

## 9.1 Saratoga County

This section presents the jurisdictional annex for Saratoga County. The county provided the following updates that were incorporated into this annex:

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

### 9.1.1 Hazard Mitigation Plan Point of Contact

Primary Point of Contact	Alternate Point of Contact
Carl Zelman, Director 25 West High Street; Ballston Spa, NY 12020 (518) 885 – 2232 czeilman@saratogacountyny.gov	Mike Stanley, Emergency Services Specialist 25 West High Street; Ballston Spa, NY 12020 (518) 885 – 2232 mstanley@saratogacountyny.gov

### 9.1.2 County Profile

Please refer to Section 4 of this Plan for details on Saratoga County’s population, location, climate, history, growth and development.

### 9.1.3 County-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 9.1-1 summarizes Saratoga County’s ranking of the hazards based on the probability of occurrence and impacts to the county.

**Table 9.1-1 Saratoga County Hazard Ranking**

Rank #	Hazard Type	Probability of Occurrence	Risk Ranking Score <sup>a</sup>	Hazard Ranking <sup>b</sup>
8	Drought	Infrequent	16	Low
7	Earthquake	Rare	17	Low
2	Extreme Temperature	Frequent	48	High
1	Flood (riverine, flash, coastal and urban flooding)	Frequent	56	High
4	Ground Failure	Regular	39	Medium
6	Invasive Species	Frequent	24	Medium
2	Severe Storm (windstorms, thunderstorms, hail, lightning and tornados)	Frequent	48	High

Rank #	Hazard Type	Probability of Occurrence	Risk Ranking Score <sup>a</sup>	Hazard Ranking <sup>b</sup>
5	Severe Winter Storm (heavy snow, blizzards, ice storms)	Frequent	36	Medium
9	Wildfire	Rare	8	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

## 9.1.4 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 9.1-2 Legal and Regulatory Capability of Saratoga County**

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	Not provided	N	Y	N	Regulated at local and state levels
2) Zoning Ordinance	Not provided	N	N	N	Regulated at local level
3) Subdivision Ordinance	Not provided	N	N	N	Regulated at local level
4) National Flood Insurance Program (NFIP) Flood Damage Prevention Ordinance (if you are in the NFIP, you must have this.)	Not provided	Y	Y	Y	Regulated at local level
5) Growth Management	Not provided	N	N	N	Regulated at the local level
6) Floodplain Management / Basin Plan	Not provided	Y	Y	N	Soil and Water has prepared stream management plans for some communities?

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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)
7) Stormwater Management Plan/Ordinance	Not provided	N	Y	Y	Regulated at the local level
8) Comprehensive Plan / Master Plan/ General Plan	Not provided	N	N	N	Regulated at the local level
9) Capital Improvements Plan (CIP)	Not provided	N	N	N	Not provided
10) Site Plan Review Requirements	Not provided	Y	Y	N	Regulated at the local level
11) Open Space Plan	Not provided	Not provided	Not provided	Not provided	Not provided
12) Economic Development Plan	Not provided	N	N	N	Not provided
13) Emergency Response Plan	Not provided	N	Y	Y	Not provided
14) Shoreline Management Plan	Not provided	Not provided	Not provided	Not provided	Not provided
15) Post Disaster Recovery Plan	Not provided	N	N	N	N/A
16) Post Disaster Recovery Ordinance	Not provided	N	N	N	Not provided
17) Real Estate Disclosure req.	Not provided	Not provided	Not provided	Not provided	N/A
18) Other [Special Purpose Ordinances (i.e., critical or sensitive areas)]	Not provided	Not provided	Not provided	Not provided	Green Infrastructure Plan

## Administrative and Technical Capability

Table 9.1-3 Administrative and Technical Capability of Saratoga County

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	County Planning
2) Engineer(s) or Professional(s) trained in construction practices related to buildings and/or infrastructure	Y	Highway and Buildings Departments

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Staff/ Personnel Resources	Available (Y or N)	Department/ Agency/Position
3) Planners or engineers with an understanding of natural hazards	Y	County Planning
4) Floodplain Administrator	Y	Local municipal designee
5) Surveyor(s)	Y	Highway Department
6) Personnel skilled or trained in "Geographic Information System" (GIS) applications	Y	County Planning
7) Scientist familiar with natural hazards in the County of Saratoga.	Y	Saratoga County Soil Water Conservation District
8) Emergency Manager	Y	Emergency Services
9) Grant Writer(s)	N	Some grant writing is done at the department level, but the county does not have a grant writer
10) Staff with expertise or training in benefit/cost analysis	N	Not provided

## Fiscal Capability

**Table 9.1-4 Fiscal Capability of Saratoga County**

Financial Resources	Accessible or Eligible to use (Yes/No/Don't know)
1) Community Development Block Grants (CDBG)	Have been used at the county level for economic development including direct loans to businesses and revolving loan program?
2) Capital Improvements Project Funding	Yes
3) Authority to Levy Taxes for specific purposes	Bonding
4) User fees for water, sewer, gas or electric service	Yes (Water and Sewer)
5) Impact Fees for homebuyers or developers of new development/homes	No
6) Incur debt through general obligation bonds	Have been used for construction of county buildings
7) Incur debt through special tax bonds	Yes
8) Incur debt through private activity bonds	No
9) Withhold public expenditures in hazard-prone areas	No
10) State sponsored grant programs such as Flood Control Assistance Account Program (FCAAP)	Yes
11) Other	

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## Community Classifications

**Table 9.1-5 Community Classifications of Saratoga County**

Program	Classification	Date Classified
Community Rating System (CRS)	N/A	N/A
Storm Ready	N/A	N/A
Firewise	N/A	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/>.

## 9.1.5 Mitigation Strategy

### Proposed Hazard Mitigation Initiatives

Table 9.1-6 Proposed Hazard Mitigation Initiatives of Saratoga County

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
SC-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	County	Municipality or District the property is located; 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
SC-2	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	County	Municipality or District the property is located; NYS DHSES; FEMA	High	FEMA Mitigation Grant Programs and local budget (or property owner) for cost share	Long Term

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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
SC-3	As appropriate, support 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	Municipality (likely through NFIP Floodplain Administrator)	County, NYS DHSES, ISO, FEMA	Low - Medium	Local Budget	Long Term
SC-4	Continue to support the implementation, monitoring, maintenance, and updating of this Plan, as defined in Section 7.0	New & Existing	All Hazards	All	All	Municipality (through mitigation planning point of contacts)	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
SC-5	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	Municipality (likely through NFIP Floodplain Administrator)	NYS DHSES, ISO, FEMA	Low - Medium	Local Budget	Long Term

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Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals Met	Objectives Met	Lead	Support	Estimated Cost	Sources of Funding	Time line
SC-6	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	Municipal Emergency Manager with support from County OEM and NYS DHSES	County Emergency Management, NYS DHSES	Low - Medium	Local Budget	Long Term
SC-7	Implement proactive stream/drainage maintenance system to reduce flooding in hazard areas.	Existing	Flood, Severe Storm	1	1-2, 1-9	SWCD	Highway	Low-High	Various sources	Ongoing
SC-8	Provide backup power at critical facilities where necessary	Existing	All Hazards	1, 3	1-1, 3-4, 3-6	Emergency Services		Med	County, Homeland	Short Term
SC-9	Enhance operations of Emergency Operations Center through technological upgrades, including improved communications systems	Existing	All Hazards	3	3-3, 3-4, 3-5	Emergency Services		Low-Medium	County, Homeland Security and other sources	Short Term

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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
SC-10	Expand public education on ways to protect property before and during hazard events	Existing	All Hazards	2	2-1, 2-2, 2-3, 2-4, 2-5	Emergency Services		Low	County and other available sources	Long Term
SC-11	Enhance emergency preparedness awareness by active participation in training exercises at both the county and local level	Existing	All Hazards	All	All	Emergency Services	NYNYS DHSES, FEMA, Law Enforcement, Local Fire Districts, Health Department , RACES, Highway	Low	County, Homeland Security and other sources	Long Term
SC-12	Continue to provide tree trimming along roadways	Existing	Severe Storm, Severe Winter Storm	1	1-1, 1-3, 1-4	Highway	Emergency Services	Low	Local Funding	Long Term
SC-13	Interagency cooperation with Public Health, DSS, Aging and other agencies to identify vulnerable populations (elderly, homebound, homeless)	Existing	All Hazards	1, 5	1-4, 5-2	Emergency Services	Public Health, DSS, Aging	Low	County and other available sources	Long Term

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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
SC-14	Develop a toolbox series on planning topics, model laws, and regulatory tools	New & Existing	All Hazards	1, 2	1-6, 2-5	County EDT&P	NYS DOS, NYS DEC, NYS OPRHP, NYS DHCR, Greenway and other agencies	Low - High	NYS DOS, NYS DHCR and other NYS and Federal sources	Long Term
SC-15	Assist local municipalities with training opportunities for municipal planning and zoning officials utilizing updated FEMA floodplain maps	New	All Hazards	5	5-2, 5-3	County EDT&P with support from NYS and other sources	NYS DOS, NYS DEC, NYPF and other agencies	Low - High	NYS and other sources	Long Term
SC-16	Encourage the incorporation of conservation subdivision principals into subdivision review	New	Flood, Ground Failure	1, 4	1-7, 1-8, 4-5	County EDT&P and county agency resources	NYS DOS, NYS DEC and other agencies; NYPF	Low	CWC Local Technical Assistance Grants, NYS DOS Planning Grants, Greenway and other NYS and Federal sources	Long Term

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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
SC-17	Assist local municipalities in developing and updating site plan, subdivision, and zoning laws with specific development standards and guidelines	New	Flood, Ground Failure	4	4-4, 4-5	EDT&P can provide models and templates but it's up to the municipality to decide whether or not to adopt standards and guidelines	NYS DOS, NYS DEC and other agencies; NYPF	Low-Medium	Not provided	Long Term
SC-18	Encourage municipalities to incorporate sound development principals when reviewing development proposals	New	All Hazards	4	4-4, 4-5	EDT&P can provide templates but it's up to the municipality to decide whether or not to adopt standards and guidelines	NYS DOS, NYS DEC and other agencies; NYPF	Low	Not provided	Long Term
SC-19	Encourage towns and villages to adopt comprehensive plans and land use regulations to foster sound development principals	New	All Hazards	4	4-1, 4-2, 4-3, 4-4, 4-5	EDP&T and county agency resources	NYS DOS, and other agencies	Low - High	TBD	Long Term

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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
SC-20	Create and maintain a natural resources inventory for Saratoga County	New & Existing	Flood, Ground Failure	1, 4	1-4, 4-4	TBD	NYS DOS, NYS DEC and other agencies	Low - High	TBD	Long Term
SC-21	Authorize the Saratoga County Planning Board to review subdivisions under NYS GML239	New	All Hazards	All	All	Not provided	Not provided	Not provided	Not provided	Long Term
SC-22	Undertake a countywide comprehensive plan that would gather input from individual municipalities and take into consideration existing local comprehensive plans and regulatory tools to implement sound development principals	New & Existing	All Hazards	All	All	Not provided	NYS DOS, NYS	Medium	NYS DHCR TA Grants, NYS DOS, Greenway and other sources	Long Term
SC-23	Work with existing agencies and organizations to develop open space strategies and conservation standards to be met by new development projects	New	Flood, Ground Failure	4	4-1, 4-2, 4-3, 4-4, 4-5	county agency resources	NYS DOS, NYS DEC and other agencies	Low - High	TBD	Long Term

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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
SC-24	Conduct continued public and stakeholder outreach to promote awareness of this Plan and obtain ongoing public and stakeholder input. Specific activities shall include maintaining the public HMP website, media releases, maintaining copies of the plan in town halls, and may include public meetings.	Existing	All Hazards	1, 5	1-4, 5-3	SC Public Information Office; Local OEMs and stakeholders			Low	County Operating budget

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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
SC-25	Identify evacuation routes and how this information is accessible to the public. This should include pre-disaster actions required to make evacuation routes accessible. Additionally, this should include provisions available to assist those with access and functional needs.	N/A	All Hazards	1	1-3	Not provided		Not provided	County	Short Term
SC-26	Promote information technology protection by continuing best practice of network security, including redundant firewalls and education of county employees	Existing	All Hazards	1, 3	1-1, 3-6	County IT		Low	County	Short Term
SC-27	Implement the Fonda Road culvert up-sizing to increase the capacity of the county culvert and Canal Corp culvert to handle demand	Existing	Flood	1,3	1-1, 1-2, 3-6	Saratoga County	NYS Canal Corp	Medium	County, State, Federal	Short Term

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Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals Met	Objectives Met	Lead	Support	Estimated Cost	Sources of Funding	Time line
SC-28	Conduct education and outreach before and after flood through outreach at fairs, public messaging, and educational material and talks	N/A	Flood	2	2-1, 2-2, 2-3, 2-4, 2-5	Saratoga County Department of Public Health		Low	Grants/ Volunteer Programming	Short Term
SC-29	Utilize county social services to update Special Needs Registry. Develop a method to maintain and remove individuals from the list.	N/A	All Hazards	2	2-1	Saratoga County Office of Emergency Management	County Social Services	Low	County	Short Term
SC-30	Determine depth of infrastructure and replace shallow low-pressure lines.	Existing	Extreme Temperatures	1, 3	1-1, 3-6	Saratoga County Sewer District #1		High	User Rates; State Grants	Long Term

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Initiative	Mitigation Initiative	Applies to New and/or Existing Structures*	Hazard(s) Mitigated	Goals Met	Objectives Met	Lead	Support	Estimated Cost	Sources of Funding	Time line
SC-31	Conduct I & I reduction, including: raising manhole structures, creating/updating GIS database, access to infrastructure including floodplain areas, identify infrastructure in floodplain areas, and slip lining/replacement of lines and structures	Existing	Flood	1, 3	1-1, 3-6	Saratoga County	NYS Canal Corp	Medium	County; NYS; Federal	Short Term
SC-32	Conduct outreach to dairy producers and farmers to educate and familiarize them with extreme temperature and drought vulnerabilities and connect the producers with farm advisors and extension personnel who can assist with developing heat stress abatement practices and strategies for their specific situations.	N/A	Extreme Temperatures, Drought	2, 3	2-2, 2-5, 3-5	Saratoga County Office of Emergency Management		Low	Existing County Budget	Short Term

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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
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\*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 County has selected a comprehensive range of actions/projects.

**Table 9.1-7 Analysis of Mitigation Actions of the County of Saratoga**

Hazard of Concern	Type of Mitigation Action					
	Prevention	Property Protection	Public Education and Awareness	Natural Resource Protection	Emergency Services	Structural Projects
Drought	SC-4, 6, 24, 26, 29, 32	SC-4, 6	SC-4, 32	SC-4, 32	SC-4, 9, 11, 13	SC-4
Earthquake	SC-4, 6, 19, 24, 26, 29	SC-4, 6, 8, 19	SC-4, 10	SC-4	SC-4, 8, 9, 11, 13	SC-4
Extreme Temperatures	SC-4, 6, 12, 24, 26, 29, 32	SC-4, 6	SC-4, 32	SC-4, 32	SC-4, 9, 11, 13	SC-4, 30
Flooding (riverine, flash, coastal and urban flooding)	SC-1, 2, 4, 5, 6, 7, 16, 17, 18, 19, 21, 22, 23, 24, 26, 29	SC-1, 2, 4, 5, 6, 7, 16, 17, 18, 19, 21, 22, 23	SC-1, 2, 4, 5, 6, 7, 16, 17, 18, 19, 21, 22, 23, 28	SC-4, 14, 15, 16, 17, 18, 19, 21, 22, 23	SC-4, 6, 9, 11, 13	SC-4, 27, 31
Ground Failure	SC-4, 6, 12, 20, 23, 24, 26, 29	SC-4, 6, 20, 23	SC-4, 5, 6, 7, 8, 9, 10	SC-4, 14, 20, 23	SC-4, 6, 9, 11, 13	SC-4
Invasive Species	SC-4, 6, 24, 26, 29	SC-4, 6	SC-4	SC-4	SC-4, 9, 11, 13	SC-4

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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)	SC-1, 2, 4, 6, 12, 24, 26, 29	SC-1, 2, 4, 6	SC-1, 2, 4, 10	SC-4	SC-4, 6, 8, 9, 11, 13	SC-4
Severe Winter Storm (heavy snow, blizzards, ice storms)	SC-4, 6, 12, 24, 26, 29	SC-4, 6	SC-4, 10	SC-4	SC-4, 6, 8, 9, 11, 13	SC-4
Wildfire	SC-4, 6, 24, 26, 29	SC-4, 6	SC-4	SC-4	SC-4, 9, 11, 13	SC-4

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.

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## Prioritization of Mitigation Initiatives

Table 9.1-8 Prioritization of Mitigation Initiatives of the County of Saratoga

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)
SC-1	8	H	H	Y	Y	N	M-H*
SC-2	8	H	H	Y	Y	N	M-H*
SC-3	8	M	L	Y	N	Y	H
SC-4	28	M	M	Y	N (Yes for 5-year update)	Y	H
SC-5	11	H	L	Y	N	Y	H
SC-6	5	M	L	Y	N	Y	H
SC-7	2	H	M	Y	N	N	M
SC-8	3	H	M	Y	N	N	M
SC-9	3	M	M	Y	Y	N	M
SC-10	5	L	L	Y	N	Y	H
SC-11	28	L	L	Y	N	Y	H
SC-12	3	L	L	Y	Y	Y	H
SC-13	5	L	L	Y	N	Y	M
SC-14	2	L	L	Y	N	N	L
SC-15	2	L	L	Y	N	N	L
SC-16	3	L	L	Y	Y	N	M
SC-17	3	L	L	Y	N	Y	H
SC-18	2	L	L	Y	N	Y	H
SC-19	5	L	L	Y	N	Y	H
SC-20	2	L	L	Y	N	Y	H
SC-21	28	L	L	Y	N	Y	H
SC-22	28	L	L	Y	Y	N	M
SC-23	5	L	L	Y	N	Y	H
SC-24	2	L	L	Y	N	Y	M
SC-25	1	M	Not provided	Not provided	N	Y	M
SC-26	2	H	L	Y	N	Y	H
SC-27	3	H	M	Y	Y	Y	M
SC-28	5	H	L	Y	Y	N	H
SC-29	1	M	L	Y	N	Y	M

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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)
SC-30	2	H	H	Y	Y	N	M
SC-31	2	H	M	Y	Y	Y	H
SC-32	3	H	L	Y	N	Y	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.

Prioritization of initiatives was based on above definitions: Yes.

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

### 9.1.6 Future Needs to Better Understand Risk/Vulnerability

None at this time.

### 9.1.7 Additional Comments

No additional comments at this time.

#### Multi-Jurisdictional Hazard Mitigation Plan

Saratoga County, New York

July 18, 2019

## 9.1.8 NYS Mitigation Action Worksheets

See next page.

## Saratoga County Multi-Jurisdictional Hazard Mitigation Plan

**Name of Jurisdiction:** Saratoga County

NYS DHSES Action Worksheet			
Project Name:	Information Technology Protection		
Project Number:	SC-26		
Risk / Vulnerability			
Hazard of Concern:	All Hazards		
Description of the Problem:	Protection of County data and resources: Intrusion network, prevention of unauthorized accounts, lack of user security knowledge, and county communications.		
Action or Project Intended for Implementation			
Description of the Solution:	Continue best practice of network security: redundant firewalls and education of county employees.		
Is this project related to a Critical Facility?		Yes	<input checked="" type="checkbox"/> X
		No	<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%	Estimated Benefits (losses avoided):	Protective data infrastructure by State and Federal laws
Useful Life:	Based on yearly review		
Estimated Cost:	County Budget		
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	Within 6 months
Estimated Time Required for Project Implementation:	6 months to one year	Potential Funding Sources:	Reallocation of county budget
Responsible Organization:	County IT	Local Planning Mechanisms to be Used in Implementation, if any:	N/A
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	
	Conduct a study to analyze the County's IT infrastructure to identify opportunities to improve security and protect data.	Unknown	Understanding the extent of the County's vulnerabilities will allow for comprehensive solutions to be identified and implemented.
	N/A		
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: Saratoga County

NYS DHSES Action Worksheet			
Project Name:	Fonda Road Culvert Up-Sizing		
Project Number:	SC-27		
Risk / Vulnerability			
Hazard of Concern:	Flooding		
Description of the Problem:	Two culverts on Fonda Road in the Village of Waterford are undersized due to development up gradient of culvert.		
Action or Project Intended for Implementation			
Description of the Solution:	The capacity of the County Culvert and Canal Corp Culvert need to be increased to handle the demand.		
Is this project related to a Critical Facility?		Yes	<input checked="" 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 flood	Estimated Benefits (losses avoided):	It will prevent losses to the road bed, roadway, and private property.
Useful Life:	50 years		
Estimated Cost:	\$900,000 for both culverts		
Plan for Implementation			
Prioritization:	Medium	Desired Timeframe for Implementation:	ASAP
Estimated Time Required for Project Implementation:	3 months	Potential Funding Sources:	FEMA Pre-Disaster Mitigation Program; FEMA Hazard Mitigation Grant Program; NYSDOT (ex. BRIDGE NY)
Responsible Organization:	Saratoga County and NYS Canal Corp	Local Planning Mechanisms to be Used in Implementation, if any:	Engineering
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	
	Only County Culvert is replaced	\$450,000	This will push the flooding downstream and other private property could be damaged.
	Conduct a study of the County's stormwater system to determine the extent of infrastructure upgrades/repair, identify green infrastructure projects, and prioritize funding.	<\$450,000	Longer-term solution; less costly than immediate repairs; allows for prioritization of projects and exploration of alternative solutions.
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:** Saratoga County

NYS DHSES Action Worksheet			
Project Name:	Education and Outreach Before and After Flood		
Project Number:	SC-28		
Risk / Vulnerability			
Hazard of Concern:	Flood		
Description of the Problem:	People may be unaware of actions they should take to protect themselves and their pets prior to a flood. They also may be unaware of the health hazards that can occur after a flood.		
Action or Project Intended for Implementation			
Description of the Solution:	Provide outreach through fairs, public messaging, and education materials and talks.		
Is this project related to a Critical Facility?		Yes	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	Estimated Benefits (losses avoided):	High
Useful Life:	Ongoing		
Estimated Cost:	Low		
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	Immediately
Estimated Time Required for Project Implementation:	Short-term (1 to 5 years)	Potential Funding Sources:	Grants/Volunteering Programming
Responsible Organization:	Saratoga County Department of Public Health	Local Planning Mechanisms to be Used in Implementation, if any:	Emergency Preparedness Plan, Outreach, Volunteer Programming
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	
	Website information	0	While this tool enables the County to be able to see who interacted, it is not interactive.
	Public messaging through social media	0	Depends on people with computers and use of social media.
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:** Saratoga County

NYS DHSES Action Worksheet			
Project Name:	Special Needs Registry		
Project Number:	SC-29		
Risk / Vulnerability			
Hazard of Concern:	Special Needs Registry – Public Education and Revamping to make current (all hazards)		
Description of the Problem:	General public is not aware of this registry. Not everyone that should be on the list is on it. Additionally, some individuals may have moved or passed away. They need to be removed from the list.		
Action or Project Intended for Implementation			
Description of the Solution:	Utilize County Social Services to get people registered in the database. Develop method to maintain and remove individuals from the list.		
Is this project related to a Critical Facility?		Yes	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:	N/A	Estimated Benefits (losses avoided):	Special needs registry will remain current.
Useful Life:	N/A		
Estimated Cost:	County Funding		
Plan for Implementation			
Prioritization:	Medium	Desired Timeframe for Implementation:	2019
Estimated Time Required for Project Implementation:	1.5 years	Potential Funding Sources:	County Budget
Responsible Organization:	Office of Emergency Services	Local Planning Mechanisms to be Used in Implementation, if any:	County Office for the Aging, County Public Health Office, and public outreach
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	
	End registry	\$0	Leaves special needs population vulnerable
	Begin new registry	\$0	Lose all records – current and outdated
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: Saratoga County

NYS DHSES Action Worksheet			
Project Name:	Shallow Infrastructure Replacement (Saratoga County Sewer District #1)		
Project Number:	SC-30		
Risk / Vulnerability			
Hazard of Concern:	Freezing Temperatures		
Description of the Problem:	Pipes freezing causes environmental concerns and loss of service.		
Action or Project Intended for Implementation			
Description of the Solution:	Determine depth of infrastructure and replace shallow, low pressure lines.		
Is this project related to a Critical Facility?		Yes	<input checked="" type="checkbox"/> X
		No	<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:	Extreme Cold Temperatures	Estimated Benefits (losses avoided):	Environmental; Less equipment wear
Useful Life:	30 years		
Estimated Cost:	\$3 million +		
Plan for Implementation			
Prioritization:	Medium	Desired Timeframe for Implementation:	Done in 10 years
Estimated Time Required for Project Implementation:	5 years	Potential Funding Sources:	User rates; NYS DEC/EFC Wastewater Infrastructure Engineering Planning Grant
Responsible Organization:	Saratoga County Sewer District #1	Local Planning Mechanisms to be Used in Implementation, if any:	n/a
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	
	Plan to Failure	2x original cost	Previous/Current; Emergency Repairs
	Conduct a study to understand the extent of shall infrastructure and map its location. Use the results of the study to analyze solutions.	Unknown	Understanding the full extent of the infrastructure will ensure that solutions provide countywide coverage.
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:** Saratoga County

NYS DHSES Action Worksheet			
Project Name:	I & I Reduction (Saratoga County Sewer District #1)		
SC-3	SC-31		
Risk / Vulnerability			
Hazard of Concern:	Flooding		
Description of the Problem:	Surface and subsurface infiltration; Location of infrastructure; Creates excess flow and strain on system (prolonged pump run times); Limited access to infrastructure (not limited to manholes).		
Action or Project Intended for Implementation			
Description of the Solution:	Raising manhole structures; Creating/updating GIS database; Access to infrastructure, including floodplain areas. Identify infrastructure in floodplain areas; Slip lining/replacement of lines and structures.		
Is this project related to a Critical Facility?		Yes	<input checked="" type="checkbox"/>
		No	<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:	500 year flood	Estimated Benefits (losses avoided):	Environmental; Less equipment wear; Greater infrastructure capacity.
Useful Life:	30 years		
Estimated Cost:	\$100 million		
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	ASAP
Estimated Time Required for Project Implementation:	Interceptor relining (2 years); Access to infrastructure	Potential Funding Sources:	FEMA HMA, EPA Drinking Water State Revolving Fund (SRF) and Clean Water SRF, EPA Water Infrastructure Finance and Innovation Act program
Responsible Organization:	Saratoga County and NYS Canal Corp	Local Planning Mechanisms to be Used in Implementation, if any:	Engineering
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	
	Only County culvert is replaced	\$450,000	This will push the flooding downstream and other private property could be damaged.
	Identify and map all infrastructure and analyze its proximity to floodplain areas. Use results of analysis to identify corrective actions.	Unknown	Understanding infrastructure location and risk will result in well-planned solutions.
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			