

9.26 Town of Stillwater

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

- Jurisdictional Annex Update (Contact Information)
- Hazard Ranking
- NYS Mitigation Action Worksheets

9.26.1 Hazard Mitigation Plan Point of Contact

Primary Point of Contact	Alternate Point of Contact
Sue Cunningham, Town Clerk 881 Hudson Ave.; Stillwater, NY 12170 scunningham@stillwaterny.org (518) 664-6148	Edward Kinowski, Supervisor 881 Hudson Ave.; Stillwater, NY 12170 ekinowski@stillwaterny.org (518) 664-6148

9.26.2 Town Profile

Population

8,436 (American Community Survey 5-Year 2016 Estimates)

Location

The Town of Stillwater is located in the eastern section of Saratoga County. It is bounded on the north by Saratoga, on the east by the county line, on the south by Halfmoon and on the west by Malta. Stillwater is the principal village. It is located near the center of the eastern border of the town on the bank of the Hudson River. Mechanicville is also partially located within the town. The east town line is the border of Rensselaer County and Washington County, marked by the Hudson River. US Route 4, partly conjoined with New York State Route 32, follows the Hudson River through the town. New York State Route 423 is an east-west highway in the northern part of Stillwater. New York State Route 9P is a north-south highway in the northwestern part of the town by Saratoga Lake. New York State Route 67 runs along the south town line.

According to the U.S. Census Bureau, the town has a total area of 43.6 square miles, with 41.4 square miles of it land and 2.2 square miles (5.07-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

Multi-Jurisdictional Hazard Mitigation Plan

Saratoga County, New York
September 18, 2019

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.

Brief History

The Stillwater area was occupied by the Iroquois and Mohican natives when the colonial period began. In 1709, Peter Schuyler built Fort Ingoldsby in town because of its location on the frontier of the French and Indian Wars. A replica of Schuyler's fort currently serves as the Stillwater Blockhouse Museum. Settlers began arriving after 1730. During the American Revolution, residents participated in the war, and part of the Battle of Saratoga was fought in the town so that the town now refers to itself as the turning point of the American Revolution. Stillwater was established as a town in 1791, when Saratoga County was formed. In 1816, the community of Stillwater set itself off from the town by incorporating as a village. Another small part of the town was lost in 1859 when Mechanicville became a village.

Governing Body Format

This information is not available at this time.

Growth/Development Trends

According to the Town of Stillwater Comprehensive Plan, the Luther Forest Technology Campus (LFTC) Planned Development District (PDD), located on the Malta-Stillwater Town Line approximately one-half mile southeast of Dunning Street and Route 9 in the Town of Malta, and west of Cold Springs Road in the Town of Stillwater is an area of future growth and development. The project site contains approximately 1,350 acres of land and proposed to contain a mixture of industrial, commercial, and residential uses, including up to four silicon computer chip manufacturing facilities, 2-million square feet of support uses such as a hotel/conference center, support businesses/offices, and up to 50 residential homes. Development of the LFTC is planned to occur in five phases over a fifteen to twenty-five-year build-out period (The Chazen Companies, 2005).

9.26.3 Town-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 9.26-1 **Error! Reference source not found.** summarizes the Town of Stillwater's ranking of the natural hazards based on probability of occurrence and impacts to the Town. The most notable differences between the Town of Stillwater and the County's hazard ranking is that the Town ranked drought and severe winter weather high and the County ranked these hazards medium.

Multi-Jurisdictional Hazard Mitigation Plan

Table 9.26-1 Town of Stillwater Hazard Ranking

Rank #	Hazard Type	Probability of Occurrence	Risk Ranking Score ^a	Hazard Ranking ^b	County Hazard Ranking ^b
6	Drought	Infrequent	20	Medium	Low
7	Earthquake	Rare	18	Low	Low
4	Extreme Temperature	Infrequent	36	Medium	High
1	Flood (riverine, flash, coastal and urban flooding)	Frequent	72	High	High
9	Ground Failure	Rare	6	Low	Medium
5	Invasive Species	Infrequent	24	Medium	Medium
2	Severe Storm (windstorms, thunderstorms, hail, lightning and tornados)	Regular	54	High	High
3	Severe Winter Storm (heavy snow, blizzards, ice storms)	Regular	48	High	Medium
7	Wildfire	Infrequent	18	Low	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

9.26.4 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 9.26-2 Legal and Regulatory Capability of the Town 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	Y	NYS Building Code 2007
2) Zoning Ordinance	Y	Y	Y	N	Not provided
3) Subdivision Ordinance	Y	N	N	N	Not provided
4) NFIP Flood Damage Prevention Ordinance (if you are in the NFIP, you must have this.)	Y	Y	Y	Y	Not provided
5) Growth Management	Y	Y	Y	N	Not provided
6) Floodplain Management / Basin Plan	Y	Y	Y	N	Not provided
7) Stormwater Management Plan/Ordinance	Y	N	N	Y	Not provided
8) Comprehensive Plan / Master Plan/ General Plan	Y	N	N	N	Stillwater Comprehensive Plan, adopted 2006
9) Capital Improvements Plan	Y	N	N	N	Not provided
10) Site Plan Review Requirements	Y	Y	Y	N	Not provided
11) Open Space Plan	Y	N	N	N	Not provided
12) Economic Development Plan	N	Y	Y	N	Not provided
13) Emergency Response Plan	Y	N	N	Y	Not provided
15) Post Disaster Recovery Plan	Y	N	N	N	Not provided
16) Post Disaster Recovery Ordinance	Y	N	N	N	Not provided
17) Real Estate Disclosure req.	N	N	N	N	Not provided
18) Other [Special Purpose Ordinances (i.e., critical or sensitive areas)]	Y	Y	Y	N	Flood Mitigation Plan, Final Draft 2002

Multi-Jurisdictional Hazard Mitigation Plan

Saratoga County, New York
September 18, 2019

Administrative and Technical Capability

Table 9.26-3 Administrative and Technical Capability of the Town 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	Not provided	Not provided
2) Engineer(s) or Professional(s) trained in construction practices related to buildings and/or infrastructure	Not provided	Not provided
3) Planners or engineers with an understanding of natural hazards	Not provided	Not provided
4) Floodplain Administrator	Y	Dave Conners – Building Inspector
5) Surveyor(s)	Not provided	Not provided
6) Personnel skilled or trained in “GIS” applications	Not provided	Not provided
7) Scientist familiar with natural hazards in the Town of Stillwater.	Not provided	Not provided
8) Emergency Manager	Not provided	Not provided
9) Grant Writer(s)	Not provided	Not provided
10) Staff with expertise or training in benefit/cost analysis	Not provided	Not provided

Fiscal Capability

Table 9.26-4 Fiscal Capability of the Town of Stillwater

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

Multi-Jurisdictional Hazard Mitigation Plan

Financial Resources	Accessible or Eligible to use (Yes/No/Don't know)
11) Other	Not provided

Community Classifications

Table 9.26-5 Community Classifications of the Town of Stillwater

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

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;
- 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/>.

Multi-Jurisdictional Hazard Mitigation Plan

Saratoga County, New York
September 18, 2019

9.26.5 Mitigation Strategy

Proposed Hazard Mitigation Initiatives

Table 9.26-6 Proposed Hazard Mitigation Initiatives of the Town 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
TST-1	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.	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	Long 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
TST-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.	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	Ongoing
TST-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
TST-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	Ongoing

Multi-Jurisdictional Hazard Mitigation Plan

Saratoga County, New York

September 18, 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
TST-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	Short Term
TST-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	Ongoing
TST-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, and 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	Short Term
TST-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	Long Term

Multi-Jurisdictional Hazard Mitigation Plan

Saratoga County, New York

September 18, 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
TST-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	Long Term
TST-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	Short Term
TST-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	Ongoing
TST-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	Town Board		Medium	Operating budget	Ongoing

Multi-Jurisdictional Hazard Mitigation Plan

Saratoga County, New York

September 18, 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
TST-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	Ongoing
TST-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; Engineering Department		Low	Local budget	Short Term
TST-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	Short Term
TST-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
TST-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, 2-5	Fire Department	County, NYS	Low to Medium	Local budget	Ongoing
TST-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	Short Term

Multi-Jurisdictional Hazard Mitigation Plan

Saratoga County, New York

September 18, 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
TST-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	Dependent on initiatives	Short Term

Multi-Jurisdictional Hazard Mitigation Plan

Saratoga County, New York

September 18, 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
TST-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	Not provided	Short Term

Multi-Jurisdictional Hazard Mitigation Plan

Saratoga County, New York

September 18, 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
TST-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	Ongoing – Long-term depending on initiative
TST-21	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
TST-22	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	Engineering Department		Low	Local budget	Short Term

Multi-Jurisdictional Hazard Mitigation Plan

Saratoga County, New York

September 18, 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
TST-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	Engineering Department		Low	Local budget	Short Term
TST-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	Town Board		Low	Local budget	Short Term
TST-25	Pursue riverbank stabilization and erosion and sedimentation control 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	Short Term
TST-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	Completed
TST-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	Short Term

Multi-Jurisdictional Hazard Mitigation Plan

Saratoga County, New York

September 18, 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
TST-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	Short Term
TST-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		Medium-High Dependent on initiative	FEMA HMA	Ongoing
TST-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; Engineering Department		Medium-High Dependent on initiative		Ongoing – Long-term depending on initiative

Multi-Jurisdictional Hazard Mitigation Plan

Saratoga County, New York

September 18, 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
TST-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	Short Term
TST-32	Maintain and improve (increase conveyance) channel for the existing drainage ditch along its 2,500-feet 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	Short Term

Multi-Jurisdictional Hazard Mitigation Plan

Saratoga County, New York

September 18, 2019

9.26-17

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
TST-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; Department of Engineering		Medium-High Dependent on initiative	FEMA HMA	Short Term
TST-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 on initiative	FEMA HMA	Short Term
TST-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	Short Term

Multi-Jurisdictional Hazard Mitigation Plan

Saratoga County, New York

September 18, 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
TST-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
TST-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
TST-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 – Long-term depending on initiative

Multi-Jurisdictional Hazard Mitigation Plan

Saratoga County, New York

September 18, 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
TST-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	Municipality		Medium-High Dependent on initiative	FEMA HMA	Ongoing
TST-40	Hire a consultant to conduct a study of the flooding caused by rainfall and snowmelt on Lohnes Road. The town will work with the consultant and find the best possible solution to mitigate against the flooding hazard.	Existing	Flood	1, 3	1-1, 1-2, 1-5, 3-5	NFIP Floodplain Administrator; Engineering Department	Highway Department	\$15,000	Grant, Municipal Match	Short Term
TST-41	Hire a consultant to conduct a study of the flooding caused by rainfall and snowmelt at 1940 State Route 4. The town will work with the consultant and find the best possible solution to mitigate against the flooding hazard.	Existing	Flood	1, 3	1-1, 1-2, 1-5, 3-5, 4-1	NFIP Floodplain Administrator; Engineering Department	Highway Department	\$15,000	Grant, Municipal Match	Short Term

*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.

Multi-Jurisdictional Hazard Mitigation Plan

Saratoga County, New York

September 18, 2019

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 Town has selected a comprehensive range of actions/projects.

Table 9.26-7 Analysis of Mitigation Actions of the Town of Stillwater

Hazard of Concern	Type of Mitigation Action					
	Prevention	Property Protection	Public Education and Awareness	Natural Resource Protection	Emergency Services	Structural Projects
Drought	TST-3, TST-7, TST-11-16	TST-3, TST-7	TST-3, TST-7	TST-3, TST-7	TST-3, TST-5, TST-6, TST-7, TST-10	TST-3, TST-7
Earthquake	TST-3, TST-7, TST-11-16	TST-3, TST-7	TST-3, TST-7	TST-3, TST-7	TST-3, TST-5, TST-6, TST-7, TST-10	TST-3, TST-7
Extreme Temperatures	TST-3, TST-7, TST-11-16	TST-3, TST-7	TST-3, TST-7	TST-3, TST-7	TST-3, TST-5, TST-6, TST-7, TST-10	TST-3, TST-7
Flooding (riverine, flash, coastal and urban flooding)	TST-2, TST-3, TST-4, TST-7, TST-8, TST-11-19, TST-21, TST-23, TST-24, TST-38, TST-39	TST-1a and b, TST-2, TST-3, TST-4, TST-7, TST-25-26, TST-28-33, TST-36-37	TST-1a and b, TST-2, TST-3, TST-4, TST-7	TST-3, TST-7, TST-25-28, TST-31, TST-33, TST-34-37	TST-2, TST-3, TST-5, TST-6, TST-7, TST-8, TST-10	TST-3, TST-7, TST-9
Ground Failure	TST-3, TST-7, TST-11-16	TST-3, TST-7	TST-3, TST-7	TST-3, TST-7	TST-3, TST-5, TST-6, TST-7, TST-10	TST-3, TST-7
Invasive Species	TST-3, TST-7, TST-11-16	TST-3, TST-7	TST-3, TST-7	TST-3, TST-7	TST-3, TST-5, TST-6, TST-7, TST-10	TST-3, TST-7

Hazard of Concern	Type of Mitigation Action					
	Prevention	Property Protection	Public Education and Awareness	Natural Resource Protection	Emergency Services	Structural Projects
Severe Storms (windstorms, thunderstorms, hail, lightning and tornados)	TST-2, TST-3, TST-4, TST-7, TST-11-8, TST-21	TST-1a and b, TST-2, TST-3, TST-4, TST-7	TST-1a and b, TST-2, TST-3, TST-4, TST-7	TST-3, TST-7	TST-2, TST-3, TST-5, TST-6, TST-7, TST-10	TST-3, TST-7
Severe Winter Storm (heavy snow, blizzards, ice storms)	TST-3, TST-7, TST-11-16	TST-3, TST-7	TST-3, TST-7	TST-3, TST-7	TST-3, TST-5, TST-6, TST-7, TST-10	TST-3, TST-7
Wildfire	TST-3, TST-7, TST-11-16	TST-3, TST-7	TST-3, TST-7	TST-3, TST-7	TST-3, TST-5, TST-6, TST-7, TST-10	TST-3, TST-7

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.

Multi-Jurisdictional Hazard Mitigation Plan

Saratoga County, New York

September 18, 2019

Prioritization of Mitigation Initiatives

Table 9.26-8 Prioritization of Mitigation Initiatives of the Town 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)
TST-1a	8	H	H	Y	Y	N	M-H*
TST-1b	8	H	H	Y	Y	N	M-H*
TST-2	8	M	L	Y	N	Y	H
TST-3	28	M	M	Y	N (Yes for 5-year update)	Y	H
TST-4	11	L	L	Y	N	Y	H
TST-5	5	M	L	Y	N	Y	M
TST-6	35	M	L	Y	N	Y	H
TST-7	28	H	L-M	Y	Dependent on specific initiative	Dependent on specific initiative	M-H (dependent)
TST-8	6	M	M-L	Y	Y	Y (local match)	M
TST-9	3	M	M	Y	Y	Y (local match)	M
TST-10	6	M	M	Y	Y	Y (local match)	M
TST-11	6	M	M	Y	N	Y	H
TST-12	4	M	L	Y	N	Y	M
TST-13	3	L	L	Y	N	Y	M
TST-14	6	M	L-M	Y	N	Y (local match)	M
TST-15	3	M	L-M	Y	N	Y	M
TST-16	3	M	L-M	Y	N	Y	M
TST-17	4	M	L-M	Y	N	Y	M
TST-18	4	M	L-M	Y	Dependent on specific initiative	Dependent on specific initiative	M-H (dependent)
TST-19	3	L	L	Y	N	Y	M
TST-20	6	M	L-M	Y	Y	Y (local match)	M
TST-21	4	M	L	Y	N	Y	M
TST-22	2	L	L	Y	N	Y	M
TST-23	3	M	L	Y	Dependent on specific initiative	Dependent on specific initiative	M-H (dependent)
TST-24	2	M	L	Y	N	Y	M
TST-25	2	H	M-H	Y	Y	Y (local match)	M

Multi-Jurisdictional Hazard Mitigation Plan

Saratoga County, New York

September 18, 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)
TST-26	2	H	M-H	Y	Y	Y (local match)	M
TST-27	3	M	M	Y	Y	Y (local match)	M
TST-28	2	H	M-H	Y	Y	Y (local match)	M
TST-29	2	H	M-H	Y	Y	Y (local match)	M
TST-30	3	M	M	Y	Y	Y (local match)	M
TST-31	2	M	M	Y	Y	Y (local match)	M
TST-32	2	M	M	Y	Y	Y (local match)	M
TST-33	2	M	M	Y	Y	Y (local match)	M
TST-34	3	M	M	Y	Y	Y (local match)	M
TST-35	3	M	M	Y	Y	Y (local match)	M
TST-36	3	M	M	Y	Y	Y (local match)	M
TST-37	3	M	M	Y	Y	Y (local match)	M
TST-38	2	M	M	Y	Y	Y (local match)	M
TST-39	2	M	M	Y	Y	Y (local match)	M

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.

Multi-Jurisdictional Hazard Mitigation Plan

Saratoga County, New York

September 18, 2019

9.26-24

Prioritization of initiatives was based on above definitions: Yes.

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

9.26.6 National Flood Insurance Program Compliance

The Town of Stillwater (Town) participates in the NFIP and draws on a number of capabilities to carry out program requirements. The Town 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; a Floodplain Management/Basin Plan; Stormwater Management Plan/Ordinance; and Site Plan Review Requirements. The Town also has other special ordinances (Flood Mitigation Plan, Final Draft 2002).

The Town is staffed with professionals whose expertise supports a high standard of floodplain management. The Town also employs a floodplain administrator. 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 prepare/Update the Town stormwater management plan and focus on sub- basins where there is chronic flooding..

The Town has is also reviewing how to best address problems arising from the presence of a repetitive loss (RL) property in the jurisdiction that is located in the special flood hazard area (SFHA). The property is located along Route 4. The Town will conduct outreach to the owners of this property and discuss with the owners the possibility of elevating or acquiring the property. Town officials will pursue FEMA Hazard Mitigation Assistance (HMA) funding in the future should property owners' express interest in these mitigation opportunities.

9.26.7 Future Needs to Better Understand Risk/Vulnerability

None at this time.

9.26.8 Additional Comments

No additional comments at this time.

9.26.9 NYS Mitigation Action Worksheet

See next page.

Saratoga County Multi-Jurisdictional Hazard Mitigation Plan

Name of Jurisdiction: Town of Stillwater

NYS DHSES Action Worksheet			
Project Name:	Flooding at Lohnes Road		
Project Number:	TST-40		
Risk / Vulnerability			
Hazard of Concern:	Flooding		
Description of the Problem:	Heavy snowmelt and major rain events cause severe culvert erosion and roadway washouts.		
Action or Project Intended for Implementation			
Description of the Solution:	Hire a consultant to conduct a study of the flooding caused by rainfall and snowmelt. The town will work with the consultant and find the best possible solution to mitigate against the flooding hazard.		
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 mitigate against emergency
Useful Life:	50+ Years		
Estimated Cost:	\$15,000		
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	ASAP
Estimated Time Required for Project Implementation:	3 months	Potential Funding Sources:	Grant, Municipal Match
Responsible Organization:	Town of Stillwater	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	\$1,000,000	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: Town of Stillwater

NYS DHSES Action Worksheet			
Project Name:	Flooding at 1940 State Route 4		
Project Number:	TST-41		
Risk / Vulnerability			
Hazard of Concern:	Flooding		
Description of the Problem:	Major weather rain events causes the Hudson River to rise and flood our Park land and surrounding area active farm lands. Additionally, causes flooding of NYS Route 4. Flood plain backwash inlets & outlets are plugged with growth and needs remediation.		
Action or Project Intended for Implementation			
Description of the Solution:	Hire a consultant to conduct a study of the flooding caused by rainfall and snow melt. The town will work with the consultant and find the best possible solution to mitigate against the flooding hazard.		
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):	Prevent loss of valuable Town Park Land and Structures, farm crops and shut down of major highway.
Useful Life:	50+ Years		
Estimated Cost:	\$20,000		
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	ASAP
Estimated Time Required for Project Implementation:	3 months	Potential Funding Sources:	Grant, Municipal Match
Responsible Organization:	Town of Stillwater	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	\$1,000,000	Not a comprehensive plan to move water out of the area. Will not solve problem with regular clogging.
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			