

## 9.27 Village of Stillwater

This section presents the jurisdictional annex for the Village of Stillwater. The village provided the following updates that were incorporated into this annex:

- Jurisdictional Annex Update Form (Contact Information, Profile, and Capability Assessment)
- NYS Mitigation Action Worksheets

### 9.27.1 Hazard Mitigation Plan Point of Contact

Primary Point of Contact	Alternate Point of Contact
Judy Wood-Shaw – Mayor P.O. Box 507; Stillwater, NY 12170 518-744-5940 judy.woodshaw@villageofstillwater.org	Judy Wood-Zeno – Village Clerk/Treasurer P.O. Box 507; Stillwater, NY 12170 518-441-4851 judy.woodzeno@villageofstillwater.org

### 9.27.2 Village Profile

1,910 (American Community Survey 5-Year 2016 Estimates)

#### Location

The Village of Stillwater is located in the southeast part of the Town of Stillwater, north of the City of Mechanicville. Stillwater is on the west side of the Hudson River, opposite at the county line of Rensselaer County. Schuyler Creek enters the Hudson River at the village. US Route 4 passes through the village conjoined with New York State Route 32. County Road 75, Lake Street, enters the village from the northwest.

According to U.S. Census Bureau, the village has a total area of 1.4 square miles, with 1.2 square miles of it land and 0.2 square miles (13.29-percent) of its water.

#### Climate

Saratoga County, with all its municipalities, generally experiences seasonable weather patterns characteristic of the northeastern U.S. Warm summers are typically experienced, with occasional high temperatures and humidity. Midsummer temperatures typically range from 60°F to 83°F (Fahrenheit). The winters of Saratoga County are long and cold, with temperatures typically ranging from 12°F to 30°F (Fahrenheit). During the winter, temperatures are cooler than the temperatures in areas located near large bodies of water. Snow accumulates to an average depth of 68.7 inches each year.

#### Multi-Jurisdictional Hazard Mitigation Plan

## Brief History

In 1816, the community of Stillwater set itself off from the town by incorporating as a village. It was originally called Up-town, then Upton, as it was the first and for a long time the only settlement north of Waterford. Stillwater is the current historical site of "The Blockhouse" since it has been moved from Saratoga battle field. Stillwater also has other sites such as the Octagon house and the twin houses built in the late 19th century.

## Governing Body Format

The Village of Stillwater is governed by four village trustees.

## Growth/Development Trends

No development is anticipated at this time.

## 9.27.3 Village-Specific Hazard Information

Detailed hazard event histories can be found in the Previous Occurrences and Losses sections of each hazard profile in Section 5. Table 9.27-1 summarizes the Village of Stillwater ranking of the natural hazards based on probability of occurrence and impacts to the village. The Village of Stillwater Lake did not revise their hazard ranking for this plan update, therefore hazard rankings are not available for the newly added hazards (drought, extreme temperature, and invasive species). Based on the old ranking, the most notable difference between the Village and the County is that severe winter weather is the Village's highest risk hazard, whereas the County ranked it a moderate hazard.

**Table 9.27-1 Village of Stillwater Hazard Ranking**

Rank #	Hazard Type	Probability of Occurrence	Risk Ranking Score <sup>a</sup>	Hazard Ranking <sup>b</sup>	County Hazard Ranking <sup>b</sup>
N/A	Drought	Not provided	Not provided	Not provided	Low
4	Earthquake	Rare	11	Low	Low
1	Flood (riverine, flash, coastal and urban flooding)	Frequent	54	High	High
N/A	Extreme Temperature	Not provided	Not provided	Not provided	High
3	Ground Failure	Occasional	24	Medium	Medium
N/A	Invasive Species	Not provided	Not provided	Not provided	Medium
2	Severe Storm (windstorms, thunderstorms, hail, lightning and tornados)	Frequent	51	High	High
1	Severe Winter Storm (heavy snow, blizzards, ice storms)	Frequent	54	High	Medium

## Multi-Jurisdictional Hazard Mitigation Plan

Rank #	Hazard Type	Probability of Occurrence	Risk Ranking Score <sup>a</sup>	Hazard Ranking <sup>b</sup>	County Hazard Ranking <sup>b</sup>
N/A	Wildfire	Not provided	Not provided	Not provided	Low

a. Risk ranking score = Probability x Impact

b. High = Total hazard priority risk ranking score of 31 and above; Medium = Total hazard priority risk ranking of 16-30; and Low = Total hazard risk ranking below 15

c. N/A = Not available. The Village of Stillwater did not rank the new hazards profiled in the 2019 HMP Update. The rankings in this table reflect the village's ranking of the hazards in the previous HMP.

## 9.27.4 Capability Assessment

This section identifies the following capabilities of the local jurisdiction:

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

### Legal and Regulatory Capability

**Table 9.27-2 Legal and Regulatory Capability of the Village of Stillwater**

Regulatory Tools (Codes, Ordinances, Plans)	Local Authority (Y or N)	Prohibitions (State or Federal) (Y or N)	Higher Jurisdictional Authority (Y or N)	State Mandated (Y or N)	Code Citation (Section, Paragraph, Page Number, date of adoption)
1) Building Code	Y	N	Y	N	NYS Code Regulations
2) Zoning Ordinance	Y	N	N	N	Village Zoning Law
3) Subdivision Ordinance	Y	N	N	N	Village Zoning Law
4) NFIP Flood Damage Prevention Ordinance (if you are in the NFIP, you must have this.)	Y	Y	Y	Y	Village of Stillwater Flood Plan Law
5) Growth Management	Y	N	N	N	Planning Board
6) Floodplain Management / Basin Plan	N	Y	Y	N	Not provided
7) Stormwater Management Plan/Ordinance	Y	N	Y	Y	MS 4 Program
8) Comprehensive Plan / Master Plan/ General Plan	Y	N	N	N	Comprehensive Plan
9) Capital Improvements Plan	N	N	N	N	Not provided
10) Site Plan Review Requirements	Y	Y	Y	N	Village Zoning Law
11) Open Space Plan	N	N	N	N	Not provided

### Multi-Jurisdictional Hazard Mitigation Plan

Saratoga County, New York

December 5, 2019

Regulatory Tools (Codes, Ordinances, Plans)	Local Authority (Y or N)	Prohibitions (State or Federal) (Y or N)	Higher Jurisdictional Authority (Y or N)	State Mandated (Y or N)	Code Citation (Section, Paragraph, Page Number, date of adoption)
12) Economic Development Plan	N	N	N	N	Not provided
13) Emergency Response Plan	Y	N	Y	Y	Village's Emergency Plan
14) Post Disaster Recovery Plan	Y	N	Y	Y	Village's Emergency Plan
15) Post Disaster Recovery Ordinance	N	N	N	N	Not provided
16) Real Estate Disclosure req.	N	N	N	N	Not provided
17) Other [Special Purpose Ordinances (i.e., critical or sensitive areas)]	Y	Y	Y	N	Aquifer Law, Flood Mitigation Plan

## Administrative and Technical Capability

**Table 9.27-3 Administrative and Technical Capability of the Village of Stillwater**

Staff/ Personnel Resources	Available (Y or N)	Department/ Agency/Position
1) Planner(s) or Engineer(s) with knowledge of land development and land management practices	Y	Adirondack Mountain Engineering
2) Engineer(s) or Professional(s) trained in construction practices related to buildings and/or infrastructure	Y	Adirondack Mountain Engineering
3) Planners or engineers with an understanding of natural hazards	Y	Adirondack Mountain Engineering
4) NFIP Floodplain Administrator (if you are in the NFIP, you must have one.)	Y	Mayor
5) Surveyor(s)	Y	Adirondack Mountain Engineering
6) Personnel skilled or trained in "GIS" applications	Y	Adirondack Mountain Engineering
7) Scientist familiar with natural hazards in the Village of Stillwater.	N	Not provided
8) Emergency Manager	Y	Mayor
9) Grant Writer(s)	Y	Adirondack Mountain Engineering
10) Staff with expertise or training in benefit/cost analysis	Y	Adirondack Mountain Engineering

## Multi-Jurisdictional Hazard Mitigation Plan

Saratoga County, New York

December 5, 2019

## Fiscal Capability

Financial Resources	Accessible or Eligible to use (Yes/No/Don't know)
1) Community development Block Grants (CDBG)	Yes
2) Capital Improvements Project Funding	Yes
3) Authority to Levy Taxes for specific purposes	Yes
4) User fees for water, sewer, gas or electric service	Water and Sewer Only
5) Impact Fees for homebuyers or developers of new development/homes	Yes
6) Incur debt through general obligation bonds	Yes
7) Incur debt through special tax bonds	No
8) Incur debt through private activity bonds	No
9) Withhold public expenditures in hazard-prone areas	No
10) State mitigation grant programs (e.g. NYSDEC, NYCDEP)	Not provided
11) Other	Not provided

## Community Classifications

**Table 9.27-4 Community Classifications of the Village of Stillwater**

Program	Classification	Date Classified
Community Rating System (CRS)	Not provided	Not provided
Building Code Effectiveness Grading Schedule (BCEGS)	Not provided	Not provided
Public Protection	Not provided	Not provided
Storm Ready	Not provided	Not provided
Firewise	Not provided	Not provided

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

The classifications listed above relate to the community's effectiveness in providing services that may impact 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 one being the best possible classification, and class 10 representing no classification benefit. Firewise classifications include a higher classification when the subject property is located beyond 1000 feet of a creditable fire hydrant and is within 5 road miles of a recognized Fire Station. Criteria for classification credits are outlined in the following documents:

- The Community Rating System Coordinators Manual;
- The Building Code Effectiveness Grading Schedule;

## Multi-Jurisdictional Hazard Mitigation Plan

Saratoga County, New York  
December 5, 2019

- The ISO Mitigation online ISO's Public Protection website at: <https://www.isomitigation.com/ppc/>;
- The National Weather Service Storm Ready website at <https://www.weather.gov/stormready/>; and,
- The National Firewise Communities website at <http://firewise.org/>.

## 9.27.5 Mitigation Strategy

### Proposed Hazard Mitigation Initiatives

**Table 9.27-5 Proposed Hazard Mitigation Initiatives of the Village of Stillwater**

Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals Met	Objectives Met	Lead	Support	Estimated Cost	Sources of Funding	Timeline
VSW-1a	Where appropriate, support retrofitting of structures located in hazard-prone areas to protect structures from future damage, with repetitive loss and severe repetitive loss properties as priority. Identify facilities that are viable candidates for retrofitting based on cost- effectiveness versus relocation. Where retrofitting is determined to be a viable option, consider implementation of that action based on available funding. The Stillwater Elementary, Middle, and High Schools complex is located in a special flood hazard area; its vulnerability to flood hazards is not fully known and over the life of this plan the village will conduct an assessment of this facility (e.g., document history of damage) to understand its vulnerabilities and mitigate.	Existing	Flood, Severe Storm	1, 2, 3, 5	1-1, 1-2, 1-3, 2-2, 2-3, 2-4, 3-1, 3-5	NFIP Floodplain Administrator	NYS DHSES, FEMA	High	FEMA Mitigation Grant Programs and local budget (or property owner) for cost share	Short Term

Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals Met	Objectives Met	Lead	Support	Estimated Cost	Sources of Funding	Timeline
VSW-1b	Where appropriate, support purchase, or relocation of structures located in hazard-prone areas to protect structures from future damage, with repetitive loss and severe repetitive loss properties as priority. Identify facilities that are viable candidates for relocation based on cost- effectiveness versus retrofitting. Where relocation is determined to be a viable option, consider implementation of that action based on available funding. The Stillwater Elementary, Middle, and High Schools complex is located in a special flood hazard area; its vulnerability to flood hazards is not fully known and over the life of this plan the village will conduct an assessment of this facility (e.g., document history of damage) to understand its vulnerabilities and mitigate.	Existing	Flood, Severe Storm	1, 2, 3, 5	1-1, 1-2, 1-3, 2-2, 2-3, 2-4, 3-1, 3-5	NFIP Floodplain Administrator	NYS DHSES, FEMA	High	FEMA Mitigation Grant Programs and local budget (or property owner) for cost share	PDM, Ongoing
VSW-2	Consider participation in incentive-based programs such as CRS.	New & Existing	Flood	1, 2, 5	1-1, 1-3, 1-6, 2-1, 2-2, 2-3, 2-4, 5-2	NFIP Floodplain Administrator	NYS DHSES, ISO, FEMA	Low - Medium	Local Budget	Ongoing – Long-term depending on initiative

**Multi-Jurisdictional Hazard Mitigation Plan**

Saratoga County, New York

December 5, 2019



Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals Met	Objectives Met	Lead	Support	Estimated Cost	Sources of Funding	Timeline
VSW-3	Continue to support the implementation, monitoring, maintenance, and updating of this Plan, as defined in Section 7.0	New & Existing	All Hazards	All	All	NFIP Floodplain Administrator	County (through Mitigation Planning Coordinator), NYS DHSES	Low – High (for 5-year update)	Local Budget, possibly FEMA Mitigation Grant Funding for 5-year update	Long Term
VSW-4	Strive to maintain compliance with, and good-standing in the National Flood Insurance program.	New & Existing	Flood	1, 2, 4	1-1, 1-2, 1-3, 1-8, 2-2, 2-3, 2-4, 4-1, 4-2, 4-3, 4-4	NFIP Floodplain Administrator	NYS DHSES, ISO, FEMA	Low - Medium	Local Budget	Ongoing
VSW-5	Continue to develop, enhance, and implement existing emergency plans.	New & Existing	All Hazards	1, 3	1-1, 1-7, 3-2, 3-4, 3-5	Emergency Management with support from County OEM and NYS DHSES	County Emergency Management, NYS DHSES	Low - Medium	Local Budget	Long Term
VSW-6	Create/enhance/ maintain mutual aid agreements with neighboring communities. Possible options listed in the Comprehensive Plan include the following: Conduct an Intermunicipal Cooperation Roundtable to promote intermunicipal coordination and Communication. Expand joint operations with the Sheriff's Office, State Police and Mechanicville Police to maximize results.	New & Existing	All Hazards	3, 5	3-4, 5-1, 5-3	Emergency Management, DPW and Roads	Surrounding municipalities and County	Low - Medium	Local Budget	Ongoing

**Multi-Jurisdictional Hazard Mitigation Plan**

Saratoga County, New York

December 5, 2019

Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals Met	Objectives Met	Lead	Support	Estimated Cost	Sources of Funding	Timeline
VSW-7	Support County-wide initiatives identified in Section 9.1 of the County Annex.	New & Existing	All Hazards	All	All	Appropriate Departments	County and Regional agencies (as appropriate for initiative)	Low - High	Existing programs and grant funding where applicable	Ongoing
VSW-8	Create/update the Emergency Action Plans for all dams located within the municipality.	Existing	Flood	1, 3	1-1, 1-6, 1-7, 3-1, 3-2, 3-4	NFIP Floodplain Administrator	Watershed districts (if applicable); neighboring municipalities; County (if applicable); NYS	Medium to Low	FEMA HMA	Ongoing – Long-term depending on initiative
VSW-9	Implement dam structure repairs as required by dam safety report/protocols	Existing	Flood	3	3-1, 3-3, 3-6	NFIP Floodplain Administrator; Engineering Department	Watershed districts (if applicable); neighboring municipalities; County (if applicable); NYS	Medium	FEMA HMA	Long Term
VSW-10	Support the Installation/Implementation of Community Emergency Alert System	New & Existing	All Hazards	1, 3, 5	1-1, 3-1, 3-3, 3-5, 3-6, 5-1	LEMC	Watershed districts (if applicable); neighboring municipalities; County (if applicable); NYS	Medium	FEMA HMA	Short Term

**Multi-Jurisdictional Hazard Mitigation Plan**

Saratoga County, New York

December 5, 2019

Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals Met	Objectives Met	Lead	Support	Estimated Cost	Sources of Funding	Timeline
VSW-11	Create a mitigation support fund to provide matching funds on an ongoing basis for municipality and residential mitigation projects which will fund cost-sharing portions of projects and be replenished during the annual budget cycle	New & Existing	All Hazards	1, 2, 3, 5	1-3, 1-9, 2-5, 3-1, 5-2	Village Board		Medium	Operating budget	Long Term
VSW-12	Develop a multi-year Capital Improvement Plan (CIP) to provide a long-term plan for infrastructure improvements.	New & Existing	All Hazards	1, 3	1-1, 1-6, 3-3, 3-6	NFIP Floodplain Administrator		Low	Local budget	Long Term
VSW-13	Perform a comprehensive review and evaluation of Stillwater's planning and zoning regulations (Per the Comprehensive Plan)	Existing	All Hazards	1	1-4, 1-6, 1-7	NFIP Floodplain Administrator		Low	Local budget	Long Term
VSW-14	Conduct Needs Assessment for each of the community service providers to ensure adequate facilities and services for residents (for example, emergency services, shelters) (Per the Comprehensive Plan)	Existing	All Hazards	1, 3	1-1, 1-4, 1-6, 3-4, 3-5, 3-6	Office of Emergency Management; Community Services Department		Low to Medium	Local budget	N/A
VSW-15	Use the Town's web site to better inform the public regarding the Fire/Police/EMS services (Per the Comprehensive Plan)	N/A	All Hazards	1, 2	1-6, 2-2, 2-5	Information Technology		Low to Medium	Local budget	Short Term
VSW-16	Work with the State, County, and local service providers to expand the delivery of fire safety/prevention programs (Per the Comprehensive Plan)	N/A	All Hazards	1, 2	1-6, 2-2, 2-	Fire Department	County, NYS	Low to Medium	Local	Short Term

**Multi-Jurisdictional Hazard Mitigation Plan**

Saratoga County, New York

December 5, 2019

Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals Met	Objectives Met	Lead	Support	Estimated Cost	Sources of Funding	Timeline
VSW-17	Prepare/Update the Town stormwater management plan and focus on sub- basins where there is chronic flooding. (Per FMA).	New & Existing	Flood, Severe Storm	1	1-4, 1-5, 1-6, 1-7	NFIP Floodplain Administrator		Low to Medium	Local budget	Ongoing
VSW-18	Explore potential passive recreational uses of the Old Champlain Canal and towpath via a trail system or linear park. This proposed use would serve to provide additional open space and recreational amenities locally and would minimize impervious surfaces and promote infiltration. Further, allowing land along the Old Champlain Canal to remain undeveloped would permit periodic access to the canal for routine maintenance activities to ensure that stormwater is being effectively and safely conveyed. (Per FMA)	Existing	Flood, Severe Storm	1, 4	1-5, 4-3, 4-4, 4-5	NFIP Floodplain Administrator		Low to Medium	Not provided	PDM, Ongoing

**Multi-Jurisdictional Hazard Mitigation Plan**

Saratoga County, New York

December 5, 2019

Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals Met	Objectives Met	Lead	Support	Estimated Cost	Sources of Funding	Timeline
VSW-19	Form a committee and study the chronic flooding problem of ice jams on the Hudson River in the vicinity of the lower dam (lock C-3) and make recommendations on how to alleviate this problem. This Committee should involve the Town and Village of Stillwater, the City of Mechanicville, the New York State Canal Corporation, New York State Electric and Gas, Stillwater Power, the Saratoga County Emergency Management Office and any other agencies and organizations with a stake in this issue. (Per FMA)	New & Existing	Flood	1, 5	1-4, 1-6, 5- 3	NFIP Floodplain Administrator	Village of Stillwater, the City of Mechanicville, the New York State Canal Corporation, New York State Electric and Gas, Stillwater Power, the Saratoga County Emergency Management Office	Low		Ongoing

**Multi-Jurisdictional Hazard Mitigation Plan**

Saratoga County, New York

December 5, 2019

Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals Met	Objectives Met	Lead	Support	Estimated Cost	Sources of Funding	Timeline
VSW-20	Increase public education on flooding. Town and Village can hold a joint workshop on the causes of flooding, the availability of flood insurance and specific techniques for flood proofing property. This workshop could also focus on the value and function of wetlands as a whole, and specifically, their role in mitigating flooding. Further, the Town may wish to consider developing an educational brochure on flooding and its mitigation. Alternatively, such a topic could be incorporated within a Town newsletter. (Per FMA)	N/A	Flood	1, 2	1-4, 1-6, 2- 1, 2-2, 2-3, 2-4, 2-5	Office of Emergency Management; NFIP Floodplain Administrator	Village of Stillwater	Low to Medium Dependent on initiative	FEMA HMA; local budget	Long Term
VSW-21	Undertake a feasibility study to examine the possibility of establishing a trail or linear park along the Old Champlain Canal. (Per FMA)	N/A	N/A	4	4-2, 4-3	NFIP Floodplain Administrator		Low	Local budget	Ongoing
VSW-22	Amend the Town zoning ordinance and Village site development law to: a) require stormwater analysis and mitigation for development and land clearing of a certain size, and b) to require erosion and sediment control. The latter has already been proposed in the draft update to the Town's zoning ordinance. (Per FMA)	New & Existing	Flood, Severe Storm	1, 4	1-6, 1-8, 4- 2, 4-4	NFIP Floodplain Administrator		Low	Local budget	Short Term

**Multi-Jurisdictional Hazard Mitigation Plan**

Saratoga County, New York

December 5, 2019

Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals Met	Objectives Met	Lead	Support	Estimated Cost	Sources of Funding	Timeline
VSW-23	Incorporate engineering and maintenance items related to flood prevention and mitigation in capital improvements and budget planning. (Per FMA)	Existing	Flood	1	1-1, 1-6, 1-7	NFIP Floodplain Administrator; Engineering Department		Low	Local budget	Short Term
VSW-24	Charge the Stillwater Grants Committee with the task of securing funding to implement the recommendations of the FMA. (Per FMA)	Existing	Flood	1	1-7, 1-9	Village Board		Low	Local budget	Short Term
VSW-25	Pursue riverbank stabilization and erosion and sedimentation control projects at problem	Existing	Flood	1, 4	1-1, 4-2	NFIP Floodplain Administrator	NYS (if applicable)	Medium-High Dependent on initiative	FEMA HMA	Ongoing
VSW-26	Provide tributary stream channel and bank improvement projects at problem locations within the Hudson Riverfront Area. (Per FMA)	Existing	Flood	1, 4	1-1, 4-2	NFIP Floodplain Administrator	NYS (if applicable)	Medium-High Dependent on initiative	FEMA HMA	Ongoing
VSW-27	Conduct long-term inspection and maintenance programs within the Hudson Riverfront Area. (Per FMA)	Existing	Flood	1, 4	1-1, 1-4, 4-2	NFIP Floodplain Administrator	NYS (if applicable)	Medium Dependent on initiative	FEMA HMA	Ongoing – Long-term depending on initiative

**Multi-Jurisdictional Hazard Mitigation Plan**

Saratoga County, New York

December 5, 2019

Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals Met	Objectives Met	Lead	Support	Estimated Cost	Sources of Funding	Timeline
VSW-28	Provide channel and embankment improvement projects for the Old Champlain Canal and Schuyler Creek to develop adequate and stable channel cross-sections to convey storm flows. Projects should include construction of access ways, clearing of overgrowth, removal of accumulated sediment and debris from channel, establish channel lines and grades, bank stabilization, sediment and erosion control measures and reinforcement of banks to prevent overtopping and breaching. (Per FMA)	Existing	Flood	1, 4	1-1, 4-2	NFIP Floodplain Administrator	NYS (if applicable)	Medium-High Dependent on initiative	FEMA HMA	Long Term
VSW-29	Improve/upgrade and increase capacity of the storm sewer infrastructure on Lake Street and Park Avenue to convey floodwaters to Schuyler Creek. (Per FMA)	Existing	Flood	1, 3	1-1, 3-6	NFIP Floodplain Administrator; Engineering Department		Medium-High Dependent on initiative	FEMA HMA	Short Term
VSW-30	Evaluate the effect of the existing private wooden bridge on channel capacity and flooding. Remove or replace bridge to provide a greater channel cross-section if indicated by evaluation (NYS RT 67, Meadow Lane, Anthony Kill Area). (Per FMA)	Existing	Flood	1	1-1, 1-4, 1-5	NFIP Floodplain Administrator		Medium-High Dependent on initiative	Not provided	Ongoing

**Multi-Jurisdictional Hazard Mitigation Plan**

Saratoga County, New York

December 5, 2019



Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals Met	Objectives Met	Lead	Support	Estimated Cost	Sources of Funding	Timeline
VSW-31	Provide stream channel improvement projects along the Anthony Kill in the Town of Stillwater. Projects should include construction of access ways, removal of accumulated sediment and debris from channel, establish channel lines and grades, bank stabilization and sediment and erosion control measures. (Per FMA)	Existing	Flood	1, 4	1-1, 4-2	NFIP Floodplain Administrator	NYS (if applicable)	Medium-High Dependent on initiative	FEMA HMA	Ongoing
VSW-32	Maintain and improve (increase conveyance) channel for the existing drainage ditch along its 2,500-foot length from Stratton Lane north to its confluence with the Hudson River, possibly in partnership with NYSDOT for capacity improvements to culvert crossing under NYS RTS 4 & 32. (Per FMA)	Existing	Flood	1, 3	1-1, 3-6	NFIP Floodplain Administrator	NYSDOT	Medium-High Dependent on initiative	FEMA HMA	Ongoing

**Multi-Jurisdictional Hazard Mitigation Plan**

Saratoga County, New York

December 5, 2019

Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals Met	Objectives Met	Lead	Support	Estimated Cost	Sources of Funding	Timeline
VSW-33	Provide channel maintenance and improvement projects for the Old Champlain Canal along its 5,200-foot length from Stratton Lane north to where it passes under RTS 4 & 32 through two large concrete box culvert Projects should include construction of access ways, clearing of overgrowth, removal of accumulated sediment and debris from channel, establish channel lines and grades, bank stabilization, sediment and erosion control measures, reinforcement of banks to prevent overtopping and breaching. Planning for these drainage projects should be coordinated with plans for future recreational development of the Old Champlain Canal and parallel towpath, and wetlands preservation considerations. (Per FMA)	New & Existing	Flood	1, 4	1-1, 4-2	NFIP Floodplain Administrator; Engineering Department		Medium-High Dependent on initiative	FEMA HMA	Ongoing
VSW-34	Provide lakeshore stabilization and erosion and sedimentation control projects at problem locations on Saratoga Lake. (Per FMA)	Existing	Flood	1, 4	1-1, 4-1, 4-2	NFIP Floodplain Administrator		Medium-High Dependent	FEMA HMA	Ongoing

**Multi-Jurisdictional Hazard Mitigation Plan**

Saratoga County, New York

December 5, 2019

Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals Met	Objectives Met	Lead	Support	Estimated Cost	Sources of Funding	Timeline
VSW-35	Provide tributary stream channel and bank improvement projects at problem locations in the Saratoga Lake area. (Per FMA)	Existing	Flood	1, 4	1-1, 4-1, 4- 2	NFIP Floodplain Administrator		Medium-High Dependent on initiative	FEMA HMA	Ongoing
VSW-36	Provide channel improvements along the Old Champlain Canal drainage way just north of the railroad embankment in the Riverside area to control ice formation by eliminating standing water. (Per FMA)	Existing	Flood	1, 4	1-1, 4-1, 4- 2	NFIP Floodplain Administrator		Medium-High Dependent on initiative	FEMA HMA	Ongoing – Long-term depending on initiative
VSW-37	Provide channel improvement projects for the Old Champlain Canal along its 5,800 feet from Halfway House Road south to its confluence with the Hudson River. Projects should include construction of access ways, clearing of overgrowth, removal of accumulated sediment and debris from channel, establish channel lines and grades, bank stabilization, sediment and erosion control measures and reinforcement of banks to prevent overtopping and breaching. (Per FMA)	Existing	Flood	1, 4	1-1, 4-1, 4- 2	NFIP Floodplain Administrator		Medium-High Dependent on initiative	FEMA HMA	Ongoing

**Multi-Jurisdictional Hazard Mitigation Plan**

Saratoga County, New York

December 5, 2019

Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals Met	Objectives Met	Lead	Support	Estimated Cost	Sources of Funding	Timeline
VSW-38	Evaluate installation of a culvert crossing River Road (NYS RTS 4 & 32) to convey overflow from the Old Champlain Canal to the Hudson River just north of the railroad embankment at the Iron Bridge. (Per FMA)	Existing	Flood	1, 3	1-1, 3-6	NFIP Floodplain Administrator		Medium-High Dependent on initiative	FEMA HMA	Ongoing
VSW-39	Evaluate installation of a culvert crossing under Burns Bridge Road, Towpath Road and Hudson Avenue (NYS RTS 4 & 32) directly to the Hudson River. The proposed culvert would convey stormwater flow from the southern end of the Gurba Subdivision drainage-way east to the river. A culvert in this location would also serve to relieve downstream flooding on Halfway House Road, Mitchell Road and in the Riverside Area. (Per FMA)	Existing	Flood	1, 3	1-1, 3-6	NFIP Floodplain Administrator		Medium-High Dependent on initiative	FEMA HMA	Ongoing
VSW-40	Hire an engineering consultant to conduct a study of the area to develop comprehensive solution to divert floodwaters from the area of Ferry Lane.	New and Existing	Flood	1, 3	1-1, 1-2, 3-5	Village of Stillwater Board		Low	Grant, Municipal Match	Short Term
VSW-41	Hire an engineering consultant to conduct a study of the area to develop comprehensive solution to divert floodwaters from the area of Bunce Lane and the Pump Station.	New and Existing	Flood	1, 3	1-1, 1-2, 3-5	Village of Stillwater Board		Low	Grant, Municipal Match	Short Term

**Multi-Jurisdictional Hazard Mitigation Plan**

Saratoga County, New York

December 5, 2019

Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals Met	Objectives Met	Lead	Support	Estimated Cost	Sources of Funding	Timeline
------------	-----------------------	--	---------------------	-----------	----------------	------	---------	----------------	--------------------	----------

\*Does this mitigation initiative reduce the effects of hazards on new and/or existing buildings and/or infrastructure?

Notes: Short term = 1 to 5 years; Long Term= 5 years or greater; OG = Ongoing program; DOF = Depending on funding; NA = Not applicable; PDM = Pre-Disaster Mitigation Grant Program.

### Analysis of Mitigation Actions

This table summarizes the participant’s mitigation actions by hazard of concern and the six mitigation types to illustrate that the Village has selected a comprehensive range of actions/projects.

**Table 9.27-6 Analysis of Mitigation Actions of the Village of Stillwater**

Hazard of Concern	Type of Mitigation Action					
	Prevention	Property Protection	Public Education and Awareness	Natural Resource Protection	Emergency Services	Structural Projects
Drought	VSW-3, VSW-7, VSW-11-16	VSW-3, VSW-7	VSW-3, VSW-7	VSW-3, VSW-7	VSW-3, VSW-5, VSW-6, VSW-7, VSW-10	VSW-3, VSW-7
Earthquake	VSW-3, VSW-7, VSW-11-16	VSW-3, VSW-7	VSW-3, VSW-7	VSW-3, VSW-7	VSW-3, VSW-5, VSW-6, VSW-7, VSW-10	VSW-3, VSW-7
Extreme Temperatures	VSW-3, VSW-7, VSW-11-16	VSW-3, VSW-7	VSW-3, VSW-7	VSW-3, VSW-7	VSW-3, VSW-5, VSW-6, VSW-7, VSW-10	VSW-3, VSW-7

### Multi-Jurisdictional Hazard Mitigation Plan

Saratoga County, New York  
December 5, 2019

Hazard of Concern	Type of Mitigation Action					
	Prevention	Property Protection	Public Education and Awareness	Natural Resource Protection	Emergency Services	Structural Projects
Flooding (riverine, flash, coastal and urban flooding)	VSW-2, VSW-3, VSW-4, VSW-7, VSW-8, VSW-11-19, VSW-21, VSW-23, VSW-24, VSW-38, VSW-39	VSW-1a and b, VSW-2, VSW-3, VSW-4, VSW-7, VSW-25-26, VSW-28-33, VSW-36-37	VSW-1a and b, VSW-2, VSW-3, VSW-4, VSW-7	VSW-3, VSW-7, VSW-25-28, VSW-31, VSW-33, VSW-34-37	VSW-2, VSW-3, VSW-5, VSW-6, VSW-7, VSW-8, VSW-10	VSW-3, VSW-7, VSW-9
Ground Failure	VSW-3, VSW-7, VSW-11-16	VSW-3, VSW-7	VSW-3, VSW-7	VSW-3, VSW-7	VSW-3, VSW-5, VSW-6, VSW-7, VSW-10	VSW-3, VSW-7
Invasive Species	VSW-3, VSW-7, VSW-11-16	VSW-3, VSW-7	VSW-3, VSW-7	VSW-3, VSW-7	VSW-3, VSW-5, VSW-6, VSW-7, VSW-10	VSW-3, VSW-7
Severe Storms (windstorms, thunderstorms, hail, lightning and tornados)	VSW-2, VSW-3, VSW-4, VSW-7, VSW-11-8, VSW-21	VSW-1a and b, VSW-2, VSW-3, VSW-4, VSW-7	VSW-1a and b, VSW-2, VSW-3, VSW-4, VSW-7	VSW-3, VSW-7	VSW-2, VSW-3, VSW-5, VSW-6, VSW-7, VSW-10	VSW-3, VSW-7
Severe Winter Storm (heavy snow, blizzards, ice storms)	VSW-3, VSW-7, VSW-11-16	VSW-3, VSW-7	VSW-3, VSW-7	VSW-3, VSW-7	VSW-3, VSW-5, VSW-6, VSW-7, VSW-10	VSW-3, VSW-7
Wildfire	VSW-3, VSW-7, VSW-11-16	VSW-3, VSW-7	VSW-3, VSW-7	VSW-3, VSW-7	VSW-3, VSW-5, VSW-6, VSW-7, VSW-10	VSW-3, VSW-7

**Multi-Jurisdictional Hazard Mitigation Plan**

Saratoga County, New York

December 5, 2019

Hazard of Concern	Type of Mitigation Action					
	Prevention	Property Protection	Public Education and Awareness	Natural Resource Protection	Emergency Services	Structural Projects

Notes:

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

## Prioritization of Mitigation Initiatives

**Table 9.27-7 Prioritization of Mitigation Initiatives of the Village of Stillwater**

Initiative #	# of Objectives Met	Benefits	Costs	Do Benefits equal or exceed Costs? (Yes or No)	Is project Grant eligible? (Yes or No)	Can Project be funded under existing programs/budgets? (Yes or No)	Priority (High, Med., Low)
VSW-1a	8	H	H	Y	Y	N	M-H*
VSW-1b	8	H	H	Y	Y	N	M-H*
VSW-2	8	M	L	Y	N	Y	H
VSW-3	28	M	M	Y	N (Yes for 5-year update)	Y	H
VSW-4	11	L	L	Y	N	Y	H
VSW-5	5	M	L	Y	N	Y	M
VSW-6	35	M	L	Y	N	Y	H
VSW-7	28	H	L-M	Y	Dependent on specific initiative	Dependent on specific initiative	M-H (dependent)
VSW-8	6	M	M-L	Y	Y	Y (local match)	M
VSW-9	3	M	M	Y	Y	Y (local match)	M
VSW-10	6	M	M	Y	Y	Y (local match)	M
VSW-11	6	M	M	Y	N	Y	H
VSW-12	4	M	L	Y	N	Y	M
VSW-13	3	L	L	Y	N	Y	M
VSW-14	6	M	L-M	Y	N	Y (local match)	M
VSW-15	3	M	L-M	Y	N	Y	M
VSW-16	3	M	L-M	Y	N	Y	M
VSW-17	4	M	L-M	Y	N	Y	M
VSW-18	4	M	L-M	Y	Dependent on specific initiative	Dependent on specific initiative	M-H (dependent)
VSW-19	3	L	L	Y	N	Y	M

### Multi-Jurisdictional Hazard Mitigation Plan

Saratoga County, New York

December 5, 2019



Initiative #	# of Objectives Met	Benefits	Costs	Do Benefits equal or exceed Costs? (Yes or No)	Is project Grant eligible? (Yes or No)	Can Project be funded under existing programs/budgets? (Yes or No)	Priority (High, Med., Low)
VSW-20	6	M	L-M	Y	Y	Y (local match)	M
VSW-21	4	M	L	Y	N	Y	M
VSW-22	2	L	L	Y	N	Y	M
VSW-23	3	M	L	Y	Dependent on specific initiative	Dependent on specific initiative	M-H (dependent)
VSW-24	2	M	L	Y	N	Y	M
VSW-25	2	H	M-H	Y	Y	Y (local match)	M
VSW-26	2	H	M-H	Y	Y	Y (local match)	M
VSW-27	3	M	M	Y	Y	Y (local match)	M
VSW-28	2	H	M-H	Y	Y	Y (local match)	M
VSW-29	2	H	M-H	Y	Y	Y (local match)	M
VSW-30	3	M	M	Y	Y	Y (local match)	M
VSW-31	2	M	M	Y	Y	Y (local match)	M
VSW-32	2	M	M	Y	Y	Y (local match)	M
VSW-33	2	M	M	Y	Y	Y (local match)	M
VSW-34	3	M	M	Y	Y	Y (local match)	M
VSW-35	3	M	M	Y	Y	Y (local match)	M
VSW-36	3	M	M	Y	Y	Y (local match)	M
VSW-37	3	M	M	Y	Y	Y (local match)	M
VSW-38	2	M	M	Y	Y	Y (local match)	M
VSW-39	2	M	M	Y	Y	Y (local match)	M

### Multi-Jurisdictional Hazard Mitigation Plan

Saratoga County, New York

December 5, 2019

9.27-25

Initiative #	# of Objectives Met	Benefits	Costs	Do Benefits equal or exceed Costs? (Yes or No)	Is project Grant eligible? (Yes or No)	Can Project be funded under existing programs/budgets? (Yes or No)	Priority (High, Med., Low)
--------------	---------------------	----------	-------	--	--	--	----------------------------

Notes: H = High. L = Low. M = Medium. N = No. N/A = Not applicable. Y = Yes.

\*This initiative has a Medium priority based on the prioritization scheme used in this planning process (implementation based on grant funding), however it is recognized that addressing repetitive and severe repetitive loss properties is considered a high priority by Federal Emergency Management Agency (FEMA) and NYS Division of Homeland Security and Emergency Services (NYS DHSES) (as expressed in the State HMP), and thus shall be considered a High priority for all participants in the planning process.

### Explanation of Priorities

- **High Priority** - A project that meets multiple objectives (i.e., multiple hazards), benefits exceeds cost, has funding secured or is an on-going project and project meets eligibility requirements for the Hazard Mitigation Grant Program (HMGP) or Pre-Disaster Mitigation Grant Program (PDM) programs. High priority projects can be completed in the short term (1 to 5 years).
- **Medium Priority** - A project that meets goals and objectives, benefits exceeds costs, funding has not been secured but project is grant eligible under, HMGP, PDM or other grant programs. Project can be completed in the short term, once funding is completed. Medium priority projects will become high priority projects once funding is secured.
- **Low Priority** - Any project that will mitigate the risk of a hazard, benefits do not exceed the costs or are difficult to quantify, funding has not been secured and project is not eligible for HMGP or PDM grant funding, and time line for completion is considered long term (1 to 10 years). Low priority projects may be eligible other sources of grant funding from other programs. A low priority project could become a high priority project once funding is secured as long as it could be completed in the short term.

Prioritization of initiatives was based on above definitions: Yes.

Prioritization of initiatives was based on parameters other than stated above: Not Applicable.

### 9.27.6 National Flood Insurance Program Compliance

The Village of Stillwater (Village) participates in the NFIP and draws on a number of capabilities to carry out program requirements. The Village maintains a number of jurisdictional ordinances that ensure all construction is appropriate for the areas considered at risk to flooding: NFIP Flood Damage Prevention Ordinance (Village of Stillwater Flood Plan Law); a Stormwater Management Plan/Ordinance (MS 4 Program); ; and Site Plan Review Requirements (Village Zoning Law). The Village also formed other special purpose ordinances (Aquifer Law, Flood Mitigation Plan).

The Village is staffed with professionals whose expertise supports a high standard of floodplain management. In addition to employing a floodplain administrator, included on Village staff are

#### Multi-Jurisdictional Hazard Mitigation Plan

Saratoga County, New York

December 5, 2019

planners and engineers with knowledge of land development and land management practices; engineers and professionals trained construction practices related to buildings and infrastructure; technical staff with an understanding of natural hazards; surveyors; personnel trained in GIS applications; emergency managers; grant writers; and staff with expertise of training in benefit/cost analysis. Project review input from professionals serving in these technical positions provides guidance to property owners about how to build or rebuild in ways that minimize flood damage to persons and property.

The community also developed three mitigation actions to enhance NFIP program management. These include reviewing the vulnerability of facilities in hazard prone areas and determining the appropriate course of action (e.g. retrofitting vs relocation); reviewing the feasibility of becoming a member of the Community Rating System; and Pursue riverbank stabilization and erosion and sedimentation control projects.

The village does not currently have any properties that have experienced repetitive loss (RL) or severe repetitive losses (SRL) from flood. The village will continue to proactively mitigate at-risk properties and monitor NFIP claims for RL and SRL properties.

### **9.27.7 Future Needs to Better Understand Risk/Vulnerability**

None at this time.

### **9.27.8 Additional Comments**

No additional comments at this time.

### **9.27.9 Mitigation Worksheets**

See next page.

## Saratoga County Multi-Jurisdictional Hazard Mitigation Plan

**Name of Jurisdiction:** Village of Stillwater

NYS DHSES Action Worksheet			
Project Name:	Flooding on Ferry Lane (private road)		
Project Number:	TST-40		
Risk / Vulnerability			
Hazard of Concern:	Flooding		
Description of the Problem:	With major rainfall and/or snow and ice melt in the Spring, Ferry Lane is prone to flooding due to proximity to Hudson River.		
Action or Project Intended for Implementation			
Description of the Solution:	Work to find a solution that meets the challenges of this hazard being on a private road. Hire an engineering consultant to conduct a study of the area to develop comprehensive solution to divert floodwaters from the area.		
Is this project related to a Critical Facility?		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
(If yes, this project must intend to protect to the 500-year flood event or the actual worst damage scenario, whichever is greater.)			
Level of Protection:	100 Year Floodplain	Estimated Benefits (losses avoided):	Eliminate traffic shutdown and ensure emergency responders can gain timely access to the residences.
Useful Life:	50+ Years		
Estimated Cost:	\$15,000		
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	Short Term
Estimated Time Required for Project Implementation:	3 months	Potential Funding Sources:	Grant, Municipal Match
Responsible Organization:	Village Board	Local Planning Mechanisms to be Used in Implementation, if any:	Floodplain management plan
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	
	Upsize culverts	\$800,000	Not a comprehensive plan to move water out of the area.
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			

## Saratoga County Multi-Jurisdictional Hazard Mitigation Plan

**Name of Jurisdiction:** Village of Stillwater

NYS DHSES Action Worksheet			
Project Name:	Flooding on Bunce Lane		
Project Number:	TST-41		
Risk / Vulnerability			
Hazard of Concern:	Flooding		
Description of the Problem:	With major rainfall and/or snow and ice melt in the Spring, Bunce Lane is prone to flooding due to proximity to Hudson River. Loss of power could result in pump station flooding at pump station behind Library on Bunce Lane.		
Action or Project Intended for Implementation			
Description of the Solution:	Hire an engineering consultant to conduct a study of the area to develop comprehensive solution to divert floodwaters from the area and protect pump station infrastructure. Village has already installed an elevated generator at the main pump station to alleviate any concern with sewage in the event of a power loss.		
Is this project related to a Critical Facility?		Yes	<input checked="" type="checkbox"/> <input type="checkbox"/>
		No	<input type="checkbox"/> <input type="checkbox"/>
(If yes, this project must intend to protect to the 500-year flood event or the actual worst damage scenario, whichever is greater.)			
Level of Protection:	100 Year Floodplain	Estimated Benefits (losses avoided):	Eliminate traffic shutdown and ensure emergency responders can gain timely access to the residences. Protect pump station from flood waters.
Useful Life:	50+ Years		
Estimated Cost:	\$15,000		
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	Medium Term
Estimated Time Required for Project Implementation:	3 months	Potential Funding Sources:	Grant, Municipal Match
Responsible Organization:	Village Board	Local Planning Mechanisms to be Used in Implementation, if any:	Floodplain management plan
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	
	Upsize culverts	\$800,000	Not a comprehensive plan to move water out of the area.
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			