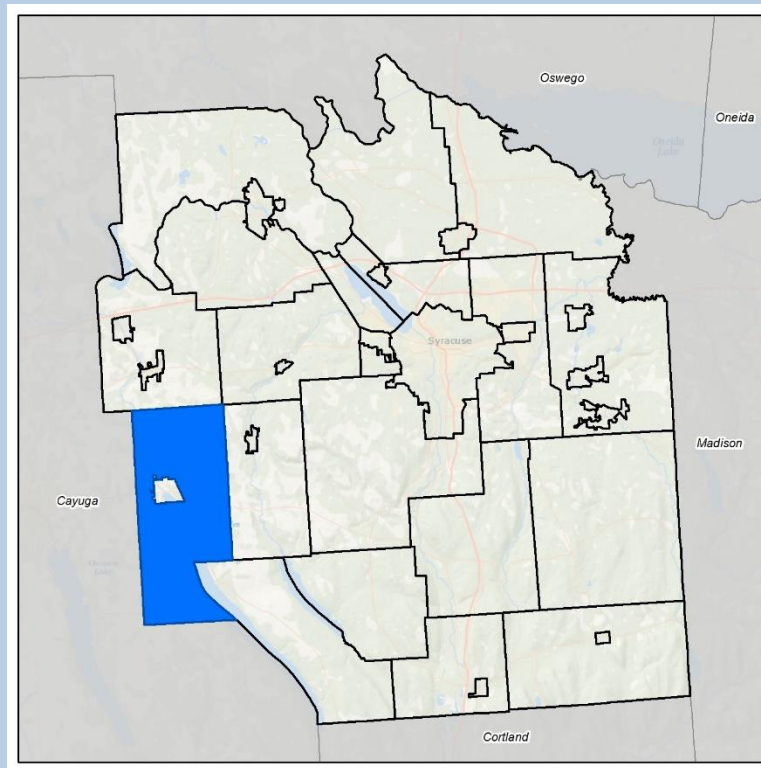




MUNICIPAL ANNEX | Town of Skaneateles



Total Population
(2010 Census)

4,669



Total Number of
Buildings

4,439



Number of National
Flood Insurance
Program (NFIP) Policies
and Percent in
Regulatory Floodplain

18 (22%)

Number of Repetitive
Loss (RL) Properties

1



Total Agricultural Land
(acres)

16,813.8



Harmful Algal Bloom
Impacted Waterbody

Yes



Total Land
(square miles)

47.1

Percent of Buildings
in Regulatory
Floodplain

1%



Proposed
Project
Types

Structure and Infrastructure
Projects, Education and
Awareness Programs, Local
Plans and Regulations, and
Natural Systems Protection



Mitigation
Focus

Severe Storm
Severe Winter Storm



9.29 TOWN OF SKANEATELES

This section presents the jurisdictional annex for the Town of Skaneateles. It includes resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions that can be implemented prior to a disaster to reduce or eliminate damage to property and people. This annex includes a general overview of the municipality and who in the town participated in the planning process; an assessment of the Town of Skaneateles' risk and vulnerability; the different capabilities utilized in the town; and an action plan that will be implemented to achieve a more resilient community.

9.29.1 Hazard Mitigation Planning Team

The following individuals have been identified as the Town of Skaneateles' hazard mitigation plan primary and alternate points of contact.

Primary Point of Contact	Alternate Point of Contact
Name: Robert G. Herrmann, Jr. Title: Code Enforcement Officer Phone Number: 315-685-0833 Address: 24 Jordan St., Skaneateles, NY 13152 Email: rherrmann@townofskaneateles.com	Name: Allan Wellington Title: Highway Superintendent Phone Number: 315-685-6718 Address: 24 Jordan St., Skaneateles, NY 13152 Email: awellington@townofskaneateles.com
Floodplain Administrator	
Name: Robert G. Herrmann, Jr. Title: Code Enforcement Officer Phone Number: 315-685-0833 Address: 24 Jordan St., Skaneateles, NY 13152 Email: rherrmann@townofskaneateles.com	

9.29.2 Municipal Profile

The Town of Skaneateles lies along the southwestern border of Onondaga County in western New York State. The Town of Skaneateles has a total area of 48.8 square miles. The Town of Skaneateles is bordered towns of Elbridge to the north, Niles to the south, Marcellus to the east, and Owasco and Sennett in Cayuga County to the west. The major body of water in the town is Skaneateles Lake, with Skaneateles Creek originating from the lake and flowing to the Seneca River. The Village of Skaneateles is located at the north end of Skaneateles Lake. Refer to Section 9.30 (Village of Skaneateles) for their individual annex. There are several communities located within the town: Highland Way, Jones Beach (hamlet), Long Bridge (hamlet), Mandana (hamlet), Mottville (hamlet), Shepard Settlement (hamlet), Skaneateles Falls (hamlet), Thornton Grove, Thornton Heights, Wicks Corner, Willow Glen, and Winding Way. The estimated 2016 population was 4,748, a 1.7 percent increase from the 2010 Census (4,669).

The town is governed by a five member Town Board, elected on a town-wide basis for a four year term; the exception being the Town Supervisor, who only serves on a two year basis. The terms for the other four members are staggered so two members are elected every two years. The Town Board acts as both the executive and legislative branch of the town government. The town currently has about 100 employees including seasonal people.

Data from the 2016 U.S. Census American Community Survey estimates that 2.6 percent of the town population is five years of age or younger, and 24.6 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.



History and Cultural Resources

The first white settler, Abraham Cuddeback, came to survey the Central New York Military Tract of Skaneateles under Moses Dewitt. At first a part of the township of Marcellus, the town of Skaneateles was separated and established independently on February 26, 1830, and the Village, at the head of the lake, was incorporated on April 19, 1833. Early turnpikes facilitated development and the town was noted for participation in reform movements prior to the Civil War. Some Skaneateles men volunteered for the ill-fated campaign (Patriot War, 1848) to liberate Canada and were imprisoned by the British in Tasmania. Quaker congregations were involved in abolition activity. Underground Railroad sites have been documented in the Town of Skaneateles. Although the larger City of Syracuse nearby was known nationally as center of abolition and Underground Railroad activity, Skaneateles was said (by Beauchamp, an early historian) to have "eclipsed Syracuse as an anti-slavery town."

Growth/Development Trends

Table 9.29-1 summarizes major residential/commercial development and any known or anticipated major residential/commercial development and major infrastructure development that is likely to occur within the municipality in the next five years (as of July 2018). Refer to the map in Figure 9.29-1 of this annex which illustrates the hazard areas along with the location of potential new development.

Table 9.29-1. Growth and Development

Property or Development Name	Type (e.g. Res., Comm.)	# of Units / Structures	Location (address and/or Parcel ID)	Known Hazard Zone(s)	Description/Status of Development
Recent Development from 2013 to present					
None					
Known or Anticipated Development in the Next Five (5) Years					
Graham Apartments	Res	18	4331 Jordan Road	None Identified	16 pending
Hidden Estates	Res	12	East Lake Road	Steep Slope	9 pending

* Only location-specific hazard zones or vulnerabilities identified.

9.29.3 Hazard Event History Specific to the Town of Skaneateles

Onondaga County has a history of natural hazard events as detailed in Volume I, Section 5.0 of this plan. A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the County and its municipalities. The Town of Skaneateles' history of federally-declared (as presented by FEMA) and significant hazard events (as presented in NOAA-NCEI) is consistent with that of Onondaga County. Table 9.29-2 provides details regarding municipal-specific loss and damages the town experienced during hazard events. Information provided in the table below is based on reference material or local sources. For details of these and additional events, refer to Volume I, Section 5.0 of this plan.

Table 9.29-2. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	Onondaga County Designated?	Summary of Event	Municipal Summary of Damages and Losses*
April – May 2011	Severe Storms, Flooding, Tornadoes, and Straight-Line Winds	Yes	A slow moving warm front pushed northward across central New York late in the afternoon on April 25th. Severe weather developed, and in addition to reports of severe wind damage and hail,	Although the county was impacted, the town did not report any damages.



Dates of Event	Event Type (Disaster Declaration if applicable)	Onondaga County Designated?	Summary of Event	Municipal Summary of Damages and Losses*
	(FEMA-DR-1993)		<p>plenty of wind shear in the vicinity of the warm front allowed for a few super-cell thunderstorms and tornadoes to develop. In addition, areas of heavy rain caused significant flash flooding in several locations of central New York.</p> <p>On May 26, a deep upper level low pressure system shifted east from the mid-Mississippi Valley region through the afternoon and evening, allowing numerous showers and thunderstorms to develop. Many reports of large hail and damaging winds occurred in central New York.</p>	
June 30- July 1, 2015	Flash Flood	No	An unseasonably strong storm system tapping into above normal moisture sources across the Great Lakes and Northeast triggered multiple heavy rain producing thunderstorms across the region. Localized torrential rainfall in central New York caused serious urban flash flooding in the Syracuse, NY metropolitan area. Damages are estimated between three and five million dollars.	Although the county was impacted, the town did not report any damages.
July 1, 2017	Flash Flood	No	A tropical moisture laden air mass produced numerous showers and thunderstorms which traveled repeatedly over the same areas of the Finger Lakes Region and Upper Mohawk Valley. Widespread flash and urban flooding developed in portions of Cayuga, Onondaga, Madison and Oneida counties. Hardest hit areas were the towns of Moravia, Chittenango, Oneida, and Utica to name a few. Total rainfall amounts along a narrow corridor from Moravia to Utica generally ranged from 2.5 to 5 inches, most of which fell in less than 1 to 2 hours. Total damages from this event range from \$10-\$15 million dollars countywide.	The town sustained shoreline damage and erosion to private property. One road was closed overnight due to a plugged culvert.
September- October 2017 and July- August 2018	Harmful Algal Bloom	No	Water sampling results confirmed that there were toxins present in quantities to potentially cause health effects if people or animals came in contact with the water.	The town was impacted by poor water quality as a result of the HAB. The county recommended that people not swim and there was a drinking water advisory not to draw water out of the lake to drink. The water was determined to be safe to drink in August 2018.

Notes:

*This table does not indicate specific impacts of the flood events, however, per documentation from the town fire department, over the period of 1/1/2013 and 11/26/2018 the department responded to 19 water issues and 37 water evacuations in the town which provides an indication of recurring flood issues.

EM Emergency Declaration (FEMA)





FEMA Federal Emergency Management Agency
 DR Major Disaster Declaration (FEMA)
 N/A Not applicable

9.29.4 Hazard Ranking and Jurisdiction-Specific Vulnerabilities

The hazard profiles in Section 5.0 (Risk Assessment) of this plan have detailed information regarding each plan participant's vulnerability to the identified hazards. The following summarizes the hazards of greatest concern and risk to the Town of Skaneateles. For additional vulnerability information relevant to this jurisdiction, refer to Section 5.0.

Hazard Risk Ranking

This section includes the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Section 5 of the plan. The ranking process involves an assessment of the likelihood of occurrence for each hazard, along with its potential impacts on people, property, and the economy as well as community capability and changing future climate conditions. This input supports the mitigation action development to target those hazards with highest level of concern.

As discussed in Section 5.3 (Hazard Ranking), each participating town or village may have differing degrees of risk exposure and vulnerability compared to Onondaga County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the Town of Skaneateles. The Town of Skaneateles has reviewed the county hazard risk/vulnerability risk ranking table as well as its individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the town indicated the following:

- Many town residents rely on lake water for drinking and recreation, therefore the town has adjusted the hazard ranking of Harmful Algal Bloom to medium.
- Flooding is a localized hazard and includes shoreline erosion and is deemed a medium hazard for planning purposes.

Table 9.29-3. Town of Skaneateles Hazard Ranking Input

HAZARD	Drought	Earthquake	Flood	Geologic	Harmful Algal Bloom*	Invasive Species	Severe Storm	Severe Winter Storm
RELATIVE RISK FACTOR	Medium	Low	Medium	Low	Medium	Low	High	High

Notes: The scale is based on the following hazard rankings as established in Section 5.3.

High = Total hazard priority risk ranking score of 5 and above

Medium = Total hazard priority risk ranking of 3.9 – 4.9

Low = Total hazard risk ranking below 3.8

*The municipality changed the initial ranking of this hazard based on event history, municipal experience, and feedback from the municipality

Critical Facilities Flood Risk

New York Department of Environmental Conservation (DEC) Statute 6 CRR-NY 502.4 sets forth floodplain management criteria for State projects located in flood hazard areas. The law states that no such projects related to critical facilities shall be undertaken in a Special Flood Hazard Area (SFHA) unless constructed according to specific mitigation specifications, including being raised 2' above the Base Flood Elevation (BFE). This statute is outlined at <http://tinyurl.com/6-CRR-NY-502-4>. While all vulnerabilities should be assessed and documented,



the State places a high priority on exposure to flooding. Critical facilities located in an SFHA, or having ever sustained previous flooding, must be protected to the 500-year flood event, or worst damage scenario. For those that do not meet this criteria, the jurisdiction must identify an action to achieve this level of protection (NYSDHSES 2017).

The table below identifies critical facilities in the community located in the 1-percent and 0.2-percent floodplain and presents Hazards United States (HAZUS) – Multi-Hazards (MH) estimates of the damage and loss of use to critical facilities as a result of a 1-percent annual chance flood event.

Table 9.29-4. Potential Flood Losses to Critical Facilities

Name	Type	Exposure		Potential Loss from 1% Flood Event		Addressed by Proposed Action
		1% Event	0.2% Event	Percent Structure Damage	Percent Content Damage	
None identified						

Source: FEMA 2016, SOCPA 2018

Identified Issues

The municipality has identified the following vulnerabilities within their community:

- The town has identified hazardous Algal Bloom as a major concern in the community as the Lake provides a water source to residents and businesses of the town and the City of Syracuse as well as a source of recreation and tourism.
- There are floodprone properties outside of the floodplain and the location or source of flooding has not been identified or documented.

Specific areas of concern based on resident response to the Onondaga County Hazard Mitigation Citizen survey include:

- Shoreline erosion areas which have been identified by the City of Syracuse.

9.29.5 Capability Assessment

This section identifies the following capabilities of the local jurisdiction:

- Planning and regulatory capability
- Administrative and technical capability
- Fiscal capability
- Community classification
- National Flood Insurance Program
- Integration of mitigation planning into existing and future planning mechanisms

Planning and Regulatory Capability

The table below summarizes the regulatory tools that are available to the Town of Skaneateles.



Table 9.29-5. Planning and Regulatory Tools

Tool / Program (code, ordinance, plan)	Do you have this? (Yes/No) If Yes, date of adoption or update	Authority (local, county, state, federal)	Dept. /Agency Responsible	Code Citation and Comments (Code Chapter, name of plan, explanation of authority, etc.)
Planning Capability				
Comprehensive Plan	Yes, 8/20/15	Local	Town Board	2015 CP under revision
Capital Improvements Plan	Yes	Local	Town Board	CIP by Town Dept. & Funds
Floodplain Management / Basin Plan	Yes	Local, State, Federal	Town Board, State, Federal	Ch 72
Stormwater Management Plan	Yes	Local	Town Board, Planning Board, CEO	148-26
Open Space Plan	DRAFT	Local	Town Board, Planning Board	Ch 131 & 148, CP
Stream Corridor Management Plan	Yes	Local	Planning Board, CEO	148-26
Watershed Management or Protection Plan	Yes	Local	City of Syracuse	148-21, 29 & 30
Economic Development Plan	No	-	-	-
Comprehensive Emergency Management Plan	Yes	Local, State, Federal	Town Board, State, Federal	NIMS Emergency Response Plan
Emergency Operation Plan	Yes	Local, State, Federal	Town Board, State, Federal	NIMS Emergency Response Plan
Evacuation Plan	No	-	-	-
Post-Disaster Recovery Plan	Yes	Local, State, Federal	Town Board, State, Federal	NIMS Emergency Response Plan
Transportation Plan	No	-	-	-
Strategic Recovery Planning Report	No	-	-	-
Climate Adaptation Plan	Yes	Local	Town Board	Climate Action Plan 11/19/15
Resilience Plan	No	-	-	-
Other Plans:	No	-	-	-
Regulatory Capability				
Building Code	Yes, 6/20/74	Local	CEO	Ch 40
Zoning Ordinance	Yes, 1/18/66	Local	Town Board, Planning Board, ZBA, CEO	w/ revisions Ch 148
Subdivision Ordinance	Yes, 7/6/67	Local	Planning Board	Ch 131 reused 2005
NFIP Flood Damage Prevention Ordinance	Yes, 8/18/16	Local, State, Federal	Town Board, CEO	Ch 72 8/18/16
NFIP: Cumulative Substantial Damages	No	-	-	-
NFIP: Freeboard	Yes	Local	Town Board, CEO	State mandated BFE+2 for all construction, both residential and non-residential (IBC adopted)
Growth Management Ordinances	Yes	Local	Town Board, Planning Board, ZBA, other	Comp Plan 2015
Site Plan Review Requirements	Yes	Local	Planning Board	148



Tool / Program (code, ordinance, plan)	Do you have this? (Yes/No) If Yes, date of adoption or update	Authority (local, county, state, federal)	Dept. /Agency Responsible	Code Citation and Comments (Code Chapter, name of plan, explanation of authority, etc.)
Stormwater Management Ordinance	Yes	Local	Planning Board, ZBA, CEO	Ch 148-26
Municipal Separate Storm Sewer System (MS4)	No	-	-	-
Natural Hazard Ordinance	No	-	-	-
Post-Disaster Recovery Ordinance	Yes	Local	Planning Board	NIMS Emergency Response Plan
Real Estate Disclosure Requirement	Yes	State	NYS Department of State, Real Estate Agent	NYS mandate, Property Condition Disclosure Act, NY Code - Article 14 §460-467
Other (Special Purpose Ordinances [i.e., sensitive areas, steep slope])	Yes	Local	Planning Board	Slopes 148-30

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the Town of Skaneateles.

Table 9.29-6. Administrative and Technical Capabilities

Resources	Is this in place? (Yes or No)	Department/ Agency/Position
Administrative Capability		
Planning Board	Yes	5 member Planning Board
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	Yes	Committee reports to Town Board
Economic Development Commission/Committee	No	-
Maintenance programs to reduce risk	Yes	Highway Dept.
Mutual aid agreements	Yes	Towns of Marcellus & Niles CEOs
Technical/Staffing Capability		
Planner(s) or engineer(s) with knowledge of land development and land management practices	Yes	Provided by contact
Engineer(s) or professional(s) trained in construction practices related to buildings and/or infrastructure	Yes	Provided by contact
Planners or engineers with an understanding of natural hazards	Yes	Provided by contact
NFIP Floodplain Administrator (FPA)	Yes	Codes Enforcement Officer
Surveyor(s)	Yes	Provided by contact when necessary
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	Yes	Town Highway Dept., Dave Bader
Scientist familiar with natural hazards	Yes	Several residents are scientists and serve as volunteers, engineering committee
Warning systems/services	Yes	Onondaga County 911
Emergency Manager	Yes	Town Supervisor



Resources	Is this in place? (Yes or No)	Department/ Agency/Position
Grant writer(s)	Yes	Provided by contact when necessary
Staff with expertise or training in benefit/cost analysis	Yes	Town Budget Officer
Professionals trained in conducting damage assessments	No	-

Fiscal Capability

The table below summarizes financial resources available to the Town of Skaneateles.

Table 9.29-7. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	No
Capital improvements project funding	Yes
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	Yes
Stormwater utility fee	Yes
Incur debt through general obligation bonds	Yes
Incur debt through special tax bonds	Yes
Incur debt through private activity bonds	Yes
Withhold public expenditures in hazard-prone areas	Yes
Other federal or state Funding Programs	Yes
Open Space Acquisition funding programs	Yes
Other	Yes

Community Classifications

The table below summarizes classifications for community programs available to the Town of Skaneateles.

Table 9.29-8. Community Classifications

Program	Do you have this? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
NYSDEC Climate Smart Community	Yes	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Natural disaster/safety programs in/for schools	No	-	-
Organizations with mitigation focus (advocacy group, non-government)	Yes	Skaneateles Lake Association: Citizens	-



Program	Do you have this? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
		Protect the Character of Skaneateles	
Public education program/outreach (through website, social media)	Yes, Website	-	-
Public-private partnership initiatives addressing disaster-related issues	No	-	-
Other	No	-	-

Note:

N/A Not applicable

NP Not participating

- Unavailable

The classifications listed above relate to the community's ability to provide effective services to lessen its vulnerability to the hazards identified. These classifications can be viewed as a gauge of the community's capabilities in all phases of emergency management (preparedness, response, recovery and mitigation) and are used as an underwriting parameter for determining the costs of various forms of insurance. The CRS class applies to flood insurance while the BCEGS and Public Protection classifications apply to standard property insurance. CRS classifications range on a scale of 1 to 10 with class 1 being the best possible classification, and class 10 representing no classification benefit. Firewise classifications include a higher classification when the subject property is located beyond 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 (<https://www.isomitigation.com/bcegs/>)
- The ISO Mitigation online ISO's Public Protection website at <https://www.isomitigation.com/ppc/>
- New York State Climate Smart Communities (<http://www.dec.ny.gov/energy/56876.html>)
- The National Weather Service Storm Ready website at <https://www.weather.gov/stormready/communities>
- The National Firewise Communities website at <http://firewise.org/>

Self-Assessment of Capability

The table below provides an approximate measure of the Town of Skaneateles' capability to work in a hazard-mitigation capacity and/or effectively implement hazard mitigation strategies to reduce hazard vulnerabilities.

Table 9.29-9. Self-Assessment Capability for the Municipality

Area	Degree of Hazard Mitigation Capability		
	Limited (If limited, what are your obstacles?)	Moderate	High
Planning and regulatory capability			X
Administrative and technical capability		X	
Fiscal capability	X - If not budgeted item there is a lack of funds		
Community political capability		X	



Area	Degree of Hazard Mitigation Capability		
	Limited (If limited, what are your obstacles?)	Moderate	High
Community resiliency capability		X	
Capability to integrate mitigation into municipal processes and activities	X - In the these were addressed by verbal agreements or solutions, no budget to update plans		

National Flood Insurance Program

This section provides specific information on the management and regulation of the regulatory floodplain.

NFIP Floodplain Administrator (FPA)

Robert G. Herrmann, Jr., Code Enforcement Officer

National Flood Insurance Program (NFIP) Summary

The Town of Skaneateles does not maintain lists/inventories of properties that have been flood damaged and does not make substantial damage estimates. The FPA noted that no properties have recently been flooded and no properties are interested in mitigation at this time.

The following table summarizes the NFIP statistics for the Town of Skaneateles.

Table 9.29-10. NFIP Summary

Municipality	# Policies	# Claims (Losses)	Total Loss Payments	# RL Properties	# SRL Properties	# Policies in the 1% Flood Boundary
Town of Skaneateles	18	7	\$69,903	1	0	4

Source: FEMA Region 2 2018.

(1) Policies, claims, RL, and SRL statistics provided by FEMA Region 2, and are current as of June 30, 2018. Total number of RL properties does not include SRL properties. Number of claims represents claims closed by July 31, 2018.

(2) Total building and content losses from the claims file provided by FEMA Region 2.

(3) Number of policies inside and outside of flood zones is based on latitude and longitude coordinates provided by FEMA Region 2 in the policy file. FEMA noted that for a property with more than one entry, more than one policy may have been in force or more than one Geographic Information System (GIS) specification was possible. Number of policies and claims, and claims total, exclude properties outside Onondaga County boundary, based on provided latitude and longitude coordinates.

RL Repetitive Loss

SRL Severe Repetitive Loss

Resources

The FPA is responsible for floodplain administration, with the assistance of the CEO with engineering consultants through C&S Engineers. NFIP administration services and functions include permit review, inspections, and record-keeping. The town conducts outreach on flood hazards/risk and flood risk reduction through the municipal website. The FPA noted that additional training would help to fulfill their responsibilities as municipal floodplain administrator and would consider attending continuing education and/or certification training on floodplain management if it were offered in the county for all local floodplain administrators.

Compliance History

The Town of Skaneateles is in good-standing in the NFIP. According to data from NYSDEC, the most recent compliance audit [e.g. Community Assistance Visit (CAV)] took place on September 8, 1994.



Regulatory

Flood Damage Prevention Ordinance: The Town of Skaneateles Flood Damage Prevention Ordinance (Chapter 72 of the municipal code) was adopted to promote the public health, safety and general welfare and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:

- Regulate uses which are dangerous to health, safety and property due to water or erosion hazards or which result in damaging increases in erosion or in flood heights or velocities.
- Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction.
- Control the alteration of natural floodplains, stream channels and natural protective barriers which are involved in the accommodation of floodwaters.
- Control filling, grading, dredging and other development which may increase erosion or flood damages.
- Regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands.
- Qualify for and maintain participation in the National Flood Insurance Program.

The objectives of the chapter are to:

- Protect human life and health.
 - Minimize expenditure of public money for costly flood-control projects.
 - Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public.
 - Minimize prolonged business interruptions.
 - Minimize damage to public facilities and utilities, such as water and gas mains, electric, telephone and sewer lines, streets and bridges, located in areas of special flood hazard.
 - Help maintain a stable tax base by providing for the sound use and development of areas of special flood hazard so as to minimize future flood-blight areas.
 - Provide that developers are notified that property is in an area of special flood hazard.
 - Ensure that those who occupy the areas of special flood hazard assume responsibility for their actions.
- Flood Damage Prevention Ordinance.

The FPA noted that there are other local ordinances, plans or programs (site plan review requirements within the Lake watershed) that support floodplain management and meeting the NFIP requirements and there is a floodplain development permit. The FPA stated that the town considered joining the Community Rating System (CRS) program in 2014 to reduce flood insurance premiums for their insured and would attend a CRS seminar if offered locally. This was not pursued due to lack of resources.

Integration of Hazard Mitigation into Existing and Future Planning Mechanisms

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of this planning effort, each community was surveyed to obtain a better understanding of their community's progress in plan integration. A summary is provided below. In addition, the community identified specific integration activities that will be incorporated into municipal procedures, which is also indicated below.



Planning

Existing Integration

Comprehensive Plan: The 2015 Skaneateles Joint Comprehensive Plan is the fundamental tool for steering the planning and development process for both the Village and Town of Skaneateles. The purpose of this Comprehensive Plan is to manage change to ensure that fundamental values of the community are protected for future generations. Relevant objectives of the plan include: accelerating efforts to protect Skaneateles' high water quality; providing enhanced protection of valuable wetlands, watercourses, and natural resources; creating model communities to protect the environment and reduce the overall carbon footprint; and developing Conservation Zoning to protect sensitive environmental areas. Actions to achieve these objectives include: preparing an open space plan; adopting protection and restoration programs; and participating in community education on the importance of water quality. The plan is currently being updated. The update will include addressing steep slopes and stormwater control. It does not currently refer to the Countywide Hazard Mitigation Plan but this will be included in the updated plan.

Harmful Algal Bloom Action Plan for Skaneateles Lake: The 2018 Harmful Algal Bloom Action Plan for Skaneateles Lake (Action Plan), developed by the New York State Water Quality Rapid Response Team, identifies the potential causative factors of harmful algal blooms (HABs) and recommendations to protect the health and livelihood of residents and wildlife. The Action Plan applies to the entire Skaneateles Lake watershed, with the primary goal of understanding the causes of the 2017 HABs and the potential triggers for future HABs. Management actions for Skaneateles Lake prioritize the reduction of nutrients to the lake via agricultural runoff and residential phosphorous sources (e.g., septic systems). Funding through Federal and State agencies (see Funding below), coupled with the organization of statewide agencies (e.g. NYSDEC) and inter-jurisdictional committees, contribute to the overall success of the Action Plan.

Stormwater Management Plan: Although the Town of Skaneateles is not an MS4 Regulated Community, it has a formal Stormwater Management Plan. The Plan specifies projects/actions/initiatives to reduce the volume of stormwater, or otherwise mitigate stormwater flooding

Onondaga County Hazard Mitigation Plan: The Town of Skaneateles supports the implementation, monitoring, maintenance, and updating of this Plan. The town supports county-wide initiatives identified in Section 9.1 of the county annex.

Emergency Plans: The Town of Skaneateles continues to develop, enhance, and implement existing emergency plans. The town currently does not have a Comprehensive Emergency Management Plan or Continuity of Operations/Continuity of Government (COOP/COG) plan(s) at this time. The town utilizes the NIMS Emergency Response Plan.

The Town of Skaneateles has an Open Space Plan, Watershed or Stream Corridor Management Plan (Soil and Water) Disaster Preparedness Plan, and a Climate Adaptation Plan/strategy. The town does not have a Re-Development Plan, Growth Plan, Economic Development Plan, Local Waterfront Revitalization Plan, a Post-Disaster Recovery Plan/Strategic Recovery Plan, or resilience plan/strategy.

Opportunities for Future Integration

Updates to the Comprehensive Plan and the town's Emergency Plans will refer to the Hazard Mitigation Plan by using the Countywide Hazard Mitigation Plan as a template. Updates to existing plans and new plans will include information on natural hazard risk/resilience and refer to the Countywide Hazard Mitigation Plan.



Regulatory and Enforcement (Ordinances)

Existing Integration

The town has multiple ordinances pertaining to the mitigation of hazards. These ordinances include the Establishment of Boards (see Operational and Administration below), Fire Prevention Ordinance, Flood Damage Prevention Ordinance, Zoning Ordinance, and Subdivision of Land Ordinance. The town also adheres to the New York State Fire Prevention and Building Code. The municipal Code and ordinances are available on the town website: <https://www.townofskaneateles.com/town-board/town-code/>

Zoning Ordinance: The Town of Skaneateles Zoning Ordinance (Chapter 148 of the municipal code) was adopted in order to protect and promote public health, safety, comfort, convenience, economy, natural, agricultural and cultural resources, aesthetics and the general welfare and for the following additional purposes:

- To conserve the natural resources and rural character of the town by permitting development in the most appropriate locations and by limiting building in areas where it would conflict with the town's rural pattern and scale of settlement.
- To minimize negative environmental impacts of development, especially in visually and environmentally sensitive areas such as the shoreline and watershed of Skaneateles Lake, the higher elevations, scenic viewsheds, steep slopes, erodible soils, stream corridors, wetlands, floodplains and active farmlands.
- To protect existing shorelines, wooded areas, scenic views, agricultural land, existing and potential recreation areas, waterways, ground and surface water supplies, ecological systems, wetlands, wildlife habitat and natural vegetation, and to maintain large areas of contiguous open space in their current undeveloped state, in order to preserve the predominantly open and rural character of the town.
- To preserve and protect lands and buildings that are historically significant.
- To enhance the aesthetic and architectural quality of the entire community, and to maintain its natural beauty.
- To encourage agriculture to continue and prosper because of its importance to the local economy and to the preservation of open space, and to avoid regulating agricultural uses in a manner that unreasonably restricts or regulates farm structures or farming practices.
- To encourage other economic activities that require large areas of contiguous open space, such as forestry, recreation, vineyards, orchards, and tree farming, as well as the support services and industries that add value to these uses, such as wood products and tourist facilities.
- To integrate different types of housing and different kinds of land uses in traditional village and hamlet centers in order to encourage social and economic interaction and pedestrian activity, and to reduce unnecessary automobile traffic.
- To provide a range of affordable housing opportunities for all segments of the local population with due consideration for regional housing needs.
- To protect residences from nonagricultural nuisances, odors, noise, pollution and other unsightly, obtrusive and offensive land uses and activities.
- To locate commercial and other nonresidential uses in a manner that is convenient to residences, reduces use of automobiles and provides freedom for landowners to make beneficial economic use of their land, provided that such uses are not harmful to neighboring properties or the natural environment.
- To improve transportation facilities in areas designated for intensive settlement and to maintain a network of smaller country roads in areas designated for the protection of open space, agriculture, steep slopes and rural character.
- To reduce traffic congestion on major roads by establishing a pattern of settlement and circulation that reduces reliance on automobiles and provides alternative routes between destinations.



- To encourage the conservation of energy and the appropriate use of solar and other renewable energy resources.
- To regulate building density in order to concentrate population in appropriate locations while allowing reasonable privacy for residences, ensure access to light and air, conserve open space, facilitate the prevention and fighting of fires, minimize the cost of municipal services and accomplish the other purposes enumerated in this chapter.
- To provide a flexible system of land use regulation that enables the town to grow, while preserving its most important natural, historic, architectural and cultural features.
- To base such flexible land use regulations on the unique characteristics of the landscape, the needs of the people of the Town of Skaneateles, the impact of proposed land uses on the natural and human environment and the purposes articulated in this chapter, and to avoid suburban sprawl and commercial strip patterns of development.

The Zoning Ordinance was most recently updated in 2005, and includes a Floodplain Overlay District (FPOD) regulating development within the floodway. The Lake Watershed Overlay District (LWOD) was established to protect the quality of Skaneateles and Owasco Lakes by controlling land uses which could be detrimental to lake water quality.

Subdivision of Land Ordinance: The Town of Skaneateles Subdivision Ordinance (Chapter 131 of the municipal code) was established in conformance with the Comprehensive Plan for the Town and Village of Skaneateles, to protect and promote public health, safety, comfort, convenience, economy, natural, agricultural, and cultural resources, aesthetics, and the general welfare, and for the additional purposes listed in the Town of Skaneateles Zoning Law.

The Town of Skaneateles' municipal zoning, subdivision regulations, and site plan review process consider natural hazard risk and require developers to take additional actions to mitigate natural hazard risk. The Planning Board/ZBA is supplied with NY DEC information, City of Syracuse Dept. of Water comments, and Town Engineer recommendations to guide their decisions in regard to natural hazard risk management. The town also applies steep slope regulations to mitigate the risk of erosion, sedimentation, and landslides.

Opportunities for Future Integration

The town Planning Board may provide monthly updates on development in hazard areas.

Operational and Administration

Existing Integration

Planning Board: The Town of Skaneateles Planning Board consists of a five member board that meets on the third Tuesday of every month at 6:30 p.m. The Planning Board advises the Town Board on the comprehensive plan, zoning changes, subdivision regulations and any other town plans such as the open space plan. In addition the board reviews applications for site plan approval, special permit, subdivision, lot line adjustment, and lot merger. The Board is involved with upholding zone code with thorough review of all applications.

Zoning Board of Appeals: The Zoning Board of Appeals provides relief for aggrieved applicants of a decision of the zoning officer. The Zoning Board of Appeals is a five member board that meets the first Tuesday of each month at 7:00 pm. The Board is involved with upholding zone code with thorough review of all applications. The Board reviews three types of applications:

- Area Variance: for an application not in compliance with the dimensional requirements of the zoning code.



- Use Variance: to use land for a purpose not allowed in the zoning code.
- Interpretation: made upon an appeal of an enforcement decision where the appellant feels the law was wrongly applied.

Mutual Aid Agreements: The Town of Skaneateles works to create/enhance/ maintain mutual aid agreements with neighboring communities. Existing agreements include code office, fire departments with neighboring communities through the county 911 program.

Stream Team Program: The Town of Skaneateles supports/participates in the Stream Team program offered by the Onondaga County SWCD, to assist in the removal of debris, log jams, etc. in flood vulnerable stream sections.

Retrofitting/Removal of Structures from Hazard Prone Areas: Where appropriate, the Town of Skaneateles supports the retrofitting, 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. The town works to identify facilities that are viable candidates for each strategy based on cost-effectiveness. Implementation of these actions are based on available funding.

The Town of Skaneateles has a municipal planner/contract planning firm. The Engineering committee, Conservational committee, Skaneateles Lake Water committee, and Open Space committee include functions with respect to managing natural hazard risk. NFIP Floodplain Management functions are performed by the Codes Enforcement Officer/Highway Dept. Superintendent. Stormwater Management functions are performed through contracts. The town contracts with firms that have experience with developing Benefit-Cost Analysis, can perform Substantial Damage Estimates, or have experience in preparing grant applications for mitigation projects. No town staff have job descriptions that involve natural hazard risk though the town would look to the Codes Enforcement Officer/Highway Superintendent during any natural disaster. These staff receive training or continuing professional education which supports natural hazard risk reduction and participate in associations, organizations, groups or other committees that support natural hazard risk reduction and build hazard management capabilities. The town Highway Department also has other hazard management programs in place.

Opportunities for Future Integration

All staff could receive training regarding natural hazard mitigation.

Funding

Existing Integration

The Town of Skaneateles municipal budget includes line items for drainage, brush/weeds, and bridges. The town has also established reserves in the Capital Improvements Budget for mitigation related projects. The town has not pursued or been awarded grant funds for mitigation-related projects. The town also relies on unappropriated fund balances and reserves to fiscally support hazard mitigation projects.

Funding through the \$65 million New York State Four-Point initiative has been used for the development of the HAB Action Plan document and will also be used to implement the HAB Action Plan. This initiative builds on the State's \$2.5 billion Clean Water Infrastructure Act investments in clean water infrastructure and water quality protection.

Pre-disaster mitigation funds will be available upon FEMA approval of this plan, along with other funding available through the state and federal sources, such as the NYS Department of Conservation (Climate Smart Communities Grants, Water Quality Improvements Program, Trees for Tribes), NYS Environmental Facilities Corporation (Wastewater Infrastructure Engineering Planning, Clean Water Revolving Loan Fund, Green



Innovation Grant Program), New York State Energy Research and Development Authority (Clean Energy Communities Program), and Empire State Development.

Opportunities for Future Integration

The town could apply for grants to support hazard mitigation projects.

Education and Outreach

Existing Integration

The Town of Skaneateles operates a municipal website (<http://townofskaneateles.com/>). The town's website posts information regarding upcoming community events and important municipal decisions. The website provides information related to safety and hazard mitigation including local emergency response contact information, current project information, and links to related ordinances (see Regulatory and Enforcement). The town also utilizes Constant Contact.

Opportunities for Future Integration

The town could develop additional outreach/education programs on natural hazards.

Sheltering, Evacuation, and Temporary Housing

Temporary housing, evacuation routes, and sheltering measures must be in place and available for public awareness to protect residents, mitigate risk, and relocate residents, if necessary, to maintain post-disaster social and economic stability.

Temporary and Permanent Housing

The Town of Skaneateles has not identified potential sites for the placement of temporary housing for residents displaced by a disaster or but has identified a potential site suitable for relocating houses of the floodplain and/or building new homes once properties in the floodplain are acquired.

For temporary housing locations, the county identified potential locations throughout the county, as shown in Section 4 (County Profile), Table 4-3 and Figure 4-18.

The town has identified the following potential site suitable for relocating houses out of the floodplain and/or building new homes once properties in the floodplain are acquired:

- Skaneateles Transfer Station: 1676 Old Seneca Turnpike. The site has a capacity of 50+ acres.

In addition, to accommodate longer term housing needs of permanently displaced residents, there is an existing supply of vacant housing units within the county which may be able to satisfy and absorb those housing needs. The county also has ample buildable land availability throughout its communities to satisfy construction of new housing units if needed, as mapped in Section 4, figure 4-20 in Volume I of this plan. Of note, given the nature of the hazards of concern to Onondaga County, the extent of housing need is also not likely to exceed currently available housing stock for all but the most extreme and widespread hazard events.

To accommodate longer term housing needs of permanently displaced residents, there is an existing supply of vacant housing units within the county which may be able to satisfy and absorb those housing needs. The county also has ample buildable land availability throughout its communities to satisfy construction of new housing units if needed, as mapped in Section 4, figure 4-20 in Volume I of this plan. Of note, given the nature of the



hazards of concern to Onondaga County, the extent of housing need is also not likely to exceed currently available housing stock for all but the most extreme and widespread hazard events.

Evacuation and Sheltering Needs

The Town of Skaneateles has not designated emergency shelters but coordinates county emergency management, but has established the following evacuation routes/evacuation procedures:

- Rt. 41 A South to Route 81 or north to Route 20 east or west or to Route 321 north
- Rt. 41 South to Route 81 or north to Route 20 east or west or Route 20 to Route 321 north
- Route 20 to Route 321 north
- Route 20 to Jordan Street north

Per the County Emergency Management Plan, in the event of a hazard occurrence, the Department of Emergency Management is tasked with coordinating evacuation procedures with the Sheriff's Department, the On-Scene Commander, the Transportation Coordinator, the ARC, hospitals, special facilities, the fire service and the Health Department. The Sheriff's Department is responsible for implementing traffic control procedures including coordination of vehicular traffic and protection of resources, facilities and services in the affected areas. As noted in Section 4, Figure 4-19 in Volume I of this plan, the primary roads and highways are the evacuation routes for Onondaga County; the county is fortunate to have a variety of well-connected arterial and collector roadways to provide a variety of routing options during times of large-scale evacuation.

The American Red Cross (ARC) has primary contractual responsibility to provide sheltering, including short term housing, for Onondaga County individuals and families during an emergency occurring in Onondaga County. Services of the ARC include emergency sheltering needs, mass care, feeding, information and referral, and special population assistance. A confidential shelters list is maintained by the Department of Emergency Management and the ARC which identifies capacity for 15,000+ residents across Onondaga County. The ARC is responsible for maintaining shelter and temporary housing agreements with selected facilities.

9.29.6 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and their prioritization.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2013 Plan. Actions that are carried forward as part of this plan update are included in the following subsection in its own table with prioritization. Previous actions that are now on-going programs and capabilities are indicated as such in the following table and may also be found under 'Capability Assessment' presented previously in this annex.



Table 9.29-11. Status of Previous Mitigation Actions

Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		Next Steps 1. Project to be included in 2019 HMP or Discontinue 2. If including action in the 2019 HMP, revise/reword to be more specific (as appropriate). 3. If discontinue, explain why.	
TSK-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.				Ongoing capability	Cost		1.	Discontinue
						Level of Protection		2.	
						Damages Avoided; Evidence of Success		3.	Ongoing capability
TSK-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.				Ongoing capability	Cost		1.	Discontinue
						Level of Protection		2.	
						Damages Avoided; Evidence of Success		3.	Ongoing capability
TSK-2	Conduct and facilitate community and public education and outreach for residents and businesses to include, but not be limited to, the following to promote and effect natural hazard risk reduction: <ul style="list-style-type: none">• Provide and maintain links to the Onondaga County HMP website, and regularly post notices on the municipal homepage referencing the Onondaga County HMP webpages.• Prepare and distribute informational letters to flood vulnerable property owners and neighborhood associations, explaining the availability of mitigation grant funding to mitigate their properties, and instructing them on how they can learn more and implement mitigation.• Use the village email notification systems and newsletters to better educate the public on flood insurance, the availability of mitigation grant funding, and personal natural hazard risk reduction measures.• Work with neighborhood associations, civic and business groups to disseminate information on flood insurance and the availability of mitigation grant funding. Municipal outreach activities to be supported by the county, as identified at county initiative OC-0.								
	Provide and maintain links to the Onondaga County HMP website, and regularly post notices on the	Flood, Storm	OC HMP link on website; notices	Town	In Progress	Cost	low	1.	Provide and maintain links to the Onondaga County HMP website, and regularly post notices on the municipal



Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		Next Steps	
								1. Project to be included in 2019 HMP or Discontinue	2. If including action in the 2019 HMP, revise/reword to be more specific (as appropriate).
	municipal homepage referencing the Onondaga County HMP webpages		included in newsletters						homepage referencing the Onondaga County HMP webpages
						Level of Protection		2.	Connection on website Newsletter, information
						Damages Avoided; Evidence of Success		3.	Letters to property owners impacted
TSK-3	Continue to support the implementation, monitoring, maintenance, and updating of this Plan, as defined in Section 7.0	All hazards	All goals & objectives	Town	Ongoing capability.	Cost	low	1.	Discontinue
						Level of Protection		2.	
						VBV-4 Damages Avoided; Evidence of Success		3.	Ongoing capability
TSK-4	Maintain compliance with and good-standing in the NFIP including adoption and enforcement of floodplain management requirements (e.g. regulating all new and substantially improved construction in Special Hazard Flood Areas), floodplain identification and mapping, and flood insurance outreach to the community. Further meet and/or exceed the minimum NFIP standards and criteria through the following NFIP-related continued compliance actions identified as Initiatives TSK-1a, 1b, 2, 8, 9 and 10.	Flood	Adopted maps, Adopted revised Chpt 72 to comply with FEMA	Town, thru NFIP	Ongoing capability.	Cost	low	1.	Discontinue
						Level of Protection		2.	Adopted flood maps 11/1/16
						Damages Avoided; Evidence of Success		3.	Ongoing capability. Adopted revised Ch 72 to comply with FEMA 11/1/16
TSK-5	Continue to develop, enhance, and implement existing emergency plans.	All Hazard		Town, County, State	Ongoing capability	Cost		1.	Discontinue
						Level of Protection		2.	
						Damages Avoided; Evidence of Success		3.	Ongoing capability
TSK-6				Town		Cost		1.	Discontinue



Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		Next Steps	
						Level of Protection		1. Project to be included in 2019 HMP or Discontinue	
	Create/enhance/ maintain mutual aid agreements with neighboring communities.	All Hazards	Niles, Marcellus established mutual aid		Ongoing capability	Damages Avoided; Evidence of Success		2.	CEO mutual aid established 2017
						Cost		3.	Ongoing capability
TSK-7	Support county-wide initiatives identified in Section 9.1 of the county Annex.	All Hazards		Town	Ongoing capability	Level of Protection		1.	Discontinue
						Damages Avoided; Evidence of Success		2.	Shotwell Brook – monitoring 9 Element Plan Adoption- 2018; Invasive species- identification & plan- 2015
						Cost		3.	Ongoing capability.
TSK-8	Support/Participate in the Stream Team program offered by the Onondaga County SWCD, to assist in the removal of debris, log jams, etc. in flood vulnerable stream sections.	Flood, Severe Storm		Town, soil & water	Ongoing capability	Level of Protection		1.	Discontinue
						Damages Avoided; Evidence of Success		2.	
						Cost		3.	Ongoing capability
TSK-9	Heavy stormwater runoff is eroding the banks of Skaneateles Lake. Partner with adjacent Counties (Cayuga, Cortland) and abutting towns to Skaneateles Lake to investigate a solution to the inadequate stormwater management in town and to address sediment flow into the lake and stream bank erosion impacting the lake's water quality.	Flood, Severe Storm		Town	In Progress	Level of Protection		1.	Include in 2019 plan
						Damages Avoided; Evidence of Success		2.	9 Element Plan
						Cost		3.	Skaneateles Lake Association coordination for WQIP Grant – 2017, 2018
TSK-10	Upgrade and increase stormwater management practices in the town to mitigate stormwater flooding issues.	Flood		Town	In Progress	Level of Protection		1.	Include in 2019 plan
						Damages Avoided; Evidence of Success		2.	2018 Small Scale Storm-water Management Guidelines
						Cost		3.	Zoning Code Revisions (ongoing)
					In Progress	Cost		1.	Include in 2019 plan



Project #	Project	Hazard(s) Addressed	Brief Summary of the Original Problem	Responsible Party	Status (In Progress, Ongoing, No Progress, Complete)	Evaluation of Success (if project status is complete)		Next Steps	
						Level of Protection		1. Project to be included in 2019 HMP or Discontinue	
TSK- 11	Continue to partner with NYSDEC, Syracuse University, Tri-County Skaneateles Lake Pure Water Association, Inc. and the Village to eradicate Eurasian Water Milfoil from Skaneateles Lake.	Invasive Species						2.	Ongoing eradication
						Damages Avoided; Evidence of Success		3.	



Completed Mitigation Initiatives Not Identified in the Previous Mitigation Strategy

The Town of Skaneateles has identified the following mitigation projects/activities that have also been completed but were not identified in the previous mitigation strategy in the 2013 Plan:

- Blue Green Algae control: City of Syracuse, NY State, Town of Skaneateles
- Phragmites control: NY State, Onondaga County, Town of Skaneateles
- Emerald Ash Borer control: NY State, Onondaga County, Town of Skaneateles. A town inventory of Ash trees and monitoring of tree health was completed.
- Extensive hydroseeding of ditch excavations.
- Purchase salt at low rate and provide salt to school.
- Support City of Syracuse and County Health Departments with alerts.

Proposed Hazard Mitigation Initiatives for the Plan Update

The Town of Skaneateles participated in a mitigation action workshop on January 23, 2019 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA 551 ‘Selecting Appropriate Mitigation Measures for Floodprone Structures’ (March 2007) and FEMA ‘Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards’ (January 2013).

Table 9.29-12 summarizes the comprehensive-range of specific mitigation initiatives the Town of Skaneateles would like to pursue in the future to reduce the effects of hazards. Some of these initiatives may be previous actions carried forward for this plan update. These initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table below to further demonstrate the wide-range of activities and mitigation measures selected.

As discussed in Section 6, 14 evaluation/prioritization criteria are used to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing your actions as ‘High’, ‘Medium’, or ‘Low.’ The table below summarizes the evaluation of each mitigation initiative, listed by Action Number.

Table 9.29-13 provides a summary of the prioritization of all proposed mitigation initiatives for the Plan update.



Table 9.29-12. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	Environmental and Historic Preservation (EHP) Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
T. of Skaneateles-1	Vegetation/Tree Management and Mitigation Project	1, 4	Severe Storm, Severe Winter Storm	<p>Problem: Falling tree limbs and trees on town, county, and state roads throughout the town. This leads to closed roads, infrastructure damage, and power outages. This can prevent emergency personnel from accessing areas of the town. There are no specific tree species that are prone to falling. This may cause power line disruption or personal injuries. Storms of late have caused sporadic times for reaction from road crews.</p> <p>Solution: Hire tree service to evaluate trees, survey and harvest as necessary.</p>	No	No	Ongoing once established	DPW	\$5,000/year	High-reduction of power outages	Operating Budget	High	LPR	NR
T. of Skaneateles-2	Gully Road Culvert Upgrade	1	Flood, Severe Storm	<p>Problem: Gully Road culvert plugs with debris causing further flooding, with some flooding occurring with sporadic rain events. There is need for consistent maintenance of the area; however, where the problem originates is located on private property and the town does not have access to this area of Gully Road.</p> <p>Solution: Upgrade culvert with a steel culvert with additional capacity to allow higher flow and prevent constrictions.</p>	No	No	1 week	DPW	\$21,000	Roadway is protected from flooding and provides continuity of emergency operations to residents	Operating Budget, PDM, HMGP Grants	High	SIP	SP



Table 9.29-12. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	Environmental and Historic Preservation (EHP) Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
T. of Skaneateles-3	Transportation Center Emergency Generator Project	1, 6	All	Problem: Need back up power in the transportation center which houses school busses and the town highway trucks and snow plows so cannot open doors during a power outage or heat the building. This is a potential shelter location. Solution: Purchase and install an 35kw emergency generator. This will enable continuity of emergency services as well as supporting a multi-use facility which could include sheltering.	Yes	None	6 months	Highway Department	\$82,000	Transportation Center will maintain power through hazard events.	PDM	High	SIP	ES
T. of Skaneateles-4	Repetitive Loss Property Outreach	2	Flood	Problem: There is a repetitive loss property in the town Solution: Provide outreach and information to support mitigation of the repetitive loss property	No	Yes	Within 6 months	Code Department	<\$200	Property owner notified of mitigation options.	Operating Budget	High	EAP	PI
T. of Skaneateles-5	Fire System Emergency Generator Project	6	Drought	Problem: Fire System lacks back up power for fire safety. Solution: Support the Village of Skaneateles for the provision back up power to provide water pressure (pump station) with backup power for fire safety.	Yes	None	Within 5 years	Village of Skaneateles Support: Town of Skaneateles	\$37,00 if installed inside, \$42,000 if generator size requires generator to be installed outside.	Fire System will remain functional through	PDM	High	SIP	ES



Table 9.29-12. Proposed Hazard Mitigation Initiatives

Project Number	Project Name	Goals Met	Hazard(s) to be Mitigated	Description of Problem and Solution	Critical Facility (Yes/No)	Environmental and Historic Preservation (EHP) Issues	Estimated Timeline	Lead Agency	Estimated Costs	Estimated Benefits	Potential Funding Sources	Priority	Mitigation Category	CRS Category
T. of Skaneateles -6	Town Information and Outreach Project	2	All	Problem: Public is unaware of the hazard mitigation plan and efforts being made.	No	None	Within 6 months	Code Enforcement	<\$100	Public will be notified of updates to the Hazard Mitigation Plan.	Municipal budget	High	EAP	PI
				Solution: Provide and maintain links to the Onondaga County HMP website, and regularly post notices on the municipal homepage referencing the Onondaga County HMP webpages										
T. of Skaneateles -7 (TSK-10)	Stormwater Management Project	1, 3	Flood	Problem: Town has numerous locations that are prone to stormwater flooding	No	None	Within 5 years (would take one week for work to be completed)	Highway Department	\$10,000	Reduction in stormwater flooding events	Municipal budget, HMGP	Medium	SIP	SP
				Solution: Upgrade and increase stormwater management practices in the town to mitigate stormwater flooding issues.										
T. of Skaneateles -8 (TSK-11)	Milfoil Mitigation Project	4	HAB, Invasive Species	Problem: Milfoil is an aquatic invasive species that is damaging the ecosystem. HAB's have been a concern for the Lake.	No	Yes, environmental mitigation.	Ongoing	NYSDEC, Syracuse University, Tri-County Skaneateles Lake Pure Water Association	Determined annually by NYS DEC actions	Reduction in Milfoil population	NYS DEC	Low	NSP	NR
				Solution: Continue to partner with NYSDEC, Syracuse University, Tri-County Skaneateles Lake Pure Water Association, Inc. and the Village to eradicate Eurasian Water Milfoil and harmful algae bloom from Skaneateles Lake.										

Notes:

Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:Potential FEMA HMA Funding Sources:Timeline:



CAV Community Assistance Visit
CRS Community Rating System
DPW Department of Public Works
FEMA Federal Emergency Management Agency
FPA Floodplain Administrator
HMA Hazard Mitigation Assistance
N/A Not applicable
NFIP National Flood Insurance Program
OEM Office of Emergency Management

FMA Flood Mitigation Assistance Grant Program
HMGP Hazard Mitigation Grant Program
PDM Pre-Disaster Mitigation Grant Program

The time required for completion of the project upon implementation

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

- Local Plans and Regulations (LPR) – These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.
- Structure and Infrastructure Project (SIP) - These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.
- Natural Systems Protection (NSP) – These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.
- Education and Awareness Programs (EAP) – These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities

CRS Category:

- Preventative Measures (PR) - Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.
- Property Protection (PP) - These actions include public activities to reduce hazard losses or 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.
- Public Information (PI) - 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 educational programs for school-age children and adults.
- Natural Resource Protection (NR) - 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.
- Structural Flood Control Projects (SP) - 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.
- Emergency Services (ES) - 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

Critical Facility:


Yes  Critical Facility located in 1% floodplain



Table 9.29-13. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community	Total	High / Medium / Low
T. of Skaneateles-1	Vegetation/Tree Management and Mitigation Project	0	1	1	1	1	1	0	1	1	1	1	1	1	1	12	High
T. of Skaneateles - 2	Gully Road Culvert Upgrade	1	1	1	1	1	1	0	1	1	1	0	1	1	1	12	High
T. of Skaneateles-3	Transportation Center Emergency Generator Project	1	1	1	1	1	1	0	1	1	1	1	1	1	1	13	High
T. of Skaneateles-4	Repetitive Loss Property Outreach	1	1	1	1	1	1	1	1	1	1	0	1	1	1	13	High
T. of Skaneateles - 5	Fire System Emergency Generator Project	1	1	1	1	1	1	0	1	1	1	1	1	1	1	13	High
T. of Skaneateles - 6	Town Information and Outreach Project	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High
T. of Skaneateles - 7 (TSK-10)	Stormwater Management Project	0	1	1	1	1	1	0	1	1	1	0	0	0	0	8	Medium
T. of Skaneateles - 8 (TSK-11)	Milfoil Mitigation Project	0	0	0	0	1	1	0	1	0	0	0	1	1	1	6	Low

Note: Refer to Section 6, which conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).



9.29.7 Future Needs To Better Understand Risk/Vulnerability

None at this time.

9.29.8 Staff and Local Stakeholder Involvement in Annex Development

The Town of Skaneateles followed the planning process described in Section 3 (Planning Process) in Volume I of this plan update. This annex was developed over the course of several months with input from many town departments, including: the Code Enforcement Officer and Highway Superintendent. The Code Enforcement Officer represented the community on the Onondaga County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

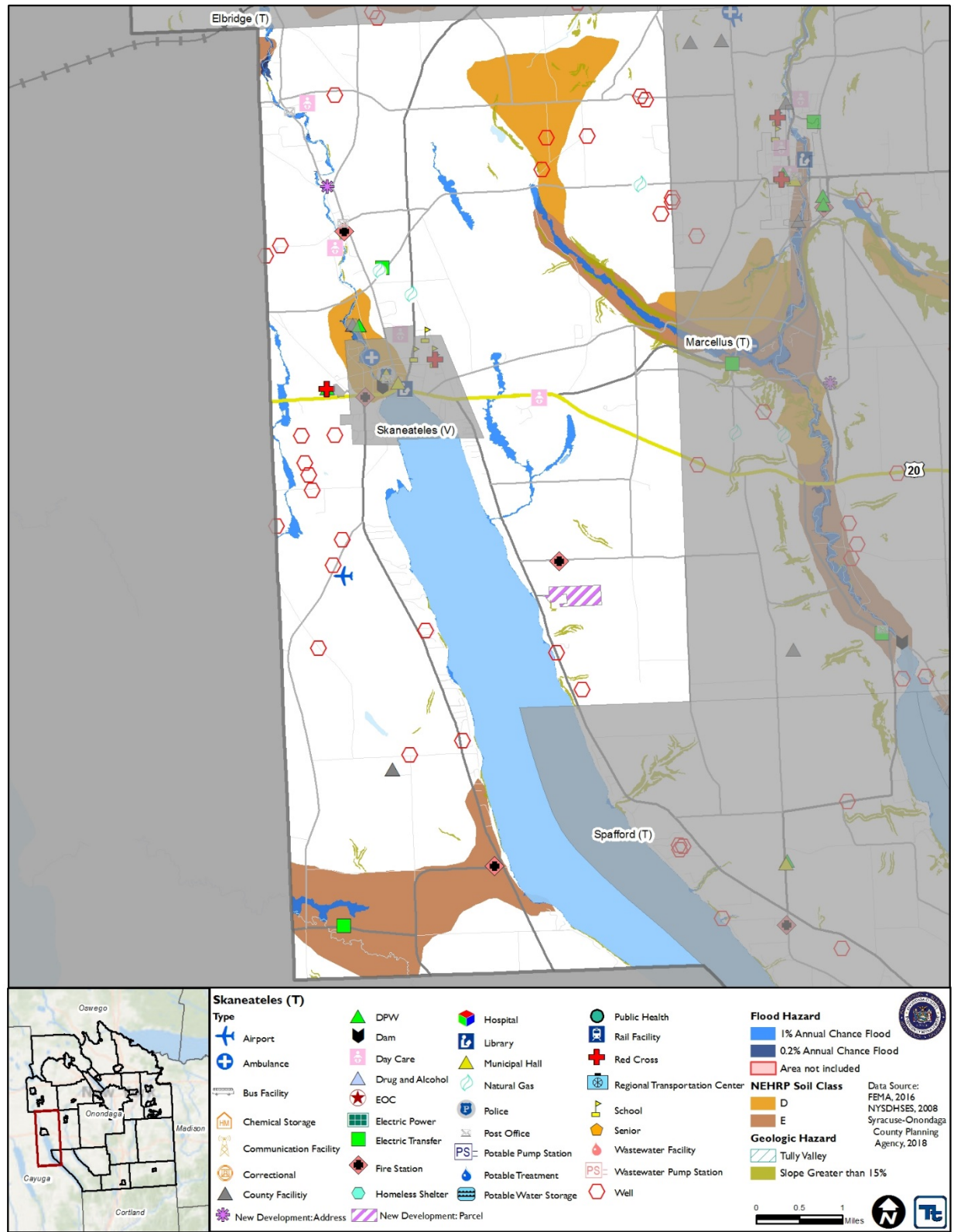
Additional documentation on the municipality's planning process through Planning Partnership meetings is included in Section 3 (Planning Process) and Appendix C (Meetings).

9.29.9 Hazard Area Extent and Location

Hazard area extent and location maps have been generated for the Town of Skaneateles that illustrate the probable areas impacted within the municipality. These maps are based on the best available data at the time of the preparation of this plan, and are considered to be adequate for planning purposes. Maps have only been generated for those hazards that can be clearly identified using mapping techniques and technologies, and for which the Town of Skaneateles has significant exposure. A map of the Town of Skaneateles hazard area extent and location is provided on the following page. This map indicates the location of the regulatory floodplain as well as identified critical facilities within the municipality.



Figure 9.29-1. Town of Skaneateles Hazard Area Extent and Location Map





Action Worksheet			
Project Name:	Vegetation/Tree Management and Mitigation Project		
Project Number:	T. Skaneateles-1		
Risk / Vulnerability			
Hazard(s) of Concern:	Severe Storm, Severe Winter Storm		
Description of the Problem:	Falling tree limbs and trees on town, county, and state roads throughout the town. This leads to closed roads, infrastructure damage, and power outages. This can prevent emergency personnel from accessing areas of the town. There are no specific tree species that are prone to falling. This may cause power line disruption or personal injuries. Storms of late have caused sporadic times for reaction from road crews.		
Action or Project Intended for Implementation			
Description of the Solution:	Hire tree service to evaluate trees, survey and harvest as necessary.		
Is this project related to a Critical Facility?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	Not applicable	Estimated Benefits (losses avoided):	High-reduction of power outages
Useful Life:	Not applicable-ongoing action	Goals Met:	1, 4
Estimated Cost:	\$5,000/year	Mitigation Action Type:	Natural Systems Protection
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	1 year
Estimated Time Required for Project Implementation:	Ongoing throughout each year	Potential Funding Sources:	Operating Budget
Responsible Organization:	DPW	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation Plan
Three Alternatives Considered (including No Action)			
	Action	Estimated Cost	Evaluation
Alternatives:	No Action	\$0	Current problem continues
	Education program to teach people how to maintain trees and report problem trees	\$500/year	Limited impact
	Change zoning to increase	\$500	Only deals with future issues, not current problem
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Action Worksheet		
Project Name:	Vegetation/Tree Management and Mitigation Project	
Project Number:	T. Skaneateles-1	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	0	
Property Protection	1	Protects property from damage from falling limbs
Cost-Effectiveness	1	
Technical	1	
Political	1	Public would support the initiative
Legal	1	
Fiscal	1	Operating budget could support the project.
Environmental	1	Keeps ecosystems healthy
Social	1	
Administrative	1	
Multi-Hazard	1	Severe storm, severe winter storm
Timeline	1	
Agency Champion	1	DPW
Other Community Objectives	1	
Total	14	
Priority (High/Med/Low)	High	



Action Worksheet			
Project Name:	Gully Road Culvert Upgrade		
Project Number:	T. of Skaneateles -2		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm		
Description of the Problem:	Gully Road culvert (about 1 mile from either end) located at a parking area for the town walking trail plugs with debris causing further flooding, with some flooding occurring with sporadic rain events. There is need for consistent maintenance of the area; however, where the problem originates is located on private property and the town does not have access to this area of Gully Road.		
Action or Project Intended for Implementation			
Description of the Solution:	Upgrade culvert to meet 25-year storm standards with a steel culvert with additional capacity to allow higher flow and prevent constrictions.		
Is this project related to a Critical Facility?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	25-year event	Estimated Benefits (losses avoided):	Roadway is protected from flooding and provides continuity of emergency operations to residents
Useful Life:	50-year	Goals Met:	1
Estimated Cost:	\$21,000	Mitigation Action Type:	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	One year
Estimated Time Required for Project Implementation:	1 week	Potential Funding Sources:	Operating Budget, HMGP grant funding
Responsible Organization:	DPW	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Current problem continues
	Sign an agreement with private property owner upstream of culvert to provide ongoing maintenance of stream bank to avoid constrictions.	No outside cost, this would be covered by Operating Budget.	Not feasible. It is not likely that the property owner will sign an agreement to maintain the stream bank.
	Install a grate to prevent the culvert from plugging.	\$1,000	Not feasible as the grate will provide additional opportunity to plug culvert if not aggressively maintained.
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Figure 9.29-2. This map shows the location of the culvert in need of upgrades.



Source: Syracuse-Onondaga County Planning Agency, New York DHSES, FEMA 2016



Figure 9.29-3. This image was pulled from Google Maps street view and is a picture of the culvert area located next to the parking area.



Source: Google Maps



Figure 9.29-4. This image is the other side of the culvert facing the floodplain.



Source: Google Maps



Action Worksheet		
Project Name:	Gully Road Culvert Upgrade	
Project Number:	T. of Skaneateles -2	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	0	
Property Protection	1	Reduction in Stormwater related flooding
Cost-Effectiveness	1	Would eliminate need for constant costly maintenance currently occurring
Technical	1	
Political	1	Public would support.
Legal	1	Town has jurisdiction.
Fiscal	0	
Environmental	1	No negative environmental impacts.
Social	1	
Administrative	1	
Multi-Hazard	1	Flood, Severe storm.
Timeline	1	
Agency Champion	1	DPW
Other Community Objectives	1	
Total	12	
Priority (High/Med/Low)	High	



Action Worksheet			
Project Name:	Transportation Center Emergency Generator Project		
Project Number:	T. Skaneateles -3		
Risk / Vulnerability			
Hazard(s) of Concern:	Flood, Severe Storm		
Description of the Problem:	<p>The town Transportation Center complex, located at 3624 Transportation Drive, houses the highway garage, the school bus garage, the town food pantry, and the outreach program office. At the time of this plan update, the complex does not have backup power. This poses an issue during power outages because the doors of the buildings cannot be opened, nor do they have heat or fuel supply for emergency vehicles. The Skaneateles Ambulance Volunteer Emergency Services also relies on this facility to fuel their vehicles. It is also an alternate source of fuel for the Village of Skaneateles Fire Department. Lastly, this complex is a potential location for an American Red Cross shelter but will need backup power if it was to be a designated shelter in the community.</p>		
Action or Project Intended for Implementation			
Description of the Solution:	Purchase and install an 100kw emergency generator. This will enable continuity of emergency services as well as supporting a multi-use facility which could include sheltering.		
Is this project related to a Critical Facility?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Is this project related to a Critical Facility located within the 100-year floodplain?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
(If yes, this project must intend to protect the 500-year flood event or the actual worse case damage scenario, whichever is greater)			
Level of Protection:	Not Applicable.	Estimated Benefits (losses avoided):	Continuity of emergency services, shelter.
Useful Life:	50 years.	Goals Met:	1, 6
Estimated Cost:	\$82,000	Mitigation Action Type:	Structure and Infrastructure Project
Plan for Implementation			
Prioritization:	High	Desired Timeframe for Implementation:	One year
Estimated Time Required for Project Implementation:	6 months	Potential Funding Sources:	HMGP, PDM grant funding with local operating budget match.
Responsible Organization:	DPW	Local Planning Mechanisms to be Used in Implementation if any:	Hazard Mitigation Plan.
Three Alternatives Considered (including No Action)			
Alternatives:	Action	Estimated Cost	Evaluation
	No Action	\$0	Current problem continues
	Rent a portable generator during emergency periods.	\$550 for 40 hours of rental use	This is not a permanent solution and would not support facility use as a shelter.
	Install solar back-up power.	\$100,000	Not feasible. Due to location and weather. Not cost effective
Progress Report (for plan maintenance)			
Date of Status Report:			
Report of Progress:			
Update Evaluation of the Problem and/or Solution:			



Figure 9.29-5. The town Transportation Center Complex is below.



Source: Syracuse-Onondaga County Planning Agency, New York DHSES



Action Worksheet		
Project Name:	Transportation Center Emergency Generator Project	
Project Number:	T. Skaneateles -3	
Criteria	Numeric Rank (-1, 0, 1)	Provide brief rationale for numeric rank when appropriate
Life Safety	1	The project will protect emergency functions
Property Protection	1	The project will protect the Transportation Center complex from power loss
Cost-Effectiveness	1	
Technical	1	
Political	1	
Legal	1	The town has the legal authority to complete the project
Fiscal	0	Project will require grant funding
Environmental	1	
Social	1	
Administrative	1	
Multi-Hazard	1	Flood, Severe Storm
Timeline	1	
Agency Champion	1	DPW
Other Community Objectives	1	Protect shelters
Total	13	
Priority (High/Med/Low)	High	