						
Neighboring County 1	Invite Cambridge to the North		518-677-5532			
Neighboring County 2	Invite Bennington Vt to the East		802-442-1043			
Neighboring County 3						
Neighboring County 4						
Tribal Group/Nation	None					

8.9.2 JURISDICTION PROFILE

8.9.2.1 Location and Land Area

The Town of Hoosick is located in northeast Rensselaer County, in the eastern part of New York State. It shares a border with Washington County to the north; Grafton, Petersburg to the south; Vermont to the east; and Pittstown to the west.

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 Town of Hoosick has a total area of 63.15 square miles (163.54 km²), of which 63.03 square miles (163.25 km²) is land and 0.11 square miles (0.29 km²) is water.

8.9.2.2 Population

According to the 2010 U.S. Census Bureau's American Community Survey 5-Year Estimates, the population of the Town of Hoosick is estimated to be 6,924 persons.

8.9.2.3 Demographics

Of a total area of 63.15 square miles (2010 Census data), the land area is 63.02 square miles and population per square mile is 107.3 persons.

Of the total population, there are 90.7 males per 100 females (all ages). About 23% of the population are persons under 18 years, and 17.1% 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 228, or 3.5%, of which 51.8% 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, 82.9% are high school graduates or higher, and 18.2% 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 2,777 total households and 2.47 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 \$51,214; the per capita income in past 12 months (2017) was \$26,226; and the percentage of persons in poverty was 15.3%. 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 16.2%, and percentage of people with a disability over age 65 years is 45.5%. The total percentage of persons (civilian, noninstitutionalized) without health insurance is 5.2%. 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.

8.9.2.4 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 beginnings of the Town of Hoosick date back to June 3, 1688 when Governor Thomas Dongan of New York Province granted the Hoosick Patent to Marie Van Rensselaer and her three associates. Early settlement of the patents progressed slowly because of the continual threats of attacks from the French and the Indians during the French and Indian Wars in 1754. The district of Hoosick was formed on March 24, 1772.

8.9.2.5 Governing Body Format

The governing body of the municipality consists of a Town Supervisor, Deputy Supervisor, and three Councilpersons, among other departments. 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.

8.9.2.6 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 Town of Hoosick reviewed and updated its prior feedback to reflect current conditions in the community as of early 2019.

The Town of Hoosick did not note any major residential or commercial development taking place, or any major infrastructure development planned for the next 5 years in the municipality. Development is generally very low; with a few single family dwellings being constructed on previous farm land (sub-divisions) also a small amount of commercial development. Most development is limited to remodeling of existing buildings. There is very little interest in any development due to recent PFOA land and water contamination.

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

The Town of Hoosick enforces local planning and zoning regulations and NYS and International Building Codes to protect new development from the effects of natural hazards. The Town has recent adopted a “Land Use Law” (zoning law); it is a work in progress with adjustments being made when problems are noticed.

8.9.3 HAZARD IDENTIFICATION

The following hazards represent those that were deemed to be significant hazards of concern for the Town of Hoosick:

Profiled Hazards in the Town of Hoosick													
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			
Hoosick, Town 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.

8.9.4 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.

NOAA's NCDC 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 Town of Hoosick since 2011 include:

May 26, 2011 – Thunderstorm Winds

Trees were reported down along Route 67 in North Hoosick due to strong thunderstorm winds.

August 28, 2011 – Irene

The remnants of Hurricane Irene brought heavy to extreme rainfall throughout Rensselaer County. In the Town of Hoosick, a National Weather Service Cooperative Observer reported a measured wind gust of 39 mph in Buskirk.

October 29-30, 2012 – Sandy

Rainfall in Rensselaer County was not excessively heavy and did not cause notable 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.

May 21, 2013 – Thunderstorm Winds

A tree was reported down due to thunderstorm winds on Route 7 in Hoosick.

July 1, 2015 – Thunderstorm Winds

Trees and wires were downed on Route 67 in North Hoosick at a result of thunderstorm winds.

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. Major flooding in the Town of Hoosick washed out culverts, parts of roads, one road completely. A beaver dam washed out as well. Damages to roads were estimated to be on the order of approximately \$100,000.

January 12, 2018 – Ice Jam

An ice jam on the Hoosic River broke loose and flooded Route 103 with ice and water between Route 67 and the covered bridge over the Hoosic River. A water rescue was performed for a vehicle stuck in moving water. Damages were estimated to be approximately \$10,000.

8.9.5 NATIONAL FLOOD INSURANCE PROGRAM SUMMARY

The Town of Hoosick has participated in FEMA's National Flood Insurance program (NFIP) since August 1, 1987.

- Total number of policies¹: 7
- Insurance in force²: \$2,694,000
- Total number of losses: 7
- Total claims paid: \$34,366
- Repetitive Loss Properties: 1
- Severe Repetitive Loss Properties: 0

The Town of Hoosick provided the following NFIP Administrator Input in 2019, for inclusion in the 2019 HMP.

Name: Fran Rogers & Mark Surdam Title: Floodplain Manager/Floodplain Administrator/NFIP Coordinator

Community: Town of Hoosick Email and Phone: Hoosicksupervisor@gmail.com (518) 527-9057



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@renesco.com. Feel free to contact Anna Foley of AECOM if you have questions, at anna.foley@aecocom.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 is a Certified Floodplain Manager?	Is floodplain management an auxiliary function?	Is your community in good standing with the NFIP?		
2018	11/01/1974	Code Enforcement Officer & Town Supervisor	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
Provide an explanation of NFIP administration services (i.e., permit review, GIS, education or outreach, inspections, engineering capability, etc.):							
Review permit applications, work with Planning and Zoning Boards and then follow up with inspections and enforcement.							
Describe barriers to running an effective NFIP program in the community (if applicable):							
Interest, funding and personnel							
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?
11/28/18 Levee Analysis	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes* <input checked="" type="checkbox"/> No * Class ___	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
*Describe any outstanding compliance issues (i.e., current violations):							

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

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: <u>Fran Rogers & Mark Surdam</u>		Title: <u>Floodplain Manager/Floodplain Administrator/NFIP Coordinator</u>						
Representing: <u>Town of Hoosick</u>		Email and Phone: <u>Hoosicksupervisor@gmail.com (518) 527-9057</u>						
Provide an explanation of your local floodplain permitting process: <u>Planning or Zoning Board as needed.</u>								
Does your community intend to continue floodplain identification and mapping services including any local requests for map updates?	Does your community intend to initiate/continue the buyouts of repetitive loss properties?	Does your community intend to commit staff or resources to improve local mapping or code administration in the future?	Does your community intend to provide local outreach to promote the sale of flood insurance?	Does your community intend to participate in RiskMAP meetings and planning initiatives?	Does your community intend to continue to implement structural improvements to mitigate against flooding - culverts, drainage basins, etc.?	Does your community intend to continue to implement home improvement programs designed to minimize basement flooding?	Does your community intend to continue to implement roadway improvements to reduce damage from future flooding events?	Does your community intend to implement plans and programs in coordination with a local or regional drainage/sewer authority?
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Does your community intend to adopt the new FEMA Advisory Base Flood Elevations?	As Floodplain Manager, did you (or your predecessor at the time) actively participate in the development of the initial Hazard Mitigation Plan?		As Floodplain Manager, are you actively participating in the development of this Hazard Mitigation Plan Update?		Have there been any changes to your community's local floodplain management program since the last version of the plan in 2011?			
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		<input type="checkbox"/> Yes * <input checked="" type="checkbox"/> No			
* If you answered "yes", that there have been changes to your local program since 2009, please describe: 								
Provide a description of your community assistance and monitoring activities: 								
Community observations and reporting, Assessor reviews areas using Picometry.								
NFIP participating communities are required to update/revise their floodplain management ordinance to ensure that it complies with the latest FEMA regulations. Will your community continue to commit to this program requirement?			NFIP participating communities are also required to update/revise their floodplain management ordinance to be consistent with the latest FIRMs. Will your community continue to commit to this program requirement?					
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No					
Note: NFIP policy statistics by community are maintained at: http://bsa.nfipstat.fema.gov/reports/1011.htm#NJ NFIP claims data by community is maintained at: http://bsa.nfipstat.fema.gov/reports/1040.htm#34 Information about structures at risk of flooding can be found in the current Hazard Mitigation Plan. All NFIP participating communities should encourage local residents to purchase and maintain flood insurance.								
Rensselaer County Multi-Jurisdictional Hazard Mitigation Plan Update – NFIP Worksheet				NFIP-2				

8.9.6 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 Town of Hoosick.

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
Town of Hoosick	\$745,594,000	4	0	0	0	4	1	0	0	5	0	0	0	0	0	0	2	0	6
Rensselaer County	Population, Census 2010:	159,429																	
Town of Hoosick	Population, Census 2010:	6,924																	
Rensselaer County	Vulnerable Population, Census 2010 (under 5 years, and over 64 years)	30,429																	
Town of Hoosick	Vulnerable Population, Census 2010 (under 5 years, and over 64 years)	1,560																	

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 land in the Town of Hoosick 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 (%)
Hoosick, Town of	39,361	2,317	6%

Improved Property. Approximately five percent of improved property in the Town of Hoosick 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 (%)
Hoosick, Town of	\$745,594,000	\$35,729,151	5%

Population. Approximately two percent of the population of the Town of Hoosick 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
Hoosick, Town of	6,924	165	2%

Critical Facilities. One critical facility (emergency facilities, critical infrastructure and utilities, and other key facilities, as presented in Section 3b) is located in the floodplain in the Town of Hoosick.

Critical Facilities in the Floodplain			
Municipality	Type of Facility	Name of Facility	Flood Zone ⁷
Hoosick, Town of	Fire Station	Buskirk Volunteer Fire Department	A/AE/AO

Historic and Cultural Resources. Two historic and cultural resources are located in the floodplain in the Town of Hoosick.

⁷ 100-year floodplain = A/AE/AO; 500-year floodplain = X500

Historic and Cultural Resources in the Floodplain			
Municipality	Historic Structure/Landmark/District	Location/Address	Flood Zone ⁸
Hoosick, Town of	Bennington Battlefield	NY 67, on VT state line	A/AE/AO
Hoosick, Town of	Buskirk Covered Bridge	Spans Hoosic River north of NY 67	A/AE/AO

8.9.7 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 Town of Hoosick, the hazard with the highest estimated average annual losses is flooding.

⁸ 100-year floodplain = A/AE/AO; 500-year floodplain = X500

Summary of Annual Loss Estimates – Town of Hoosick ⁹													
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
Hoosick, Town of	\$745,594,000	\$31	\$277	\$1,932	\$240	\$10,599	\$2,685	\$752	\$0	\$208,210	\$2,526	\$0	\$2

⁹ * **It is important to note that this table reflects estimates of average annualized damages. For any hazard, individual event damages could be substantially higher.**

8.9.8 HAZARD RANKINGS AND KEY RISK FINDINGS

Hazard rankings for the Town of Hoosick 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 Town of Hoosick's highest priority hazard.

Hazard Rankings – Town of Hoosick					
Hazard	Future Probability	Potential Consequence	Relative Risk	Hazard Priority	Average Annualized Losses ¹⁰
Extreme Temperatures (Coldwave/ Heat Wave)	Low	Low	Low	Low	\$31
Hurricane/ Tropical Storm	Low	High	Moderate	Moderate	\$277 Wind; \$1,932 Wind + Flood
Lightning	High	Low	Low	Low	\$240
Tornado	Low	High	High	High	\$10,599
Wind	High	Low	High	High	\$2,685
Winter Storm (Ice Storm/Snow Storm)	High	Moderate	Moderate	Moderate	\$752
Drought	Low	High	Low	Low	\$0
Flood	High	High	High	High	\$208,210
Earthquake	Low	High	Moderate	Moderate	\$2,526
Landslide	High	Low	Moderate	Moderate	\$0
Wildfire	Low	Low	Low	Low	\$2

Key risk findings identified by the Town of Hoosick JAT as representing the highest local priorities for mitigation are:

- Beavers have built dams near Tory Hill Road. In 2017, a beaver dam in this same area broke and washed out a large section of Tory Hill Road. The beavers have returned since that time and have built new dams in the same area.
- The Buskirk Fire Station is located in a flood zone (in the 100-year floodplain, at the edge of the floodway). The fire station floods and really should be moved to a location of out the floodplain to ensure continuity of operations.
- NFIP Repetitive Loss Properties and the Town's Severe Repetitive Loss Property are good candidates for hazard mitigation.
- Elements of the Town's local drainage system is under capacity and requiring upgrades in many areas; this causes flooding.

¹⁰ 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.

- 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.
- Local codes and ordinances should all be integrated with the mitigation plan. 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.
- Staff training on code enforcement issues and mitigation would be helpful. 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.
- The local comprehensive plan should be integrated with the hazard mitigation 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.
- Municipal staff would benefit from training on natural hazards and hazard mitigation. 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.
- Ordinances need to be kept up to date. Including but not limited to the floodplain management ordinance as well as construction ordinances. Outdated ordinances can mean that a community may not be regulating to the latest codes and standards or hazard information, and that does not foster community resiliency.
- Staff training on the NFIP is needed. Communities are safer when their floodplain management ordinances are administered properly.

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

8.9.9 OUTREACH TO THE PUBLIC AND OTHER STAKEHOLDERS

As part of this 2019 Plan Update, the Town of Hoosick 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 Town are presented in the following table.

Section 8.9 - Jurisdictional Annex, Town of Hoosick

Outreach Activities			
DATE OF ACTIVITY	TYPE OF ACTIVITY	ACTIVITY DETAILS	LEAD DEPARTMENT AND/OR STAFF TITLE WHO UNDERTOOK ACTIVITY
December 2018	Town Board Meeting	Information about the project, and passed resolution to participate	Mark Surdam
February 2019	Town Board Meeting	Update and briefing on the plan update project and the Town's activities	Mark Surdam
June 2019	Post on town web site	Fact sheet posted, with two links to the County web site (one on the 2011 plan, and the other link was to the 2019 plan update info page)	Mark Surdam
June 2019	Town Board Meeting	Update and briefing on the plan update project and the Town's activities	Mark Surdam

The Town of Hoosick received the following comment as a result of its outreach activities:

Comments Received									
#	Comment	Comment Submitted By	Comment Submitted To	Comment Submitted on Date	How was comment submitted?	Disposition (Concur; non-concur; will evaluate)	Response / Action Proposed	Responsible Party	Action taken
1	Need for flood mitigation in the area of the Buskirk Covered Bridge	Lloyd Moses, Assistant Chief, Buskirk Volunteer Fire Department	Mark Surdam	06/03/19	Email	Concur	Town has a project in the plan for relocating the fire house. However, regarding County Route 103 is outside of the Town's jurisdiction. The Town has forwarded Mr. Moses' comment to County BPS for their consideration.	Mark Surdam	Town has a project in the plan for relocating the fire house. However, regarding County Route 103 is outside of the Town's jurisdiction. The Town has forwarded Mr. Moses' comment to County BPS for their consideration. *Note: County BPS and Highway have added an action in the County's mitigation strategy to meet with the Fire Department and the Town to discuss further.

8.9.10 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.

8.9.10.1 Legal and Regulatory Capability

The table below summarizes the regulatory tools that are available to the Town of Hoosick. The Town 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	Code Enforcement Officer	
b. Zoning ordinance	Y	ZBA	Adopted March 2009, Amended 2010, 2012, 2018
c. Subdivision ordinance or regulations	Y	Planning Board	Adopted July 2011 Amended December 2014
d. Special purpose ordinances (floodplain management, stormwater management, hillside or steep slope ordinances, wildfire ordinances, hazard setback requirements)	Y	ZBA and or Planning Board	As outlined in planning and zoning docs.
e. Growth management ordinances (also called "smart growth" or anti-sprawl programs)	Y	ZBA and or Planning Board	As outlined in planning and zoning docs. Also 204 Comp Plan
f. Site plan review requirements	Y	Planning Board	
g. General, comprehensive or master plan	Y	ZBA, Planning Board, and Town Board	Comprehensive Plan last updated in 2004
h. A capital improvements plan	N		
i. An economic development plan	Y	ZBA, Planning Board	Work in progress "Land Use Laws"
j. An emergency response plan	Y	Town Board	Work in progress
k. A post-disaster recovery plan	N		

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)
l. A post-disaster recovery ordinance	N		
m. Real estate disclosure requirements	N		
n. Other			

8.9.10.2 Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Town of Hoosick. The Town 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	N	Hired as needed
b. Engineer(s) or professional(s) trained in construction practices related to buildings and/or infrastructure	N	Hired as needed
c. Planners or Engineer(s) with an understanding of natural and/or human-caused hazards	N	Hired as needed
d. Floodplain manager	Y	Building Inspector Code Enforcement Officer and or Town Supervisor
e. Surveyors	N	Hired as needed
f. Staff with education or expertise to assess the community's vulnerability to hazards	Y	Code Enforcement Officer Highway Superintendent
g. Personnel skilled in GIS and/or HAZUS	N	
h. Scientists familiar with the hazards of the community	N	
i. Emergency manager	Y	County EMS Town Supervisor
j. Grant writers	N	Hired as needed
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.		

8.9.10.3 Fiscal Capability

The table below summarizes financial resources available to the Town of Hoosick. The Town 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)	Yes
b. Capital improvements project funding	Yes
c. Authority to levy taxes for specific purposes	Yes
d. Fees for water, sewer, gas, or electric service	Partial (Part of Town has public water)
e. Impact fees for homebuyers or developers for new developments/homes	No
f. Incur debt through general obligation bonds	Yes
g. Incur debt through special tax and revenue bonds	Yes
h. Incur debt through private activity bonds	Don't Know
i. Withhold spending in hazard-prone areas	Don't Know
j. State mitigation grant programs	Yes
k. Other	

8.9.10.4 Overall Capabilities

The Town of Hoosick’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
High	Moderate	Moderate	High	High
How these capabilities can be expanded and/or improved to reduce risk:				
The Town is willing to improve capabilities, but the reality is there just is not the funding and or staff to do so.				

8.9.10.5 Community Classifications

The following table summarizes classifications for community program available to the Town of Hoosick.

Community Classifications		
Program	Classification	Date Classified
Community Rating System (CRS) *	NP	
Building Code Effectiveness Grading Schedule (BCEGS)	NP	
Public Protection	NP	
Storm Ready	NP	
FireWise	NP	
Notes: - = Unavailable N/A = Not applicable NP = Not participating. * CRS Ranking as of April 2019		

The classifications listed above relate to the Town of Hoosick'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/>

8.9.11 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.

8.9.12 PLAN FOR EVACUATION NEEDS AND SHELTERING

The Town of Hoosick has an emergency response plan¹¹. It does not have a post-disaster recovery plan or a post-disaster recovery ordinance¹². 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 Town of Hoosick 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.

8.9.13 FUTURE NEEDS - RISK/VULNERABILITY

The Town of Hoosick has identified no future needs to better understand risk/vulnerability in the community.

8.9.14 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 Town of Hoosick 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).

¹¹ Source: Local Capability Assessment

¹² Source: Local Capability Assessment

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

- 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.
- Community currently has a local zoning ordinance.]

Targeted Plan Integration Activities for the Next Planning Cycle (2019-2024) – The Town of Hoosick 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.
- Enforce codes and standards beyond FEMA minimum requirements.
- 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.
- Revise job descriptions to include mitigation-related duties to further institutionalize mitigation.
- Revise capital or operating budgets to include a line item for mitigation project funding.
- 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.
- Reach out to state agencies for assistance with natural hazard mitigation

- activities.
- Reach out to colleges and universities for technical assistance with natural hazard mitigation activities.
 - 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.
 - Implement hazard mitigation activities through existing plans and policies.
 - Sponsor training on best practices for hazard mitigation for local government staff. (Note: this may be accomplished with other local governments.)

8.9.15 MITIGATION STRATEGY

This subsection sets forth the mitigation strategy for the Town of Hoosick. It describes:

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

8.9.15.1 Progress on 2011 HMP Initiatives

The following table was completed by the Town of Hoosick 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 Town of Hoosick reported no major changes in priorities since the 2011 HMP and indicated that flooding continues to be the Town's primary concern.

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	
H-1	Relocate Buskirk Fire House out of the flood zone	Medium	Flooding	Town Board and Fire Dept.			x		Funding would need a new fire station	x		Carried forward with no changes
H-2	Purchase of 2 homes in flood zone. These houses would no longer flood if bought and torn down. Meet with homeowners to discuss purchase. Phase I - If interested help them fill out HMPG & PDM applications. Phase II - If not interested discuss what direction to go in.	Medium	Flooding	Town Board				x	Funding	x		Carried forward with no changes
H-3	Culvert/Drainage upgrade/replacement at various locations so that roads will no longer wash out.	Medium	Flooding	Town Highway			x		Project is ongoing	x		Ongoing
H-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, Town Supervisor			x		Change in administration; no records were maintained for the new administration. Activities unknown.	x		County is carrying forward this County-led activity with no changes; our municipality will it carry it forward as well.
H-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, Town Supervisor			x		Change in administration; no records were maintained for the new administration. Activities unknown.	x		County is carrying forward this County-led activity with no changes; our municipality will it carry it forward as well.
H-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, Town Supervisor			x		Change in administration; no records were maintained for the new administration. Activities unknown.	x		County is carrying forward this County-led activity with no changes; our municipality will it carry it forward as well.
H-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, Town Supervisor			x		Town does have a Master Plan. It was original in 2004; reapproved in 2014 with no changes.	x		County is carrying forward this County-led activity with no changes; our municipality will it carry it forward as well.

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	
H-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, Town Supervisor			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.
H-NFIP-1	Update/revise floodplain management ordinance to comply with latest FEMA regulations.	High	Flooding	Building Department, Town Board			x		Ordinance was updated in 2018.	x		Ongoing type of activity; will be carried forward with no changes.
H-NFIP-3	Add/train sufficient members of staff to adequately enforce NFIP regulations/floodplain management ordinances.	Medium	Flooding	Town Board			x		Funding is a limitation	x		Ongoing type of activity (with staffing changes); will be carried forward with no changes.
H-NFIP-4	Update/revise floodplain management ordinance to be consistent with potential future new FIRMs	High	Flooding	Building Department, Town Board			x		FEMA issued new maps in 2016. Ordinance was updated in 2018.	x		Ongoing type of activity; will be carried forward with no changes.
H-NFIP-5	Require staff involved in floodplain management and ordinance enforcement to become Certified Floodplain Managers (CFMs)	Medium	Flooding	Town Board				x	Not agency required; municipality opted not to require CFM certification.		x	Not agency required; municipality opted not to require CFM certification.

8.9.15.2 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 Town of Hoosick, 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	July 4, 2017 Flood Mitigation Measures	Flooding	Major flood July 4, 2017 that took out a bunch of culverts, parts of roads, one road completely. Lot of problems in the town and the village. Project: upgraded culverts, road rebuilding. State road damages were about \$100,000. Beaver dam washed out.	Cost	On the order of about \$20,000
				Level of Protection	approximately 50 years
				Damages Avoided; Evidence of Success	Similar event hasn't yet occurred since the project was completed. Beaver dam is back, and the Town has proposed a new mitigation measure to remove the dam and the beavers.

8.9.15.3 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.

Proposed 2019 HMP Mitigation Initiatives for Town of Hoosick 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 ¹³ ?	EHP ¹⁴ Issues?	Estimated Timeline	Project Lead (include relevant Department and Position Title)	Estimated Costs	Estimated Benefits	Potential Funding Sources ¹⁵	Priority ¹⁶	Action Worksheet Provided? ¹⁷
* NOTE: Projects related to Critical Facilities (CF) must protect the facility to the 500-year event or worst damage scenario, whichever is greater.														
1	Relocate Buskirk Fire Station Out of Floodplain (2011 H-1)	3	Flooding	Fire station floods with high flows and ice jams. The fire station is located in the 100year floodplain just outside of the mapped floodway.	Move/rebuild the fire station	Yes	No	3 to 5 years	Buskirk Fire Department	\$500,000	Eliminate flood damage; benefits are high and expected to equal or exceed costs. \$1,000,000	FEMA PDM grant; FEMA HMGP grant with Town and Fire Department contributing toward grant's local match	H	Yes
2	Acquisition of Two Houses in the Floodplain (2011 H-2)	3	Flooding	Homes Flood – Woods Brook	Acquire homes and return property to open space. Purchase of 2 homes in flood zone. These houses would no longer flood if bought and torn down. Meet with homeowners to discuss purchase. Phase I - If interested help them fill out HMPG & PDM applications. Phase II - If not interested discuss what direction to go in.	No	No	3 to 5 years	Hoosick Town Board	\$200,000	Eliminate flood damage; benefits are high and are expected to exceed costs	FEMA PDM grant; FEMA HMGP grant with Town and Fire Department contributing toward grant's local match	M	No
3	Culvert/Drainage Upgrades/Replacement (2011 H-3)	3, 4	Flooding	Roadway flooding and wash outs	Increase capacity of the drainage system and upgrade equipment so that roads will no longer flood and wash out	No	No	Ongoing	Hoosick Supervisor	\$150,000	Reduce flood frequency and damage; benefits are high and are expected to exceed costs	For sections under capacity: FFEMA PDM grant; FEMA HMGP grant with Town contributing toward grant's local match. For other sections that represent routine maintenance: local budget	M	No
4	Beaver Dam Removal *NEW*	3,4	Flooding	Roadway flooding and wash outs when the beaver dams break	Remove beavers and the dams to protect against flooding	No	No	2019	Hoosick Supervisor and Highway Superintendent	\$6,000	Avert potential damage from flooding when the beaver dams fail; benefits are expected to exceed costs	Local budget	H	Yes

¹³ CF – Critical Facility. Please respond “Y” (yes) if the project’s purpose is to protect a critical facility, or “N” (no) if not.

¹⁴ 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.

¹⁵ 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.

¹⁶ Priority – See “Prioritization Methodology” on the next page.

¹⁷ 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.

5	Participate in County-Led Hazard Mitigation Outreach (2011 H-CL-1)	1	All hazards	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.	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)	No	No	5 years	County-led action item. CPG Member, Town Board, Town Supervisor	Unknown	Increase public awareness	Local	H	No
6	Request code/ordinance review by Count as needed (2011 H-CL-2)	4	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.	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)	No	No	5 years	County-led action item. CPG Member, Town Board, Town Supervisor	None	Safer community	Local	H	No
7	Send CEO to County-Led Training (2011 H-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.	Code enforcement: Enforcement of NYS and Local Building Codes with Continual CEO training. (prevention)	No	No	5 years	County-led action item. CPG Member, Town Board, Town Supervisor	None	Continued education will benefit the town residents	Local	H	No
8	Send Comprehensive Plan Update to County for Review by County Planning (2011 H-CL-4)	2,3,4	All hazards	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.	Ensure that local comprehensive plans incorporate natural disaster mitigation techniques through a courtesy review of draft plans by the County Planning Department (prevention)	No	No	5 years	County-led action item. CPG Member, Town Board, Town Supervisor	None	Keep town looking to the future	Local	H	No
9	Attend County-Led Workshops on Natural Hazards and Hazard Mitigation (2011 H-CL-5)	2,4	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.	Hold periodic workshops for municipalities regarding zoning and planning issues that arise regarding natural hazards and hazard mitigation. (prevention)	No	No	ongoing	County-led action item. CPG Member, Town Board, Town Supervisor	None	Keep zoning and planning boards abreast of changes	Local	H	No
10	Update Floodplain Management Ordinance per New FEMA Regulations (as needed) (2011 H-NFIP-1)	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 comply with latest FEMA regulations.	No	No	Ongoing	County-led action item. CPG Member, Town Board, Town Supervisor	None	Compliance may lead to additional funding to resolve issues	Local	H	No

11	Staff Training in NFIP (2011 H-NFIP-3)	2	Flooding	Communities are safer when their floodplain management ordinances are administered properly.	Add/train sufficient members of staff to adequately enforce NFIP regulations/floodplain management ordinances.	No	No	2019-2024	County-led action item. CPG Member, Town Board, Town Supervisor	Staff salary would need to be budgeted for, or a volunteer will need to be found	Training in FEMA 480 would be an excellent asset and capability for the Village in ensuring that decisions are main in compliance with the NFIP	Local	H	No
12	Update Floodplain Management Ordinance when New FIRMs are Issued (2011 H-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	No	No	Ongoing	County-led action item. CPG Member, Town Board, Town Supervisor and Floodplain Manager	None	Protection for the town and residents	Local	H	No
13	Join the CRS (2011 H-NFIP-6)	2	Flooding	Flood insurance policies are expensive	Join the Community Rating System (CRS)	No	No	5 years	County-led action item. CPG Member, Town Board, Town Supervisor and Floodplain Manager	Staff salary would need to be budgeted for, or a volunteer will need to be found	Residents would be eligible for policy premium reductions; greater reductions as community CRS Class incremental moves up from Class 10 toward Class 1	Local	L	No
14	Mitigation of RLPs *NEW*	1	Flooding	Hoosick has one NFIP Repetitive Loss Property	The Town will support property owners who wish to undertake flood mitigation on private property.	No	TBD	5 Years	Town Supervisor and Floodplain Manager	High	High	FEMA PDM or HMGP	Medium	No

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														
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?	Priority
1	Relocate Buskirk Fire Station Out of Floodplain (2011 H-1)	Flooding	No	Yes	Eliminate flood damage; benefits are high and expected to equal or exceed costs. \$1,000,000	\$500,000	Equal	Yes	No	Yes	No	No	No	H
2	Acquisition of Two Houses in the Floodplain (2011 H-2)	Flooding	No	Yes	Eliminate flood damage; benefits are high and are expected to exceed costs	\$200,000	Exceed	No	No	Yes	No	No	No	M
3	Culvert/Drainage Upgrades/Replacement (2011 H-3)	Flooding	Yes	Yes	Reduce flood frequency and damage; benefits are high and are expected to exceed costs	\$150,000	Exceed	No	Yes	Yes	No	No	No	H
4	Beaver Dam Removal *NEW*	Flooding	Yes	Yes	Avert potential damage from flooding when the beaver dams fail; benefits are expected to exceed costs	\$6,000	Exceed	No	Yes	Yes	No	No	No	H
5	Participate in County-Led Hazard Mitigation Outreach (2011 H-CL-1)	All hazards	No	Yes	Increase public awareness	Unknown	Yes	No	Yes	Yes	No	No	No	H
6	Request code/ordinance review by Count as needed (2011 H-CL-2)	All hazards	No	Yes	Safer community	None	Yes	No	Yes	Yes	No	No	No	H
7	Send CEO to County-Led Training (2011 H-CL-3)	All hazards	No	Yes	Continued education will benefit the town residents	None	Yes	No	Yes	Yes	No	No	No	H
8	Send Comprehensive Plan Update to County for Review by County Planning (2011 H-CL-4)	All hazards	No	Yes	Keep town looking to the future	None	Yes	No	Yes	Yes	No	No	No	H
9	Attend County-Led Workshops on Natural Hazards and Hazard Mitigation (2011 H-CL-5)	All hazards	No	Yes	Keep zoning and planning boards abreast of changes	None	Yes	No	Yes	Yes	No	No	No	H
10	Update Floodplain Management Ordinance per New FEMA Regulations (as needed) (2011 H-NFIP-1)	Flooding	No	Yes	Compliance may lead to additional funding to resolve issues	None	Yes	No	Yes	Yes	No	No	No	H
11	Staff Training in NFIP (2011 H-NFIP-3)	Flooding	No	Yes	Training in FEMA 480 would be an excellent asset and capability for the Village in ensuring that decisions are main in compliance with the NFIP	Staff salary would need to be budgeted for, or a volunteer will need to be found	Yes	No	Yes	Yes	No	No	No	H

12	Update Floodplain Management Ordinance when New FIRMs are Issued (2011 H-NFIP-4)	Flooding	No	Yes	Protection for the Town and residents	None	Yes	No	Yes	Yes	No	No	No	H
13	Join the CRS (2011 H-NFIP-6)	Flooding	No	Yes	Residents would be eligible for policy premium reductions; greater reductions as community CRS Class incremental moves up from Class 10 toward Class 1	Staff salary would need to be budgeted for, or a volunteer will need to be found	Yes	No	Yes	Yes	No	No	No	L
14	Mitigation of RLPs *NEW*	Flooding	No	Yes	High	High	Equal	No	Private/Grants	Yes	No	No	No	M

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 Town of Hoosick are included on the following pages.

Section 8.9 - Jurisdictional Annex, Town of Hoosick

NYS DHSES Action Worksheet			
Project Name:	Beaver Dam Removal		
Project Number:	H-4		
Risk / Vulnerability			
Hazard of Concern:	Flooding		
Description of the Problem:	In 2017, a beaver dam at this location broke and washed out a large section of Tory Hill Road		
Action or Project Intended for Implementation			
Description of the Solution:	Remove beavers and open the dams		
Is this project related to a Critical Facility?	Yes * <input type="checkbox"/>	No <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:	High	Estimated Benefits (losses avoided):	\$100,000
Useful Life:	Unknown - this is suitable beaver habitat so the project has a useful life until beavers decide to build here again		
Estimated Cost:	\$6,000		
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	2019
Estimated Time Required for Project Implementation:	3-6 months	Potential Funding Sources:	Local budget
Responsible Party: (Department/ Organization)	Highway Superintendent and Hoosick Supervisor	Local Planning Mechanisms to be Used in Implementation, if any:	N/A - This is a function of the highway department's responsibilities
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Not viable- roads are still potentially at risk of washing out
	Remove the dams but leave the beavers	\$3,000	Not viable- the flood problem would only be eliminated until the same beavers rebuild in the same location
	Remove the beavers and open the dams	\$6,000	Best solution- opening the dams will eliminate the flood problem; and removing the beavers makes it less likely that the same beavers will rebuild dams in the same location
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 8.9 - Jurisdictional Annex, Town of Hoosick

NYS DHSES Action Worksheet			
Project Name:	Relocate Buskirk Fire Station Out of Flood Zone		
Project Number:	H-1		
Risk / Vulnerability			
Hazard of Concern:	Flooding		
Description of the Problem:	Fire station floods due to being located in a flood zone (in the 100-year floodplain, at the edge of the floodway)		
Action or Project Intended for Implementation			
Description of the Solution:	Move/rebuild the fire station on a parcel out of the floodplain		
Is this project related to a Critical Facility?	Yes * <input checked="" 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:	500-year	Estimated Benefits (losses avoided):	Eliminate flood damage; benefits are high and expected to equal or exceed costs. \$1,000,000
Useful Life:	100 year		
Estimated Cost:	\$500,000		
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	3-5 years
Estimated Time Required for Project Implementation:	3-5 years	Potential Funding Sources:	FEMA PDM grant; FEMA HMGP grant with Town and Fire Department contributing toward grant's local match
Responsible Party: (Department/ Organization)	Buskirk Fire Department	Local Planning Mechanisms to be Used in Implementation, if any:	N/A- continuity of operations of the service provided by the fire department
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Not viable- the fire department will still be flooded, and also unable to respond to emergencies when it is flooded
	Floodproofing	High (<\$500,000)	Not viable- the fire department structure and contents would be protected, but continuity of operations would still be an issue
	Acquisition and relocation of the fire department to a site outside of the floodplain	\$500,000	The fire department structure and contents would be protected, and continuity of operations would be maintained
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:			